

ISSN-0974-9349 (Print) • ISSN-0974-9357 (Electronic)

Volume 11 / Number 2 / April-June 2019

International Journal of Nursing Education



www.ijone.org

International Journal of Nursing Education

Editor-in-Chief

Amarjeet Kaur Sandhu

Ex.-Principal & Professor, Ambika College of Nursing, Mohali, Punjab

E-mail: editor.ijone@gmail.com

INTERNATIONAL EDITORIAL ADVISORY BOARD

1. **Leodoro Jabien Labrague** (*Associate Dean*)
Samar State University, College of Nursing and Health Sciences, Philippines
2. **Dr. Arnel Banaga Salgado** (*Asst. Professor*)
Psychology and Psychiatric Nursing, Center for Educational Development and Research (CEDAR) member, Coordinator, RAKCON Student Affairs Committee, RAK Medical and Health Sciences University, Ras Al Khaimah, United Arab Emirates
3. **Elissa Ladd** (*Associate Professor*)
MGH Institute of Health Professions Boston, USA
4. **Roymons H. Simamora** (*Vice Dean Academic*)
Jember University Nursing School, PSIK Universitas Jember, Jalan Kalimantan No 37. Jember, Jawa Timur, Indonesia
5. **Saleema Allana** (*Assistant Professor*)
AKUSONAM, The Aga Khan University, School of Nursing and Midwifery, Stadium Road, Karachi Pakistan
6. **Ms. Priyalatha** (*Senior lecturer*) RAK Medical & Health Sciences University, Ras Al Khaimah, UAE
7. **Mrs. Olonisakin Bolatito Toyin** (*Senior Nurse Tutor*)
School of Nursing, University College Hospital, Ibadan, Oyo State, Nigeria
8. **Mr. Fatona Emmanuel Adedayo** (*Nurse Tutor*)
School of Nursing, Sacred Heart Hospital, Lantoro, Abeokuta, Ogun State, Nigeria
9. **Prof Budi Anna Keliat**, Department of Mental Health Nursing
University of Indonesia
10. **Dr. Abeer Eswi** (*Associate Prof and Head of Maternal and Newborn Health Nursing*) Faculty of Nursing, Cairo University, Egypt
11. **Jayasree R** (*Senior Teacher, Instructor H*)
Salalah Nursing Institute, Oman
12. **Dr. Khurshid Zulfiqar Ali Khawaja**
Associate Professor, Aga Khan University School of Nursing, Karachi, Pakistan
13. **Mrs. Ashalata Devi** (*Assist. Prof.*)
MCOMS (Nursing Programme), Pokhara, Nepal
14. **Sedigheh Iranmanesh** (*PhD*)
Razi Faculty of Nursing and Midwifery, Kerman Medical University, Kerman, Iran
15. **Billie M. Severtsen** (*PhD, Associate Professor*) Washington State University College of Nursing, USA International Journal of Nursing Education
16. **Dr Nahla Shaaban Khalil** (*Assist Professor*)
Critical Care and Emergency Nursing, Faculty of Nursing Cairo University

NATIONAL EDITORIAL ADVISORY BOARD

1. **Dr. G. Radhakrishnan** (*PhD, Principal*)
PD Bharatesh College of Nursing, Halaga, Belgaum, Karnataka, India-590003
2. **Dr Manju Vatsa** (*Principal, College of Nursing*)
AIIMS, New Delhi.
3. **Dr Sandhya Gupta** (*Lecturer*) College of Nursing, AIIMS, New Delhi

NATIONAL EDITORIAL ADVISORY BOARD

4. **Fatima D'Silva** (*Principal*)
Nitte Usha Institute of nursing sciences, Karnataka
5. **G.Malarvizhi Ravichandran**
PSG College of Nursing, Coimbatore, Tamil Nadu
6. **S. Baby** (*Professor*) (PSG College of Nursing, Coimbatore, Tamil Nadu, Ministry of Health, New Delhi)
7. **Dr. Elsa Sanatombi Devi** (*Professor and Head*)
Meidcal Surgical Nursing, Manipal College of nursing, Manipal
8. **Dr. Baljit Kaur** (*Prof. and Principal*)
Kular College of Nursing, Ludhiana, Punjab
9. **Mrs. Josephine Jacqueline Mary.N.I** (*Professor Cum Principal*) Si-Met College of Nursing, Udma, Kerala
10. **Dr. Sukhpal Kaur** (*Lecturer*) National Institute of Nursing Education, PGIMER, Chandigarh
11. **Dr. L. Eilean Victoria** (*Professor*) Dept. of Medical Surgical Nursing at Sri Ramachandra College of Nursing, Chennai, Tamil Nadu
12. **Dr. Mary Mathews N** (*Professor and Principal*)
Mahatma Gandhi Mission College of Nursing, Kamothe, Navi Mumbai, PIN-410209, Cell No.: 09821294166
13. **Dr. Mala Thayumanavan** (*Dean*)
Manipal College of Nursing, Bangalore
14. **Dr. Ratna Prakash** (*Professor*) Himalayan College of Nursing, HIHT University, Dehradun, Uttarakhand
15. **Pramilaa R** (*Professor and Principal*)
Josco College of Nursing, Bangalore
16. **Babu D** (*Associate Professor/HOD*)
Yenepoya Nursing College, Yenepoya University, Mangalore
17. **Dr. Theresa Leonilda Mendonca** (*Professor and Vice Principal*) Laxmi Memorial college of Nursing, A. J. Towers, Balmatta, Mangalore, Karnataka
18. **Madhavi Verma** (*Professor*) Amity College of Nursing, Amity University Haryana
19. **Latha Srikanth** (*Vice Principal*)
Indirani College of Nursing, Ariyur, Puducherry
20. **Rupa Verma** (*Principal*)
MKSSS College of Nursing for Women, Nagpur
21. **Sangeeta N. Kharde** (*Professor*) Dept. of OBG Nursing KLES's Institute of Nursing Sciences, Belgaum
22. **Dr. Suresh K. Sharma** (*Professor*)
(*Nursing*) College of Nursing, All India Institute of Medical Sciences, Rishikesh (UK) 249201
23. **Sudha Annasaheb Raddi** (*Principal & Professor*)
Dept of OBG Nursing, KLEU's Institute of Nursing Sciences, Belgaum
24. **Rental Sreevani** (*Professor & HOD*)
Dept. of Psychiatric Nursing, Sri. Devaraj Urs College of Nursing, Kolar, Karnataka
25. **Accamma Oommen** (*Associate Professor and Head*)
Department, Child Health Nursing, Sree Gokulam Nursing College, Trivandrum, Kerala, India

International Journal of Nursing Education

NATIONAL EDITORIAL ADVISORY BOARD

26. **Shinde Mahadeo Bhimrao** (*Professor*)
Krishna Institute Of Nursing Sciences Karad Tal-Karad Dist
Satara Maharashtra State
27. **Dr. Judith A Noronha** (*Professor and HOD*)
Department of Obstetrics and Gynaecological Nursing,
Manipal University
28. **Prof. Balasubramanian N** (*Head*)
Psychiatric Nursing, Shree Devi College of Nursing,
Mangalore
29. **Mrs. Harmeet Kaur** (*Principal*) Chitkara School of Health
Sciences, Chitkara University, Punjab.
30. **Mrs. Chinnadevi M** (*Principal*) Kamakshi Institute of Nursing,
Bassa wazira, Bhugnara Post, The Nurpur, Dist Kangra, HP,
31. **Dr. Linu Sara George** (*Professor and Head*)
Department of Fundamentals of Nursing, Manipal College of
Nursing Manipal
32. **Juliet Sylvia** (*Professor and H.O.D*)
Community Health Nursing, Sacred Heart Nursing College,
Madurai
33. **Dr. (Prof). Raja A** (*Professor & HOD*)
Department of Medical Surgical Nursing, Sahyadri College of
Nursing, Mangalore-575007
34. **Beena Chako** (*Professor*)
PSG College of Nursing, Coimbatore. Tamil Nadu 35.
35. **Anitha C Rao**, Professor and Principal, Canara College of
Nursing, Kundapur, Karnataka
36. **Dr. N.Gayathripriya** (*Professor*) Obstetrics and
Gynaecological Nursing, Sri Ramachandra
University, Chennai
37. **Vijayaraddi B Vandali**, *Principal*
Surendera Nursing Training Institute,
Sri Ganganagar, Rajasthan
38. **T Siva Jeya Anand**, *Vice Principal*, Chitra College of
Nursing, Pandalam, Pathanamthitta Dist, Kerala
39. **Anil Sharma**, *Principal*, Manikaka Topawala Institute of
Nursing CHARUSAT-Changa
40. **Vasudevan N.J.**, *Associate Professor*, Chitra College of
Nursing, M.C Road, Pandalam. Pathanamthitta District,
Kerala
41. **Col. Jayalakshmi Namasivayam Pillai**, *Principal & Director*
Symbiosis College of Nursing Pune, Maharashtra
42. **Mrs Ashia Qureshi**, *Dean Cum Principal* Prakash Institute
of Nursing, Physiotherapy and Rehabilitation & Allied Medical
Sciences
43. **Sonopant Joshi**, *Professor & HOD - Research & Statistics*
Symbiosis College of Nursing Pune (Maharashtra) India
44. **Prof. Dr. Parimala K. Samuel**, *Principal*, Chitra College of
Nursing, Chitra Institute of Medical Sciences and Research
Center, Pandalam, Kerala
45. **Ravindra HN**, *Principal*, Sumandeep Nursing College,
Vadodara, Gujarat

International Journal of Nursing Education is an international peer reviewed journal. It publishes articles related to nursing and midwifery. The purpose of the journal is to bring advancement in nursing education. The journal publishes articles related to specialities of nursing education, care and practice. The journal has been assigned international standard serial numbers 0974-9349 (print) and 0974-9357 (electronic). The journal is covered by Index Copernicus, Poland and is included in many international databases. We have pleasure to inform you that IJONE is a double blind peer reviewed indexed international journal and is now covered by EMBASE (Scopus), Indian citation index, GOOGLE SCHOLAR, INDEX COPERNICUS (POLAND), EBSCOHOST (USA), and many other international databases.

© All Rights reserved The views and opinions expressed are of the authors and not of the International Journal of Nursing Education. The Journal does not guarantee directly or indirectly the quality or efficacy of any products or service featured in the advertisement in the journal, which are purely commercial.

SCIENTIFIC COMMITTEE

1. **Padmavathi Nagarajan** (*Lecturer*)
College of Nursing, JIPMER, Puducherry
2. **Mrs. Rosamma Tomy** (*Associate Professor*)
MGM College of Nursing, Kamothe, Navi Mumbai
3. **T. Sivabalan** (*Associate Professor*)
Pravara Institute of Medical Sciences (DU), College of
Nursing, Loni, Maharashtra
4. **Ms Daisy J Lobo** (*Associate Professor*)
MCON, Manipal, Karnataka
5. **Sanjay Gupta** (*Assistant Professor*)
M.M. College of Nursing, Mullana (Haryana)
6. **Prashanth PV** (*Nursing Supervisor*) M.O.S.C Medical
College Hospital, Kerala
7. **V. Sathish** (*Academic Officer*)
Allied Health Sciences, National Institute of Open Schooling,
Ministry of Human Resource, Development, Government of
India
8. **Dr. Suman Bala Sharma** (*Associate Professor*)
Govt. Medical College and Hospital (GMCH)
9. **Smriti Arora** (*Assistant Professor*)
Rufaida College of Nursing, Faculty of Nursing, Hamdard
University, New Delhi-110062
10. **Rajesh Kumar** (*Asst. Professor*)
SGRD CON(SGRDISMR), Vallah Amritsar Punjab
11. **Baskaran. M** (*Assistant Professor*)
PSG College of Nursing, Coimbatore, Tamil Nadu,
12. **Mr. Kishanth** (*Olive. Sister Tutor*)
Department of Psychiatric Nursing, College of Nursing,
JIPMER, Pondicherry - 06
13. **Mr. Mahendra Kumar** (*Associate Professor*)
Savitribai Phule College of Nursing, Kolhapur
14. **Bivin Jose** (*Lecturer*)
Psychiatric Nursing, Mar Baselios college of Nursing,
Kothamangalam, Kerala
15. **Poonam Sharma** (*Assistant Professor*)
INE, Guru Teg Bahadur Sahib (C) Hospital,
Ludhiana, Punjab
16. **Kapil Sharma** (*Associate Professor*)
INE, G.T.B.S.(C) Hospital, Ludhiana (Punjab)
17. **Simer Preet Kaur** (*Lecturer*), U.P R.I.M.S N R,
Saifai, Nursing College

Print-ISSN: 0974-9349, Electronic - ISSN: 0974-9357,
Frequency: Quarterly (Four issues in a year)
www.ijone.org

Editor

Dr. R.K. Sharma
Institute of Medico-legal Publications
Logix Office Tower, Unit No. 1704, Logix City Centre Mall, Sector-32,
Noida-201 301 (Uttar Pradesh)

Printed, published and owned by

Dr. R.K. Sharma
Institute of Medico-legal Publications
Logix Office Tower, Unit No. 1704, Logix City Centre Mall, Sector-32,
Noida-201 301 (Uttar Pradesh)

Published at

Institute of Medico-legal Publications
Logix Office Tower, Unit No. 1704, Logix City Centre Mall, Sector-32,
Noida-201 301 (Uttar Pradesh)



CONTENTS

Volume 11, Number 2**April-June 2019**

1. To assess the Effectiveness of Planned Teaching Program (PTP) on Knowledge Regarding Early Detection and Prevention of Cervical Cancer among Women: Pre-experimental Study 1
Kusumlata, Akoijam Mamata Devi
2. Assessment of Knowledge on Psychiatric Emergencies among Staff Nurses 7
B. Jayabharathi, V. Jeya, R. Porchelvi, S. Saraswathi, B. Mythily
3. An Exploratory Study to Assess the Level of Internet Addiction and its Impact on the Health of Adolescents in Selected Schools of District Mohali, Punjab 12
Deeksha Sharma, Nitakumari, GeetaVerma
4. Effectiveness of Evidence-Based Practice (EBP) Training Program on the Level of Competencies of Faculty Members in a School of Nursing 17
Febes Catalina T. Aranas
5. A Comparative Study to Assess the Knowledge on Child Abuse among Mothers Residing in Urban and Rural Community 23
K. Silambuselvi, P. Abirami, Nandhini R., Oneyekachi esther, Jeevitha J.
6. A Study to Assess the Effectiveness of Buerger Allen Exercise in Improving the Peripheral Circulation among Patients with Diabetes Mellitus Admitted in Sharda Hospital, Greater Noida 27
Poonam Thakur, Kiran Sharma
7. A Study to Assess the Effectiveness of Self-Instructional Module Regarding Knowledge of Correct Body Mechanics in Prevention of Low Back Pain among Staff Nurses Working at Tertiary Care Hospital, Bhubaneswar, Odisha 32
Kulumina Dash, Minati Das
8. A Study to Assess the Effectiveness of Self Instructional Module on Knowledge Regarding Evidence Based Nursing Practice among Staff Nurses Working in Selected Hospitals at Mysore 36
Nandaprakash P., Lingaraju M., B. S. Shakuntala
9. Prevalence of Hypertension and Obesity among Women Residing in Selected Community Area Punjab 42
Neha Bharti
10. Use of Internet Vs Book as a Source of Information among Nursing Undergraduates, AIIMS, New Delhi 48
Nemkholam Chongloi, Ajesh Kumar, Monika Sabharwal, Hansaram Suthar, Gita Razdan
11. Study to Assess the Coping Strategies on Selected Tri-Dimensional Problems among Peri-Menopausal Women 54
Pallavi Verma, Shivani Sharma, V. Santhalakshmi

12. A Study to Assess the Knowledge and Practices of Staff Nurses Regarding Aseptic Technique During Normal Vaginal Delivery at Selected Government Hospitals of Haryana 58
Priyanka, P. Tamil Selvi, Rachna Mutneja
13. A Study to Assess the Effectiveness of Green Tea on Reduction of Body Weight among Obese Young Adult Girls Residing at Selected Girl's Hostel of Sharda University, Greater Noida 62
Richa Singh, R Sree Raja Kumar
14. A Study to Assess Depression and Social Support among Older Persons in Selected Community Areas at Kancheepuram District 67
R. Vijayalakshmi, M. Thirunavukarasu
15. Attitude Towards Care of Dying Patients among the Interns in a Tertiary Care Hospital 70
S. Kavitha, S. Yogeswari
16. Perceptions of Male Nursing Students in Providing Care to Children in Paediatric Clinical Settings in Oman 74
Salem Al Touby, Vanaja Muniswamy, Sheikha Al Sabari, Pricilla Monterio
17. The Effect of Computer-Assisted Instruction on Students' Knowledge about Health Impacts of Cigarette Smoke in Pregnant Women and Newborns 79
Sununta Youngwanichsetha, Sasitorn Phumdoung, Warangkana Chatchawet
18. Field Trip for Case Study: Action Research to Improve Teaching and Learning in Midwifery Course 83
Sununta Yoyngwanichsetha, Warangkana Chatchawet, Sureeporn Kritcharoen, Sasikarn Kala, Benyapa Thitimapong
19. To Assess the Level of Knowledge Regarding Partogram among the Nursing Students in Selected Nursing College of Punjab 87
Jasleen Kaur, Komalpreet Kaur, Sanjay Gupta, Rajinder Kaur
20. Stress and Coping Strategies among Working Women in Selected Institutions, Mangaluru 92
Rosemarie, Shijina T, Thereza Mathias
21. Consumption Pattern of Unhealthy Food Items among Adolescents- A Survey 97
R. Sudha, P. Umalakshmi
22. A Study to Assess the Relationship between Sleep Quality and Quality of Life among IT Professionals at SRMIST, Kattankulathur, Kancheepuram District 102
Ushapriya Mathiazhakan, B. Jayabharathi, Lalitha, Priyankaghosh, Chinnamani
23. A Descriptive Study to Assess the Knowledge and Attitude Towards HPV Vaccination among Students of Selected School at Ludhiana Punjab 106
Keshni
24. A Study to Assess Knowledge and Attitude Regarding Organ Donation among Health Professionals of Selected Colleges of Anand District- Literature Review 109
Arti Patel, Chintan Macwan, Bhavna Makwana, Princy Parmar, Shivangi Parekh, Dhurvi Patel, Prachi A. Soni
25. An Exploratory Study to Assess the Knowledge Regarding Enteral Feeding among Staff Nurses in Christian Medical College & Hospital, Ludhiana, Punjab 114
Harjit, Kamlesh Gill

To assess the Effectiveness of Planned Teaching Program (PTP) on Knowledge Regarding Early Detection and Prevention of Cervical Cancer among Women: Pre-experimental Study

Kusumlata¹, Akoijam Mamata Devi²

¹M.Sc. Nursing Student, ²Professor, Department of Obstetric & Gynecological Nursing, Faculty of Nursing, SGT University, Gurugram

ABSTRACT

Introduction: Cervical cancer is the second most common cancer among Indian women. Prevention and early detection can help reduce the incidence of cervical cancer. Taking care of health needs of the people and preventing diseases is a major concern for health, professionals. Planned teaching programme is one of the most effective teaching strategies, which can be used for improving the knowledge of people.

Aim: The aim of this study was to find out the effectiveness of a planned teaching programme in improving the knowledge of women in prevention and early detection of cervical cancer.

Material and Method: Pre experimental design was used to assess the Effectiveness of Planned Teaching Programme (PTP) on knowledge regarding early detection and prevention of cervical cancer. Purposive sampling techniques were used to select 60 women in selected village in Gurugram. Informed written consent was taken from selected women. A structured questionnaire was administered to assess the knowledge on early detection and prevention of cervical cancer. The collected data was analyzed by using descriptive statistics and inferential statistics. Frequency and percentage distribution was used for demographic variables and assessing the knowledge on early detection and prevention of cervical cancer. Chi-square test was used to find out association between knowledge on early detection and prevention of cervical cancer among women and selected demographic variables.

Result: The finding of the study revealed that pre test knowledge 35% had poor, 60% had average, 5% had good knowledge regarding early detection and prevention of cervical cancer. Post test knowledge 0% had poor, 25% had average, 75% had good knowledge regarding early detection and prevention of cervical cancer. Knowledge was significantly associated with religion 0.02 at significance of $p < 0.05$ level. No association was found between knowledge and other demographic variables like age, education, occupation, marital status, number of children, health information.

Conclusion: Planned teaching programme will be effective in improving knowledge regarding early detection and prevention of cervical cancer among women in selected villages in Gurugram.

Keywords: Effectiveness, prevention and early detection, cervical cancer, planned teaching program, women.

Introduction

Womanhood is the period in a female's life after she has transitioned through childhood and adolescence, generally at the age of 18 years. Puberty generally begins at about age of 10 years, followed by menarche at age 12 to 13 years. Women play an essential role in maintaining family and community health. Some women's health

Corresponding Author:

Ms. Akoijam Mamata Devi

Professor

Department of Obstetric & Gynecological Nursing

Faculty of Nursing, SGT University, Gurugram

Email: mamatadevi@sgtuniversity.org

problems will require a bit more effort than others, but virtually all can be eliminated if proper natural health steps are taken to eliminate the causes.

Cancer is one of the frequently talked about and most feared diseases that falls under the genre of lifestyle diseases that have evolved, rather rapidly, in the past two decades. Cancer is a generic term for a large group of diseases that can affect any part of the body.

Cancer of the cervix is the second most common cancer in women worldwide and is a leading cause of cancer-related death in women in underdeveloped countries. Worldwide, approximately 500,000 cases of cervical cancer are diagnosed every year. Worldwide, the most frequent HPV types are 16 and 18, with HPV 16 being the most common subtype. Globally, 70% of invasive cervical cancers are caused by infection with HPV 16 and 18. 41-67% of high-grade squamous intraepithelial lesions, 16-32% of low-grade squamous intraepithelial lesions and 6-27% of atypical squamous cells of undetermined significance are also estimated to be HPV 16/18 positive.

Cancer of cervix is the second most common cancer with estimated 1 lakh new cases in 2016 and about 1.04 lacks during 2020. Cancer associated with the use of tobacco account for about 30 % of all cancer in male and female, according to ICMR report.

Treatment for early stage cervical cancer - that is confined to the cervix - has a success rate of 85% to 90%. Early stage cancer treatment like surgery is commonly used when the cancer is confined to the cervix. Radiotherapy may be used after surgery if the doctor believes that there may still be cancer cells inside the body. The options for surgery in the early stages may include Cone biopsy (conization), Laser surgery, LEEP (loop electrosurgical excision procedure) Cryosurgery, Hysterectomy. In the later stages of cancer palliative therapy is administered to relieve symptoms and improve quality of life.

Statement of the problem: A pre-experimental study to assess the Effectiveness of Planned Teaching Program (PTP) on knowledge regarding Early Detection and Prevention of Cervical Cancer among Women in selected Village in Gurugram.

Objectives of the study

1. To assess the pretest knowledge score regarding early detection and prevention of cervical cancer among women in selected village in Gurugram.

2. To assess the posttest knowledge score regarding early detection and prevention of cervical cancer among women in selected village in Gurugram.
3. To find the association between posttest knowledge score regarding early detection and prevention of cervical cancer among women with selected demographic variable in selected village in Gurugram.

Research Hypothesis

H1—There will be significance between pretest and posttest knowledge score regarding early detection and prevention of cervical cancer at 0.05 level of significance.

H2—There will be significance association between posttest knowledge score regarding early detection and prevention of cervical cancer with selected demographic variables at 0.05 level of significance

Methodology

Research approach: Quantitative research approach

Research design: Pre experimental one group pretest and posttest design

Research setting: Ghari Harsaru village in Gurugram

Population of the study: The population for the study comprised of women aged between 15-45 Years.

Criteria for sample selection

Inclusion criteria

1. Women in the age group of 15-45 years
2. Women who are willing to participate in the study.

Exclusive criteria:

1. Women who had undergone hysterectomy.
2. Women who are not willing to participate in study.

Sampling Technique: Purposive sampling technique.

Sample size: 60 Women.

Variables Under Study: In the present study the variables under Study are.

Dependent variable: In this study it refers to the knowledge regarding Early Detection and Prevention of Cervical Cancer among women.

Independent variable: Planned teaching program on Early Detection and Prevention of Cervical Cancer

Demographic variables: Age (in year), Marital Status, Family, Education, Religion, Occupation, Sources of Health related information.

Tool for data collection:

Section A: Selected Demographic variable like age, religion, education, occupation, marital status, number of children, health related information.

Section B: Structure Knowledge Questionnaire regarding early detection and prevention of cervical cancer.

Section C: Planned Teaching Programme on early detection and prevention of cervical cancer.

Ethical Consideration: Ethical approval to conduct this study was obtained from ethical committee of SGT University, Gurugram. Consent was taken from the participants regarding their willingness to participate in the research project. The purpose for carrying out research project was explained to the participants and assurance of confidentiality was given.

Data collection procedure: The investigator met the Sarpanch of Ghari Harsaru in order to obtain permission and co-operation to conduct main study successfully. The formal prior permission was obtained from the Dean of Faculty of Nursing, SGT University, Gurugram for main study. The investigator introduced herself to women and established rapport with them. The study was conducted for period of 12 days. The investigator selected the sample which fulfilled the inclusion criteria. The informed consent was obtained from respondent. Appropriate orientation had given to the subjects about the objectives of the study, nature of structured knowledge questionnaire and adequate care was taken for protecting the subjects from potential risk including maintain confidentiality, security and identify. The demographic variables collected from the subjects. The pre test was done to assess the knowledge score

regarding early detection and prevention of cervical cancer among women. The planned teaching programme was administered immediately after pre test. The post test of study was carried out one week later, using same tools as pre test. Collection data was then tabulated and analysed.

Result

Major findings: The analysis of data revealed the following heading:

- According to age, majority percentage (36.66%) of women was in the age group 25-34 year. Religions, majority percentage (81.66%) of women were Hindu. Education, majority percentage (23.33%) of women was in high school. Occupation, majority percentage (33.33%) of women was house wives. Marital status, majority percentage (48.33%) of women was married. Numbers of children, majority percentage (33.33%) women have two children. Health information, majority of percentage (33.33%) of women was family member.(Fig. 1)
- Pretest knowledge among women 35% had poor knowledge, 60% had average knowledge and 5% had good knowledge regarding cervical cancer among women.
- Posttest knowledge among women 0% had poor knowledge, 25% had average knowledge and 75% had good knowledge regarding cervical cancer among women.
- The association between posttest knowledge score regarding cervical cancer among women with selected demographic variables. Religion was found statistically significant at of 0.02 $p < 0.05$ and other demographic variables such as age (in year), education, occupation, marital status, number of children, was not found statistically significant at the level of significance of $p < 0.05$.

Table 1: Mean and Standard Deviation of Effectiveness of Planned Teaching Programme

S. No.	Knowledge Score	Range	Mean	Standard Deviation	Mean Difference	t value	P-value
1.	Pre-test	18	14.48	4.91	7.55 10.44 <0.00001		
2.	Post-test	13	22.03	2.68			

$P < 0.05$ = (significant)

Table 1 depicts that post test mean knowledge score was more than pre test knowledge score with mean difference of 7.55. Paired t- test was performed to find the difference between pre test and post test knowledge score. So the null hypothesis was rejected and research

hypothesis was accepted. So statistically planned teaching programme was effective in improving the knowledge of early detection and prevention of cervical cancer among women. The comparison of pre and post-test knowledge score. Therefore, it was inferred that the

increase in knowledge score was attributed to the planned teaching programme provides as an intervention by the researcher and not by chance

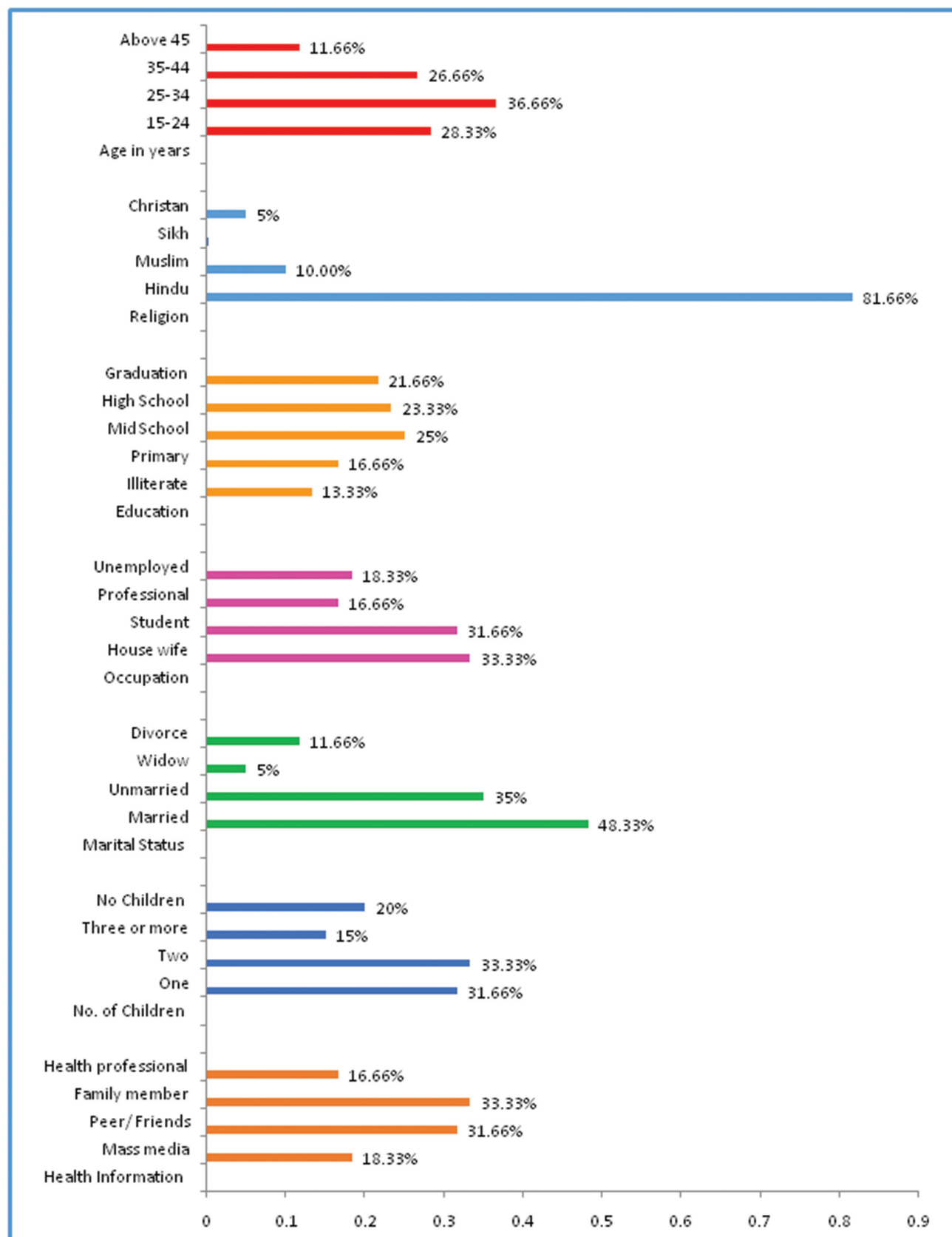


Fig. 1: Bar diagram showing percentage distribution of sample of demographic characteristic

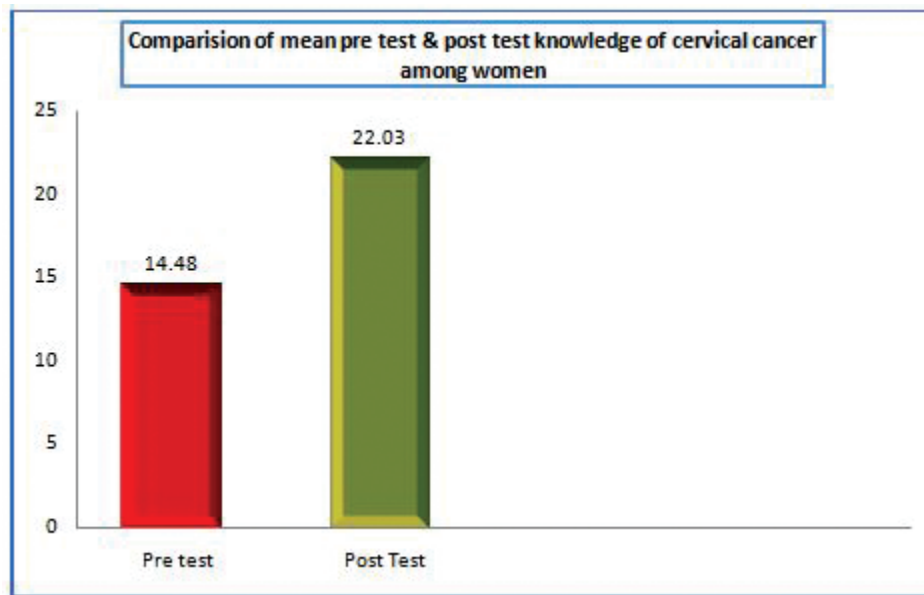


Fig. 2: Shows comparison of mean pre-test and post-test knowledge score

Figure:2 The comparison of pre-test and post-test knowledge score to assess the effectiveness of planned teaching programme (PTP) in term to gain knowledge score among women. The mean of pre-test 14.48 and post-test knowledge score 22.03 having a significant difference with t value for knowledge 10.44 at the level of significant $p < 0.05$.

Therefore, it was concluded that there was a significant difference in pre test and post test knowledge score to assess the effectiveness of planned teaching programme in terms of gain in knowledge score among women in selected village Gurugram. Hence, there was the research hypothesis accepted.

Discussion

- To analysis the data regarding knowledge of early detection and prevention of cervical cancer. 35% women had poor knowledge 60% had average knowledge and 5% had good knowledge. In congruence with Thavamni K, Susila C (2015) prevention and early detection of cervical cancer. In pretest 28(93.3%) women had inadequate knowledge, 2(6.7%) women had moderate adequate knowledge and 0(0%) had adequate knowledge.
- To assess the posttest knowledge score regarding early detection and prevention of cervical cancer among women. 25% women had average knowledge 75% were good knowledge. Significantly proven the effectiveness of PTP regarding early detection

and prevention of cervical cancer. In congruence with Naregal PM, Mohite V, Anagha VK (2017) to assess the effectiveness of planned teaching programme on knowledge regarding cervical cancer among women. In posttest knowledge score 30(50%) had good knowledge 25(41.7%) had average knowledge 5(8.3%) had poor knowledge.

- To find the association between posttest knowledge score regarding early detection and prevention of cervical cancer among women with selected demographic variable. In the present study demographic variables such as religion was showing association with knowledge score at the level of significance of $p < 0.05$. The present study is supported by Naregal PM (2016) who conducted a study to assess effectiveness of planned teaching programme on knowledge regarding cervical cancer among women. There was no significant association between knowledge score of women with the selected demographic variables.

Conclusion

The study concluded that there was a significant difference in knowledge score of women before and after administering the planned teaching program (PTP) regarding early detection and prevention of cervical cancer. The association of posttest knowledge score regarding early detection and prevention of cervical cancer among women with selected demographic

variables religion 0.02, found significant at $p < 0.05$ level of significance. It was proven that the effectiveness of planned teaching program was effective for women regarding early detection and prevention of cervical cancer.

Conflict of Interest: Nil

Source of Funding: Self

Ethical Clearance: Approved from Institute Ethical Committee (IEC), Faculty of Nursing, SGT University, Gurugram.

REFERENCE

1. Reeder.S.J, Martin LL and Koniak.D. Maternity Nursing; 17th edition; Philadelphia Lippincott co. (1992)
2. M.S Jasmine Philip. Experimental Research study on Prevention and Treatment of cervical cancer,[Unpublished dissertation].Bangalore Rajiv Gandhi University;2010.
3. Bruni L, Diaz M, Castellsagué X, Ferrer E, Bosch FX, de Sanjosé S. Cervical human papillomavirus prevalence in 5 continents, meta-analysis of 1 million women with normal cytological findings. *J Infect Dis* 2010;202:1789-1799.
4. IARC, Human papillomaviruses; in Biological Agents. A Review of Human Carcinogens. IARC Monographs on the Evaluation of Carcinogenic Risks to Humans.Lyon,IARC,2012,vol100B.<http://monographs.iarc.fr/ENG/Monographs/vol100B/mono100B-11.pdf> (accessed September 2014).
5. Clifford G, Franceschi S, Diaz M, Muñoz N, Villa LL. HPV type-distribution in women with and without cervical neoplastic diseases. *Vaccine* 2006; 24(3):26-34.
6. Insinga RP, Dasbach EJ, Elbasha EH, Liaw K, Barr E. Progression and regression of incident cervical HPV 6, 11, 16 and 18 infections in young women. *Infect Agent Cancer* 2007; 2-15.
7. WHO: Weekly Epidemiological Record. Geneva, October, 2014; 43 (89): 465-492. <http://www.who.int/wer/2014/wer8943/en/>.
8. Denny LA, Francheschi S, de Sanjosé S, Heard I, et al: Human papillomavirus, human immunodeficiency virus and immunosuppression. *Vaccine* 2012 ;(30):168-174.
9. Eileen M. Burd, *Clinical Microbiology Reviews* 2003 Jan; 16(1): 1-17.
10. MahboobenSafaeian, Diane Solomon. *Obstetrics gynecology clinics of North American* 2007 Dec; 34(4):739. Articles.timesofindia.indiatimes.com
11. American cancer society, surgery for cervical cancer. <http://wikipedia,encyclopedia/wks/cervicalcancer>.
12. Alberto Manetta. Cancer prevention and early diagnosis in women. *New England of Medicine* 2004 Sep; 3(6): 388.
13. Shah V, Vyas, Singh A, Shivastava M, conducted a study to assess theAwareness and Knowledge of cervical cancer and its prevention among the nursing staff of a tertiary health institute in Ahmedabad, Gujarat, India. *Ecancermedical science* 2012; (6): 270. <http://ecancer.Org/journal/6/full/270>.
14. Vinsi M.S, Singh M, a study to assess the Knowledge regarding cervical cancer and its prevention among B.sc Nursing Students in Bombay hospital, Indore. *International journal of current Research*, March 2014; 6(3): 57895790.
15. Tata S, Joshi R, Pratinidhi A.A quasi experimental study to assess the effectiveness of planned health education on knowledge of nurses working at tertiary care hospital regarding early detection of cancer cervix karad, western Maharashtra, India. *International journal of Reproduction, Conception, Obstetric and Gynecology*. 2018 Jan; 7(1):173-177.
16. Said SAE, Hassan HE,Sarhan AEM.A quasi-experimental study to assess the effect of an education intervention on women knowledge and attitude regarding cervical cancer.*American Journal of Nursing Research* 2018; 6(2): 59-66.
17. Aweke YH, Ayanto SY, Ersado TL. Knowledge, attitude and practice for cervical cancer prevention and control among women of childbearing age in Hossana Town, Hadiya zone, Southern Ethiopia: Community-based crossectional study. *PLOS ONE* 2017; 12(7):1-18.

Assessment of Knowledge on Psychiatric Emergencies among Staff Nurses

B. Jayabharathi¹, V. Jeya², R. Porchelvi³, S. Saraswathi³, B. Mythily³

¹Professor, ²Assistant Professor, ³B. Sc(N) Students, SRM College of Nursing,

ABSTRACT

Introduction: Psychiatric emergency is stress induced pathogenic response that physically endangers the affected individual or others that significantly disrupts the functional equilibrium of the individual or his/her environment and it requires immediate intervention whereas medical emergency is one which endanger the life of individual patient.

Aim: The study aims to assess the knowledge on psychiatric emergencies among staff nurses at SRM general hospital, Kattankulathur, Kanchipuram district.

Methodology: Non experimental-descriptive research design was used to assess the knowledge on psychiatric emergencies among staff nurses. The study was conducted at SRM general hospital, Kattankulathur, Kanchipuram district. 100 Staff nurses who were working at SRM general hospital were selected by Non -probability convenient sampling technique. The tool consisted of 2 sections. Section A dealt with demographic details of staff nurses and section B consisted of structured questionnaire to assess the knowledge on psychiatric emergencies among staff nurses.

Results: The present study results reveals that, 47(47%) of them had inadequate knowledge on psychiatric emergencies, 30(30%) of them had moderately adequate knowledge on psychiatric emergencies and 23(23%) of them had adequate knowledge on psychiatric emergencies.

Conclusion: With respect to the overall knowledge status of staff nurses, among 100 nurses majority 47% of the them had inadequate knowledge on psychiatric emergencies. So In service Education and Continuing Nursing Education programmes can be planned to improve staff nurse's knowledge level on psychiatric emergencies.

Keywords: *knowledge, psychiatric emergencies, staff nurses*

Introduction

Psychiatric emergency is stress induced pathogenic response that physically endangers the affected individual or others that significantly disrupts the functional

equilibrium of the individual or his/her environment and it requires immediate intervention whereas medical emergency is one which endanger the life of individual patient. The most urgent type of psychiatric crises are psychiatric emergencies. They involve sudden sever changes in emotions or behavior which, if unchecked, pose serious threats of physical, emotional or social harm. Examples include suicide attempts, homicide attempts or psychotic decomposition. The common criteria for civil commitment –danger to self, danger to others and grave disability – reflect the very definition of a psychiatric emergency. With prompt appropriate intervention, however a psychiatric emergency does not have to result in involuntary hospitalization. An emergency is an unforeseen combination of circumstances which calls for immediate action. A psychiatric emergency is a disturbance in thought, mood/or action which causes

Corresponding Author:

Dr. B. Jayabharathi, M.Sc (N), Ph.D
Professor

Department of Obstetrics & Gynaecology Nursing
SRM College of Nursing
SRM Institute of Science & Technology
Kattankulathur, Kancheepuram District-603203
Tamil Nadu, India
Mobile: +91 9840650338
Email: jayabharathimariyappan23@gmail.com

sudden distress to the individuals or others and or sudden disability thus requiring management¹

The demand for emergency psychiatric services has rapidly increased throughout the world. Since the 1960's especially in urban area. Case of patients in situations involving emergency psychiatry is complex². Emergency psychiatric is the clinical application of psychiatric settings. Condition requiring psychiatric interventions may include attempted suicide, substance abuse, psychosis, depression, violence or other rapid changes in behavior. Psychiatric emergency services are rendered by professionals in the field of medicine, nursing, psychology and social work.³

As an emergency medicine doctor, violence, drug abuse, alcoholism, psychosis, suicide attempts, confessional states and plain human distress and fear will confront you frequently. You may feel inadequate, frightened, impatient or irritated by such patients. Nurses, receptionists and porters will also be involved and will look to you for advice and support. Anxious, fearful or aggressive relatives and friends will need tactful handling and gradual and social workers will be seeking someone to take the patient off their hands. In a busy department there will be pressures to cope with many other emergencies and time to deal with the psychiatric problems will be at a premium. A reassuring, orderly, calm approach will save time in the long run.

The NIMH estimates that in the United States, 16 million adults had at least one major depressive episode in 2012. That's 6.9 percent of the population. According to the World Health Organization (WHO), 350 million people worldwide suffer from depression. It is a leading cause of disability. Data from the National Survey on Drug Use and Health highlights the problem among young adults. From 2008 to 2010, more than 8 percent of young adults between the ages of 18 and 22 reported a major depressive episode in the previous year. When it come to gender, women are more likely to be diagnosed with depression than men.⁴

In the last 45 years suicide rates have increased by 60% worldwide. Suicide is now among the three leading causes of death among those aged 15-44 (male and female). Suicide attempts are up to 20 times more frequent than completed suicides. Although suicide rates have traditionally been highest amongst elderly males, rates among young people have been increasing to such

an extent that they are now the group at highest risk in a third of all countries. Mental health disorders (particularly depression and substance abuse) are associated with more than 90% of all cases of suicide. However, suicide results from many complex socio cultural factors and is more likely to occur during periods of socioeconomic, family and individual crisis (e.g. loss of a loved one, unemployment, sexual orientation, difficulties with developing one's identity, disassociation from one's community or other social/belief group, and honour). The WHO estimates that each year approximately one million people die from suicide, which represents a global mortality rate of 16 people per 100,000 or one death every 40 seconds. It is predicted that by 2020 the rate of death will increase to one every 20 seconds.⁵

The harmful use of substance use (alcohol) results in 3.3 million deaths each year. On average every person in the world aged 15 years or older drinks 6.2 litres of pure alcohol per year. Less than half the population (38.3%) actually drinks alcohol, this means that those who do drink consume on average 17 litres of pure alcohol annually. At least 15.3 million persons have drug use disorders. Injecting drug use reported in 148 countries, of which 120 report HIV infection among this population.⁶

Violence causes more than 1.6 million deaths worldwide every year. More than 90% of these occur in low- and middle-income countries. Violence is one of the leading causes of death in all parts of the world for persons ages 15 to 4. But the Centers for Disease Control and Prevention (CDC) is working to change that. CDC is committed to building a world free of violence⁷.

The study aims to assess the knowledge on psychiatric emergencies among staff nurses at SRM general hospital, Kattankulathur, Kanchipuram district.

Methodology

A Non experimental-descriptive research design was used to assess the knowledge on psychiatric emergencies among staff nurses. The study was conducted at SRM general hospital, Kattankulathur, Kanchipuram district. 100 Staff nurses who were working at SRM general hospital were selected by Non -probability convenient sampling technique. The inclusion criteria were a. Staff nurses of both gender, b. Staff nurses who were available during data collection period, c. Staff nurses with B.SC(N), DGNM program and post basic B.Sc., (N). and the exclusion criteria was Staff nurses who were not willing to participate in this study.

Tool for Data Collection

The tool consisted of 2 sections. Section A dealt with demographic details of staff nurses such as age, gender, education, monthly income, resident, experience, previous experience related to psychiatric emergencies, designation and section B consisted of structured questionnaire to assess the knowledge on psychiatric emergencies among staff nurses. Each question was given 4 options. Each correct answer was awarded score 1. Each incorrect answer was awarded score 0.

Scoring Interpretation

Percentage (%)	Level of Knowledge
71 TO 100	Adequate Knowledge
51 TO 70	Moderate Knowledge
Below 50	Inadequate Knowledge

Ethical Considerations: The research proposal was approved by research committee of SRM College of nursing, SRM University, Kattankulathur, Kancheepuram district. Permission was obtained from the Dean, SRM College of Nursing and Medical Superintendent, SRM General Hospital. Informed consent was obtained from the study participants, after explaining the nature and duration of the study. Assurance was given to the individual that report will be kept confidential.

Results

Descriptive and Inferential Statistics were used to assess the knowledge on psychiatric emergencies among staff nurses.

Table 1: Frequency and percentage distribution of demographic variables of staff nurses

N = 100

S. No.	Demographic Variable	Class	No. of respondents (n)	Percentage Distribution (%)
1.	Age in years	21 - 30 Years	83	83
		31 - 40 Years	16	16
		41 - 50 Years	1	1
2.	Gender	Male	12	12
		Female	88	88
3.	Education	DGNM	51	51
		B.Sc. Nursing	37	37
		Post Basic	12	12
4.	Income	Below Rs. 12, 000	67	67
		Rs 12,100 - 15,000	31	31
		Rs 15,100 - 20,000	2	2
5.	Resident	Urban	73	73
		Semi urban	15	15
		Rural	12	12
6.	Experience	1 -2 Years	56	56
		2 - 4 Years	33	33
		4 - 6 Years	11	11
7.	Did you attend any workshop or training related to psychiatric emergencies?	Yes	7	7
		No	93	93
8.	Designation	Junior Staff Nurse	59	59
		Senior Staff Nurse	29	29
		Ward In charge	10	10
		Supervisors	2	2

Regarding the age, out of 100 samples 83% of samples were in the age group of 31-40years, 1% samples, were in the age group of 21-30 years, 16 % was in age group of 41-50years. Regarding the Gender,

12% of them were males and 88% were female. With respect to qualification, 55% of them had completed diploma nursing, 37% of them had completed B.SC nursing, 12% of them had completed in P.B.B.Sc(N). Considering the monthly income, 67% were getting <12,000, 31% were getting 12,100 -15,000, and 2% were getting 15,100-20,000. Considering staff nurses resident, 73% were from urban area, 15% were from semi urban area, 12% were from rural area. Considering the experience of the staff nurses, 56% had 1-2 years of experience, 33% had 2-4 years of experience, 11% of them had 4-6years of experience. Considering their previous experience related to psychiatric emergencies, 7% of nurses had attended in service education and training programme, 93% of nurses have not attended any programme regarding psychiatric emergencies. About the designations of the staff nurses, 59% are junior staff nurses, 29% are senior staff nurses, 10% are ward in charges, and 2% are supervisors.

Table 2: Frequency and percentage distribution of level of knowledge on psychiatric emergencies among staff nurses

N = 100

S. No.	Level of knowledge	No. of respondents (n)	Percentage Distribution (%)
1.	In adequate knowledge	47	47
2.	Moderately adequate knowledge	30	30
3.	Adequate knowledge	23	23

The above table reveals that, 47(47%) of them had inadequate knowledge on psychiatric emergencies, 30(30%) of them had moderately adequate knowledge on psychiatric emergencies and 23(23%) of them had adequate knowledge on psychiatric emergencies.

Discussion

Psychiatric emergencies is a condition where in the patient has disturbances of thought, affect and psychomotor activity leading to threat to his existence or threat to the people in the environment. This condition needs immediate intervention to safeguard the life

of the patient, bring down the anxiety of the family members and enhance emotional security to others in the environment.¹

The present study results reveals that, 47(47%) of them had inadequate knowledge on psychiatric emergencies, 30(30%) of them had moderately adequate knowledge on psychiatric emergencies and 23(23%) of them had adequate knowledge on psychiatric emergencies.

The results revealed that, there was high significance association found between the level of knowledge regarding psychiatric emergencies among staff nurses with their demographic variables such as age, income, experience, designation and there was no significant association found between level of knowledge on psychiatric emergencies among staff nurses with other demographic variables such as gender, education, resident, and any training program.

Sally Wai-chi Chan , Wai-tong Chien , Steve Tso(2008) conducted a study to evaluate the effect of an education programme on nurses' knowledge, attitude and competence on suicide prevention and management for patients with suicide attempt. An 18-hour education programme on suicide prevention and management was developed based on needs analysis and literature and was provided to the study group. Fifty-four registered general nurses from the medical and surgical units of two general hospitals completed the education programme. Focus groups were used for process ($n= 24$) and outcome evaluation ($n= 18$). The findings suggested that the education intervention had benefited the participants by improving their attitude, confidence and professional skills in responding to patients with suicidal intent.⁸

Conclusion

With respect to the overall knowledge status of staff nurses, among 100 nurses majority, 47% of the them had inadequate knowledge on psychiatric emergencies. So In service Education and Continuing Nursing Education programmes can be planned to improve staff nurse's knowledge level on psychiatric emergencies.

Source of Funding: Self

Conflict of Interest: Nil

REFERENCES

1. R. Sreevani.A Guide to mental health and psychiatric nursing. JAPPEE publication, 3rd edition, 2010; 153-273
2. Bassuk, E.L. & Brik, A.W. Emergency psychiatry: Concepts, methods, and practices. New York: Plenum press. 1984
3. Elakkuvana baskara raj. DEBR'S psychiatric nursing as per revised INC syllabus Post Basic B.Sc (N) I edition, MMESS medical publishers. 2012; 215
4. Depression: Facts, Statistics, and You – Healthline (internet) (Cited on 2016, April, 4th) Available from : <https://www.healthline.com/health/depression/facts-statistics-infographic>
5. Suicide statistics- Befrienders worldwide. (internet) (Cited on 2016, May, 25th) Available from: <https://www.befrienders.org/suicide-statistics>
6. Management of substance abuse : WHO facts and figures –WHO. (Internet) (Cited on 2016, June, 3rd) Available from: www.who.int/substance-abuse/facts/an.
7. Global and regional estimates of violence; WHO; (Internet) (Cited on 2016, June, 4th) Available from: apps.who.int/iris/bitstream/10665/85239/1/eng-pdf
8. Sally Wai-chi Chan , Wai-tong Chien , Steve Tso. The qualitative evaluation of a suicide prevention and management programme by general nurses, Journal of Clinical Nursing. 2008;13 October. Available from: <https://doi.org/10.1111/j.1365-2702.2008.02424.x>

An Exploratory Study to Assess the Level of Internet Addiction and its Impact on the Health of Adolescents in Selected Schools of District Mohali, Punjab

Deeksha Sharma¹, Nitakumari², Geeta Verma³

¹Lecturer in Modern Nursing College Annandale Shimla, ²Professor ³Assistant Professor, Mata Sahib Kaur College of Nursing, Mohali

ABSTRACT

Introduction: Internet addiction is alarming and is on the rise, according to the mental health professional. As the internet increasingly becomes part of our lives, internet addiction disorder has received much attention. Overuse of internet causes bad impact on adolescents health. De to addiction of internet, adolescents neglect the familial social activities, doing less physical activities, having poor academic performance, feel loneliness, frustrated, depressed, sleep deprivation, back-ache, and it will affect the lifestyle habits of the adolescents.

Aim of the Study: Aim of study is to assess level of internet addiction and its impact on the health of adolescents in selected schools of district Mohali, Punjab.

Material & Method: A quantitative approach with exploratory research design was adopted. By Purposive sampling technique 200 adolescents were selected. Data was collected by internet addiction test to assess the level and self-structured rating scale to assess the impact of internet addiction on health. Analysis of data was done using descriptive and inferential statistics.

Results: Study findings shows that adolescents majority had moderate level of internet addiction 178(89%) and had moderate impact on health 119(60%). Internet addiction were having more impact on physical health with mean value of 68.96 as compared to the mental and social health (56.82 and 55.37) respectively. There was moderate positive correlation between level of internet addiction and its impact on the health of adolescent ($r=0.347$).

Conclusion: It shows that adolescents were having moderate level of internet addiction which is having impact on their physical, mental and social health.

Keywords: Internet addiction, Impact, Health, Adolescent, Information booklet.

Introduction

Internet is a global system of interconnected computer networks which use the standard internet protocol suit to serve the users worldwide. It carries the

vast range of information resources and services, such as inter-linked hypertext documents and application of the world wide web (WWW) electronic mail, telephony and peer-to-peer networks of file sharing.¹

Internet addiction is defined as an impulse control disorder, which does not involve use of an intoxicating drug and is very similar to pathological gambling. It is also known as internet addiction disorder.²

Internet addiction is a modern day addiction among adolescents. Persons with internet addiction can exhibit symptoms, suffer drawbacks, and face the impacts that are similar to individuals addicted to alcohol,

Corresponding Author:

Ms. Deeksha Sharma
Mata Sahib Kaur College of Nursing, Mohali
Near Kamala Nehru State Hospital,
Govt. Residence Set no-4 Shimla-171001
Phone: 9418213097, 9736118897
Email: deeksharma123@gmail.com

gambling, narcotics, shopping, and other compulsive behaviors. One way to describe persons with internet addiction is that they find the virtual environment to be more attractive than everyday reality. Their daily lives are dominated with their need to be online. Sadly, this addiction is affecting millions of adolescents and their families in every aspects of their life.³

According to World Health Organization (WHO) "health is physical, mental, social well-being and not merely the absence of disease or infirmity". Next to life itself, good health is the most precious gift and is necessary for a purposeful existence. A good wealth of health can be obtained in a number of ways. It needs regular exercise, good food, good thoughts and activities and cleanliness.⁴

Internet addiction is alarming and is on the rise, according to the mental health professional. An increasing number of adolescents are seeking help to get over their obsession with the cyber world. There are not only children and adolescents, but also middle-aged groups who are addicted to various social networking, gambling, gaming and pornographic websites.⁵

Improving adolescents health is an emerging area for India to invest in. Due to addiction of internet, adolescents neglect the familial social activities, doing less physical activities, having poor academic performance, feel loneliness, frustrated, depressed, sleep deprivation, back-ache, and it will affect the lifestyle habits of the adolescents. Ultimately, an addiction to the internet can cripple adolescents ability to maintain a physical health, mental health and a healthy social life.⁴

The internet makes our planet a small world, but it is needed to make sure that the wonderful tool that bind us, does not become bondage. As adolescents go online with great frequency, the risk for addiction in the form it takes become greater which affect their physical health, mental health and social health. Hence the investigator would felt the need to assess the level of internet addiction and its impact on the health of adolescents.

Objectives of the Study

- To assess the level of internet addiction and its impact on health of adolescents in selected schools of district Mohali.

- To determine the correlation between internet addiction and impact on health of adolescents.
- To associate the findings with selected socio-demographic variables.

Assumption

- It is assumed that the level of internet addiction has an impact on the health of adolescents.

Material and Method

In present study, a quantitative approach with exploratory research design was adopted. By Purposive sampling technique 200 adolescent were selected. Internet addiction test was used to assess the level of internet addiction and self- structured rating scale was used to assess the impact of internet addiction on health of adolescents in the study. Analysis of data was done using descriptive and inferential statistics. A study was conducted in the month of January 2017. Formal written permission was obtained from the concerned principle of selected schools of Mohali, after discussing the purpose and objectives of the study. Analysis and interpretation of data was done according to objectives of the study by using descriptive and inferential statistics.

Ethical Consideration

With the view of ethical consideration the researcher has taken permission from Principal of Mata Sahib Kaur college of nursing Mohali. After that the researcher has discussed the type and purpose of the study with the concerned principle of selected schools, Mohali and written permission were obtained. Also the adolescents were explained about the purpose of the study and written consent was taken from them for their participation in study. They were explained about the right to refuse from participating in the study. The adolescents were assured that the information given by them will be kept as confidential and will be purely used for research purpose.

Results

Table 1: Frequency and percentage distribution according to selected socio-demographic variables of adolescents

N = 200

Sr. No.	Socio-demographic variables	Frequency (f)	Percentage (%)
1.	Age (in years)		
	15	20	10
	16	31	15.5
	17	60	30
	18	89	44.5
2.	Gender		
	Male	97	48.5
	Female	103	51.5
3.	Place of residence		
	Rural	74	37
	Urban	126	63
4.	Type of family		
	Nuclear	90	45
	Joint	110	55
5.	Monthly Family income (in rupees)		
	≤10000/-	0	0
	10001-15000/-	10	5
	15001-20000/-	107	53.5
	>20000/-	83	41.5
6.	Class attendance		
	≤50%	0	0
	51-70%	27	13.5
	71-90%	151	75.5
	>90	22	11
7.	Hours spend online (per day)		
	≤1 hour	0	0
	1-2 hour	26	13
	3-4 hour	84	42
	>4 hour	90	45
8.	Types of site mostly searched		
	Whatsapp	32	16
	Instagram	22	11
	Imo	14	7
	Google	38	19
	Facebook	70	35
	Hike	24	12

Table 1 show frequency and percentage distribution of adolescents based on socio-demographic variables such as age (in years), gender, place of residence, type of family, monthly family (in rupees), class attendance, hours spend online and types of site mostly searched.

According to age (in years), majority 89(44.5%) of the adolescents belonged to 18 years of age, 60(30%) belonged to 17 years, 31(15.5%) belonged to 16 years of age, and 20(10%) belonged to 15 years of age.

According to According to gender, majority 103(51.5%) of the adolescents were females whereas 97(48.5%) were males.

According to place of residence, majority 126(63%) of the adolescents lived in urban area whereas 74 (37%) lived in rural area.

According to type of family, majority 110(55%) of the adolescents belonged to joint family and the remaining 90(45%) belonged to nuclear family.

According to monthly family income (in rupees) majority 107(53.5%) of the adolescents were having monthly family income between 15001-20000/-, 83(41.5%) were having monthly family income more than 20000/-, 10(5%) were having monthly family income between 15000-20000/- and none were having monthly family income ≤10000/-.

According to class attendance, majority 151(75.55%) of the adolescents had class attendance between 71-90%, 27(13.5%) had class attendance between 51-70%, 22(11%) had class attendance of ≥90% and none of the adolescents had class attendance ≤50%.

According to hours spend online, majority 90(45%) were spend online >4 hours per day, 84(42%) were spend online for 3-4 hours per day, 26(13%) were spend online for 1-2 hours per day and none of the adolescents were spend online for ≤1 hour per day.

According to types of site mostly searched, majority 70(35%) of the adolescents searched Facebook, 38(19%) searched Google, 32(16%) searched What Sapp, 24(12%) searched hike, 22(11%) searched instagram and 14(7%) searched imo.

Table 2: Frequency and percentage distribution of level of internet addiction among adolescents**N = 200**

S. No.	Level of internet addiction	Score	Frequency(f)	Percentage (%)
1.	None	0-30	0	0
2.	Mild	31-49	5	2.5
3.	Moderate	50-79	178	89
4.	Severe	80-100	17	8.5
	Median (Min.-Max.)	71		
	Mean \pm SD	69.11 \pm 9.588		

The above table depicts the level of internet addiction among adolescents. In the present study, majority 178(89%) of adolescents were having moderate level of internet addiction, 17(8.5%) were having severe level of internet addiction and 5(2.5%) were having mild level of internet addiction.

Table 3: Frequency and percentage distribution of impact of internet addiction on the health of adolescents**N = 200**

S. No.	Impact of internet addiction	Score	Frequency(f)	Percentage(%)
1.	Mild impact	0-13	6	3
2.	Moderate impact	14-26	119	59.5
3.	Severe impact	27-40	75	37.5
	Median (Min.-Max.)	25		
	Mean \pm SD	24.34 \pm 5.579		

The above table depicts the impact of internet addiction among the health of the adolescents. In the present study, majority 119(59.5%) of the adolescents were having moderate impact on health due to internet addiction, 75(37.5%) were having severe impact on health and only 6(3%) were having mild impact on health due to internet addiction.

Table 4: Correlation between level of internet addiction and its impact on the health of adolescents**N = 200**

S. No.	Research Variables	Mean	Standard Deviation	Karl Pearson Correlation	Inference
1.	Level of internet addiction	69.18	9.22	r = 0.347	Moderate positive correlation
2.	Impact of internet addiction on health	24.34	5.57		

The above table depicts the correlation between level of internet addiction and its impact on the health of adolescents. In the present study, there was moderate positive correlation between level of internet addiction and its impact on the health of adolescents. So it can be concluded that higher the level of internet addiction more the impact on health.

Association of findings of level of internet addiction with selected socio-demographic variables: There was statistically significant association found with class attendance and hours spend online per day.

Association of findings of impact of internet addiction with selected socio-demographic variables: There was statically significant association found with class attendance.

Discussion

The results revealed socio-demographically According to age majority 89(44.5%) belonged to 18 years of age, 103(51.5%) were females, majority 126(63%) lived in urban area, 110(55%) adolescents belonged to joint family, majority 107(53.5%) were having monthly

family income between 15001-20000/-, 151(75.5%) adolescents had class attendance between 71-90%, most of the adolescents 90(45%) were spend online for >4 hours per day, 70(35%) mostly searched Facebook.

Objective: To assess the level of internet addiction and its impact on health of adolescents in selected schools of district Mohali. Findings of the study showed that 178(89%) were having moderate level of internet addiction, 17(8.5%) were having severe level of internet addiction and 5(2.5%) were having mild level of internet addiction. The majority 119(59.5%) of the adolescents were having moderate impact on health due to internet addiction, 75(37.5%) were having severe impact on health and only 6(3%) were having mild impact on health. Out of the three aspects, internet addiction were having more impact on physical health with mean value of 68.96 as compare to mental and social health (56.82 and 55.37) respectively.

Objective: To determine correlation between internet addiction and impact on health of adolescents. There was moderate positive correlation ($r=0.347$) found between level of internet addiction and its impact on the health of adolescents. There was significant association found between level of internet addiction with class attendance and hours spend online. There was also significant association found between impact of internet addiction on the health with class attendance.

Objective: To associate the findings with selected socio-demographic variables. There was significant association found between level of internet addiction with class attendance and hours spend online per day. There was no significant association found between level of internet addiction with age (in years), gender, place of residence, type of family, monthly family income (in rupees) and types of sites mostly searched.

There was also significant association found between impact of internet addiction with class attendance. There was no significant association found between impact of internet addiction with age, gender, place of residence, type of family, monthly family income, hours spend online per day and types of sites mostly searched.

Conclusion

The conclusion drawn from the present In present study, adolescents were having moderate level of internet addiction 178(89%), which is having moderate impact 119(60%), on their physical, mental and social health. There was moderate positive correlation found between level of internet addiction and its impact on health of adolescents with $r=0.347$. So it can be concluded that higher the level of internet addiction more the impact on health of adolescents. There was significant association found between level of internet addiction with class attendance and hours spend online. There was also significant association found between impact of internet addiction on the health with class attendance.

Conflict of Interest: Nil.

Source of Funding: Self.

REFERENCES

1. Ivan G. Internet addictive disorder (IAD) Diagnostic criteria, <http://www.psychom.net/iadcriteria/reviewed> on 2015.
2. Subramanyam M, Shijia Q, Munidasa W. Prevalence and correlates of excessive internet use among youth in Singapore, *Annals Academy of Medicine Singapore* 2008;37(1):9-14.
3. Prasanna Chebbi, Kai S. Koong, Lai Liu. Some Observations on Internet Addiction Disorder Research. *Journal of Information System Education* 2008;11(34):31-34.
4. PathakVikas. short essay on Health is Wealth in India: <http://www.importantindia.com/reviewed> on 22/01/2014. *The Journal of Nervous and Mental Disease* 2005;1(3):728-733.
5. KoCh, Yen, J Chen. Proposed diagnostic criteria of internet addiction for adolescents. *The Journal of Nervous and Mental Disease* 2005;1(3):728-733.

Effectiveness of Evidence-Based Practice (EBP) Training Program on the Level of Competencies of Faculty Members in a School of Nursing

Febes Catalina T. Aranas, RN, MAEd, MAN

College of Nursing, San Beda University, Manila, Philippines

ABSTRACT

The vision for the future of nursing has led to convergence of knowledge, quality, and new functions in nursing that require new competencies beyond evidence-based practice (EBP). However, the success of teaching and implementing EBP rely on the competencies of nursing educators. This study aimed to determine the effectiveness of the Evidence-Based (EBP) Training Program in enhancing the EBP competencies of faculty members. An EBP Training Program was conducted among 13 nurse educators. The participants cognitive and psychomotor competencies were measured before and after the EBP Training Program using a self-made cognitive and psychomotor competency questionnaire. Pre-test and post-test scores were then analyzed using RM-MANOVA. Results revealed that the EBP Training Program caused a large improvement in the cognitive competency in EBP of nurse educators. However, the training program was not sufficient to cause a significant effect on the psychomotor competency of the nurse educators.

Keywords: *Cognitive Competency, Evidence-Based Practice; Psychomotor Competency, Training Program*

Introduction

Transforming the face of the nursing profession is a call for evidence-based quality improvement initiatives. Redesigning the healthcare practice and healthcare education underscores the need for restructuring frameworks that are effective, safe, and efficient. Nursing educators must respond to innovations, which are continually challenging the full conveyance on the promise of evidence-based practice (EBP)^{1,2}. Likewise, competencies must focus on utilizing knowledge in clinical decision-making and producing research evidence on interventions that promote application and must be operated by individual and group of providers. Furthermore, this will lead to inter-professional linkages in improving delivery systems, and brings to the fore new competencies, beyond EBP^{1,3}.

The Academy of Medical-Surgical Nurses (AMSN)⁴ values EBP as a method to improve patient care and close the unacceptable gap between what we know and what we do in the care of patients. They added that the development of EBP is fueled by the increasing public and professional demand for accountability in safety and quality improvement in healthcare.

However, uncertainties exist about what exactly that level of engagement encompasses. The development of EBP competencies should be aligned with the evidence-based practice process through, continual evaluation across the extent of the nurses' practice, including technical skills in searching and appraising literature, clinical reasoning, problem-solving skills in making recommendations for practice changes, and the ability to adapt to the changing environments⁵.

Therefore, the nursing curriculum should enable the acquisition and development of knowledge, attitudes, and skills in the integration of evidence-based practice. Where, knowledge would need to result in skills, attitudes, and appropriate changes in behavior. Despite its importance, evidence-based practice is not explicitly and effectively incorporated in the undergraduate nursing curriculum.

In the Philippines, the undergraduate nursing curriculum is regulated by the Commission on Higher Education (CHED). According to the CHED Memorandum No. 14 (CMO 14) series of 2009, which outlines the policies and standards for Bachelor of Science in Nursing (BSN) program in the Philippines,

a total of 3 units or credits (equivalent to 153 contact hours) is allocated for Nursing Research (NRes). However, reviewing the course specifications for both NRes 1 and NRes 2, EBP was only mentioned once during the dissemination phase⁶. Moreover, Burke et al.⁷ posited that the typical nursing curriculum focuses on the process of nursing research and fails to comprehensively discuss the appraisal and utilization of research findings. EBP is commonly discussed as a separate, isolated course, making it difficult to interrelate with other nursing courses⁷. This specification therefore, highlights that although research competency is an expected outcome in the undergraduate curriculum, this outcome does not necessarily include the competency in conducting evidence-based practice (EBP).

Purpose

The aim of the study was to:

1. Assess the pre-test and post-test mean cognitive and psychomotor competency scores on EBP of the faculty members.
2. Determine the difference between the pre-test and post-test mean cognitive and psychomotor competency scores on EBP of the faculty members.

Method

Design overview: The study utilized a one group pre-test-post-test quasi-experimental design to determine the effectiveness of the EBP Training Program. The group is pretested for the independent variable, then received the treatment, and is post-tested to examine the effects of manipulating the independent variable on the dependent variable⁸.

Sample and setting: The study was conducted in a selected school of nursing in Metro Manila, Philippines that is duly recognized by Commission on Higher Education (CHED) to offer nursing program. The participants included part-time and full-time nurse educators with at least 1-year hospital experience and a master's degree. The Dean, Assistant Dean, and other nursing administrators were excluded due to their administrative work and limited contact time with students.

In addition, a total of 13 participants participated in the study. According to Melynck, Gallagher-Ford, Long

and Fineout-Overholt⁹, studies involving evidence-based practice application, such as in the case of this study, does not necessarily involve a large population or samples. Such approach is utilized since these types of study does not aim for greater generalizability but rather, to address a prevailing practice issue⁹.

Instrumentation: The study utilized questionnaire which are divided into three parts; respondents' information sheet, cognitive competency questionnaire and psychomotor competency questionnaire.

Respondents Information Sheet: The respondent's information sheet which profiled the respondent's age, gender, years of clinical experience, educational attainment, employment status, and clinical areas of expertise.

Cognitive competency questionnaire: The cognitive competency questionnaire is a self-made questionnaire composed of 25 items which assess the cognitive competency of the participants in the following topics of Evidence-Based Practice: Concepts of EBP, steps in EBP, Hierarchy of Research Evidence, P.I.C.O.T. Framework, and Searching for Evidence. The questionnaire used a mixture of multiple choice, enumeration, ranking, and matching type items according to the critical thinking skills level of Bloom's Taxonomy.

After face and content validation by panel of 3 content experts, an I-CVI and S-CVI/Average of 1.00 was computed¹⁰. In addition, a Kuder-Richardson Formula 21 of 0.91 was computed after the pilot test of 6 eligible participants.

Psychomotor Competency Rubric: The Psychomotor Competency Rubric was adapted from Melynck, Fineout-Overholt, Feinstein, Sadler, & Green-Hernandez¹¹. This rubric was used to evaluate and score the psychomotor competency of the participants in answering given clinical case scenarios.

In each clinical case scenario, participants were asked to write a focused clinical question to guide searching; list potential sources of information that will address their question; identify the level of evidence needed; describe the search strategy and techniques; and identify characteristics of the study that will determine relevance, validity, magnitude of the impact, and clinical significance of the study. The answers of the faculty members were graded using the

psychomotor competency rubric which has six (6) key areas: formulation of clinical guide question, search plan, search process, appraisal of evidence, synthesis of evidence, and formulation of clinical decision or recommendations for clinical practice. The six (6) assessment areas were focused on the application of the different steps of Evidence-Based Practice.

Since the study has a pre-test and a post-test, two clinical case scenarios were developed. One clinical case scenario was answered during the pre-test, while the other clinical case scenario was completed during the post-test.

Akin to the Cognitive Competency Questionnaire, it underwent face and content validation which yielded an I-CVI and S-CVI/Average of 1.00 after 2 rounds of validation¹¹. A Cronbach's alpha of 0.75 was also computed after pilot testing among 6 eligible participants. The scores in each clinical case scenario was graded using the rubric that ranges from 0 to 18.

Data Collection Procedures

The researcher secured an ethical clearance from a university ethics review committee prior to the conduct of the study. In selecting the participants, the researcher first listed down all CHED-recognized nursing schools in Metro Manila and randomly-selected 10% of them through fish-bowl technique. In Metro Manila, there were 38 CHED-recognized (non-Center of Excellence)

nursing schools. Thus, four (4) schools were randomly-selected. From these schools, the school with the most number of faculty members were selected as the site for the data collection. Prior to the conduct of the EBP Training Program among the participating faculty members, the researcher first administered a pre-test questionnaire to determine the baseline characteristics and mean cognitive and psychomotor competency on EBP among the participants. Then, the training program was conducted for 8 hours with 4-hours didactics and 4-hour practicum session. After the training program, an evaluation was immediately done through a post-test and each participant was given a certificate of participation.

Data Analysis

The data were analyzed using Stata Statistical Software, Version 13, College Station, TX: Stata Corp LP, with a p-value of 0.05 was considered statistically significant. Specifically, mean, standard deviation, frequency, and percentage for descriptive statistics and Repeated Measures Multivariate Analysis of Variance (RM-MANOVA) for inferential statistics were utilized.

Findings

The table below illustrates the comparative analyses for the pre-test and post-test mean cognitive and psychomotor competencies of the participants after receiving the Evidence-Based Practice Training.

Table 1: Within-Group Comparison of Cognitive and Psychomotor Competency Scores (N = 13)

Variables	Pre-Test		Post-Test		F-value	p-value (Two-tailed)	Partial η^2
	Mean (SD)	Interpretation ^a	Mean (SD)	Interpretation ^a			
Cognitive Competency	8.85 (± 2.91)	Fair	14.46 (± 4.96)	Good	9.59	*0.0093	0.444
Psychomotor Competency	0.23 (± 0.60)	Poor	0.69 (± 1.55)	Poor	0.89	0.3634	0.069

Multivariate Test: Pillai's = 0.45, $F=4.44$, $p=0.0386$

^aCognitive Competency Scores are categorized as poor (scores ≤ 6), fair (scores 7 – 12), good (scores 13 – 19), and excellent (scores ≥ 20). Psychomotor Competency Scores are categorized as poor (scores ≤ 4.49), fair (scores 4.50 – 8.99), good (scores 9.00 – 13.49), and excellent (scores ≥ 13.50).

*Significant at ≤ 0.05 level

[†]Significant at ≤ 0.01 level

As presented in Table 1, the pre-test mean cognitive competency score of the participants was fair, with a mean of 8.85 (± 2.91) with the possible score range of

0 to 25 using the 25-item EBP Knowledge Questionnaire. On the other hand, the pre-test mean psychomotor competency score was poor, with a mean score of

0.23 (\pm 0.60) which ranges from 0 to 18 using the EBP Rubric. From these values, it can be noted that the participants had fair cognitive and poor psychomotor competencies about Evidence-Based Practice.

Focusing on the post-test scores, it can be gleaned that the mean post-test cognitive competency score of the participants became 14.46 (\pm 4.96) after the EBP Training Program. It can also be noted that the mean post-test psychomotor competency score slightly increased to 0.69 (\pm 1.55) after the intervention. Although the post-test cognitive competency score can be interpreted as good, the presented post-test psychomotor competency score remained poor.

Univariate analysis of the mean cognitive competency scores yielded an *F*-value of 9.59 and a computed *p*-value of 0.0093. It can also be noted that the computed partial eta squared was 0.444, which denotes that the 44.40% of the change in the cognitive competency scores was attributed to the EBP Training Program (Cohen, 1988).

On the other hand, univariate analysis of mean psychomotor competency scores yielded an *F*-value of 0.89 and a computed *p*-value of 0.3634. It can also be noted in Table 1 that the computed partial eta squared was 0.069, which denotes that the 6.90% of the change in the psychomotor competency scores was due to the EBP Training Program.

Discussion

Focusing on the pre-test cognitive and psychomotor competency scores, it can be noted that the participants had fair and poor competencies in these areas of EBP. Similar to the results of Iovu and Runcan¹² and Humphrey¹³, participants had some or little knowledge about EBP. Such finding may be attributed to their exposure in the educational setting, being nurse educators, where EBP is a common concept. Despite being nurse educators with background in research, the concept of EBP is rarely discussed comprehensively in the undergraduate nursing curriculum. As a matter of fact, EBP is a nursing research topic that is commonly just tackled but not comprehensively discussed in the undergraduate curriculum. Likewise, the participants, being nurse educators in the Philippine setting, are expected to have completed at least a master's degree in nursing or any allied health profession¹⁴. This educational

requirement may have exposed the participants to the different concepts or steps of EBP such as searching for research articles and appraising research evidences' validity and reliability¹⁴.

In a different light, the results of the study found that the EBP Program facilitated the improvement in cognitive competency. From a poor cognitive competency, it improved to a good level ($M=14.46$, $SD=4.96$) after the EBP Training Program. However, the program was not sufficient to improve the psychomotor competency of the nurse educators despite the intervention. This result may be attributed to several reasons which are inherent to the characteristics of the EBP Training Program.

The EBP Training Program was a combination of a 4-hour didactic session and a 4-hour practicum session. The 4-hour didactic session served as the educational intervention component of the EBP Training Program. According to several studies, educational interventions such as lectures, workshops, and seminars are excellent means of improving knowledge-based deficits in a target population^{13,15-17}. These approaches facilitate the transfer of knowledge to the recipients by addressing the nurturing concepts, notions, and perception about a given topic. In the study of Hart et al.¹⁶, a 3-month module-based training program on evidence-based practice improved the knowledge of Registered Nurses and Practical Licensed Nurses.

Similarly, Manspeaker et al.¹⁷ reported a statistically significant increase in the EBP knowledge of students on EBP after administering the Evidence-Based Teaching Model, which resulted to an effect size of 72.00% and mean difference score of 1.14. Shuval et al.¹⁵ also reported a statistically significant increase in the knowledge scores of medical doctors after administering their Evidence-Based Medicine educational intervention which focused on the processes of evidence-based practice. The result of the study also showed that the EBP Training Program attributed 44.40% of the change in the cognitive competency of the participants, a result consistent with the study of Manspeaker et al.¹⁷. These evidences and presented results support the big effect of the EBP Training Program in improving the cognitive competency of nurse educators on EBP¹⁸.

On the other hand, the results showed that the intervention did not cause a statistically significant change in the psychomotor competency. This finding

is contradictory with published literature showing that educational interventions on EBP can improve EBP skills¹⁵⁻¹⁷. However, this result may be explained by the limited time and practice that the participants had to enhance their EBP psychomotor skills.

Conclusions

The EBP Training Program largely improved the cognitive competency in EBP of faculty members. However, the training program alone was not sufficient to cause a significant effect to the psychomotor competency in EBP of the nurse educators.

Ethical Clearance: Taken from Arellano University Ethics Review Board

Source of Funding: Self

Conflict of Interest: There is no conflict of interest to disclose.

REFERENCES

1. Stevens, K. The impact of evidence-based practice in nursing and the next big ideas. *OJIN: The Online Journal of Issues in Nursing*. 2013; 18(2). Available from: <http://ojin.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Vol-18-2013/No2-May-2013/Impact-of-Evidence-Based-Practice.html>
2. World Health Organization. *Nurse educator core competencies*. Geneva: WHO; 2016
3. Institute of Medicine. *The future of nursing: Leading change, advancing health* [prepared by Robert Wood Johnson Foundation Committee Initiative on the Future of Nursing. Washington, DC: National Academies Press; 2011
4. Academy of Medical-Surgical Nurses. *Nurse Competencies of Concern to Patients, Clinical Units and Systems*. Available from: <http://www.aacn.org/wd/certifications/content/synpract2.pcms?menu> [Accessed 15th February 2018]
5. Burns, B. Continuing competency: What's ahead? *Journal of Perinatal Neonatal Nurse*. 2009; 23(3): 218–227.
6. Commission on Higher Education (CHED). Policies and Standards for Bachelor of Science in Nursing (BSN) Program. Manila, Philippines: CHED; 2009
7. Burke, L., Schlenk, E., Sereika, S., Cohen, S., Happ, M., Dorman, J. Developing research competence to support evidence-based practice. *Journal of Professional Nursing*. 2005; 21, 348–363.
8. Polit, D., Beck, C. *Essentials of Nursing Research: Appraising Evidence for Nursing Practice*. Philadelphia: Lippincott Williams & Wilkins; 2014
9. Melnyk, B. M., Gallagher-Ford, L., Long, L. E., Fineout-Overholt, E. The establishment of evidence-based practice competencies for practicing registered nurses and advanced practice nurses in real-world clinical settings: proficiencies to improve healthcare quality, reliability, patient outcomes, and costs. *Worldviews on Evidence-Based Nursing*. 2014; 11(1), 5-15.
10. Polit, D. and Beck, C. *Nursing Research. Generating and Assessing Evidence for Nursing Practice*. Philadelphia: Lippincott Williams & Wilkins; 2017
11. Melnyk, B., Fineout-Overholt, E., Feinstein, N., Sadler, L., Green-Hernandez, C. Nurse practitioner educators' perceived knowledge, beliefs, and teaching strategies regarding evidence-based practice: Implications for accelerating the integration of evidence-based practice into graduate programs. *Journal of Professional Nursing*, 2008; 24(1), 7-13. Available from: doi:<http://dx.doi.org/10.1016/j.profnurs.2007.06.023>
12. Iovu, M.B., Runcan, P. Evidence-based practice: knowledge, attitudes, and beliefs of social workers in Romania. *Revista De Cercetare Si Interventie Sociala*. 2012; 38, 54-70.
13. Humphrey, J.S. Improving Registered Nurses' knowledge of evidence-based practice guidelines to decrease the incidence of central line-associated bloodstream infections: an educational intervention. *Journal of Association for Vascular Access*. 2015; 20(3), 143-149.
14. Venzon, L.M., Venzon, R.M. *Professional Nursing in the Philippines – Eleventh Edition*. Quezon City, Philippines: C&E Publishing Inc; 2010

15. Shuval, K., Berkovits, E., Netzer, D., Hekselman, I., Linn, S., Brezis, M. et al. Evaluating the impact of an evidence-based medicine educational intervention on primary care doctors' attitudes, knowledge and clinical behaviour: a controlled trial and before and after study. *Journal of Evaluation in Clinical Practice*. 2007; 13(4), 581–598.
16. Hart, P., Eaton, L., Buckner, M., Morrow, B. N., Barrett, D. T., Fraser, D., et al. Effectiveness of a computer-based educational program on nurses' knowledge, attitude, and skill level related to evidence-based practice. *Worldviews on Evidence-Based Nursing*. 2008; 5(2), 75–84.
17. Manspeaker, S.A., Van Lunen, B.L., Turocy, P.S., Pribesh, S., Hankemeier, D. Student knowledge, attitudes, and use of evidence-based concepts following an educational intervention. *Athletic Training Education Journal*. 2011; 6(2), 88-98.
18. Cohen, J. *Statistical Power Analysis for the Behavioral Sciences*, 2nd ed. Hillsdale, NJ: Lawrence Earlbaum Associates; 1988

A Comparative Study to Assess the Knowledge on Child Abuse among Mothers Residing in Urban and Rural Community

K. Silambuselvi¹, P. Abirami², Nandhini R.³, Oneyekachi esther³, Jeevitha J.³

¹Assistant Professor, ²Professor, ³B.Sc. Nursing Students, SRM College of Nursing, SRMIST, Kattankulathur, Chennai

ABSTRACT

Child abuse is a serious physical and psycho-social problem which adversely affect the health and overall development of a child. It is very pathetic that many parents sometimes unknowingly abuse their child. Parents do not differentiate between the methods of disciplining the child and the form of abuse and neglect. The objective of the present study is to assess and compare the knowledge on child abuse among mothers residing in selected urban and rural community. Quantitative approach and descriptive research design was adopted for this comparative study. The study was conducted among hundred mothers who are having children below 12 years and who fulfill the inclusion criteria. The tool consisted of two parts. Section A included Demographic Variables such as Age, Religion, Education, Occupation, Monthly Income, and Type of family. Section B included Structured questionnaire to assess the knowledge on child abuse among mothers residing in selected urban and rural community. The results of the study revealed that Mean value of knowledge on child abuse among rural mothers was 12.44 and urban mothers was 11.98. When both the groups were compared it showed that t value -0.53 was statistically significant at $P < 0.001$. There was no significant association between the knowledge on child abuse among mothers residing in urban and rural community with their demographic variables. The study concluded that knowledge on child abuse was better among mothers residing in rural community than the urban mothers.

Keywords: *Child abuse, Knowledge, Demographic variables, Urban mothers, Rural mothers*

Introduction

Child abuse is a common and serious problem in our nation. India is home to almost 19% of the world's children; nearly 40% of its population and 69% of Indian children are victims of child abuse. Child abuse is one of the most common types of violence against children. This type of violence can have implications for both the physical and mental health of the children, and can influence the health status long after the abuse has occurred [1]. According to World Health Organization, Child abuse or maltreatment constitutes all forms of physical and/or emotional ill-treatment, sexual abuse, neglect or negligent treatment or commercial or other exploitation, resulting in actual or potential harm to the

child's health, survival, development or dignity in the context of a relationship of responsibility, trust or power. Children who survive abuse grow up more likely to negatively impact our society in many ways, which may be in form of violence, crime, drug abuse and disease. Causes of child abuse in India are high crime rate, lack of or few social services, high poverty rate, high employment rate, personal history of abuse as a child, teenage parents, young single parent, severe stress, domestic violence, history of depression, low self-esteem, multiple young children, unwanted pregnancy, handicap, unwanted child in family, separation from mother in neonatal period, physically unattractive. Children who experience child abuse and neglect are 59% more likely to be arrested as juveniles, 28% more likely to be arrested as adults and 30% more likely to commit violent crime. A long term study also found out that up to 80% of abused people had at least one psychiatric disorder at age 21, with problems including depression, anxiety, eating disorders, and suicide attempts. Children who survive abuse to adulthood in turn are more likely to abuse their own children [2]

Corresponding Author:

Dr. K. Silambuselvi

Assistant Professor, SRM College of Nursing,
SRMIST, Kattankulathur, Chennai

Phone: 9488603336

Email: selvivalavan@gmail.com

In Indian society, parents play a significant role in upbringing of the child. If mothers have a good awareness regarding child abuse they can detect the signs and prevent the occurrence of child abuse. Since they are unaware of what is abuse and neglect, it is very difficult for them to protect their children being abused by others. It is the prime responsibilities of the mothers to ensure the optimum climate for the child to grow and develop. The mother should have knowledge regarding the child abuse and neglect because while the bruises fade with time, the scars of child abuse never fades, children are never the same again after an abuser has entered their lives; they lose not only the innocence of child abuse but the chance of a normal future.

Methodology

Quantitative approach and descriptive design was adopted for this present study. The study was conducted during 2017 in places of Maraimalai nagar (urban area) and Potheri (rural area) of Kancheepuram district of Tamilnadu among mothers having children below 12 years and who fulfill the inclusion criteria. Hundred samples were selected by Non-probability Purposive

sampling technique. The tool used for the study consisted of two parts. Section A included Demographic Variables such as Age, Religion, Education, Occupation, Monthly Income and Type of family. Section B included structured questionnaire containing thirty questions to assess the knowledge on child abuse among Mothers residing in selected urban and rural community. Formal approval was obtained from the institution review board and institutional ethical committee of SRM Institute of science and technology, Kattankulathur, Kancheepuram, Tamilnadu, India. Content validity was obtained from the various experts from the field of nursing, biostatistician and research experts. Data collection was done after obtaining consent from the samples. The confidentiality on the data and finding were ensured to the subjects. Approximately each participant took 15-20 minutes for answering the questionnaire. Descriptive and inferential statistics were used for data analysis.

Results

Table 1 shows the results on Frequency and percentage distribution of knowledge on child abuse among rural and urban mothers.

Table 1: Frequency and percentage distribution of knowledge on child abuse among rural and urban mothers
N = 100

Knowledge	Urban		Rural	
	Frequency	Percentage	Frequency	Percentage
Inadequate	19	38	20	40
Moderate	31	62	25	50
Adequate	0	0	5	10
Total	50	100	50	100

The above Table 1 reveals that among 100 subjects 19(38%) in urban and 20(40%) in rural were having inadequate knowledge, 31(62%) in urban and 25(50%) were having moderate knowledge. 0(0%)in urban and 5(10%) in rural were having adequate knowledge on child abuse.

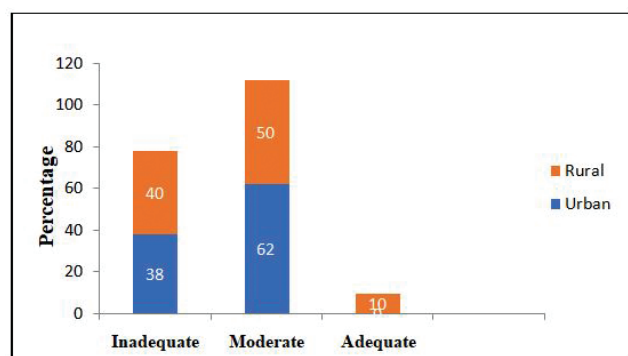


Fig. 1: (a) Percentage distribution of knowledge on child abuse between rural and urban mothers

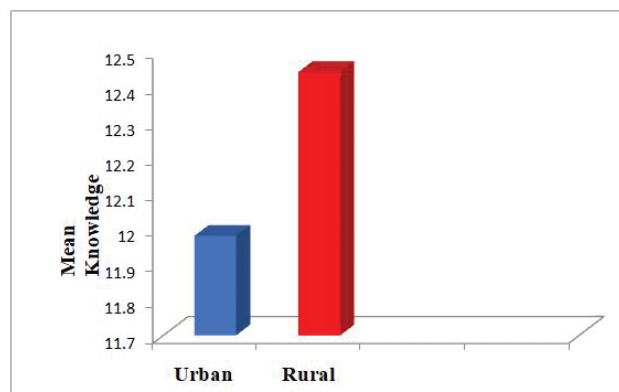


Fig. 1: (b) Comparison of mean values on knowledge between rural and urban mothers

Table 2: Comparative t-test of knowledge on Child abuse between Rural and Urban mothers**N = 100**

	Groups	n	Mean	Standard Deviation	Standard error Mean	T Value
Knowledge	Urban	50	11.98	3.094	0.438	-0.53
	Rural	50	12.44	5.361	0.738	

Significant at $P < 0.001$

The above table 2 reveals that Mean value of knowledge on child abuse among urban mothers was 11.98 and was 12.44 among rural mothers. This shows that rural mothers have better knowledge than urban mothers. When both the groups were compared it showed that t value -0.53 was statistically significant at $P < 0.001$.

Discussion

The results of present comparative study reveals that among 100 samples, 19(38%) subjects had inadequate knowledge on child abuse in urban and 20(40%) subjects had inadequate knowledge on child abuse in rural. 31(62%) subjects had moderately adequate knowledge on child abuse in urban and 25(50%) subjects had moderately adequate knowledge on child abuse in rural. 0 (0%) subjects had adequate knowledge on child abuse in urban and 5(10%) subjects had adequate knowledge on child abuse in rural. Mean value of knowledge among rural mothers 12.44 was greater than urban mothers 11.98. Results shows that rural mothers have better knowledge than urban mothers. When both the groups were compared it shows that t value -0.53 was statistically significant at $P < 0.001$. Hence there was significant difference in the knowledge on child abuse among mothers between urban and rural community.

Many studies also supports that there is difference in knowledge level on child abuse among mothers residing in different areas. **Thangavelu SN.,2016^[3]** study to assess the level of knowledge regarding child abuse among mothers in selected areas at Latur, found that 15% of mothers had inadequate knowledge and 85% were having moderate knowledge regarding child abuse. **Akoijam Mamata Devi.,2016^[4]** study on knowledge regarding child abuse among parents showed that 39% have obtained knowledge about child abuse recently from health personnel, 8% parents had good knowledge and 92% parents knowledge level was average on child abuse. The present study findings was consistent with **BinshaPappachan C et al.,2017^[5]** study on knowledge

of mothers regarding child abuse. The findings of the study developed the fact that most of the mother, about 60% had excellent knowledge regarding prevention of child abuse, about 34% have good knowledge, 6% had average knowledge and none of the mother had poor knowledge. Results showed that awareness scores regarding all aspect of child abuse was good in mothers residing in rural areas

Conclusion

The findings of the study revealed that the knowledge about child abuse among mothers residing in rural community was better than the urban mothers. There was also statistical significant difference in knowledge on child abuse among mothers residing in rural and urban community ($P < 0.001$). In Indian society, parents play a significant role in upbringing of the child.. If mothers have a good awareness regarding child abuse they can detect the signs and prevent the occurrence of child abuse. Creating awareness and educating mothers regarding child abuse will help to reduce the incidence of child abuse.

Acknowledgment

The investigators acknowledges The Dean, SRM College of Nursing for granting permission to conduct the study in SRM College of Nursing and all the participants for their support and co-operation

Conflict of Interest: Authors Dr. K. Silambuselvi, Dr. P. Abirami, Ms. Nandhini. R, Ms. Oneyekachiesther Ms. Jeevitha. J has no conflict of interest

Source of Funding: This present study was not funded.

Statement of Human and Animal Rights: All procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national) and with the Helsinki Declaration of 1975, as revised in 2008

REFERENCE

1. Jane. W Ball, Ruth C. Bindler, Kay J. Cowen, Child Health Nursing: Partnering with Children and Families.2nd ed. Prentice Hall;2009.p.4-5.
2. Cynthia Crosson-Tower. Understanding Child Abuse and Neglect.9th ed. Pearson;2013.
3. Thangavelu. SN . Assess the Level of Knowledge Regarding Child Abuse among the Mothers in Selected Areas at Latur. Journal of child and adolescent behavior.2016;4(1):1-3.
4. Akoijam Mamata Devi, Mrs. Ritu Yadav. Knowledge Regarding Child Abuse among Parents. International Journal of Advances in Nursing Management. 2016;4(3):191-193
5. Binsha Pappachan C,Jipsa Philip, Jenita Pinto, Nikeetta Aleyamma Kurian, Victoria, Rufina Rodrigues. Knowledge of mothers regarding prevention of child abuse. Innovational Journal of Nursing and Healthcare.2017;3(1):7-10.

A Study to Assess the Effectiveness of Buerger Allen Exercise in Improving the Peripheral Circulation among Patients with Diabetes Mellitus Admitted in Sharda Hospital, Greater Noida

Poonam Thakur¹, Kiran Sharma²

¹M.Sc. Nursing 2nd Year Student, ²Professor, SNSR, Sharda University

ABSTRACT

Diabetes as one of Non-communicable diseases has consumed a large share of money, material, time and human resources of health systems. Now, due to advancement in lifestyle and industrial process, prevalence of diabetes and its associated complications have been raised. Among these complications, diabetic foot considered as a common complication of diabetes. Nurses as a health care providers has a responsibility for prevention and early diagnoses of diabetes and its complications.¹

A study was conducted to assess the effectiveness of Buerger Allen Exercise in improving the peripheral circulation among patients with diabetes mellitus admitted in Sharda Hospital, Greater Noida. The research approach adopted for this study was quantitative research approach and Quasi-experimental pre- test and post-test control group was research design. There were 60 Patients admitted with diabetes mellitus selected by using simple random sampling technique and were randomly allocated in experimental and control group using lottery method. The correlation coefficient was 0.86. The results showed that from baseline to after 20 minutes of Buerger allen exercise mean score become 2.56 to 1.4 in experimental group and mean difference Inlow's score in experimental group were (1.1+0.017) is higher as compare to control group (0.2+0.005). it revealed that there was significant improvement in peripheral circulation after Buerger allen. This study showed that Buerger allen exercise become more effective along with hospital routine treatment in diabetic mellitus patient. Buerger allen exercise can be used for improvement in peripheral circulation among Diabetes mellitus patients.

Keyword: *Buerger allen exercise, Effective, Diabetic mellitus patient, Peripheral circulation*

Introduction

Healthy life is the valuable gift of an individual. But there are certain disease condition which affects the many of people, such as heart problems, neurological problems, orthopedic problems, metabolic disorders especially diabetes mellitus, etc., among which diabetes is the one of the important health issue in today's world which may affect the entire life pattern of an individual. It is a chronic, non-communicable, and expensive public health disease. Diabetes is a global public health problem; it is a chronic disease and is now growing as an

epidemic in both developed and developing countries. Diabetes mellitus is the commonest form of diabetes constituting 90% the diabetes population.²

Both type 1 and type 2 diabetes cause the direct and indirect effects on the human vasculature thus become the major source of morbidity and mortality. Diabetes mellitus leads to macrovascular complications (coronary artery disease, peripheral arterial disease, and stroke) and microvascular complications (diabetic nephropathy, neuropathy, and retinopathy). Among these complications of diabetes mellitus, Peripheral neuropathy manifest in different forms, including sensory, focal/multifocal, and autonomic neuropathies. More than 80% of amputations occur after foot ulceration or injury, which can result from diabetic neuropathy.³

Diabetic neuropathies are nerve devastation disorder which is one of the complication of diabetes mellitus.

Corresponding Author:

Ms. Poonam Thakur

PG student, SNSR, Sharda University

Email: poonni14@gmail.com

These conditions are thought to result from diabetic micro vascular injury and macro vascular conditions that cause diabetic neuropathy. Others may have symptoms such as pain, tingling, or numbness ie, loss of feeling in the hands, arms, feet, and legs. Diabetes mellitus risk can rises with age and longer duration of diabetes. As the data collected in 2010, diabetic neuropathy affects approximately 132 million people as (1.9% of the population)and affects approximately 25% of individuals diagnosed with diabetes.⁴

Exercise training for prevention of peripheral vascular disease among diabetic patient helps in potential mechanisms like formation of collateral circulation and increased blood flow, improve micro circulation and endothelial functions, improving in muscle metabolism and oxygen extraction, protect from inflammation and muscle injury, preventing atherosclerosis and pro-thrombotic risk factors. Buerger - Allen exercise has shown an effect on improving peripheral circulation. Buerger - Allen exercise is an active postural exercise in which gravity alternatively fills and empties the blood vessels for preventing.⁵

Diabetic foot is a chronic and major disabling complication of diabetes. The incidence of peripheral arterial disease (PAD) is high in diabetic patients and found mostly in 50% of cases of diabetic foot. Peripheral artery disease as a complication of diabetes become worse due to lack of technical expertise, negative beliefs because of poor experience. Italy has one of the lowest prevalence rates of major amputations in Europe. The published prevalence rates of peripheral arterial disease vary widely between studies. A research article by Jude indicates that the incidence among diabetics is, 8–30%; Faglia estimates about 22% in newly diagnosed type 2 diabetes patients[2], and Prompers estimates about 50% in diabetic patients with foot ulcers.

Method

Simple Random sampling technique was used to select the sample size 60 Patients admitted with diabetes mellitus randomly allocated in experimental and control group by using lottery method. Control group was received standard treatment. Experimental group was received Bueregr allen exercise along with standard treatment. Informed consent was obtained from patient. The study excluded the patients with diabetic foot ulcer and gangrene, below 39 year, Juvenile diabetes mellitus and Gestational diabetes mellitus.

Data Collection Procedure

The research investigator met the head of the institution in order to establish support and cooperation to conduct the study successfully. The formal permission was taken from The Dean of the School of Nursing Science and Research, Sharda University, Greater Noida, U.P and The Medical Superintendent of Sharda Hospital, Greater Noida, U.P to collect data for main study. The main Study was conducted from 5th March 2018 to 7th April 2018 in Sharda Hospital, Greater Noida.

The method used for data collection was as follows

1. The research investigator introduced him to the subjects and establish the good rapport with them.
2. The written consent was obtained from each patient.

Ankle Brachial Index:

- No smoking 2 hour before test so to prevent vasoconstriction.
- Remove shoes, socks and long sleeves.
- Lie in supine position at the same level of heart in warm temperature, normal atmosphere.
- After lying down patient should relax for 10 minute the goal for the patient is to be relax so pressure measure be stable at resting baseline.
- This time is used to explain procedure and also check pedal pulse and sensation at the feet.

Steps of Procedure: Select the appropriate size cuff to check the blood pressure. Measure the cuff to the diameter of the limb, the cuff should be 20% larger to the limb diameter so to compress the all soft tissue evenly. Cuff should be put on straight and snugly but not be tight to ensure correct reading. Ankle cuff should be go actual ankle not midcalf to ensure the correct reading. All articles should be kept ready for the use to save the time. Allow the patient to take rest and be relax, not to talk. After rest period, take the first brachial pressure in the anticubital fossa at elbow to note upper systolic pressure reading. Find the brachial pulse with the finger and apply gel on the place to ensure correct reading. Use the enough gel (not too much little of too much). Obtain the good Doppler signal for sound and move the Doppler around slowly in order to find the best pulse. Be sure angle of Doppler with the tip of transducer facing towards blood flow. Angle must be

40-60 degree to the skin surface to find the best pulse. For holding the tip of the Doppler only over the artery, slowly inflate the cuff until sound disappear to find the best pulse. Inflate additional 20-30mmhg above that number super-systolic but not higher. Slowly deflate cuff around 20- 30mmhg at a time until Doppler sound reappear to check the systolic pressure. The pressure reading when the first sound appears is systolic pressure. Deflate cuff completely and record the systolic pressure. Remove the excess gel to ensure patient comfort. Move the next ankle pressure step to check the high systolic pressure of lower limb. When taking ankle pressure it is very important patient feet should be warm to ensure the circulation be adequate for test. Identify posterior tibial pulse by locating medial malleolus to check the location of peripheral pulse for reading. Posterior tibial pulse is 2-3 cm along and beyond it to ensure the correct location of peripheral pulse for reading. This pulse is deeper than dorsal pedal so it require more concentration to palpate. Once palpate the pulse put the electro conductive gel on this part and using Doppler to ensure good peripheral pulse. Obtain the good Doppler sound or signal to ensure correct peripheral. Inflate the cuff until the sound hearing is disappear and then inflate 20-30mmhg above that number super-systolic to check the lower limb pulse reading. Ankle cuff can be pain full so do not inflate higher unnecessary to prevent for pain. Slowly deflate cuff around 20-30mmhg at a time until Doppler sound appear to note the reading. Pressure reading when first sound appear is systolic pressure. Deflate cuff immediately to return into normal level. Record systolic pressure for that site. Remove the extra electro conductive gel to ensure patient comfort and start with Buerger allen exercise

Burger's Allen exercise: Buerger's Allen exercise: it refers an active postural exercise, which help in fills and empties the lower extremity blood vessels according to gravity alternatives.

Step 1-elevation: In this study the researcher desires to elevate lower extremities at 45 to 90 degree angle and hold in this position until the skin blanches, for about 2 minutes.

Step 2: Break for 1 min, In this study, it refers to no exercise for 1 min and complete rest.

Step 3-Dependency: In this study, it refers feet and legs are then lowered below the level of the rest of the body until redness appears (care should be taken that there is no pressure against the back of the knees); moves the finger for about 2 minutes.

Step 4: Break for 1 min, In this study, it refers to no exercise for 1 min and complete rest.

Step 5-Horizontal: In this study, it refers to legs are placed flat on the bed in a horizontal position and place the towel under the knees and ask the subject to apply pressure over the towel with his own capabilities and capacities for 2 minutes.

Step 6: Break for 1min, In this study, it refers to no exercise for 1 min and complete rest. The length of time for each position varies with the patient's tolerance and the speed with which color change occurs. Usually the exercises are prescribed for about 20 minutes. Three series of steps can be repeated for a frequency of 2 times a day.

Results And Analysis

Table:1: Pre and Post test scores of peripheral circulation of the DM patients in experimental group

Factors	Mean	N	Std. Deviation	t value	p value
M1B	2.5667 ^a	30	.50401	5.385	<0.001**
M1A	2.5667 ^a	30	.50401		
E3B	1.4333 ^a	30	.40609	-4.014	
E3A	1.4333 ^a	30	.40609		

Note: ** and * denotes significant at 1% level and 5% level.

The above value mentioned in table 4 indicates that p values of the above analysis are less than 0.001, which means alternative hypothesis (Ha1) was accepted at 1% level, therefore it was concluded that the Buerger allen exercise was effective in improving peripheral circulation

of the diabetes mellitus patients in experimental group. Further, the mean score on first day become (2.5) & on third day it become (1.4) that indicates Buerger allen exercise was effective in improvement of peripheral circulation of the diabetes mellitus patients in experimental group.

Table:2: Pre test-Post test scores of peripheral circulation of the DM patients between experimental and control group

Particulars	Group Type	N	Mean	Std. Deviation	t value	p value
M1B	Experimental	30	2.5667	.50401	.766	.447
	Control	30	2.6667	.50742		
M1A	Experimental	30	2.5667	.50401	.766	.447
	Control	30	2.6667	.50742		
E3B	Experimental	30	1.4333	.48609	-7.914	.000
	Control	30	2.4667	.50232		
E3A	Experimental	30	1.4333	.48609	-7.914	.000
	Control	30	2.4667	.50232		
Mean Difference	Experimental	30	1.1+0.017			
	Control	30	0.2+0.005			

Note: ** & * significant at 1% level & 5 % level.

The above value mentioned in table 5 indicates that p values of the above analysis were less than 0.01 & .05, which means alternative hypothesis (Ha2) was accepted at 1% level & 5% level, therefore it was concluded that there was a significant difference between patients of experimental and control group with respect to Buerger allen exercise in improving peripheral circulation. Further, the mean difference score of experimental group (1.1+0.017) was higher as compare to control group (0.2+0.005) after Buerger allen exercise. This indicates that there was gradual improvement in peripheral circulation of the diabetes mellitus patients in experimental group after Buerger allen exercise.

Discussion

In this study the data was obtained from diabetes mellitus patients admitted in Sharda Hospital, Greater Noida a Quasi-experimental pre-test & post-test control group design was adapted and 60 patients were selected by using simple random sampling technique, fulfilling the inclusion and exclusion criteria. The subjects were evaluated by using structured participation information sheet, inform consent, demographic variables, ankle brachial index, Inlow's 60 sec diabetic foot assessment scale.

Conclusion

Diabetes mellitus is an complex metabolic disease. A non- pharmacological approach is needed to overcome that problem, simple, which is easy to do, has no notable side effects and most acceptable one to reduce Diabetes mellitus. The findings of the study revealed

that the Buerger allen exercise effective in improving the peripheral circulation among patients with diabetes mellitus. Thus study suggest that Buerger allen exercise is a complimentary alternative therapy that helps the parents, family members and nurses for improving the peripheral circulation, cost effective way without shivering and complication. As this method can be performed for the elderly by themselves or other people, it can be recommended in health programs for them. Further comparative study could be conducted to evaluate the effectiveness of Buerger allen exercise with other non pharmacological measure and alternative therapy.

Keyword: Buerger allen exercise, Effective, Diabetic mellitus patient, Peripheral circulation

Conflict of Interest: Nil

Source of Funding: Self

Ethical Clearance: Taken

REFERENCE

1. M Aalaa, et all. Nurses' role in diabetic foot prevention and care. Journal of Diabetes & Metabolic Disorders. Publication (P) Ltd. 2012..
2. Altman, Buchel, Coxon. Fundamentals & advanced nursing skill. 1st edition. Canada: Thomson learning. Publication(P) Ltd. 2000; 28-32.
3. Michael J. Fowler, MD. Microvascular and Macrovascular Complications of Diabetes. American Diabetes Association. 2008 April;26 (2); 77-82. <https://doi.org/10.2337/diaclin.26.2.7>.

4. King SA. Diabetic Peripheral Neuropathic Pain. Effective Management. Publication (P) Ltd. 2008 ;48 (11). Available from: URL:http://en.wikipedia.org/wiki/Diabetic_neuropathy
5. Suzanne C. Smeltzer, Brenda G. Bare, Brunner and suddarth's Text book of medical and surgical nursing. Assessment of patient with vascular disease. 9th edition; 691-693.
6. A.Aiello. R.Anichini.et all. Treatment of peripheral arterial disease in diabetes. A consensus of the Italian Societies of Diabetes Nutrition, Metabolism and Cardiovascular Diseases. Publication (P) Ltd 2014 ; 355-369. Available at: <http://www.sciencedirect.com/science/article/pii/S093947531003141>

A Study to Assess the Effectiveness of Self-Instructional Module Regarding Knowledge of Correct Body Mechanics in Prevention of Low Back Pain among Staff Nurses Working at Tertiary Care Hospital, Bhubaneswar, Odisha

Kulumina Dash¹, Minati Das²

¹Programme Coordinator, ²Asst. Professor, Kalinga Institute of Nursing Sciences, KIIT Deemed to be University, Bhubaneswar

ABSTRACT

Low back pain is the second leading health problem concerning disability and visits to the doctors in population under 45 years of age. Musculoskeletal system disorders including LBP comprise significant occupational injuries and disability within nursing profession. LBP is reportedly the most important reason for nurses' decision to change their job. In terms of high risk groups for occupational low back pain, the nurses and other health workers are considered to the highest incidence of low back pain requiring medical and hospital intervention. Nursing staffs have one of the highest incidences of work-related back problems of all occupations. The incidence rates continue to climb and the direct and indirect costs associated with back injuries for nurses are estimated to be \$20 billion annually. The objectives was to assess the knowledge of staff nurses regarding proper body mechanics in prevention of low back pain before giving the self-instructional module and to determine the effectiveness of self-instructional module regarding knowledge on proper body mechanics in prevention of low back pain among staff nurses. One group pre test- post-test research design was selected for the study. 60 samples were selected by using purposive and convenience sampling technique. Samples were selected from medicine, surgery and orthopedic ward of Pradyumna Bal memorial Hospital, Bhubaneswar Odisha. After obtaining the written consent from the 60 staff nurses to participate in this study, the knowledge was assessed using a self administered structured questionnaire. After completing the pre test, a Self Instructional Module on correct body mechanics in prevention of low back pain was given to them and the post test was done after 7 days. The data thus collected was analyzed using descriptive and inferential statistics. The study findings interpreted that in orthopedic ward out of 20 staff nurses, (45 %) have good knowledge, (5 %) have average knowledge & (50 %) have poor knowledge of prevention of low back pain, in surgery ward out of 20 staff nurses (60 %) have good knowledge, (25 %) staff nurses have average & (15 %) staff nurses have poor knowledge and in medicine ward out of 20 staff nurses, (70%) have good, (30 %) have average knowledge & none of the staff nurses have poor knowledge on prevention of low back pain. The study findings showed that self-instructional module was effective in improving knowledge of staff nurses.

Keywords: LBP(Low back pain), Self –instructional module, Body mechanics.

Introduction

Health care professionals should have thorough scientific knowledge of body mechanics and its proper use in their daily practices. Gravity plays an important role in body mechanics. There is a constant pull exerted by earth on every object towards its center part, which helps to maintain the good posture and balance of whole body^[1]. The proper functioning of the body relates to the

Corresponding Author:

Ms Minati Das
Asst. Professor, KINS,
Kalinga Institute of Nursing Sciences(KINS), Patia
KIIT Deemed to be University, Bhubaneswar-751024
Phone: 9438526249

posture also and correct use must be implicated during shifting the bedridden or immobilized patients. Walking, moving, lifting and are some essential components needed in transferring the patients in the hospital^[2]. Over three quarters of a million work days are lost annually as a result of back injuries in nursing, with an estimated 40,000 nurses reporting illnesses from back pain each year^[3]. Ambulation of an individual needs knowledge and implementation of proper body mechanics, so that the individual could lift or transfer the patients^[4].

Nurses are among the occupational groups within the health service that are vulnerable to lower back pain. Among nurses, the prevalence of lower back pain was varying between 50% and 90%. Nurses frequently have to lift or transfer patients who may move suddenly and carry out repetitive procedure with incorrect or poor body posture, which subsequently cause lower back pain^[5].

A study conducted in the rural hospital of Maharashtra on 25 nurses to assess the work load musculoskeletal disorder. Result showed that 84.1% nurses had experienced work related musculoskeletal pain or discomfort.⁷ Harbor in his study revealed that work related back injury among hospital nurses were because of lifting and helping the client in and out of bed is 78%. Some health care workers used improper body mechanics while handling and transferring the immobilized patients due to lack of knowledge and its can leads complications^[6].

LBP continues to be a common occupational disease for nurses. However, taking precautions for prevention of LBP in nurses is important in order for nurses to exercise their fundamental right to work under healthy and safe conditions, to maintain their professions and to provide better support for their patients^[7]. Most often, nurses hurt their backs while turning bed-ridden patients or transferring them among stretchers, beds and chairs, adding that orthopedic and intensive care unit (ICU) nurses have the highest rates of low back pain among all nurses. The use of proper body mechanics is an effective way to prevent further injury to back and when it is incorporated into activities of daily living, body mechanics help decrease the amount of stress on the spine. Education in body mechanics is therefore, essential in prevention of back pain^[8].

Method

The objective of this study was to assess the knowledge of staff nurses regarding proper body mechanics in

prevention of low back pain before giving the self-instructional module and to determine the effectiveness of self-instructional module regarding knowledge on proper body mechanics in prevention of low back pain among staff nurses. One group pre test- post-test research design in PBMH, KIMS, Bhubaneswar, Odisha, was conducted among staff nurses by using purposive and convenience sampling technique. 60 staff nurses were selected from medicine, surgery and orthopedic ward of PBMH, KIMS, Bhubaneswar. The data was collected by using a self structured questionnaire focusing on knowledge on proper body mechanics in prevention of low back pain among staff nurses. The first part of questionnaire consist of demographical data such as age, gender, marital status, educational qualification, professional qualification, place of posting, year of experience, any type of past history of illness. The second part asks questions about knowledge upon proper body mechanics in prevention of low back pain among staff nurses. After completing the pre test a Self Instructional Module on correct body mechanics in prevention of low back pain was given to them and the post test was done after 7 days. The data thus collected was analyzed using descriptive and inferential statistics.

Result and Discussion

The socio demographic characteristics of study participants (n=60) in this present study were recruited from the PBMH, KIMS, Bhubaneswar. From the total study participants, 50% of the staff nurses were below 25 yrs of age, 33% were 26 to 30 yrs of age and 13% were 31 to 33 yrs of age. Most of the staff nurses of the total were female that is 51(85%). Out of total staff nurses 19(32%) of the respondents reported attended higher secondary education followed by 32 (53%) were graduate, 9 (15%) were post graduate. And it is reported that the 50(83%) of participants attended GNM followed by 10 (17%) were completed B.SC(nursing). About place of posting, the researcher found that twenty participants (33.3%) of the total were working in orthopaedic ward, followed by (33.3%) were working in surgery ward and (33.3%) were working in medicine ward. Of total 60 staff nurses, 40 (67%) were having less than 5 yrs of working experience, following 11(18%) were having 6 to 10 yrs of experience, and 9 (15%) were having 11 to 15 yrs of experience. And the researcher found that 24(40%) were married, 36 (60%) were unmarried. Most of the study participants 57(95%) reported that they were not having any past history of illness.

Section-A**Table 1: Pre-test assessment of knowledge regarding proper body mechanics in prevention of low back pain among staff nurses (n = 60)**

Knowledge assessment	Criteria	Frequency	Percentage (%)
Adequate/good	>75%	30	50%
Average	51-75%	15	25%
Poor/Inadequate	<50%	15	25%

Table 2: Post-test assessment of knowledge regarding proper body mechanics in prevention of low back pain among staff nurses (n = 60)

Knowledge assessment	Criteria	Frequency	Percentage (%)
Adequate/good	>75%	35	59%
Average	51-75%	12	20%
Poor/Inadequate	<50%	13	21%

Section-B**Table 3: Pre-test: Knowledge score of the nursing staffs with types of wards (n = 60)**

Type of ward	Knowledge score					
	Good (76-100)%	%	Average (36-75)%	%	Poor (0-35)%	%
Orthopedic	6	30%	1	20%	10	50%
Surgery	10	50%	5	25%	4	20%
Medicine	14	70%	6	30%	1	5%

Table 4: Post test Knowledge score of the nursing staffs with types of wards (n = 60)

Types of ward	Knowledge score					
	Good (76-100)%	%	Average (36-75)%	%	Poor (0-35)%	%
Orthopedic	9	45%	1	5%	10	50%
Surgery	12	60%	5	25%	13	15%
Medicine	14	70%	6	30%	0	0

Table 5: Mean & S. D. of knowledge score of staff nurses of medicine, surgery, orthopedic ward**Pre Test:**

Types of ward	No. of items	No. of sample	Mean	S. D.
Orthopaedic	37	20	19.4	7.26
Surgery	37	20	23.45	5.68
Medicine	37	20	27.8	1.24

Post Test:

Type of wards	No. of items	No. of sample	Mean	S.D.
Orthopedic	37	20	21.65	9.65
Surgery	37	20	27.25	7.43
Medicine	37	20	30.1	2.66

After completing the pre test, a Self Instructional Module on correct body mechanics in prevention of

low back pain was given to them and the post test was done after 7 days. The data thus collected was analyzed using descriptive and inferential statistics. The study findings interpreted that in orthopedic ward out of 20 staff nurses, (45 %) have good knowledge, (5 %) have average knowledge & (50 %) have poor knowledge of prevention of low back pain, in surgery ward out of 20 staff nurses (60 %) have good knowledge, (25 %) staff nurses have average & (15 %) staff nurses have poor knowledge and in medicine ward out of 20 staff nurses, (70%) have good, (30 %) have average knowledge & none of the staff nurses have poor knowledge on prevention of low back pain.

Conclusion

The study findings showed that self-instructional module was effective in improving knowledge of staff nurses. We want to highlight to potential need to improve

the level of knowledge among staff nurse on proper body mechanics in prevention of low back pain. Prevention of low back pain is very essential for every staff nurses, because low back pain is very common problem among staff nurses. Most of the staff nurses gain knowledge from self Instructional Module but proper body mechanics practice is very important for the staff nurses

Implication: Exploring of knowledge and encourage on proper body mechanics in prevention of low back pain among staff nurses. Management of low back pain by maintaining various types of body mechanics and how these are helpful in prevention of low back pain. The study will provide the basis for improving knowledge on proper body mechanics in prevention of low back pain.

Recommendation: The study can be replicated on large number of samples in a different setting to have wider generalization of findings. Similar study can be conducted in all wards among all staff nurses, and health care workers.

Ethical Clearance: Taken from Institutional ethics committee.

Source of Funding: Self

Conflict of Interest: Nil

REFERENCES

1. Barbara C. Long, Wilma J. Phipps, Virginia L. Cassmeyer, Medical Surgical Nursing; A Nursing Process Approach; 3rd Edition 1993; ISBN-0801674174; Mosby. 164.
2. Galatia Tina Iakovou, Implementation of an evidence-based safe patient handling and movement curriculum in an associate degree nursing program, April 2008; vol-3; 48-52
3. Bashir, Munira. "Low back pain caused by muscular skeletal disorder" health care industry. Nursing journal of India, April 2002
4. BT Basavanthappa; Fundamentals of nursing; published by Jaypee Brothers; edition- 2004 (2); ISBN- 8171799701; 254,258.
5. Fatma Abdel Moneim Al Tawil; low back pain and patients lifting behavior among nurses; international journal of advanced research; 2015; vol-3; issue (11); ISSN- 23205407; p- 1211-1223
6. Kozier Barbara, Erb Glenora; Fundamentals of nursing; 1063
7. Roberto, "occupational musculoskeletal injuries in nurses" journal of orthopedics sports physical therapy: 30(1) A: 7-8.
8. Annalee Yassi, Karen Lockhart, Work-relatedness of low back pain in nursing personnel: a Systematic review, International Journal of Occupational and Environmental Health 2013 Jul-Sep; 19(3): 223-44.

A Study to Assess the Effectiveness of Self Instructional Module on Knowledge Regarding Evidence Based Nursing Practice among Staff Nurses Working in Selected Hospitals at Mysore

Nandaprakash P.¹, Lingaraju M.², B. S. Shakuntala³

¹Professor & HOD Department of Community Health Nursing, Government College of Nursing, Irwin Road, Mysore; ²Assistant Professor, Department of community Health Nursing, JSS College of Nursing, Mysore; ³Dean (Nursing), AECS Maaruti College of Nursing, Bangalore

ABSTRACT

Background of the study: The nurse's needs to gain knowledge and skills in collecting and integrating evidences in to practice.

Aim: The main objectives of the study were to improve the knowledge and skills in collecting and integrating evidences in to practice.

Method: The research approach adopted for the study was evaluative and the research design was quasi experimental. Out of eighty staff nurses forty were selected from K.R. Hospital as experimental group and forty were selected from Cheluvamba and PKTB Hospital for control group. Pre-test was conducted to know the knowledge regarding evidence based nursing practice among experimental and control group and the self-instructional module was administered to staff nurses in the experimental group and the post-test was done after the gap of two weeks for the both group.

Results: The post-test mean value of experimental group was 11.3 (56.50%) was higher than pre-test mean value 5.97 (29.85%). The mean difference value is (5.33) and the obtained 't' test value is 15.0. The obtained 't' value is highly significant at $p < 0.05$ level. The post-test mean value of control group was 5.97 (29.85%) was higher than pre-test mean value 5.95 (29.75%). The mean difference value is 0.02 and the obtained 't' test value is 0.61 which is not significant at $p < 0.05$ level therefore null hypotheses is accepted. The obtained post-test mean value in experimental group (11.3) was higher than post-test mean value in control group (5.97). The mean difference value is (5.33) and the obtained 't' test value is 9.07 which is not significant at $p < 0.05$ level therefore null hypotheses is rejected.

Interpretation and conclusions: The self-instructional module was very effective in improving the knowledge regarding evidence based nursing practice.

Keywords: Evidence Based Nursing Practice, Self-instructional Module, Staff-nurses.

Introduction

Evidence-Based Nursing or EBN is a type of evidence-based healthcare, drawing on some of the traditions of evidence-based medicine. It involves identifying solid research findings and implementing them in nursing practices, in order to increase the quality of patient care. The goal of EBN is to provide the highest quality and most cost-efficient nursing care possible. EBN is a process founded on the collection, interpretation, and integration of valid, important, and applicable research. In order to practice evidence based

Corresponding Author:

Dr. Nandaprakash P. MSc (N), Ph.D (N)
Professor & HOD
Department of Community Health Nursing
Government College of Nursing,
Mysore Medical College and Research Institute, Mysore
Irwin Road, Mysore- 570 001
Phone: 9448219870
Email: nandu8670@gmail.com
nandu8670@yahoo.co.in

nursing, practitioners must understand the concept of research and know how to accurately evaluate this research. These skills are taught in modern nursing education and also as part of professional training.¹

There are exciting times in nursing. These exciting times should include a strong motivation among nurses to apply the findings of research to their practice through evidence-based nursing. To complement these developments, a variety of resources (like self-instructional module, in-service education programs on EBNP etc) have to be emerged to help nurses become evidence-based practitioners.²

Material and Method

Statement of the Problem: “A study to assess the effectiveness of self-instructional module on knowledge regarding Evidence Based Nursing Practice among Staff Nurses working in selected Hospitals in Mysore”

Aim: To Improve Knowledge of staff nurses regarding Evidence Based Nursing Practice.

Objectives of the study:

1. To Assess the Knowledge of staff nurses regarding Evidenced Based Nursing Practice at selected Hospital in Mysore
2. To assess the effectiveness of self-instructional module on knowledge of Staff Nurses regarding Evidence Based Nursing Practice in experimental group.
3. To compare the post-test knowledge of staff nurses regarding evidence based nursing practice between experimental and control group.
4. To find out the association between pre-test knowledge regarding evidence based nursing practice and selected demographical variables among staff nurses in experimental and control group.

Hypotheses

H₁: There will be a significant difference between the pre-test and post-test knowledge scores on evidence based nursing practice among staff nurses in the control group.

H₂: There will be a significant difference between the pre-test and post-test knowledge scores on evidence based nursing practice among staff nurses in the experimental group.

H₃: There will be a significant difference between the post-test knowledge scores regarding evidence based nursing practice among staff nurses in experimental and control group.

H₄: There will be significant association between the pre-test knowledge regarding evidence based nursing practice and the selected demographical variables among staff nurses in the experimental group.

H₅: There will be significant association between the pre-test knowledge regarding evidence based nursing practice and the selected demographical variables among staff nurses in the control group.

Research Approach: Evaluative quasi-experimental approach was adopted.

Research Design: Quasi-experimental research design is that on day one pre -test was given in the form of a knowledge questionnaire. After 30 minutes, the questionnaire was collected back and self-instructional module on evidence based nursing practice was given on the same day. After two weeks post-test was conducted to assess the gain in knowledge regarding evidence based nursing practice.

Setting: This study was conducted in the KR Hospital and Cheluvamba and PKTB Hospital Mysore.

Target Population: target population was the staff nurses working in Hospitals.

Sampling Technique: convenient sampling technique was adapted to select sample for the study.

Sample and Sample Size: The sample of study 40 nurses was selected from K.R. Hospital for experimental group and 40 nurses were selected from Cheluvamba and PKTB Hospital for control group.

Criteria for Selection of Sample

a. Inclusion criteria

- Staff nurses of selected Hospital at Mysore.
- Both males and females.
- Both GNM and BSc graduates.

b. Exclusion Criteria:

- Those who were not present at the time of the study.
- Those who were not willing to participate in the study.

Development of the Tool: A structured knowledge questionnaire with multiple choice questions was prepared by the investigator to assess the knowledge of the staff nurses regarding evidence based nursing practice.

Content Validity of the Tool: The prepared instrument along with validity seeking letter, acceptance form, problem statement, objectives, hypotheses, operational definitions, blue print, criteria checklist and answer key was submitted to ten experts in the field of medical surgical nursing for the content validity. Suggestions and recommendations given by experts were accepted and necessary corrections were done for modifying the tool.

Reliability of the Tool: The reliability of the tool was found to be $r = 0.89$ which indicated that the tool was highly reliable.

Development of Self Instructional Module: Self-instructional Module was developed based on the review of literature, which was pertaining to the development of Self-instructional Module on knowledge regarding Evidenced Based Nursing Practice.

Data Collection and Procedure

(a) Permission from the Concerned Authority: Formal administrative permission was obtained from concerned authority, Mysore Medical College and Research Institute, Mysore.

(b) Period of Data collection: The main study was conducted for a period of 4 weeks between 13-08-2018 to 08-09-2018 at KR Hospital, Cheluvamba and PKTB Hospital, Mysore.

(c) Pre-test: The investigator collected data from 40 experimental group and 40 control group.

(d) Administration of Structured Teaching Programme: After pre-testing, the self-instructional module was administered on the same day for the experimental group.

(e) Post-test: After two weeks post-tests were conducted for both groups with the same tool to evaluate the effectiveness of the self-instructional module.

Major Findings of the Study

I: Findings Related to the Subjects Demographical Variables:

- In experimental group majority of 25(62.5%) staff nurses had age between 21-25years. Among control group majority of 18(45%) staff nurses had age between 21-25 years.
- In experimental group majority 22(55%) of staff nurses were females and 18(45%) were males. In control group about 25(62.55%) of staff nurses were females and 15(37.5%) were males.
- In experimental group majority 32 (80%) were GNM nurses and remaining 8 (20%) were BSc graduates. In control group majority 21 (52.5%) were GNM nurses and the remaining 19 (47.5%) were BSc graduates.
- In experimental group majority 13(32.5%) of staff nurses had experience between 10-20 years and in control group majority 17(42.5%) of nurses had experience between 10 -20 years of experience.
- In experimental group majority 26(65%) nurses had no previous knowledge and least 5(12.5%) members had previous knowledge through journals and books. In control group majority 19(47.5%) nurses had no previous knowledge and least 3(7.5%) members had previous knowledge through other sources.

Table 1: Data on Analysis of Pre-test and Post-test Knowledge Score Regarding Evidence Based Nursing Practice among Staff Nurses in Control Group

N = 40

Group	Pre -test		Post-test			Paired t test values
	Mean	SD	Mean	SD	MD	
Overall knowledge in the control group	5.95	1.66	5.97	2.13	0.02	t = 0.61; p = 0.951; NS

The obtained post-test mean value 5.97 (29.85%) was higher than pre -test mean value 5.95 (29.75%). The mean difference value is (0.02) and the obtained 't' test value is 0.61 which is found to be less than the 't' table

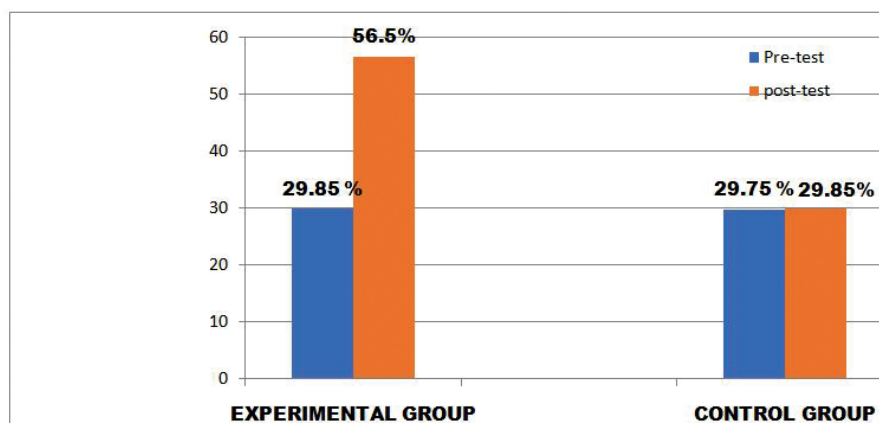
value (1.685). Since the obtained 't' value is not significant at $p < 0.05$ level therefore null hypotheses is accepted. It is inferred that there is no significant difference in knowledge among staff nurses in control group.

Table 2: Data on Analysis of Pre-Test and Post-Test Knowledge Score Regarding Evidence Based Nursing Practice among Staff Nurses in Experimental Group

N = 40

Group	Pre -test		Post-test			Paired 't'test values
	Mean	SD	Mean	SD	MD	
Overall knowledge in experimental Group	5.97	2.09	11.3	3.04	5.33	t = 15.0, p = 0.001, S

The obtained post-test mean value 11.3 (56.55%) was higher than pre-test mean value 5.97 (29.85%). The mean difference value is (5.33) and the obtained 't' test value is 15 which is found to be more than the 't' table value (1.685). Since the obtained t value is highly significant at $p < 0.05$ level therefore null hypotheses is rejected. It is inferred that there is significant difference in knowledge among staff nurses in experimental group.

**Fig. 1: Comparison Between Experimental and Control Group Knowledge Score on Subjects****Table 3: Data Analysis on Comparison of Both Experimental and Control Group**

N = 80

Group	Test	Mean	SD	MD	Unpaired t-test value
Control	post-test	5.97	3.04	5.33	t = 9.07, p = 0.001, S
Experimental		11.3	2.13		

Table-3 depicted that the obtained post-test mean value in experimental group 11.3 (56.50%) was higher than post-test mean value in control group 5.97 (29.85%). The mean difference value is (5.33) and the obtained 't' test value is 9.07 which is found to be less than the 't' table value (1.99). Since the obtained t value is not significant at $p < 0.05$ level therefore null hypotheses is rejected. It is inferred that there will be significant difference between post-test knowledge among staff nurses in the experimental and control group.

Table 4: Data Analysis on Association with the Demographic Variable among Staff Nurses in Experimental and Control Group

Demographic variable		≤ Median	>Median	Total	Results
Age	21-25	18	7	25	$\chi^2 = 3.33$, df=2, p=0.196 p> 0.05, NS
	26-30	5	4	9	
	31-35	2	4	6	
Gender	Male	12	6	18	$\chi^2 = 0.242$, df=1, p = 0.622 p> 0.05, NS
	Female	13	9	22	

Conted...

Qualification	GNM	19	13	32	$\chi^2 = 0.667$, df=1, p = 0.414, p> 0.05, NS
	BSc nursing	6	2	8	
Area of maximum experience	ICU	8	6	14	$\chi^2 = 0.747$, df=3 p = 0.862, p> 0.05, NS
	Casualty	4	3	7	
	Operation theatre	3	2	5	
	Ward	10	4	14	
Source of previous knowledge	Journals and books	2	3	5	$\chi^2 = 2.00$ df=3, p = 0.571 p> 0.05, NS
	Seminars and conference	3	3	6	
	Others	2	1	3	
	No previous knowledge	18	8	26	

The Table-4 shows association between Demographic variable and pre-test knowledge in experimental group. This shows there is no significant association between any of the background variables. For all the variables the p > 0.05 there for the null hypotheses is accepted. It is inferred that there is no significant association between pre-test knowledge and Demographic variable.

Table 5: Data Analysis on Association Between Pre-test Knowledge and Demographic Variables in Control Group
N = 40

Demographic variable		≤ Median	>Median	Total	Results
Age	21-25	11	7	18	$\chi^2 = 4.60$ df=3, p =0.204 p> 0.05, NS
	26-30	6	10	16	
	31-35	4	1	5	
	Above 35	0	1	1	
Gender	Male	9	6	15	$\chi^2 = 0.541$, df=1, p = 0.462 p> 0.05, NS
	Female	12	13	25	
Qualification	GNM	13	8	21	$\chi^2 = 0.1.57$, df=1, p = 0.21 p> 0.05, NS
	BSc nursing	8	11	19	
	1-2 years	9	8	17	
	2-4 years	2	9	11	
	4yrs and above	5	2	7	
Area of maximum experience	ICU	5	5	10	$\chi^2 = 2.57$, df=3 p = 0.462, p> 0.05, NS
	Casualty	3	6	9	
	Operation theatre	3	3	6	
	Ward	10	5	15	
	Head nurse	4	2	6	
	Ward in charge	0	1	1	
Source of previous knowledge	Journals and books	3	2	5	$\chi^2 = 4.16$, df=3 p = 0.244, p> 0.05, NS
	Seminars and conference	6	2	8	
	Others	2	6	8	
	No previous knowledge	10	9	19	
	No	16	15	31	

Table-5 shows association between pre-test knowledge and demographic variables in control group. The table shows for experience the χ^2 value was 10.7 and the $p < 0.05$ there for null hypotheses is rejected. For all other demographical variables $p > 0.05$ there for null hypotheses is accepted. It is inferred that there is significant association between experience and pre-test knowledge.

Conclusion

The aim of this study was to assess the knowledge on evidenced based nursing practices among staff nurses at KR Hospital, Cheluvamba and PKTB Hospital, Mysore, as well as to provide information to them about evidenced based nursing practices through self-instructional module

Conflict of Interest: Nil

Source of Funding: Self or Other Source–Self

Ethical Clearance: Obtained

REFERENCES

1. Kathuria, Om Kumari. Evidence based nursing practice (EBP). Nursing Journal of India 2017 Nov; 94(11): 251-52.
2. Youngblut JM, Brooten D. Evidence-based nursing practice: why is it important? Journal of Advanced Nursing 2017; 12(4): 468-76.
3. Ketefian S. Application of selected nursing research findings into nursing practice: a pilot study. Nursing Research 2016; 24: 89-92.
4. Fineout-Overholt E, Melnyk BM, Stillwell SB, Williamson KM. Evidence-based practice step by step: Critical appraisal of the evidence: part I. American Journal of Nursing 2016 Jul; 110(7): 47-52.
5. Pearcey PA. Achieving research-based nursing practice. Journal of Advanced Nursing 2016; 22(8): 33-9.
6. Young, K. M. Where's the evidence? American Journal of Nursing 2016; 103(10): 11
7. Mary L Koehn, Karen Lehman. Nurses' perceptions of evidence-based nursing practice. Journal of Advanced Nursing 2015; 62(2): 209-215
8. Rosaline A. Olade. Evidence-based practice and research utilization activities among rural nurses. Journal of Nursing Scholarship 2016. Sep;36(3):220-25.
9. Caroline E. Brown, Mary A. Wickline, Laurie Ecoff, Dale Glaser. Nursing practice, knowledge, attitudes and perceived barriers to evidence-based practice at an academic medical center. Journal Advanced Nursing 2016. Feb;65(2):371-81,
10. L. Özdemir, N. Akdemir. Turkish nurses' utilization of research evidence in clinical practice and influencing factors. International Nursing Review 2016. Sep;56(3): 319–325.

Prevalence of Hypertension and Obesity among Women Residing in Selected Community Area Punjab

Neha Bharti

Clinical Instructor, Shri Mata Vaishno Devi College of Nursing, Katra, Jammu & Kashmir

ABSTRACT

Hypertension is a common disease associated with high morbidity and mortality. The disease is a silent threat to the health of people all over the world. Thus, early detection of hypertension and its precipitating or aggravating factors are important if one is to evolve measures so that complications of hypertension can be prevented. On the other hand obesity is a major health problem that affecting women mostly. Obesity has become one of our nation's leading epidemics. According to the Centre for Disease Control (CDC) obesity has almost tripled over the past 30 years.

Obesity is strongly associated with hypertension and cardiovascular disease. Obesity is also associated with endothelial dysfunction and renal functional abnormalities that may play a role in the development of hypertension. The continuing discovery of mechanisms regulating appetite and metabolism is likely to lead to new therapies for obesity-induced hypertension.

Methodology: A non-experimental approach with simple random sampling technique was used in the study. The data was collected through body mass index scoring sheet, assessment sheet for hypertension and health assessment Performa. The final study was also conducted on 200 women in selected area of Punjab. Descriptive and inferential statistics were employed to analyze the data.

Result: The results showed that out of 200 subjects 42.5% were overweight. 30.5% subjects comes under pre hypertension, 16% subject comes under stage- I hypertension while only 3% subjects comes under stage –II hypertension category.

The findings revealed that there was a significant association between hypertension with demographic variable like age, education, duration of hypertension, type of family and life style and not any significant association between hypertension and demographic variables such as occupation, religion, marital status, family history of hypertension, family history of obesity, income (monthly) and dietary pattern.

There was a significant association between obesity with demographic variable like marital status, duration of hypertension and life style and not any significant association between obesity and demographic variables such as Age, education, occupation, religion, family history of hypertension, family history of obesity, income (monthly), type of family and dietary pattern.

Keywords: *Prevalence, Hypertension, Obesity.*

Introduction

Obesity and hypertension have become public health issues with rising prevalence globally, associated with increased morbidity and mortality from cardiovascular diseases as well as increased socioeconomic costs. The growing prevalence of obesity is increasingly recognized as one of the most important risk factors for the development of hypertension. This epidemic of obesity and obesity related hypertension is paralleled

Corresponding Author:

Neha Bharti
Clinical Instructor,
Shri Mata Vaishno Devi College of Nursing,
Katra, Jammu & Kashmir
Phone: 8894239318
Email: katnawer.tanu1010@gmail.com

by an alarming increase in the incidence of diabetes mellitus and chronic kidney disease.¹ Obesity and weight gain have been reported to be the most significant determinants of hypertension. Obese patients are more prone to hypertension and hypertensive patients also appear prone to weight gain.²

In the Framingham study, a 10% rise in body weight is associated with a 7mmHg rise in systolic blood pressure.³ The National Health and Nutrition Examination survey reported linear association between increase in Body Mass Index (BMI) and systolic, diastolic and pulse pressure in the American population. It is reported that an increase of BMI of 1.75 kg/m² in men and 1.25 kg/m² in women will cause 1 mm Hg rise in systolic blood pressure.⁴

The use of simple anthropometric measures as health outcome indicators, suitable for population screening. These include body mass index (BMI), waist circumference (WC) and waist hip ratio (WHR). These measurements have been shown to be related to cardiovascular risk factors or mortality.⁵

Body mass index (BMI) and waist circumference (WC) have been used as simple anthropometric indices for assessing the amount and distribution of body fat.^{6,7} and are useful indices in predicting the risks of type 2 diabetes, hypertension, and cardio vascular diseases.^{8,9} Similarly, obesity represents a serious health concern that needs to be addressed to improve the health and wellbeing of the present and the future population.¹⁰

Material and Method

A Quantitative research approach was adopted for the study. A descriptive research design was utilized to achieve the objectives of the study. The study was conducted in selected residential area of Punjab. Researcher's familiarity with setting and availability of required sample were also considered while selecting the study group. The target population is all the women >35 years of age residing in selected areas of Punjab. In the present study the 200 women >35 years of age selected in the Dhianpura village and they were selected by using simple random sampling technique. The data was collected through body mass index scoring sheet, assessment sheet for hypertension and health assessment Performa.

Content validity of the tool was made and necessary modifications were made according to the expert's

opinion and tool was finalized. Ethical approval to conduct the study was taken from college. Written informed consent was obtained from the study subjects regarding their willingness to participate in the research project. Demographic variables were collected by using interview technique and privacy is provided. For this study descriptive research design, demographic variable, body mass index scoring sheet, assessment sheet for hypertension and health assessment performa was used. Data was collected from 200 women >35 years of age. After the data collection, pamphlet on prevention of the hypertension and obesity were provided to the women. According to objectives the data was organized, tabulated. Analysis was done by using descriptive and inferential statistics. Descriptive statistics was used for frequency, percentage and inferential statistics calculated by chi square.

Result

Table 1: Distribution of subjects as per their obesity based on their Body Mass Index

N = 200

Classification	Frequency	Percentage
Underweight	008	4.0
Normal Range	107	53.5
Overweight	085	42.5

Table 2 depicts that, majority of the subjects i.e. 107 (53.5%) were normal body mass index, while 85 (42.5%) subject were overweight and only 8 (4.0%) subjects were underweight. The highest percentage of subjects was come under the normal range.

Table 2: Distribution of subjects as per their blood pressure based on classification of hypertension

N = 200

Classification of Hypertension	Frequency	Percentage
Normal (<120/<80mmHg)	101	50.5%
PRE- Hypertension (120-130/80-89mmHg)	061	30.5%
Stage-I Hypertension (140-150/90-99mmHg)	032	16.0%
Stage-Ii Hypertension (≥160- ≥100)	006	3.0%

Table 3 depicts that majority of the subjects 101 (50.5%) were not hypertensive, 61 (30.5%) subject were comes under the pre- hypertension category while 32 (16.0%) subject were comes under the stage- I hypertension category, and only 6 (3.0%) subject were comes under the stage II hypertension category. The highest percentage of subject was comes under the normal range.

Table 3: Distribution of subjects on the basis of their health assessment profile

N = 200

Subject Assessment	Frequency	Percentage
Nutritional History		
<i>Habit of consuming pickle</i>		
Yes	187	93.5%
No	013	6.5%
<i>Habit of consuming chutney</i>		
Yes	163	81.5%
No	037	18.5%
<i>Amount of salt consuming in meal</i>		
Mild	001	0.5%
Moderate	189	94.5%
Heavy	010	5%

Conted...

<i>No. of glasses of water per day</i>		
2-4 glasses	042	21%
5-8 glasses	152	76%
>8 glasses	006	3%
<i>No. of cup of tea/coffee per day</i>		
<2 cup	003	1.5%
2-4 cups	175	87.5%
>4 cups	022	11%
Other Habits		
<i>Exercise</i>		
Regular	002	1%
Irregular	108	54%
No exercise	090	45

According to nutritional status of the subjects, most of subjects were having a habit of eating pickle i.e 187 (81.5%) and chutney i.e 163 (93.5%). It was also showed that most of subjects were taking the moderate amount of salt in meal per day i.e. 189 (94.5%) and also highest percentage of subject were drinking 5-8 glasses of water per day. Instead of this, the majority of subject i.e 175 (87.5%) were drinking 2-4 cup of tea/coffee per day and also highest percentage of subjects were doing irregular exercise i.e 108 (54%)

Table 4: Association between hypertension and selected socio demographic variables

N = 200

Sr. No.	Demographic Variable	n	Chi-square value	df and p value	Level of significance
1.	Age in years				
	35-50yrs	091	28.038	df = 9 p.001*	Significant
	51-66yrs	043			
	67-82yrs	053			
	>82	013			
2.	Education				
	Illiterate	072	37.312	df =9 p.000*	Significant
	Primary Education	067			
	Secondary Education	045			
	Graduate and above	016			
3.	Occupation				
	Unemployed	198	2.136	df = 3 p.545	NS
	Employed	002			
4.	Religion				
	Sikh	179	1.586	df = 3 p.663	NS
	Hindu	021			
5.	Marital Status				
	Unmarried	035	10.840	df = 3 p.013	NS
	Married	165			

Conted...

6.	Family History of Hypertension				
	Yes	018	5.116	df = 3 p. 163	NS
	No	182			
7.	Duration of Hypertension				
	No history of hypertension	120	151.747	df = 12 p.000*	Significant
	<1years	006			
	1-2yrs	056			
	3-4yrs	009			
	>4yrs	009			
8.	Family History of Obesity				
	Yes	031	3.594	df = 3 p. 309	NS
	No	169			
9.	Income (Monthly)				
	5001-10000	049	11.427	df = 6 p. 076	NS
	10001-15000	111			
	>15000	040			
10.	Type of Family				
	Joint	128	16.124	df = 3 p.001*	Significant
	Nuclear	072			
11.	Dietary Pattern				
	Vegetarian	143	2.119	df = 3 p. 548	NS
	Non-vegetarian	057			
12.	Life Style				
	Sedentary	020	36.756	df = 6 p.000*	Significant
	Moderate Activity	132			
	Heavy activity	048			

Table 5: Association between obesity and selected socio demographic variables

N = 200

Sr. No.	Demographic Variable	N	Chi-square value	df and p value	Level of significant
1.	Age in years				
	35-50yrs	091	28.428	df = 18 p.056	NS
	51-66yrs	043			
	67-82yrs	053			
	>82	013			
2.	Education				
	Illiterate	072	26.909	df = 18 p.081	NS
	Primary Education	067			
	Secondary Education	045			
	Graduate and above	016			
3.	Occupation				
	Unemployed	198	1.756	df = 6 p.941	NS
	Employed	002			

Conted...

4.	Religion				
	Sikh	179	8.163	df = 6 p.226	NS
	Hindu	021			
5.	Marital Status				
	Unmarried	035	19.038	df = 6 p.004*	Significant
	Married	165			
6.	Family History of Hypertension				
	Yes	018	5.685	df = 6 p. 459	NS
	No	182			
7.	Duration of Hypertension				
	No history of hypertension	120	50.055	df = 24 p.001*	Significant
	<1years	006			
	1-2yrs	056			
	3-4yrs	009			
	>4yrs	009			
8.	Family History of Obesity				
	Yes	031	4.620	df = 6 p. 593	NS
	No	169			
9.	Income (Monthly)				
	5001-10000	049	13.221	df = 12 p. 353	NS
	10001-15000	111			
	>15000	040			
10.	Type of Family				
	Joint	128	13.822	df = 6 p.032	NS
	Nuclear	072			
11.	Dietary Pattern				
	Vegetarian	143	3.955	df = 6 p. 683	NS
	Non-vegetarian	057			
12.	Life Style				
	Sedentary	020	33.909	df = 12 p.001*	Significant
	Moderate Activity	132			
	Heavy activity	048			

Discussion

The study was conducted using a descriptive research design, subject were selected simple random sampling technique. The sample size was 200.

This study revealed that majority of subjects i.e. 50.5% were not hypertensive, 30.5% subjects comes under the pre- hypertension category while 16% subjects were under the stage- I hypertension category and only 3% subjects comes under the stage-II hypertension category and for obesity the most of subjects i.e. 53.5%

were normal body mass index, while 42.5% subjects were overweight and only 4% subjects were underweight.

At last the study results showed that age, education, duration of hypertension, type of family and life style were strongly associated with hypertension, as the subjects indicates the p- value (.001) that is less than α (0.005). On the other hand occupation, religion, marital status, family history of hypertension, family history of obesity, income (monthly) and dietary pattern do not had any impact on hypertension as p- value was more

than α (0.005) and with obesity marital status, duration of hypertension and life style were strongly associated, as the subjects indicates the p- value (.001) that is less than α (0.005). On the other hand age, education, type of family, occupation, religion, family history of hypertension, family history of obesity, income (monthly) and dietary pattern do not had any impact on hypertension as p- value was more than α (0.005).

Conclusion

It was found that out of total percentage of subjects there were 42.5% subject overweight and 49.5% subject were hypertensive. So the highest percentage of women was comes under the normal range of hypertension and obesity. This study also concluded that age, education, duration of hypertension, type of family and life style were strongly associated with hypertension, as the subjects indicates the p- value (.001) that is less than α (0.005). instead of this, marital status, duration of hypertension and life style were strongly associated with obesity, as the subjects indicates the p- value (.001) that is less than α (0.005)

Ethical Clearance: The permission obtained from college to conduct the final study as the data was collected during Feb 2016.

Source of Funding: Self

Conflict of Interest: NA.

REFERENCES

1. Narkiewicz K. Obesity and hypertension—the issue is more complex than we thought. *Nephrol Dial Transplant* 2006;21:264–267.
2. Julius S, Valentini M, Palatini P. Overweight and hypertension: a 2way street? *Hypertension* 2000;35:807–813.
3. Garrison RJ, Kannel WB, Stokes J. Incidence and precursors of hypertension in young adults: The Framingham offspring study *Preventive medicine* 1987;16:235251.
4. Harlan WR, Hull AL, Schmouder RL, Landis JR, Thompson FE, Larkin FA. Blood pressure and nutrition in adults. The National Health and Nutrition Examination Survey. *Am J Epidemiol* 1984;120:1728.
5. J Woo, SC Ho, ALM Yu and A Sham. Is waist circumference a useful measure in predicting health outcomes in the elderly?. *Int J Obes Relat Metab Disord.* 2002; 26, 13491355.
6. Gallagher D, Visser M, Sepulveda D, Pierson RN, Harris T, Heymsfield SB. How useful is body mass index for comparison of body fatness across age, sex, and ethnic groups? *AM J Epidemiol.* 1996; 143:22839.
7. Pouliot MC, Després JP, Lemieux S, Moorjani S, Bouchard C, Tremblay A, et al. Waist circumference and abdominal sagittal diameter: best simple anthropometric indexes of abdominal visceral adipose tissue accumulation and related cardiovascular risk in men and women. *Am J Cardiol.*1997; 73:4608.
8. Huang KC, Lin WY, Lee LT, Chen CY, Lo H, Hsia HH, et al. Four anthropomtic indices and cardiovascular risk factor in Taiwan. *Int J Obes relat Metab Disord.*2002; 26:10608.
9. Zhu S, Wang Z, heshka S, Heo M, Faith MS,Heymsfield SB. Waist Circumference and obesity associated risk factors among whites in the third National Health and Nutrition Examination survey clinical action thresholds. *Am J. Clin Nutr.* 2002;76; 7439.
10. KuoChin Huang, MeeiSyyuan Lee, ShyhDye Chang, YiChin Lin, SuHao Tu, WenHarn Pang. Obesity in the Elderly and Its Relationship with Cardiovascular Risk Factors in Taiwan. *Obesity Research.*2005; 13(1): 1708.

Use of Internet Vs Book as a Source of Information among Nursing Undergraduates, AIIMS, New Delhi

Nemkholam Chongloi¹, Ajesh Kumar², Monika Sabharwal¹,
Hansaram Suthar¹, Gita Razdan³

¹Tutor, ²Lecturer, ³Senior Tutor, College of Nursing, AIIMS, New Delhi

ABSTRACT

Background: The Internet has become part and parcel of every walk of life across the world. Nursing students are in touch with books and the internet in order to acquire information for their academic learning.

Aim: This study explored use of the internet Vs book as a source of information among nursing undergraduates and how these sources are influencing their academic performances.

Method: A descriptive Survey Design was adopted; 197 students of B.Sc. (Honors) Nursing students recruited to study by convenience sampling. Data was collected by using demographic profile, likert scale on web based learning, likert scale on traditional book based learning and record analysis for academic performance.

Results: Students showed a greater appreciation for books than for Internet (Average Books Score was greater than Average Internet Score). However, the difference was not significant at the 5% level, though it was significant at the 10% level. Increased use of Internet for Academic Activity was not associated with better academic performance as measured by the percentage of marks obtained by the student.

Conclusion: The effects of Internet use on academic performance and the higher rating of books as compared to the Internet is a clear indication that while internet is useful for study it cannot be a universal and complete solution.

Keyword: internet, book, source of information, nursing undergraduates.

INTRODUCTION

Gathering appropriate information is very crucial in any sort of academic learning. The teachers and students utilize this collected information for their academic activities.¹ The information can be collected through electronically or printed material. The Internet has become part and parcel of every walk of life across the world. This ranges from its support in improving the way people seek information, conduct research, perform business transactions, and communicate with others and various other features.² According to Solangaarachchi, et al (2016) for medical students, many of the tools that support medical education and transmit health research are now available online.³ Ayatollahi A (2014) found that use of the Internet among medical students is increased and they are competent enough to use computer and easily access the internet.⁴

Although there are many benefits associated with the use of Internet, there has been a deep concern regarding

the risk associated with using it.⁵ It is undoubtedly true that students have sidelined the use of books with the emergence of the Internet. This is probably due to the benefits and comfort of using the virtual information. The internet act as a catalyst for medical students to understand the theoretical and critical concepts. Though the internet is a storehouse of much information, the quality and authenticity of information need to be ascertained. A research conducted by Niels (2006) argues that students do not bypass the physical libraries and it is also evident that the use of physical libraries and digital resources complement each other. Book or library stands higher over virtual information because of many advantages such as many books are not available in online.⁶

The present study aims to explore the use of the internet Vs book as a source of information among undergraduates nursing graduates and how these sources are influencing their academic performances. The researcher have observed that use of books among

students have significant reduced due to the intrusion of technology.

Materials and Method

In this descriptive Survey Design, sample consisted of 197 students (all female) of B.Sc. (Honors) Nursing studying at the College of Nursing, All India Institute of Medical Science, New Delhi. Non Probability Convenience sampling was used to select students. Of them there were 56, 75, 40 and 26 students studying in the First, Second, Third and Fourth year respectively of the B.Sc. (Honors) Nursing programme. Data collecting instruments consist of four sections: demographic profile, likert scale on web based learning, likert scale on traditional book based learning and record analysis for academic performance. The demographic components included age, class, percentage acquired in last financial year, total family income, percentage of attendance, choice of course, average time spent on internet and other scholastic activities. The likert scale to determine the preference of web based learning and traditional book consisted of twenty items. In order to ensure the validity of tool, it was given to five experts from nursing. Tool was found to be valid with few corrections, which were incorporated and the final draft of the tool was prepared. Try out was conducted to ensure the clarity of the tools. The reliability of the tool was determined by Cronbach's alpha which is .76 and the tool found to be reliable. Ethical permission was taken from institutional ethical committee of All India Institute of Medical Science,

New Delhi. The objectives of the study explained and informed consent obtained from participants.

Results

Time Spent on Internet and Other Activities:

Altogether there was only one student (who was from B.Sc. (H) First Year class) who did not use the internet. On the whole, there was an increase in internet use as we move from the first year batch towards the fourth year batch, with a noticeable dip in the case of the third year students. On an average a first year student used the internet for nearly 4 $\frac{3}{4}$ hours, including 1 $\frac{1}{2}$ hours was for study, 1 hour for Assignments, 25 minutes for Facebook, 20 minutes for news and 43 minutes for Whatsapp. Another 3 hours were spent on reading textbooks, journals, newspapers etc, and 1 hour was spent on watching TV, movies etc. The total internet usage increased to nearly 6 $\frac{1}{2}$ hour in the Second Year, before falling to about 5 $\frac{1}{4}$ hours in the Second Year and then rising sharply to nearly 8 $\frac{1}{2}$ hours in the Fourth Year. The biggest increases were on account of Whatsapp, Facebook and less so on account of increased use for Assignments and Study. Reading of books, journals, newspapers also showed similar variation: further rise in the Second Year, then a decline, followed by a major increase in the Fourth Year.

Average marks received by the Students: This data was collected not from the recipients but from the official College of Nursing records. The summary is given in Table 1 below:

Table 1: Marks (%) Received by Students

	First Year (N = 56)			Second Year (N = 75)			Third Year (N = 40)			Fourth Year (N = 26)		
	Mean	Std. Deviation	C.O.V.	Mean	Std. Deviation	C.O.V.	Mean	Std. Deviation	C.O.V.	Mean	Std. Deviation	C.O.V.
MARKS (percent)	75.88	5.44	0.07	69.01	3.86	0.06	71.41	2.39	0.03	69.88	3.88	0.06

There is very little change in the mean marks received by the students. There is a slight decrease from an average of 76% for First Year Students to 70% for Fourth Year students. It is to be noted that the Coefficient of Variation (C.O.V) of marks is extremely low for all four groups of students, in all cases much below 10%, whereas the variations in times spent on various activities are much larger: in no case was the Coefficient of Variation less than 38%.

Use of Internet Vs Use of Books: A number of questions in the questionnaire about the relative preference for internet vs. books were posed in two exactly opposite

ways. For example, there was a question, "I prefer the internet over books for Assignment", as well as its exact opposite, namely, "I prefer books over internet for Assignment". Ideally the respondents should respond in exactly opposite ways to the two questions. But on examining the responses, it was found that the correlation was not significantly different from zero. Hence these questions were not used in the analysis.

Instead, an "Average Internet Score" and an "Average Book Score" were calculated as averages of the numerical scores for 5 questions pertaining to Internet and Books respectively.

Table 2: Average Internet Score and Average Books Score for 1st, 2nd, 3rd and 4th year students

Class		Average Internet Score	Average Books Score
B.Sc (H) Nursing 1st year	Mean	3.7750	3.8071
	N	56	56
	Std. Deviation	.61386	.55526
B.Sc (H) Nursing 2nd year	Mean	3.8314	3.9892
	N	70	74
	Std. Deviation	.56531	.49423
B.Sc (H) Nursing 3rd year	Mean	3.7026	3.8450
	N	39	40
	Std. Deviation	.62048	.55928
B.Sc (H) Nursing 4th year	Mean	3.8000	3.8385
	N	26	26
	Std. Deviation	.47329	.51852
Total	Mean	3.7843	3.8878
	N	191	196
	Std. Deviation	.57780	.53094

Table 3: ANOVA to show differences in Average Internet Score and Average Books Score between different groups (1st, 2nd, 3rd and 4th year Classes)

	Sum of Squares	df	Mean Square	F	Sig.
AverageInternetScore * Class	.427	3	.142	.423	.737
	63.006	187	.337		
	63.433	190			
AverageBooksScore * Class	1.262	3	.421	1.503	.215
	53.709	192	.280		
	54.971	195			

Table 3 shows that there were no significant differences either for Average Internet Score or for Average Book Score between the four groups of students, namely, B.Sc. (H) 1st year, B.Sc. (H) 2nd year, B.Sc. (H) 3rd year and B.Sc. (H) 4th year. The next test was to compare the Average Internet Score and the Average Book Score. A paired t-test was used for this purpose. The results are shown in Tables 04 and 05.

Table 4: Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Average Internet Score	3.7843	191	.57780	.04181
	Average Books Score	3.8921	191	.53380	.03862

Table 5: Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		Mean	Std. Deviation	Std. Error Mean
Pair 1	AverageInternetScore - AverageBooksScore	-.10785	.79465	.05750	-.22127	.00556	-1.876	190	.062

Tables 04 and 05 tell us that the Students showed a greater appreciation for books than for Internet (Average Books Score was greater than Average Internet Score). However, the difference was not significant at the 5% level, though it was significant at the 10% level.

Correlation between Academic Performance and Time Spent on Internet for Academic Study: Scatter diagrams of the data on academic performance and time spent on internet indicated that the relation, if at all it existed was not linear. Hence non-parametric correlation (Spearman's Rho) was preferred as the measure of association as shown in Table 06:

Table 6: Spearman's Rank Correlation Rho between Percentage of Marks and extent of use of Internet for Academic purposes

		Percentage of Marks	Internet Academics Time (Minutes)
B.Sc.(H)Nursing 1st year	Spearman's Rho	1	0.189099
	Sig. (2-tailed)	.	0.162775
	N	56	56
	Spearman's Rho	0.189099	1
	Sig. (2-tailed)	0.162775	.
	N	56	56
B.Sc.(H)Nursing 2nd year	Spearman's Rho	1	-0.09751
	Sig. (2-tailed)	.	0.40526
	N	75	75
	Spearman's Rho	-0.09751	1
	Sig. (2-tailed)	0.40526	.
	N	75	75
B.Sc.(H)Nursing 3rd year	Spearman's Rho	1	0.059364
	Sig. (2-tailed)	.	0.715956
	N	40	40
	Spearman's Rho	0.059364	1
	Sig. (2-tailed)	0.715956	.
	N	40	40
B.Sc.(H)Nursing 4th year	Spearman's Rho	1	0.193993
	Sig. (2-tailed)	.	0.342321
	N	26	26
	Spearman's Rho	0.193993	1
	Sig. (2-tailed)	0.342321	.
	N	26	26

In none of the cases was Spearman's Rho significantly different from zero. This indicates that increased use of Internet for Academic Activity was not associated with better academic performance as measured by the percentage of marks obtained by the student.

Similar investigations were carried out to examine whether there was any correlation between the percentage of marks and increased study of Books and Journals. The result was mixed: there was significant positive correlation only for the Fourth Year Batch, but not for First, Second or Third year batches. The conclusion regarding the effects of Internet use on academic performance and the higher rating of books as

compared to the Internet is a clear indication that while internet is useful for study it cannot be a universal and complete solution.

Discussion

Findings of this study conclude that students had a greater appreciation for books than for Internet. However, the difference was not significant at the 5% level, though it was significant at the 10% level. This findings were consistent with those of Ngoumandjoka, (2013) who reported that the Internet exerts some influence on students' academic performance but no link of causality between the two could be established.⁷

According to Dee, C., & Stanley, E. E. (2005) nursing students and clinical nurses were most likely to rely on colleagues and books for medical information, while other resources they frequently cited included personal digital assistants, electronic journals and books, and drug representatives.⁸ The present findings was also similar to Supriya C et al, who found that maximum students are using library as source of scientific information for their academic purpose as compared to the internet.⁹ Promise ifeoma, Goodluck I (2010) reported that student should not only focus on the library to gain the knowledge but also they need to access the internet for their education and in betterment in clinical practice.¹⁰

The present study revealed that use of internet for academic activity was not associated with better academic performance. Similarly, Sumaiyah et al (2017) found that there was no significant relationship between the students' usage of internet for their academic purposes with their academic achievement.¹¹ Contrary to this findings El-Ezazy, Abdel-Latif, & Ali,(2014) reported that there is a positive correlation between the internet and academic performance among the students at Two Faculties in Beni Suif University, Egypt.¹²

Limitation & Recommendations

The present study is limited to one setting and self reports for internet usage among students. Longitudinal and multi-centered with more sample size studies can be conducted to get more details about students preference towards source of information for studies. From the finding of this study, it is advisable for the students decide source of information wisely. In order to make nursing education more effective and conducive nurse educators can help the nursing students to find a reliable source of information.

Conclusion

This study explored use of the internet Vs book as a source of information among undergraduates nursing graduates and how it influenced them academically. There was an increase in internet use as we move from the first year batch towards the fourth year batch. the Students showed a greater appreciation for books than for Internet. However, the difference was not significant at the 5% level, though it was significant at the 10% level. Though internet is useful for study it cannot be a universal and complete solution.

Conflict of Interest: None declared

Source of Funding: Self

Ethical Clearance: The study was approved by Ethics Committee, AIIMS, New Delhi. Written informed consent from all participants was obtained.

REFERENCES

1. Kumah, Cynthia H. A Comparative Study of use of the Library and the Internet as Sources of Information by Graduate Students in the University Of Ghana. *Library Philosophy and Practice* (e-journal). 2015: Paper 1298
2. Chien Chou. *CyberPsychology & Behavior*. July 2004;4(5): 573-585. doi:10.1089/109493101753235160.
3. Solangaarachchi D.I.K, Marasinghe M.P. L.R, Abeygunasekera C.M, Hewage S.N. Thulani U.B. Use of Library and Internet Facilities for Seeking Information among Medical Students at Faculty of Medicine, University of Kelaniya. *Kelaniya International Conference on Advances in Computing and Technology (KICACT - 2016)*, Faculty of Computing and Technology, University of Kelaniya, Sri Lanka. 2016: p 62-63.
4. Ayatollahi A, Ayatollahi J, Ayatollahi F, Ayatollahi R, Shahcheraghi SH. Computer and Internet use among Undergraduate Medical Students in Iran. *Pakistan Journal of Medical Science*. 2014; 30(5):1054-8. doi: 10.12669/pjms.305.5355.
5. Albouq N, Hafiz B, Qasem A, Ekhmimi Y. Prevalence Of Internet Usage Among Medical Students at Taibah University and Its Impact on The Academic Performance, Madinah, Kingdom Of Saudi Arabia. *European Journal of Pharmaceutical and Medical Research*. 2016; 3(7): 110-113.
6. Niels Ole Pors. The public library and students' information needs. *New Library World*. 2006; Vol. 107 Issue: 7/8:275-285. doi: 10.1108/03074800610677263
7. Ngoumandjoka, U.T. *Correlation between Internet usage and academic performance among university students* (Thesis). 2013. Retrieved from <http://wiredspace.wits.ac.za/handle/10539/13009>

8. Dee C, Stanley E. E. Information-seeking behavior of nursing students and clinical nurses: implications for health sciences librarians. *Journal of the Medical Library Association*. 2005; 93(2): 213–222.
9. Supriya C, Aiswarya TR, Anisha R, Anjumol KR, Archana S. Utilization of the Library and Internet as a Source of Scientific Information by the Nursing Students. *Biomed J Sci &Tech Res* 2(4). 2018; BJSTR.MS.ID.000792. DOI: 10.26717/BJSTR.2018.02.000792
10. Ilo, Promise Ifeoma and Ifijeh, Goodluck I. Impact of the Internet on Final Year Students' Research: A Case Study of Covenant University, Ota, Nigeria. *Library Philosophy and Practice* (e-journal). 2010: 403. Retrieved from <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1414&context=libphilprac>
11. Sumaiyah Jamaludin, Thandar Soe and Awang Kechik, Nurulhusnaa and Mei Chan, Chong. *The Impact of internet usage for academic purposes on nursing students' achievement*. *Scholars Journal of Applied Medical Sciences (SJAMS)*. 2017; 5 (10A): 3857-3861. ISSN 2320-6691.
12. El-Ezazy, A. A, Abdel-Latif, S. A, Ali H. H. Impact of Internet Usage on the Student Attitude and Academic Achievement at Two Faculties in Beni Suif University. *Zagazig Nursing Journal*. 2014; 395(3589): 1–14. <https://doi.org/10.12816/0029148>

Study to Assess the Coping Strategies on Selected Tri-Dimensional Problems among Peri-Menopausal Women

Pallavi Verma¹, Shivani Sharma², V. Santhalakshmi²

¹M.Sc (N) Student, ²Professor, Mata Sahib Kaur College of Nursing, Mohali

ABSTRACT

Introduction: Women have a more complex phase of old age than men because of the dominant effect of hormonal changes in the women. There are number of strategies that can assist women to achieve a smooth transition to peri-menopausal process. Although Peri-menopause is an universal experience for women, the experience is not universal. The onset and duration is indefinite and end is un predictable. The feeling of Peri-menopausal symptoms varies from women to women and there is no fixed pattern and no chain of events.

Aim of the Study: The aim of the study is to assess the coping strategies on selected tri-dimensional problems among peri- menopausal women.

Material & Method: A quantitative approach with descriptive research design was adopted. By Purposive sampling technique 150 women were selected. Data was collected by structured interview schedule. Analysis of data was done using descriptive and inferential statistics.

Results: Study findings shows that in physical symptoms, majority (82%) of the peri-menopausal women experienced joint pain, in psychological symptoms, majority (88.6%) of the peri-menopausal women experienced sadness and in social problems, most (79.3%) of the peri-menopausal women experienced altered social communication.

Conclusion: It shows that majority of peri-menopausal women were having fair and poor coping strategies to deal with selected tri-dimensional problems.

Keywords: Peri-menopausal women, coping strategies, Tri-dimensional problems.

Introduction

Peri-menopausal is the transition period in woman's life when her ovaries start producing eggs irregularly, her body produces less oestrogen and progesterone, and menstruation become less frequent, eventually stopping altogether. The term —peri- menopause has been derived from Greek word —peri, —men and —pauses. The word peri 'means prior, men' means month and the word pause' means cessation. So, the word

—peri —menopausal —was created to described this change in human females, where the end of fertility is tri-dimensionally indicated before stopping of monthly menstruation. Women in their mid- 40's and early 50's commonly suffer from hormonal imbalance caused by an excess of oestrogen and deficiency of progesterone, as their usual and regular monthly ovulation becomes more irregular. This is known as peri-menopause.¹

In peri- menopausal stage, there are tri-dimensional problems occurring in the women. These tri-dimensional problems are physiological, psychological and social problems. In physiological problems there is pain in breast, joint pain, hot flushes, urinary problem, sleeping problem, headache, weight gain, night sweat. In psychological problems there are depressive mood, irritability, nervousness and disturbed memory. In social problems there are altered social communication and disturbed social relationship.²

Corresponding Author:

Ms. Pallavi Verma
VPO Dhaloon Teh. Nagrota Bagwan
Distt. Kangra (HP) 176056
Phone: 9805418810
Email: pallaviverma2408@gmail.com

Women have a more complex phase of old age than men because of the dominant effect of hormonal changes in the women. There are number of strategies that can assist women to achieve a smooth transition to peri-menopausal process. Although Peri-menopause is an universal experience for women, the experience is not universal. The onset and duration is indefinite and end is unpredictable. The feeling of Peri-menopausal symptoms varies from women to women and there is no fixed pattern and no chain of events. Hence the researcher wants to assess the coping strategies among peri-menopausal women which will increase the coping level of the women and also the family members.³

A telephone survey to assess the prevalence of hot flashes, use of estrogen, age of menopause onset, the frequency of occurrence and number of years of hot flashes among peri-menopausal women. In this study 594 peri-menopausal women were selected to check the prevalence. The prevalence of hot flashes was 88%. Surgical menopause women had a prevalence rate of 92% and had the highest estrogen utilization rate. The median age of onset for natural menopause women was 49 years. The frequency of occurrence and number of years of hot flash experience was variable across all groups.⁴

Cross sectional study to assess the peri-menopausal symptoms in rural area of Tamil Nadu on 780 peri-menopausal women. The results showed that majority of the women (88.1%) reported one or more peri-menopausal symptoms. The presence of peri-menopausal symptoms may decrease the health related quality of life in women, because majority of them still do not take any treatment for these symptoms.⁵

Objectives of the Study

- To assess the coping strategies on selected tri-dimensional problems among peri-menopausal women.
- To associate the findings with selected socio-demographic variables.

- To provide guidelines on selected tri-dimensional problems and coping strategies.

Assumption

- Peri-menopausal women may experience physical, psychological and social problems.
- Peri-menopausal women may use various coping strategies, to deal with selected tri-dimensional problems.

Material and Method

In present study, a quantitative approach with descriptive research design was adopted. By Purposive sampling technique 150 peri-menopausal women were selected. Data was collected by structured interview schedule used in the study. Analysis of data was done using descriptive and inferential statistics. A study was conducted in the month of January 2017. Formal written permission was obtained from the Sarpanch of villages Daun, Shahimajra and Desumajra Mohali, Punjab.

After discussing the purpose and objectives of the study. Analysis and interpretation of data was done according to objectives of the study by using descriptive and inferential statistics.

Ethical Consideration

With the view of ethical consideration the researcher has taken permission from Principal of Mata Sahib Kaur College of nursing Mohali. After that the researcher has discussed the type and purpose of the study with the Sarpanch of villages Daun, Shahimajra and Desumajra and written permission were obtained. Also explained to the peri-menopausal women about the purpose of the study and written consent was taken from them for their participation in study. The peri-menopausal women were assured that the information given by them will be kept as confidential and will be purely used for research purpose.

Results

Table 1: Level of coping strategies on selected tri-dimensional problems among peri-menopausal women

Sr. No.	Tri-dimensional Problems	Good coping strategies n (%)	Fair coping strategies n (%)	Poor coping strategies n (%)
Physical Symptoms				
A.	Hot flushes (n = 121)	14(11.5%)	95(78.6%)	12(9.9%)
	Joint pain (n = 123)	-	62(50.5%)	61(49.5%)
	Pain in breast (n = 112)	-	97(86.6%)	15(13.4%)
	Sleeping problem at night (n = 96)	-	69(71.8%)	27(28.2%)
	Headache (n = 95)	-	35(36.8%)	60(63.2%)
	Gained weight (n = 86)	-	31(36%)	55(64%)
	Night sweat (n = 70)	14(20%)	50(71.5%)	6(8.5%)
	Inability to control urine (n = 49)	4(8.1%)	39(79.5%)	6(12.4%)
Psychological Symptoms				
B.	Sadness (n = 133)	13(9.7%)	96(72.3%)	24(18%)
	Mental confusion (n = 100)	-	40(40%)	60(60%)
	Nervousness (n = 94)	4(4.3%)	46(48.9%)	44(46.8%)
	Irritated easily (n = 66)	-	42(63.6%)	24(36.4%)
Social Problems				
C.	Altered social communication (n = 119)	18(15.2%)	97(81.5%)	4(3.3%)
	Disturbed social relationship (n = 87)	14(16%)	42(48.4%)	31(35.6%)

Table 1 depicts that for physical symptoms majority of the peri-menopausal women were having fair coping strategies for hot flushes i.e. 95 (78.6%) followed by good coping strategies 14(11.5%) and poor coping strategies 12(9.9%).

For Joint pain, 62(50.4%) women were having fair coping strategies and 61(49.5%) were having poor coping strategies, none was having good coping strategies.

It was also observed that 97(86.6%) peri-menopausal women were having fair coping strategies for pain in breast followed by 15(13.4%) having poor coping strategies and none of them were having good coping strategies.

69(71.8%) and 27(28.2%) of peri-menopausal women were having fair and poor coping strategies respectively for sleeping problem at night; none were having good coping strategies.

For headache 60(63.2%) and 35(36.8%) women were having poor and fair coping strategies and none was having good coping strategies.

55(64%) and 31(36%) of peri-menopausal women were having poor and fair coping strategies respectively for weight gain and none having good coping strategies.

In this study, it was also observed that for night sweat 50(71.5%), 14(20%) and 6(8.5%) peri-menopausal women were having fair, good and poor coping strategies respectively.

For inability to control urine majority 39(79.5%) of the peri-menopausal women were having fair coping strategies followed by very few had poor and good coping strategies 6(12.4%) and 4(8.1%) respectively.

In psychological symptoms, majority of the peri-menopausal women were having fair coping strategies for sadness i.e. 96(72.3%) followed by poor coping strategies 24(18%) and good coping strategies 13(9.7%). In this study 60(60%) and 40(40%) of peri-menopausal women were having poor and fair coping strategies respectively for mental confusion; none were having good coping strategies.

For nervousness 46(48.9%) peri-menopausal women were having fair coping strategies followed by

poor and good coping strategies 44(46.8%) and 4(4.3%) respectively.

Associate the findings with selected socio-demographic variables: It shows that there is statistically significant association between coping strategies for hot flushes used by peri-menopausal women with education, inability to control urine with family income and source of information, pain in breast with marital status, joint pain with dietary pattern, sleeping problem at night with family income, headache with source of information, weight gain with education and working status, night sweat with educational status and family income, irritated easily with education, working status, family income and source of information, nervousness with working status, dietary pattern and source of information, mental confusion with education, working status, family income and dietary pattern, altered social communication with working status and marital status, disturbed social relationship with working status and dietary pattern.

Discussion

The results revealed Based revealed that majority of the peri-menopausal women were having fair and poor coping strategies for tri-dimensional problems.

Conclusion

The conclusion which is drawn from the study is that in physical symptoms, majority (82%) of the

peri-menopausal women experienced joint pain, in psychological symptoms, majority (88.6%) of the peri-menopausal women experienced sadness and in social problems, most (79.3%) of the peri-menopausal women experienced altered social communication. The study findings revealed that majority of peri-menopausal women were having fair and poor coping strategies to deal with selected tri-dimensional problems.

Conflict of Interest: Nil

Source of Funding: Self

REFERENCES

1. Peri-menopause. The free encyclopedia . October 2009, <http://en.Wikipedia.org/wiki/peri-menopause>
2. Mortin KA, Manson JAE. Approach to the patient with peri-menopausal symptoms . The journal of clinical endocrinology and metabolism 2008; 93(12):571-575.
3. GovindarajuGl. BeraTK, Peri-menopause and normal changes, [http //www. Information word . com](http://www.Informationword.com) on 20/02/2008.
4. Feldman BM. Prevalence of hot flushes. Journal of Gynaecology Nursing January 2014; 12(1):341-346.
5. Dutta R. Peri-menopausal symptoms in rural area of Tamil Nadu, [http//www. ncbi.nlm.nih.gov](http://www.ncbi.nlm.nih.gov) reviewed on 18/10/2012.

A Study to Assess the Knowledge and Practices of Staff Nurses Regarding Aseptic Technique During Normal Vaginal Delivery at Selected Government Hospitals of Haryana

Priyanka¹, P. Tamil Selvi², Rachna Mutneja³

¹Senior Nursing Tutor, ²Prof. Principal, Ved Nursing College, Baroli, Panipat, Haryana, India;

³Dept. of OBG, Dr. Prem Hospital, Panipat, Haryana, India

ABSTRACT

Background: Aseptic techniques is a set of specific practices and procedures performed under carefully control condition with the goal of minimizing contamination by pathogens. A report of WHO in 2008 states that 50-60% of all death occur within the first month of life due to poor aseptic techniques in the labour room.

Aim: The aim of the study was to assess the knowledge and practices of staff nurses regarding aseptic technique during normal vaginal delivery at selected government hospitals of Haryana.

Methodology: The Non-experimental Descriptive Design was used in the present study which includes 60 staff nurses of civil hospital Panipat, Jind and Sonipat which were selected by non-probability convenience sampling technique.

Data Collection: The data was collected from subject to assess the knowledge and practices of aseptic technique during normal vaginal delivery by using self-structured knowledge questionnaire and self-structured observation checklist. Data collected was analysed and interpreted by using descriptive and inferential statistics.

Findings: The mean, median and standard deviation for pre-test knowledge was 24.80, 24.5 and 3.726 respectively. The mean, median and standard deviation for observation checklist score was 49, 0.954 and 0.954 respectively. There was no significant co-relation found between knowledge and practices. The Karl-pearson co-relation value is ($r = -0.120$) and there is a negative co-relation between knowledge and practices which was less than table value (0.254) at p value is 0.361.

Conclusion: The study findings revealed that most of the staff nurses had good knowledge, adequate practices regarding aseptic techniques during normal vaginal delivery. The staff nurses must have adequate knowledge and practices regarding aseptic techniques for conducting normal vaginal delivery.

Keywords: Assess the knowledge, Practices regarding aseptic techniques during normal vaginal delivery.

Introduction

Women health and development are the indicators of National Health and Development. Similarly, mother's health is the bulwark of her family, the foundation of community and social progress.¹ Pregnancy and childbirth are the major cause of maternal mortality and morbidity.² Child birth is viewed as an important life

event. Care during child birth is immense and it requires knowledge and skill on the part of the care givers, quality services if rendered in the labour room, not only enhances safe delivery but also prevents complications that may endanger the life of the mother.³

During the birth both mother and fetus are particularly vulnerable to infection. Although there is evidence that strict antisepsis is unnecessary if the birth is straightforward, meticulous aseptic technique must be observed when preparing sterile equipment such as episiotomy scissors. Surgical gloves should be worn during the birth for the protection of both mother and midwife.⁴ Aseptic technique is a set of specific

Corresponding Author:

Ms. Priyanka

Senior Nursing Tutor, Ved Nursing College, Panipat

Email: priyankaraman919@gmail.com

practices and procedures under carefully controlled conditions with the goal of minimizing contamination by pathogens.⁵ Knowledge and practice of aseptic techniques is vital in reducing the morbidity and mortality associated with infections.

Objectives

1. To assess the knowledge of staff nurses regarding aseptic technique during normal vaginal delivery.
2. To assess the practices of staff nurses regarding aseptic techniques during normal vaginal delivery.
3. To find out co-relation between knowledge and practices of staff nurses regarding aseptic technique during normal vaginal delivery.
4. To find out association between the mean knowledge and practices score of staff nurses with their selected socio-demographic variable.

Materials and Method

In this study, Non-experimental Descriptive design was used to carry out the study. The sample size considered for the present study was 60 staff nurses from the various government hospitals by using non-probability convenience sampling technique. The tool used in the study to evaluate the knowledge and

practice regarding aseptic techniques during normal vaginal delivery is divided into three sections. **Tool 1:** Demographic data of the participants; **Tool 2:** Self-structured knowledge questionnaire regarding aseptic techniques during normal vaginal delivery; **Tool 3:** Self-structured Observation Checklist.

Results

SECTION 1: Description of study participants: The maximum patients were from age group of 31-40 years. The maximum staff nurses are married i.e. 80% (48). Maximum were GNM staff nurses i.e. 62% (37). Staff nurses having 6-10 years of total clinical experience i.e. 40% (24). Majority of staff nurses having 3-5 years of experience in midwifery i.e. 42% (25).

Section II: Knowledge scores obtained by the subjects regarding aseptic techniques during normal vaginal delivery

Table 1: Showing Frequency & Percentage of knowledge score n = 60

Knowledge Score	Frequency	Percentage
Good	38	63.33%
Average	22	36.67%
Poor	0	0.00%
TOTAL	60	100%

Table 2: Showing Mean, Median, Range and S.D of knowledge score (n = 60)

Descriptive statistics	Mean	Median	S.D.	Maximum	Minimum	Range	Mean%	Possible Gain%
Knowledge score	24.80	24.5	3.736	30	18	12	82.67	17.33

Maximum = 30, Minimum = 0

Section III: Practice scores obtained by the subjects regarding aseptic techniques during normal vaginal delivery

Table 3: Showing Frequency & Frequency percentage of Practice score n = 60

Practice Score	Frequency	Percentage
High	60	100.00%
Average	0	0%
Low	0	0%
TOTAL	60	100%

Table 4: Showing mean, median, range and S. D. of Practice score (n = 60)

Descriptive statistics	Mean	Median	S.D.	Maximum	Minimum	Range	Mean%	Possible Gain%
Observation checklist score	49.15	49	0.954	50	47	3	98.30	1.70

Maximum = 50, Minimum = 0

Section- IV Analysis and interpretation of data in order to find the co-relation between knowledge score and practice score.

Pearson's Correlation	Knowledge	
	Knowledge Score	Observation Checklist Score
Mean	24.8	49.15
SD	3.736	0.954
N	60	
Correlation	-0.120	
Table Value	0.254	
P Value	0.361	
Result	Not Significant	

Section - V Analysis and interpretation of data in order to find the association of assessed knowledge score of staff nurses with selected demographic variable.

Table 5: Association of assessed knowledge with age, marital status, professional qualification, total clinical experience and experience in midwifery of staff nurses

Levels		Levels (N = 60)			Association with Knowledge Score				
Variables	Options	Good	Average	Poor	Chi Test	P Value	df	Table Value	Result
Age in Years	20-30 Years	16	6		1.540	0.463	2	5.991	Not Significant
	31-40 Years	14	9						
	41-50 Years	8	7						
	Above 50 Years	0	0						
Marital Status	Married	29	19		NA				
	Unmarried	9	3						
	Divorced	0	0						
	Widow	0	0						
Professional Qualification	GNM	27	10		10.465	0.015	3	7.815	Significant
	B.Sc Nursing	7	2						
	Post B.Sc Nursing	4	8						
	MSc Nursing	0	2						
Total clinical Experience	0-5 Years	15	6		3.123	0.373	3	7.815	Not Significant
	6-10 years	16	8						
	11-15 years	3	5						
	>15 years	4	3						
Experience in Midwifery	0-2 years	12	5		0.918	0.821	3	7.815	Not Significant

Discussion

The study was supported by a study conducted by Devi B and Tamang R (2014) to assess knowledge on practice of aseptic technique during delivery among 60 health professionals in selected government hospitals of sikkim and found that knowledge regarding Bio-medical waste management (87%), definition of asepsis, aseptic technique, infection (86%), aseptic technique in labour room (77%) and asepsis in stages of labour (59%) was found to be better whereas asepsis during delivery (57%) was found to be less. There was a significant association between knowledge on practice of aseptic technique during delivery with years of experience in labour room as seen by chi square value ($p < 0.05$)⁶

Another study which supports the present study was conducted by Jyoti Bala (2009) to assess practices of 60 staff nurses (selected by purposive sampling) regarding infection control in MCH area of selected hospitals in Ludhiana, Punjab. Observational checklist was developed to collect the data. The final result revealed that most of the staff nurses have unsatisfactory practices (61.66%) regarding infection control measures. The final result depicted that the level of practices were not appropriate to the standard.⁷

Conclusion

It is concluded that most of the subjects have good knowledge and adequate practices regarding aseptic techniques during normal delivery.

Recommendations

- An observational study can be conducted to assess the practice among staff nurses regarding aseptic techniques during normal vaginal delivery.
- Similar kind of study can be conducted by using large sample in order to make the study generalizable.
- A comparative study can be conducted to assess the effectiveness of structured instructional module regarding aseptic techniques during normal vaginal delivery.

Ethical Clearance: Taken from Ved Nursing College, Baroli, Panipat (Haryana)

Source of Funding: Self

Conflict of Interest: Nil

References

1. Fraser cooper. Textbook for Midwives, Edition 14, Page no: 574,671,469.
2. WWW.Who.int/maternal child adolescent/ documented/9789241596213/en Retrieved on 21/10/2012.
3. Dorathy Devakirubai. Puerperal Sepsis. Nightingale Nursing Times.2013 Jan-June; (2):21-22&38-39.
4. Katherine Hauswirth APRN, Gale Encyclopaedia of Nursing and Allied Health, 2008, 76(2):277-287.
5. Benita, D., Vijayalakshmi and Kanchana. Effectiveness of Infection Control Standards on Practice among Health Care Personnel Working in Labour Unit. 2014; 1(4):1-7.
6. Devi, B. and Tamang, R. Knowledge on Practice of Aseptic Technique during Delivery among Health Professionals in Selected Government Hospitals of Sikkim. 2014; 1(2), 303-312.
7. Jyoti Bala, knowledge and practices of staff nurses regarding infection control in MCH area , 2007, Sep. P/ICNN/CIPr/21, Pg 69.

A Study to Assess the Effectiveness of Green Tea on Reduction of Body Weight among Obese Young Adult Girls Residing at Selected Girl's Hostel of Sharda University, Greater Noida

Richa Singh¹, R Sree Raja Kumar²

¹School of Nursings Science And Research, ²Associate Professor, Community Health Nursing, School of Nursings Science and Research, Sharda University, Plotno 32, 34 Knowledge Park-III, Greater Noida, UP

Abstract

Obesity considered as a medical problem in many under developing and developed countries across the world. Many researchers are working towards reduction of obesity because it leads to many life threatening diseases like coronary heart diseases hypertension, non-insulin dependent diabetes, pulmonary dysfunctions, osteoarthritis and certain types of cancers.

Obesity is a growing health issue worldwide specifically in India there is growing prevalence of obesity and India is the third most obese country in the world, just behind US and China. In such scenario the rise in obesity and obesity related disorders focuses on the increasing effect of lifestyle changes specifically eating habits i.e. misconception of junk food. The solution to this problem is to have healthy lifestyle speaking of which opens a lot of doors from exercise to food. Reduction of the weight among obese is beneficial which helps to reduce the risk for mortality and morbidity.

All the health care professionals especially in the field of Community Health Nursing must take an extensive effort to educate the people to follow healthy life style practices in reduction of weight and make efforts to reduce the obesity. Hence the researcher felt need of conducting the research on reduction of weight among obese young adult girls as it is a major modifiable risk factors disease in the world.

The aim of the study was to assess the effectiveness of green tea in reduction of body weight among obese young adult girls.

Objectives:

1. To assess the obesity among young adult girls by using BMI calculation.
2. To assess the effectiveness of Green tea on weight reduction among obese young adult girls.
3. To find out the association between the post test weight of obese young adult girls with their selected demographic variables.

Keywords: Assess, Green tea, Obese, BMI Young adult girls

Introduction

Obesity affects every aspect of a people's lives, from health to relationships."

-Jane Velez Mitchell

Corresponding Author:

Mr. R Sree Raja Kumar
Associate Professor, Community Health Nursing,
School of Nursings Science and Research,
Sharda University.
Email: paulsree82@gmail.com

Obesity is considered as a medical problem in many under developing and developed countries across the world. And the scientists are working towards reduction of obesity because it leads to many life threatening diseases like coronary heart diseases, hypertension, non-

insulin dependent diabetes, pulmonary dysfunctions, osteoarthritis and certain types of cancers.¹

One of the major factors which causes obesity are decreased physical activity and increased energy intake i.e. in another words increased carbohydrate intake.²

Tea is the most widely consumed beverage in the world, second only to water. The three kinds of true tea—green, black, and oolong—are all derived from the *Camellia sinensis* plant. At harvest tea leaves contain high levels of catechins, a particular class of polyphenols. After harvest catechins may be rapidly converted by enzymatic oxidation to a complex mixture of other derivatives, thearubigins and theaflavins, responsible for the characteristic color of oolong and black tea. Green tea (GT), however, is produced by heat-treating leaves soon after harvest, thereby preserving the catechins from oxidation.³

Treatment of obesity is beneficial because weight loss reduces the risk of mortality and morbidity. Even modest level of weight loss i.e. 5%-10% of initial body fat loss has also marked health advantages. Modest weight loss is suitable, acceptable and realistic goals towards many.⁴

However, it is really difficult to maintain weight loss for long term and found unsuccessful at many cases. Most studies reveal that maintenance of weight loss has undesired weight regain because of the fact that subjects did not change their feeding habit adequately.⁴

To overcome the traditional treatment of obesity, rapidly growing therapeutic era is use of natural herbal supplements for weight loss. Green tea is one of them which have great therapeutic effect on weight loss.⁴

Methodology

Research Approach: In this study Quantitative research approach is used. It is a method in which the study variables are pre selected and defined by the investigator and the data are collected and quantified, then statistically analyzed, often with a view to establishing the cause and effect of relationship among the variables.

Research Design: The design spells out the basic strategies which the researchers adopt to develop information that is accurate and interpretable, (Polit and Beck 2011).

In this study Quasi experimental pre-test, post-test control group research design was used. The study has fulfilled the criteria of manipulation and control group.

Table 1: Tabular presentation of the research design

Group	Pre-test	Intervention	Post-test
Experimental group(obese young adult girls)	O ₁	X	O ₂
Control group(obese young adult girls)	O ₃	-	O ₄

O₁-Pre-test body weight assessment among the Experimental group

O₂-Post-test body weight assessment among the Experimental group

X-Administration of Green tea to the Experimental group

O₃-Pre-test body weight assessment among the Control group.

O₄- Post-test body weight assessment among the Control group

Independent Variables: Independent variable is the variable that stands alone and does not depend on any other.

In this study researcher independent variable was Green tea.

Dependent Variable: Dependent variable is the variable the researcher is interested in understanding explaining or predicting.

In this study researcher independent variable was Body weight

Extraneous Variable: A variable that confounds the relationship between the independent and the dependent variable, that needs to be controlled either in the research design or through statistical procedure.

In this study the extraneous variables were age, religion, education, family monthly income, dietary pattern, times of food eaten, source of information on green tea effect, previous regimen followed to reduce weight.

Setting: Setting refers to the area where the study is conducted. It may be natural setting of laboratory setting depending upon the study topic and researcher's choice.

This study has been conducted in was Mandela, Sarojini, Kasturba, Mother Teresa and Indira girls hostels of Sharda University.

Population: The entire set of individuals or objects having some common characteristics, (**Polit and Beck, 2011**).

The populations of the present study were the obese young adult girls of age between 20 to 35 years.

Target Population: The target population consist of obese young adult girls those who are residing in different girls hostel of Greater Noida

Accessible Population: The accessible population consist of obese young adult girls those who are residing at selected girls hostel of Sharda University.

Sample: A set of a population selected to participate in a study, (**Polit and Beck 2011**).

The sample selected for the present study were obese young adult girls those who are residing at different girls hostel of Sharda University who are willing to participate and present during the time of data collection.

Sampling Technique: Sampling technique refers to the process of selecting the population to represent the entire population, (**Polit and Beck, 2011**).

Purposive sampling technique, it is a type of non-probability sampling approach was found to be appropriate for the present study.

Sample Size: It consists of total 60 obese young adult girls. i.e 30 obese young adult girls in Experimental group and 30 obese young adult girls in Control group

Criteria for Sample Selection

Inclusion Criteria

- Young adult girls who are in the age group of 20-35 years.
- Young adult girls who are under the category of obesity by BMI assessment according to WHO.
- Obese Young adult girls who are residing in girls hostels of Sharda University.

Exclusion Criteria

- Obese young adult girls who were suffering from any disease condition.
- Obese young adult girls who were doing physical exercise and taking medicine to reduce weight.
- Obese Young adult girls who were below 20 years and above 35 years of age are not included in the study

Development of Tool: The research instrument was developed by doing study from the literature review. The primary and secondary sources of literature were reviewed to develop at the appropriate tool. Validity was obtained from the 5 experts from different department of nursing, Statistician, Ayurvedic doctor. Their opinions and valuable suggestion were incorporated in the tool and it was finalized by the guide.

Description of the Tool

Section A: Demographic data was collected from the sample which include Age, Religion, Educational status, monthly family income, dietary pattern, times of food eaten, source of information of green tea effect, previous any regimen followed to reduce weight.

Section B: Measurement of the BMI was assessed by measuring the weight in kg with the help of weighing scale and the measurement of height in m² with the help of stadiometer.

$$\text{BMI} = \text{weight in kg} / \text{height in m}^2$$

Discussion

A study to assess the effectiveness of Green tea on reduction of body weight among obese young adult girls at Selected girls hostel of Sharda University.

The Findings Regarding Sample Characteristics: On demographic variables the results of the study shows that in the experimental group majority of the obese young adult girls 24 (80%) of them belongs to the age group of 20-23 years, In Control group majority of the obese young adult girls were 25 (83.3%) of them belongs to the age group of 20-23 years. In the experimental group majority of the obese young adult girls 21 (70%) of them were Hindus. In Control group majority of the obese young adult girls, 27 (90%) of them were Hindus. In the experimental group majority of the obese young adult

girls were 20 (66.7%) of them were in Medical course. In Control group majority of the obese young adult girls were 25 (83.3%) of them were in Medical course. In the experimental group majority of the obese young adult girls 18 (60%) of them had income of above Rs 25000. In Control group majority of the obese young adult girls 23 (76.7%) of them had income of above Rs 25000. In the experimental group majority of the obese young adult girls were 23 (76.7%) of them were in Mixed diet. In Control group majority of the obese young adult girls were 26 (86.7%) of them were in mixed diet. In the experimental group majority of the obese young adult girls 20 (66.7%) of them used to eat 3 times a day. In Control group majority of the obese young adult girls, 24 (80%) of them used to eat 3 times a day. In the experimental group majority of the obese young adult girls 22 (73.3%) of them got information from friends/relatives. In Control group majority of the obese young adult girls 16 (53.3%) of them got information from friends/relatives. In the experimental group majority of the obese young adult girls 14 (46.7%) of them didn't followed any regimen. In Control group majority of the obese young adult girls 19 (63.3%) of them didn't followed any regimen.

Objectives of the Study Were

1. To assess the obesity among young adult girls by using BMI calculation.
2. To assess the effectiveness of Green tea on weight reduction among obese young adult girls.
3. To find out the association between the post test weight of obese young adult girls with their selected demographic variables.

Objective 1: To assess the obesity among young adult girls by using BMI calculation.

Frequency and percentage distribution of the obese young adult girls in experimental and control group

In Experimental Group: The study result have shown that majority of the obese young adult girls 28(93.33%) of them are in class I categories of obesity, 2(6.66%) of them are in class II categories of obesity and none of them were found in class III categories of obesity.

In Control Group: The study result have shown that majority of the obese young adult girls 26(86.66%) of them are in class I categories of obesity, 4(13.33%) of them are in class II and none of them were in class III categories of obesity.

This study was supported by T. Iobstein, L. Baur and R. Uauy (2017) who conducted a study on worldwide trends in body mass index, underweight, overweight, and obesity from 1975 to 2016: a pooled analysis of 2416 population-based measurement studies in 128.9 million children, adolescents and adults. The study had shown that Global age-standardized prevalence of obesity increased from 0.7% (0.4–1.2) in 1975 to 5.6% (4.8–6.5) in 2016 in girls, and from 0.9% (0.5–1.3) in 1975 to 7.8% (6.7–9.1) in 2016 in boys. In the same year, 50 (24–89) million girls and 74 (39–125) million boys worldwide were obese.

Objective 2: To assess the effectiveness of Green tea on body weight reduction among young adult girls in experimental group.

Compare the pre-test and post-test body weight of the Obese young adult girls in experimental group:

The study result shows that the mean percentage of body weight during pre-test was 80.7% with standard deviation 8.6 and the post test mean was 79.0% with standard deviation 8.5. In this it was clear that post test mean % was less as compared to mean % of pre-test and t calculated value was more than t-table value. Hence it was found that Green tea is effective in reducing the body weight among obese young adult girls in the experimental group.

Compare the pre-test and post-test body weight of the obese young adult girls in control group:

The study result shows that the mean percentage of body weight during pre-test was 82% with standard deviation 7.13 and the post test mean was 82.20% with standard deviation 7.03. In this the pre-test and post-test mean % score were almost same with only mean difference is 0.20. It was found that there was no significant difference between pre-test and post-test mean % score clearly indicating that there is no impact of any other factor causing in reducing the weight among obese young adult girls in control group.

Compare the post-test body weight of the obese young adult girls in experimental and control group:

The study result shows that the post test mean % of experimental group is 79.03 with standard deviation 8.5 and post-test mean % of control group was 82.20 with standard deviation 7.03 which had shown that there had no significant difference between mean percentage of body weight level in experimental and control group but still it

may required more duration for administration of Green tea to show the impact of Green tea on weight reduction.

This study was supported by a single blinded clinical trial on Effects of green tea on the body weight of malaysian young obese females by Redhwan Ahmed Al-Naggar, Muhamed, T. Osman, Mahfoudh Abdulghani. In the study rresearcher concluded that daily consumption of green tea beverage in amount of 1.5 litres per day for up to consecutively 25 days is affectively way to reduce body weight.

Objective 3: To find out the association between the post-test body weight among obese young adult girls with their selected demographic variables in experimental and control group.

Association between the post-test body weight among obese young adult girls with their selected demographic variables in experimental group: Chi- square values were calculated to find out the association between post test scores on the body weight in experimental group among obese young adult girls with their demographic variables. It was revealed that there was no significant association between post- test body weight of Experimental group when associated with demographic variables of Age, Religion, Education, Monthly family income, dietary pattern, times of food eaten, source of information of green tea, previous regimen followed to reduce weight ($P<0.05$).It seems that Green tea on body weight was effective to the experimental group irrespective of their demographic variables.

This study was supported by a randomized placebo controlled double blind trial on body weight loss and weight maintenance in relation to habitual caffeine intake and green tea supplementation by Westerterp-PM S, lejeunem P.G.M, and. Kovacs E M. R.High caffeine intake was associated with weight loss through thermo genesis and fat oxidation and with suppressed leptin in women. In habitual low caffeine consumers, the green tea-caffeine mixture improved WM, partly through thermo genesis and fat oxidation.

Conclusion

The present study was to assess the effectiveness of green tea on weight reduction among young obese adult girls. The results of the results have revealed that the mean percentage of body weight during pre-test was 80.7% with standard deviation 8.6 and the post test mean was 79.0% with standard deviation 8.5.. Hence it was found that Green tea is effective in reducing

the body weight among obese young adult girls in the experimental group. There was no significant association was found with the weight of adult girls and their socio demographic variables.

Conflict of Interest: There is no conflict.

Source of Funding: Sharda University

Ethical Clearance: Taken

REFERENCE

1. Obesity and Overweight.” WHO. N.p., Jan. 2015. Web. 30 May 2015.
2. Sudathipsae T, Kimberly A Grove, Joshua D lamber.Pharmacological Research, Volume 64, issue 2 page 146-154.
3. Cabrera C, Artacho R, Giménez R. Beneficial effects of green tea--a review.*J Am CollNutr*2006;25:79–99.
4. Pilou LH R. Janssens. Nutraceuticals for body –weight managements: The role of Green tea Catechins, Volume 162, page 83-87.
5. Julius Goepp, article on New research on Health benefits of Green tea, Life Extension Magazine., 2008
6. PawarP.Green Tea and Weight Loss:An update (Meta-Analysis).International Journal of Biotechnology and Biomedical Sciences,2015. Volume 1, Number 1; July- December, pp. 21-24.
7. Jane Pettigrew, the Tea Companion, Running Press, 2004.
8. Green Tea Market to Touch Rs 400 Crore in FY’15: TataGlobal.” Times of india-economictimes. N.p., n.d. Web. 27 May2015.
9. Dulloo AG, Seydoux J, Girardier L. Potentiation of thethermogenic antiobesity effects of ephedrine by dietary methylxanthines:adenosine antagonism or phosphodiesterase inhibition?*Metabolism*. 1992;41:1233– 41.
10. Dulloo AG, Geissler CA, Horton T, Collins A, Miller DS.Normal caffeine consumption: influence on thermogenesisand daily energy expenditure in lean and postobese humanvolunteers. *Am J ClinNutr*. 1989;49:44 –50.

A Study to Assess Depression and Social Support among Older Persons in Selected Community Areas at Kancheepuram District

R. Vijayalakshmi¹, M. Thirunavukarasu²

¹Vice-Principal, SRM College of Nursing; ²Professor and HOD, Department of Psychiatry, SRM Medical College and Hospital, SRM Institute of Science and Technology

ABSTRACT

The World Health Organization estimated that the overall prevalence rate of depressive disorders among elderly generally varies between 10% and 20% depending on cultural situations. Depression and Social support among 70 older persons in Potheri Village, Kattankulathur, Kancheepuram District, were assessed. Quantitative research approach and descriptive research design was used for the study. J.A. Yesavage Geriatric Depression Scale was used to assess Depression and Perceived Social Support Scale developed by Karim Ahmed et al. (2012) to assess Social Support. Among the older persons, 42 (60%) of them had mild depression and 68 (97.1%) of them had Moderate Social support. There was significant association between the demographic variable previous occupation and level of Depression among older persons. There was significant association between the demographic variable religion and level of social support among older persons. Study results concluded there was a negative correlation between the variables Social support and Depression.

Keywords: Depression, Social Support, J.A. Yesavage Geriatric Depression Scale, Perceived Social Support Scale

Introduction

Depression among older persons is a major mental health concern, which is less addressed among Indian population. Research evidences suggest depression among older persons is increasing in India and recommends more screening to be done among older persons for early identification and management. Pracheth. R¹ (2015) reports the prevalence of depression was found to be 27.71% and 24.46% among the urban and rural elderly population, respectively. Considering the high prevalence of depression, screening for depression among elderly population to facilitate the successful implementation of intervention programs is imperative.

Retrospective study based on meta-analysis of various study reports of community based mental health surveys on geriatric depressive disorders conducted between 1955 and 2005 in continents of Asia, Europe, Australia, North America and South America. 74 original research studies that surveyed a total of 4,87,275 elderly individuals in the age group of 60 years and above, residing in various parts of the world were included for the final analysis. The Median Prevalence

rate of depressive disorders in the world for the elderly population was determined to be 10.3% [Interquartile Range (IQR) = (4.7% - 16.0%)]. The Median Prevalence Rate of depression among elderly Indian population was determined to be 21.9% [IQR = (11.6% - 31.1%)]. Though there was a significant decrease trend in world prevalence of geriatric depression, but it was significantly higher among the Indians in recent years than the rest of the world.²

George Maddox (1964) believed that activity, was the secret to successful aging. A physically and socially active lifestyle was the most adaptable means for achieving life satisfaction in the later years. Empirical studies over the past 20 years have proved Maddox correct. Older adults are healthier and they live longer when they are socially engaged (Blazer, 1982). Social isolation and impaired social support have also been found to be associated with both moderate and severe depressive symptoms in the elderly (Bruce, 2002; Chi & Chou, 2001; George et al., 1989). Social scientists are now convinced that social engagement and support are critical for the physical and mental health of older adults.³

Objectives

1. To assess the level of Depression among older persons
2. To assess the level of Social Support among older persons
3. To associate the level of Depression among older persons with their demographic variables
4. To associate the level of Social Support among older persons with their demographic variables
5. To correlate the level of Depression with Social Support among older persons

Materials and Method

Research Approach: Quantitative Approach

Research Design: Descriptive Research Design

Sampling Technique: Convenient Sampling was used to select the samples.

Setting: The study was conducted in Potheri village, Kattankulathur, Kancheepuram district.

Data Collection: Depression and Social Support among seventy (70N) Older persons 60 yrs and above were assessed. J. A. Yesavage Geriatric Depression Scale was used to assess Depression and Perceived Social Support Scale, developed by Karim Ahmed et.al(2012) to assess Social Support.

Ethical Clearance: The study was approved by the Institutional Ethical Clearance Committee. Permission

was obtained from the Authorities of the Community Medicine Department, SRM Medical College. Informed consent was obtained from the older persons.

Data Analysis

Data analysis was done by descriptive and analytical statistics

Table 1: Frequency and Percentage Distribution of Level of Depression among Older Persons N = 70

S. No.	Depression Level	No. of respondents	Percentage
1.	Normal	26	37.1%
2.	Mild Depression	42	60.0%
3.	Moderate Depression	2	2.9%
4.	Severe Depression	0	0.0%

Table 2: Frequency and Percentage Distribution of Level of Social Support among Older Persons N = 70

S. No.	Social Support	No. of respondents	Percentage
1.	Low Social Support	2	2.9%
2.	Moderate Social Support	68	97.1%
3.	High Level Social Support	0	0.0%

Table 3: Correlation of Level of Depression and Level of Social Support among Older Persons N = 70

S. No.	N	Mean	SD	Correlation [r]	P-value
1.	Support	34.67	4.504	-0.256	0.030*
2.	Depression	5.03	2.092		

*-Significant at 5% level **-Significance at 1% level

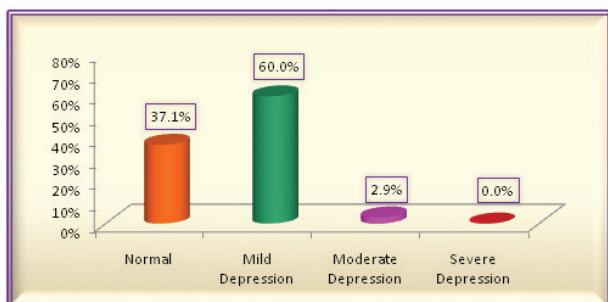


Figure 1: Level of Depression among older persons

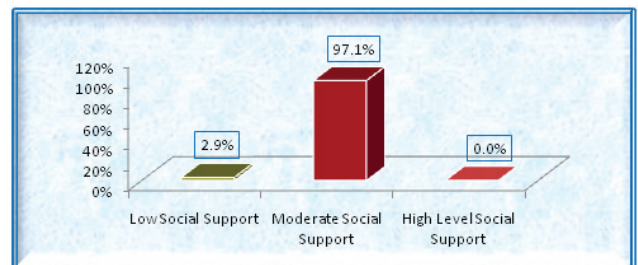


Figure 2: Level of Social Support among older persons

Results and Discussion

Among 70 older persons, 26(37.1%)were normal, 42(60%)had mild depression,2(2.9%)had moderate depression and no one had severe depression. Among 70 older persons, 2(2.9%)had low level of social support, 68 (97.1%) had moderate level of Social support and no one had high level of Social support.

The analysis revealed that the p-value corresponding to the demographic variable “Previous Occupation” is highly significant at 1% level (since the p-value is less than 0.01) hence it is concluded that there is high significant association between “Previous Occupation” and “Level of depression”. All other p-values are not significant since they are not less than 0.05 hence it is concluded that there is no significant association between the demographic variables other than “Previous Occupation” and “Level of depression”.

The analysis revealed that the p-value corresponding to the demographic variable “Religion” is highly significant at 1% level (since the p-value is less than 0.01), hence it is concluded that there is high significant association between “Religion” and “Level of Social support”.All other p-values are not significant since they are not less than 0.05 hence it is concluded say that there is no significant relation between the demographic variables other than “Religion” and “Level of Social support”.

The analysis of correlation betweenDepression and Social support revealed that the p-value is less than 0.05 and hence it is concluded that there is significant negative correlation ($r = -0.256$) between the variables ‘Social support and Depression’ at 5% level, showcasing that, when Social support is increasing, the of Level of depression found to be decreasing.

Conclusion

Depression and Social support among 70 older persons were assessed. Among the older persons, 42(60%) of them had mild depression and 68(97.1%) of them had Moderate Social support. There was significant association between the demographic variable previous occupation and level of Depression among older

persons. There was significant association between the demographic variable religion and level of social support among older persons. Study results concluded there was a negative correlation between the variables Social support and Depression.

Conflict of Interest: None

Source of Funding: Self Funded

REFERENCES

1. PrachethR, Urban–rural comparison of depression among the elderly population: a cross-sectional study,International Journal of Medical Science and Public Health, 2016 ;Vol 5, Issue 05
2. AnkurBarua et.al, Depressive Disorders in Elderly: An Estimation of this Public Health Problem,JIMSA, October - December 2011 ;Vol. 24 No. 4 193
3. D. G. Blazer, Depression and social support in late life: A clear but not obvious Relationship, Aging & Mental Health, November 2005; 9(6): 497–499
4. Frady, Kristen, “Depression, Social support, and Self-rated health in older adults” (2014). Open Access Master’s Theses. Paper 313.,<http://digitalcommons.uri.edu/theses/313>
5. Valeria T. S. Lino et.al, Assessment of Social Support and Its Association to Depression, Self-Perceived Health and Chronic Diseases in Elderly Individuals Residing in an Area of Poverty and Social Vulnerability in Rio de Janeiro City, Brazil, journal. pone 2013, James LoGerfo, University of Washington, United States of America,PLoS ONE 8(8): e71712.
6. Genevie` veGarie` py, Helena Honkaniemi and Ame` lie Quesnel-Valle` e, Social support and protection from depression:systematic review of current findings in Western countries, The British Journal of Psychiatry, 2016; 209, 284–293.
7. Ana Filipa Pimentel, Rosa Marina Afonso, Depression and Social support in old age, psicologia, saúde e doenças, 2012; vol. 13, núm. 2, pp. 311-327

Attitude Towards Care of Dying Patients among the Interns in a Tertiary Care Hospital

S. Kavitha¹, S. Yogeswari²

¹Associate Professor, Department of Biochemistry, ²MBBS Student, PSG Institute of Medical Sciences and Research, Coimbatore, Tamil Nadu

ABSTRACT

Aim: To assess the attitude among interns on palliative care in a tertiary care unit

Background: Palliative care is a specialized approach for the terminally ill patients which focuses on relieving the pain and stress of the dying patient and their family. At the end of the curriculum all doctors are capable of treating a patient but the psychological stress while dealing with a dying patient is not balanced properly. Hence our study was designed with the idea to assess the attitude on palliative care by a FATCOD questionnaire.

Subjects and Method: A descriptive study conducted among 100 interns from a tertiary care hospital. FATCOD, a standard questionnaire with 30 item tool using a five-point Likert scale is used assess the attitude of health professionals on palliative care.

Results: Participants included 52 female interns and 48 males. Mean score of the study population was 92.07 ± 13 .

Conclusions: We conclude that the awareness on palliative care is low among the interns. This signifies the need for education and awareness about palliative care to medical students.

Keywords: Awareness, care of dying, FATCOD, Interns, Palliative care, Tertiary care hospital

Introduction

Palliative care as defined by World Health Organization is 'an approach that improves the quality of life of patients and their families facing the problem associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual'.⁽¹⁾ Palliative care is primarily targeted to provide symptom and pain management to the terminally ill patients. Also known as 'end of life care', the main aim of palliative care is to improve the quality of a

patient's life by providing cure to support not only for his physical illness but also to enhance the mental and spiritual well being of the dying patient and his family and not just pain relief. With increased life span and geriatric population with long term chronic illnesses, need for palliative care is in increase.

Though the nurses are the direct bedside care takers of a dying patient, the team of palliative care is incomplete without the doctors' role. Palliative care is often considered as a synonym with geriatric medicine, pain medicine or rehabilitative medicine. Along with the medical knowledge, the doctor is also expected to possess qualities like compassion, empathy and skills like communication and interpersonal skills which he gains through experience and practice. Palliative care is not only provided by doctors specialized in palliative medicine, but also by interns, fresh graduates and any specialist. Palliative care is not a part of standard Indian medical curriculum for undergraduates. Lack of knowledge and awareness on palliative care during

Corresponding Author:

S. Yogeswari

MBBS Student,

PSG Institute of Medical Sciences and Research,
Coimbatore, Tamil Nadu

Phone: 9789675787

Email: Yogi98.sf@gmail.com

their undergraduate course may lead to poor delivery of the same by doctors while treating a dying patient in the future. Knowledge through books alone may not be adequate to deal with a dying patient it should be gained through experience. Hence we selected interns were for this study. Hence this study is designed to assess the attitude on palliative care among the interns in a tertiary care setup and to evaluate the need for incorporation of palliative care in Undergraduate curriculum.

Materials and Method

It is a descriptive study conducted among interns in a tertiary care hospital. After obtaining approval from institutional human ethics committee, interns willing to participate in the study were recruited. Participants included all willing interns irrespective of their current clinical postings were who gave consent were included in the study. None of the participants had any training in palliative care.

FATCOD Questionnaire: The FATCOD [Frommelt Attitude Toward Care Of the Dying] is one of the standard questionnaires to assess the attitude of health professionals on palliative care. It is a 30 item tool using a five-point Likert scale [strongly disagree, disagree, neutral, agree, and strongly agree]. 20 questions deal with attitude of the health care professional towards the dying person and the remaining 10 questions deal with attitude of the health care professional towards the patient's family and friends. A score of 30-150 points will be acquired. More the score better the attitude on palliative care.

Data: After explaining the details regarding study, questionnaire was given to the interns. Filled up questionnaires were collected anonymously by interns were requested to return the questionnaires to the office secretary. Demographic details like gender, age and duration of internship was also collected. Data presented as mean, percentages and frequencies. Statistical analysis done using SPSS software version 19. Student 't' test was used to compare between subgroups. $p < 0.05$ considered as significant.

Results

100 interns returned their filled in questionnaire and were analyzed. Mean age of interns was 23 years. Participants included 52 female interns and 48 males.

Mean score of the study population was 92.07 ± 13 . Mean score was 93.6 ± 13 in males and $90.7 \pm$

12 in females. There is no significance between mean score between males and females. A score of 110 and above [$>75\%$] was set as the cutoff for good attitude on Palliative care. Only 9 participants out of 100 got scores more than 109. 58 ± 8 was the mean score in attitude of the health care professional towards the dying person and 33.8 ± 7 was the mean score in attitude of the health care professional towards the patient's family and friends.

Table 1 shows Itemized Mean score for FATCOD questions. None of the questions got mean score of above 4.

Discussion

With increasing life span and prevalence of chronic illnesses among the older population, the need for providing palliative care is on the rise.

Current study shows that attitude among interns towards care of dying is low compared to the study done by Tait V *et al* (2015) among nursing students which showed 119.8 ± 11.1 .⁽²⁾ Similar study conducted by Pandey.S *et al* (2015) reveal that in the first two years of undergraduate medical studies there is a low perception of palliative care. But it is increased in the clinically exposed students with the highest being in third year. Hence it should be included in undergraduate medical study.⁽³⁾ The basic knowledge of palliative care is inadequate among the undergraduate medical students, and the students are unprepared and uncertain in their approach of delivering palliative care. The incorporation of palliative and end of life care in undergraduate curricula has become a need of the hour. Magnani JW *et al* (2002) in their study conclude that there is a lack of standardized curricula for learning and practicing palliative care during the undergraduate years.⁽⁴⁾

Works from Block SD(2002) proves that the other contributor to deficient palliative care is the uninterested attitude of health care teachers who impart the knowledge that the dying cases are not as good as the "teaching cases" and the students lack exposure to a dying patient.⁽⁵⁾ A survey conducted among the medical students, residents, fellows, and attending physicians by Sand RB *et al* (1998) found that, there was lack of standardized training in dealing with terminally ill people.⁽⁶⁾ An educational intervention study conducted by Chih-Yuan Shih(2010) affirms that Palliative care education contributes to increased willingness toward providing end of life care among the junior doctors, which suggests that this kind of training course should be

emphasized in medical education There is an increased willingness towards palliative care. ⁽⁷⁾ Mr.Braun *et al*(2010) through their study found that Further research needs to be undertaken using large sample sizes that include multidisciplinary health care professionals. ⁽⁸⁾

Conclusions

To shape the future educational system, a proper understanding of the present knowledge on palliative care is needed This study reveals that the attitude

towards end of life care is very poor among the interns of PSGIMSR. Our education system equips us with knowledge, skills and practice to cure any patient. But as students, what we lack is communication, psychological skills, intrapersonal skills and life closure skills. These skills can be acquired with proper education, practice and awareness on palliative care from the very first year of medical school. Incorporation of palliative care is necessary not only for medical students but also to other health care professionals like nurses and allied health services who deal with dying patients.

Table 1: Itemized Mean score for FATCOD questions

S. No.	Question	Mean score
1.	I would feel like running away when the person actually died.	1.7
2.	I would not want to care for a dying person	1.8
3.	I am afraid to become friends with a dying person	2.0
4.	The length of time required giving care to a dying person would frustrate me	2.1
5.	As a patient nears death, the nonfamily caregiver should withdraw from his/her involvement with the patient.	2.2
6.	Educating families about death and dying is not a nonfamily caregiver responsibility.	2.5
7.	I would hope the person I'm caring for dies when I am not present.	2.7
8.	The nonfamily caregivers should not be the one to talk about death with the dying person.	2.8
9.	The dying person should not be allowed to make decisions about his/her physical care.	2.8
10.	I would be uncomfortable talking about impending death with the dying person.	2.9
11.	It is difficult to form a close relationship with the dying person.	2.9
12.	Addiction to pain relieving medication should not be a concern when dealing with a dying person.	3.1
13.	When a patient asks, "Am I dying?" I think it is best to change the subject to something cheerful.	3.2
14.	I would be uncomfortable if I entered the room of a terminally ill person and found him/her crying.	3.2
15.	I would be upset when the dying person I was caring for gave up hope of getting better.	3.2
16.	Family members who stay close to a dying person often interfere with the professional's job with the patient.	3.2
17.	It is beneficial for the dying person to verbalize his/her feelings.	3.3
18.	The family should be involved in the physical care of the dying person.	3.4
19.	Caring for the patient's family should continue throughout the period of grief and bereavement.	3.4
20.	Care should extend to the family of the dying person.	3.4
21.	It is possible for nonfamily caregivers to help patients prepare for death.	3.4
22.	Dying persons should be given honest answers about their condition.	3.5
23.	There are times when the dying person welcomes death.	3.5
24.	The dying person and his/her family should be the in-charge decision-makers.	3.6
25.	Families should be concerned about helping their dying member make the best of his/her remaining life.	3.6
26.	Death is not the worst thing that can happen to a person.	3.6
27.	Giving care to the dying person is a worthwhile experience.	3.6
28.	Caregivers should permit dying persons to have flexible visiting schedules.	3.7
29.	Families need emotional support to accept the behavior changes of the dying person.	3.7
30.	Families should maintain as normal an environment as possible for their dying member.	4.0

Ethical Clearance: Taken from Institutional Human Ethics Committee

Source of Funding: Self

Conflict of Interest: Nil

REFERENCES

1. Definition of palliative care. Available from: <http://www.who.int/cancer/palliative/definition/en/>. [accessed on 2017 Nov 2]
2. Tait V, Higgs M, Magann L, Dixon J, Davis JM, Fernandez R. Attitudes of Nonpalliative Care Nurses towards Palliative Care. *International Journal of Palliative Care*. 2015; 6 pages.
3. Perception of Palliative Care among Medical Students in a Teaching Hospital Pandey S, Gaire D, Dhakal S, Jaishwal N, Kharel PM, Vaidya P. *J Nepal Med Assoc*. 2015;53[198]:113-7.
4. Magnani JW, Minor MA, Aldrich JM. Care at the end of life: A novel curriculum module implemented by medical students. *Acad Med*. 2002;77:292–8
5. Block SD. Medical education in end of life care: The status of reform. *J Palliat Med*. 2002;5:243–8.
6. Sand RB, Blackall GF, Abrahm JL, Healy K. A survey of physician's education in caring for the dying: Identified training needs. *J Cancer Educ*. 1998;13:242–7.
7. What factors are important in increasing junior doctors' willingness to provide palliative care in Taiwan? An educational intervention study. Chih-Yuan Shih, Tai-Yuan Chiu, Long-Teng Lee, Chien-An Yao, Ching-Yu Chen, Wen-Yu Hu. *Journal of Palliative Medicine* 2010, 13 [10]: 1245-51]
8. M. Braun, D. Gordon, and B. Uziely, "Associations between oncology nurses' attitudes toward death and caring for dying patients," *Oncology Nursing Forum*, 2010 vol. 37, no. 1, pp. E43–E49,

Perceptions of Male Nursing Students in Providing Care to Children in Paediatric Clinical Settings in Oman

Salem Al Touby¹, Vanaja Muniswamy², Sheikha Al Sabari³, Pricilla Monterio³

¹Associate Dean, ²Nursing Science Teacher Specialist, ³Assistant Tutor,
Oman College of Health Sciences, Nursing Program

ABSTRACT

The Clinical placements and clinical learning form a major part of nurse education and have an important role in students' perceptions of nursing. This study assessed the perceptions of male nursing students, their views, concerns, challenges in providing care to the children during paediatric clinical placement. A Descriptive, qualitative design with focus group interview was conducted. Analysis of data yielded four themes: 1) Traditionally gendered specialty; 2) Barriers to provision of care; 3) Lack of support; 4) Alternative clinical settings.

Keywords: *Perceptions, Male nursing students, childcare, clinical learning, clinical placements.*

Introduction

Nursing in Oman is widely recognized as a caring and an admirable profession. In some Arab countries, nursing also is considered one of the appreciated and recommended professions.¹⁸ In Oman, Ministry of Health (MOH) nursing institutes offer three-year General Nursing program (until 2015), which is equivalent to an associate degree in nursing from the United States. There were eight (8) nursing institutes located in different regions of the country with an annual intake of 540 students. Nursing graduates from MOH institutes work mainly in MOH primary, secondary and tertiary health organizations located in different regions in Oman. In Oman and elsewhere, male nurses have been a minority group within the nursing profession. The number of male nursing students' admission to nursing profession has been increased in the current years.¹⁹ In the past five years, male nursing students are showing an increasing trend in all nursing institutes; they constitute 15 % of the annual intake in 2013. Therefore, it was imperative to assess how the male students perceived their role in the female dominated work environment. The perception

has a great influence on the development of nursing students and the future quality of nursing.¹⁷

Literature Review

The professional practice of nursing within the pediatric environment can be both rewarding and challenging, as it requires developmentally appropriate care and diligence in assessment of patient and parental concerns.²² Clinical placements and clinical learning form a major part of nursing education and have an important role in students' perceptions of nursing.¹⁵ Interestingly a study conducted in Oman reported that nursing favored female student admission to nursing courses (80-85%) in contrast to (15-20%) male students, with MOH justification that female nurses can work in any area of health care, whereas male nurses were prohibited in some areas of practice.² Currently, the proportion of female to male nursing in Oman is about 7:1. In contrast, other studies highlighted that male students having human and professional power, offering unconditional care at all levels and settings. Some literature found that male students encountered gender barriers which negatively affect their nursing education, academic achievement and practice.^{10,13,14, 29} The studies that explored the experiences and perceptions of nursing towards nursing found that male students were negative and stemmed from gender bias¹³ social views on nursing work. In addition, male nursing students are not acceptable in child care areas, face discrimination by practicing nurses, physicians and the public.^{5, 15, 16,32}

Corresponding Author:

Ms. Vanaja Muniswamy
MSN, BSN, RN, Nursing Science Teacher Specialist,
Oman College of Health Sciences, Nursing Program
Email: mvanaja306@gmail.com
yusra444@hotmail.com

The existing literature identified various barriers that are faced by male nursing students that is worth studying from the Omani context. Male nursing students at ONI often questioned how to work effectively in paediatric clinical settings with the presence of cultural barriers. Very little is known about this topic in Oman and in the gulf region, hence this study was conducted. Therefore, the purpose of this qualitative study with a descriptive design was to assess the Omani male nursing students' perceptions of providing care to children in the paediatric clinical settings.

Research Methodology

A Qualitative descriptive utilizing focus group interview with semi structured open-ended questions that lasted for one hour. The Data was gathered from 8 third year male nursing students from ONI who were taking child health course in the academic year of 2014-2015.

Convenient sampling technique was used. Male students who were posted in the paediatric clinical area were requested to participate. Ethical approval was obtained from MOH and the dean of ONI. The principal investigator explained the study and the willing students were provided with an information sheet and a consent form to sign. The ethical approval of the study was taken from.

Data Analysis

Data transcribed by the researchers and were analyzed independently and anonymously, using verbatim analysis; later the recorded data was discarded. Post hoc themes identification was done by team of researchers independently. Early stages of coding led to the identification of six core themes, illustrating the perceptions, barriers, facilitators, challenges, alternative settings, strengthening of clinical placement to provide care to children. The final stages of coding yielded 4 themes.

Table 1: Data Extract, with codes applied

Data Extract	Coded for
Hospital Staff really forgotten that male students are really assigned with them, Ah! Child is accompanied by the mother, and it is not acceptable in our culture to talk to females, what I am doing now is obtaining the information from computer! It is like looking at the scene, and not talking. "Al-amdulliah, I was surprised and felt happy when the child was accompanied by the father and I was able to sit with the child.	Gender traditional settings culture anxiety, low self esteem support from the faculty and health care team Equity of opportunity

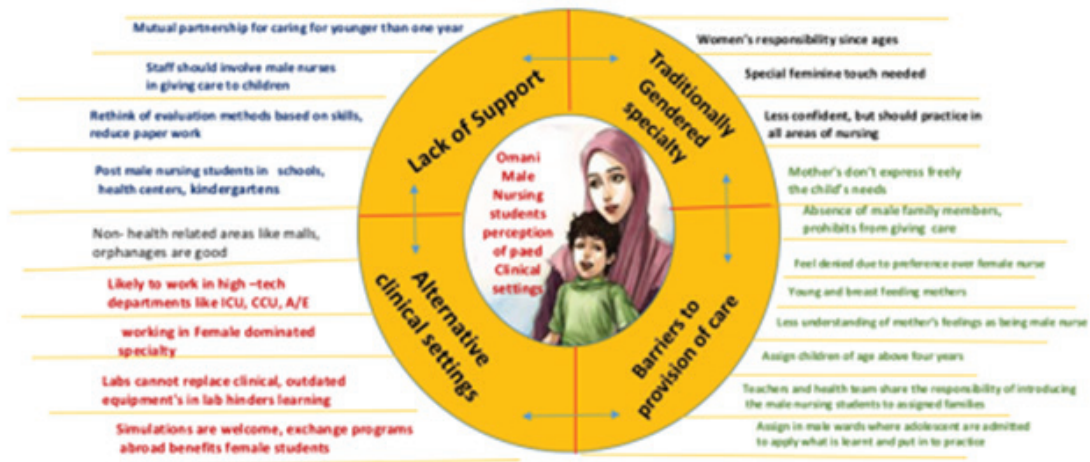


Fig. 1: Qualitative thematic map showing final four themes

Identified Themes

1. Traditionally Gendered Specialty: Male nursing students perceived their placement at the the paediatric settings as anxious experience with lack of confidence, low self-esteem in providing care to children. Also, they perceived it as a female

dominated specialty. One of the respondents reported that, "I like nursing, and feel better as I am important in the community and give care to people of all ages". Other respondent stated that "paediatric ward should be for female nurse, and it is impossible for a male nurse to work there". The other respondent said, "male nursing students are

not in favour of memorization of some of the child care concepts". "We are not saying that we do not like children, we like them; however, in reality dealing with them in everyday practice is difficult; unlike the female nurses. All the participants felt that paediatric nursing is important to take care of patient throughout the lifespan.

- 2. Barriers to Provision of Care:** Male nursing students perceived communication was one barrier that hindered providing care for children. One student said "When the staff is female nurse, they can explain about procedure without feeling shy". "When I explain, I feel they will misunderstand me". Other student highlighted that "you see most of time the paediatric units are covered by curtains, mothers are breast-feeding their infants, or sleeping" "most of the time as children do not sleep well at night, and at times very young mother, I feel shy and embarrassed." But I was surprised that I could do well last two weeks as father accompanied the child".

Socio-cultural was another barrier emerged. The Omani culture views that provision of care in the pediatric setting is a gender based and accepted culturally when provided by female nurses. The cultural adaptation required were evident due to female domination of the profession as expressed by male nursing students. "We are not able to talk to children, touch them, as they will be crying and running most of the time to their mothers". "We are not allowed culturally to sit and talk to women,". I feel trapped in the unit with full of mothers and children", another participant added, "Even though the information can be taken from the computer, you still need to collect the information from parents or family themselves to be more specific".

- 3. Lack of support:** Male nursing students highlighted they need support from the faculty, health team and society as expressed by them. "Third year is better; student nurses have the knowledge of adult diseases and it is easier to understand the disease conditions of children, and deal with all different age groups". One of the participants reported, "it would be better to mutually share with female nursing students, the completion of case study related to infants and toddler age groups so that we will be able to deal with the child in spite the presence of mother". Another added, "We are now three years working together helping each other".

"Some of the staff are really forgetting that there are male students assigned with them, to observe and assist in the childcare, they ignore and approach female nursing students, instead". One respondent reported, "The staff should be aware of how to deal with male students and support them while they are in the clinical. "Other student highlighted" faculty should rethink of evaluations based on more skills and giving immediate feedback. "Some of the clinical teachers were supportive and motivated us to learn about new cases every day, gave us take home assignments in order to be benefitted to apply theoretical knowledge into practice.

- 4. Alternative clinical settings:** Facilitation is teaching, supporting and giving feedback of assessments, it was apparent in the current study the participants expressed the teacher need to support them, facilitate collaborating with staff and female students in the ward, and provide more opportunities to practice. Therefore, more than half of the participants expressed their desire to work with children in other areas than the inpatient clinical settings to meet the course objectives. One of the participant reported, "In primary health center, we can deal with the child since mother /children are not in-patients, here you are assigned in the room and child and mother come to you for their concerns, the same way in schools we can take care without bias, as only the child is present here. Other participants responded and suggested kindergarten, city malls, and orphanages as alternative clinical settings. The respondents answered to the question, the benefit of exchange program abroad where there may be no restrictions the respondents reported, "We are Muslims and, still our thinking will be same, anywhere and it is expensive to send students abroad, sending female students can be good as they can be globally prepared to give care."

Discussion

The study provided a useful insight into the perceptions of male nursing students in providing child care in the pediatric clinical settings. Male nursing students perceived child care as a female dominant specialty. To our knowledge, this study is the first study in the middle east area that assessed the perception of nursing students on provision of care to children in the clinical setting. The study also found that communication and culture were the barriers to providing care to children

in the clinical settings. Gender and sociocultural issues might be the most important factors underlying all issues related to barriers to caring for children, as perceived by male nursing students; which found that Gender bias does exist in nursing education and can lead to discrimination against male students.^{7,11,31} Lack of support is another theme emerged in the study. The male nursing students in the study reported that there was lack of support from the faculty, health team and society. More attention to be given to them while in the clinical area and their needs must be adequately assessed to ensure that they gain the course objectives in the clinical areas. Lack of support and dissatisfaction highlighted widely in the previous literature that impeded students' learning in nursing education.³ The final theme highlighted the alternative approach to be considered for male students to provide care for children other than in patient settings. The male nursing students suggested some areas to accomplish their clinical objective related to paediatric course such as health centers, schools, orphanages and day care settings. Also, some students highlighted the need to consider exchange programs that would allow them to work in pediatric settings in countries that do not consider gender differences in provision of care. Some studies supported our findings and highlighted that people would be more likely to accept male nurses if there are no opposition from society, both genders are capable of taking part in all specialties.^{18,24}

Conclusion

The aim of this study was to assess the perception of male nursing student on provision of care to children in the pediatric clinical. Four themes emerged 1) Female dominant specialty; 2) Barriers to provision of care; 3) Lack of support; 4) Alternative clinical settings. The male student perceived the paediatric clinical setting as an interesting area of practice; however, due to socio-cultural barriers, it is perceived as a female dominant area that would not be accepted by the Omani culture to be practiced by male students. Lack of support contributed to a negative perception of the students; and therefore, more attention to be given to the male students in the clinical area to attend their needs. Since pediatric experience is an important area of practice; male students must be given the opportunity to provide care to children but in alternative clinical settings (day care, schools, orphanages) other than in patient-settings.

Implications of the Study: The study implied the need to design an innovative approach for strengthening child health care clinical placements for male nursing students. It further implied the identification of alternative areas for provision of care to children. Hence the support from policy makers, and curriculum planners of graduate education of nurses is mandatory to ensure that the learning needs and the courses objectives are mutually met. This will enable administrators' and other stakeholders to incorporate the changes in the workplace as well strengthen the clinical learning environment for better learning and practice.

Limitation: Generalization of findings is not possible.

Acknowledgment

We would like to acknowledge the contribution of the following faculty members for their valuable contribution to accomplish the study: Dr. Yusra Al Nasiri, Mohammed Shamnad, Jocelyn Gensoli, Omar Al Omari.

Conflict of Interest: None

Source of Funding: Self-funding

REFERENCES

1. Alghemini M & Denham S. Professional nursing in Oman. Retrieved online <http://www.minoritynurse.com> accessed on. (2008). 26/04/2015.
2. Al-Nasseri Y. Renganathan L. The impact of teacher- students' relationship on students learning. *Journal of Nursing Education*. 6 (1), (2014). 167-172.
3. Amanda Stott. Exploring factors affecting attrition of male students from an undergraduate nursing course: a qualitative study. *Nurse Education Today*, 27(4), (2007). pp-325-332.
4. Anthony A. Gender bias and discrimination in nursing education. Can we change it? *Nurse Educator*, 29. (2004), pp. 121-125.
5. Braun V, Clarke V. Using thematic analysis in psychology. *Qualitative Research in Psychology*; 3(2), (2006). 77 — 101.

6. Bartfay W, Bartfay E, Clow K Attitudes and perception towards men in nursing education. *Journal of Allied health sciences and practice*; 8 (2), (2010). pp 540-580
7. Chan D. Nursing students' perceptions of hospital learning environments—an Australian perspective. *International Journal of Nursing Education Scholarship* 1 (1), (2004). 233-238.
8. El Sayed M & El Rashad N. The Experience of Newly Enrolled Egyptian Male Nursing Students into Maternity Nursing Curriculum *Life Science Journal* 2 (1), (2013). pp 150-155.
9. Eswi A, El Sayed Y. The experience of Egyptian male student nurses during attending maternity nursing clinical course. *Nurse Education in Practice*, 11(2), (2011). pp. 93-98.
10. Eick A. A systematic review of placement-related attrition in nurse education *International journal of nursing studies*, 49(10), (2012):1299-309.
11. Gaber M and Mostaf, M. Comparison of Nursing Students' perceptions about Male Nursing among Zagazig University in Egypt and Shaqra University in Saudi Arabia. *Life Science Journal*;10(4), (2013). 245-250.
12. Grady CA, Stewardson GA. Factors Influencing Men Entering the Nursing Profession, and Understanding the Challenges Faced by Them: Iranian and Developed Countries' Perspectives. *Nurs Midwifery Stud*. Dec 2(4).(2013). 49-56.
13. Keogh B & O'Lynn C. Male nurses, experiences of gender barrier: Irish and American perspectives. *Nurse Education*. 32(6), (2007). 256- 9
14. Lehinds N. Male nurses: gender-based barriers in nursing school, university of the pacific. *Canadian Journal of Nursing*, 28 (1), (2010). 25-39.
15. Lofmar A, Wikblad K. Facilitating and obstructing factors for development of learning in clinical practice: a student perspective. *Journal of Advanced Nursing*, 34(1), (2001). pp 43-50.
16. Maaitah R. Perception of Jordanian male nursing students about caring for children in the pediatric units after graduation. *Journal of Paediatric Nursing*, 15(3), (2000). 220-228.
17. Ministry of Health. Fact sheets (2011b) accessed online: http://www.moh.gov.om/stat/moh_fact_sheet.pdf
18. Ministry of Health. Human resources development review. (2011c) http://www.moh.gov.om/nv_menu.php?fNm=hr/HRDReview.htm&SP
19. Ministry of Information (2002) Ministry of Information: Sultanate of Oman, accessed online <http://www.omanet.om/english/home.asp>
20. O'Lynn C. Gender-based barriers for male students in nursing education programs: Prevalence and perceived importance. *Journal of Nursing Education*, 43 (5), (2004). pp. 229–236.
21. Ozdemir A, & Tunk Z Gender and Career: Female and Male Nursing students' perceptions of nursing role in Turkey, *Health science journal*, 2 (3), (2008).).115-120.
22. Paterson B, Tschikota S, Crawford M, Saydak M, Venkatesh P, Aronowitz TJ, Learning to care Gender issues for male nursing students. *Nursing Education* ; 47(7), (2008). 314- 23.
23. Saeed E. Knowledge and Practice Gaps among Pediatric Nurses at a Tertiary Care Hospital Karachi Pakistan, *International Scholarly Research Network ISRN Pediatrics*. (2011).
24. Shukri R. Attitudes of Students at Sultan Qaboos University towards the Nursing Profession. *Sultan Qaboos University Medical Journal*; 13(4),(2013). PP 539–544.
25. Tawash E, Cowman S, Anunciacion E. A triangulation study: Bahraini Nursing students perception of nursing as a career. *Journal of nursing education and practice*; 2 (3), (2012). pp- 81-92.
26. Villeneuve J, Keogh M. Male nurses' experiences of gender barriers: Irish and American perspectives. *Nurse Educator*, 32 (6), (2007). pp. 256–259
27. Wang H, Hu, X, Chen, H., Gao, Y., Zhao, H., Huang, L. Perception of nursing profession and learning experiences of male students in baccalaureate nursing program in changsha, china. *Nurse Education Today*; 31, (2010). pp. 36–42.
28. Zhang M, Petrini M. Factors influencing Chinese undergraduate nursing students' perceptions of the nursing profession, *International Nursing Review*, 55(3), (2008) p 274–280.

The Effect of Computer-Assisted Instruction on Students' Knowledge about Health Impacts of Cigarette Smoke in Pregnant Women and Newborns

Sununta Youngwanichsetha¹, Sasitorn Phumdoung², Warangkana Chatchawet³

¹Associate Professor, ²Professor, ³Assistant Professor, Faculty of Nursing, Prince of Songkla University, Hat Yai, Songkhla, Thailand

ABSTRACT

Background: Computer-assisted instruction (CAI) is effective to enhance students' learning outcome. It can be adopted as alternative or additional teaching method to promote active learning.

Purpose: This study aimed to examine the effect of CAI on students' knowledge about health impacts of cigarette smoke in pregnant women and newborns.

Methodology: Quasi-experimental research design was employed. One hundred and eighty-four undergraduate nursing students were recruited as the study sample. Data was collected using pretest and posttest true or false questions.

Results: After studying with CAI, students showed significantly higher mean score of knowledge and confidence on the assessment of smoke impacts in pregnant women and newborns.

Conclusion: This finding suggests that CAI is helpful instructional tool to improve students' learning outcome.

Keywords: Computer-assisted instruction, nursing education, cigarette smoke exposure

Introduction

Cigarette smoke exposure is known to be among many prenatal risk factors that affect pregnancy outcomes including miscarriage, placenta abruption, placenta previa, preterm delivery, and low birth weight in newborns¹. Health care providers should educate pregnant women to avoid second-hand smoking. In nursing curriculum, undergraduate students are set out to gain knowledge and competency to implement nursing care and health education program on smoking protection. Health educators also should learn about 5 procedures including asking for smoking history, advising to avoid cigarette smoke, assessing health

impacts, assisting and arranging follow-up in smoking cessation. Effective education media is helpful to promote student engagement and achievement of the desired learning outcomes.

Computer-assisted instruction (CAI) has been developed and proposed as educational innovation and learning material in order to enhance academic achievement among nursing students. Educators are encouraged to develop CAI as an alternative or additional teaching method. Prior research has proven CAI programs to be effective and thus been adopted widely in many nursing school and universities because it can respond to diverse learning styles while, increase access to additional resources and standardize learning process². In addition, CAI can improve students' learning outcomes because it facilitates engagement and enhance educational motivation³.

Contents learned from CAI can be designed as an online educational tools⁴, computer-mediated continuing education, and online training package⁵. Learning from CAI is considered friendly environment⁶.

Corresponding Author:

Sununta Youngwanichsetha

Faculty of Nursing, Prince of Songkla University,
Hat Yai, Songkhla, 90112, Thailand

Email: sununta.y@psu.ac.th

sununta.y@gmail.com

Application of CAI, based on constructivism learning theory, emphasizes the role of the learners' cognitive ability. Teachers play role as constructive assistants and facilitators in an active learning process. In addition, CAI satisfies the students because it allows thorough understanding of assigned knowledge in a comfortable environment and available time⁷.

Prior research has shown that CAI can improve knowledge, diagnostic abilities, and clinical skills among medical students⁸. In addition, application of CAI can enhance clinical decision making and self-efficacy for student to practice⁹. It can also be applied to prepare students for professional testing¹⁰ and improve self-efficacy in clinical practice¹¹. However, the development and application of CAI in nursing education has not been widely used¹². Literature reviews found no research evidence on beneficial of CAI regarding impacts of second hand smoking on maternal and newborn health. Therefore, researchers are interested to further examine its application in nursing education.

Research Methodology

This study was approved by Institutional Review Board Committee of Prince of Songkla University, Hat Yai, Thailand. An interactive multimedia CAI on health impacts of cigarette smoke in pregnant women and newborns was developed to increase nursing students' understanding of second hand smoking. CAI developed to offer contents related to harmful substances in cigarette

smoke and maternal and newborn health impacts. Data was collected using questionnaire comprising of personal data, knowledge, self-confidence assessment, and evaluation of the developed CAI. Quasi-experiment research method with one group pretest posttest design, was employed. Two hundred and twelve undergraduate nursing students who were enrolled in Midwifery course during second semester of 2018 academic year, were approached and invited to participate in the study. The participants were asked to complete the pretest questionnaire on the day before class, then assigned to watch the developed CAI in class followed by completing the posttest questionnaire. However, 184 nursing students could complete both pretest and posttest questionnaire.

Findings

The participants were 21-23 years of age. Forty-two percent reported that they had previously used CAI in high school or university. The developed CAI showed efficiency of E1/E2 at 85.13/86.42. The students' learning mean score in posttest (M 8.70, SD 1.51) was higher than pretest (M 4.30, SD 0.95) at .05 significant levels. Students' mean score of self-confidence on the assessment of cigarette smoke impact on pregnant women and newborn health in posttest (M 83.030, SD 7.33) was higher than pretest (M 47.00, SD 7.33) at .05 significant levels (Table 1). The overall students' satisfaction of CAI was 83.12 percent (SD 6.78) (Table 2).

Table 1: Comparison of pretest and posttest mean scores of knowledge and self-confidence on assessment of cigarette smoke impacts on pregnant women and newborn health (n = 184)

Dependent Variables	Pretest		Posttest		t	p
	mean	SD	mean	SD		
Students' knowledge of cigarette smoke impacts on pregnant women and newborn health	4.30	0.95	8.70	1.51	33.11	.000
Students' self-confidence on assessment of cigarette smoke impacts on pregnant women and newborn health	47.00	7.33	83.00	7.33	21.35	.000

Table 2: Students'satisfaction on the developed CAI (n = 184)

Characteristics of the developed CAI	Mean	SD
1. Simplicity	89.00	8.76
2. Conciseness	85.00	5.68
3. The objectives and content were congruent	83.00	8.23

Conted...

4. Font and color were appropriate	87.00	4.83
5. Object and animation were appropriate	79.00	6.75
6. Sound was appropriate	75.00	7.07
7. Designed graphic was appropriate	82.00	6.32
8. CAI was user-friendly	85.00	6.67
Overall satisfaction	83.12	6.78

Discussion

After learning with the developed CAI, nursing students gained higher mean score of knowledge and self-confidence on the assessment about health impacts of cigarette smoke in pregnant women and newborns. This finding indicates that CAI can improve students' learning outcomes. Previous studies also support that CAI is effective to stimulate students' motivation and active learning engagement¹³. In addition, CAI can be used to improve students' competency on applying their knowledge and enhance self-efficacy to practice. It is reported that CAI in E-learning can improve radiological knowledge and image interpretation skills of medical students¹⁴. Knowledge testing in CAI can enhance students' clinical reasoning. CAI can also use to promote comprehension in health education program and online education¹⁵.

CAI can increase learner's knowledge and comprehension because it is designed to improve student learning skills and transform of theory to clinical reasoning and decision making process¹⁶. It can further initiate student interactivity in the learning process with educational technology¹⁷. Moreover, CAI features, such as bright colors, cute cartoon characters, and animation on screen can effectively attract the students' attention¹⁸. Additionally, it is not only developed to facilitate convenience and efficiency of classroom teaching but also provide learning environment for students who may possess various learning styles¹⁹ and competency levels²⁰. Therefore, CAI is suggested to be integrated with face-to-face lectures²¹. As a result, students reported satisfaction with the developed CAI and ultimately increased retention of learned knowledge.

Conclusion

After studying the content from CAI, nursing students gained significantly higher score on knowledge about second hand smoking impacts on maternal and child health. The findings confirm that CAI is an effective instructional media in nursing education. Development and evaluation of CAI are suggested so it can be used as an alternative or additional education tool.

Conflict of Interest: Nil

Source of Funding: Faculty of Nursing, Prince of Songkla University, Hat Yai, Thailand.

Ethical Clearance: Taken from Center for Social and Behavioral Sciences Institutional Review Board, Prince of Songkla University, Thailand.

REFERENCES

1. Norsa B, Salinah O. The effects of second-hand smoke exposure during pregnancy on the newborn weight in Malaysia. *Malays J Med Sci* 2014; 21: 44-53.
2. Wagg AJ, Callanan MM, Hassett A. The use of computer mediated communication in providing patient support: A review of the research literature. *Int J Nurs Stud* 2018; 82: 68-78.
3. Arslan GG, Ozden D, Goktuna, G, et al. A study on the satisfaction of students for the time spent watching video-based learning during their basic nursing skills' training. *J Caring Sci* 2018; 11: 427-436.
4. Shenai SNA, George AM, Mariyam AM, et al. Perception of educational environment among Bsc nursing students. *Intl J Nurs Educ* 2019; 11: 109-114.
5. Militello L, Gance-Cleveland B, Aldrich H, et al. A methodological quality synthesis of systematic reviews on computer-mediated continuing education for healthcare providers. *Worldviews Evid Based Nurs* 2014; 11: 177-186.
6. Gartshore E, Briggs L, Blake H. Development and evaluation of an educational training package to promote health and wellbeing. *Br J Nurs* 2017; 26: 1182-1186.
7. Dennison HA. Creating a computer-assisted learning module for the non-expert Nephrology nurse. *Nephrol Nurs J* 2011; 38: 41-53.
8. den Harder AM, Frijlingh M, Ravesloot CJ, et al. The importance of human-computer interaction in radiology E-learning. *J Digit Imaging* 2016; 29: 195-205.
9. Costello E, Ruckert E, Lyons L, et al. To treat or not to treat: The use of computer assisted learning to enhance clinical decision making and self-efficacy of student physical therapists in the acute care setting. *J Phys Ther Educ* 2017; 31: 27-36.
10. Jillian R, Rebecca B, Andrea FM, et al. Use of computer-assisted instruction for teaching

- nutrition-focused physical examination to dietetics students: A pilot study. *Top Clin Nutr* 2017; 32: 219-228.
11. Madorin S, Iwasiw C.. The effects of computer assisted instruction on the self-efficacy of Baccalaureate nursing educations. *Nurse Educ Today* 2013; 38: 282-285.
12. Herriot AM, Bishop JA, Murphy M, et al. Evaluation of a computer assisted instruction resource in nursing education. *Nurse Educ Today* 2013; 23: 537-545.
13. Hu A, Shewokis PA, Ting K, et al.. Motivation in computer-assisted instruction. *Laryngoscope* 2016; 126: S5-S13.
14. Babenko-Mould Y, Andrusyszyn MA, Goldenberg D. Effects of computer-based clinical conferencing on nursing students' self-efficacy. *J Nurs Educ* 2014; 3: 149-155.
15. Raupach T, Andresen JC, Meyer K, et al. Test-enhanced learning of clinical reasoning: A crossover randomized trial. *Med Educ* 2016; 50: 711-720.
16. Chin SC, Cheng KY, Sun TK, et al. The effectiveness of interactive CAI compared to videotaped instruction for teaching nurses to assess neurological function of stroke patients: A randomized controlled trial. *Int Nurs Stud* 2014; 46: 1548-1556.
17. Barker MD, Purdy SC. An initial investigation into the validity of a computer-based auditory processing assessment. *Int J Audiol* 2015; 55: 173-183.
18. Frost ME, Derby DC, Haan AG. Using computer-assisted learning to engage diverse learning styles in understanding business management principles. *J Chiropr Educ* 2013; 27: 141-146.
19. Kaur P, Vati J.. A quasi experimental study to assess the effectiveness of computer assisted instructions to improve knowledge and attitude of MPHWS regarding kangaroo mother care. *J Nurs Educ* 2013; 3: 10-18.
20. Terry VR, Terry PC, Moloney C, et al.. Face-to-face instruction combined with online resources improves retention of clinical skills among undergraduate nursing students. *Nurse Educ Today* 2018; 61: 15-19.
21. Fernandez-Aleman JL, de Gea JMC, Mondejar JJR. Effects of competitive computer assisted learning versus conventional teaching methods on the acquisition and retention of knowledge in medical surgical nursing students. *Nurse Educ Today* 2011; 3: 866-871.

Field Trip for Case Study: Action Research to Improve Teaching and Learning in Midwifery Course

Sununta Youngwanichsetha¹, Warangkana Chatchawet², Sureeporn Kritcharoen¹, Sasikarn Kala²,
Benyapa Thitimapong²

¹Associate Professor, ²Assistant Professor, Faculty of Nursing, Prince of Songkla University, Hat Yai,
Songkhla, Thailand

ABSTRACT

Background: Field trip for case study is an active learning approach that can be used to promote motivation, student engagement and academic achievement. However, it is not widely apply in nursing lecture class.

Purpose: An active learning experience, field trip for case study, was created and implemented in the Midwifery course in order to improve teaching strategy and learning outcomes.

Methodology: Action research method was employed. Participants were 160 third year nursing students enrolled in the Midwifery course. Three main active learning activities were: 1) participating in a field trip for case study, 2) learning from case study, and 3) presentation of case study.

Results: The findings indicated that nursing students had positive learning experiences, achieved learning outcomes, and were satisfied with learning activities. Well-planned activities of the field trip for study, well-constructed for active learning strategies, and additional instructional media were suggested.

Conclusion: The field trip for case study could be used as an active learning strategy in nursing education.

Keywords: Field trip for case study, active learning, nursing students, action research

Introduction

Active learning, developed under constructionist learning theory, is an instructional process integrating activities designed to promote student engagement and participation in the classroom. The main focus is the integration of big concepts in education. Knowledge is dynamic in our experiences. Learning is an interactive process building upon student's prior beliefs and knowledge. The educator's role is changed from directive authority to facilitator of learning processes. It is recommended in the educational profession to improve 21st century skills of students. It can be used both in the classroom and simulation laboratory¹. However, it was not widely implemented in nursing lecture class.

Students and their learning needs are the focus of active learning. All teaching and learning activities aim at enhancing student ability to build new knowledge based on their prior competencies. Students are active learners while educators act as learning facilitators. Examples of active learning activities are field trips for case study, flipped classroom, short-lecture with assigned activities in class, questions and answers, case study, presentation, seminar, reflective journal writing, and concept mapping².

Using active learning in class has many benefits for the learning process and outcomes. It can promote active participation in the learning process through engagement in reading, critical thinking, participation in class activities, and reflection on learning experiences. As a result, it can enhance short-term and long-term outcomes because it combines cognitive, psychomotor, and emotional components. Prior research evidence shows that active learning activities can increase exam scores by 6%³.

Corresponding Author:

Sununta Youngwanichsetha
Faculty of Nursing, Prince of Songkla University,
Hat Yai, Songkhla, 90112, Thailand
Email: sununta.y@psu.ac.th
sununta.y@gmail.com

Lecturing is conventional in nursing and midwifery education, resulting in an inactive learning process and diminished achievement in some learning outcomes. Students attending a standard lecture class are more likely to learn more passively, only listening to lectures. In addition, they were less motivated to participate in a large classroom. Therefore, they are 1.5 times more likely to fail in achievement of expected learning outcomes as compared to those engaged in active learning activities⁴.

Currently, the active learning approach is a proposed educational innovation of Thailand's qualification framework and quality assurance processes. Therefore, this study aimed to apply the field trip for case study to active learning strategy in order to promote student engagement and improve expected learning outcomes.

Research Methodology

In this study, an action research was created and implemented to improve student engagement and participation in active learning activities in Midwifery class. The problem identified was passive learning among students in lecture class. Therefore, action research was selected as suitable to enhance effectiveness of teaching strategy and improve learning outcomes in the classroom. The action research process was composed of planning, acting, observing, reflecting, and modifying further cycles⁵. This study was approved by the Institutional Review Board for ethical in research design and data collection. The third year-nursing students registered in the Midwifery course during second semester of 2017 academic year were asked to participate in action research. Written-informed consent was obtained before a research plan and data collection was implemented. Data were collected using individual records, interview guides, and reflective journal writing. Content analysis was used to interpret qualitative data⁶. Credibility of this study and its results were ensured by prolonged engagement in the field. Field note was written down for reference. Data triangulation was conducted using interview guides, reflective writing and participant observation. Additionally, participants and peer review were applied to ensure thoroughness⁷.

Findings

One hundred and sixty nursing students signed informed consents in order to participate in this study.

Eleven were male and the other 149 were female. The Midwifery course during second semester of 2017 academic year promoted active learning into two phases: Phase I- field trip for case study, Phase II-active learning activities in classroom.

Firstly, passive learning among nursing students in the Midwifery course was identified as a research problem. Secondly, the field trip for case study was developed and implemented. The objective of the field trip was for each group of students to select a case study of interest. A teacher was assigned to mentor. Sixteen case studies were presented as options to students: 1) teenage pregnancy, 2) elderly pregnancy, 3) hyperemesis gravidarum, 4) multiple pregnancy, 5) hypertensive disorders, 6) abortion, 7) placenta previa, 8) gestational diabetes, 9) heart disease, 10) anemia, 11) sexually-transmitted infection, 12) Prolonged labor, 13) preterm labor, 14) fetal distress, 15) postpartum hemorrhage, and 16) cesarean section.

In Phase I, the first cycle of 80 students were divided into eight groups. Each group comprised of 10 students. The students were assigned to collect clinical data for the select case study in a postpartum ward of Songklanagarind hospital during 10.00 a.m.-12.00 p.m. and 13.00 p.m.-15.00 p.m. on the weekends. Observing step, involved data collection through observation and semi-structured interview focusing on student's motivation, engagement and data collection. The researchers observed that the field trip for case study in one hospital location did not achieve the learning goals.

Reflecting step, involved documenting teacher's reflection on the learning activities and collecting student's reflection on the learning experience. Most students were interested in actively participate in the field trip but some were observed to be less motivated to engage in this activity due to the weekend requirement. The students did not necessarily understand the objective and benefits of the field trip for case study.

Modification of the field trip was made for the second group with 80 students who were assigned to collect clinical data of case study in postpartum wards at Hat Yai hospital. This time the participants were informed in detail of the purpose and significance of the learning activity. The mentor motivated the students by assisting in selection of case study and showing interesting data that could be used for further discussion in class.

Tapping into student peer group dynamic was helpful to promote engagement and participation in active learning activities during the field trip.

In Phase 2, active learning activities in classroom were planned and implemented by teachers and students assigned to the group. After obtaining case study from the field trip, the students were divided into group to analyze important clinical data for the case study and to compare its pathophysiology, treatments and nursing care. Thirteen groups could select appropriate case study from the field trip and 3 groups could not collect any data of the select case study. Therefore, example of case study was created for class learning and presentation.

The findings revealed that most of the students gained positive learning experiences and were satisfied with going to the field trip to select case study. They also learned from the case study, and presented them case study in classroom. Suggestions for further learning activities were: 1) well-planned activities for the field trip for case study, 2) well-constructed active learning activities in class, and 3) instructional media. For learning achievement, mean score of case study presentation was 92 (81-100) while mean score of case study report was 90 (85-95). As a result, one student received grade A, 48 students received grade B⁺, 74 students received grade B, 34 students received grade C⁺, and 3 student received grade C. Summary of the action research process is presented in Table 1.

Discussion

Three active learning strategies were used in this study: going on the field trip for case study, learning from case study, and presenting of the case study in class. These activities can promote student engagement in the learning process and achieve the learning outcomes. Students participating in the field trip for case study could learn from collecting clinical data of a real-life case study. Learning from case study in group promotes critical thinking and collaboration among students. Presenting the case study in class can improve student's communication skill, creativity, and collaboration⁸. As, a result the students can construct their own knowledge based on prior knowledge and new learning experience⁹. Achieving the learning outcomes can enhance student's satisfaction with active learning activities thus gain

positive learning experience¹⁰. However, well-planned activities including the field trip should be considered for further implementation. Scheduling should be clearly designated in the syllabus. Educators should go to the field with students in order to maximize and support learning activities and experiences.

Promoting the students' participation in active learning activities and as a team should be well-constructed and well-prepared^{11,12}. Variety of activities such as games and application of social media should be created in order to facilitate creativity and critical thinking^{13,14}. Additional instructional learning media should be developed and applied in active learning class including computer-assisted instruction, audio-visual presentation or internet-based activities^{15,16}. These teaching and learning strategies can enhance comprehension and long-term retention of knowledge¹⁷.

Analysis of student's reflections in experiential learning showed that action research can motivate the students' active participation while increase content knowledge¹⁸. Finally, action research is suitable for further studying to improve teaching and learning activities¹⁹.

Conclusion

In this study, an interactive learning experience was created and implemented using action research method among nursing students attending the Midwifery course. Three main active learning approaches were going to the field trip for case study, promoting learning activity from such case study and improving presentation skill of the case study. As a result, positive learning experiences, satisfaction with learning activities and expected learning outcome were achieved. Application of the field trip for case study should be considered and implemented in variety nursing courses in order to promote more learning engagement and critical thinking skill.

Conflict of Interest: Nil

Source of Funding: Faculty of Nursing, Prince of Songkla University, Hat Yai, Thailand

Ethical Clearance: Taken from Center for Social and Behavioral Sciences Institutional Review Board of Prince of Songkla University, Thailand.

REFERENCES

1. Marchi NM, Dolansky M. Using active learning to foster patient safety knowledge, perceived skills and attitudes in baccalaureate nursing students. *Nurs Educ Perspect* 2017; 38: 146-148.
2. Waltz CF, Jenkins LS, Han N. The use and effectiveness of active learning methods in nursing and health professions education: A literature review. *Nurs Educ Perspect* 2014; 35: 392-400.
3. Freeman S, Eddy SL, McDonough M, et al. Active learning increases student performance in science, engineering, and mathematics. *Proc Natl Acad Sci U S A* 2014; 111: 8410-8415.
4. Berkhout JJ, Helmich E, Tennissen PW, et al. How clinical medical students perceive others to influence their self-regulation learning. *Med Educ* 2018; 52: 34-44.
5. Efron SE, Ravid R. *Action research in Education: A practical guide*. Philadelphia: Wolters Kluwer; 2013. p. 56-59.
6. Waltz CF, Strickland OL, Lenz ER. *Measurement in nursing and health research* (5 th ed.). New York: Springer; 2016. p.124-126.
7. Denzin NK, Lincoln YS. *Strategies of qualitative inquiry* (4th ed.). Los Angeles: Sage; 2013. p.156-160.
8. Larsson K. Understanding and teaching critical thinking: A new approach. *Int J Educ Res* 2017; 84: 32-42.
9. Gwen E, Liz S, Clair W. Action research and millennials: Implementing pedagogical approaches to encourage critical thinking. *Nurse Educ Today* 2018; 61: 140-145.
10. Moore-Cox A. Lesson plans: Road maps for the active learning classroom. *J Nurs Educ Pract* 2017; 56: 697-700.
11. Day-BlackC, Merrill EB, Konzelman L, Williams TT, Hart N. Gamification: An innovative teaching-learning strategy for the digital nursing students in a community health nursing course. *ABNFJ* 2015; 26: 90-94.
12. Urio A, Haag F B, Zanettini A, et al. Challenges in the use of active learning strategies with students in a public school. *J Nurs Educ Pract* 2017; 11: 4866-4874.
13. Huda S, Ali TS, Nanji K, Cassum S. Perception of undergraduate nursing students regarding active learning strategies and benefits of active learning. *IJONE* 2016; 8: 193-199.
14. Martin SE, Marie B, Gunila M. Developing, implementing, and evaluating the educational module student active learning via internet observation in undergraduate nursing education. *Perspect Psychiatr Care* 2017; 53: 104-110.
15. Morales KA. Active learning strategies to enhance nursing students' knowledge of Pharmacology. *Nurs Educ Perspect* 2017; 38: 100-101.
16. Jacob SA, Khan TM, Pusparajah P, et al. Students' perceived predictors of an effective active learning/problem-based learning session: A pilot study. *J Res Pharm Pract* 2016; 46: 42-46.
17. McGuire M, Goldstein C, Claywell L, et al. Analysis of student reflections of experiential learning in nursing health policy courses. *Nurse Educ* 2017; 42: 95-99.
18. Markowski A, Greenwood K. Evaluation of an active learning experience for educating physical therapist students on oral health screening for health promotion. *Man Ther* 2016; 25: e117-e117.
19. McDonnell P, McNiff J. *Action research for nurses*. Los Angeles: Sage; 2016.p. 45-49.

To Assess the Level of Knowledge Regarding Partogram among the Nursing Students in Selected Nursing College of Punjab

Jasleen Kaur¹, Komalpreet Kaur², Sanjay Gupta³, Rajinder Kaur⁴

¹Clinical Instructor, Faculty of Nursing, SGT University, Gurugram; ²Clinical Instructor, Adesh Group of Institution & Hospital, Sri Muktsar Sahib, Punjab; ³Asst. Professor, ⁴Tutor, State Institute of Nursing and Paramedical Sciences, Badal, Sri Muktsar Sahib, Punjab

ABSTRACT

Background of the Study: Excellent obstetrician and midwife must always be alert to detect any sign and symptoms of abnormal labor. Prolong labor presents a picture of mental anguish, physical morbidity and may need to emergency procedure and other surgical intervention¹. The goal of this study is to use partogram to monitor labor, initiate uterine activity that is sufficient to produce cervical change and fetal descent while avoiding uterine hyperstimulation, hypostimulation and fetal distress and provide timely surgical intervention where required.

Aim of the Study: The aim of the study is to assess the level of knowledge regarding partogram of nursing students in selected nursing colleges, Punjab.

Material and Method: A quantitative research approach, descriptive study in which descriptive research design was used to conduct the research study. 60 nursing students of SINPMS, Badal were selected for the study with purposive sampling technique. A self structured knowledge questionnaire was used to assess the level of knowledge regarding partogram among nursing students.

Result: the study depicted that out of 60 nursing students of SINPMS, Badal, 6(10%) have good level of knowledge followed by 41(68.3%) nursing students of SINPMS having average level of knowledge and the remaining 13(21.6%)nursing students of SINPMS having below average level of knowledge. So Average level of knowledge among Nursing students of SINPMS, Badal, Punjab. The overall mean 13.3 and SD is 6.82. Level of knowledge was significantly ($p < 0.5$) not associated with age, gender, class, source of information.

Conclusion: The study concluded that average level of knowledge among nursing students

Keywords: Good obstetrician, Prolongation of labor, Partogram, knowledge, nursing students

Introduction

The partogram offers health professionals with a pictorial overview of labour to allow early identification and diagnosis of the pathological labour². WHO recommends using the partogram to monitor labour and delivery, with the objective to improve health care and reduce maternal and fetal morbidity and death³.

The majority of maternal deaths and complications attributable to obstructed and prolonged labour could be prevented by cost –effective and affordable health interventions like the use of⁴. A partogram is one of the valued suitable technologies in use for an improved monitoring of labour progress for maternal and fetal well being⁵.

Problem Statement: A Descriptive study to assess the knowledge regarding Partogram among Nursing students in selected Nursing Colleges of Punjab.

Aim of the Study: The aim of the study is to assess the level of knowledge regarding Partogram of nursing students in selected nursing colleges, Punjab.

Objectives

- To assess the knowledge regarding Partogram among nursing students.
- To find out the association of knowledge regarding Partogram with selected demographic variables.

Methodology

Research Approach: A Quantitative descriptive approach

Research Design: Descriptive survey

Variable

Research variable: In the study, knowledge of nursing students regarding Partogram are the dependent variables.

Demographic variable: Age, gender, class, source of information.

Research Setting: The present study will be conducted on nursing students in SINPMS, Badal.

Population: Nursing Students of SINPMS, Badal.

Target Population: GNM 3rd year, B.Sc 4th year, Post-Basic 1st year

Sample Size and Sampling Technique: The sample size for the study is 60 nursing students who will meet the criterion of sample selection. **Non-Probability purposive Technique** in which the researcher selects the subjects because of their accessibility and proximity.

Sampling Criteria: 60 nursing students are selected on the basis of following criteria.

Inclusion Criteria

- Nursing Students who are in G.N.M, B.sc Nursing, Post Basic Nursing, of SINPMS, Badal.
- Students, who know to read and write English.
- Nursing students who are available and willing to participate in the study

Exclusion Criteria

- Students of nursing colleges who are not present at the time of data collection
- Students of nursing colleges who are on clinical posting

Limitations

- The setting of the study was limited to one selected nursing College.
- The sample size was limited to 60 students hence the possibility for wider generalization is limited.

Tool Used for Data Collection: Self Structured questionnaire.

Selection Aand Development of Study Tool: Specifically for the purpose of the study the knowledge questionnaire containing multiple choice questions were developed which provided the base of the data collection regarding Partogram from nursing students. The tool consisted of two sections:-

Section A: Demographic variables i.e. Age, Gender, Class, Source of information.

Section B: self Structured questionnaire related to knowledge.

Section A: Demographic Variables: It comprised of 4 items seeking information on demographic data such as Age, Gender, Class, Source of information.

Section B: Structured Knowledge Questionnaire: It consisted of a self structured questionnaire on Partogram which comprise 30 items.

Scoring Technique of Knowledge: The knowledge questionnaire consisted of 30 closed ended- multiple choice question with a single correct answer. Every correct answer was accorded a score of one (1) and every incorrect answer was accorded zero (0). The Maximum score on knowledge questionnaire was thirty (30) and minimum score on knowledge questionnaire was zero (0).

Ethical Consideration: Ethical consideration was obtained from:

- The research ethical committee of State Institute of Nursing and Paramedical Sciences, Badal, Sri Muktsar Sahib.
- The writer consent from subject who are willing to participate in the study.

Data Collection Procedure

- A data collection is the precise, systematic gathering of information relevant to the research purpose.
- Formal administrative approval to conduct the study was obtained from Principal of State Institute of Nursing and Paramedical Sciences, Badal. The data was obtained on 07september,2018. Only willing participants should be taken as sample. The investigator, before collecting the data from students, explained the nature, purpose and assured

confidentiality to and used for research purpose only. The sample consisted of 60 students from SINPMS, Badal.

- The tool was administered to students and the purpose of study was explained. Students who are willing to participate in the study and who are present at the time of data collection are included as study subjects. The average time taken by students to complete the questionnaire was 10-15 minutes.

Result

- Out of 60 nursing student, Maximum 34(56.6%) students were in the age group of 21years and minimum 2(3.3%) students were in the age group

of 19 years followed by 15(25%) student were in the age group of 20 or more years.

- According to Gender, maximum 60(100%) students were from Female gender and minimum 0(0%) students were from Male gender.
- According to Class, Maximum 29(48.3%) students were From GNM 3rd year, minimum 11(18.3%) students were From Post Basic 1st year and average 20(33.3%) students were from B.Sc. 4th year.
- According to source of information, maximum 29(48.3%) were have information from Teachers and minimum 2(3.3%) were have information from mass media followed by 27(45%) students have from hospital/clinics and 2(3.3%) students have information from friends/Families.

Table 1: Frequency and Percentage distribution of nursing student depending upon their level of knowledge regarding Partogram

N = 60

Level of knowledge	Range	Frequency	Percentage
Good	20-30	6	10%
Average	10-20	41	68.3%
Below Average	0-10	13	21.6%

Maximum score=30 Minimum score=0

Table 1 reveals that out of 60 nursing students of SINPMS, Badal.10%of nursing student having good level of knowledge regarding Partogram, 68.3% nursing student having average level of knowledge regarding partogram and 21.6% nursing student having below average knowledge regarding partogram.

Table 2: Mean and S.D of nursing students depending upon their level of knowledge regarding partogram

N = 60

Group	Mean	S.D.
Nursing students of SINPMS, Badal.	13.3	6.82

Maximum scores = 30 Minimum scores = 0

Table 2 indicated the overall mean and S.D of nursing students studying in SINPMS, Badal was 13.3 and 6.82.

Table 3: Chi square association of demographic variables with level of knowledge among nursing students regarding Partogram

N = 60

S. No.	Demographic Variables	Good	Average	Below Average	Chi-square test	Df
1.	Age (in years)					
	a. 19	0	2	0	31.5 NS	6
	b. 20	0	7	2		
	c. 21	5	29	0		
	d. 22 or more	1	13	1		

Conted...

2.	Gender					
	a. Male	0	0	0	15.9 NS	2
	b. Female	6	46	8		
3.	Class					
	a. GNM 3 rd year	2	23	4	26.05 NS	4
	b. B.Sc. 4 th year	3	16	1		
	c. Post basic 1 st year	1	6	4		
4.	Source of information					
	a. Teachers	2	22	5	33.0 NS	6
	b. Hospital/clinics	3	21	3		
	c. Media	1	1	0		
	d. Family/friends	0	2	0		

Table 3 reveals that there is no statistically association between level of knowledge and selected demographic variables. On analysis there was no statistically significant association between age and level of knowledge as evidenced by chi square value of 2.68, degree of freedom (6) at 0.05 level of significance. while calculated value of Gender is degree of freedom (2) at 0.5 level of significance, calculated chi-square value of Gender is 15.9, calculated value of Class includes degree of freedom (4) at 0.5 level of significance, calculated chi-square value is 26.05, calculated value of Source of information includes degree of freedom (6) at 0.5 level of significance, calculated chi-square value is 33.01.

Discussion

To assess the knowledge regarding Partogram of nursing students in selected nursing College, Badal, Shri Muktsar Sahib.

The objective is supported by the finding shown in table 4.3 and figure 4.11 reveals that out of 60 nursing students of selected nursing College, Badal, Shri Muktsar Sahib, 6(10%) students have good level of knowledge, 41(68.3%) have average level of knowledge, 13(21.6%) have below average knowledge regarding Partogram. So nursing students of Badal, Shri Muktsar Sahib, Punjab have average level of knowledge regarding Partogram. The overall mean and S.D is 13.3 and 6.82

To find out association of knowledge partogram with their selected demographic variables.

The objective is supported by the finding shown in table 4.3 reveals the association level of knowledge and

selected demographic variables. On analysis there was a statistically no significant association between age, Gender, Class and Source of information as evidenced by chi square value of $X^2 = 31.5, 15.9, 26.05, 33.01$, degree of freedom (6,2,4,6,6) at 0.5 level of significance.

Hence it can be concluded that there is no impact of age, gender, class, source of information.

Conclusion

The researcher concluded that majority of nursing students had average knowledge regarding Partogram. So there is a need to develop a good teaching pattern at Colleges.

Conflict of Interest: Nil

Source of Funding: Self

Ethical Clearance: Approval from Institute Ethical Committee (IEC), State Institute of Nursing and Paramedical sciences, Badal, Sri Muktsar Sahib, Punjab

REFERENCES

1. Manjulatha VR, Anitha GS, Shivalingaiah N. Partogram: clinical study to assess the role of Partogram in primigravidae in labor. *Int J Reprod Contracept Obstet Gynecol.* 2016 Apr;5(4):1014-1025
2. Ogwang S, Karyabakabo Z, Rutebemberwa E. Assessment of partogram use during labour in Rujumbura Health Sub District, Rukungiri District, Uganda. *Afr Health Sci.* 2009 Aug 1; 9(Suppl 1): S27–S34.

3. Van Bogaert LJ. Revising the primigravida partogram. *Arch Gynecol Obstet.* 2009;279(5):643-7.
4. Magon N. Partograph revisited. *Int J Clin Cases Investig.* 2011;3:1-2.
5. Lavender T, Hart A, Smyth RM. Effect of partogram use on outcomes for women in spontaneous labour at term. *Cochrane Database Syst Rev.* 2008;4:CD005461
6. Windrim R, Seaward PG, Hodnett E, Akoury H, Kingdom J, Salenicks ME. A randomized controlled trial of a bedside Partogram in the active management of primiparous labour. *J Obstet Gynaecol Can.* 2007;29(1):27-34
7. Javed I, Bhutta S, Shoaib T. Role of partogram in preventing prolonged labour. *J Pak Med Assoc.* 2007;57(8):408-11.
8. Lavender T, Alfrevic Z, Walkinshaw S. Effect of different partogram action lines on birth outcomes: a randomized controlled trial. *Obstet Gynecol.* 2006;108(2):295-302.
9. Sizer AR, Evans J, Bailey SM, Wiener JA. Second-stage partogram. *Obstet Gynecol.* 2000;96:678-83.
10. Rocha IM, de Oliveira SM, Schneck CA, Riesco ML, da Costa AS. The Partogram as an instrument to analyse care during labour and delivery. *Rev Esc Enferm USP.* 2009;43(4):875-83.
11. Alfrevic Z, Edwards G, Platt J. The impact of delivery suite guidelines on intrapartum care in "standard primigravida". *Eur J Obstet Gynecol Reprod Biol.* 2004;115(1):28-31.
12. Sadler LC, Davidson T, Mc Cowan LME. A randomised controlled trial and meta-analysis of active management of labour. *Br J Obstet Gynaecol.* 2000;107:909-15.
13. Friedman EA. Primigravida labour: a graphicostatistical analysis. *Obstet Gynaec.* 1955;6:569.
14. Philpott RH, Castle WM. Cervicographs in the management of labour - the alert line for detecting abnormal labour. *Journal of Obstet and Gynaec of the British Commonwealth.* 1972;79:599.
15. Philpott RH, Castle WM. Cervicographs in the management of labour- the action line for detecting abnormal labour. *Journal of Obstet and Gynaec of the British Commonwealth.* 1972: 79.
16. WHO. World Health Organization Partogram in management of labour. *The Lancet.* 1994;1399-404.
17. WHO. Training modules 11. The use of the Partograph (also known as Partogram). *Essential Antenatal, Perinatal and Postpartum Care.*
18. O'Driscoll K, Foley M, MacDonald D. Active management of labour as an alternative to caesarean section for dystocia. *Obstet Gynecol.* 1984;63:485-90.
19. Friedman EA. An objective approach to the diagnosis and management of abnormal labour. *Bull N Y Acad Med.* 1972;48:842.
20. Friedman EA. *Labour: clinical evaluation and management*, 2nd ed. New York, Appleton-Century-Crofts, 1978.

Stress and Coping Strategies among Working Women in Selected Institutions, Mangaluru

Rosemarie¹, Shijina T¹, Thereza Mathias²

¹Basic B. Sc Nursing Student, ²Professor and HOD, Department of Mental Health Nursing, Laxmi Memorial College of Nursing, Mangalore, Karnataka, India

ABSTRACT

Background of the Study: Indian families are undergoing rapid changes due to the increased pace of urbanization and modernisation. Indian women belonging to all classes have entered into paid occupations. Stress is a complex and highly personalized process. As such, stress levels in individuals can vary widely, even in identical situations, due to women's abilities to cope with different forms and levels of stress.

Methodology: A cross sectional research design was adopted for the study. Purposive sampling technique was adopted to select 200 working women from selected institutions in Mangaluru. Married women belonging to nuclear families, willing to participate and present at the time of data collection were included in the study. Three tools were used to collect information from working women namely demographic variables with 10 items, Singh Personal Stress Source Inventory and the Coping Scale. Ethical clearance was obtained from A.J. Ethics Committee. Permission was obtained from the concerned authorities as well as the working women. Analysis was done by using descriptive and inferential statistics.

Results: The findings revealed that majority (91.5%) of the working women's had moderate stress, and least percentage (8.5%) of the working women's had high stress. None of the working women has low stress. The majority (95%) of the working women has average coping and least percentage (5%) has good coping. There is significant association of level of stress and coping with demographic variables such as age, presence of maid at home, mode of transport to the work place.

Interpretation and Conclusion: The study concludes that majority of the working women had moderate stress level and had average coping. The study provides valuable insight into the stressful experience and the use of coping strategies adopted by working women.

Keywords: Stress, Coping, Working Women, institutions, Mangaluru

Introduction

Since the turn of the century, the status of women in India has been changing due to growing industrialization, urbanization, spatial mobility and social legislation. With the spread of education and awareness, women

have shifted from kitchen to higher level of professional activities. Rapid changes in traditional values, life styles, competitiveness and industrialization are the few factors that have changed the whole environment.¹

This change in environment has encouraged and motivated the women for search of work outside the home, which creates stress in women who handled the role of housewife, mother and employed woman at a time. Many studies have produced evidence to indicate that women report more psychological distress than men. Work and family have increasingly become antagonist spheres, equally greedy of energy and time and responsible for work-family conflict. Stress paralyses the human life making life difficult to live²

Corresponding Author:

Dr. Thereza Mathias
Professor and HOD,
Department of Mental Health Nursing,
Laxmi Memorial College of Nursing,
Mangalore, Karnataka, India
Phone: 9902597730
Email: tresavinay@yahoo.com

Stress has both psychological as well physiological dimensions. By every individual, stress can be handled in different manner like it can be stressful in negative manner for someone, while at the same time it can be eustress for another. All those reasons are known as stressors, which create lots of pressure and demand on an individual to perform. A study reported that stressed working women suffer from many problems like more illness, medicine intake, anxiety and depression.

A study reported that 2% of the female married women never felt stress in their profession, 7% of the respondents felt stress rarely, 24% of the respondents sometimes felt stress, 33% of the respondents felt stress often and rest 34% felt stress regularly in their profession³

Coping is the process of managing demands exceeding the resources of the persons. Coping is not a onetime action; rather, it is a set of responses occurring over time by which the environment and the person influence each other. Coping strategies are the specific efforts, both behavioural and psychological, that individuals employ to master, tolerate, reduce, or minimise stressful events. Approaches in coping with stress are influenced by ethnic, cultural, and socioeconomic characteristics. If we would want the women to be empowered and to give their best in the workplace, one of the employer responsibilities would be to reduce stress level and develop coping mechanism to lead a healthy wealthy and prosperous life. Hence the investigator decided to focus on stress and coping among working women in selected schools in Mangaluru.

Objectives

1. To assess the level of stress among working women as measured by stress scale.
2. To identify the coping strategies among working women as measured by coping check list.
3. To find the association of level of stress and coping strategies with selected demographic variables.

Methodology

A cross sectional research design was adopted for the study. Purposive sampling technique was adopted to select 200 working women from selected institutions in Mangaluru. The inclusion criteria were only married working women belonging to nuclear families, willing to participate and present at the time of data collection

were included in the study. Married women without children and living in joint families were excluded from the study. Informed consent was obtained from the study participants. Ethical clearance was obtained from A.J. Ethics Committee.

The Instruments for data collection were as follows:

- Demographic performa with 10 items that include age, income, education, number of children, presence of maid at home full time, children below five years, means of transport to work place and distance from work place.
- Singh Personal Stress Source Inventory (SPSSI)⁴ constructed by Arun Kumar Singh, Ashish Kumar Singh and Arpana Singh was used to assess the level of stress. The inventory had 35 items with three options seldom, sometimes and frequently. The scoring was as follows: 0-30 mild stress, 31-79 moderate level of stress and 80 or higher high level of stress. The English version of the SPSSI has both test-retest reliability and internal consistency reliability. The test-retest reliability was found to be .792 which was not only high but also statistically significant. Likewise, internal consistency reliability by odd-even method was found to be .784 which was highly significant. Thus SPSSI possessed a sufficient degree of reliability. Permission was obtained to use the tool.
- The coping scale had 28-items with three options always(4),sometimes(3) Rarely(2)and Never(1). The tool was given to five experts for content validation. Only one item was modified as per the suggestion of the expert. Arbitrary scoring was as follows: 1-37scores was considered as poor coping skills, 38-75 as average coping skills and 76-112 as good coping skills.

Prior to data collection, permission was obtained from the concerned authorities and subjects. Subjects were selected according to inclusion criteria. All the three tools were administrated to 200 working women. Analysis was done by using descriptive and inferential statistics

Results

The analysis of the data from the study is presented under following headings:

Section A: Description of demographic variables of working women.

Section B: Description of stress score of working women

Section C: Description of coping strategies of working women.

Section D: Association of level of stress with selected demographic variables

Section E: Association of demographic characteristics of working women

Section A: Description of demographic variables of the sample: This section deals with description of working women according to their demographic characteristics. Data was analyzed using descriptive statistics and is summarized in terms of frequency and percentage. Highest 110(55%) of the working women are in the age group of (31-40 years). Highest 127(63.5%) of the working women are between the income of Rs.(10,000 -15,000) and least income 3 (1.5%) in the group of (>30,000). More than half 127(63.5%) of the working women have studied up to graduate with B.Ed. Most 112(56%) of the working women have two children. Majority 162(81%) of the working women have no servant at home. Most 103(51.5%) of the working women having children below the age of five. Most 37% of the working women keep their children for babysitting when they are at work. 37.5% of the working women have to travel about 6-10 km from home to work place. Mode of transport: Most 79(39.5%) of working women use bus facility to travel to workplace and least 11(5.5%) of working women are dropped by family members.

Section B: Description of stress score of working women: Stress of 200 working women were assessed by using Singh Personal Stress Source Inventory Scale.

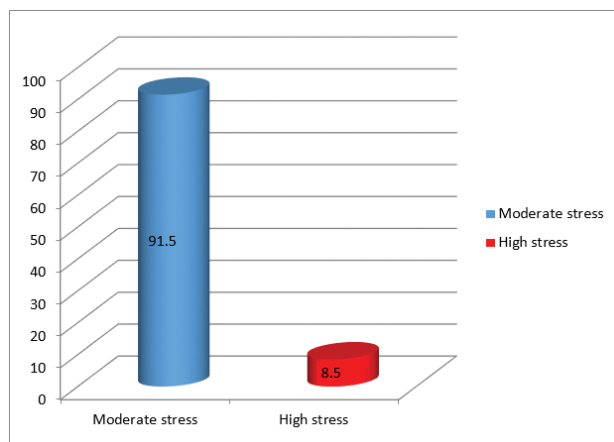


Figure 1: Bar diagram representing percentage distribution of level of stress among working women

The findings in fig 1 shows that majority 91.5% of working women had moderate stress whereas 8.5% of the working women had high stress. The range of stress score was 43-85, the mean stress score of working women was 66.6 and the standard deviation was 6.91. The median for the stress score was 66. None of them had low stress.

Section C: Description of coping strategies of working women: Coping strategies of 200 working women were assessed by using the coping scale.

Table 1: Frequency and percentage distribution of brief coping strategies among working women

N = 200

Level of coping	Range	Frequency	Percentage (%)
Poor	1-37	-	-
Average	38-75	190	95
Good	76-112	10	5

Table 1 shows that majority 95% of the working women had average coping and 5% of the working women show good coping. None of the sample have poor coping. The mean of the coping scores was 64.4 which shows that working women had average coping.

Section D: Association of level of stress of working women with selected demographic variables: To compute the association between the levels of stress of working women with selected demographic variables chi square test was computed. Analysis revealed that there was significant association of stress score with age, presence of maid, and mode of transport to the work place. The chi square value obtained is more than the 'p' value. Hence the null hypothesis is rejected and research hypothesis is accepted.

Section E: Association of coping strategies of working women with selected demographic variables: The findings revealed that there was significant association of coping strategies with age, income, education, presence of maid/servant, presence of child below age of five years, distance between home and work place, mode of transport to the work place.

Discussion

Stress is the individual's response to pressure. The response can be psychological and/or behavioural.

How the individual responds to the stressor will depend on their personality, their perceptions, and their past experience. Some amount of stress is necessary and assists the women in achieving both work and personal goals. However, too much stress can make those goals harder to achieve. People respond differently to stress. Some people function well under significant stress while others do not.

In the present study majority (91.5%) of working women have moderate coping and whereas 8.5% of the working women had high stress. The range of stress score was 43-85, the mean stress score of working women was 66.6 and the standard deviation was 6.91. The median for the stress score was 66. None of them had low stress.

This finding is supported by a study conducted by using a descriptive study design to assess stress among 100 School Teachers using the Singh Personal Stress Source Inventory. Results revealed that 77% of teachers showed average stress, 10% of teachers showed high stress and only 13% teachers showed low stress. The comparative study of stress level and scores calculated mean values are 26.38, 54.84 and 82.40 respectively for Low, Average and high stress level.⁵

In yet another study undertaken with the objective of determining the level of stress experienced by the working women and the factors cause stress by working women in banking sector in Bangladesh estimated that more than 43% of the working women faced high stress between the age group of 20-29. 28% working women regularly felt stress in their profession in banking sector. Workload was major factor of stress reported by 65% and 80% women reported that they felt stress due to low salary, job insecurity, transfer and lack of opportunity for growth and advancement; those were mostly responsible creating stress among the working women in banking sector. This shows that working women does have stress in different areas.⁶

The present study shows that majority 95% of the working women had average coping and 5% of the working women show good coping. None of the sample have poor coping. The mean of the coping scores was 64.4 which show that working women had average coping.

A study attempted to find out the coping strategy of stress in employed women and non employed women who were between 25 to 40 years age group. Results showed that the mean score of G₂ group is 1.80 and G₁ is 1.60

for self distraction. G₂ group (working women) score is significantly greater than G₁ group (Non Working) which indicates that the employed women use self distraction technique more in comparison to unemployed women. It is observed that employed women used more technique of self distraction, instrumental support, behavioural disengagement, venting and positive reframing in comparison to non-employed women for coping with stress. Mean score of instrumental support of employed women (M=1.93) is significantly higher in comparison to non employed women (M=1.53)⁷

Conclusion

The study provides valuable insight into the stressful experience and the use of coping strategies among working women and their level of coping. The study concludes that working women has moderate level of stress and average coping level.

Limitations of the Study:

- The sample size is small. Hence generalisations of study findings are difficult.
- Only subjective reporting was used to assess the stress and coping among women.

Recommendations: On the basis of the findings of the study, the following recommendations have been made:

1. The study can be replicated on a large sample for generalizing the findings.
2. An interventional study on effectiveness of stress management program can be done.
3. A comparative study can be done between women working on day and night shift
4. A study to assess the various types of stress can be conducted.

Conflict of Interest: None

Source of Funding: Self

REFERENCES

1. Kelly EL,, Moena P, and Tranbyb E Changing Workplaces to Reduce Work-Family Conflict: Schedule Control in a White-Collar Organization. Am Sociol Rev. 2011 April ; 76(2): 265–290.

2. Honda A, Abe Y, Date Y, Honda S. The Impact of Multiple Roles on Psychological Distress among Japanese Workers. *Safety and Health at Work*. 2015 114 - 119
3. Manual for Singh Personal Stress Source Inventory (SPSSI) by Arun Kumar Singh, Ashish Kumar Singh and Arpana Singh. Publisher: Agra National Psychological Corporation 2004
4. Carver, C. S. You want to measure coping but your protocol's too long: Consider the Brief COPE. *International Journal of Behavioral Medicine*. 1997; 4, 92-100
5. Sharma RS. Study of stress among school teachers. *Multidisciplinary Research Journal*. 2015; 5(4), pp 1-4
6. Das AC. Causes and effects of stress among working women in banking sector, Bangladesh. *Medioscope*. 2016; 3(1), 1-7.
7. Dhurandher D, Gaukaran Janghel G Coping Strategy of Stress in Employed Women and Non Employed Women. *International Journal of Scientific and Research Publications*. 2015 5(4), PP1-3

Consumption Pattern of Unhealthy Food Items among Adolescents- A Survey

R. Sudha¹, P. Umalakshmi²

¹Principal, ²Lecturer, M. A. Chidambaram College of Nursing, VHS, TTTI post, Taramani, Chennai

ABSTRACT

The aim of the study was to assess consumption pattern of the unhealthy food items (fried food, fried rice, puffs, parata, burger etc) and its association with age and gender among adolescents aged 13 to 18 years in Chennai. An exploratory survey was conducted and a convenient sampling technique was used to select 300 samples. Structured questionnaire was used to collect the data from 300 adolescents and the data was analyzed using descriptive and inferential statistics. The findings revealed that majority of the adolescents had unhealthy dietary habits. Seventy nine percentage of the samples were male and 21% of them were female. Majority of the adolescents (88.3%) were non vegetarian and 47% of the adolescents reported that their food choice was influenced by friends. Majority (47%) of the adolescents consumed potato chips, 45% consumed fried chicken, 31% consumed chocolate, 39% consumed biscuits, 23.7% consumed ice creams, 49.7% consumed coke/pepsi in common. There was a significant association found between consumption of unhealthy food items with age and gender at 0.05 level of significance.

Keywords: Consumption Pattern, Unhealthy Food Items, Adolescents

Introduction

“To eat is a necessity, but to eat intelligently is an art.”

—La Rochefoucauld

Nutritional needs during adolescence are increased because of the increased growth rate and change in body composition associated with puberty Spear, B.A., et al.,2002)¹ The dramatic increase in energy and nutrient requirements coincides with other factors that may affect adolescents’ food choices and nutrient intake and thus, nutritional status. These factors, including the quest for independence and acceptance by peers, increased mobility, greater time spent at school and/or work activities and preoccupation with self-image, contribute to the erratic and unhealthy eating behaviors that are common during adolescence (Carson, T., et al, 2002)² Unhealthy eating habits are seen in adolescents in the United States and many other countries (Rodrigues PRM et al 2017)³.

Sound nutrition can play a role in the prevention of several chronic diseases, including obesity, coronary heart disease, and certain types of cancer, stroke, and type 2 Diabetes (Shepherd R et al1996)⁴. For this reason,

nutrition remains an important objective for Healthy People 2020. To help prevent diet-related chronic diseases, researchers have proposed that healthy eating behaviors should be established in childhood and maintained during adolescents (Mcnaughton SA et al 2017)⁵.

National and population-based surveys have found that adolescents often fail to meet dietary recommendations for overall nutritional status and for specific nutrient intakes (Neumark-Sztainer D et al 2002)⁶. Eating habits vary widely between individual adolescents, and also display some general trends over time, reflecting socio-cultural trends in food availability and nutritional goals. As an example, data from six national representative surveys showed that total energy intake among US adolescents increased through 2004, then decreased through 2010(Slining MM et al 2013)⁷. Seven food sources, including sugar-sweetened beverages, pizza, full-fat milk, grain-based desserts, breads, pasta dishes, and savory snacks, consistently contributed to this trend. Intakes of full-fat milk, meats, ready-to-eat cereals, burgers, fried potatoes, fruit juice, and vegetables decreased, whereas nonfat milk, poultry, sweet snacks and candies, and tortilla- and corn-based dishes increased through 2010. The changes contributing

to the decline in caloric intake prior to 2010 included significant decreases in sugar-sweetened beverages, pizza, pasta dishes, bread, and savory snacks; and significant increases in fruit.

During adolescence, young people are in a transition period when they gradually take over the responsibility for their own eating habits (Milosavljevic D et al., 2015)⁸. Knowledge is one of the factors necessary for a healthy transition of responsibility. Therefore, this study was carried out among urban adolescents, with the objective to assess their consumption pattern & type of unhealthy foods consumed them in Chennai city, India.

Problem Statement: A study to assess the consumption pattern and unhealthy eating habits of adolescents residing at selected areas in Chennai.

Objectives

To assess the consumption pattern of unhealthy food items among adolescents

To assess the food items consumed in common by adolescents

To associate the consumption of unhealthy food items with the age of adolescents

To associate the consumption of unhealthy food items with the gender

Method

An exploratory survey was conducted. Three hundred adolescents in the age group of 13 to 18 years residing at Guindy and Kotturpuram community area were selected as samples using convenient sampling technique. A self report was obtained and a structured questionnaire was used to collect data. The tool consisted of demographic variables of adolescents and questions related to type of food and the frequency of consumption of unhealthy food items such as fried food and rice, non veg biriyani and food items, parata, samosa, puffs, burger, pizza, noodles, ice creams, soft drinks etc were included. Informed consent was obtained from the parents.

Results and Discussion

Demographic variables of adolescents revealed that out of 300 samples, 26% were 15 years of age and 18.7 % of the samples were 13 & 14 years respectively. Eleven and 12% of the samples were 17 & 18 years respectively. Majority of adolescents (79%) were male. As occupation of the father is concerned, majority (57.3%) of them were daily wage earner. Majority (66.3%) of samples' mothers had completed high school education and 57.7% of the samples' mothers were house wife. Regarding religion, 72.7% of samples belonged to Hindu religion and 20.7% were Christians. Majority of the adolescents (74.3%) were non vegetarian and 47% of the adolescents reported that their food choice was influenced by friends.

Assessment of consumption pattern of unhealthy food items among adolescents

Table 1: Frequency and Percentage of consumption of unhealthy food items among adolescents

Food item	Don't eat		Once in a week		Once in two weeks		Once in a Month/Rare		Total	
	F	%	F	%	F	%	F	%	F	%
Fried rice	107	35.7	143	47.7	37	12.3	13	4.3	300	100.0
Non Veg Biriyan	79	26.3	150	50.0	59	19.7	12	4.0	300	100.0
Parata	93	31.0	123	41.0	68	22.7	16	5.3	300	100.0
Samosa	98	32.7	149	49.7	42	14.0	11	3.7	300	100.0
Puffs	98	32.7	147	49.0	50	16.7	5	1.7	300	100.0
Burger	99	33.0	124	41.3	65	21.7	12	4.0	300	100.0
Pizza	112	37.3	117	39.0	50	16.7	21	7.0	300	100.0
Noodles	90	30.0	142	47.3	54	18.0	14	4.7	300	100.0
Ice creams	96	32.0	120	40.0	68	22.7	16	5.3	300	100.0
soft drinks	95	31.7	129	43.0	52	17.3	24	8.0	300	100.0

Table 1 reveals that, out of 300 adolescents, 47.7% adolescents have eaten fried rice once in a week and 12.3% of them consumed once in two week. Fifty percentages of the samples were taking Non Veg Biriyani once in a week and 19.7% were taking once in two weeks.

Parata was consumed by 41% of adolescents once in a week and 22.7% consumed once in two weeks. Samosa was consumed by 49.7% of adolescents once in a week and 14% were taking once in two weeks. Majority of the samples (49%) consumed puffs once in a week and 14% consumed once in two weeks. Burger was consumed by 41.3% of adolescents once in a week whereas 21.7% consumed once in two weeks. Pizza was consumed by 39% of adolescents once in a week whereas 16.7% of them consumed once in two weeks. Noodles was consumed by 47.3% of adolescents once in a week whereas 18% of them consumed once in two weeks. Ice cream was consumed by 40% of adolescents once in a week whereas 22.7% consumed once in two weeks. Soft drinks was consumed by 43% of adolescents once in a week whereas 17.3% of them consumed once in two weeks.

Assessment of the food items consumed in common by adolescents

Table 2: Frequency and Percentage of food items consumed in common by adolescents

Food items taken in Common	F	%
Fried food taken in common		
Vadai	78	26.0
Potato chips	141	47.0
Fish fry	55	18.3
Chicken fry	25	8.3
Any other	1	0.3
Total	300	100.0
Non vegetarian food taken in common		
Don't eat	78	26.0
Chicken	135	45.0
Mutton	60	20.0
Fish	24	8.0
Any other	3	1.0
Total	300	100.0

Conted...

Sweet commonly taken		
Chocolate	93	31.0
Biscuits	117	39.0
Ice creams	71	23.7
Cake	18	6.0
Any other	1	0.3
Total	300	100.0
Soft drink taken		
Don't drink	90	30.0
Coke/Pepsi like drinks	149	49.7
Bottled sweetened fruit juices	44	14.7
Any other	17	5.7
Total	300	100.0

Table 2 reveals that out of 300 adolescents, with regard to fried food, majority (47%) of the adolescents consumed potato chips and 26% consumed vadai in common. Regarding Non vegetarian food taken in common, 45% consumed chicken and 20% consumed mutton. Regarding sweet, 31% consumed chocolate, 39% consumed biscuits and 23.7% consumed ice cream in common. Regarding soft drink taken in common, 49.7 % consumed coke/pepsi and 14.7% consumed bottled sweetened fruit juices.

Association of consumption of unhealthy food items with the age of adolescents:

There is a statistically significant association found between the type of food and its frequency of consumption with the age of adolescents at 0.05 level of significance. There is a statistically significant association between fried food taken in common ($P= 0.046$); non vegetarian food taken in common ($P= 0.041$); frequency of taking ice creams ($P= 0.021$); frequency of taking chocolates ($P= 0.008$); frequency of taking burger ($P= 0.042$) and frequency of taking parata ($P= 0.038$) with age in years.

The age of the samples ranged from 13 to 18 years. Potato chips are consumed by majority (47%) of the samples from all ages. Chicken (45%) is more preferred and consumed by the majority of the samples in all ages over Mutton (20%). Majority of the 13 to 15 years teen agers consumed Ice creams once in a week whereas 16 to 18 years consumed once in two weeks. Majority of the samples (39%) from all ages consumed biscuits daily followed by chocolates (31%). Majority of the samples in all ages that is 13 to 16 years consumed Parata, Pizza, Samosa, Puffs and Burger once in a week.

Association of consumption of unhealthy food items with the gender: There is a statistically significant association found on selected variables with the gender at 0.05 level of significance. There is a statistically significant association found between frequency of taking non vegetarian item ($p = 0.005$); frequency of taking fried rice ($p=0.033$); frequency of taking soft drinks ($p=0.046$) with the gender. For consumption of other foods like pizza, burger, chocolates, ice creams, parata, puffs, samosa etc there was no significant association found between male and female gender.

Discussion

The present findings highlight the unhealthy eating habits among adolescents residing in Chennai city, India. This unhealthy dietary intake may increase the risk of nutrient inadequacy and weight gain among nutritionally vulnerable Indian adolescents. Considering the likely tracking of food behaviours into adulthood, there is an immediate need to modify such behaviours during this pubertal phase, thus, enabling adolescents to develop healthy food practices for their adulthood (Gupta S,et al.,2014)⁹.

As a consequence of food globalization, the consumption of energy-dense and nutrient-poor foods and sugar-sweetened beverages has increased substantially, particularly, in urban regions. This overconsumption is quite evident in the present study as nearly three quarters of the sample consumed three or more servings of energy-dense snacks and about half of the respondents consumed three or more servings of energy-dense beverages & majority of the samples (39%) from all ages consumed biscuits daily followed by chocolates (31%). Majority of the samples in all ages that is 13 to 16 years consumed parata, pizza, samosa, puffs and burger once in a week. This study findings were supported by Singh et al., (2006)¹⁰ who found that about one third (32.1%) of secondary school students ($n = 510$; aged 12–18 years) in New Delhi area consumed fast food (e.g. burgers, pizzas, fried foods etc.) three or more times per week.

The study findings were supported by Vaida N., (2013)¹¹ who reported that eating of fast foods among the adolescents who belong to a high society had a mean unit value of 3.78 with the standard deviation of 1.17. Consumption of fast foods is more among girls than in boys with the mean value of 3.64 with the standard

deviation of 1.32. Naeen et al., (2014)¹² reported that average amount of daily intake of meat & fats, were 3.5 ± 1.2 , 6.2 ± 2.4 , respectively.

Therefore, in order to encourage healthy eating among adolescents, Indian schools should perhaps incorporate the concepts of food literacy into its academic curriculum as food literacy has the potential of increasing the healthy eating habits of teenagers. Effective school canteen policies should be implemented as an additional way to improve the dietary habits of adolescents. Healthy school canteen policies have been successful in improving the availability, accessibility, variety and affordability of healthy food choices in canteens thus supporting students in consuming nutritious foods(Vidgen HA,et al., 2014)¹³.

Conclusion

Malnutrition includes over nutrition and under-nutrition and in today's scenario the adolescents eat lot of calorie rich junk foods ignoring its nutritive value and also suffering from micronutrient deficiency. The present study confirms the high prevalence of unhealthy eating habits among adolescence. This study finding highlighted the need to design effective nutrition promotion strategies to encourage healthy eating habits in adolescents. The following are the recommendations for parents and schools made to promote healthy eating habits of adolescents.

Recommendations

Based on the findings of the present study, following recommendations emerge:

- Having a written canteen policy in all schools
- Creating food literacy by teaching the importance of consumption of balanced diet and ill effects of junk food
- Regulating food availability in schools, restricting access to sugary soft drinks and increasing fruit and vegetable options.
- To arrange for nutrition counselling to bridge the gap between knowledge and practice.
- Adopting easy-to-understand nutritional information about food products, particularly those targeted at children and adolescents.

Conflict of Interest: Nil

Source of Funding: Self

Ethical Considerations: Informed consent was obtained from the samples' parents.

REFERENCE

1. Spear BA. Adolescent growth and development. *Journal of American Dietetic Association* 2002; 102:S23.
2. Carson T, Popkin B. Three squares or mostly snacks--what do teens really eat? A socio-demographic study of meal patterns. *Journal of Adolescent Health* 1998; 22:29.
3. Rodrigues PRM, Luiz RR, Monteiro LS, et al. Adolescents' unhealthy eating habits are associated with meal skipping. *Nutrition* 2017; 42:114.
4. Shepherd R, Dennison CM. Influences on adolescent food choice. *Proceedings of the Nutrition Society* 1996; 55:345.
5. McNaughton SA et al., Understanding the eating behaviors of adolescents: application of dietary patterns methodology to behavioral nutrition research. *Journal of American Dietetic Association* 2011; 111:226.
6. Neumark-Sztainer D, Story M, Hannan PJ, Croll J. Overweight status and eating patterns among adolescents: where do youths stand in comparison with the healthy people 2010 objectives? *American Journal of Public Health* 2002; 92:844.
7. Slining MM, Mathias KC, Popkin BM. Trends in food and beverage sources among US children and adolescents: 1989-2010. *Journal of the Academy of Nutrition and Dietetics* 2013; 113:1683.
8. Milosavljević D, Mandić ML, Banjari I. Nutritional knowledge and dietary habits survey in high school population. *Collegium Antropologicum* 2015; 39:101.
9. Gupta s et al., Tracking a dietary pattern associated with increased adiposity in childhood and adolescence. *Nutrients*. 2014;22:458–65.
10. Singh AK et al., Lifestyle associated risk factors in adolescents. *Indian Journal of Pediatrics*. 2006;73:901–6.
11. Vaida et al., Prevalence of Fast Food Intake among Urban Adolescent Students 2013 ISSN: 2319 – 1813 ISBN: 2319 – 1805 vol-2,p353-359
12. Naeen et al., Nutritional Knowledge, Practice, and Dietary Habits among school Children and Adolescents 2014 Dec; 5(Suppl 2): S171–S178.
13. Vidgen HA et al., Defining food literacy and its components, 2014 .01.010 May vol -76 p50-59

A Study to Assess the Relationship between Sleep Quality and Quality of Life among IT Professionals at SRMIST, Kattankulathur, Kancheepuram District

Ushapriya Mathiazhakan¹, B. Jayabharathi², Lalitha³, Priyankaghosh³, Chinnamani³

¹Assistant Professor, ²Professor, ³B.Sc (N) IV year Students, SRM College of Nursing

ABSTRACT

Aim: To assess and correlate the sleep quality and quality of life among IT Professionals.

Method: The Research design adopted for the study was Non experimental descriptive–correlational Research design. Sample size for the study was 50. Non-probability convenient sampling technique was used to select the sample for the study. The tool consists of 3 sections **Section A:** Structured questionnaire was used to assess the demographic variables of IT Professionals. **Section B:** Pittsburgh Sleep Quality Index (PSQI) was used to assess the Sleep Quality Of IT Professionals. **Section C:** World Health Organization (WHO) Quality Of Life scale was used to assess the quality of life among Information Technology (IT) Professionals.

Result: The results revealed that out of 50 (14%) of IT Professionals had poor Quality of life, 20% of IT Professionals had Excellent Quality of life, 66% of IT Professionals had Good Quality of life. The result revealed that, The P-value of the Pearson's correlation co-efficient is highly significant (since the P-value is lesser than 0.01) and there is significant positive relation (correlation) found between Sleep Quality and Quality of Life of IT Professionals.

Conclusion: The study concludes that, out of 50 (70%) of IT Professionals had Good sleep quality, 30% of IT Professionals had poor sleep quality. It is clear that, if sleep quality is good for IT professionals then their Quality of life will be good.

Keywords: Assess, Sleep quality, Quality of life, IT Professionals

Introduction

Sleep is a basic biological process, which is essential for healthy growth and development from intrauterine life.¹ Sleep is a vital part of a healthy lifestyle, but with technological advances, there are a number of growing factors that can inhibit this Vital function, causing poor sleep quality. ²Poor sleep quality, including insomnia, can reduce the quality of life (QOL). ³IT company jobs are known to be more competitive and stressful because

of their nature of work like target achievements, night shift, work overload. Moreover, since IT professionals are exposed to long hours of computer usage, the present study was conducted to determine the relationship between stress and the number of hours of computer exposure in IT professionals.⁴

The Pittsburgh Sleep Quality Index is a psychometric and non poly somnographic test, can be used to measure the sleep quality.⁵ Sleep quality was measured with PSQI questionnaire, consists of 19 questions. PSQI assesses the sleep quality with questions asked under 7 different components (subjective sleeping quality, sleep latency, sleeping time, habitual sleep efficiency, sleep disorders, usage of sleeping pills and daytime dysfunctions). Each question was given a score interval of 0-3. Points of 7 components were collected. If total score are 5 or more, the sleeping quality was considered to be low.⁶

Corresponding Author:

Ms. Ushapriya Mathiazhakan, M.Sc (N)
Assistant Professor, SRM College of Nursing
SRM Institute of Science and Technology
Kattankulathur
Email: mowazh@gmail.com

QOL is comprehensive programmed designated to improve employees satisfaction. It is a way of thinking about people, work and organization and creates a sense of fulfillment in the minds of the employees and contributes towards greater job satisfaction, improving productivity, adaptability and overall effectiveness of an organization.⁷ The definition of quality of life changes from society to society as well as from individual to individual in a given society. The World Health Organization Quality of Life (WHOQOL) group defines quality of life as: “an individual’s perception of their position in life, in the context of the culture and values in which they live and in relation to their goals, expectations, standards, and concerns”. This definition focuses on the IT Professionals to evaluate their quality of life from their own perspective.⁸

Jha. A et al.(2012)has found in his study that overall analysis for 338 software professionals clearly demonstrated significant differences between mean scores of these two sectors for each of the six outcome domains of WHO QOL- BREF. we found positive associations between hours of computer use.⁹Work related factors were associated with insufficient sleep. A more positive perception of work and more suitable work demands might reduce sleep debt and insomnia thus promote recovery from work. For this studies, reduced sleep can be associated with risk of health problems. Information professionals (IT) often work long hours and this could have an effect on their sleep quality and quality of life.

Materials and Method

The Research design chosen for the study was Non experimental descriptive–correlational Research design. The study was conducted in ITKM department at SRMIST, Kattankulathur, Kancheepuram District and the ITKM department consists 50 IT Professionals working in Information Technology Knowledge management and the working hours are 8 am to 4 pm. Sample size for the study was 50. Non-probability convenient sampling technique was used to select the sample for the study. The Inclusion Criteria include a). IT Professionals who were between the age group of 21-50 years. b). IT Professionals working in ITKM department at SRMIST, Kattankulathur. c). IT Professionals those who were willing to participate in the study. The exclusion criteria include a). IT Professional those who were with any

psychiatric disorders. b). IT Professionals with stroke, renal diseases and cardiac diseases

Development and Description of the Tool: The tool consists of 3 sections

Section A: Structured questionnaire was used to assess the demographic variables of IT Professionals. It consists of age, gender, educational status, religion, monthly income, types of family, marital status, working hours (per day).

Section B: Pittsburgh Sleep Quality Index (PSQI) was used to assess the Sleep Quality Of IT Professionals.

Section C: World Health Organization (WHO) Quality Of Life scale was used to assess the quality of life among Information Technology (IT) Professionals.

Reliability of the Tool: Reliability of the tool was established by split half method. The coefficient correlation $r = 0.91$ which was very high. Hence, the tool was considered reliable and feasible for proceeding with the main study.

Ethical Consideration: The research proposal was approved by research committee of SRM college of Nursing, SRMIST, Kattankulathur, Kancheepuram district. Permission was obtained from Dean, SRM College of Nursing and ITKM department. Informed consent was obtained from the study participants, after explaining the nature and duration of the study. Assurance was given to the individual that report will be kept confidential.

Results

Table 1: Frequency and percentage distribution of sleep quality of IT Professionals

N = 50

S. No.	Sleep Quality	No. of IT Professionals (N)	Percentage distribution (%)
1.	Good	35	70
2.	Poor	15	30

The above table 1 shows the frequency and percentage distribution of sleep quality of IT Professionals. The table reveals out of 50 sample 70% of 35 no. of IT Professionals have Good sleep quality, 30% of 15 no. of IT Professionals have poor sleep quality

Table 2: Frequency and percentage distribution of Quality of life of IT Professionals N = 50

S. No.	Quality of Life	No. of IT Professionals (N)	Percentage distribution (%)
1.	Poor	7	14
2.	Excellent	10	20
3.	Good	33	66

The above table 2 shows the frequency and percentage distribution of quality of life of IT Professionals. Table reveals out 50 samples 14% of 7 no. of IT Professionals have poor Quality of life, 20% of 10 no. of IT Professionals have Excellent Quality of life, 66% of 33 no. of IT Professionals have Good Quality of life.

Table 3: Correlation of Sleep quality and quality of life of IT professionals

S. No.	Scores	Mean	Standard Deviation	N	Pearson's Correlation	P-Value
1.	Sleep Quality	16.2	2.556	50	0.380	0.007**
2.	Quality of Life	141.92	19.366	50		

The above Table 4 shows the correlation of sleep quality and quality of life of IT Professionals. The result revealed that, The P-value of the Pearson's correlation co-efficient is highly significant (since the P-value is lesser than 0.01) and there is significant positive relation (correlation) found between Sleep Quality and Quality of Life of IT Professionals.

Discussion

The first objective was to assess the Sleep quality among IT Professionals Based on the objectives of the study, the data is analyzed by descriptive and inferential statistics. The result revealed that out of 50 (70%). of IT Professionals had Good sleep quality, 30% of IT Professionals had poor sleep quality. The result of the study was supported by Sallien M, KalimoR, (2000) Sleep quality among IT Professionals proportion of those working for at least 50 h a week (27%) was higher than in the general population in Finland (16%). Sleep debt was most among the youngest and insomnia among oldest respondents. which is compatible with previous observations. Young man reported spending more time on work and study than others. Considering that the percentage of those who replied in the age group was smaller than expected, it is possible that the amount of time sleep spent on work and study by young men in IT sector is in reality even greater.⁶

The second objective was to correlate between the sleep quality and quality of life among IT Professionals. The results showed the correlation of sleep quality and quality of life of IT Professionals. The result revealed that, The P-value of the Pearson's correlation co-efficient is highly significant (since the P-value is lesser

than 0.01) and there is significant positive relation (correlation) found between Sleep Quality and Quality of Life of IT Professionals. The result of the study was supported by the study Warr and Colleagues (1979) in an investigations of QOL Consider a range of apparently relevant factors, including work involvement, intrinsic job motivation, higher order and need strength, perceived intrinsic job characteristics, job satisfaction, life satisfaction, happiness and self-rated anxiety, they discussed a range of correlations derived from their work, such as those between work involvement and job satisfaction intrinsic job motivation and job satisfaction, and perceived intrinsic job characteristics and job satisfaction. This research provides useful information on Quality of life for IT Professionals.¹⁰

Conclusion

The study results concludes that, out of 50 (70%) of IT Professionals had Good sleep quality, 30% of IT Professionals had poor sleep quality. The results revealed that out of 50 (14%) of IT Professionals had poor Quality of life, 20% of IT Professionals had Excellent Quality of life, 66% of IT Professionals had Good Quality of life. It is clear that, if sleep quality is good for IT professionals then their Quality of life will be good.

Conflict of Interest: Ms.Ushapriya Mathiazhakan, Ms.Lalitha, Ms.Priyankaghosh, Ms.Chinnamani,, Dr. Jayabharathi, declares that no conflict of interest. In addition, this study was not funded.

Statement of Human and Animal Rights: All procedures followed were in accordance with the ethical standards of the responsible committee on human

experimentation (institutional and national) and with the Helsinki Declaration of 1975, as revised in 2008 (5).

Statement of Informed Consent: Informed consent was obtained from all the samples for being included in the study.

Source of Funding: There is no funding agencies were involved. It is fully self financed.

REFERENCE

1. Carskadon MA. Sleep in adolescents: the perfect storm. *Pediatric Clin North Am* 2011;58:637-647.
2. Cain,N., &Gradisar, M. Electronic media use and sleep in school aged children And adolescents: A review. *SleepMedicine*, 2010;11(8), 735---742.
3. Fortier-brochu E, Beaulieu-Bonneau S, Ivers H, Morin CM. Relations between sleep, fatigue, and health-related quality of life in individuals with insomnia. *J Psychosom Res* 2010 ; 69, 475–83.
4. Buysse DJ, Reynolds CF, Monk TH, Hoch CC, Yeager AL, Kupfer DJ. Quantification of subjective sleep quality in healthy elderly men and women using the Pittsburgh Sleep Quality Index (PSQI).*Sleep*.1991; 14(4): 331-338.
5. Agargun MY, Kara H, Anlar O. The validity and reliability of Pittsburgh Sleep Quality Index [in Turkish].*Turkish Journal of Psychiatry*.1996; 7: 107-115.
6. SallinenM, HermaM, kalimoR. The prevalence of sleep debt and it is association with fatigue, performance and accident in the modern society. *People works Res* 2000;33:140-43.
7. Heskett, J.L., Sasser, W.E., Jr and L.A., Schlesinger. “The service profit chain”. New York: The Free Press. Sanyal, A and Singh, B. R. Improving the Quality of Working Life,*Lok Udyog*, 1997;November, 27-35.
8. Fisher, R., Gould, D., wain wright,s., & fallon, M. Quality of Life. *clinical nursing*, 1998; 7: 553-563
9. Jha. A et al.,WHO QOL,2012; pg-341-346.
10. Warr and Colleagues.Job characteristic and the organizational Integration of professionals. *Administrative Quarterly*,1979; vol.15,271-281.

A Descriptive Study to Assess the Knowledge and Attitude Towards HPV Vaccination among Students of Selected School at Ludhiana Punjab

Keshni

Assistant Professor, Department of Medical Surgical Nursing, SKSS College of Nursing Ludhiana, Punjab

ABSTRACT

Introduction: Cervical cancer is the third most commonly diagnosed cancer worldwide and fourth leading cause of cancer in women. HPV is the most common sexually transmitted infection (STI).. But there are vaccines that can stop these health problems from happening.

Aim: The study was carried out to assess the knowledge and attitude towards HPV vaccination among students of school.

Methodology: A descriptive research design was used to assess the attitude and knowledge of 60 students in selected school by sampling techniques who were studying in the school of Ludhiana, Punjab. A self structured questionnaire tool was used to assess the knowledge and attitude with method.

Results: It shows that 3% of students having good knowledge (5%) and 46% of students having average knowledge (76.6%) and 11% of students having poor knowledge (18.3%). This study shows that 49% of the students having unfavourable attitude (81.6%) and remaining 11% the student having favourable attitude (18.3%) regarding HPV vaccination.

Conclusion: Hence, it is concluded that the majority of students having average knowledge and majority of student having unfavourable attitude towards HPV vaccination.

Keywords: *Assess, knowledge, attitude, HPV Vaccination, School students*

Introduction

Cervical cancer is the second most common cancer among aged 15-44 years in India. Every year 50,000 new cases are diagnosed and 27,000 women dies of this disease, mostly 85% in developing countries, worldwide 15% of all cancer cases and nearly 26% of cancer cases in developing countries are attributable of infectious agent, particularly viruses. 67,477 new cases of cervical cancer deaths occur annually in India. Cervical cancer which is caused by human papilloma virus (HPV) is the leading cause of cancer mortality in 70-80 % cases¹. The approval and recommendation of two vaccines – Gardasil and Cervarix – help to reduce the burden of cervical cancer. These include high cost of vaccine and vaccine delivery, low cervical cancer screening levels, inaccessibility to medical care, low awareness and knowledge of HPV and cervical cancer, and failure of cervical cancer to recognized as a major

health concern. Lack of knowledge of cervical cancer in the population and among health care worker is a prime barrier of access to cervical cancer in the population and to cervical cancer prevention. It is crucial that Indian students should be aware of the advances and especially of those interventions, which can be utilized, in low resource settings. Cancer of the cervix is a major health problem in India and account for 26.1 to 43.8% of all cancers in Indian women.⁴ Students were chosen because they will be sought by the population as the first line information resources in clearing myth and spreading awareness regarding cervical cancer in future when they become clinicians. Educational initiative targeting youth have a definite role in promoting vaccine acceptance and can positively influence screening for cervical cancer.⁵

Human papilloma virus, which infect 20 million people in US and cause cervical cancer and genital warts. The vaccine is widely recommended for girls

and women aged (11-26) whereas, new launched HPV vaccine (Cervarix) approved in early 2008, could help to reduce the virus load in women who are already infected with HPV. A woman should vaccinate with HPV upto 26 years of age, if she is not vaccinated early.²

HPV infection or virus is the viral infection that is passed between people through skin to skin contact. There are more than 100 varieties of HPV, 40 of which are passed through sexual contact and can affect your genital, mouth or throat. According to centers for disease control and prevention (CDC), HPV is most common infection that affects both men and women. Most people get HPV through direct sexual contact, such as oral sex.³

Risk of HPV infection is anyone who had sexual skin to skin contact is at risk for HPV infection. It is impossible to know who will develop health problems from HPV, but people with weakened immune system may be more at risk.²

Prevention of HPV infection is easiest way to prevent HPV is to use condoms and to limit the number of sexual partners. In addition, CDC recommends the HPV vaccine for boys and girls at age of 11 and 12. Women and men can get vaccinated until age of 26. The vaccine is said to protect against types of HPV know to be associated with cancer and also to prevent some type of cancer cause warts.³

Methodology

It include research design of the study, research setting, target population, sample and sample technique, data collection tools and technique pilot study and plan for data collection and data analysis.

Research Design: Descriptive research design is used to assess the knowledge of students of the selected school at Ludhiana, Punjab.

Research Setting: This study is conducted in selected school at Ludhiana, Punjab.

Target Population: The target population is adolescent between the age group of 13-19 years of selected school at Ludhiana, Punjab.

Sample Size: The sample size is 60 students between the age group of 13-19 years.

Sampling Techniques: The sample is drawn using purposive sampling techniques, which are purposeful sampling techniques, keeping in mind the following inclusion and exclusion criteria.

Inclusion and Exclusion Criteria

Inclusion Criteria: Students who are:

- Student between the age group of 13-19 years in the selected school at Ludhiana, Punjab
- Willing to participate

Exclusion Criteria

- Students less then age group of 13 years
- Those who are absent during data collection.

Analysis and Interpretation of Data

In frequency and percentage distribution it has been depicted that According to age, (43.3%) respondent belongs to age group of 18 years followed by (30%) respondent of age group 17 years. One fourth (28.3%) falls in the age group of 15 years and (23.3%) of respondent belong to age group 16 years. According to gender, more than the half of respondent (56.6%) were female and near to half (43.3%) were males. According to class, more than half of respondent (75%) were the student of +2 and rested over (25%) of respondent were from +1. According to course category, the higher percentage of the respondent of non medical (55%), medical (36.6%) and commerce (8.3%). According to academic Performa, the highest percentage of the respondent 71-80% is (58.3%), 61-70% is (28.3%) and 81-90 % is (13.3). According to education of father, the higher percentage is of secondary (65%), graduation and above (23.3%), and primary 11.65%. According to education of mother, the higher percentage is of secondary (65%), graduation and above (21.6%), and primary (1.6%). According to monthly income, (43.3%) respondent had income 10001-20000, followed by (33.3%) had income 20001-30000, and (23.3%) had income >30001. According to religion, the Sikh respondent had (93.3%) and the Hindu respondent had (6.6%). According to knowledge of Pap smear test, (81.6%) respondents are unaware, whereas (18.3%) respondents are aware. According to habitat, more than half (95%) of respondents belongs from rural area and (5%) belongs from urban area.

In the percentage distribution of knowledge score of the subjects regarding among students it is depicted that more than half (76.6%) of the respondents had Average knowledge, followed by 5% had good knowledge and 18.3% respondents had poor knowledge regarding HPV vaccination. Hence, it was concluded that the some students had good knowledge about HPV vaccination.

In the percentage distribution of attitude of the subjects regarding among students. students it is depicted that more than half (81.6%) of the respondents had unfavourable attitude, followed by 18.3% of the respondents had favourable attitude regarding HPV vaccination. Hence, it was concluded that most of the students had unfavourable attitude about HPV vaccination

The association between the knowledge and with all social demographic variables was mostly found to be statistically non significant as ($p>0.05$) except education status of father and academic Performa of students was found to be statistically highly significant as ($p=0.01^*$) as calculated by ANOVA and t-test. Therefore, it can be concluded that education of father and academic Performa has impact on HPV vaccination.

Implications: The findings of the study have several implications in nursing education, nursing practice, nursing administration and nursing research.

Nursing Education: The finding of the present study shows the result regarding knowledge about HPV vaccination among students. It helps to assess the knowledge and attitude of HPV vaccination of student in the field of nursing education.

Nursing Administration: Nurse administrator can utilize the findings of study and imparting HPV vaccine education to the students. It also makes provision of theoretical skill facilities for students having less knowledge.

Nursing Practices: Health care professional, nurses are well positioned to advocate individual and family in implementing the knowledge on HPV vaccination. There is need to arouse interest among students regarding HPV vaccination.

Nursing Research: The findings of the study provide baseline data about knowledge of HPV vaccination among students (13-19) age group. The nurses will come to know about the knowledge of student regarding HPV vaccination. So, they can conduct further research in this area.

Limitation

- The size of the sample under study was limited to 60 students. Hence, results cannot be generalized due to limited sample size.
- Data collection was based on information provided by the subject

The study was limited to residing in selected school of a selected village at Ludhiana

Ethical Consideration:

- The study was conducted after approval from ethical committee of SKSS CON Sarabha.
- A written permission was taken from principal college of nursing Sarabha.
- Consent was taken from all students between the age group of 13-19 years those who are studying in selected school at Ludhiana Punjab and it was assured this information would be kept confidential.

Conflict of Interest: There is no conflict of interest

Source of Funding: Self

REFERENCE

1. Anon, human papillomavirus [Internet].2019 [Accessed 29 Jan. 2019].Available from:: https://www.rightdiagnosis.com/h/human_papillomavirus/wiki.htm
2. Human Papillomavirus (HPV): Practice Essentials, Background, Pathophysiology. [Internet]. [Accessed 24 Jan. 2019]. Available from:: <https://emedicine.medscape.com/article/219110-overview>.
3. Human Papillomavirus Infection: Symptoms and Prevention. Healthline [Internet]. [Accessed 25 Jan. 2019].Available from:: <https://www.healthline.com/health/human-papillomavirus-infection>
4. Lamaze for Parents : Blogs : What to Know About HPV, Cervical Health, Cervical Cancer and Pregnancy.Givingbirthwithconfidence.org. (2019). [Internet]. [Accessed 29 Jan. 2019]. Available from:: <https://www.givingbirthwithconfidence.org/blog/what-to-know-hpv-cervical-health-cancer-pregnancy>
5. Cervical Cancer Cancer [Internet]. 2019 [Accessed 29 Jan. 2019].Available from: <https://www.cancer.net/cancer-types/cervical-cancer/screening>.

A Study to Assess Knowledge and Attitude Regarding Organ Donation among Health Professionals of Selected Colleges of Anand District- Literature Review

Arti Patel¹, Chintan Macwan¹, Bhavna Makwana¹, Princy Parmar¹, Shivangi Parekh¹, Dhurvi Patel¹, Prachi A. Soni²

¹4th year GNM Students, ²Nursing Tutor (Medical-surgical Nursing), Manikaka Topawala Institute of Nursing, CHARUSAT, Changa, Anand, Gujarat

ABSTRACT

The current study aims to assess knowledge and attitude regarding organ donation among health professionals of selected colleges of Anand District. Life is too precious to be lost to an organ failure. But millions have lost their lives when a vital organ failed to function in their body. Health professionals who are more concerned related to educate students in health sectors so every health professional needs to know all aspect of organ donation process including legal aspects of organ donation to save precious lives from being lost before their time.

Many studies level of awareness among health care professionals on organ donation. In fact, the health care professionals demonstrated a general positive attitude towards donation and transplantation but when assessed on a more personal level, they were less keen on donating organs. None of the participants had complete knowledge as to who should authorize brain death as identified barriers of organ donation advancement include lack of knowledge, personal beliefs, and a negative attitude from health professionals. It was also observed that they were interested in knowing more about the subject of organ donation.

Keywords: Organ Donation, Health Professionals, Knowledge and Attitude.

Introduction

“A literature review is a body of text that aims to review the critical points of knowledge on a particular topic of research.”

—ANA, 2000

A review of literature is a description and analysis of the literature relevant to a particular field or topic. It provides an overview of what work already had been carried out, who are the key researchers who did that work, which of the questions are already answered regarding a particular area of research interest, what

methods and methodologies were used to answer the particular questions and what are the prevailing theories and hypotheses.

Swain S. Prog Transplant. Date of publication 2011. Clinical nurse educators are advanced practice nurses with preparation at the master's level or higher. Such nurses play an important role in organ procurement organizations. As leaders and members of the team, they provide structure and design to the training process. These educators oversee orientation of new employees, serve as mentors to preceptors, assess the learning needs of the organization, and provide ongoing training to veteran staff. Clinical nurse educators also contribute to continuous quality improvement for the organization and help to comply with regulatory standards. ⁽¹⁾

Poreddi, B V Katyayani, Sailaxmi Gandhi, Suresh Badamath, Rohini Thimmaiah, Date of publication 2016, Globally, there is an acute shortage of organs for transplantation. Health professionals play an important

Corresponding Author:

Prachi A. Soni

Nursing Tutor (Medical-surgical Nursing),
Manikaka Topawala Institute of Nursing,
CHARUSAT, Changa, Anand, Gujarat
Email: prachisoni.nursing@gmail.com

role in raising awareness, motivating, and subsequently increasing the organ donation rates. Research related to nursing students' attitudes toward organ donation is limited from India. We aimed to assess undergraduate nursing students' knowledge, attitudes, and willingness to donate organs. This was a cross-sectional descriptive study carried out among conveniently selected undergraduate nursing students ($n = 271$) using self-reported questionnaires. The mean score indicates that 66.7% of the participants had adequate level of knowledge [mean \pm standard deviation (SD), 7.34 ± 1.61] and 72.3% hold positive attitudes (mean \pm SD, 83.9 ± 1.01) toward organ donation. Statistically significant correlation ($r = 0.265$, $P < 0.001$) was observed between knowledge and attitudes of the participants toward organ donation. The findings suggest the need for revising the nursing curricula to prepare the future nurses' competent in encountering the issues related to organ donation and fostering.⁽²⁾

Bothamley J. Br J Theatre Nurs. Date of publication 1999. Organ harvesting is part of the practice of many perioperative nurses in general hospitals. Add to this the fact that organ harvesting often takes place outside 'normal' working hours, and that the staff providing facilities for donation are left with the body and the mess, it is evident that both the issue and the perioperative nurse's part in this practice require some special attention. This is the first of three excellent articles by Janet Bothamley, based on her wide ranging review of the literature covering theatre nurses' perceptions of organ retrieval. Consent and patients' rights, and brain stem death, will be dealt with in the subsequent articles.⁽³⁾

Maureen E. Bishop Date of publication 1994. Nurses today are caring for a wide array of patients that may include potential organ donors or organ transplant recipients. The purpose of this descriptive correlational study was to explore the knowledge nurses possess and the attitude they hold regarding organ donation, using Jean theory of human caring as the conceptual framework. convenience sample of approximately 200 registered nurses. The knowledge level had a mean score of 6.69 with a possible high of 11. This suggests that the knowledge level of the registered nurses regarding organ donation is insufficient. The registered nurses were found to have a positive attitude regarding the organ donation process and that their attitude would be influenced by increasing their knowledge of the organ donation process. This study suggests the need for further research into the effectiveness of current education programs for healthcare professionals regarding the organ donation.⁽⁴⁾

Funmi Ojawniyi RN, BSc, MSc, Kevin Gormley PhD, RN, MSc, Date of publication 15 January 2018. Globally, there remains a perennial disequilibrium between organ donation and organ transplantation. Several factors account for this disequilibrium; however, as healthcare professionals are not only strategically positioned as the primary intermediaries between organ donors and transplant recipients, but also professionally situated as the implementers of organ donation and transplantation processes, they are often blamed for the global organ shortage.⁽⁵⁾

Aulisio MP, et al. Crit Care Med. Date of publication 2007 Taking values seriously: Ethical challenges in organ donation Last year, >28,000 people received organ transplants from >14,000 donors in the United States. Critical care professionals know the sad reality behind the statistical scarcity of organ supply. They must manage anxious patients and family members who may be waiting for an organ that never comes, triage patients into and out of the intensive care unit. Equally significant ethical challenges arise on the donor side, whether it is working through difficult end-of-life decisions, identifying when to call the organ procurement organization, caring for brain-dead patients, managing a candidate for donation after cardiac death, or caring for a living donor postoperatively. This article discusses some of the difficult ethical challenges raised by organ donation and transplantation for critical care professionals, focusing on end-of-life decision making, donation after cardiac death, and living organ donation.⁽⁶⁾

Taimur Salem Date of publication 2009 A study to assess the knowledge, attitudes and practices regarding organ donation in a selected adult population in Pakistan. Convenience sampling was used to generate a sample of 440; 408 interviews were successfully completed and used for analysis. Data collection was carried out via a face to face interview based on a pre-tested questionnaire in selected public areas of Karachi, Pakistan. Data was analyzed using SPSS v.15 and associations were tested using the Pearson's Chi square test. Knowledge about organ donation was significantly associated with education ($p = 0.000$) and socioeconomic status ($p = 0.038$). 70/198 (35.3%) people expressed a high motivation to donate. Allowance of organ donation in religion was significantly associated with the motivation to donate ($p = 0.000$). Television emerged as the major source of information. Only 3.5% had themselves donated an organ; with only one person being an

actual kidney donor. Conclusion Better knowledge may ultimately translate into the act of donation. Effective measures should be taken to educate people with relevant information with the involvement of media, doctors and religious scholars.⁽⁷⁾

Terbonssen Date of publication 2015 a study to assess the influence of information campaigns on the specific knowledge and the willingness to donate organs. We conducted an online survey based on recruitment via Facebook groups, advertisements using the snowball effect, and on mailing lists of medical faculties in Germany. Besides the demographic data, the willingness to hold an organ donor card was investigated. Specific knowledge regarding transplantation was explored using five factual questions resulting in a specific knowledge score. We recruited a total of 2484 participants, of which 32.7% (300/917) had received information material. Mean age was 29.9 (SD 11.0, median 26.0).. The specific knowledge score and the percentage of organ donor card holders showed a linear association ($P < .001$). The information campaign was not associated with a relevant increase in specific knowledge, but with an increased rate in organ donor card holders. This effect is most likely related to the feeling of being informed, together with an easy access to the organ donor card.⁽⁸⁾

Francisco Javier Mercado-Martinez Date of publication 2015 The purpose of this study was to review the empirical studies on health personnel's views towards organ donation and transplantation carried out in English, Portuguese and Spanish. The search was conducted in eight databases, and two search engines. Four groups of descriptors were used. The period covered was 1985 to 2013 was performed, prioritized the perspective of medical and nursing personnel over other actors, such as directors and organ donation coordinators. Health personnel's attitudes toward deceased organ donation was the most examined topic. In conclusion, a growing quantitative literature analyzes the perspective of physicians and nurses with regard to deceased organ donation and transplantation.⁽⁹⁾

Susan Morgan & Jenny Miller Date of publication 2007 a study to assess knowledge and attitude towards organ donation among premedical students. This is a cross sectional descriptive study in which a specially designed self-administered questionnaire to assess knowledge and attitude towards organ donation (OD) was used to perform a survey on a representative sample

of pre-medical students in a local high school whose major is biology science and medical students in Faculty of Medicine, Mansoura University, Egypt. A total of 359 students completed the questionnaire.. There is a significant relation between student knowledge and positive attitude towards OD ($P = 0.003$). Student's knowledge was significantly associated with seniority ($P = 0.0001$) and Christian religion ($P = 0.04$). There is lack of sufficient knowledge about the legal aspect criteria and details of organ donation process which directly contributing in reducing the positive attitude among Egyptian medical students. In a religiously and culturally accepted background, educational curriculum must focus on brainstem death is crucial for positive attitude from OD.⁽¹⁰⁾

Nisreen Feroz Al Date of publication 2013 To determine the knowledge and ethical perception regarding organ donation among medical students in Karachi- Pakistan. Data of this cross sectional study was collected by self-administered questionnaire from MBBS students of Ziauddin University from 2010 to 2011. Sample size of 158 (83 First years and 75 Fourth years) were selected by convenient sampling and those students who were present and gave consent were included in the study. The data was analyzed by SPSS version 20. A total of 158 participants from Ziauddin Medical University filled out the questionnaire out of which 83 (52.5%) were first years and 75 (47.5%) were fourth year medical students.. Willingness to donate was significantly associated with knowledge of allowance of organ donation in religion ($P = 0$). Both 1st year and 4th year students are aware of Organ Donation, but there is a significant lack of knowledge regarding the topic, ⁽¹¹⁾

Oluyombo, Date of publication 2013 A study To assess the knowledge and attitude of health workers toward organ donation in South-West Nigerian. a cross-sectional study conducted on 850 health care workers, self-administered questionnaires were used to obtain information from participants. Of 850 participants, 766 (90.1%) returned their completed questionnaires. The mean \pm SD age of participants was 36.7 ± 9.2 years. Majority (93.3%) of participants had heard of organ donation; 82.5% had desirable knowledge. Only 29.5% and 39.4% would be willing to donate and counsel potential organ donors, respectively; 36.5% would consider signing organ donation cards. Only 19.4% believed that organ transplantation is often effective and 63.4% believed they were permitted by their religion to

donate. There is disparity in knowledge of organ donation and willingness to donate among health care workers. Efforts should be intensified to give comprehensive and appropriate education to health care workers about organ donation to bridge this gap. ⁽¹²⁾

Joseph T. Altobelli Date of publication 2017 A descriptive correlational study to explore the knowledge nurses process and the attitude they hold regarding organ donation, using Jean Watson's theory of human caring as the conceptual framework. A convenience sample of approximately 200 registered nurses in 300-bed medical center, that does not have an organ transplant program was surveyed. The knowledge level had a mean score of 6.69 with a possible high of 11. This suggests that the knowledge level of the registered nurses regarding organ donation is insufficient. The registered nurses were found to have a positive attitude regarding would be influenced by increasing their knowledge of the organ donation process. This study suggested the need for further research into the effectiveness of current education program for healthcare professional regarding the organ donation process. future research should also focus on alternative education. ⁽¹³⁾

Mohadese Babaie,¹ Mahdi Hosseini,² Jalaeddin Hamissi Zahra Hamissi Author Knowledge, Attitude and Practice of Nurses Regarding Organ Donation Published online 2015 Apr 3. doi: 10.5539/gjhs.v7n6p129 About 150 nurses recruited in this cross-sectional study randomly. After taking informed consent, questionnaires were filled. The data collection tool was a multipart questionnaire including demographic information, 18 questions about attitude and practice and 15 question about knowledge toward organ donation. The knowledge average scores were 50.60 ± 16.19 and 56.54 ± 17.48 for two groups ($p > 0.05$). The knowledge average scores between different age groups was significant ($p < 0.05$). There was a direct and significant relation between attitude and practice ($r = +0.33$, $p < 0.05$), attitude and Factors influencing attitude and practice ($r = 0.866$, $p < 0.05$), but the relation between attitude and knowledge was indirect and significant ($r = -0.183$, $p < 0.05$). Since the medical team are most important adviser for promote activities related to organ donation, it seems that educational curriculum and facilities should applied to enhance attitude and behavior favorable change of personnel towards this issue. ⁽¹⁴⁾

Conclusion

Majority of the study samples are lacked in the adequate knowledge and attitude regarding organ donation among health professionals of selected colleges of Anand District.

Conflict of Interest: None

Source of Funding: No separate funding was received for this study.

Ethical Clearance: Permissions were obtained from College Head, Doctors of Respected hospitals of Anand district and consent was taken from participants.

REFERENCES

1. Swain S. Prog Transplant. Date of publication 2011 <https://www.ncbi.nlm.nih.gov/m/pubmed/22548988/>
2. Poreddi, BV Katyayani, Sailaxmi Gandhi, Suresh Badamath, Rohini Thimmaiah, Date of publication 2016 [http://www.sjkdt.org/article.asp?issn = 13192442; year = 2016; volume = 27; issue = 6; spage = 1129; epage = 1138; aualast = Poreddi](http://www.sjkdt.org/article.asp?issn=13192442;year=2016;volume=27;issue=6;spage=1129;epage=1138;aualast=Poreddi)
3. Bothamley J. Br J Theatre Nurs. Date of publication 1999 <https://scholarworks.gvsu.edu/theses/168>
4. Maureen E. Bishop Date of publication 1994 <https://www.ncbi.nlm.nih.gov/m/pubmed/10646390/>
5. Funmi Ojawniyi RN, BSc, MSc, Kevin Gormley PhD, RN, MSc, Date of publication 15 January 2018 <http://onlinelibrary.wiley.com/doi/10.1111/jocn.14154/full>
6. Aulisio MP, et al Crit Care Med. 2007 Feb; 35 (2 Suppl):S95-101 people received organ transplants from donors in the United States. <https://www.ncbi.nlm.nih.gov/pubmed/17242610>
7. Taimur Saleem Email author, Sidra Ishaque, Knowledge, attitudes and practices survey on organ donation among a selected adult population of Pakistan (17 July 2017) <https://bmcmmedethics.biomedcentral.com/articles/10.1186/1472-6939-10-5>
8. Terbonssen et al (2015) studied the influence of information campaigns in Germany on specific

- knowledge and willingness to donate organs
Public and media awareness and promotion
of organ donation https://www.health.govt.nz/system/files/.../discussion_docpublic_awareness.docx
9. Francisco Javier Mercado Martinez.(2015) this study was to review the empirical studies on health personnel's views towards organ donation and transplantation www.scielo.br/scielo.php?script=sci_arttext&pid=S0104-7072015000200574
10. Susan Morgan & Jenny (2007) Communicating about gifts of life: the effect of knowledge, attitudes, and altruism on behavior and behavioral intentions regarding organ donation <http://www.tandfonline.com/doi/abs/10.1080/00909880216580>
11. Nisreen Feroz Ali, Amal Qureshi,² Basmah Naser Jilani,² and Nosheen Zehra¹,(2013) Knowledge and ethical perception regarding organ donation among medical students <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3856467/>
12. R. Oluyombo, Knowledge Regarding Organ Donation and Willingness to Donate among Health Workers in South-West Nigerian J Organ Transplant Med. Published online 2016 Feb 1. 2016; 7(1): 19–26. PMID: PMC4756261 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4756261/>
13. Joseph T. Altobelli (2017) a descriptive correlational study to explore the knowledge nurses process and the attitude they hold regarding organ donation, using Jean Watson's theory of human caring as the conceptual framework. <http://www.ratemyprofessors.com/ShowRatings.jsp?tid=805890>
14. Mahdi H Jaleddin Hamissi, Mohadesse Babaieosseini (Dec 21, 2017) Knowledge, Attitude and Practice of Nurses Regarding Organ Donation https://www.researchgate.net/.../276430608_Knowledge_Attitude_and_Practice_of_Nur

An Exploratory Study to Assess the Knowledge Regarding Enteral Feeding among Staff Nurses in Christian Medical College & Hospital, Ludhiana, Punjab

Harjit¹, Kamlesh Gill¹

¹Associate Professor, College of Nursing, CMC & Hospital, Ludhiana

ABSTRACT

Nasogastric tube feeding is the most frequently used method of enteral feeding particularly if feeding is to be used for short period. The nurse's knowledge in tube feeding and subsequent care of nasogastric tube are important in clinical area to ensure patient safety. Present study was conducted to assess the knowledge regarding enteral feeding among staff nurses in Christian Medical College & Hospital, Ludhiana, Punjab. Objectives of the study were to assess the knowledge regarding enteral feeding among Staff Nurses, to ascertain the relationship of knowledge regarding enteral feeding among staff nurses with selected variables such as age, gender, marital status, professional qualification, work experience, working area, in- service education and to prepare the pamphlet to enhance the knowledge regarding enteral feeding among staff nurses. Quantitative research approach and non-experimental exploratory design were used in the study. Subjects were chosen by purposive sampling technique and the sample size was 100 staff nurses. Data was collected by structured multiple choice questionnaire and analyzed by using descriptive and inferential statistics. Bar diagram was used to depict the findings. Results of the study shows majority (80%) of staff nurses had good knowledge, 12% staff nurses had excellent knowledge and only 8% staff nurses had average knowledge regarding enteral feeding. Among demographic characteristics working area and marital status had significant impact on the knowledge of staff nurses regarding enteral feeding.

Keywords: Nurses, Knowledge, Enteral feed.

Introduction

Enteral feeding refers to the delivery of nutritionally complete feed, containing protein, carbohydrate, fat, water, minerals and vitamins directly into the stomach, duodenum or jejunum.¹ Gastroenteric tube feeding plays major role in the management of patient with poor voluntary intake, chronic neurological or mechanical dysphagia or gut dysphagia and in patient who are chronically ill². Enteral nutrition is often used for children as well as for adults³. Children may require enteral feeding for a wide range of underlying conditions such as malnutrition, metabolic disorder and neuromuscular disorder⁴.

Short term access is usually achieved by using nasogastric tube at an initial continuous feeding rate 30 ml per hours. Percutaneous endoscopic gastrostomy or jejunostomy placement should be considered if feeding is planned for longer than one month. The use of NG tube is associated with some complication such as pulmonary aspiration, nausea, vomiting, diarrhoea, pain, nasopharyngeal injury, tube occlusion, dehydration and electrolyte imbalance⁵.

The nurses role in delivering the tube feeding usually include insertion of feeding tube if the temporary tube is used, maintenance of the tube, administration of nutrition, prevention and detection of complications associated with this form of therapy and support in the assessment of patient's reaction to tube feeding and subsequent care of nasogastric tube are important in clinical area to ensure the patient safety⁵.

Corresponding Author:

Mrs. Harjit

Associate Professor

College of Nursing CMC & Hospital, Ludhiana

Email: shehnazjohnson@gmail.com

Enteral feed help to maximize nutrition for patient's in a variety of health care setting. It is estimated that

3,45,000 people in America receive nutrition by tube feeding. 60% of patient who receive nutrient through tube will develop aspiration pneumonia.. Nurses are ones who observe and notice when the patient is not tolerating tube feeding.

Review of Literature

A descriptive study was conducted on 53 nurses working in intensive care units of Malwai Hospital regarding nurse's competency in enteral feeding. Participants reported that nutritional assessment 56.9%, insertion of nasogastric tube 88.2%, tube feeding 82.4% was within the scope of their assessment. Study shows adequate knowledge in insertion of nasogastric tube 100%, checking proper placement 92.2%, assessment of nutritional status 43%, 60.8% participants position their patient in a semi fowler during tube feeding. On documentation of nutritional care 23.5% always documented⁷.

A descriptive study was conducted in Nellore on 15 staff nurses and 15 nursing students on knowledge regarding gastrostomy feeding. The results depicted that among staff nurses 73.3% have adequate knowledge, 20% have moderate knowledge and 6.7% have inadequate knowledge. Among students 86.6% have adequate knowledge, 6.7% have moderate and inadequate knowledge⁸.

An exploratory study was conducted at Ismailia General Hospital on 45 staff nurses regarding knowledge and performance of nasogastric feeding. The study conclude that nurses knowledge score about care given before, during, after feeding administration were 73.3%, 71.1% and 69.9%. Total knowledge score of nasogastric feeding administration was 71.7%, the practice score about care given before, during and after NG tube feeding administration were 44.4%, 15.6% and 42.2%. Total practice score was 37.8%. The most common factor affect their practices are increase work load 84.4%, shortage of nursing staff 80%, No reward for good work 84.4%, no upgrades for efficient nurses 82.2%. There are no opportunities for attending training courses 33.3%⁹.

Research Problem

“An Exploratory Study to Assess the Knowledge Regarding Enteral Feeding among Staff Nurses in Christian Medical College & Hospital, Ludhiana, Punjab.”

Objectives:

1. To assess the level of knowledge regarding enteral feeding among Staff Nurses.
2. To ascertain the relationship of knowledge regarding enteral feeding among Staff Nurses with selected variables such as age, gender, marital status, professional qualification, work experience, working area and in-service education
3. To prepare the pamphlet to enhance the knowledge regarding enteral feeding among staff nurses

Assumption: Staff Nurses do have some knowledge regarding enteral feeding

Material and Method

Research Approach & Research Design: For the present study Quantitative research approach and Non experimental exploratory research design were used to accomplish the stated objectives.

Independent Variables: The independent variables of the present study were age, gender, marital status, professional qualification, work experience, working area and in-service education.

Dependent Variables: The dependent variable was knowledge regarding enteral feeding among Staff Nurses.

Selection of the Field for Study: The study was conducted on the staff nurses in Christian Medical College & Hospital, Ludhiana, Punjab.

Population: The target population of this study comprised of staff nurses working in Christian Medical College & Hospital.

Sample and Sample Technique: Purposive sampling technique was used to select the sample of 100 staff nurses working in Christian Medical College & Hospital, Ludhiana, Punjab.

Development of the Data Collection Tool: A structured questionnaire was developed to assess the knowledge regarding enteral feeding among Staff nurse.

Description of Tool: The tool consisted of following 2 parts

Part-1: Socio Demographic Characteristics: This part consist of 7 items for obtaining information of staff nurses i.e. age, gender, marital status, professional qualification, work experience, working area and in-service education.

Part-2: Knowledge Questionnaire Related to Enteral Feeding: This part consisted of 44 multiple choice questions. Each question had four options. Each correct answer carried 1 mark and wrong answer carried zero mark. The maximum score was 44 and minimum score was 0.

Criterion Measure: The criterion measure used in this study was based on knowledge score that refers to total obtain score on the item in the knowledge questionnaire on enteral feeding.

Levels of knowledge	Score	Percentage (%)
Excellent	>35	>80
Good	29-35	66 - 80
Average	22-28	50 - 64
Below average	<22	<50

Reliability of Tool: The reliability of the tool was established by split half method and was calculated using Karl Pearson's coefficient of correlation and Spearman's Brown Prophecy formula. The reliability of the questionnaire was $r'=0.7$.

Data Collection Procedure: The sample was 100 staff nurses working in Christian Medical College & Hospital, Ludhiana, Punjab. The data collection for the study was carried out after formal permission from the Nursing Superintendent through proper channel, Christian Medical College & Hospital, Ludhiana, Punjab. The staff nurses were approached and explained about the purpose of gathering information. The researcher took verbal consent from the staff nurse and purposive sampling technique was used to select the sample.

Ethical Consideration: Prior to data collection, formal written permission was taken from the Nursing Superintendent through proper channel, Christian Medical College & Hospital, Ludhiana, Punjab before conducting the study and the staff nurses were assured for their anonymity & confidentiality.

SECTION I

Socio Demographic Characteristics of Sample

Table 1: Frequency and Percentage Distribution of Sample Characteristics

N=100

Characteristics	f	%
Age		
21-24	09	09.00
25-28	41	41.00
29-32	25	25.00
>32	25	25.00
Gender		
Male	24	24.00
Female	76	76.00
Marital Status		
Married	50	50.00
Unmarried	50	50.00
Professional Qualification		
GNM	61	61.00
B.Sc. Nursing	27	27.00
Post Basic B.Sc (N)	12	12.00
Work Experience (in years)		
< 1	08	08.00
1-3	23	23.00
4-6	34	34.00
> 6	35	35.00
Working Area		
Medical	35	35.00
Surgical	24	24.00
Critical	32	32.00
Emergency	09	09.00
In- Service Education		
Yes	85	85.00
No	15	15.00

Table no. 1 depicts that the distribution of staff nurses according to sample characteristics according to age maximum (41%) of staff nurses were in age group 25-28 years followed by 29-32 years and >32 years (25%) each and least were in 21-24 (9%). According to gender 76% were females and 24% were males. According to marital status 50% of the staff nurses were married

and 50% were unmarried. According to Professional Qualification maximum staff nurses were GNM (61%) followed by B.Sc.Nursing (27%) and least (12%) were Post Basic B.Sc (N). According to work experience, maximum (35%) staff nurses were having >6 Years experience followed by 4-6 Years (34%), 1-3 years (23%) and least (8%) were having < 1 year experience. According to Working Area, maximum (35%) were working in medical unit followed by critical unit (32%), followed by surgical (24%) and least 09% were working in emergency unit. According to In- service education maximum (85%) of staff nurses had attended in service education followed by 15% had not attended in service education on enteral feeding.

Hence it can be concluded that maximum staff nurses were in the age group of 25-28 Years and were females. 50% were married, 61% were GNM, 35% were having > 6 Years' experience, 35 % were working in medical unit and 85 % had attended in- service education on enteral feeding.

Section II

Objective 1: To assess the level of knowledge among staff nurses regarding enteral feeding

Table 2: Frequency & percentage distribution of staff nurses regarding enteral feeding according to level of knowledge

N = 80

Level of Knowledge	Staff Nurses		
	Score	f	%
Excellent	>35	12	12.00
Good	29-35	80	80.00
Average	22-28	8	8.00
Below Average	<22	0	0%

Maximum score = 44

Minimum score = 0

Table 2 depicts Frequency & percentage distribution of staff nurses regarding enteral feeding according to levels of knowledge. Majority (80%) of the staff nurses had good knowledge regarding enteral feeding, followed by (12%) excellent knowledge and least (08%) had average knowledge regarding enteral feeding.

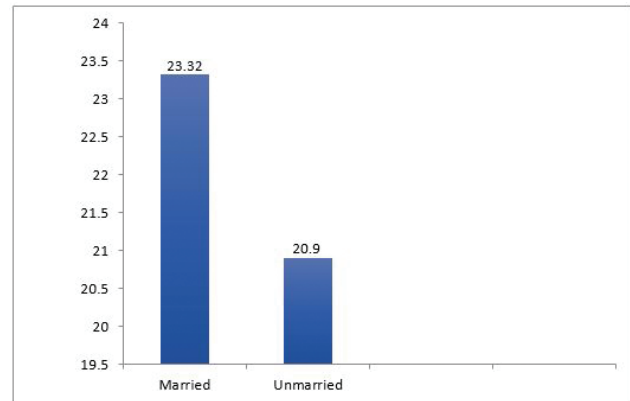


Fig. 1: Mean Knowledge Score of Staff Nurses Regarding Enteral feeding According to Marital Status

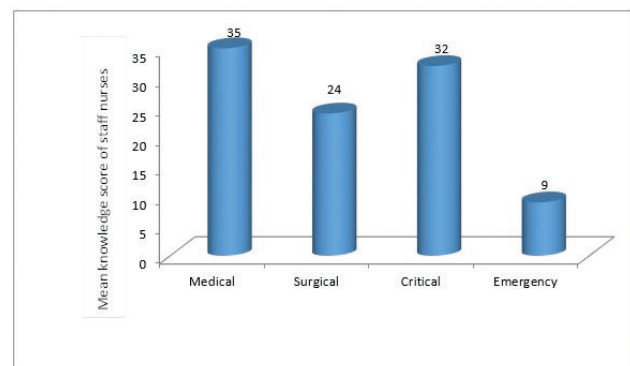


Fig. 1: Mean Knowledge Score of Staff Nurses Regarding Enteral feeding According to Working Area

Major Findings According to Sample Characteristics

Majority of the staff nurses were from age group were 25-28 years (41%) and least were 21-24years (9%),

- Majority of the staff nurses were female (76%) and least (24%) were male.
- 50% of the staff nurses were married and (50%) were unmarried.
- Majority of the staff nurses did G.N.M (61%) and (12%) least were Post Basic B.Sc.(N) .
- Majority of the staff nurses (35%) had more than 6 years of experience and least (8%) had less than 1 year of experience.
- Majority of the staff nurses (35%) were working in medical area and least (9%) were working in emergency unit.
- Majority of the staff nurses (85%) had attended in-service education and least (15%) had not attended. In service education on enteral feeding.

Findings Related to Knowledge Regarding Enteral Feeding among Staff Nurses with Selected Variables

- Mean knowledge score was highest (24.20) among staff nurses who were in the age group of >32 years & least (20) in the age group of 21 - 24 years. Age had no impact on knowledge of staff nurses regarding enteral feeding.
- Mean knowledge score was highest (23.42) among males and least (21.70) in were females. Gender had no impact on knowledge of staff nurses regarding enteral feeding.
- Mean knowledge score was highest (23.32) among staff nurses who were married and least (20.90) in staff nurses who were unmarried. Marital status had impact on knowledge of staff nurses regarding enteral feeding.
- Mean knowledge score was highest (23.25) among staff nurses who had done Post Basic B.Sc.(N) & least (21.66) among staff nurses who were G.N.M. Professional Qualification had no impact on knowledge of staff nurses regarding enteral feeding.
- Mean knowledge score was highest (23.49) among staff nurses with more than 6 years of work experience and least (20.38) among staff nurses with less than 1 years of work experience. Work experience had no impact on knowledge of staff nurses regarding enteral feeding.
- Mean knowledge score was highest (24.19) among staff nurses who were working in critical areas & least (17.89) among staff nurses who were working in emergency. Working area had significant impact on knowledge of staff nurses regarding enteral feeding.
- Mean knowledge score was highest (22.40) among staff nurses who had attended in-service education & least (20.47) among staff nurses who had not attended. In service education had no impact on knowledge of staff nurses regarding enteral feeding.

Conclusion

Maximum (41%) staff nurses were in the age group of 25-28 Years and (76%) were females. 50% were married, 61% were GNM, 35% were having > 6 Years experience, 35 % were working in medical unit and 85 % had attended in- service education on enteral feeding. Majority of staff nurses had good knowledge (80%), (12%%) had excellent knowledge and only (8%) had

average knowledge. Marital status and working area had significant impact on knowledge regarding enteral feeding among staff nurses.

Conflict of Interest: Nil

Source of Funding: Self

Ethical Clearance: verbal permission from the participants and written consent from the Authorities were sought before the data collection.

REFERENCES

1. Nutritional support in adult: oral nutrition support, enteral feeding. NICE Clinical Guidelines. 2006.
2. White H, King L, Enteral feeding panp: efficacy, safety and patent acceptability: Med device. 2014 Aug. 197: 291-98.
3. Caring for children and young people In the commonly receiving enteral feeding; NHS quality improvement Scotland.
4. Braegger. C, Decsit, Dias. JA, et. al . Practical approach to Pediatric enteral Nutrition: A comment by the ESPGHAN. Committee on nutrition. J Pediatric Gastroenteral. Nutri. 2010. July 51) 1 ; 110-122.
5. Urden LD, Stacy. KM. Thelan L.A: Thelan is critical care nursing: Diagnosis and management, 7th Ed. Mosby INC.PP- 142-225. 2006.
6. AL. Kalaldehy M, R. Wastson: Jordanian nurse's knowledge and responsibilation for enteral nutrition in the critically ill. Nursing in critical care 20 (5): 229-41, 2015.
7. C. Mula: nurse competency ad challenge in enteral feeding. Malawi medical Journal.
8. E. Vanithassee; KatariKantha. Knowledge regarding gastrotomy feeding among staff and student nurses: International Journal of applied research.
9. Muneer. NM; AL. Aaliwaly, Mona H. Assessment of nurses Knowledge and performance regarding nasogastric feeding. Med. J. cairo. University. Vol. 84 NO. 2. Sep: 99-105, 2016.
10. Patricia C. LesteyAdkisa, Jason Adelman etc. Enteral Feeding. Jan. 2017. Vol. 12. No. 1.
11. Mettina M. Sandra " Lippincott Manual of nursing practice " wollter Kluwer publication, 10th edition page- 722-725.
12. DeluneC.Sue" fundamentals of nursing standards of practice" Delmar publishers. Page o.- 1121-1131.
13. TNAI " Fundamentals of nursing a procedure manual". TNAI publication page no. 536- 542.

Call for Papers/Article Submission

Article submission fee

- Please note that we charge manuscript handling charges for all publications. Charges can be enquired by sending mail.
- In cases of urgent publication required by author, he /she should write to editor for discretion.
- Fast tracking charges are applicable in urgent publication
- Please note that we charge only after article has been accepted for publication, not at the time of submission.
- Authors have right to withdraw article if they do not wish to pay the charges.

Article Submission Guidelines

Please submit paper in following format as far as applicable

1. Title
2. Names of authors
3. Your Affiliation (designations with college address)
4. Corresponding author- name, designations, address, E-mail id
5. Abstract with key words
6. Introduction or back ground
7. Material and Methods
8. Findings
9. Discussion/Conclusion
10. Conflict of Interest
11. Source of Support
12. References in Vancouver style.
13. Word limit 2500-3000 words, MSWORD Format, single file
14. Please quote references in text by superscripting.

Our Contact Info

Prof (Dr) R K Sharma

International Journal of Nursing Education

Institute of Medico-Legal Publications

Logix Office Tower, Unit No. 1704,

Logix City Centre Mall, Sector-32, Noida-201 301 (Uttar Pradesh)

Tel no: +91 - 09971888542

Email: editor.ijone@gmail.com, Website: www.ijone.org



International Journal of Nursing Education

CALL FOR SUBSCRIPTIONS

About the Journal

Print-ISSN: 0974-9349, **Electronic-ISSN:** 0974-9357, **Frequency:** Quarterly (Four issues in a year)

“**International Journal of Nursing Education**” is an international peer reviewed journal. It publishes articles related to nursing and midwifery. The purpose of the journal is to bring advancement in nursing education. The journal publishes articles related to specialities of nursing education, care and practice. The journal has been assigned international standard serial numbers 0974-9349 (print) and 0974-9357 (electronic). The journal is covered by Index Copernicus, Poland and is included in many international databases.

SUBSCRIPTIONS

Journal Title	Pricing of Journals
IJONE	Print Only
Indian	INR 9000

NOTE FOR SUBSCRIBERS

Advance payment required by cheque/demand draft/Bank Transfer in the name of “Institute of Medico-Legal Publications” payable at New Delhi.

Cancellation not allowed except for duplicate payment.

Claim must be made within six months from issue date.

A free copy can be forwarded on request.

Bank Details

Name of account - Institute of Medico-Legal Publications Pvt Ltd

Bank - HDFC Bank

Branch - Sector-50, Noida-201 301

Account Number - 09307630000146

Type of Account - Current Account

RTGS/NEFT/IFSC code - HDFC0000728

OUR CONTACT INFO:

Dr R K Sharma

Editor

Institute of Medico-Legal Publications

Logix Office Tower, Unit No. 1704,

Logix City Centre Mall,

Sector-32, Noida-201 301 (Uttar Pradesh)

Tel no: +91 - 09971888542

Email: editor.ijone@gmail.com

Website: www.ijone.org

