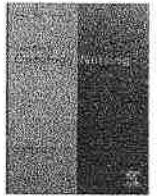




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## Aesthetic Expressions of the Life-World of Filipino School-Age Children with Advanced Cancer

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### ARTICLE INFO

**Key Words:**

- Advanced cancer
- Aesthetic expression
- Life-world
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### ABSTRACT

**Objectives:** The purpose of this study was to describe the meanings of the life-world of school-age children with advanced cancer through aesthetic expression.

**Data Sources:** Drawing, writing, and interviewing data from 10 school-age children with advanced cancer living in Negros Island, Philippines, who met the inclusion criteria of the study.

**Conclusion:** Five major thematic categories structured the participants' existential life-worlds with advanced cancer and were reflected within five lived-worlds as follows: *lived body*, poor body conditions but strong mind; *lived relation*, unlike the others; *lived time*, being in present while waiting for normal life; *lived space*, certain places of living and caring; and *lived thing*, supportive living by technology. The participants did not have control over the external events that happened to them, but their internal reactions made a powerful turning point. Advanced cancer made them tough and resilient to emotions. The negative problems dictated their response and allowed being unaffected by advanced cancer, and they were able to do it.

**Implications for Nursing Practice:** The results presented by this study can be used to enhance positive feelings and emotions of school-age children with advanced cancer. Schooling should remain an active part of participants' life to provide them with a sense of normalcy to carry on with their social and academic development. A prearranged discussion with the teacher, principal, school nurse, and hospital team is important to help everyone know what to expect.

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### Introduction

Globally, cancer is a leading cause of death for children and adolescents. Children of all ages are diagnosed with cancer each year.<sup>1</sup> Moreover, children with cancer comprise the fastest-growing sector of hospital patients in the Philippines, with their numbers rising by an alarming 30% annually.<sup>2</sup> Cancer-related deaths among males up to age 14 account for 1277 cases and 963 cases in females up to age 14 with the highest number of children's deaths occurring in the National Capital Region.<sup>3</sup> Lecciones<sup>2</sup> further confirmed that leukemia topped the killer diseases at the Philippine Children's Medical Center (PCMC) among 10- to 14-year-old children. In fact, Kyle and Carman<sup>4</sup> affirmed that cancer accounts for the most deaths from the disease in children ages 15 years old and young.

Children diagnosed with cancer faced changes in nearly every area of their lives. They faced physical changes that may be temporary, such

as hair loss and weight loss or gain, or disfigurement or amputation. As Scheurer et al<sup>5</sup> suggested, these changes served as a constant bodily reminder of their illness and the uncertainty of their future.

According to Kyle and Carman,<sup>4</sup> children do not only struggle from cancer itself but also from the hospital experience, related procedures for assessment and evaluation, and treatment interventions for cancer (surgical removal of the tumor, chemotherapy, radiation therapy, and bone marrow transplant) that caused negative feelings and fear. The negative feelings involved emotional distress (lack of energy, sadness, sensitivity, or irritability), fear of the unknown, and changes in life priorities of the child and family.<sup>6</sup> Pain, lack of strength, and fatigue constituted the most common physical symptoms, and changes in appearance, as well as dyspnea and altered sleep patterns were also reported.<sup>7</sup>

An illness in children is stressful especially if it includes hospitalization. School-age children view the hospital experience as a threat and worry about pain and changes that may occur to their bodies. They may miss school and the interaction with peers because friends are important to children of this age group, and they may think that their friends will forget them while they are ill.<sup>8</sup> Their concerns are particularly intensified when they expect symptoms to be more

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serious because it will interfere with activities they want to do.<sup>9</sup> Chemotherapy contributes substantially to the children's misery, but this suffering diminishes with time as the disease is controlled.<sup>10</sup> There are still many undesirable difficulties and problems of advanced cancer and chemotherapy treatment affecting the life-worlds of school-age children such as stress, pain, lack of energy, and sadness.<sup>11</sup>

According to previous studies, no research has aimed to describe the meaning of children's experiences living with advanced cancer. While it is true that there were numerous studies on children and cancer, these studies emphasized disease conditions rather than on children's experiences regarding advanced cancer. However, children's experiences should also be emphasized, and this area describing the experiences of school-age children living with advanced cancer using aesthetic expression has not yet been researched as much. The absence of research studies focused on the aesthetic expression of these children constitutes an obstacle in terms of understanding them more fully.

### *Objective of the study*

The objective of the study was to describe the meanings of the life-world of school-age children with advanced cancer through aesthetic expression.

## **Methods**

### *Design of the study*

This study was a qualitative research design with a hermeneutic phenomenological method based on philosophy of Gadamer and van Manen<sup>12</sup> to study the school-age children's life-world with advanced cancer. Gadamer, a philosopher of hermeneutic phenomenology and aesthetics, focused on the importance of language in shaping both our experience and our interpretations with an aim to explain lived experience and reveal the lived meaning through a process of understanding and interpretation of this basic experience. By using Gadamer's hermeneutics, the researcher was guided as to how one interprets whatever the aesthetic outputs (drawing and writing) of the children would mean to them. The interpretation is open to reinterpretation and dialectical in nature.<sup>13</sup>

### *Setting of the study*

The setting of the study was conducted in Negros Island, Philippines.

### *Ethical considerations*

Approval to conduct the research was provided by the institutional review board of the Social and Behavioral Sciences, Faculty of Nursing (number 2017 NST – QJ051), Prince of Songkla University in Thailand. Moreover, the researcher asked permission from the school-age children with advanced cancer and their parents or guardian before conducting the study. The school-age children with advanced cancer participated voluntarily in this study and were provided with essential information for informed consent. They were informed that all the information collected would be kept anonymous by using codes. Furthermore, the results of the study would be reported without any reference to anyone, and the participants' name would not be shown or used. In addition, all interview transcriptions and photographs taken of artwork were stored in a password-protected file saved on an external hard drive, and this was securely stored in a locked storage box. The participants could ask any question related to this study and could withdraw from the research at any time. This study posed no physical or physical or emotional risks on the participants. Recollecting some of the experience was a little painful for the children. Some instances involved tearful moments during the recollection and recalling the aspects of the lived experience that caused moments of discomfort for the participants. The potential harms of

taking part in this study was being upset or sad recalling the cancer experience. When children or parent or guardian (who was present) became sad or upset about the situation they could be referred to a psychologist or they could stop participating without question. The researcher was a nurse experienced in comforting children. She acknowledged momentary discomfort, sadness, or pain for these children and helped each child deal with it constructively.

The sensitivity of the topic and its potential intense interpersonal exchange was recognized. The researcher met the parent and guardian personally before the start of the study to discuss the title of the study, purpose, recruitment of participants, and method. It was reiterated to the parents that, if the child showed signs of anxiety and hesitation or felt sad or had difficult time accepting the situation, the researcher would provide support or if they preferred, the child could to speak to a psychologist who was aware of the research. Otherwise, the researcher offered to end the interview. All data from participants is to be kept confidential. Participants' names will not be shown. Only the researcher, the researcher's advisor, and the institutional review board only can review materials if necessary. If a parent or guardian decides to allow a child to join in this study, it is on a voluntary basis. The participant can withdraw from this study at any time.

### *Participants*

Snowball sampling technique was used because the participants were not hospitalized since they lived in far flung areas outside of the city. There was no easily available data like their demographic information and personal details that could be obtained certainly. The researcher selected a parent of a school-age child known to have advanced cancer based on the inclusion criteria. The potential parent(s) or guardian(s) as well as the participants were not known by the researcher beforehand. The researcher prepared a letter of permission for the parents or guardian. The researcher described the research, the purpose of the study, and benefits if the child participated. The researcher did not contact the hospitals to recruit the participants; instead the researcher carefully and discreetly asked the parent about sharing some information about the study she just completed to other potential parents whose children were listed in a cancer registry of a cancer support organization. Most of the chemotherapy treatment was sponsored by either the Philippine government or their locality. Patients came to the hospital for chemotherapy as outpatients only. However, the limitation of snowball sampling was that the parent or guardian referred those whom they knew had similar medical condition as their child; nonetheless, this sampling method might only have reached out to a small group of children as participants. During patient recruitment, some patients voluntarily certified to enter the study than others, such sample would not be representative of the population in which this research was done. This is a kind of sampling bias.

The inclusion criteria for participants' selection were as follows: (i) 10-14 years old; (ii) diagnosed with advanced cancer (second stage) as verbalized by parent or guardian; (iii) ability to communicate in English; (iv) willingness to participate in the study; and (v) ability to express their experiences through graphic representation such as drawings and narrative description such as writing. The number of participants who participated in this study was based on saturation. Data saturation were attained when the researcher observed data redundancy among the participants.<sup>14</sup> The rationale of age 10-14 years in the inclusion criteria was selected because the cognitive development of this age group according to Jean Piaget, is that, they are already able to understand instructions and understand concepts of past, present, and future, and they are able to think in abstract terms and use rational thinking to arrive at conclusions.<sup>7</sup> Ten participants who met inclusion criteria were in the age range of 10-14 years. Four were 10 years old, two were 12 years old, two were 13 years old, and another two were 14 years old. Five were boys and five were girls. The highest grade level attained was grade 8 while the lowest

was grade 2. Six participants were diagnosed with acute lymphocytic leukemia (ALL), two with acute myeloid leukemia (AML), one with osteosarcoma, and the last one with retinoblastoma. Seven were admitted in private teaching hospitals and three were in a public government-owned teaching hospital. Six are still undergoing chemotherapy treatment, and four are on maintenance course.

#### Data collection

On the data collection, the participants laid out the aesthetic expression of their experience being persons with advanced cancer. The participants were provided with a drawing pad, pencil, eraser, crayons, colored pens and pencils, and watercolor. The participants could choose the materials that suited their preference to use for drawing. The researcher emphasized to the participants that the drawing should be without any help from any member of the family. Drawing materials were properly arranged on the table beside the participant for easy accessibility. Once the participant was ready, he or she started to draw and write. Each participant was instructed to show by drawing or illustrating their life or living experiences with advanced cancer. Participants were allowed 30-45 minutes to draw their pictures. The rationale of the time limit of 30-45 minutes is because this is the average period of time for which a typical school-age child can maintain focus on a given task, growing tired after 45 minutes.<sup>6</sup> In the narrative description phase, the participants described the expressions or images in the drawing through writing on provided paper. If the child opted to verbally describe the picture, the researcher audiotaped the description (as indicated in the informed consent form) and clarifications were made about the participants' uncertain statements.

After drawing and writing, the face-to-face interview followed. The semistructured, open-ended interview questions were used in the study. Interview sessions were conducted in quiet, private, and safe locations of the participants' choice. Interviews were carried out with audiotaped record on at least three occasions for 1 hour and 30 minutes and later were transcribed. Field notes were taken and completed while conducting interviews.

#### Data analysis

Drawings from each participant were inspected one by one. The steps of analysis were based on Farokhi and Hashemi.<sup>15</sup> Images, symbols, objects, places, and events were noted. Participants' interpretations were recorded. Next, written and audio-recorded narrative descriptions of the drawings were examined individually, and field notes were made. In accordance with van Manen's<sup>16</sup> hermeneutic

phenomenological approach, the researcher made use of reflective methods such as thematic reflection and existential reflection, as well as writing methods to come up with an interpretation of the meanings associated with aesthetic expression, as it is lived.

All transcripts were read several times for familiarity, marking any sentences or phrases that were particularly significant in terms of clarity. Participants were asked to describe the hidden meanings observed in the repeated symbols in the participants' drawing. Next, the documents were analyzed by applying van Manen's approach.<sup>16</sup> The text was read again and the phrases highlighted that particularly revealed significant statements about participants' experience. This process generated thematic statements regarding what each sentence or cluster of sentences revealed. Themes that emerged were identified. To complete the data analysis process and thematic reflection, existential reflection served as a guide grounded on the five life-worlds: "lived body," "lived relation," "lived time," "lived space," and "lived thing."<sup>17</sup> Thus, these five life-worlds were particularly helpful in engaging in reflection for this study, considering that the lived experience of school-age children with advanced cancer was more profoundly understood when this existential ground was considered.

#### Trustworthiness of qualitative study

Trustworthiness of the study was maintained by using the criteria of Lincoln and Guba.<sup>18</sup> Credibility established the integrity that the truth of the findings was consistent with the reality. In this study, the data were collected from participants who had experience advanced cancer and could reflect and describe the experience: Dependability was accomplished following the process of an external audit to evaluate the accuracy and whether the results, discussions, and conclusion are consistent with the data. The external audit was done by consultation with a thesis advisor and peer review from an expert. Confirmability displays that the findings were formed by the participants and not by the researcher's bias, motivation, or interest. Confirmation was attained by triangulation that used multiple data sources including graphic representation through drawings, narrative descriptions, interview transcriptions, observation form, and field notes written by the researcher during data collection. Transferability was achieved by thick descriptions in which the researcher described the phenomenon in detail.

#### Results

Five major thematic categories were reflected within the existential five lived-worlds,<sup>17</sup> as presented in the Table.

**Table 1**  
Major thematic categories and their thematic categories within five existential life-worlds of school-age children with cancer.

Five existential life-worlds	Major thematic categories	Thematic categories
Live body	Poor body conditions but strong mind	<ul style="list-style-type: none"> <li>• Having physical discomforts</li> <li>• Feeling "not normal"</li> <li>• Changing body image</li> </ul>
Lived relation	Unlike the others	<ul style="list-style-type: none"> <li>• Cancer never owned me</li> <li>• Supportive family</li> <li>• Appreciated compassionate school</li> <li>• Living strength through kindness companionship</li> </ul>
Lived time	Being in present while waiting for normal life	<ul style="list-style-type: none"> <li>• Bullying was worse than cancer</li> <li>• Remembering the past active life</li> <li>• Feeling left behind by others</li> <li>• Waiting for comfort from discomfort</li> <li>• Hopeful thought for the future and will fight the cancer</li> </ul>
Lived space	Certain places of living caring	<ul style="list-style-type: none"> <li>• So near yet so far</li> <li>• Living in secure places</li> <li>• Nature nurturing living with cancer</li> </ul>
Lived things	Supportive living by technology	<ul style="list-style-type: none"> <li>• Inspiration from God's blessings</li> <li>• Enhanced connectedness and knowledge through technology</li> <li>• Hope for technology and being cured from cancer</li> <li>• Being close in cyberspace</li> </ul>

*Lived body: poor body conditions but strong mind, "cancer never owned me"*

The conscious awareness of the participants that even if they had cancer, they did not allow cancer to control them. The manner of accepting the uncomfortable corporeal uneasiness of cancer and chemotherapy was its physical impact such as pain, hair loss, and weight loss that further affected body image as experienced by most of them as reflected in the subthemes "having physical discomforts," "feeling not normal," and "changing body image." Below is an example of statement reflecting poor body conditions affecting lived body of the participants:

"I feel my body was behaving differently. It was more like of a sickly that would not go away and came back the next day. I also woke up in the middle of the night completely soaked in sweat." (P5, L388-389).

In a similar way, the reflective awareness of the participants about their physical selves after chemotherapy treatment was on changing body image. They focused on uninviting messages around them and made critical comparisons between their bodies and what they see as ideal bodies.

Cancer tried to strike them down but the strength of character to survive was firm in the struggle to be treated and focused on surviving. Participant 1, who was a happy child, full of positivity, and confident about herself, illustrated a picture reflective of her positive outlook despite her diagnosis of advanced cancer explained that:

"My positive belief that I will get well from advanced cancer pushes me more to be optimistic that I will survive." (P1, L16-17)

In Figure 1, illustrated by participant 1, she wrote that "I had cancer but cancer never had me."

*Lived relation: unlike the others, "bullying worse than cancer"*

The participants had their family with them especially during the critical stages of their illness. They understood and experienced how

every member of their family tried to be present for them. They gained strength in the support their family provided them. In the same manner, the readiness of the school to accept and assist the participants from the difficulty of the disease and delicate feelings was overwhelming. In this study, all participants acknowledged the special attention granted by their teachers and school administrators. Likewise, the participants were inspired by friends on their journey back to health. Their friends did not help in restoring physical discomforts but encouraged them to be back to normal activities.

On the other hand, the participants looked different, and their physical features were not acceptable to other children that they met in school every day. The unpleasant intimidation was considered to be more unpleasant than the participants' disease. Their confidence was affected by how they looked at their physical features. They perceived changes in their own bodies and worried about these. They compared themselves with their peers. During the interview, a child elucidated, as her experience is shown by a picture of a girl with a swollen finger as she colored it red with tears falling from eyes and turned her back from her classmate who attacked her.

"My swollen finger was red, and the point of the ball pen was red because of the blood stain from my finger. My tears were falling on my face because of the pain of the point of the pen which stabbed me hard. I started to cry and our teacher dismissed our class to apply first aid on me." (P9, L119-120).

In Figure 2, this participant reflected her life-world at school and wrote that "Bullying: worse than cancer."

*Lived time: being in present while waiting for normal life, "forget about cancer"*

The participants lived time as children missing their normal active life because of the prolonged absences from school, which placed them at a disadvantage because interaction and association separated them from others during treatment compared with their peers and siblings who enjoyed the normal active life. They felt behind the others because

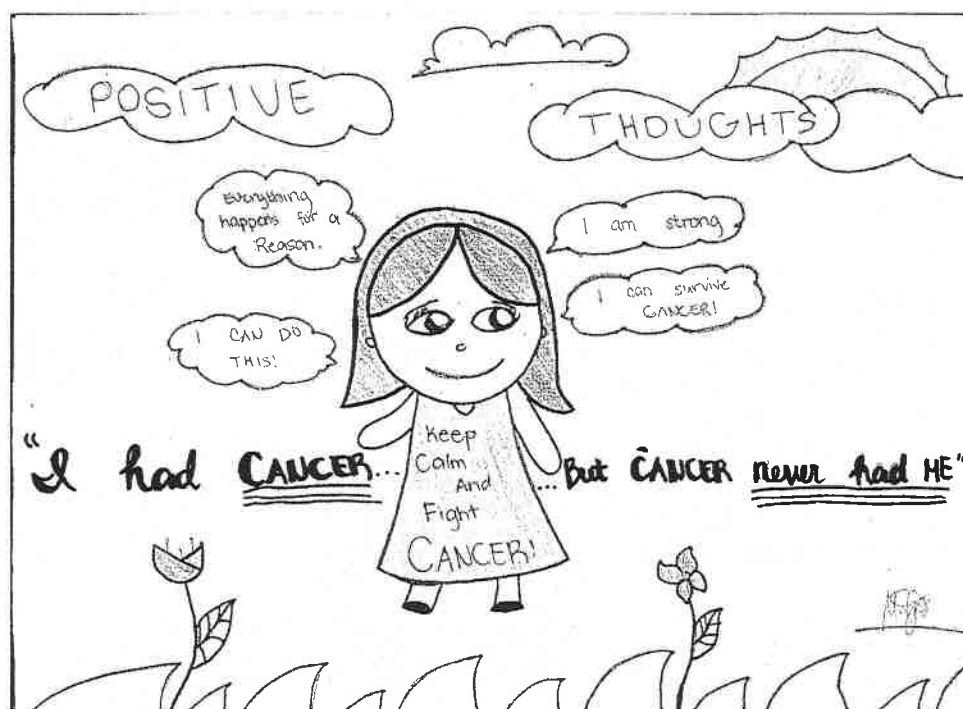


Fig. 1. Illustration by Participant 1.



Fig. 2. Illustration by Participant 9.

of the big life changes brought about by advanced cancer that threatened their sphere of influence, especially when it was related to their school. Some participants experienced the progressive ups and downs of academic performance caused by advanced cancer. Nevertheless, despite all that happened, they were encouraged for what the future brings. Participants hoped for a chance or a different light of comfort that their cancer would end. The participants eagerly waited for relief from discomfort while waiting for normal and be liberated from cancer. The excerpt braced this awareness.

*"I have been waiting for a long time. I like to be cured to happen sooner, so I can do what normal healthy kids also do."* (P1 L113-114)

However, they tried to concentrate on their present moment and appreciate the beauty and nature in the world to divert and keep their minds busy to forget about their cancer. They continued to hold on to their dreams, hopes, faith, and determination and had gathered strength from support systems because when they fought against cancer, that was never to give up. They made a conscious attempt to avoid references to their cancer. Instead, they talked about things they liked and what made them feel good. In his narrative, it was evident that a participant was much more concerned with his life beyond and outside his cancer diagnosis and treatment. He has hopeful thoughts for the future and will fight the cancer; he shared:

*"I forget about my cancer. I try not to think about my illness. I keep myself busy to entertain myself from being sick. I will fight this cancer!"* (P5, L408-409).

In Figure 3, this participant reflected his life-world "my life with cancer" relative to his immediate surroundings, particularly the mountain and what it provided; the fresh air and fresh vegetables, he said, were beneficial and acted as a treatment for his cancer.

*Lived space: certain places of living caring, "the places that help me with my cancer"*

The participants believed that the chemotherapy treatment was something within their grasp to end cancer. It was a devastating experience to achieve what they wanted, but in the end they still needed to struggle. They realized that there was still much more to be done or resolved before cancer was ended. They were so near to their goal, yet still had to achieve it.

The places like home, school, hospital, church, and nature were the places of caring and healing that were significant in assisting the

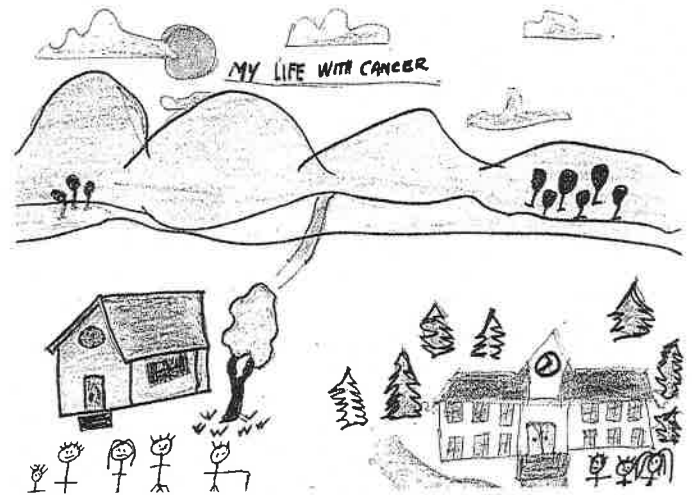


Fig. 3. Illustration by Participant 5.

participants' desires to rebuild themselves after the diagnosis and treatment of advanced cancer. Many participants were fond of these places and indicated in their art work. They had been confined to these places in their search for acceptance and comfort as they would submit to chemotherapy. When they wanted to be safe and protected while they rested, they chose to be at home. A participant mentioned:

*"I feel safe and protected when I am home with my grandparents because I am important to them."* (P2, L207-208)

Another participant specified:

*"At home I'm safe since nobody can bully me."* (P8, L423)

The participants experienced the security and strength needed for their condition in the hospital. They believed in the doctors and nurses who took care of them. The challenges of treatment became less stressful for participants because of the life they still enjoyed, exemplified by the beautiful nature that surrounded them. Nature fostered therapeutic effect on participants' recovery. School is a certain place for the participants to live. The most significant effect of school on the participants was the awareness of their teachers and classmates about their condition and maintained their attachment to each other to cope with the demands of schoolwork. All participants continued to go back to school because they enjoyed being in school. A participant said:

*"I enjoy school because I have friends and classmates to learn and play with."* (P2, L181)

Aside from home, hospital, nature, and school, the participants also experienced being in church, a place to go with their families to pray to God for their condition as a source of strength and recovery. A participant described:

*"I feel happy when I am inside the church because I feel the blessings of God to cure my cancer."* (P3, L464-465)

Figure 4 was the representation of the places of healing by Participant 3. This participant also wrote the description in Figure 4 to explain that "The places that help me with my cancer." In the picture, there are certain places for the participant to live in caring such as home, hospital, church, and school.

*Lived thing: supportive living by technology*

The source of technology valued by the participants on their life-world during cancer was the use of the gadgets and the Internet as

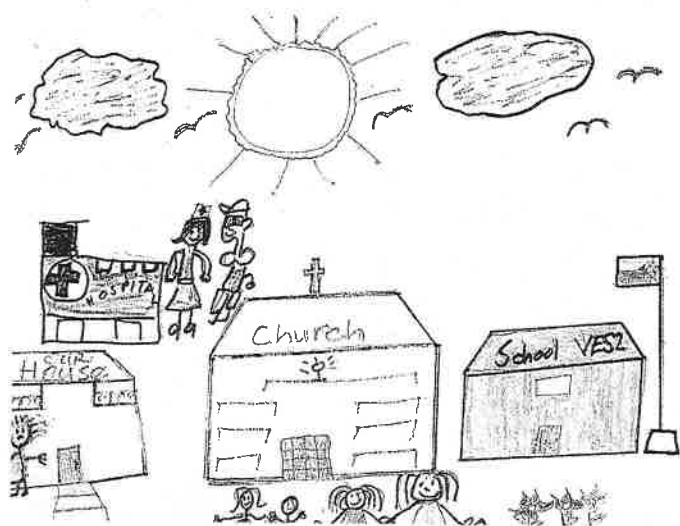


Fig. 4. Illustration by Participant 3.

means to communicate and gain knowledge and information about cancer and treatment. In this day and age, children are well-adapted to using computers, mobile phones, and tablets. They can easily access information technology and communicate with family and friends and receive quick responses. The use of technology reduced the participants' burden. A participant stated:

*"My grandmother always wants me to keep my cellphone open so she can call me anytime."* (P2, L323)

Being close in cyberspace highlighted participants' connectedness with family, friends, and school during their illness through the use of Internet. Technology was an effective medium of support to reduce participants' separation from their support circle. This was evident in the statement of a participant:

*"I also stay updated with my friends through mobile phone. We send messages and sometimes I call them for updates about school."* (P2, L318-319)

The transition a participant experienced detailed the physical, emotional, and social changes he underwent as he dealt with cancer. The transition from a wheelchair to the use of crutches to be able to walk was a struggle. The loss of a limb, acceptance of cancer, and connecting with people for support, he found a new beginning to keep him going like normal as the others in school. As the participant came to terms with his situation, he began to go back to school alone, as a motivation to regain his confidence, and rejoin school activities. He was happy again.

*"I started to meet friends online with the same condition as I have. We shared experiences and I realized there are others who are even worse than my case. It is very uplifting when I meet people who can help me through counselling and advices from online with the same condition as mine."* (P8, L463-464)

Figure 5 is the illustration of Participant 8's experience in life. He drew himself with the wheelchair and crutch that was the technological equipment to support his daily living and connect with the others.

#### Limitation

One limitation of the study was that it had to be conducted in several areas in Negros Island. Therefore, this study cannot be generalizable to other context. In these areas, the participants used some local

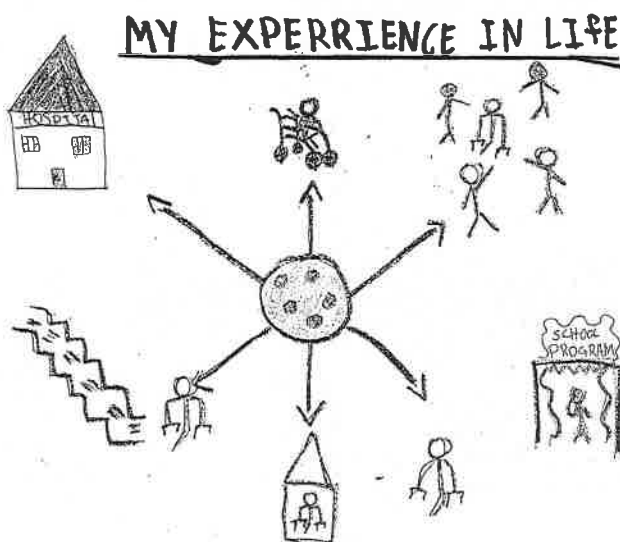


Fig. 5. Illustration by Participant 8.

idioms more than the official language, which the researcher might not fully understand the meanings. The researcher asked the participants and locals meanings of words.

#### Discussion

Aesthetic expressions through drawing and writing helped school-age children with advanced cancer uncover their lived experiences as they existed in their life-worlds in relation to their body, relationship with others, time, space, and things as they told their stories. They had the opportunity to put their feelings and thoughts through drawing into their own words. Participants' drawings not only reflected shared experiences of a life-world perspective having fallen ill with advanced cancer but also the distinct, unique individual experiences of each child.

The body changes experienced by several of the participants were a challenge for them. They stated that physical discomforts were the aspect of treatment that disturbed them the most. The physical change in appearance was evident in their drawings like "bald head," "protruding eye ball from the socket," "amputated limb," and "weight loss," which served as a constant bodily reminder of their illness. According to Ricci and Kyle,<sup>19</sup> both cancer and its treatment may change how a child will look. Children worry about being different. Their body image is threatened, and at this stage in their life children are aware of their bodies and belonging to a group of friends. This was similar to what was reported by Bambach<sup>20</sup> that children undergoing cancer treatments described their experience with numerous hurdles in physical appearance. The physical problems of childhood cancer started from the initial diagnosis of the condition and admission in a hospital to the administration of chemotherapy.

The participants' life with advanced cancer revolved around being and dealing with relationships. At the same time, advanced cancer and hospitalization separated the participants from their family and friends for a short time at the beginning of chemotherapy. As with Boles's findings,<sup>21</sup> childhood cancer treatment not only impacts physical, psychological, and social development but also limits a child's participation in community contexts such as school. However, participants managed their condition better because the support systems provided them with strength, courage, and motivation to successfully achieve and face the different stages of treatment and adjustments. This is similar to a previous study by Rosenberg-Yunger et al<sup>22</sup> in which children with cancer reported that many of them received support from family, friends, community, teachers, religious organizations and cancer organizations, and

government programs that assisted their conditions. A strong family support was significant because their family stood by them during the critical stage of their illness. This is consistent with the study of Vrijmoet-Wiersma and da Silva Pedro, et al<sup>23,24</sup> who found in their studies that childhood cancer is one of the most challenging experiences a parent can have but with support from other members of the family, a great deal of the burden is lessened. Meanwhile, help from friends and teachers gave encouragement that made them feel normal again, especially in school. Even if they looked different from other school-age children and their physical features were not "acceptable" to other children in school, they kept going on with their lives. Their strong belief in God was the ultimate reason for the inspiration to move on because participants believed that God could bring them a state of balance. This is consistent with the study of Khoury et al<sup>25</sup> in which participants see God as a benevolent Supreme Being working for the good of the individual; others see God as in control but not approachable and accept circumstances with resignation.

Embedded with time that always remained as memories were encounters of the past. Consistent with the study of Fernandez-Delgado,<sup>26</sup> which indicated that pediatric cancer patient is not a doomed invalid but someone with a life to be fought for, whereas few years ago they were regarded as a regrettable complication. However, in the present, burdens of treatment, reassurances from family and friends, and inspiration from God changed that. Similarly, Thompson et al<sup>27</sup> stated that returning to school after diagnosis and treatment with cancer promotes positive adjustment for children with cancer. School-age children have an expanded knowledge about the world and about bad things that can happen.<sup>28</sup> The participants in this study had a good sense of how their condition affected their lives and how they intended to respond to the challenges. Santrock<sup>29</sup> noted that school-age children ages 10 to 14 years old have a deeper sense of their inner world. The recollection of the past became the yardstick in becoming hopeful for the future.

On the other hand, the surroundings in which the participants moved and found themselves accepted influenced the space as living (home), caring (hospital), and healing (school and church). The findings concurred with the previous study of Enskär and von Essen<sup>30</sup> who mentioned that the child with cancer spends more time at the hospital and less time at school during treatment. However, the participants' individual home offered them not only protection and security but also made them susceptible to change. The adjustment was influenced by circumstances under which they encountered, such as feeling isolated and separated from others. In contrast, the participants acknowledged the nurturing effects of nature, which diverted their attention away from cancer and resulted in a less stressful treatment. A previous study by Blaschke<sup>31</sup> discussed how nature provides patients with cancer with unburdened physical and psyche space. According to Blaschke, nature could offer a familiar and nurturing context, especially when patients might move in and out of the home. Additionally, the school was experienced as an enjoyable atmosphere.<sup>31</sup> The participants appreciated their good form that brought them back to school after treatment and rest period. They felt normal again. At the same time, this finding corresponds with the previous study of Rudolf et al.<sup>32</sup> Their study found that the school to a child with cancer was seen more than just a place for learning. It was also a place for fun, friendship, and belongingness where a child who came back after treatment suffered several challenges. Under other conditions, they sought refuge in the church because they felt the power of God restored their health from cancer as they asked for divine intervention and intercession for recovery. This finding accords with the previous study by Corcioli et al<sup>33</sup> who found praying and going to church was embedded in the life of children with cancer to lessen their distress as they journeyed through cancer.

In this study, lived things were experienced as relating technologies in acquiring knowledge and information as well as hope for a cure from cancer. The participants lived in the information age.

Similar to other studies, the current study indicates that participants used technology devices like computers, mobile phones, and tablets, including Internet connection and running various applications.<sup>34</sup> In addition, Hockenberry et al<sup>6</sup> cited that children spend a significant amount of time every day being involved in media-related activities, including the use of tablets, videogames, and cell phones. In this study, the participants used communication technology to acquire knowledge and information about advanced cancer, chemotherapy, and online support. This is consistent with McGee and Gray's work,<sup>35</sup> which reports that children and adolescents are more willing to use Internet connection technology (ICT) devices compared to paper-and-pencil and traditional forms because of their strong learning potential when these devices are used. Similarly, a previous study by Rutten et al<sup>36</sup> stated that information technology has clearly emerged as an important means of meeting informational needs of patients with cancer, particularly for treatment-related information. In this study, technology went beyond information seeking, by providing resources for social and emotional support of participants. This is in concordance with the results of the study of Bennett et al<sup>37</sup> in which they identified that children with cancer find comfort and confidence in using electronic devices and this served as an advantage by increasing shared information.

Participants correspondingly encountered things like toys to play with during their illness that diverted their attention from the discomforts of illness and provided comfort and relief. Similarly, previous study by Li et al<sup>38</sup> stated that cancer brings restrictions to the life of the child that interfere with their development. Playing is a source of pleasure for children; it is they, for a moment, forgets the difficulties of the illness and treatment and what they are going through to enter a fantasy world. In the current study, a participant presented in his drawing a pet dog that gave him happiness. During the interview, others verbally expressed the joy of playing with Barbie dolls and enjoyed journal writing and playing with their siblings. In a qualitative study by Silva et al<sup>39</sup> on children with cancer, it was found that playing promotes child development, and it is also a source of pleasure and helps maintain the lives of these children. Finally, online networking retained the participants' correspondence with family, friends, and school during their illness. It provided opportunity for participants to share personal experience and feelings to fill the gap between treatment and the need for emotional support.

## Conclusion

The study showed that children with advanced cancer approached their diagnosis and condition negatively but eventually arrived at positive perceptions throughout the course of their treatment. Even though the themes were arranged into the five life-worlds, certainly these five existential elements were present at all times because they were interrelated and it was impossible to completely separate them. The time axis journeyed by the participants began with a negative point of view. Nevertheless, they turned negative experiences into a positive one.

## Implications for Nursing Practice

The findings of this study can be recommended to oncology nursing practice and nursing research. This study also highlighted the need for physical and emotional as well as institutional support for school-age children returning back to school after cancer diagnosis and treatment. It is suggested that professional counseling, debriefing, and emotional support from school officials are needed to understand and facilitate children's feelings after the cancer diagnosis and treatment and to help them cope with their condition. In addition, the findings of this study involved the attention of the nurses caring for children with cancer. Pediatric nurses may provide an approach for the expression of feelings through aesthetic means such as draw-

and-write interviews. Furthermore, training concerning aesthetic practice-related nursing intervention in caring for children with cancer is recommended to address the lack of expertise in dealing with them. As a final point, the results of the present study provide the guideline of using aesthetic expression in children with cancer for further studies.

### Declaration of Interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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### Conflict of Interest

The authors declare that they have no competing interests.

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