EMPLOYMENT OF COLAIZZI'S STRATEGY IN DESCRIPTIVE PHENOMENOLOGY: A REFLECTION OF A RESEARCHER

Ghada Abu Shosha, PhD

Faculty of Nursing, Zarqa University , Jordan

Abstract

Background: Phenomenology is a philosophy and a research method designed to explore and understand people's everyday lived experiences. Aim: This paper aims to convey the experience of using Colaizzi's (1978) strategy of descriptive phenomenological data analysis in a nursing research. Method: Using a real research example, the process of Colaizzi was used to provide assistance in extracting, organizing, and analyzing such narrative dataset. Results: the eventual outcome sought from applying Colaizzi's strategy in descriptive phenomenology was to elicit an exhaustive description about the phenomenon regarding adolescents' experience after receiving chemotherapy and their coping strategies used to accommodate with physical changes occurred after that therapy. A number of significant statements and theme clusters were integrated to formulate the overall themes which describe the phenomenon thoroughly. Conclusion, the use of Colaizzi's strategy in descriptive phenomenology was successfully evident in this research. Researchers are encouraged to emphasize on enhancing rigor to the study findings through employing different trustworthiness elements throughout their research process.

Keywords: Colaizzi's Strategy, Descriptive Phenomenology, Bracketing, Trustworthiness

Introduction

The roots of phenomenology are related to early history, to Plato, Socrates, and Aristotle, as philosophers struggled to understand phenomena (Fochtman, 2008). Phenomenology flourished in the first decade of the twentieth century under the influence of the German philosopher Edmund Husserl. Husserl aimed to establish a rigorous and unbiased approach that appears to arrive at an essential understanding of human consciousness and experience (Fochtman, 2008; Lopez & Willis, 2004; Wojnar & Swanson, 2007). Therefore,

phenomenology aims to: (1) gaining a deeper understanding of the meaning of people's everyday experiences (Polit & Beck, 2008; Van Manen, 1990), and (2) directing the understanding of phenomenon which is consciously experienced by people themselves (Polifroni & Welch, 1999). According to Van Manen (1990), phenomenological research does not develop theory; it provides insight into reality and makes us closer to the living world. The phenomenological researcher may ask the following questions: What is this experience like? (Laverty, 2003); what is this or that kind of experience like? (Van Manen, 1990); what is the essence of this phenomenon as experienced by these people? (Polit & Beck, 2008); or, what is the meaning of the phenomenon to those who experience it? (Polit & Beck, 2008).

Approaches of phenomenology

Phenomenology can be divided into descriptive phenomenology created by Husserl and interpretive- hermeneutic phenomenology created by Heidegger. However, overlapping between both approaches is expected (Fochtman, 2008). The descriptive phenomenology used to reach true meanings through engaging in-depth into reality (Laverty, 2003; Lopez & Willis, 2004). Husserl valued the experience of phenomenon as perceived by human consciousness which should be an object of scientific study (Lopez & Willis, 2004).

One of the important assumptions of Husserlian phenomenology is bracketing in which the researcher should declare personal biases, assumptions, and presuppositions and put them aside (Gearing, 2004). The aim of this is to keep what is already known about the description of the phenomenon separately from participants' description. The researchers should avoid any imposing of their assumptions on the data collection process or the structure of the data (Ahern, 1999; Gearing, 2004; Speziale & Carpenter, 2007). Therefore, bracketing is a way to ensure validity of data collection and analysis and to maintain the objectivity of the phenomenon (Ahern, 1999; Speziale & Carpenter, 2007). Husserl believed that bracketing helps to gain insight into the common features of any lived experience. He referred to these features as universal essences and considered them to represent the true nature of the phenomenon under investigation (Lopez & Willis, 2004; Wojnar & Swanson, 2007).

Later, Heidegger (a student of Husserl) modified the work of Husserl and introduced some assumptions that may yield meaningful inquiry. Heidegger’s ideas include the interpretive or hermeneutic research tradition. To study human experience, hermeneutics comprises not only description of the major concepts and essences, but also looking for meanings embedded in common life practices. These meanings are not obscure, so it can be extracted from the narratives generated by people (Lopez & Willis, 2004; Wojnar &

Swanson, 2007). Heidegger believed that the relationship between an individual and his or her world should be the focus of phenomenological inquiry.

Phenomenological data analysis using Colaizzi's (1978) strategy

Prior to describe the analytical procedure of dataset, a brief description of data collection and transcripts formation are summarized as follow:

Semi-structured, face-to-face interviews were conducted using a pre-prepared interview guide. Participants were encouraged to talk freely and to tell stories using their own words. Each interview lasted from 45 minutes to one-hour and all of them were conducted by the main researcher. At the end of each interview, the researcher reminded the participants about her need for a second contact with them via telephone calls to discuss the study findings and to make sure that the study findings reflect their own experiences. The level of data saturation was determined by the main researcher and by another independent researcher in a process carried out in parallel with data collection. Then, saturation was based on consensus between both researchers. Twenty-two participants engaged the study. In eventual, the transcripts were double-checked by the independent researcher who has experience in qualitative research.

The following steps represent Colaizzi process for phenomenological data analysis (cited in Sanders, 2003; Speziale & Carpenter, 2007).

1. Each transcript should be read and re-read in order to obtain a general sense about the whole content.

2. For each transcript, significant statements that pertain to the phenomenon under study should be extracted. These statements must be recorded on a separate sheet noting their pages and lines numbers.

3. Meanings should be formulated from these significant statements.

4. The formulated meanings should be sorted into categories, clusters of themes, and themes.

5. The findings of the study should be integrated into an exhaustive description of the phenomenon under study.

6. The fundamental structure of the phenomenon should be described.

7. Finally, validation of the findings should be sought from the research participants to compare the researcher's descriptive results with their experiences.

Figure (1) illustrates the process of descriptive phenomenological data analysis created by Colaizzi (1978).

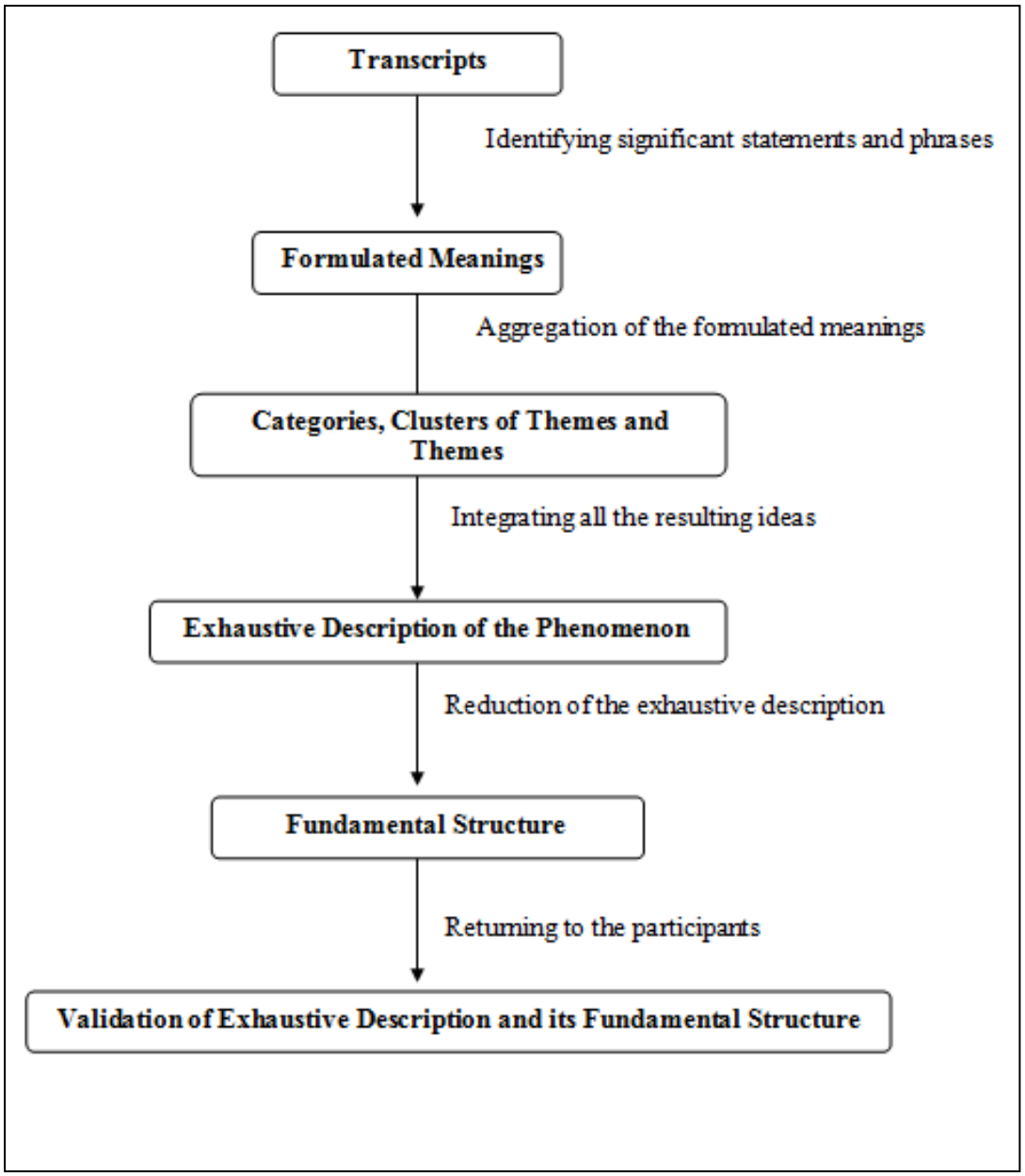

Figure 1. A summary of Colaizzi's strategy for phenomenological data analysis.
(developed by the author in 1/9/2010).

The previous steps were employed and confirmed by two researchers as follow:

Step one

Each transcript was read several times to gain a sense of the whole content. During this stage, any thoughts, feelings, and ideas that arose by the researcher due to her previous work with cancer patients were added to the bracketing diary. This helped to explore the phenomenon as experienced by participants themselves.

Step two

In this stage of analysis, significant statements and phrases pertaining to body image changes and coping strategies were extracted from each transcript. These statements were written in separate sheets and coded based on their "transcript, page, and line numbers". After extracting the significant statements form transcripts, the two researchers compared their work and reached consensus. Four hundred and ten significant statements were extracted from the twenty-two transcripts. Table (1) provides examples from the significant statements which were identified and extracted from patients' data.

Step three

Meanings were formulated from the significant statements. Each underlying meaning was coded in one category as they reflect an exhaustive description. Similarly, both researchers compared the formulated meanings with the original meanings maintaining the consistency of descriptions. However, minimal differences were found between the two researchers. Four hundred and ten formulated meanings were derived from the 410 significant statements. Thereafter, the whole statements and their meanings were checked by an expert researcher who found the process is correct and the meanings are consistent. Table (2) provides examples of how significant statements were converted into formulated meanings.

Step four

After having an agreement toward all formulated meanings, the process of grouping all these formulated meanings into categories that reflect a unique structure of clusters of themes was initiated. Each cluster of theme was coded to include all formulated meanings related to that group of meanings. After that, groups of clusters of themes that reflect a particular vision issue were incorporated together to form a distinctive construct of theme. Indeed, all these themes are internally convergent and externally divergent; meaning that each "formulated meaning" falls only in one theme cluster that is distinguished in meaning from other structures (Mason, 2002).

Later, both researchers compared their clusters of themes and checked the accuracy of the overall thematic map along with having assistance from the expert researcher in qualitative research.

Fourteen theme clusters emerged which were grouped later into four emergent themes. Table (3) shows the process of constructing the first theme "Awareness of deteriorating physical changes" through integrating various clusters of themes.

The final thematic map developed for this study is illustrated in Table (4).

Table 1: Examples of Significant Statements.

Significant Statements	Transcript No.	Page No.	Lines No.
"I am a girl, and I want to be pretty as any girl. When I became ill and got chemotherapy, everything changed; my hair…face…weight…and my color, I became ugly"	18	2	61-63
"I am very annoyed to see myself like this, and many times I cry because of that…my appearance has changed… sometimes I feel that people are disgusted because of my appearance, and sometimes they feel sorry for me because of my condition, this causes me to feel depressed"	2	4	154-157
"At first, I felt that all my friends were shocked because my appearance has changed a lot. They stare at me, but later they got used to see these changes…our relationship is very good now"	6	3	115-117
"Yes, surely, my family members tell me about these changes that they are acceptable, they try to make me feel normal…my father tells me that these changes are normal; they are from God, he usually supports me"	4	8	353-355
"I started to wear a hat because of my hair, and I wear a mask when these lesions appear around my mouth ... I do not want anyone to see them…they are very disgusting"	22	3	99-101

Table 2: Examples of the Process of Creating Formulated Meanings from Significant Statements.

Significant Statements	Formulated Meanings
"I do not like to see people because all of them are curious to look at something strange, and I always hear from most of the people that my hair will not grow again because of chemotherapy, they only want to look at me" (Transcript 2, page 2, lines 83-85).	People are curious to look at the patient, considering different appearance than normal.
"I feel that I have changed, I am ugly, my face is very yellow, and sometimes I have dark discoloration below my eyes, it is scary and abnormal…like ghosts" (Transcript 6, page 2, lines 85-87).	Patient realizes that the current appearance is undesirable due to skin discoloration throughout the body surface.
"Nurses are always kidding with me, and when I buy new clothes they say to me they are very beautiful" (Transcript 6, page 4, lines 146-147).	Nurses kindly regard patient's appearance and dress.
"My family members say there is no problem, this disease is from God, and they say that everything will return as in the past after you complete your chemotherapy" (Transcript 11, page 4, lines 191-192).	Patient shows that her family accepts and reassures her by returning to the normal life after completing the treatment.
"It is clear that I am a cancer patient. Actually, there is no one who did not hear about the effect of chemotherapy like hair loss, vomiting, and others" (Participant 22, page 2, lines 53-54).	Patient indicates that any person can recognize cancer through its signs such as hair loss and vomiting.

Table 3: Example of How the First Theme "Awareness of Deteriorating Physical Changes" Was Constructed From Different Clusters of Themes and Formulated Meanings.

Examples of Formulated Meanings	Theme Clusters	Emergent Theme
• Patient realizes that the current appearance is undesirable due to skin discoloration throughout the body surface. • Darkness below eyes is considered an abnormal change associated with chemotherapy. • Hair loss is the most stressful change caused by chemotherapy. • Loss of eyebrows and eyelashes are distressing changes which are very difficult to hide.	Awareness of altered skin	Awareness of deteriorating physical changes
• Patient complains of changes in nails hardness from chemotherapy. • Patient is aware of changes in skin texture such as softness, transparence, and then roughness. • Patient complains of the shrinkage in his leg muscles. • Puffy skin and puffy eyes caused by chemotherapy are seen as undesirable changes. • Patient realizes that low immunity associated with chemotherapy causes lesions inside and outside mouth.	Awareness of impaired body integrity	
• Patient complains of increasing in his weight because of chemotherapy. • Patients links fluctuating weight with chemotherapy. • Patient realizes that vomiting and loss of appetite are other side effects of chemotherapy that contribute to weight loss. • Patient describes "cortisone" as a drug that causes weight gain. • Patient complains of difficulty to find suitable dress due to the changed weight. • The patient believes that even when she finds suitable clothes, her general appearance is still not attractive.	Awareness of changed body weight	

Table 4: The Final Thematic Map.

First Theme: **Awareness of Deteriorating Physical Changes**	**Second Theme:** **Psychosocial Impact and Effects**
Awareness of altered skin • Losing hair • Darkness below eyes • Hand spots from cannulation • Freckles • Yellowish skin color **Awareness of impaired body integrity** • Mouth and lips sores • Brittle skin & nails • Skin texture change • Puffiness of skin and eyes • Shrinkage of legs muscles **Awareness of changed body weight** • Changed weight • Difficulty to find suitable dress	**Reflecting on self-body image** • Frightened and scared from appearance change • Feeling of embarrassment • Feeling ugly • Feeling different from people • Giving less interest towards clothes • Difficulty to tolerate changes **Effects on psycho-spiritual status** • Depression • Feeling of sadness • Feeling of boredom • Feeling of annoyance • Feeling of defeat • Feeling of aggression and nervousness • Feeling of powerful spirit • Hallucination **Relationship impact** • Social isolation • Disliking social interaction • Disliking people look at them • Tendency to talk less • Disliking compassionate people • Disliking people questionings • Preferring people to deal with them normally **Impact on ordinary activities** • Changed daily activities and homework • Disliking going outside home

Table 4: The Final Thematic Map…continue

Third Theme: **Coping Strategies**	**Fourth Theme:** **Developing Supportive Structures**
A. *Problem-focused strategies* **Deliberate measures of concealing signs** • Wearing hats, masks, wigs, and scarves • Wearing pajamas for changed weight • Wearing family clothes that are suitable for patient's size • Wearing full sleeves • Wearing belts • Wearing fashionable dress • Stop wearing T-shirt • Shaving hair • Using cream for spots • Using makeup and putting eyeliner • Eating broccoli plant as hair booster **Utilizing time wisely** • Spending time playing on computers • Talking with patients with same condition • Reciting the Qur'an and going to pray **Accessing hospital facilities** • Using the play room • Using the educational classroom • Participating in parties **B. *Emotion-focused strategies*** **Self-convincing strategies** • Convincing self that they will go back to normal soon • Convincing self that they are stronger than the disease **Negative avoidance** • Ignoring people's comments and mocks • Telling others incorrect information about the reasons of changes • Avoiding people by sleeping	**Approaching contacted-people support** • Supportive friends and colleagues • Supportive health care providers • Supportive teacher **Connection to family** • Family members relieving tension by talking, playing, and accompanying • Family reassuring back to the normal appearance gradually • Husband support • Parents support

Step five

At this stage of analysis, all emergent themes were defined into an exhaustive description. After merging all study themes, the whole structure of the phenomenon "perceptions of body image changes associated with chemotherapy and coping strategies" has been extracted. Thereafter, the researcher sought an expert researcher who reviewed the findings in terms of richness and completeness to provide sufficient description and to confirm that the exhaustive description reflects the perceptions of Jordanian adolescents of their body image changes and the coping strategies. Finally, a validation to this exhaustive description was confirmed with the research supervisors.

Step six

This step is a bit similar to the previous step, but no exhaustive meanings were sought. In this step a reduction of findings was done in which redundant, misused or overestimated descriptions were eradicated from the overall structure. It seems that such attempt was made to emphasize on the fundamental structure. Some amendments were applied to generate clear relationships between clusters of theme and their extracted themes, which included also eliminating some ambiguous structures that weaken the whole description.

Step seven

This step aimed to validate study findings using "member checking" technique. It was undertaken through returning the research findings to the participants and discussing the results with them. Participants' views on the study results were obtained directly via phone calls. This step was done by the main researcher as she took the approval from the participants in advance during the first interviewing. Eventually, all participants showed their satisfaction toward these results which entirely reflect their feelings and experiences.

Demonstrating Trustworthiness of the Study Findings:

Essentially, the qualitative research has to demonstrate trustworthiness in providing rigor and strength to the study validity and reliability in all stages including data collection, data analysis and descriptions (Speziale & Carpenter, 2007; Vivar, McQueen, Whyte, & Armayor, 2007). Trustworthiness approaches; credibility, dependability, confirmability, and transferability were undertaken throughout the study process.

A number of strategies were employed to add rigor to the study such as "member checking" which was achieved by getting agreement from the participants on the emerged results (Creswell, 2003; Creswell 2009; Marshall & Rossman 2006; Speziale & Carpenter, 2007). In addition, the researcher reflected her own presuppositions about the perceptions of altered body image and coping strategies using bracketing. As explained earlier, bracketing eradicates any bias inherent in researcher believes and attitudes (Creswell 2009; Marshall &

Rossman 2006). Peer review of the emerging ideas through discussions with the study supervisor and the independent researcher was also done. Regarding the process of translation, all transcripts were double checked by a bilingual translator who is competent in both Arabic and English. According to Creswell (2009), using of an external auditor who reviewed the whole process of the study and performed an additional checking for coding process and analysis was also applied. Finally, cross checking of the whole analysis process was done by the research supervisor.

Conclusion

This paper described the process of descriptive phenomenology which was used in this study to explore the perceptions of body image changes in Jordanian adolescents undergoing chemotherapy and the coping strategies used to accommodate with these changes. Colaizzi's process of phenomenological data analysis showed an active strategy to achieve the description of living experience for those people. It includes understanding the data and identifying significant statements which in turn were converted into formulated meanings. Thereafter, groups of theme clusters were developed to establish the final thematic construct. Trustworthiness of the study findings was undertaken using different approaches and strategies to achieve each approach affectively. The accurate application of Colaizzi's process of descriptive phenomenology would provide and exhaustive description to the body of knowledge about human experience and therefore would be an effective strategy to establish the basis for future research.

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