

RESEARCH ARTICLE

Understanding Experiences of Young Adult Males with Below-Knee Amputation

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Abstract

Purpose: This study was done to explore the experiences of young adult males with below-knee amputation at surgical wards and clinics in Teaching Hospital, Kurunegala, Sri Lanka.

Design: The study used the phenomenology design of qualitative research.

Methods: Face-to-face interviews were conducted for data collection using a theme list with a saturation point reached at 16 participants. The duration of an interview was 30-45 minutes and was recorded on audiotape and transcribed later. Phases of familiarization with the data, coding, searching for themes, reviewing themes, defining and naming themes, and writing up were conducted accordingly to thematic analysis.

Findings: The young adult male below-knee amputees showed changes in lifestyle with dependence on others, supporting aids, and experiencing discomfort. They showed mental distress with dissatisfaction with life and suffering of life. Additionally, they lacked power with identity changes and encounter economic problems in their lives.

Conclusions and recommendations: It is essential to give special education to the staff caring for the below-knee amputees to minimize their unpleasant and challenging experiences. Health staff can motivate family members and friends for individuals' mental adjustment to their new life. Additionally, the social attitude of the community should be changed positively regarding amputated patients.

Keywords: *Knee amputation, Sri Lanka, Phenomenological study, Males*

Introduction

Below-knee amputation is common in males compared with females. Among various kinds of amputations, below-knee amputation is mostly among young adult males (Ubayawansa et al., 2016). The approximate age limit for young adulthood is 20-40 years. Young adult below-knee amputees experiences so many effects when adjusting for everyday activities. Body image disturbances and impaired self-esteem are commonly suffered by below-knee amputees (Couture et al., 2010). The experiences of below-knee amputees showed a change in the quality of their life (Mohammed & Shebl, 2014).

Many studies have been done at the international level to identify physical experience after below-knee amputation (Rahimi et al., 2012; van der Schans et al., 2002). Rahimi et al. (2012) in Iran conducted a cross-sectional study to assess the impact of pain on

health-related quality of life in a population of war-related bilateral lower limb amputees. They have done this study with 578 persons between the age of 21-71 years. This study shows phantom limb pain, vertebral column pain, lumbar-sacral pain, neck pain, and thoracic pain as physical experiences after below-knee amputation.

Similar findings were identified by van der Schans et al. (2002) in Netherland. They conducted a cross-sectional study with 437 persons to describe health-related quality of life in a population of below-knee amputees and investigate potential determinants, including phantom pain.

In general, the most important amputation-specific determinants of health-related quality of life were 'walking distance' and 'stump

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pain (Schans et al., 2002). According to this study, phantom pain, phantom sensation, and limited physical activities are physical experiences after below-knee amputees (Walters & Williamson, 1998). When considering phantom limb pain, phantom sensation, vertebral column pain, lumbar-sacral pain, neck pain, and thoracic pain are physiological experiences after below-knee amputation. Restricted mobility-limited physical activities and freedom are the physiological effects of lower limb amputees.

There were many studies conducted at the international level on the associated psychological experience of below-knee amputation (Sahu et al., 2016; Mosaku et al., 2009; Woods et al., 2018; Jayakaran et al., 2019), and also few studies conducted in Sri Lanka (Gunawardena et al., 2006). According to Sahu et al. (2016), in India, an observational study was undertaken of 190 males aged 18-45 to identify psychological experience associated with below-knee amputation. They stated psychological distress among the amputees. This study highlighted that psychological illnesses, such as depression and post-traumatic stress disorder are prevalent with below-knee amputation.

According to Woods et al. (2018) in Ireland, a study examined the relationship between psychological variables and sexual functioning in persons with below-knee amputations. They did qualitative research with 65 participants. The result was half of all participants with lower-limb amputations were not currently sexually active. This study highlighted that anxiety and sexual dysfunction are psychological experiences of below-knee amputees. A Sri Lankan study also focused on psychological experience after below-knee amputation. Gunawardena et al. (2006) conducted a study to describe the mental health outcome of unilateral lower limb amputee males and identify the mental health outcome. They employed a cross-sectional study with 461 patients. Among amputees, 36% were found to be psychologically distressed. Psychologically distress was more significant among amputees. Alcohol consumption and substance abuse were more common.

Many studies were done at the international level to identify sociological factors after below-knee amputation (Darter et al., 2018; Burger & Marincek, 1997; Stefan et al., 2019). According to Darter et al. (2018), a cross-sectional study with 652 patients was conducted to describe people's occupational situation with lower-limb amputations in the Netherlands to compare amputee patients' working and nonworking health experiences with a non-impaired reference population. Many people wished their work was better adjusted to the limitations presented by their disability. They mentioned having problems concerning possibilities for amputation. 78% of those who stopped working within two years after the amputation said that amputation-related factors played a role in their decision.

Burger and Marincek (1997) identified new findings in Slovenia. They conducted a cross-sectional study with 228 below-the-knee amputated patients to explore young people's lifestyle after lower limb amputation. Results were that almost half of patients who answered the questions were less frequently visiting friends and relatives after the amputation; and, around two-third were less regularly visiting the cinema, theater, sports events, and going to the library, dances, and shows. Persons who were less frequently visiting friends, cinema, theatre, and going to dances and performances were older at the time of the amputation, and they were also those who are six to ten years older today. After the amputation, they read, watched television, listened to radio and music, and do housekeeping. They had chosen indoor free time activities after below-knee amputation.

Amputation is doing as a lifesaving method. Among various kinds of amputation, below-knee amputation is very common in the world. Experience of the below-knee amputation is varied from western countries to Asian countries. Among the various age groups of below-knee amputees, young adult males experience a badly affected life career. In Sri Lanka, below-knee amputees happen to experience many changes in their quality of life. But this is a preventable problem. This research was conducted to find a solution to that problem by analyzing young adult males' experience with below-knee amputation.

Methodology

Research approach and design

Using phenomenology, this study explored the lived experiences of young adults who had below-knee amputation. This design is the most appropriate in understanding the phenomena.

Research setting

This study took place at the surgical wards and a surgical clinic of the Teaching Hospital, Kurunegala, Sri Lanka. There were three surgical wards in the hospital. The surgical clinic was held on Thursdays. After discharge from the surgical ward, the amputees are registered at the clinics and are given instructions for follow-ups. The researcher gathered all relevant information about the study participants after obtaining their consent. The four aspects of trustworthiness that qualitative research must establish (credibility, transferability, dependability, and conformability) were highly maintained.

Population and sample

The target population was the below-knee amputated patients in surgical wards and follow-up clinics in Teaching Hospital Kurunegala. The sample size consisted of 16 young adults who were amputated below the knee during the first month after surgery.

Data collection method and tool

In this study, interviews were used as the primary method of data collection. Many different types of interviews are used in phenomenology, such as structured, semi-structured, open-ended, face-to-face, telephonic, computer assisted, group interviews, and focus group interviews.

The interview topic guide consisted of semi-structured and open-ended questions. The researcher used semi-structured nature to allow probing and a more conversation-like interview, rather than a rigid question and answer approach. Interviews were conducted in the Sinhalese language, which is the native language in Sri Lanka. It was more successful because participants can express their feelings as much as possible in detail.

The duration of the interview was 30-45 minutes and was recorded on audiotape and transcribed later. Numbers introduced participants during recording. Participants were informed of their right to withdraw from the study or terminate the interview before commencing the session. Interviews were conducted between January 2019 and February 2019. Participants gave details of their reactions to the amputation and the responses of family members and significant others.

The first theme is demographic information, including amputees' age, educational level, occupation, and other family information. The second theme is collected information about the reason for the amputation, hospitalization period, giving consent for amputation, and views on amputation. The third theme is collected information about their feelings regarding pain, phantom limb pain, and suicidal ideas about below-knee amputation. Their perceptions regarding family members' responses were recorded. The patient's difficulties with usual activities after below-knee amputation and disagreements with the medical team's opinions and views were also documented. The last theme is collected information about their socio-economic experiences.

Limitation of data collection

There were some limitations on data collection. The interviewees were in a stressful situation corresponding to the loss of their limbs. Sometimes, they were less attentive. Some became emotionally unwell. Because of these, their full attention in responding to an excellent interview became a limitation. Although those minor limitations existed, no major events occurred as a barrier to data collection.

Ethical consideration

This study obtained its ethical approval from the Ethical Review Committee of Teaching Hospital Kurunegala, Sri Lanka. Before the study's commencement, permission was taken from the Director of the Teaching Hospital Kurunegala, Sri Lanka. A letter of invitation

was conveyed, including all information confirming anonymity and confidentiality. Informed consent was taken from every participant.

Data analysis

Thematic analysis was used to analyze the data for this study. Familiarization with the data, coding, searching for themes, reviewing themes, defining and naming themes, and writing up are the six phases followed in this study. The transcribed interviews were examined line by line, and comments and key messages from within the data were written in the margins. The interviews were re-read using a comparative method, and codes were identified in each interview.

Findings

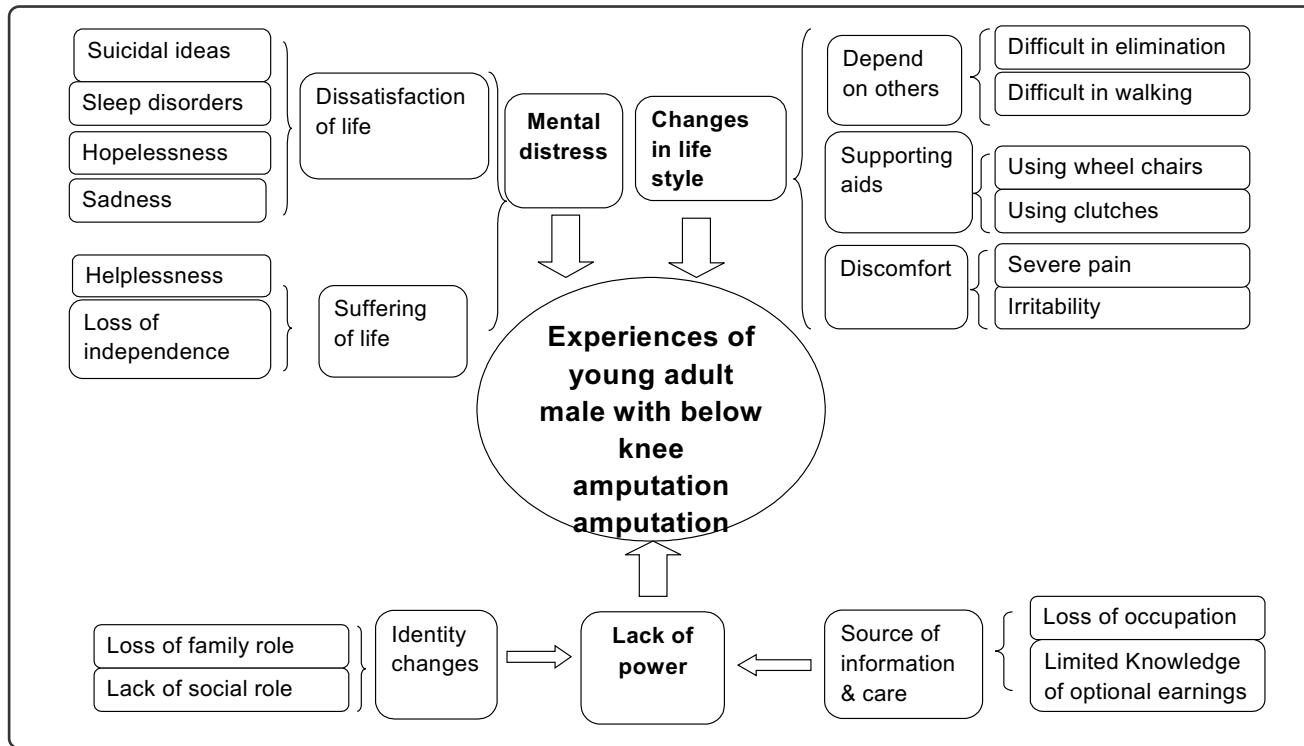
This portion of the report describes the study findings that have been presented from the analysis of data using the Richard method (Laurie & Jackson, 2005). The analysis method has been described earlier. Quotes of participants' experiences were obtained in the findings. Confidentiality was maintained by reporting the quotes using numeric in introducing the interview. Many of the quotes are not grammatically correct so, as not to change the actual meaning when translating into English. The young adult male below-knee amputation experiences are presented as subcodes, and then they are developed as sub-themes. Those sub-themes were developed as themes. There are three themes in this research study— changes in lifestyle, mental distress, and lack of power, as described in Figure 1.

Young adult male below-knee amputees' experiences result in many challenges when adjusting for normal activities. They show the changing quality of their life physically, socially, psychologically, and economically. One participant 'described his experiences as follow;

"Up to now, I reach my targets step by step. But I feel that my present condition is a turnover in my life. Now I understand that it is not easier my carrier as earlier. My studies are also.... Oh, I don't know, miss" (Interview- 04, Patient- D)

According to his explanation, it shows changing quality in his future life.

Loss of independence Suicidal ideas Sleep disorders
Hopelessness Sadness Dissatisfaction of life Helplessness
Changes in life style Suffering of life Loss of occupation Limited
Knowledge of optional earnings Difficult in elimination Difficult in
walking Using wheel chairs Using clutches Irritability Severe pain
Lack of social role Loss of family role Identity changes Depend on
others Supporting aids Discomfort Source of information & care
Lack of power Mental distress Experiences of young adult male
with below knee amputation

Fig.1 The Model of experiences of a young adult male with below-knee amputation

4.1 Changes in lifestyle

Findings from the study showed that living with an amputation brings several changes in one's life. Lifestyle changes were cited explicitly by participants who do physical activities well previously. After the below-knee amputation, the participants had to face difficulty eliminating and walking mainly, leading to dependence on others. After the amputation, they used supporting aids like wheelchairs and crutches to adjust to their new lives. They faced discomfort because of the pain and irritability.

4.1.1 Dependence on others

Participants had views that the amputation affected their independence, gave certain limitations and made them dependent on others. Mobility is the best predictor of quality of life among individuals who had a lower limb amputation. Participants highlighted the changes such as difficulty in elimination, difficulty in walking, and discomfort in their everyday lives caused by the amputation. Participants described feelings such as loneliness, sorrowfulness, and frustration due to their loss of independence and increased dependence on others. They happened to depend on others for personal hygiene and wound care also. One participant described his disability in his interview.

"I thought that I could do nothing alone. I needed the help of somebody for everything. My elder brother or younger brother was with me continuously. It was mental distress for

me to get the help of somebody even to go to the toilet." (Interview-15, Patient-O).

One participant described that he could do nothing alone and needed the help of somebody for his everything. He was worried about that. He said that it was mental distress to get somebody's help, even to go to the toilet.

"It is difficult for me to eliminate properly. So, I eat less to prevent going to the toilet. I feel my stomach as if it is filled with air. I'm unable to go anywhere along yet. I have lost my independence a lot." (Interview-16, Patient-P)

One participant explained that it was difficult for him to eliminate properly. Then he had eaten less to prevent going to the toilet. It gave him difficulty and a harmful effect. This (unclear antecedent) may result from limited mobility or lack of adjustment to supporting aids. He was worried about the loss of his independence.

"Now, I skip with the help of somebody. The huge problem is going to the toilet. Everything cannot be fulfilled through others. It's very difficult to depend on many people. It is mental distress for me when I can't do basic things" (Interview-07, Patient-G).

Some participants described his walking difficulty. He also mentioned that toileting is a huge problem. He said that everything is not fulfilled through others. He was suffering from dependence on others. The participants mentioned that they had

to depend on others because of difficulty in elimination and problem in walking after the below-knee amputation. It may lead to changes in the lifestyle of the below-knee amputees.

4.1.2 Supporting aids

Participants recognized the limitations of their mobility due to amputation. And they happened to adapt their movements and habits to maximize their physical abilities. These comments highlight the importance of the adjustment process of the amputee to his supporting aids. The effort required when walking with a wheelchair or a crutch restricted the distance this participant was able to walk. Participants described how the use of a wheelchair or crutches involved a process of acceptance and adjustment.

"There was somebody during this season with me. I got things done with their help. In the beginning, they carried me with a trolley. Now I can move with the help of a wheelchair. It is difficult for me to have a body wash or to bathe without getting wet on the leg. I can go about afoot with the help of somebody. Nothing can be done for me alone. I received two crutches from the ward. But, I'm not familiar with them. I'm afraid of falling." (Interview- 05, Patient- E).

One participant described that he couldn't do anything alone after the amputation. He worried about his disability to do his day-to-day activities also. He was not familiar with crutches or a wheelchair at that time. He was in fear of walking with a supporting aid because he may fall.

Participants described that they happened to face most of the daily challenges with crutches. They explained and pointed out painful abrasions and inflammation in their hands and underarms because of the crutches. The handgrip on crutches is also another problem that the amputees faced. Some patients said that the crutches carry weight too. Some participants' elbows were red and covered with rashes because of the crutches. They also complained about the discomfort and increased sweating by walking with crutches. Although there are many difficulties, they used wheelchairs and crutches as their supporting aids because they cannot see any alternatives.

4.1.3 Discomfort

Participants continued to cope with persistent afflictions such as intermittent phantom limb pain, stump problems, and irritability. They happened to face acute pain after the amputation. They experienced pain in mobility after the below-knee amputation. They explained their experiences of discomfort with pain and irritability: *"I felt a pain which cannot be expressed. I am unable to sleep. I can't be in the same posture. It's paining."* (Interview-13, Patient- M).

Some participants described that he felt acute pain after the below-knee amputation. He said that it couldn't even explain. He

said that he was unable to sleep also. One participant complained about discomfort with irritability.

"Oh...my God! I wouldn't say I like to recollect it. I felt huge pain. I disliked my life myself. I felt that life is a misery. And I felt the leg was there as it was. I felt as it was pricking. But those are removing little by little now." (Interview -15, Patient- O).

Some participants explained that he displeases even remembering it because of the severity of the pain. He said that he disliked his life also. Then he said that he felt the leg was there as it was after the amputation. This experience is also discomforting for the patient. Participants experienced pain during mobilization and while dressing up. Medications and the aftereffects of surgery can cause loss of appetite and excessive sleeping. Then the pain and irritability may lead to discomfort for the below-knee amputees.

4.2 Mental distress

Mental distress was another theme identified among the data. When considering young adult males' experiences with below-knee amputation, those below-knee amputees were mentally distressed because of dissatisfaction with life and suffering in life. The following anecdotes illustrate the experience of below-knee amputees on how they mentally got down.

4.2.1 Dissatisfaction with life

Participants in the study are dissatisfied about their life due to thinking about their self. The researchers are going to point out experiences that come through participants' self. Those experiences are suicidal ideas, sleep disorders, hopelessness, and sadness.

One participant described his suicidal ideas as follow;

"I'm afraid that the studies of my children will break-up because of this trouble. These thoughts like to make a burst in my head. That's enough to me consoling these suffering. Sometimes I think to keep my neck to that lift door and terminate the life." (Showing a lift apart from the corner of the ward) (Interview- 04, Patient- D)

Young adult males have a major role on their selves, the family and the society. But doing the activities with pain, discomfort, and losing their role results in suicidal ideations.

Sleep disorders are major sufferings for the young adult male below-knee amputees. One participant described his experiences of sleep disorders as follow;

"Earlier, I was seeking time to go to bed for a nice sleep. I wear out two and half weeks on this bed. But I was not sleeping even two hours continuously too. On and off sleep make me tired and headache" (Interview- 07, Patient- G).

Everybody needs good sleep for the freshness of life. But the experience of the below-knee amputees' such as pain, irritability, and discomfort, is causing sleep disorder.

Hopelessness is another experience of the young adult male below-knee amputees, which may cause dissatisfaction with life. One participant described his experience of hopelessness as:

"It's a myth that God is living in the world. If so, I never happen such an incident. I had dreams of making my own house, helping my sister learn, and living with her mother happily. But now those dreams are far away from my life." (Interview-02, Patient-B)

Young adult males have many dreams about their future, and they dedicate themselves to achieve them. The condition, such as a below-knee amputation, caused it to block or diminish their hopes.

In this research study, many young adult male below-knee amputees were spending with sorrowfulness due to loss of leg, pain, discomfort, irritability, and coping with their family and social role. One participant described his sadness as follow;

"My wife is pregnant. The delivery date is next month. My elder daughter is in grade five. It was me that carry my daughter to extra classes. The wife can't do such things. But now, who is doing those? I feel so sad about my family and me or." (Interview-01, Patient-A)

Many young adult male below-knee amputees were living with grief. Many participants were thinking about their families. All the experiences such as suicidal ideas, sleep disorders, hopelessness, and despair caused dissatisfaction in their lives.

4.2.2 Suffering of life

All participants were suffering from the loss of independence and helplessness, which may lead to mental distress. One participant described his loss of autonomy as follows;

"I thought that my leg would not remove till last. But nothing to do. It is spoiling my mind that I fail to do even my usual works. I'm a good spotter in our University sport club. But now I feel I'm like an invalid coin. That thought can't burden me. Now my father is with me. He is always caring for me. However, I have to spend my life according to somebody's toughness, such as doctors or nurses. It is also worry for me." (Interview-4, Patient-D)

Young adult males go synchronously with the flow of the fast-moving world. But a condition like below-knee amputation limits the young adults' activities into a frame. They would seek to help for their life careers and obey the helpers' suggestions.

Some young adult male below-knee amputees have experienced helplessness. One participant described his experience of helplessness as follows:

"I'm married. We have no children. My wife has left me five years before. She has gone abroad. Now I live with my brother. But he can't come to see me frequently. The patient beside me has done the same surgery. I see that his wife, children, and relations are helping and caring for him. I'm not lucky like that. There isn't anybody here in the family to help me." (Interview-02, Patient-B)

While they suffer dependability on others, young adult male amputees can still manage to sought help and care independently.

According to the anecdotes, young adult male below-knee amputees present mental distress through expression of suicidal ideas, sleep disorders, hopelessness, sadness, helplessness, and independence loss.

4.3 Lack of power

In most cases, the predominant experience of the amputee is one of loss: not only the apparent failure of the limb but also resulting losses in function, self-image, and loss of their ability towards career and relationships. They had to stop the duties done by them. They reported a decrease in social acceptance after the amputation. Friends, neighbors, and colleagues had neglected them. They had significant economic difficulties with the loss of their current occupation. At the same time, they were not aware of optional earning methods.

4.3.1 Identity changes

Some of the participants described that their family role was completely changed after amputation. Before amputation, they were the main provider of their family. But after the amputation, they have become dependent on the family. Most of the participants reported their wives to replace their position, where the male was dominant before the amputation.

"My wife came to see me yesterday. She cried very much. She told me not to worry, and she will do everything for our family. She said she found a job at a garment near our house. She will earn money for our children and me. I am sad she had a hard time now." (Interview-16, Patient-P)

One participant described that he was unable to attend to children's need and responsibilities now. He told me that he used to take his children to school. He always protected his children. Now that he is disabled, he is worried about his children.

"I took my children to school early. I wouldn't say I liked that they go alone. Now I can't do it again. Who will protect my children like me? I fear they will not be able to do their studies as before. Because they cried very much telling father can't involve in our works as before". (Interview-06, Patient-F)

One participant described that his friends do not accept him as before. They have isolated him after the amputation. Their friends had not made even a single telephone call.

"I had a lot of friends early. But after hospitalization, few came to see me. They did not make a telephone call even. It's not their fault. They may have a lot of works to do than see me. Nothing I can do now. I have been a dependent." (Interview-08, Patient-H)

4.4 Economic Changes

Participants said that they had to face an economic crisis after the amputation. They were anxious about the loss of their occupation. At the same time, they were not counselled on other employment opportunities and had limited knowledge on alternative earning methods.

One participant described that he couldn't do his occupation as before. He worried about low income. He had taken loans and fallen into trouble. He feared the loss of his employment.

"I work at a shop in Colombo. After my surgery, the owner of the shop came to see me. He gave some money to me. He told me that another person was taken to a shop because I have been disabled. I felt sadness. How will I repay the loans? I haven't another income." (Interview-13, Patient-M)

One participant described that he lost his current job and got worried about not having any income. He told a lot of economic burdens that he went through after amputation.

"I worked at a garment. It is a small garment in our village. After I was admitted to the ward, they did not come to see me. I think I will not get the job again in the same place. I will have to depend on others. Usually don't like to depend on others. Early I have worked hard. Now can't work as before." (Interview-15, Patient-O)

Some participants described that they did not have relevant knowledge about finding another job. They thought that they could not find alternative earnings because they were not appropriately educated.

"My occupation was climbing trees such as Coconut trees and jack fruit trees. Those days I had a good income. Now I can't do that job again. I have not been educated. I don't know to do another job. Who will give me a job people like us?" (Interview-13, Patient-M)

Another participant described that he didn't know about alternative jobs. He feared that he would have to beg from others. He thought that mobilization and education are essential in finding and doing a job. He worried that he does not have both of them.

"Early I work as a lorry driver. I worked as a driver for a long time. I think I will not be able to do another job again because I'm not educated. Now I can't walk as before. How I do a job again? I fear I will have to become a beggar on the streets one day. Who will help us?" (Interview-05, Patient-E)

Discussion

This study's findings explore the experiences of below-knee amputation among young adult males admitted at Teaching Hospital Kurunegala, Sri Lanka. Our study indicates that amputees with emotional pain have a considerably poorer health-related quality of life. Furthermore, reinforces the need for special education to the staff caring the below-knee amputees to minimize their unpleasant and challenging experiences. Health staff can motivate family members and friends to help the amputee adjust psychologically in his new life.

The young adult male below-knee amputees suffer from many physical experiences such as difficulty in elimination and trouble in walking. Those physical experiences may lead lifestyle changes. In this study, below-knee amputees were suffering from a problem in elimination because of difficulty in walking. Maintaining and changing positions during elimination posits terrible experiences to them. Van der Schans et al., 2002 in Netherlands and Mohammed & Shebl, 2014 in Egypt presented similar findings.

The young adult male below-knee amputees use supports such as a wheelchair and clutches. But according to their experience, using supporting aids also caused some difficulties and discomfort. In America, Ciuffo et al., 2019 presented similar findings. They also suffered from pain and irritability, leading to discomfort. Many participants of this research study experienced pain such as phantom limb sensation and stump pain. Irritability is related to experience with pain. A similar study finding was presented in Iran by Rahimi et al., 2012.

According to the findings, having difficulty in elimination and walking, trouble using wheelchairs and crutches, and experiencing pain and irritability may lead to lifestyle changes.

Based on the present study findings, young adult male below-knee amputees suffered from much psychological distress such as suicidal ideas, sleep disorders, hopelessness, and sadness, leading to dissatisfaction with life. Suicidal thoughts were extensively presented among young adult male below-knee amputees regarding their experience. This condition was severely affecting their career. Many Asian research studies suggested related findings. The two identical study findings were presented by Mohammed & Shebl, 2014 in Egypt and Gunawardena et al., 2006 in Sri Lanka.

Most young adult males presented with sleeping disorders. They were not getting enough sleep due to pain, irritability, and discomfort. They experience fatigue with an on and off sleeping pattern. In Nigeria, Mosaku et al., 2009 found similar findings. Hopelessness is another common problem among young adult males below-knee amputees. In this research study, participants became hopeless because of coping with their careers. A study done in Sri Lanka presented similar findings (Lawson et al., 2014).

Sadness is another experience among young adult male below-knee amputees. In the present study, many participants were worried about losing their careers. In India, similar findings were reported by Sahu et al., 2016. Many young adult male below-knee amputees were suffering due to helplessness and loss of independence. The research study in Taiwan by Liu et al. (2010) offered parallel findings of patients' endless suffering.

Based on the present study, suicidal ideas, sleep disorders, hopelessness, sadness, helplessness, and loss of independence were leading to mental distress. However, in developed countries, young adult male below-knee amputees can engage in coping strategies and rehabilitation programs.

A young adult male below-knee amputee faced powerlessness, such as loss of family role and lack of social acceptance, that may cause identity changes. Every participant had a significant family role as a father, husband, brother, or son. But after the below-knee amputation, they described changes in their family role, including changes in relationships with others and the ability to earn an income. The loss of their family role is badly affected by the balance and conductivity of the family. These findings were akin to the study findings conducted by Burger & Marincek (1997) in Slovenia.

Participants suffered from their inability to participate in social activities as before and feared social isolation. Although they expected social acceptance earlier, many of the participants' significant others had not visited them frequently. The same study findings were found in Austria (Prahm et al., 2017).

Participants highlighted the importance of social acceptance from family, friends, and professionals. They mentioned the importance of remaining socially active simply by spending time with friends and family. Naili et al. (2017) reported that this is an essential aspect of adjusting to life after the below-knee amputation. Many participants suffered from the loss of occupation and limited knowledge on alternative jobs. Similar findings were identified in the Netherlands by Darter et al., 2018. Participants had the challenge of going back to their previous careers or shifted to less physically demanding works due to the disability.

Due to family role and economic changes in their lives, they experienced a lack of power in their lives. Power is endemic to humans as it is needed in social interactions (Lopez et al., 2017; Maduagwu et al., 2019), most especially to men wherein the social structure dictates the legitimacy of perceived higher power. However, young adult males experience powerlessness following below-knee amputation.

The major findings of this research study, which are mental distress, lifestyle changes, and lack of power, answer the research objectives. The significant findings highlight the psychosocial and physical experiences of below-knee amputees.

Conclusion

This study helps us understand the lived experience of the young adult male below-knee amputees. It identifies the various reactions

and changes that occur following the loss of a limb and explores the needs of young adult male amputees.

At the same time, it is helpful to appreciate the importance of social, physical, and psychological support from the significant others and the society. People differ in their level of social and psychological wellbeing based on their goals or desires.

Furthermore, it highlights the importance of family members' and friends' physiological, social and emotional support as an essential part of individuals' adjustment to their new life as amputees and the use of their prostheses. After this study conducts a teaching session for nurses working at surgical wards and relevant clinics, it leads to knowing how to deal with and positively encourage amputees.

The present study addresses local literature on the lived experience of persons with lower limb amputation. However, there is a need for further research that is longitudinal in nature and explores the lived experience of study participants over a period. This study's limited time frame forced restrictions on the number of participants with whom interviews were conducted. The interview was a new experience for the patients involved. The researcher sufficiently articulated the feelings of the participants to provide the meaning of their experience. The researcher conducted the study in English. But the interviews were done in the mother tongue of the participants. Some changes in meanings may have occurred when the interview quotations were translated into English which could be a limitation of the study.

Recommendations are based on the findings of the study. It is essential to give special education to the staff who are caring for the below-knee amputated patients. Often the patients get physical recovery in the units. But no one thinks of their psychological and social healing. It is important to do a psychological referral for all the below-knee amputated patients before discharge from the wards. Education about phantom sensation and phantom limb pain helps the health staff protect the patients from falls and injuries. Social attitudes of the community should be changed positively regarding amputated patients by educating the community.

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