



The Hospitalization Experience of Chinese Older Adults after Coronary Artery Bypass Surgery: A Qualitative Study

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Abstract

Purpose: The aim of this study was to explore the hospitalization experience of Chinese older adults after coronary artery bypass surgery.

Methods: A qualitative phenomenological approach was adopted. The study was conducted in cardiac surgery department of two hospitals (two 3000-bed hospitals in Wuhan, China) over a 7-month period from October 2016 to April 2017. A total of 28 (P1-P28) Chinese older adults (age 60 or older) participated (Age: 68.17 ± 7.92). The data were collected within one week after CABG using semi-structured interviews. The data were analysed using the Colaizzi phenomenological method.

Results: Four main themes describing the hospitalization experience of Chinese older adults after coronary artery bypass surgery emerged: anxiety due to a lack of awareness of the operation, a lack to adaptation to the life in the hospital, a lack of rehabilitation programs and remaining in a passive status.

Conclusions: Chinese old adults are in bad status and a passive role after CABG, wherefore nurses should take into consideration the mental state and attitudes to rehabilitation and provide them with more assessment and care during perioperation.

Keywords: Aged; Coronary Disease; Qualitative Research

Introduction

Coronary heart disease (CHD) is one of the main causes leading to heart failure of old adults [1]. Coronary artery bypass grafting (CABG) surgery is internationally recognized as the most common surgical procedure for coronary heart disease, and the innovation of CABG is helpful in improving older patients' quality of life and increasing their life span [2]. Due to variability in functional capability, older adults show different hospitalization experiences, which require nurses to understand the patient's psychological status and needs to help them carry out their rehabilitation programs [3].

Researchers have commonly focused on the evaluation of the experience of patients before an operation, during the operation, and after discharge [4-8]. However, there has been far less research conducted on postoperative Chinese older adults. The aim of this study is to describe the hospitalization experience of Chinese older adults who underwent CABG and to understand their physical and psychological experience from their perspective, which allows nurses to evaluate the older adults in the clinical stage and to develop individualized nursing interventions to promote the early rehabilitation of patients.

Methodology

Study design

A qualitative phenomenological study was used. Older adults were interviewed, while researchers recorded and then analysed the interview records according to the Colaizzi phenomenological method [9].

Setting and sampling

To explore the hospitalization experiences of older adults within one week after CABG, researchers conducted in-depth interviews [10] in cardiac surgery department of two hospitals (two 3000-bed hospitals in Wuhan, China).

Inclusion criteria: The inclusion criteria for the study were as follows: (a) being a Chinese older adult (age 60 or older); (b) having successfully undergone CABG; (c) able to understand and respond to the interview questions; and (d) voluntarily accepting the survey.

Exclusion criteria: The exclusion criteria for the study were as follows: (a) previous psychiatric history; (b) severe cognitive impairment; (c) important organ dysfunction or other serious chronic diseases.

Ethical considerations

To ensure ethical clarity, all patients who participated in the study were fully informed about the purpose of study, and an emphasis was put on the voluntary nature of their participation. Written consent was obtained from the patients before collection of the data.

Measurement and data collection

The data were collected over a 7-month period from October 2016 to April 2017. Researchers used semi-structured interviews and prepared outlines to guide the interview. Before the formal interview, the interviewer and record personnel were trained appropriately, which included learning the purpose of the interview, the skills of asking questions and the matters needing attention? The interview was scheduled for 20-30 minutes, while patients were encouraged to express their true feelings during hospitalization. During the interview in patient room, one researcher was sensitive to the nonverbal information of the interviewees and paid attention to their psychological adjustment to allow the interview to proceed smoothly; two researchers recorded the contents of the interview in the form of notes, with the consent of patients.

Data analysis

Researchers sorted the interview records according to the phenomenological method of P.F. Colaizzi, which contains 5 steps: "a) read all the interview details; (b) extract meaningful statements or words that are consistent with the experience of the study; (c) sum up and extract meaning from a meaningful statement; (d) link the extracted statements into several topics; (e) link these topics in a comprehensive description of the experience; and (f) compared with the original description, confirm final results".

Researchers repeated the interviews and analysed the meaning sentence by sentence. They then coded, classified, explained the essence and meaning of the phenomena, and finally formed the identification of the themes that represented the hospitalization experiences of older adults after CABG.

Old adults are anxious because of a lack of awareness of the operation: The lack of knowledge of CABG may be due to various reasons, such as barriers in communicating with doctors, economic factors, and family support. Most of the preoperative conversations often involved their families. P8 (Male, Age: 71 years): "My admission to the hospital was completely handled by my son." P2 (Male, Age: 69 years): "I only knew the name of the operation. And the operation was finished very quickly." P20 (Female, Age: 75 years): "Because of the doctors and nurses, I felt at ease in the hospital, but I learned relevant information about the operation from the doctor." (This text and other quotes from comments/interviews have been lightly edited)

After CABG, because of the lack of knowledge of the operation, approximately half of the older adults expressed various degrees of worry about the condition. P4 (Male, Age: 63 years): "First, I felt good when I had the physical examination, but after the operation, I cannot move and have to stay in bed." P22 (Male, Age: 61 years): "They let me stay in the hospital after I finished the physical examination. Unfortunately, I regretted coming to the hospital for surgery because of the fears of pains about the surgery, and I felt uncomfortable when I recalled it." P23 (Female, Age: 80 years): "Now I am much worse than when I came to the hospital. Actually, I suffered from heart disease many years ago and insist on exercising and taking medicine. However,

I feel tired now and think that everything is over." Due to great unhappy experiences after operation, older adults thought they were healthier before the surgery.

Patients have not adapted to hospital life: After the operation, because of the pain of the wound, anxiety and poor appetite, the patients were unable to eat normally; furthermore, they felt weak and tired during the hospitalization. P6 (Female, Age: 68 years): "I can only eat 1/4 of the prescribed amount of food. I cannot eat the rest of it or spit it out once I eat it." P11 (male, Age: 65 years): "I think taking medicine is the main cause of my poor appetite these days." P23 (Female, Age: 80 years): "I have not eaten anything for 5 days, and I only drank two spoons of rice soup yesterday."

P27: (Female, Age: 63 years) "During hospitalization they required me to eat a light diet, which was not the same as my daily diet. I really like to eat the snacks downstairs instead of those light foods."

In addition to diet, the sleeping quality for the older adults after CABG was worse. The reasons for this difficulty included the following: the visiting of other patients' family members in the ward, the pain of the wound, discomfort caused by the bandage and shortness of breath. P5 (Male, Age: 65 years): "I cannot sleep well when I'm in a supine position. To tell the truth, I cannot sleep well after the surgery." P23 (Female, Age: 80 years): "I have been confused these days, because I do not know whether I have slept or not. I felt uncomfortable because of the bandage on my chest. I cannot imagine this bandage will exist on my chest for half a year. I cannot imagine such a bad situation." P27 (Female, Age: 63 years): "I cannot get used to the smell of disinfectant in the hospital. They don't open the window. The room is so stuffy that I cannot sleep well at night." P28 (Male, Age: 62 years): "I cannot sleep well these days. My family members told me that I was snoring and waving my hands like a child when I slept."

In addition, it is difficult to change bad living habits during a short time. Most older adults, especially the male patients, had smoked or drink alcohol for more than 20 years; however, they had not been allowed to smoke or drink since they were hospitalized, which made them susceptible to discomfort. P3 (Male, Age: 69 years): "I have been smoking for 50 years; thus, I have been not feeling well since I cannot smoke these days." P14 (Male, Age: 60 years): "I used to drink a little alcohol every day, and although I know I cannot drink now, I still want to drink."

It is possible that because of the pain of the wound after the operation, the lack of familiarity with the ward environment and the lack of being cared for by family members, most older adults felt depressed. P20 (Female, Age: 75 years): "I want to tell you I was in a bad mood after the operation." P23 (Female, Age: 80 years): "I'm lucky to be accompanied by my family members, and without them I would definitely feel lonely (her family member reflected that she was in a bad mood after her operation)." P26 (Female, Age: 74 years): "I find myself quite different after the operation. For the experience in the hospital, I would say that to live is no better than to die."

The majority of patients are in a passive role and lack an active postoperative rehabilitation program: During the interview, patients expressed various degrees of need for the same care in their homes as in the hospital. P14 (Male, Age: 60 years): "My physical condition is not as good as it used to be, so I'm certainly going to rely on the nurses and my family." P2 (Male, Age: 69 years): "I don't need to consult the doctor about my illness, which is usually done by my family."

In the interview, there were 21 patients who did not have a specific rehabilitation programme and simply hoped that the medical staff could help them complete it. P3 (Male, Age: 69 years): "I have not had a rehabilitation plan yet. The nurses counted the pills and then gave them to me to administer every time." P5 (Male, Age: 65 years): "I hope the nurses can help me proceed with rehabilitation training." P7 (Male, Age: 63 years): "I hope I can get the same care as I got in the hospital when I go home." P20 (Female, Age: 75 years): "After the surgery, I followed the doctor's suggestions in terms of physical exercise and diet adjustment. I will do whatever they told me." P23 (Female, Age: 80 years): "What rehabilitation plans do I prepare for? I don't need them, because doctors and nurses should help me finish them."

There were 3 patients who said that their memory was so terrible that they could not take their medicine on time, which required the supervision and help of their family members. P16 (Male, Age: 69 years): "My wife will supervise me to take medicines. I always forget it and I'm afraid of getting it wrong."

Results and Discussion

Nowadays a large number of Chinese old adults immigrate to the other country, on account of different culture background; their hospitalization experiences are susceptible to be different from native people. The reasons for that maybe culture background influence their recognition and attitude towards disease. From our research we can find that old adults lack knowledge of the operation and stay in a passive role for a long period of time. In China, their children and spouse cope with the all of the hospitalization issues and even sign the operation consent file for them, which create a knowledge deficit among most elderly adults, and inevitably their passive role forms. In addition, hospitalization signifies a change in their social role, as they are limited in the hospital and must strive to adapt to environment and condition. The anxiety induced by passive role is harmful for the recovery of old patients and relation with nurses. Therefore, during perioperation of CABG nurses should offer them relative knowledge about the operation and relieving the anxiety, and encourage them actively to care about their rehabilitation.

In addition, our results reveal the maladjustment of older adults after CABG. Their sleep quality is worsened after the operation within one week after CABG, and similar results can also be found in previous studies. Atelectasis is the most common complication that appears in patients with pulmonary and underlying diseases [11], which possibly would cause patients to have paroxysmal nocturnal dyspnea and then have sleep disorders. In addition to postoperative complications, lack of adaptation to life in the hospital is another reason for sleep disturbances. Research showed that more than 50% of patients experienced sleep problems through hospitalization and 6 months after heart surgery. The main causes included physical and environmental factors such as pain, cardiac function, and noise, and psychological factors such as anxiety and mood [12]. Furthermore, sleep quality at 1 month after discharge was better than at 1 week post hospitalization significantly, and bad sleep quality was related with age, heart function, anxiety and depression. Nonetheless, although sleep quality was significantly improved 1 month after hospital discharge, more than half of the patients continued to have poor sleep quality and some level of depression [13]. Recently, researches declared that poor sleep quality is associated with a higher incidence of adverse perioperative events in patients undergoing CABG and there is possible a link between in hospital outcome and polypeptide endothelin 1 (ET-1) in sleep disorder patients undergoing CABG [14]. From our research, all of the

old adult patients have bad sleep quality, and most patients cannot consume any food, and their appetite is reduced. Some of them complain that they cannot eat what they prefer.

Researchers showed that comprehensive rehabilitation can significantly improve the cardiac function and exercise capacity of the patients, shorten hospitalization time and improve patients' mental status and quality of life [6]. Some researchers think that patients who undergo CABG have the highest level of demand for knowledge prior to hospital discharge because patients would immediately leave the hospital, and there is an urgent need to confirm the potential outcome of the prognosis. On the other hand, patients hope to get special knowledge and psychological support from the medical staff [15]. However, our findings highlight the fact that many of the older adults lack a rehabilitation plan after CABG. This lack of planning may be due to being in a passive role for a long period of time in the hospital. While patients are on bed rest, nurses supervise the patients' condition, instruct them to take medicines and complete relevant examinations. On the other hand, their family members take care of their daily life, which causes the patients to remain in a passive status during the period of hospitalization. Therefore, it is necessary to decrease the patients' role and behaviour, which is characterized by excessive reliance on other people, such as medical staff and family members. They are often reluctant to leave the hospital and medical staff, thus lacking the confidence to return to society; as a result, their condition gradually worsens [16-17].

According to previous studies, we found measures for improving the quality of life of older adults in the hospital. First, it is important to search for all types of resources to help them confront daily hospitalization positively, and nurses should allocate more time and attention to this matter [18]. Also, some researchers declare that different aspects of the patient, such as education and race, should be considered during interventions. For example, Mansoureh utilizes the organizational culture improvement model to educate patients before CABG, which includes the following dimensions: effective communication, participatory decision making, goal setting, planning, implementation and recording, supervision and control, and improvement of motivation. The results show that the patients' stress lowers and their satisfaction increases [19]. Furthermore, studies have indicated that it is possible for black patients to have higher rates of re-admittance after surgical procedures; thus, efforts should not only focus on race-based treatment but should also focus on increasing Medicare in hospitals serving minorities [20]. Also, some researchers note that because patients and partners are affected by the operation as a shared life experience, couple-centred interventions may be better than individually focused interventions in improving health-related quality of life [21].

Conclusion

The results of this study show that Chinese older adults suffered from anxiety, a lack of adaptation in the hospital, remaining in a passive status, and a lack of rehabilitation plans after the CABG procedure. It is necessary for nurses to know patient's role and attitude towards disease, and formulate timely, effective and appropriate personalized caring according to the older adults' hospitalization experience.

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