

Perception From Barrier and Facilitator for Providing of Early Rehabilitation Care for RTI Victims

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Background: Road traffic injuries (RTIs) are a major public health problem and the most important cause of disability, morbidity and mortality worldwide. Early rehabilitation can play a significant role in minimizing complications, morbidity and mortality.

Objectives: The aim of this study was to describe perceptions of barriers precluding provision of early rehabilitation care for RTI victims.

Patients and Methods: A qualitative content analysis was carried out on 15 nurses with at least one year experience caring for RTI victims. The nurses were selected from various wards (emergency, orthopedic, neurosurgery, and clinic) of Sina and Imam Khomeini Hospitals via targeted sampling. Data were collected through semi-structured interviews and targeted sampling until data saturation. Data were analyzed and assessed.

Results: After continuous analysis and comparison of data, major causes precluding nurses from early rehabilitation of RTI patients were retrieved. These barriers included: (a) lack of insight, (b) lack of comprehensive care (c) excessive costs; facilitating factors included (d) training for cooperation and (e) support for coping.

Conclusions: The findings of this study show that the need for early rehabilitation in the hospital phase of care for RTI victims is needed. Knowledge about the barriers precluding nurses from early rehabilitation of RTI patients and facilitators that can help health care workers and policy makers eliminate the barriers precluding early rehabilitation can help health care workers, especially nurses enable patients get over their disability and gain social and family support.

Keywords: Road Traffic Injuries; Early Rehabilitation; Nurses

1. Background

Road traffic injuries (RTIs) are a major public health problem (1-3). Currently, more than 1.2 million people each year die in road traffic accidents, while an additional 20 to 50 million are injured by RTIs (4). RTIs were responsible for 57 million disability-adjusted life years (DALYs) (5).

Road traffic injuries are responsible for different types of injuries and disabilities, which can affect the individual's quality of life (6, 7). They may suffer limitations in physical, social and mental health (1, 8). Studies also revealed that many of road traffic survivors have difficulty returning to their normal life and occupation (7, 8). Rehabilitation services are an essential component of the comprehensive package of initial and post-hospital care of the injured. It helps to minimize future functional disabilities and restore the injured person to an active life within society (9). Rehabilitation is often the longest and most difficult phase of the trauma care continuum for patients and their families (10). However, few have access to optimal rehabilitation programs owing to lack of fi-

nancially supported infrastructure (11), and fragmented healthcare systems (12, 13). Moreover, rehabilitation services tend to be constructed around specific patterns of injury or functional impairments; thus, providing care for the complex needs of patients with multiple injuries can be challenging (14). Most countries need to increase the capacity of their health-care systems to provide adequate rehabilitation (15). In low-income and middle-income countries, there is an increasing focus on improving the care of survivors in the acute phase, and thus minimizing disability (10). Nurses play an important role in rehabilitating patients after traffic accidents (16). Few studies have been done on trauma care for injured people in Iran (17); those that have been conducted have mainly focused on availability of resources and effective interventions done in prehospital settings (18). However, no study has been done on providing early rehabilitation care for RTI victims in Iran and identifying potential areas for improvement.

2. Objectives

The aim of this study was to describe perception from barrier and facilitator for providing of early rehabilitation care for RTI victims.

3. Materials and Methods

The method of interpretative description was used in this study. A qualitative approach was done and conventional content analysis summarizing, describing, and interpreting data was used.

Using a purposive sampling procedure, 15 nurses including three head-nurses, two supervisors, and 10 staff nurses were recruited. Purposeful sampling was based on selected criteria.

Participants were recruited from different settings, including two hospitals (Sina and Imam Khomeini Hospitals) and different wards. Ten female and 5 male nurses with an average age of 33 participated in this study. The working experience of our participating nurses in trauma care units was 1 - 20 years. At the time of the study, they were practicing nursing in medical-surgical, mixed, orthopedic, and neurosurgery ICUs in hospitals. Among them, 14 held a Bachelor of Science in nursing and one had a Master's degree.

Data were collected through in-depth, semi-structured, and face-to-face interviews. The interviews were started with one open question and continued by in-depth questions regarding the early rehabilitation process for RTI victims. The process of data collection lasted from August 2013 to March 2014. Each interview lasted for 25 - 45 minutes. The main questions of the interviews included: "What are the important points in your opinion when caring for a RTI victim?" "Can you set an example?" "What factors help you in the process of providing rehabilitation services?" "What are the barriers preventing ideal rehabilitation?" A content analysis approach was employed to analyze the data.

Regarding trustworthiness, credibility was ensured through constant comparison, triangulation, member check, and peer review.

4. Results

Demographic information: participants included 15 nurses (10 females and 5 males) working at different wards (emergency, orthopedics, neural surgery, and trauma clinic) of the hospitals. The mean age of nurses was 33 years. The youngest nurse was 22 and the oldest was 44.

Barriers included: (a) lack of insight, (b) lack of comprehensive care (c) excessive costs; facilitating factors included (d) training for cooperation and (e) support for coping.

(A) Lack of Insight

Lack of insight was among the most important barriers for providing rehabilitation care to casualties. It was the

main barrier against a comprehensive care for prevention of secondary disabilities and detectable primary disabilities in these patients. This theme contained two subthemes: inadequate assessment and poor nursing rehabilitation knowledge.

Inadequate assessment was a main finding of the interviews. Participants stated that insufficient assessment of a RTI victim posed a major barrier against patient recovery delaying the patient's return to normal life.

(B) Lack of the Comprehensive Care System

Lack of a comprehensive care system was reported by the participants as a weakness in providing team care and inadequate attention to the continuity of care.

Inadequate Team Care

Lack of team working was identified as one of the main barriers to provide effective trauma care, which was partly affected by lack of a comprehensive care system. One of the issues that contributed to interrupt trauma care in RTIs included the absence of trauma teams.

(C) Excessive Costs

Intolerance of excessive costs were among the main barriers. These patients deal with high treatment costs, work days lost to disability and accident expenses.

"The costs of treatments and expenses related to the accident further add to patients' stress. Patients who borrow some money to pay the treatment costs deal with stresses related to paying off the debt". "Only the primary care in the hospitals is free. In some cases, the patients are required to be transferred to private hospitals to continue treatment; however, the costs of treatment, physiotherapy and commute are extremely high".

The participants stated that the treatment costs are not fully covered by the insurance companies and the patients need to pay for the rehabilitation care out of their pocket or quit the treatment.

"These patients do not receive physiotherapy or the rehabilitation care in the hospitals and these costs are not covered by the insurance either. The patients must seek private care and pay high costs. The health care system in our country does not support rehabilitation care until patient recovery."

(D) Training for Cooperation

Education and training is an important facilitator in this regard and can greatly enhance patient recovery. It is an important part of rehabilitation care and nurses play an important role in this regard. "Education is extremely important and plays an important role in patient recovery. It facilitates and shortens the recovery period. Educating the family members of the patient can also greatly help patients participate in treatment plan and resume their daily activities.

(E) Support for Coping

Support was among the main extracted themes and was divided into two subthemes of nursing team support family involvement in process of care.

Nurses believed that support was an important factor in patient adaptation to the post-accident conditions. Optimal communication with patients plays a pivotal role in regaining health and balance by the patients.

"We also have the responsibility to psychologically support the patients. We help the patients understand that they need to help themselves and try harder in order to be able to perform their daily tasks". "As a nurse, I help patients believe in themselves and see the positive changes in their condition. I help patients take care of themselves and stand on their own feet. We must have sympathy with the patients and help them take care of themselves". Participants in this study used different methods to support patients and help them resume their normal life.

Inclusion of the patient family in the process of care is an important facilitator of patient recovery according to the nurses' perspective.

"Family plays a critical role in resuming normal life. Trained family members can greatly help patient recovery". "Family support is very effective for patients resuming daily activities. Family members can help patients accept and make peace with their condition". "Nurses can increase the cooperation of patient's family members by 100%. Nurses can ask family members to bring the patient's loved ones by his/her side and ask them to talk to the patient".

5. Discussion

Based on the findings of the current study barriers of early rehabilitation care of RTA casualties were care lack of insight, lack of a comprehensive care system and intolerance of excessive costs. Also, the facilitators included training for cooperation and support for coping.

Some studies confirm our results and state that in-patient rehabilitation care provided by the nurses mostly comprised routine, nonspecific tasks, and they were not well aware of their role and professional tasks as a trauma nurse (19, 20). In Pryor' study (2008) it was reported that nurses have insufficient insight or autonomy for rehabilitation care. Also, lack of knowledge of nurses regarding their complex role in patient rehabilitation is caused their interrupted function (21). Lack of team working is one of the other main issues hindering a systematic approach. The trauma team usually comprises a multidisciplinary group of individuals drawn from the specialties of anesthesia, emergency medicine, surgery, nursing, and support staff, each of whom provides simultaneous inputs into the assessment and management of the trauma patient, their actions being coordinated by a team leader. The primary aims of the team are to rapidly resuscitate and stabilize the patient, priorities, and determine the nature and extent of the in-

juries and prepare the patient for transport to the site of definitive care, be that within or outside the receiving hospital (22). The finding of this study is consistent with that of lack of team working in trauma care was an important factor contributing to poor organization of trauma care delivery. Based on the findings of the current study one of the important challenges in providing care from RTI victims was lack of the comprehensive care system. Participants believed that the care services were interrupted, and were only provided at the hospital. They stated that trauma care to patients only provided in the hospital but are left alone after discharge. These results were in consistent with Christian's study (2011). In their study rehabilitation needs of patients discharged from a regional trauma center in Africa showed that only a few of casualties with significant physical disability were followed-up after discharge and most patients with physical limitation did not receive care until return to normal life (23). However, in the systemic chain model of trauma, the emphasis was put on all phases from acute trauma care until returning to the community (prehospitalization, hospitalization, and post-discharge) (24). The results of this study showed that patients with physical injuries required to be transferred to private hospitals for continuing treatment; however, the costs of treatments, especially physiotherapy, are extremely high. Results of our study were in consistent with results of Pryor and Bazio studies in 2010. The results of this study showed that education is an inevitable facilitator of rehabilitation care. Training nurses increases the cooperation of nurses and patients in the rehabilitation program. These activities enhance the perception and autonomy of nurses in the rehabilitation process (25). Also, health workers must ensure that patients have received adequate information regarding their treatment. Patient-based care must be valued in rehabilitation care (26). Evidence shows that formal and informal education can decrease the consequences of hospitalization to some extent and improves the quality of care (26). Mak (2004) mentioned that collision victims require rehabilitation interventions during hospitalization. In order to do so, the quality of nursing care must be improved by educating the trauma nurses (27). On the other hand, evidence shows that susceptibility of patient is decreased by providing adequate information to patients and addressing their needs (28, 29). Also, supporting the patients and including the family members in the process of care and rehabilitation improves the sense of patients' confidence.

The results showed that the need for early rehabilitation care in hospital phase caring of RTI victims is very necessary. Knowledge about the barriers and facilitators of rehabilitation care can help health care workers and policy makers to eliminate the barriers and help health workers, especially nurses, enable patients to confront the disability, and consequence of their injuries through patient and family education and support.

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Authors' Contributions

Study concept and design was from Kian Norouzi Tabrizi, Hamid Reza Khankeh, Soheil Saadat, Fatemeh Pashaei Sabet, and Heidar Ali Abedi. Analysis and interpretation of data was done by Fatemeh Pashaei Sabet, Kian Norouzi Tabrizi, Hamid Reza Khankeh, Soheil Saadat, Heidar Ali Abedi. Critical revision of the manuscript for important intellectual content was done by Fatemeh Pashaei Sabet, Kian Norouzi Tabrizi, Hamid Reza Khankeh, Soheil Saadat, and Heidar Ali Abedi, study supervisors were Kian Norouzi Tabrizi, Hamid Reza Khankeh, Soheil Saadat, and Heidar Ali Abedi.

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