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Original Article

Evaluation of Tracheostomy Care Self-Care Knowledge among Adult Patients with Permanent Tracheostomy

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ABSTRACT

Tracheostomy is a major surgery, to create an opening to provide airway patency at the 3rd or 4th cartilage ring in the anterior wall of the trachea. Tracheostomy has been considered the best life-saving procedure. **Objective:** To determine the impact of tracheostomy care intervention on self-care and assess level of anxiety. **Methods:** A crass sectional study was conducted on 34 patient's takins from ENT and Patients age limit between 18 to 50 years, educational status was primary, metric and above, OPD patients, inpatients were included. Data were gathered using a standardized questionnaire on the evaluation of tracheostomy self-care. The SPSS version used to enter and evaluate the data. 21.0. The Chi-square test was used to determine whether there was a significant relationship between the patients; a p-value of 0.05 was deemed significant. **Results:** Total 34 participants enrolled in current study. 37.1% were 41-50 years old. 60% of participant's were male. Majority (76.4%) of the patients have poor self-care knowledge regarding tracheostomy care. Only 14.7% patients gave good self-care knowledge. majority of participant's responses haven poor self-care. The older patients 41 to 50 years, female and primary education patients have poor self-care knowledge. **Conclusions:** After tracheostomy procedure it is very important to maintain self-care and avoid to infection. It is concluded from this study that self-care not good on their evaluation, education intervention to enhance on self-care and reduced the level of anxiety for patients with tracheostomy at home.

INTRODUCTION

In order to open up congested airways, a surgical technique called a tracheostomy involves making an incision in the skin and soft tissues that cover the cervical trachea's anterior wall. It is a routine treatment carried out in ENT surgical practice [1]. Tracheostomy is a major surgery, to create an opening to provide airway patency at the 3rd or 4th cartilage ring in the anterior wall of the trachea. Tracheostomy has been considered the best life-saving procedure [2, 3]. In order to preserve patient life and enhance their quality of life, tracheostomy is used most often in older persons [4]. It often refers to the broad utilization and cost-effectiveness of health care as well as triggering the release of elderly patients from inpatient rehabilitation facilities without tracheostomy closure and total rehabilitation [5, 6]. Tracheostomy can be performed in an emergency or elective basis. All healthcare professionals who are directly involved in giving these patients postoperative care so that they can do their self-care effectively [7]. Additionally, they should be knowledgeable of any possible hazards, difficulties, and how to manage them, especially in situations that are potentially life-threatening [8]. This is essential need for patient and caregivers to get education about tracheostomy self-care. Additionally, according to Sherlock *et al.*, the study participants felt they did not receive enough information on their tracheostomy and its side effects that was tailored to their particular needs [9]. Tracheostomy may cause patients much more physical and psychological trauma than professionals are likely to realize. According to studies, people have trouble restoring

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their confidence and living their pre-tracheostomy lives [10]. Participants said that despite initially embracing a tracheostomy as necessary and even desirable for survival, the physical and psychological repercussions were more distressing than they had anticipated, particularly if the treatment was performed without their consent [11]. A patient with a new tracheostomy leaving the hospital would face the issues including secretion control, elevated risk of infection, physical structure changes & reduced physical movement [12]. The patient must be aware to deal all facets of tracheostomy treatment to ensure a smooth transition from the hospital to home and be able to recognize signs and symptoms. Therefore, this study was conducted To assess the tracheotomy self-care among adult patients with permanent tracheostomy.

METHODS

A crass sectional study was conducted from Lahore General Hospital Lahore after the approved from the University of Lahore, in this study 34 patient's takin from ENT and Neurosurgery ward, in this study purposive sampling techniques was used, Patients age limit between 18 to 50 years, educational status was primary, metric and above, OPD patients, inpatients which there are plan for tracheostomy procedure, post tracheostomy patients are excluded from this study. After self-introduction and discussed the purpose study informed consent was taken, validated questionnaire on Evaluation of tracheostomy self-care was used to data collection. Questionnaire haven two parts, Part one demographic data, Part two self-care. the participants responses falling in the ranges of 0-50%, 51-75% and 76-100% recorded as poor, average and good quality of life. Data were gathered using a standardized questionnaire on the evaluation of tracheostomy self-care. The SPSS version used to enter and evaluate the data. 21.0. The Chi-square test was used to determine whether there was a significant relationship between the patients; a p-value of 0.05 was deemed significant.

RESULTS

Total 34 patients were enrolled in current study. 25.7 % participants were 18-30 years old, 34.3 % were 31-40 and 37.1% were 41 -50 years old. Where the majority 60% of total participant's haven male and 37.1 haven Female participates, educational results shows majority of participates qualification haven primary. Majority (76.4%) of the patients have poor self-care knowledge regarding tracheostomy care. Only 14.7% patients gave good self-care knowledge (Table 1).3

Variable	Frequency (%)
Age	
18-30	9(25.7)
31-40	12(34.3)
41-50	13(37.1)
Gender	
Male	21(60)
Female	13(37.1)
Education	
Primary	24(68.6)
Matric, above	10(28.6)
Self-care Knowledge	
Poor Self- Care (<50%)	26(76.4)
Fair Self-Care 51 % to 75%	5(14.7)
Good Self-Care (>75%)	3(8.82)

Table 1: Characteristics of Demographic Data

According to table 2, majority of participant's responses haven poor self-care. The older patients 41-50 years, female and primary education patients have poor self-care knowledge. But in contrast there was insignificant association among age, gender, and education according to self-care knowledge (p-value <0.05).

Variable	Good	Faire	Poor	Pearson Chi-Squared	p-value
Age					
18 to 30 (10)	2	0	8	5.457	0.65
31 to 40 (9)	0	3	6		
41 to 50 (15)	1	1	13		
Gender					
Male	3	2	15	5.568	0.380
Female	0	2	19		
Education					
Primary	0	1	14	9.085	0.335
Matric, above	2	3	4		

Table 2: Association Between Self-care and demographic variables

DISCUSSION

The basic aim of this study was to determine the impact of tracheostomy care intervention on self-care and evaluate the level of anxiety among adult patients with permanent tracheostomy. In this study overall, 34 participants were recruited. Majority of the participants were Male 21(60%) and 13(37.1%) were Female. Out of 34, 9 (25.7 %) from the age group of 18 to 30 years,12 (34.3%) from 31 to 40, and from 41 to 50 years 13(37.1) to this study. The majority of the participants had primary education 24(68.6%) and 10 (28.6%) had secondary education or above. In a study published in 2014, by Jeon *et al.*, investigated the impact of tracheostomy timing on clinical outcome in mechanically ventilated neurosurgery patients admitted to the surgical intensive care unit. They made use of 125 individuals who underwent mechanical ventilation and tracheostomy. They learn that in critically ill patients, early tracheostomy decreased the length of the MV, the time spent in the ICU, and the prevalence of ventilator-associated pneumonia [13]. All healthcare professionals who are directly involved in the postoperative care of patients with tracheostomies must be able to properly care for patients with tracheostomies, be aware of potential tracheostomy-

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related complications, and be able to manage those complications, especially in an immediate life-threatening situation [14, 15]. The majority of patients in the current study (76.4%) had poor understanding of tracheostomy care, which is in line with findings from a study by Qadir done in India that found that most participants (81.67%) had inadequate knowledge [16]. Furthermore, in another study conducted by Dhaliwal *et al.*, in India found that average knowledge was present in more than half of the study participants [17]. Furthermore, only 46.4% of participants in a study by McCormick *et al.*, correctly answered seven questions, indicating a low level of awareness about tracheostomy care [18]. Another study carried out in 2019 highlighted the importance of educational programs to improve the quality of life of patients and caregivers. Out of 220 participants, 48% felt 'very prepared" at the time of discharge from the hospital while some of them didn't show so much willingness to cope due to the lack of training before discharge [19]. However, standardizing tracheostomy care training for routine needs and improving post-discharge assistance and coordination are two possible quality improvement opportunities. And arranging the meeting for the attendants with already tracheostomies patients before surgery may also be helpful [20].

CONCLUSIONS

Finally, the research results showed that the poor self-care knowledge among patients. After tracheostomy procedure it is very important to maintain self-care and avoid to infection. It is concluded from this study that self-care not good on their evaluation, education intervention to enhance on self-care and reduced the level of anxiety for patients with tracheostomy.

Conflicts of Interest

The authors declare no conflict of interest

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