



KNOWLEDGE AND SELECTED SKILLS OF CAREGIVERS OF PATIENTS WITH NEUROGENIC DYSPHAGIA

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ABSTRACT

Dysphagia is a frequent occurrence in approximately 50% of patients with stroke. To provide proper care, the care givers need to have adequate knowledge and special skills. The aim of the study was to assess the knowledge and selected skills of caregivers of patients with neurogenic dysphagia. 120 Caregivers of patients admitted with stroke and having dysphagia in two selected hospitals in Kollam district of Kerala were used for study. A researcher made structured knowledge questionnaire and a performance rating scale were used to collect data. Majority of the subjects (56.7%) had poor knowledge, 62.5% had poor skill in oral feeding and all of them had poor skill in performance of breathing and swallowing exercises, while 43.3% of subjects demonstrated good skill in nasogastric tube feeding. Significant positive correlation established between their knowledge and selected skills. Age, education, marital status and occupation of caregivers had significant association with their knowledge.

KEYWORDS : neurogenic dysphagia, stroke, caregivers, knowledge, selected skills

Introduction

Feeding, eating, and swallowing are complex activities that require a coordinated function of the motor, sensory, and cognitive systems that necessitate baseline knowledge in those activities and may need advanced-level knowledge and skills in the field of dysphagia management¹. Neurogenic dysphagia is one of the most serious deficits in function that can result from neurological damage. Various rehabilitation measures are used clinically for managing dysphagia such as dietary modification, swallowing exercise, postural techniques and safe feeding techniques.²

Due to physical and cognitive disabilities, many patients with neurogenic dysphagia are dependent on their caregivers. Better caregiver awareness and understanding of dysphagia management guidelines are essential for taking care of such patients to avoid serious consequences.

Statement Of The Problem

A study to assess the knowledge and selected skills of caregivers of patients with neurogenic dysphagia in selected hospitals in Kollam district, Kerala.

Objectives

- To assess the knowledge of caregivers on care of patients with neurogenic dysphagia
- To assess selected skills of caregivers on care of patients with neurogenic dysphagia
- To correlate the knowledge of caregivers with their selected skills in care of patients with neurogenic dysphagia
- To associate knowledge and selected skills of care givers in care of patients with neurogenic dysphagia and their sociopersonal variables

Materials and Methods

A quantitative approach with a descriptive design was used to meet the objectives of the study. 120 subjects who gave unpaid/paid, informal and consistent care for patients admitted with stroke and having dysphagia in two major super speciality hospitals namely Sankar institute of medical sciences and technology and ESI model and super speciality hospital, in Kollam district, Kerala were selected as the sample for study. Care givers working as health care providers were excluded from the study. Being a clinical study and due to limited availability of subjects, samples were consecutively selected.

A researcher made structured knowledge questionnaire and performance rating scale were used as tools. Structured

knowledge questionnaire to assess the knowledge of caregivers on care of patients with neurogenic dysphagia included, section A to assess the sociopersonal variables of caregivers and section B to assess the knowledge of caregivers regarding the care of patients with dysphagia. Section B had 30 questions related to care of patients with neurogenic dysphagia on aspects such as positioning, safe feeding techniques for oral and nasogastric tube feeding, diet consistency modification, oral care and performance of breathing and swallowing exercises. Each question was given a score of 1 with a total score of 30 for correct responses. Questionnaire was self administered among the subjects after giving clear instructions on how to complete it. Performance rating scale to assess the selected skills of caregivers on care of patients with neurogenic dysphagia had 3 subsections such as rating scale to assess the skill of caregivers in oral feeding with 12 actions, in nasogastric tube feeding with 12 actions and in performance of breathing and swallowing exercises with 13 actions. Rating was done on a three point scale as poor (0), satisfactory (1) and good (2) by the researcher using non participant observation.

The tools were made by the researcher after a vast literature review and content validity of tools was ascertained in consultation with experts in the field of neuro medicine, neurosurgery, medicine and medical surgical nursing. Internal reliability of the knowledge questionnaire was measured by spilt half method and it was found to be good (0.81). Reliability of performance rating scale was established by inter rater reliability (0.72). After obtaining the setting permission from the authorities and informed consent from the subjects the data were collected using the above mentioned tools from 01/10/2016-31/02/2018. Knowledge and skills regarding care of patients with neurogenic dysphagia were scored and graded as poor - <50 %, moderate - 50-75% and good- >75% of the total score. The collected data were analysed using frequency and percentage analysis, Spear man's correlation coefficient and Chi square test of association.

Results

a. Socio personal variables of caregivers

Among the participants, majority (70%) were female. Spouse of the patients were found to provide care in most of the cases (38.3%). While 28.3% were within the age of 41-50 years, 25% of them were between 60-70 years and only 10% were less than 30 years. Most of the subjects (49.2%) belonged to semiurban locality. While 23.3% were graduates, 31.7% were qualified below S.S.L.C and majority were from Hindu religion (53.3%). A lion's share (75.8%) of the study participants were married. Only 16.7% of the subjects had technical/skilled job and 19.2% had manual labour. Most of the participants

(81.7%) had no prior experience in caring patients with neurogenic dysphagia.

b. Knowledge and selected skills of care givers

Table 1. Distribution of subjects according to knowledge regarding care of patients with neurogenic dysphagia

N=120

Knowledge	Frequency	Percent
Poor	68	56.7
Moderate	52	43.3
Mean \pm SD	14 \pm 3.9	

Table 2. Distribution of subjects according to Skill on oral feeding

N=120

Skill on oral feeding	Frequency	Percent
Poor	75	62.5
Moderate	27	22.5
Good	18	15.0
Mean \pm SD	11.8 \pm 4.7	

Table 3. Distribution of subjects according to Skill on nasogastric tube feeding

N=120

Skill on nasogastric tube feeding	Frequency	Percent
Poor	28	23.3
Moderate	40	33.3
Good	52	43.3
Mean \pm SD	16.4 \pm 4.9	

Table 1 shows that most of the subjects (56.7%) had poor knowledge regarding care of patients with neurogenic dysphagia. Table 2 and 3 illustrate that while majority of subjects (43.3%) demonstrated good skill in nasogastric tube feeding, a lion's share (62.5%) had poor skill in oral feeding and all of the subjects demonstrated poor skill in performance of breathing and swallowing.

c. Correlation between knowledge and selected skills of caregivers

The study revealed that there was positive correlation of knowledge of caregivers with their skill in oral feeding ($r=0.713$) and skill in nasogastric tube feeding ($r=0.657$) at 0.01 level of significance.

d. Association between sociopersonal variables and knowledge and selected skills of care givers regarding care of patients with neurogenic dysphagia

Association between knowledge of caregivers regarding the care of patients with neurogenic dysphagia and their sociopersonal variables such as age in years ($\chi^2=48.3$, $p=0.000$), educational qualification ($\chi^2=52.89$, $p=0.000$), marital status ($\chi^2=7.66$, $p=0.006$) and occupation ($\chi^2=21.25$, $p=0.000$) was significant at 0.01 level. Association of skill in oral feeding and variables such as age in years ($\chi^2=29.91$, $p=0.000$) educational qualification ($\chi^2=30.31$, $p=0.000$) and marital status ($\chi^2=10.17$, $p=0.000$) was significant at 0.01 level. Association between skill in nasogastric tube feeding and variables such as age in years ($\chi^2=33.46$, $p=0.000$) educational qualification ($\chi^2=15.46$, $p=0.004$), marital status ($\chi^2=11.2$, $p=0.004$) and occupation ($\chi^2=24.26$, $p=0.000$) was significant at 0.01 level where as the association between the same and religion ($\chi^2=10.1$, $p=0.039$) was significant at 0.05 level

DISCUSSION

The findings of the study revealed that majority of caregivers had poor knowledge and skills in care of patients with neurogenic dysphagia. A comparatively fairly good skill in nasogastric tube feeding observed in nearly half of the subjects might be due to the training they acquired from the health care providers while in hospital. But knowledge and skills necessary in other aspects of dysphagia management is lacking in most of the participants. A positive correlation was observed between their knowledge and

selected skills. These results are supported by another research which reported inadequate stroke knowledge and poor personal health behaviours among 50 stroke caregivers aged >18 years. About 74% of subjects were aware of existence of swallowing problems in stroke, however 44% still believed that oral feeding the acceptable mode of feeding in such patients. Overall 52% caregivers had low level of awareness regarding stroke care with a mean knowledge score of 23.7. About 56% respondents were aware of nasogastric feeding is a preferable route when swallowing difficulties exist⁴.

Another descriptive qualitative study to describe the experiences of Taiwanese family care givers of stroke survivors after discharge reported that, while at home they felt a sense of uncertainty especially in five common areas including feeding, elimination, transportation, breathing problems and rehabilitation resources⁵. In the present study also caregivers demonstrated poor knowledge and skills in caring patients with dysphagia secondary to stroke.

The findings of the present study revealed significant association between some sociopersonal variables and the knowledge of caregivers. Hence it is inferred that as age increases, the knowledge and skills of caregivers decreases; young caregivers were found to be more knowledgeable and demonstrated good skills in caring patients with neurogenic dysphagia. Education and occupation of caregivers also had a significant impact on their knowledge and skills. Professionally and technically employed individuals demonstrated good knowledge and skills compared to home makers. It was also proved that there is no significant association between prior experience in caring patients dysphagia and their knowledge and skills on caring such patients. These findings highlight that care of patients with neurogenic dysphagia is a novel area of concern not only to the care givers but also to the nursing personnel involved in the care of such patients.

CONCLUSION

Dysphagia is a common health risk factor among patients with neurological disorders. To avoid serious consequences, dysphagia must be addressed and managed by long term care⁶. It is there fore essential that the caregivers should have adequate knowledge and special skills to detect and manage dysphagia early. Findings of the above study recommend that training is an emergent issue for the care givers of such patients in order to enhance their care quality.

Acknowledgement

Authors wish to acknowledge the contributions of Dr. Syam. U.K. (Neurologist, ESIC model Hospital, Asramam, Kollam) who helped in providing details of patients for this study. Also acknowledge the service of Dr. Oommen P. Mathew (Research Investigator, Population Research Centre' University of Kerala) who helped in statistical analysis.

Conflict of interest

Nil

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