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RESEARCH ARTICLE OPEN ACCESS

A DESCRIPTIVE STUDY ON CAREGIVERS KNOWLEDGE REGARDING HOMECARE NEEDS OF STROKE PATIENTS IN A SELECTED HOSPITAL, LUDHIANA, PUNJAB

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ABSTRACT

Stroke is one of the main Non-Communicable Disease of public health. It is a global problem of enormous proportion. Stroke is becoming a major cause of premature deaths and disability in developing countries. It has been found that a considerable number of stroke patients will survive from five to ten years after initial incident of stroke. Furthermore, one-fifth of stroke survivors require long term care. Stroke survivors need intensive long term home-care and assistance in their (ADL) Activities of Daily Living from family members, close friends or paid attendant. The Conceptual Framework for the study was based on a "Three Phase Theory" described by Fitts and Posner (1967). A descriptive approach and non experimental research design was adopted for the study. Data was collected through self structured knowledge questionnaire which was developed after extensive literature review and was tested for validity and reliability (r=0.88).

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INTRODUCTION

Our brain is supplied with lots of blood vessels and capillaries which supply blood with nutrients and oxygen. When blood flow to a part of the brain stops; it results in a condition known as "Stroke". A stroke is sometimes called a "brain attack."Stroke is a "brain attack", cutting off vital supplies of blood and oxygen to the cerebral cells controlling everything we do - speaking, walking, breathing. A stroke occurs when an artery becomes blocked (ischemic stroke) or ruptured (hemorrhagic stroke). Most strokes occur when arteries are blocked by blood clots or by the gradual build-up of plaque and other fatty deposits. Arteries can rupture when weak spots on the blood vessel wall break (A.D.A.M. Medical Encyclopedia, 2011). Stroke is a preventable and treatable disease, ranking third globally. Stroke is becoming a major cause of premature deaths and disability in developing countrie. (T Beena, Malathi, Navaneetha M 2011). In India the incidence rate of stroke is likely to rise in coming years due to increase in population, increase in life expectancy, rapid urbanization from migration of villagers to the cities, changing life styles involving sedentary habits, smoking, excess alcohol usage and rising stress level in life. According to the estimates by the National Commission on Macro economics and Health in India, there will be 1.67 million stroke cases in India in 2015 Which we have already crossed. ("Stroke Surveillance in India" World Health Organization New Delhi, 2006). Long term physical disability and dependency in performing Activities of Daily Living (ADL) are common manifestation of the stroke disease (WHO b, 2013). Caregiver, help patient to maintain and regain health, manage disease and symptoms, and attain a maximal level function and independence through the healing process. Provide healing through physical and interpersonal skills. Healing involves more than achieving improved physical well being. Need to meet all health care needs of the patient by providing measures that restore patients emotional, spiritual and social well – being. As a caregiver, help the patient and family set goals and assist them with meeting these goals with minimal financial cost, time, and energy. (Perry AG & Potter. PA, 2013). It has been found that a considerable number of stroke patients survives from five to ten years after initial incident of stroke. Furthermore, one-fifth of stroke victims require long term care. Stroke survivors need intensive long term home-care and assistance in their ADL from family members, close friends or paid attendant (WHO, 2006). A large proportion of disabled stroke survivors lives at home and is supported by informal caregivers. (Cullagh EM, Brigstocke G, Donaldson N, Kalra L, 2005). The care givers are the back bone of the service provided to people affected by stroke. A care giver has to do a number of activities to stroke patient, example; lifting, change position in bed, bathing,

dressing, feeding, cooking, shopping, paying bills, giving medicines, keeping them company, providing emotional supports. Stroke patients and their caregivers have large gaps in stroke knowledge and have suboptimal personal health behaviors, thereby putting the patient at high risk for recurrent stroke. Education programmes are needed for closing these gaps in knowledge and personal health behaviors (Martein Dennis MD, Suzanne O'Rourke Phd etal,1998).

Research design & method: Descriptive research approach and non experimental research design was considered appropriate for assessing the caregivers knowledge regarding homecare needs of stroke patients.80 caregivers of stroke patients selected by non- probability purposive sampling technique. Analysis of the data has been done in accordance with the objectives of the study by using descriptive and inferential statistics.

Target population: In this study population refers to the Caregivers either relatives or attendants of stroke patients admitted in neurosciences ward and patients coming for follow up in OPD of Christian Medical College & Hospital Ludhiana.

Sample & sampling technique: The sample for the present study was 80 caregivers of stroke patients selected by non-probability purposive sampling technique in Christian Medical College & Hospital Ludhiana.

Selection & development of tool: Tool was selected/ modified/ developed to assess the knowledge regarding homecare needs among caregiver of stroke patients in selected hospital. An intensive review of the literature, experts' opinion, and suggestions of the research panel, researchers' professional experience and informal interview with caregivers provided basis for the construction of self structured knowledge questionnaire.

Description of tool: The tool consisted of two sections and classified as follows:

Part–I: Socio-demographic characteristics of caregivers and illness related characteristics of patient
Part II: Structured knowledge Questionnaire

Part–I: **Socio-demographic characteristics of caregivers and illness related characteristics of patient**

This part consist of 13 characteristics/ variables items for obtaining information i.e. age, gender, education, occupation, residence, family income, source of information, previous caring experience, relationship with patient, gender of patient, duration of patient illness, number of hospitalization, dependency level.

Part II: Structured knowledge Questionnaire

This part consists of self structured knowledge questionnaire It is consisted of multiple choice questions related to caregivers knowledge regarding homecare needs of stroke patients. This questionnaire consists of 36 multiple choice items, each item is having four choices and each correct answer carries one mark.
It deals with the area of knowledge regarding homecare needs among caregiver of stroke patients. The tool of the data is subcategorized into six areas that is used for collection as follow:

Areas of Knowledge	No.of Items	Percentage
a. Personal Hygiene :	07	19.44
b. feeding	05	13.88
c. elimination	07	19.44
d. mobility	04	11.11
e. communication, psychological and emotional	07	19.44
f. complications	06	16.66
Total item	36	100

PART I – It was related to sample characteristics which were not included in the scoring system.

PART II – It included self structured knowledge questionnaire regarding homecare needs of stroke patients. The questionnaire consisted of 36 items. Each item had four options and it was asked to tick mark (√) against most suitable correct answer. The maximum score was 36 and minimum score was 1 mark was given for correct answer and 0 for incorrect answer.

Criterion measures

Criterion measurement to assess knowledge

Level of knowledge	Score	Percentage (%)
Very good	>24	> 66.6 %
Good	20-24	55.5% - 66.5%
Average	15-19	41.6% - 52.7%
Below average	< 14	< 38.8%

Content Validity of tool: The tool was confirmed by experts' opinion regarding the relevance of items. The tool was given to the experts from the areas of Medical Surgical Nursing, Obstetrical and Gynecological Nursing, Community Health Nursing, Mental Health (Psychiatric) Nursing and Child Health Nursing. Tool was given to experts and changes were made. According to their valuable suggestions some corrections and modifications were made in 4 items, and 3 items were deleted. The final tool consisted of 36 items of knowledge in self-structured questionnaire regarding knowledge of homecare needs of stroke patients.

Reliability of the tool: Reliability of the structured questionnaire was computed by applying split half method and was calculated by Karl Pearson's co-efficient correlation and Spearman Brown Prophecy formula and the reliability of the structured questionnaire was found r'=0.88 of caregivers knowledge. Hence the tool was reliable.

Ethical consideration: Prior to the data collection, researcher first got written permission from Medical Superintendent of Christian Medical College & Hospital, Ludhiana, Punjab and approval from the research and ethical committee of college of Nursing, C.M.C and Hospital, Ludhiana, Punjab was taken. Written consent was taken from the subjects and information collected was kept confidential and was used for research purpose only.

Plan of Data analysis: Analysis of the data has been done in accordance with the objectives of the study. The analysis was done using descriptive and inferential statistics. In descriptive statistics mean, mean percentage and standard deviation were used to describe the caregivers according to variables i.e. age, gender, education, occupation, residence, relationship with patient, family income, duration of disease, number of hospitalization, source of information, previous caring experience, gender of Patient, dependency level. In inferential

statistics analysis of variance was used to interpret the relationship between variables. The level of significance choose was $p<0.05$. Results of the study were shown in the form of tables and bar diagram.

RESULTS

Table 1. Percentage distribution of caregivers of stroke patients according to the level of knowledge regarding homecare needs

N=80

Levels of knowledge		Caregivers		
		Score	N	%
Very Good	(>66.6%)	>24	4	5
Good	(55.5%-66.6%)	20-24	35	44
Average	(41.6- 52.7%)	15-19	36	45
Below average	(≤38.8%)	≤14	5	6

Maximum Score = 36
Minimum Score = 0

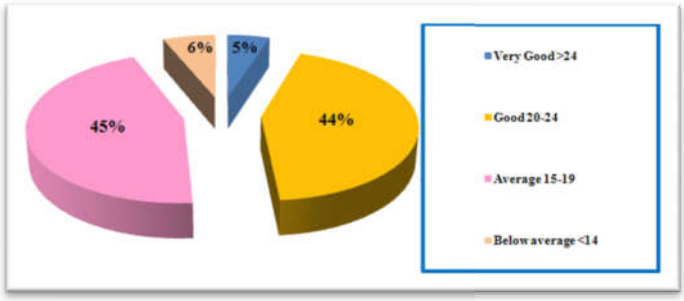

Figure 1. Percentage distribution of Caregivers of Stroke Patients according to the Level of Knowledge

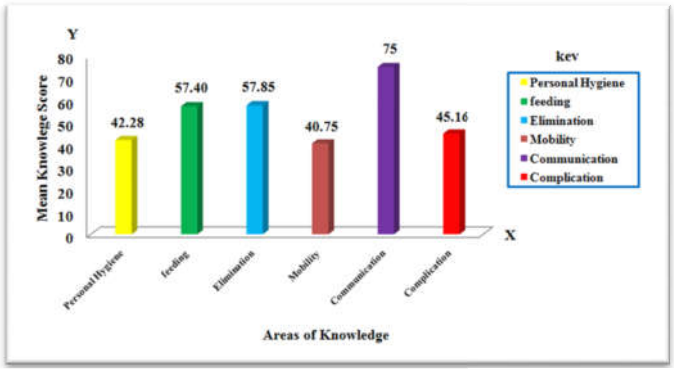

Figure 2. Mean percentage of knowledge Score of Caregivers according to Areas of knowledge

DISCUSSION

The findings of the present study have been discussed in accordance with objectives pertaining to research problems. The findings of the study are discussed with references to result observed by the investigators.

- The analysis of the data according to sample characteristics reveals that majority of caregivers (45%) had average knowledge, 44% had good knowledge, 6% had below average knowledge and 5% had very good knowledge regarding homecare needs of stroke patients.
- The analysis of data according in the areas of knowledge. The majority of caregivers knowledge was higher 75% in the area of communication, followed by elimination 57.85%, feeding 57.40%, complication 45.16% personal hygiene, 42.28% and least was in mobility 40.75%. The overall mean knowledge score was found to be 19.46.
- Analysis of data according to sample characteristics reveals that majority of the subjects in study were in the age group of >50 years, 55% were females, 80 caregivers, did matriculation 25%, unemployed 48.75%, majority 75% of them were from urban area, 38.75% family income was 5001-10,000, 90% caregivers source of information was health care team, 63.75% had no previous caring experience, 38.75% were spouse. Majority of the patient taken by caregivers were male 63.75%, 65% duration of patient illness was <2years, 61% was hospitalized once and 21% of patients were partially dependent.
- The findings were supported by **Yard, Sevgisun, Hatice**[59] who conducted a descriptive study in Turkey to identify difficulties experienced by bedridden CVA patients' caregivers at home due to decreased knowledge about giving care after stroke. Knowledge deficit about patient's physical care was another problem that caregivers encountered. At the discharge and home monitoring stages, 94.7% and 42.1% of the caregivers, respectively, were in need of information about the physical care of the patient. It was concluded that insufficient knowledge is a factor in caregivers, sufficient knowledge about caregiving of stroke patient is essentially needed.
- Major findings related to caregivers knowledge clearly indicates that caregivers do lack expected level of knowledge related to homecare need of stroke patient. Therefore, there is a need for dissemination and improvement in caregivers current level of knowledge of caregiving of stroke patient.

Conclusion

As assumed by the investigator, in the present study maximum number of caregivers (45%) have average level of knowledge. These findings support the assumption that "Care givers do have some knowledge of homecare needs of stroke patients". The overall mean knowledge score level was not sufficient patient's safety at risk, demanding immediate attention of nursing educators and administrators to hold time to time awareness education programme.

REFERENCES

A global brief on hypertension, silent killer, global public health crisis. http://apps.who.int/iris/ bitstream eng.pdf, WHO(2013) Retrieved Aug13, 2014.

A.D.A.M. Medical Encyclopedia: URL:http:// www.ncbi.nlm.nih.gov/ pubmedhealth Nov 2012.

Abu Kamel, A. Bond, A. E., Froelicher, E. Depression and caregiver burden experienced by caregivers of Jordanian patients with stroke. International Journal of Nursing Practice, (2012). 18: 147–154.

American Heart Association, stroke. Stroke epidemiological data of nine

Amritha C.K. knowledge assessment of caregivers of stroke patients about their caring role. dspace.sctimst.ac.in/ jspui/bitstream. 2009.

Ang, S., Tin, A., Pavitar, G., Ng, W., Lee, K., Lim, L. et al. A Qualitative Study into Stroke Caregivers' educational needs –perspectives of caregivers and healthcare professionals. Proceedings of Singapore Healthcare, (2013). 22(3), 166-174.

Ang. et al.. A Qualitative Study into Stroke Caregivers' educational needs –perspectives of caregivers and healthcare professionals. Proceedings of Singapore Healthcare, (2013). 22(3), 166-174.

Asian countries. Website: www.ncbi.nlm.nih.gov. 2007

Bakas T, Austin J, Okonkwo K, Lewis R, Chadwick L. Needs, concerns, strategies, and advice of stroke caregivers the first 6 months after discharge. Journal of Neuroscience Nursing.2002;34:242–251.

Barbara campos de Oliveira, Mara Lucia Garanhani,Marcia Regina Garanhani. Caregivers of people with stroke-needs, feelings and guidelines provided. Acta paul, enferm vol.24 no.1.Sao Paulo 2011. Jan-Feb; 24 (1): 43-9.

Baumann, Lurbe - Puerto, Alzahouri, & Aiach , Increased residual disability among poststroke survivors and the repercussions for the lives of informal caregivers. Top Stroke Rehabil. 2011 Mar-Apr;18(2):162-71. doi: 10.1310/ tsr1802-162.

BeenaT, Malathi, Navaneetha M. Risk status of stroke among adults and the effectiveness of an awareness program on primary prevention of stroke. International journal of nursing 2011; 3(2):12-14.

Bruce Ovbiagele. Stroke Epidemiology: Advancing Our Understanding of Disease Mechanism and Therapy. Neurotherapeutics.v.8 (3); Jul 2011 .

Burton CR. A description of the nursing role in stroke rehabilitation.J Adv Nurs 2000; 32(1):174-1

Cameron, V. Best Practices for stroke patient and family education in the acute care setting: a literature review. Med-Surgical Nursing. (2013). 22(1), 51-55.

Cardiovascular diseases, facts.. http://www.who.int/ mediacentre/ factsheets/fs317/en/index.html. WHO(2006) Retrieved Aug 14, 2014

Cullagh EM,Brigstocke G,Donaldson N,Kalra L. Determinants of care giving burden and quality of life of caregivers of stroke patients. Stroke 2005; 36:2181.

Elisabeth T.P, et al, Long-term effects of a group support program and an individual support program for informal caregivers of stroke patients: which caregivers benefit the most, patient education and counseling, volume 2002. 47, Issue 4, pages 291- 299,

Emily McCullagh, Gavin Brigstocke, Nora Donaldson, Lalit Kalra, http://stroke.ahajournals.org/content/ 2005; 36: 2181-2186.

Exel J, Graaf GD, Brouwer , Give me a break, informal caregiver attitude towards respite care. Health policy 2008; 88:73-87.

Fitts P & Posner M. Learning and skilled performance in human performance. Beanont CA: Brock-Cole,1967

Forster A, Dickerson J, Young J, et al. on behalf of the TRACS Trial collaboration. A structured training programme for caregivers of patients after stroke. a cluster randomised controlled trial and cost – effectiveness analysis, 2013 Lancet 382:2069-76.

Foster A, et al, http://www.ncbi.nlm.nih.gov/pubmed/23152210, 2005.

Han, B., & Haley, W. Family caregiving for patients with stroke: Review and analysis. Stroke, 30, 1478-1485. 1999

Jullamate P, Azeredo Z Pául C Subgranon. Thai Stroke Patient Caregivers: Who They Are and What They Need, Cerebrovasc Disease October 5, 2009;21:128-133..

Kalra, et al. Training carers of stroke patients: randomised controlled trial. BMJ ;328 .Published 06 May 2004.

Kangnaowan Pellet. Stroke http://bodycountry.com/stroke/2010/introduction-to-strokei.html/ .2009 Dec 22, cited Nov 12

Kaul S, Bandaru VC, Suvarna A, Boddu DB. Stroke burden and risk factors in developing countries with special reference to India. J Indian Med Assoc. 2009 Jun; 107(6):358, 367-70

Kelly J, Winograd CH. A functional approach to stroke management in elderly patients. *J Am Geriatr Soc*. 1985;33:48–60.

Koenig KL, Whyte EM, Munin MC, O'Donnell L, Skidmore ER, Penrod LE Lenze EJ. Stroke related knowledge and health behaviors among post stroke patients in inpatient rehabilitation. Arch phys Med Rehabilitation 2007; 88(9):1214-6.

Lee KW, Choi SJ, Kim SB, Lee JH & Lee SJ, A Survey of Caregivers' Knowledge About Caring for Stroke Patients. Ann Rehabil Med. 2015 Oct; 39(5):800-15. 2015

Linda L Pierce &Victoria Steiner, Emotional support, physical help and health of caregivers of stroke survivors. Journal of neuroscience nursing. 2007.40 (1) 48-53.

Maclsaac, L., Harrison, M., & Godfrey, C. Supportive needs of caregivers of individuals following stroke: a synopsis of research. Canadian Journal of Neuroscience Nursing, (2010). 32(1), 39-46.

Mahasneh, S. Survey of the health of the elderly in Jordan. Medical Journal of Islamic Academy of Sciences, 2000, 13(1), 39-48.

ManjariTripathi, DeepthiVibha "Stroke in young in Indian", "Journal of Indian Medical Association" 107 (6): 372 - 377. 2009

Martein Dennis, Suzanne O'Rourke et.al. A quantitative study of the emotional outcome of people caring for stroke survivors: Stroke.ahajournals.org. 1998

Mary k, Kathy J. The stroke patient and assessment of caregiver needs. J Vasc Nurs1998; 16(3):62-7.

May.et al. Supporting Family Caregivers in Stroke Care. Stroke; 36: 2514-2522. 2005

Ministry of Health, Malaysia .Clinical Practice Guideline Website: http://www.moh.gov.my 2006.

Ministry of Health, Malaysia. Health Facts 2009. Website: http:// www. moh. gov.my

Moromoto, et al. Caregiver burden and health related quality of life Japanese stroke caregivers. British Geriatrics Society Diambil pada tanggal. Ageing oxford journals. 18 August 2010

Murrain et al, 2003*; dspace.sctimst.ac.in /jspui/bitstream/ 123456789/ 1551/ 1/153.pdf*

Neurological disorders: public health challenges from http://www.who.int/ mental_health/neurology/ neurological _disorders _ report_ web.pdf, WHO. 2006. Retrieved Aug 13, 2014

Patel Anita, Martin Knapp, Andrew Evans, Inigo Perez and Lalit Kalra. Training care givers of stroke patients: economic evaluation, BMJ. May 8, 2004; 328(7448): 1102.

Polit. D.F& Hungler. B.P: Nursing Research. 7th ed. J.B. Lippincott Company, 2002.

Potter.P.A, Perry.A.G: Fundamentals of nursing. 6th ed. Mosby publication; 2013. P 7.

R.P. Newhouse, S.L. Dearholt, S.S. Poe, L.C. Pugh, K.M. White. John Hopkins nursing evidence-based practice: Model and guidelines. Sigma Theta Tau International, Indianapolis (2007)

Reddy M.P & Reddy V. shodhganga.inflibnet.ac.in/ bitstream , 2012. P 34.

Rose Galvin.Tara Cusack. Eleanor O'Grady. Thomas Brendan Murphy. Emma Stokes. FAME.Evaluation of a Novel Form of Exercise Delivery After Stroke. stroke. journal of the American heart association. Jan 13, 2011.

Sawatzky, J. & Fowler-Kerry, S. Impact of caregiving: Listening to the voice of informal caregivers. Journal of Psychiatric and Mental Health Nursing, (2003). 10: 277-286.

Sirivarasai, K. The relationship between family relationship, hope, and adaptation in hemiplegic patients. Unpublished master's thesis, Mahidol University, Bangkok, Thailand. 1993

Smeltzer SC, Bare BG: Text book of Medical-Surgical Nursing. 10th ed. Philadelphia: Lippincott Williams and Wilkins; 2004.

Smith J, ForsterA, Knapp p,Wright JJ,YOUNG J. Information provision for stroke patients and their caregivers . Cochrane data base of syst Rev 2008; 4.

Smith, S. & Bell, P. (2005). Examining the effectiveness of Savvy Caregiver Program among Rural Colorado residents. Rural and Remote Health. 5, 466. Retrieved Sep 11, 2014

Suzanne.C.S, Brenda.G.B,Brunner and Suddarth.Text book of medical surgical nursing. 10th ed. Lippincot publication; P 1896-1898.

Tajuddin Syed et al. Mental Trauma Experienced by Caregivers of patients with Diffuse Axonal Injury or Severe Traumatic Brain Injury. Trauma Mon. 2013 Sep; 18(2): 56–61

Tan, K. S., Tan, C. T., Churilov, L., Mackay, M. & Donnan, G. A. Ischaemic stroke in young adults: a comparative study between Malaysia and Australia.*Neurol Asia.* 15(1): 1-9. 2010

Van Exel, Koop Manschap, Van den Berg, Brouwer, & Van den Bos, Give me a break, informal caregiver attitude towards respite care. Health policy 2005.

Van Pelt David, Schulz Richard, Chelluri Lakshmipathi & Pinsky Michael. Patient-Specific, Time-Varying Predictors of Post-ICU Informal Caregiver Burden. Chest. 2010 Jan; 137(1): 88–94.

Wade.DT. Langton hewer R, Skibeck e-Brainton Debunk. controlled trial of home care service for acute stroke patient. 2006.

Watson J. Caring science and human caring theory. Journal of HHS Spring, 2009. P 479.

Wellwood I, Dennis MS, Warlow CP. Perceptions and knowledge of stroke among surviving patients with stroke and their carers. Age aging 1994; 23:293-8

workshop report on stroke surveillance in India" world Health Organization New Delhi, http://www.whoindia.org/ 2006.

Yaffe, M. & Jcobs, B. Education about family caregiving. *Canadian Family Physician*, (2008). 54, 1359-1360.

Yamamoto, Yosuke, Hayashino, Yasuaki, Yamazaki & Shin, Violent Patient Behavior Is Associated with Bodily Pain and a High Burden on Informal Caregivers. Journal of General Internal Medicine. (2009) Oct; 24(10): 1085–1088.

Yard . Sevgisun & Hatice. Family Caregivers' Difficulties in Caring for Bedridden Stroke Patients. Sağlık Bilimleri Fakültesi Hemşirelik Dergisi (2009) 17–31

Yu-ying tang, et al. Health promotion behaviors in Chinese family caregivers of patients with stroke. Oxford Journals Health Promot. Int, 2002;Volume 17, Issue 4Pp. 329-339.

Yu-ying, et al. The Effect of Discharge Planning on Elderly Stroke Patients.; ethesys.fy.edu.tw. 2009

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