

**Misconceptions about metformin use among patients attending diabetes clinic in Teaching Hospital Karapitiya (THK)**

Chanika Rangani<sup>1\*</sup>, Arosha Dissanayake<sup>2</sup>

<sup>1</sup>Department of Nursing, Faculty of Allied Health Sciences, University of Ruhuna; <sup>2</sup>Department of Medicine, Faculty of Medicine, University of Ruhuna

\*Correspondence: chanikarangani@gmail.com

**Background:** Metformin is the first line medication used in the treatment of diabetes. Misconceptions prevalent in Sri Lankan society have created anxiety about use of metformin.

**Aims:** To identify common misconceptions about metformin among patients attending the diabetes clinic at THK and to assess knowledge and factors associated with taking prescribed dose metformin.

**Methods:** A hospital base descriptive cross sectional study was conducted with 400 patients who attended the diabetes clinic at THK. An interviewer administered questionnaire was used to collect data. Data was analyzed with Chi square, ANOVA and independent T tests using SPSS 20.

**Results :** In the study, 78.5% (n=314) were females. Most 80.7% (n=323) were of Sinhalese ethnicity. Approximately 30.50% (n=122) had educational achievements up to O/L. The most common misconceptions were 72.5% (290) believed that long term use of metformin caused renal failure and 64.3% (n=257) believed long term use of metformin cause liver failure. A further 18% (n=72) believed taking thebu kola (*Costus speciosus*), Karavila (*Momordic charantia*) or home remedies were more effective for diabetes control than taking metformin. Patients 55.7% (n=223) admitted to deliberately taking metformin at less than the doses prescribed to them in the clinic. There was significant association between taking prescribed dose of metformin and education level (p<0.05), with those with higher educational attainment being more likely to take the prescribed doses correctly. But no significant association was noted with age, gender, family history and duration of illness. The mean knowledge score on metformin was 6.3 ± 4.1. A substantial proportion of patients (41.8%, n=167) scored in 0-4 score range. Higher education levels of patients were associated with higher knowledge scores (p<0.05).

**Conclusions & Recommendations:** Though routinely medical staff provides basic knowledge on diseases and medications, many misconceptions regarding use of metformin prevailed among patients with diabetes attending the diabetes clinic. Overall knowledge about metformin was not satisfactory. This was especially so in the patients with lower educational levels. The lower knowledge and prevalent misconceptions resulted in many patients not adhering to the doses of metformin prescribed. A concerted effort specifically addressing misconceptions related to metformin use both at individual patient level and in mass media is recommended to address this important health problem.

**Key words:** *Misconceptions, Metformin, Diabetes*

**Caregiver skills on activities of daily living provided by family caregivers of dependent stroke survivors: preliminary results of a study from Colombo, Sri Lanka**

S. A. M. H. Kumara<sup>1\*</sup>, S. W. Wimalasekera<sup>2</sup>, G. Ponnampereuma<sup>3</sup>, A. A. T. D. Amarasekara<sup>1</sup>, S. B. Gunatilake<sup>4</sup>

<sup>1</sup>Department of Nursing and Midwifery, Faculty of Allied Health Sciences, University of Sri Jayewardenepura; <sup>2</sup>Department of Physiology, <sup>3</sup>Department of Medicine, Faculty of Medical Sciences, University of Sri Jayewardenepura; <sup>4</sup>Department of Medical Education, Faculty of Medicine, University of Colombo

\*Correspondence: mkumara200@gmail.com

**Background:** Stroke is a life changing event that affects both the stroke survivors and their family members. The role of the family caregiver may differ, depending on the functional limitations of the stroke survivor and the need for assistance with Activities of Daily Living (ADL). Thus caregiving skills are essential to enhance rehabilitation and post-stroke recovery of stroke patients.

**Aims:** To assess the baseline skills of providing care related to ADL by family caregivers of dependent stroke survivors in Colombo, Sri Lanka.

**Methods:** A descriptive cross-sectional study was conducted on family stroke caregivers. The dependency of stroke survivors was confirmed by Barthel Index validated for Sri Lanka. Care giving skills were observed on family caregivers of highly dependent stroke patients (Barthel Index below 60). Subjects were selected from two teaching hospitals and a base hospital in Colombo district. Family caregivers were assessed using an observation guide on caring tasks related to ADL, which was developed based on the literature and expert opinion. The level of performance of caregivers was scored out of a total score of 100.

**Results:** The family caregivers of the above stroke survivors comprised 33 males and 40 females (n = 73). The mean age of the patients was 61.9 years and the mean age of the caregivers was 47.2 years. Majority of caregivers were educated up to G.C.E. (Ordinary Level). Caregiving skills were observed in 40 family caregivers. The mean (SD) score of the caregivers was 46.3 (17.3). Poor performance was observed in 25 (62.5%) caregivers (mean=35.7, SD=8.8).

**Conclusions & Recommendations:** Majority of the family caregivers had poor skills when providing care to stroke survivors. The findings indicate the need for proper skills training to the family caregivers to provide appropriate post stroke homecare. A proper health education programme needs to be established to train care givers so that better homecare is provided for the stroke survivors.

**Key words:** *Barthel Index validated Sri Lankan version*

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**Availability of resources for provision of homecare and knowledge of care giving among family caregivers of dependent stroke survivors – Preliminary results**

Kumara SAMH<sup>1</sup>, Wimalasekera SW<sup>2</sup>, Ponnampereuma G<sup>4</sup>, Amarasekara AATD<sup>1</sup>, Gunatilaka SB<sup>3</sup>,

<sup>1</sup>Department of Nursing and Midwifery, Faculty of Allied Health Sciences, University of Sri Jayewardenepura, Sri Lanka; <sup>2</sup>Department of Physiology, Faculty of Medical Sciences, University of Sri Jayewardenepura, Sri Lanka; <sup>3</sup>Department of Medicine, Faculty of Medical Sciences, University of Sri Jayewardenepura, Sri Lanka; <sup>4</sup>Department of Medical Education, Faculty of Medicine, University of Colombo, Sri Lanka

**Background:** In Sri Lanka, family caregivers provide homecare to stroke survivors after hospital management. Therefore, the availability of resources and knowledge of care are important to provide better homecare for stroke survivors.

**Objectives:** To determine availability of resources in the home and to determine the knowledge of family caregivers to provide homecare for dependent stroke survivors.

**Methods:** A descriptive cross-sectional study was conducted using consecutive sampling technique on family caregivers of stroke survivors with disability score of below 60 in the Barthel index validated Sri Lankan version in three hospitals of Colombo district. Ethical approval was granted from University of Sri Jayewardenepura. An interviewer administered questionnaire was used. Knowledge on aspects of care giving was scored and interpreted as poor, satisfactory, good and very good. Data were entered into a database and descriptive analysis done using SPSS software (version 16.0).

**Results:** Mean age of the caregivers (n=85, 40 males) was 47.1 ( $\pm 13.86$  SD) years. Majority

(76, 89.4%) were married and 39 (45.9%) were unemployed. Most caregivers (46, 54.1%) were educated up to G.C.E. (Ordinary Level) and 47.1% had experience as family caregivers. Most patients (78, 91.8%) were cared in their own home. Majority of the patients (65, 76.5%) had good sanitary facilities and pipe borne water supply (59, 69.4%). 65 (76.5%) respondents indicated that wheelchair accessibility at home was unavailable. Poor knowledge was observed in 78 (90.7%) of family caregivers on providing care related to activities of daily living.

**Conclusion:** Majority of respondents had basic resources to provide homecare for the stroke patients. However, their level of knowledge was poor. Thus, homecare can be improved with provision of proper education programs and would help to improve the quality of life of both the stroke survivors and the family caregivers.

# ACTUAL AND PREFERRED LEARNING PRACTICES OF FAMILY CAREGIVERS OF DEPENDENT STROKE SURVIVORS ON CARE RELATED TO ACTIVITIES OF DAILY LIVING – PRELIMINARY FINDINGS

Kumara SAMH<sup>1</sup>, Wimalasekera SW<sup>2</sup>, Ponnamparuma G<sup>3</sup>, Amarasekara AATD<sup>1\*</sup> and Gunatilake SB<sup>4</sup>

<sup>1</sup>Department of Nursing and Midwifery, Faculty of Allied Health Sciences, University of Sri Jayewardenepura, Sri Lanka

<sup>2</sup>Department of Physiology, Faculty of Medical Sciences, University of Sri Jayewardenepura, Sri Lanka

<sup>3</sup>Department of Medical Education, Faculty of Medicine, University of Colombo, Sri Lanka

<sup>4</sup>Department of Medicine, Faculty of Medical Sciences, University of Sri Jayewardenepura, Sri Lanka  
thamaraamarasekara@yahoo.com

## Abstract

Stroke is a medical emergency and unexpected sudden onset event which negatively affects the stroke survivor and his/her family. The acute phase of the stroke is treated in the hospitals, and then the patient is discharged with remaining disabilities. In Sri Lankan context, post-stroke homecare has been taken over by the family caregiver. It can be a challenging process for a family caregiver as an untrained person who takes on the task of caring for a relative presenting dependency, associated with stroke. The objective of this study was to determine the family caregivers actual and preferred learning practices for learning stroke care related to Activities of Daily Living (ADL) for dependant stroke survivors. A descriptive cross-sectional study was conducted, and family caregivers (n=55) were invited to participate from three selected hospitals in Colombo District. A researcher administered Multiple Choice Questions (MCQ) which were piloted was used to assess the existing and preferred learning practices. Ethical approval was obtained from the University of Sri Jayewardenepura. Mean age of the sample was 46.51 ( $\pm 15.36$ ) years. Majority of them were Sinhalese (90.9%). G.C.E. Ordinary Level was the highest educational qualification for most of the participants (45.5%). There were only 13.3% participants had previous learning experiences about stroke home care. Majority (48%) of the sample was preferred to use the video presentation as the method of learning about the care. Finding highlighted that there is a need of implementing a caregiver focused homecare programme by using preferred learning methods of family caregivers in order to deliver proper care at home setting for the stroke survivors for the improvement of caregiving skills of the family caregiver.

**Keywords:** homecare, activities of daily living, family caregivers of stroke survivors, homecare learning methods, homecare learning practices

## Poster Presentation Abstracts

### **Attitudes of Family Caregivers of Dependent Stroke Survivors Towards Post-stroke Home-based care – Preliminary Results from a Study in Colombo, Sri Lanka**

M. H. Kumara,<sup>1</sup> S. W. Wimalasekera,<sup>2</sup> G. Ponnampperuma,<sup>3</sup> T. D. Amarasekara,<sup>1</sup> and S. B. Gunetilaka<sup>2</sup>

<sup>1</sup>Allied Health Sciences, Sri Jayewardenepura, Sri Lanka <sup>2</sup>Medical Sciences, Sri Jayewardenepura, Sri Lanka <sup>3</sup>Medical, Colombo, Sri Lanka

**Background:** Stroke is a significant cause of adult disability in Sri Lanka. After acute-phase management, most of the stroke survivors, are cared by family caregivers, and the care varies due to their attitudes. Cultural aspects have a direct impact on the attitudes of family caregivers in care provision. There is a paucity of data regarding this phenomenon.

**Objective:** To determine the family caregivers' attitudes towards homecare for their stroke survivors.

**Methods:** A descriptive cross-sectional study was conducted, and family caregivers of dependent stroke survivors (n=99) were invited to participate from three hospitals in Colombo district. The sample was selected using consecutive sampling technique and size was calculated based on the literature available. A pre-tested, an interviewer-administered questionnaire, including a five-point Likert scale, was used to determine the attitudes. The mean values of 10 statements were taken individually and concluded the attitudes as positive, moderate or negative. Descriptive statistics and Chi-square test were used to analyze the data by using SPSS software (Version 20). Ethical approval was obtained from the University of Sri Jayewardenepura and relevant authorities.

**Results:** Mean age of the sample was 47.55 (±13.46 S.D.) years. Majority of them were Sinhalese (90, 75%) and Buddhists (82, 68.3%). Most had (54, 45%) G.C.E. (Ordinary Level) as highest educational qualification. Nine aspects indicated moderate attitudes of family caregivers and single aspect generated negative attitudes. A significant association was identified with religion, and the statement of "stroke occurs due to bad karma" ( $p = 0.00 < 0.05$ ). The statements of "stroke survivors have to be homebound for the lifetime" and "giving expectations to the patients on recovery" indicated significant relationships with race and highest educational qualifications ( $p = 0.00 < 0.05$ ).

**Conclusion:** The race, religion and level of education have a direct impact on the attitudes, and it highlights a need for culture-based health education is essential for better post-stroke care.

**Key words:** Stroke Survivors, Family Caregivers, Attitudes, Post-stroke Care, Sri Lanka

*Correspondence:* Maduranga H Kumara, RN, Allied Health Sciences, Sri Jayewardenepura, Sri Lanka  
E-mail: thamaramarasekara@yahoo.com