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I-CART: AN INNOVATIVE WAY ENGAGING WITH THE COMMUNITY

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ABSTRACT

The need for caregiving is growing, with the increasing numbers of elderly and people with disabilities. In Malaysia, caregiver support is limited and expensive. Transferring the knowledge and skill of carer training requires time, cost and motivation. The carer training provided in the hospital usually inadequate because limited time, resources and lack of family preparedness to learn. Therefore, Interdisciplinary Caregiver Rehabilitation Training (I-CART) module is innovated to engage with the caregivers in community and upgrade their knowledge related to caregiving of bedridden people, in effective way. I-CART provides 5 modules, which is a core knowledge and skill that the caregiver must know to handle a bedridden patient. The modules are provided by doctors, psychologist, rehabilitation nurse, physiotherapist, occupational therapist and speech therapist. Methods of module delivery are by didactic teaching, real-life demonstration, sharing session and practical session. This is the two days module provided in a small targeted group and a platform of health professionals to engage with community differently. It is cost-effective, unique and has commercialization value targeting the informal caregiver and private institutions that providing caregiver services. Therefore, the health burden related to bedridden patient and caregiver will be minimized, reduce healthcare cost and better quality of life.

Keywords: caregiver, carer training, rehabilitation

1. INTRODUCTION

Caregiving is a significant public health concern that influences the quality of life of millions of people. The increasing numbers of elderly and people with disabilities reflect the demand and burden of caregivers. Center for Disease and Control Prevention reported in 2018, over half of the caregivers showed to have depressions, physical issues and sleep disturbance while caregiving. The reliance and burden from the residual disability from the discharge patient was placed on informal caregivers to aid with daily activities [1]. Informal caregivers were defined as a provider of care for someone that normally from family or friends, and they enter the caregiving role due to necessity, and not by choice thus degree of involvement and preparedness for training in the hospital are limited [2]. Caregiver training was trusted to enhance knowledge and skills among caregivers after patient's discharge. In the hospital setting, the training commonly delivered per individual by different health professional in different session. In a study done by Kalra et al, systematic, structured training for caregivers, London Stroke Carers Training Course (LSCTC) was developed and assessed in randomized control trial, showed decrease in caregiver burden, wellbeing, improved psychological outcomes for patients, and reduced overall costs largely due to hospital discharge following the LSCTC[3]. This was agreed by [4], results in a study showed that online interventions had improved the condition and preparedness of caregivers. Caregiving required multi-dimensional approach for knowledge and skill to be delivered effectively especially to informal caregiver. Based on the social theory of learning, the process of observation, imitation and modelling

would later change the behavior and attitude of a person.[5]. Therefore, our project Interdisciplinary Caregiver Rehabilitation Training (I-CART) was innovated based on the social learning theory to upgrade the knowledge and skill of caregiver in the community.

2. MATERIALS AND METHODOLOGY

I-CART was initiated by multidisciplinary certified professionals who work in the government hospital which are doctors, nurses, physiotherapists, occupational therapists and speech language therapist. The stage of the training module development is illustrated below in Figure 1.

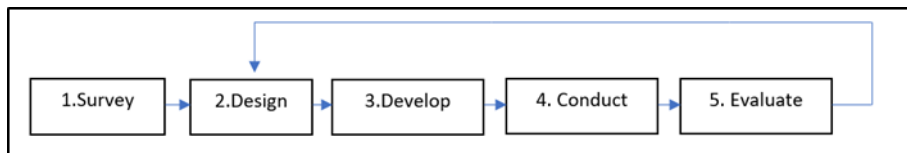


Figure 1. The Stage of Training Module development

In stage 1, a few series of surveys had performed to identify the demand of the module. The surveys were done via telephone call to institutional nursing home registered under the Social Welfare Department and in-patient ward. In stage 2, all the relevant contributors for the module were meet up and discussed on the delivery method and the flow process of the training. For stage 3, the detail materials of the module were prepared and compiled. In stage 4, the training was conducted as planned and stage 5 was the evaluation process of the module. This project has reached up to stage 4. I-CART has been conducted in July, 2019 for the first focus group of 35 caregivers. All the subjects were from informal and formal caregivers. There were 5 basic modules covering all aspect of caregiving which are; 1. Basic Health Knowledge of Caregiving 2. Basic Nursing Care 3. Oral Care, Swallowing & Communication 4. Activities Daily Living and Cognitive 5. Basic Exercise and Mobility. There were a few methods of delivery which were didactic lecture, live-demonstration and practical session. We also add-in one session for consumer. For that session, one of the caregivers shared his struggling experience of caregiving to the bedridden child. This project will be evaluated to assess the effectiveness of the module via the questionnaires for all the subjects soon.

3. CONCLUSION

I-CART is one of the methods for the health professional to engage with the community in focus group, catering specific issue outside their job description. Thus, the knowledge and skills of the caregiving will be upgraded in the community and better quality of life for bedridden patient will be implied.

REFERENCES

1. L. Tooth, K. McKenna, A. Barnett, C. Prescott, and S. Murphy, "Caregiver burden, time spent caring and health status in the first 12 months following stroke." *Brain Inj.*, vol. 19, no. 12, pp. 963–974, Nov. 2005.
2. V. J. Edwards, E. D. Bouldin, C. A. Taylor, B. S. Olivari, and L. C. McGuire, "Characteristics and Health Status of Informal Unpaid Caregivers — 44 States, District of Columbia, and Puerto Rico, 2015–2017," *MMWR. Morb. Mortal. Wkly. Rep.*, vol. 69, no. 7, pp. 183–188, 2020.

3. M. K. Lalit Kalra, Andrew Evans, Inigo Perez, Anne Melbourn, Anita Patel, "Training carers of stroke patients: randomised controlled trial.," *BMJ*, vol. 328, no. 7448, p. 1099, May 2004.
4. M. Pleasant, V. Molinari, D. Dobbs, H. Meng, and K. Hyer, "Effectiveness of online dementia caregivers training programs: A systematic review.," *Geriatr. Nurs.*, Jul. 2020.
5. B. A. Mukhalalati and A. Taylor, "Adult Learning Theories in Context: A Quick Guide for Healthcare Professional Educators," *J. Med. Educ. Curric. Dev.*, vol. 6, p. 238212051984033, 2019.



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