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The Effectiveness of Psychoeducational Interventions in Reducing the Care Burden of Family Members Caring for the Elderly in Turkey: A Randomized Controlled Study☆,☆☆,★

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ABSTRACT

Objective: To examine the effectiveness of psychoeducational intervention that is based on the McGill Model of Nursing in reducing the burden of caregivers and improving self-efficacy and adaptive coping in people who provide care for the older person.
Methods: This study was conducted using a pre- and post-test control group and repeated measures experimental design in a family health center service area located in Istanbul. This study was conducted with 33 caregivers in each group. The data were collected using the questionnaire form, the Zarit Burden Interview, the General Self-Efficacy Scale and the Cognitive Emotion Regulation Questionnaire.
Results: According to the findings of the study, the post-test Zarit Burden Interview points of the intervention group trained for according to McGill Model of Nursing will decrease compared with the control group after the intervention hypothesis was accepted; the post-test General Self-Efficacy Scale and adaptive subscales of the Cognitive Emotion Regulation Questionnaire scores will increase after the intervention hypothesis was also accepted.
Conclusion: It was found that the psychoeducational intervention based on the McGill Nursing Model was efficient.

Old age is a period in which care is most needed. Old age is defined as a period in which the individual suffers losses in physical appearance, strength, role and status, and the individual becomes dependent on his/her environment with an increase in disability and physical illnesses (Atagun, Balaban, Atagun, Elagoz, & Ozpolat, 2011). In the literature, old age is classified as follows: an age of 65–74 years refer to being old, 75–84 years refer to being older, while people aged 85 or older is referred as oldest old (World Health Organization-WHO, 2011). In 2010, an estimated 524 million people were aged 65 years or older, accounting for 8% of the world's population (WHO, 2011). In parallel with the aging of the world's population, Turkey's older population has increased to 8% of its total population (Turkish Statistical Institute, 2013).

The majority of older people are cared for at home by family members, and this brings with it some challenges. These challenges, frequently referred to as the caregiver burden, can affect aspects of caregivers' well-being; they may feel isolated and lack the time to reflect on their own needs and regain energy (Candy, Jones, Drake, Leurent, & King, 2011). It may also affect their own health, resulting in fatigue, sleeping problems, weight loss, depression, anxiety, and an increased risk of death (Atagun et al., 2011; Candy et al., 2011; Shankar, Hirschman, Hanlon, & Naylor, 2014; Yaci, 2011). The most important factors that influence the experience of the burden of care are self-efficacy and coping methods (Atagun et al., 2011; Shankar et al., 2014). For this reason, it is important to improve care providers' self-sufficiency and adaptive coping methods. Psychoeducational interventions can be used to achieve this, and thus reduce the care load. Improve self-sufficiency and adaptive coping methods, reducing care load.

The literature reports that several intervention programs aimed at reducing the disruptive effects of caregiving have been provided to caregivers. These include respite care (Lopez-Hartmann, Wens, Verhoeven, & Remmen, 2012), technology-based interventions (Blom, Bosmans,

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Cuijpers, Zarit, & Pot, 2013), psychoeducational interventions (Brodaty & Arasaratnam, 2012; Elvish, Lever, Johnstone, Cawley, & Keady, 2013; Lopez-Hartmann et al., 2012), and combined approaches (Lee, Czaja, & Schulz, 2010). However, the majority of these methods consist of psychosocial support interventions (Blom et al., 2013).

Psychoeducational interventions include enhancing caregivers' skills, planning their activities, reorganizing the environment, and enhancing support systems (Brodaty & Arasaratnam, 2012) and are usually delivered by nurses (Chu, Yang, & Liao, 2011; Elvish et al., 2013). Nurses use nursing models to base the care they provide on scientific grounds, and the McGill Model of Nursing (MMN) is one such model. This model, which addresses individual/family centered care and evaluates such care holistically, is an efficient method for use with various age groups and under any circumstances to promote growth by supporting psychological reinforcement (Gottlieb & Gottlieb, 2007). The logic of the model, its intellectual originality, and its benefits to other disciplines are evidence of its efficiency (Comer, 1991; Melrose, 2000). The nurse, who plays a key role in counseling and education, can provide psychoeducational interventions based on this model, which, in turn, will help to reduce the burden on caregivers and improve self-efficacy and adaptive coping methods.

The MMN was developed in the 1970s under the guidance of Dr. Moyra Allen and Mona Kravitz at McGill University's Faculty of Nursing in Canada (Comer, 1991). The initial model was called Situation-Responsive Nursing and Allen's Model of Nursing or Complemental Nursing (Allen & Warner, 2002). Later, Allen and her colleagues improved the model and renamed it the Developmental Model of Health & Nursing. Laurie Gottlieb and McGill University scholars and students, under the name of MMN, continue to evolve the model. The MMN has been widely approved in Canada, acknowledged as a beneficial framework for other nursing applications, and has been tested and used in various health institutions (Comer, 1991; Melrose, 2000; Gaudine, 2001; Allen & Warner, 2002).

There are evidence-based studies related to MMN in the literature. Murphy (1994) conducted research based on MMN education for nurses. Through this education, it was found that increasing the professional practice of nurses had a positive effect on family care. Similarly, Gaudine (2001) conducted a workshop based on MMN for nurses and found that the model was effective; she also found that self-efficacy in performing the model increased, as did behaviors and performance related to nursing. Comer (1991) reported that positive feelings can increase, and negative feelings decrease, by learning methods to cope effectively with life experiences via MMN. In addition, Comer specified MMN as a convenient model for gerontological nursing. However, despite reports that MMN is suitable for nursing professionals who work with families and the elderly, no studies have investigated its effectiveness for family members who provide care for older people.

Due to the lack of services for caregivers, it is thought that those caring for the elderly in Turkey carry a heavier burden than caregivers in other countries. In Turkey, elderly people live with and are cared for by their families, with the care mostly provided by the female members of the family. Women having to work outside the home while also providing care for the elderly increases their burden of care. *The Station of Elderly People in Turkey and National Plan of Action on Ageing,* published in 2013, recommended that interventions designed for the elderly and their caregivers should be carried out more effectively. In this context, nurses play a key role among health personnel in Turkey.

Nurses in Turkey use different care models during their education. The most commonly used nursing model is Orem's Self Care Model (Demir, 2012), which focuses on the individuals' insufficiencies, diseases, and problems. This inclination toward insufficiencies causes two major problems in application. First, as nurses focus on the insufficiencies of the family, they may fail to notice the strong elements of the individual. Thus, one of the pitfalls of this method is that the family may be labeled negatively by health professionals, and become stigmatized. The second problem is the formation of the perception that families cannot solve their own problems, cope with the situation, and reach their goals. Clinicians try to solve the family's problems instead of working in partnership with them (Feeley & Gottlieb, 2000).

Therefore, MMN is preferred since it addresses family-based care and focuses on the strong points of the individual/family. The variety of nursing models in practice is limited, which means the adaptation and utilization of practice-based models would increase the effectiveness of psychoeducational interventions. A literature review reveals that psychoeducational interventions are used for caregivers rather than nursing models. In the nursing directory, published in 2011, it was decided that Public Mental Health Center (PMHC) nurses should provide services for the elderly and their caregivers. It was assumed that the current study, which aimed to determine the effectiveness of MMN, would guide PMHC nurses' practices. In addition, strengthening caregivers and promoting their adaptive ways of coping would increase their well-being, and in turn, increase the quality of care provided for the elderly.

Although there are descriptive studies investigating caregivers burdens in Turkey (Kocak, 2011; Yaci, 2011), the number of interventional studies that aimed to reduce the burden of caregivers is limited (Demir, 2012). Additionally, since studies on the efficiency of MMN were only performed in Canada previously, the use of this model in Turkey is important with regard to exhibiting its efficiency in a different culture.

The overall aim of this study is to evaluate the effectiveness of psychoeducational intervention in reducing caregivers' burdens. The hypotheses are as follows: (H1) MMN decreases the burden level of caregivers; (H2) MMN increases the self-efficacy level of caregivers; (H3) MMN increases the adaptive coping styles of caregivers.

METHOD

Design

An experimental two-group, single-blinded, pre-test and post-test, follow-up design was adopted.

Participants

The study was conducted between 15.01.2014 and 21.08.2014 in a primary healthcare center service area located in Istanbul, Turkey. The population of the study consisted of caregivers who provided care for the older person aged 65 years or older in this service area (N = 84). According to the power analysis, the sample size was determined to be 31 for each group (standard deviation value 11 and 8 points of expected change in scales, 0.01 alpha [type I error probability] and 0.90 beta [type II error probability]). A total of 66 people who met the inclusion criteria were included in the study due to the possibility that some participants would discontinue the study (experimental group = 33, control group = 33). The inclusion criteria were as follows; the caregiver is aged between 18 and 75 years; the older person cared for is a family member of the caregiver; the caregiver has provided care for the older person for at least 6 months; the caregiver is the primary caregiver of the older person; the caregiver is literate; and the caregiver has the ability to understand the questions, vocalize ideas, and participate in the study. The exclusion criteria were the caregivers being paid for providing care or providing care for less than six months.

Randomization

In order to reduce bias in the determination of experimental and control groups, a list was created by a third party who did not play a direct role in the study. The assignment of experimental and control groups was done using the random numbers table (http://www.stattrek.com/statistics/random-number-generator.aspx). Later, the list was handed to the researcher and the application commenced.

Ethical Considerations

First, approval from Prof. Dr. Laurie N. Gottlieb, who is the developer of the MMN, was received via e-mail. The study received human research ethics approval from the study site and Bakirkoy Dr. Sadi Konuk Training and Research

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