Asian Nursing Research 9 (2015) 177–184

Contents lists available at ScienceDirect

Asian Nursing Research

journal homepage: www.asian-nursingresearch.com

Review Article

Family Adaptation to Stroke: A Metasynthesis of Qualitative Research based on Double ABCX Model

Ali Hesamzadeh, RN, PhD Student of Nursing, [1] Asghar Dalvandi, RN, PhD, [1,*] Sadat Bagher Maddah, RN, PhD, [1] Masoud Fallahi Khoshknab, RN, PhD, [1] Fazlollah Ahmadi, RN, PhD [2]

[1] Department of Nursing, The University of Social Welfare and Rehabilitation Sciences, Tehran, Iran
[2] Department of Nursing, Faculty of Medical Sciences, Tarbiat Modares University, Tehran, Iran

ARTICLE INFO

Article history:
Received 27 February 2014
Received in revised form
28 March 2015
Accepted 31 March 2015

Keywords:
cerebrovascular accident
stroke
family adaptation
meta-synthesis

SUMMARY

Purpose: There is growing interest in synthesizing qualitative research. Stroke is a very common cause of disability often leaving stroke survivors dependent on their family. This study reports an interpretive review of research into subjective experience of families with stroke survivors based on the components of the Double ABCX Model including stressors, resources, perception, coping strategies, and adaptation of these families.

Methods: Metasynthesis was applied to review qualitative research looking at stroke family members' experiences and responses to having a stroke survivor as a family member. Electronic database from 1990 to 2013 were searched and 18 separate studies were identified. Each study was evaluated using methodological criteria to provide a context for interpretation of substantive findings. Principal findings were extracted and synthesized under the Double ABCX Model elements.

Results: Loss of independence and uncertainty (as stressors), struggling with new phase of life (as perception), refocusing time and energy on elements of recovery process (as coping strategy), combined resources including personal, internal and external family support (as resources), and striking a balance (as adaptation) were identified as main categories. Family members of stroke survivor respond cognitively and practically and attempt to keep a balance between survivor's and their own everyday lives.

Conclusions: The results of the study are in conformity with the tenets of the Double ABCX Model. Family adaptation is a dynamic process and the present study findings provide rich information on proper assessment and intervention to the practitioners working with families of stroke survivors.

Introduction

Annually, approximately 15 million people suffer from stroke worldwide [1,2]; Cerebrovascular accident or stroke is a serious health problem in the Western world [3,4]. Stroke patients frequently suffer decreased physical function (disability) [5]. Disability following stroke appears in the form of neurological dysfunctions (e.g., motor, sensory, visual) and limited ability to perform activities of daily living (ADLs) [6]. In Iran, based on different local studies, 33–327 persons in every 100,000 of the population are diagnosed with stroke each year making it the most prevalent cause of disability in adults [7,8]. However, according to a more accurate study, the annual incidence rate of stroke is 139 per 100,000 of population [9]. Stroke occurs suddenly, is traumatic, and leaves patients and families unprepared for dealing with its aftermath. It is a complex, life-changing experience for both stroke survivors and their family caregivers [10]. Thus, there is a growing interest in identifying compensatory mechanisms that can improve functional independence after stroke [11]. The role of the family is critical to stroke rehabilitation [12]. The family provides the most

* Correspondence to: Asghar Dalvandi, RN, PhD, Department of Nursing, The University of Social Welfare and Rehabilitation Sciences, Evin District, Koodakyar, Tehran, Iran.
E-mail addresses: asghar.dalvandi@gmail.com, asghar.dalvandi@uswr.ac.ir

http://dx.doi.org/10.1016/j.anr.2015.03.005
p1976-1317 e2093-7482/Copyright © 2015, Korean Society of Nursing Science. Published by Elsevier. All rights reserved.

critical resource for integrating and coordinating healthcare for its members [13]. It is a well-documented fact that the inclusion of family members in the caregiving process of stroke rehabilitation improves recovery [12]. Family caregivers of stroke patients are seriously in need of support. In both the short-term and long-term periods, many family caregivers report physical symptoms and psychological distress as a result of giving care [14]. The more severe a patient's level of disability, the more likely the caregiver will experience higher levels of burden [10].

Family adaptation is a process in which families engage in direct responses to the extensive demands of a stressor and realize that systematic changes are needed within the family unit to restore factional stability and improve family satisfaction and well-being [15]. Informal family caregiving has been a focus of nursing research for more than 25 years [10], while caring for families is a growing part of nurses' professional work in home care and in various healthcare settings [16]. Family nursing centers on the family as a unit of care, addressing family needs in response to a member's illness or threat to health, rather than focusing on the individual [17]. Of the many approaches to family theory, family coping theory has been extensively tested and applied to families dealing with stress of traumatic and chronic illness [18]. Developed originally by Hill's (1949), family stress theory called the ABCX postulates that a stressor (A) interacts with family resources for dealing with crises (B) and with the definition the family makes of the event (C) to produce crisis (X) [15,18,19]. The subsequent refinement of this model by McCubbin et al. treats coping as the central process in the family's effort to adapt to a crisis and the A factor was expanded to include both the original and the pileup of stressors [15,18,20]. This model defines the process of adaptation to stressful situations as an interaction among four components. These components include the stressor (e.g., disease diagnosis, A), the internal and external resources one has to address the stressor (e.g., the support of family members, B), the appraisal of the stressor (e.g., seeing the stressor as a threat and challenge, C), and the coping strategies utilized to respond to the stressor (BC) [21–23]. The Double ABCX model of an adjustment and adaptation asserts that family outcomes following the impact of a stressor and crises are the by-products of multiple factors (A,B,C, and X) in interaction with each other [24]. The degree to which a family adapts after stroke can dramatically affect patient recovery [25]. Despite the high prevalence of stroke and the potentially high burden of family caregiving for the stroke survivors few studies have systematically addressed the consequences of stroke on family members [26]. Although the quantitative studies have provided valuable information about family members' problems toward stroke survivors' caregiving issues, in the past 20 years have there been very few qualitative research focused on describing and explaining family adaptation following stroke.

Providing a richer understanding of an issue is not possible from the results of one study [27]. Qualitative metasynthesis is an emerging method for synthesis of the findings of qualitative studies [28]. Metasynthesis is defined as “the theories, grand narratives, generalizations, or interpretive translations produced from the integration or comparison of findings from qualitative studies [29]. It is a method of blending a group of qualitative studies to discover the common essence in the data and translate that into a new understanding [30]. The aim of the present study was to firstly, bring together the voice of families with stroke survivors who participated in qualitative research, on the basis of adaption to stroke survivors' caregiving tasks, and secondly, to determine the extent to which stroke family members' experiences can be accommodated within the Double ABCX Model of family crises.

Methods

Study design

A synthesis of qualitative studies relating to stroke family members' experience of having a stroke patient is proposed.

Data collection

An interdisciplinary online search was done from the databases of Medline, PubMed, Cumulative Index to Nursing and Allied Health Literature (CINAHL), OVID Medline, Proquest, SID, Magiran, IRAN MEDEX, MEDLIB and Irandoc from January 1, 1990 to November 31, 2013. The Google Scholar search engine was used to generate articles as well. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines were applied to select the studies [31]. Keywords such as family adaptation, stroke family, cerebrovascular accident, family, stroke informal caregivers, qualitative research, experience, themes, grounded theory, and phenomenology were used. The abstract of papers were retrieved by the first two authors to determine their appropriateness. Bibliographies of the retrieved papers were also examined carefully. The inclusion criteria of studies to be examined were the following: having a qualitative design and focusing on the community-dwelling stroke patients' caregivers and their families. There was no restriction in the paper selection, regarding the stroke patients' range of age or length of stroke disease. Only studies in the English language were included. Eighteen qualitative studies on the caregivers' experience of having stroke survivors in the family and the family adaptation were retrieved finally.

Measurements

A consensus definition for each statement was developed to maximize consistency by the first two authors using standards for the systematic review of qualitative literature [32] (Table 1). The purpose of the quality appraisal was ascertaining the methodological quality of the studies included in the synthesis. If the studies inadequately focused on the topic, or were not actually qualitative (sometimes studies collected data using qualitative methods, but did not analyze the data qualitatively), they were excluded from the research. The exclusion process is summarized in Figure 1.

Data analysis

The study followed the broad principles of metasynthesis outlined earlier. In the first stage, two authors reviewed each paper alone to extract qualitative findings. No attempt was made to reanalyze primary data presented as quotations, as these were inevitably sparse and selective in relation to the totality of the data in any study [32]. In the second stage of the analysis, clustering and recoding the findings from individual studies under broader themes was performed through discussion and agreement in meetings with all the authors. The aims of the meetings were resolving the possible disagreement between the two authors over papers rejection or inclusion to the synthesis process as well as recognizing higher-order concepts. The Preliminary coding rubric was established by the research team based on the framework of the Double ABCX Model of family crisis [15] and were reviewed for congruence with the tenets of the model. Within the coding rubric, individual codes were grouped within the model domains of a stressor, resources, definition the family makes of the event, coping strategies, contextual characteristics and adaptation [15,18].

Based on the Hill's classic family theory [33], the Double ABCX Model extended by MacCubbin and Patterson, to address the issue