Literature Review: Roy’s Adaptation Theory

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Roy Adaptation Model or RAM is an adoption process which implies that people respond positively to their changing environment using three types of stimuli, contextual, residual and focal. RAM promotes patient adoption in nursing practice because nurses employ environmental stimuli and make patients able to cope up with their life situation positively, and it leaves a positive impact on their illness and health. A number of recent theoretical, qualitative and quantitative studies have established the efficacy of the model to achieve positive patient outcomes.

In a quantitative study, Alimohammadi, Maleki, Shahriari, & Chitsaz (2015) tested the effects of a care plan that is based on the biological dimension of Roy’s adaptation model on the physiologic adaptation level of stroke patients. The care plan, as part of the intervention, was based on Roy's adaptation model was implemented through four sessions with patients, and 1-month follow-ups through phone calls and evaluation forms that were built according to the model were given to the patients and completed both after and before the intervention. The intervention session, the first phase involved providing patients with an awareness of the signs and symptoms of the disease, education regarding range of motion exercises for the limbs, self-care methods, and balancing in case of motor or sensory disorders, counseling to cope with depression and anxiety, and a discussion on diet and nutrition to maintain good health. The findings showed that showed that the care plan based on the biological dimension of Roy's adaptation model led to a significant increase in patient's adaptation with stroke, notably in the physiological dimension, which provided evidence to the efficacy of a self-care plan based on RAM that it could significantly influence physiologic adaption which in turn prevents further complications and stabilizes the chronic process of the disease. The model, therefore, can be used for nurses in increasing the adaptation of patients to the disease

Similar results were found by Cypress (2011) in a qualitative phenomenological research in which the research explored the personal experiences of the nurses, patients as well as their family members in a healthcare institution during the phase of critical illness. The study obtained qualitative data from 5 participants from the three categories and interviewed them twice in a study period of 5 months. It was based on earlier findings that patients who are critically evil can create serious complications, anxiety, and stress within family members, that leads to a sense of disequilibrium within the family, which in turn disrupts the function and the different roles of members therein. The interviews were transcribed to obtain qualitative data through thematic content analysis to study five common integrating themes from the data. Each of the theme correlated with different concepts that were proposed by the Roy Adaptation Model. The qualitative study method provided a reflective perception of the sample participant's views about being in or having their family members in a critical state of illness, and the method employed by the researcher was helpful to uncover newer and deeper meanings from the lived experience of the individual’s experiences in the intensive care unit. The study found that all participants agreed to the common theme of interdependence in the ICU experience. Therefore a successful adaptation to the condition, while being in the ICU, required physiological care, physical comfort, and care, as well as psychosocial support. The findings agreed with Alimohammadi, Maleki, Shahriari, and Chitsaz (2015) and suggested that an intervention that integrates these functions, which correspond with the Roy's adaptation model, results into patients transformation and thus adaptation to the condition, which in turn prevents further complications and helps the patients, as well as their family members, cope with the condition.

The qualitative and quantitative findings from Alimohammadi, Maleki, Shahriari, and Chitsaz (2015) and Cypress (2011) further confirm the theoretical study from Ursavas, Karayurt, & İşeri (2014) who examined the use of RAM in taking care of a patient having breast cancer and was having breast-conserving surgery as treatment. In the study, four modes of Roy Adoption Model was used to evaluate the patient data (physiologic, role function, interdependence modes, and self-concept), along with the application of the nursing process. Since the diagnosis and undergoing treatment of cancer results in the appearance of bio-psycho-social problems. In the study under discussion, the patient was interviewed after the 45 days of undergoing breast-conserving surgery (BCS) and in the chemotherapy treatment's first course. All the data related to patient demographics, nursing intervention and the clinical data related to the physiologic mode of RAM was recorded. In the same way, patient's data related to nursing intervention and role function of RAM along with data related to nursing intervention and interdependence mode of RAM was recorded. To facilitate the patient in each phase, the nursing intervention was provided for each step of the RAM process. Based on the analysis of data, the study concluded that it could be said that if the interventions developed by nurses are specific to the individuals, it will produce positive results in patient's adoption who try to cope with their issues. Using this mean, patients will be able to adapt to their new life resulting in an improvement of their quality of life. In addition, it concluded that the use of theories will help the situation and will guide nurses to give attention to their profession and take care of their patients developing holistic care in biopsychosocial approach.

Similar theoretical findings from Ursavas, Karayurt, & İşeri (2014) are further reinforced from an earlier theoretical study by Rogers and Keller (2010) who tested interventions based on Roy's adaptation model on older adults who had a sedentary lifestyle. Applying the theoretical model to the study, Rogers and Keller (2010) create a theoretical intervention that promotes adaptation of older adults into an active lifestyle, which is further tested against evaluation theory. The study was motivated by the many common challenges faced by aging adults with regards to their physical function, and therefore the development of evidence-based interventions that help with the promotion of adaptation to older age carries great significance because a sizeable portion of the population would be able to adapt to a healthier lifestyle. The study is also significant because an aging adult experiences a considerable decline in physical function, which in turn leads to a sedentary lifestyle, that further leads to complications. The adaptation model suggested by Sister Callista Roy is used by the researchers owing to its integrated and holistic perspective towards health promotion through the adaptive model of self-concept, physiological-physical, interdependence and role-function (Cypress, 2011; Alimohammadi, Maleki, Shahriari, & Chitsaz, 2015; Rogers & Keller, 2010). In the study, Rogers and Keller (2010) focussed on the self-concept and physiologic modes of the model to assess the effects of a meditative movement based intervention on the personal beliefs and physical function of aging adults which is theoretically predicted to lead to spirituality, enhanced physical activity, and self-efficacy. The intervention dose was the primary input in the study which involved weekly 1-hour sessions for 12 weeks on a sample size of 15 participants. The results of the intervention are proposed to be measured through the enhancement of strength and endurance as a result of more physical activity and improved self-efficacy which will be measured through an increased daily-self participation in the meditative movement exercises after having it performed and demonstrated by others. The outcome of the Roy adaptive model-based intervention is adaptation in which the physiologic mode will be measured by signs of improved blood pressure, walking time, and meditative movements aimed at improving physical functions through mind-body enhancement. The theory-based model for intervention is presented for further empirical research to test its ability to promote adaptation for aging adults at multiple levels.

# References

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