**Concept Analysis (My POI is Management of blood pressure in elderly hypertensive patients in long term care)**

Isometric resistance training is the concept relevant to this Phenomenon of Interest which is the management of blood pressure in elderly hypertensive patients in long term care.  The authors of the peer-reviewed article carried out a randomized controlled trial on the efficacy of isometric resistant training utilizing handgrip exercise for blood pressure management (Carlson, Inder, Palanisamy, McFarlane, Dieberg & Smart, 2015).  There were about 40 hypertensive individuals included in the study, where isometric resistance training was carried out for 8 weeks (Carlson, et al., 2015).  The main results of the study revealed that IRT helped reduce resting systolic blood pressure, and also in mean arterial pressure.   This study highlighted how IRT using handgrip exercises can decrease systolic blood pressure and mean arterial pressure, for the group which underwent lower intensity training, no significant change in the blood pressure was seen (Carlson, et al., 2015).  This study also acknowledged the fact that hypertension is a major risk factor which can contribute to cardiovascular diseases which is one of the major causes of death in the world (Carlson, et al., 2015).  While hypertensive medications can help control blood pressure, the primary treatment for hypertension is lifestyle modification – mostly diet and exercise.  The authors pointed out that numerous studies suggest that isometric resistance training seems to be an effective method in helping decrease and manage blood pressure.  The study therefore set out to study IRT more, using patients as research subjects (Carlson, et al., 2015).  The purpose of the analysis was to establish how efficient IRT is in reducing blood pressure among hypertensive patients.  For the nursing practice, this study implies that nurses can encourage their patients to participate in IRT in order to reduce their blood pressure (Farah, et al., 2017).  Nurses can refer their hypertensive patients to experts in IRT who can develop an appropriate IRT program for the patient.  The critical attributes of the concept is that IRT may present with better outcomes for hypertensive patients as compared to aerobic and resistance exercises (Pearl, 2017).  Previous research findings do confirm such outcome where better results in terms of hypertensive management was noted among patients who participated in IRT as compared to patients who participated in aerobic and resistance training.

This particular article was chosen because it is a primary research study, a randomized controlled trial which applied and studied the use of a physical activity as an option for hypertensive management.  It is a study which evaluates a non-pharmacologic based remedy for hypertension, and is likely an option which would help address not just hypertension but would also help promote weight loss, increase energy, and promote general physical and mental wellness (Carlson, et al., 2016).  It was also chosen because its comparative data was based on a wide range of percentage in contraction.  This wide range of comparison helped establish how different levels of activity can impact ultimately on blood pressure levels. At a time where individuals may opt for lighter exercises to reduce blood pressure, this study does indicate that light exercises may not have as much an impact on decreasing blood pressure as much as more intense activities (McGowan, Proctor, Swaine, Brook, Jackson & Levy, 2017).  The concept was significant for my POI because it is a study which evaluated a management option for hypertension and my POI ultimately seeks to develop an efficient hypertensive management program for elderly patients.  This concept is also significant because it suggests important elements of hypertension management, mostly in terms of acknowledging how sedentary lifestyle contributes significantly to the increase of hypertension (Ash, et al., 2017).

In analyzing the concept of isometric resistance training (IRT), this training impacts the way I view the POI within the context of my specialty practice by teaching me about the importance of ensuring mobility and activity for individuals, especially those who have hypertension or who carry the risk of developing hypertension.  This concept analysis affects the way I view hypertension management for the elderly population by pointing out to me the importance of focusing on physical activity for those who have hypertension (Pagonas, Vlatsas, Bauer, Seibert, Zidek, Babel, & Westhoff,, 2017).  While the elderly population may not be able to participate in more intensive exercises, the more important concern is that they would be able to take part in physical activities and not live sedentary lives (Pinto, Karabulut, Poton, & Polito, 2018).  The focus of my role in working with hypertensive patients should therefore be towards implementing pharmacological as well as non-pharmacological options in hypertensive management.

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