Develop a PICOT Question

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**PICOT Question:** Can the increased intake of Vitamin D at a younger age be beneficial towards decreasing the susceptibility of Alzheimer disease?

 Alzheimer's disease is considered to be the major cause of dementia throughout the world which is further characterized by the continuous loss of memory and also cognition. Sunlight exposure and high Vitamin D status have been considered to reduce the risk of Alzheimer disease. There are various studies at present that suggest that there is a vital association between Vit D deficiency and Alzheimer disease. Vitamin D does not refer to a single essential nutrient rather it is a group of various secosteroids. It basically acts as a hormone which is normally synthesized in one place of the body and then it acts on the other part of the body. It is reported recently through various studies that around 40-75% among all the individuals are vitamin D deficient. It is also reported that those people who are severely deficient in Vitamin D are twice at risk to develop Alzheimer disease as compared to those people who have adequate levels of Vitamin D (Sommer et al,. 2017).

 Nursing intervention is very significant nowadays and the public health policy makers along with the healthcare individuals are focusing more on nursing interventions and applying nursing theories for the betterment of the health of these individuals. It is quite apparent that among all the healthcare providers nurses spent most of their time among the patient so in this case as well by putting the nurse role positively it is possible to control AD at a very young age. The nurse's need theory mainly focuses on the role of the nurse in assisting a patient's health and also helps the patient from recovering from injuries. The main focus of the nurse in this theory is more concentrated on the patient rather than the doctor. Here four basic needs of the patient are outlined which are psychological needs which help the patient in communicating and also handling care, the physiological needs are focused on eating and sleeping. Spiritual needs of the patients are focused on worship and faith while the social needs are focused on recreational activities. This theory is chosen in this particular intervention because AD disables the person ablility to interact and also the patient isolates him/herself and unable to perform daily activities. So by choosing the nursing need theory, it will be easy for the nurse to take care of all the aspects of the patient (Shen & Ji 2015).

 So far there is no direct link that has been proven that Vitamin D deficiency is linked to AD and by increased intake at a younger age can decrease the susceptibility of this disease. For the effective evaluation, the nurse has to measure the participant's interview and then taking their blood samples for evaluation. Because from many studies it has been proved that if Vit D concentration is lower in individuals then the individual has higher chances of AD. So the role of nurse and applying the Nurse Need theory is critical in this case because once it is identified that the AD is a cause of Vit D deficiency then not only the nurses will take care of other needs of the patient but they will take care of fulfilling the requirements of Vit D in the patient, by exposing the patient to sunlight for a brief period and also by giving food that are rich in Vit D. The Nurse Need theory will also be applicable in young population, as AD is diagnosed at a young age so it will be easy to monitor the level of Vit D in the child and if the requirements are taken care of properly then it will be possible to control AD.

 The Nurse Nedd theory is one of the most important theories in taking care of the special needs of the patients and AD is a condition in which the brain activity is disturbed and the patient does not feel hot or cold objects and also the communication skills are disturbed. So in this theory, all the basic interventions are provided to the patient. And although more research is required to determine that whether there is an association between Vit D deficiency and AD or not but it will be quite helpful to intervene at an early stage and taking care of the Vit D requirements in order to minimize the chances of AD.

**References**

Sommer, I., Griebler, U., Kien, C., Auer, S., Klerings, I., Hammer, R., ... & Gartlehner, G. (2017). Vitamin D deficiency as a risk factor for dementia: a systematic review and meta-analysis. *BMC geriatrics*, *17*(1), 16.

Shen, L., & Ji, H. F. (2015). Vitamin D deficiency is associated with increased risk of Alzheimer’s disease and dementia: evidence from meta-analysis. *Nutrition Journal*, *14*(1), 76.