

## THE RELANTIONSHIP OF KNOWLEDGE ON THE BEHAVIOUR OF GENERATIVE DISEASES IN THE ELDERLY

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### ABSTRACT

Degenerative diseases are the leading cause of death globally. World Health Organization data shows that of the 57 million deaths that occur in the world, as many as 36 million or almost two thirds are caused by degenerative diseases. To determine the relationship between knowledge and degenerative disease prevention behavior in the elderly in Patok Hamlet, Marunsu Village, Samalantan District in 2022. The method used in this study is analytic observational with a cross-sectional study approach. The sampling technique in this study used total sampling, namely taking samples from the entire existing population, namely all elderly people with degenerative diseases in Patok Hamlet, Marunsu Village, Samalantan District. Data was collected using a questionnaire. The analysis technique uses the chi-square test. The results show that as many as 64.3% of respondents has lack knowledge. Negative behavior was reported by 53.6% respondents. There was a significant relationship between respondents' knowledge and prevention of behavior ( $p < 0.05$ ). There is a relationship between respondents' knowledge and prevention behavior regarding degenerative diseases in the elderly in Patok Hamlet, Marunsu Village, Samalantan District.

**Keywords:** Knowledge, Behaviour, Generative diseases, Elderly

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### INTRODUCTION

Currently, quality of life is a significant concept that is used as one of the evaluation criteria for health service interventions (Fitzpatrick et al., 1992). Quality of life, as defined by the World Health Organization (WHO), is a person's perception of their physical health, psychological status, level of independence, social relationships, personal beliefs, and special relationships with other people in society. The Medical Outcomes Study Short Form 36, also known as the SF-36 questionnaire, is one of several quality-of-life measurement methods that have been developed at this point (Martinez et al., 2000). This method uses two scales to describe the quality of life: quality of mental health/Mental Component Summary (MCS) and quality of physical health/PCS (Dewi et al., 2017).

Since the idea of measuring the quality of life is thought to be more comprehensive, studies on quality of life, including those of elderly people (elderly), are becoming increasingly popular (Rejeski & Mihalko, 2001). The following is stated in Article 183, Paragraph 1 of Law No. 36 of 2009 on Health: "In accordance with human dignity, efforts to maintain elderly health must aim to maintain a socially and economically productive life. This shows that Indonesia's current efforts to provide elderly health services also aim to improve the elderly's quality of life (Dewi et al., 2017).

The aging process is a life cycle with stages of decline in various organ functions (Troncale, 1996). These stages make the body more susceptible to diseases that can kill, like those in the cardiovascular and blood vessel, respiratory, digestive, and endocrine systems, among other systems. This is because the structure and function of cells, tissues, and organ systems are changing as people get older (Mangoni & Jackson, 2004). The deterioration of

elderly people's physical and mental health as a result of these changes will ultimately have an impact on their economic and social well-being. so that the activities of daily living will generally be affected (Peter, 2013).

A health condition in which an organ or tissue continues to deteriorate over time is known as degenerative disease (Hill et al., 1999). Changes in the body's cells are the cause of this disease, which ultimately affect how well an organ works as a whole. Degenerative diseases are most often brought on by aging (Kovács, 2004). Tissues and organs will become less useful as you get older. As a result, elderly people are more likely than younger people to develop a variety of degenerative diseases (Triana, 2019).

Globally, degenerative diseases account for the majority of deaths. According to data from the World Health Organization (WHO), degenerative diseases were the cause of as many as 36 million, or nearly two-thirds, of the world's 57 million deaths in 2008. People die at a younger age from degenerative diseases. More than two-thirds (705%) of the world's population will die from degenerative diseases, according to the World Health Organization (WHO). Deaths from non-communicable diseases (PTM) are expected to continue rising worldwide, with the greatest increase occurring in middle-income and developing nations. such as diabetes, cardiovascular disease, and cancer (Kemenkes, 2013).

Degenerative diseases cause the majority of deaths worldwide. Degenerative diseases were responsible for as many as 36 million, or nearly two-thirds, of the world's 57 million deaths in 2008, according to WHO data. Degenerative diseases cause people to die earlier. According to the World Health Organization (WHO), degenerative diseases will cause the deaths of more than two-thirds (705%) of the world's population. Worldwide, non-communicable diseases (PTM) deaths are expected to continue rising, with middle-income and developing nations experiencing the greatest increase. such as cancer, diabetes, and heart disease (Kemenkes, 2013).

Each year, the prevalence of degenerative diseases has increased. According to the 2018 Riskesdas, doctors based on age diagnosed joint disease in 8.5% of women and 6.1% of men. The higher the percentage of older people, the more common the disease. When compared to urban areas, rural areas have a higher incidence of joint disease at 7.8% and 6.9%, respectively. 19.6 percent of people between the ages of 55 and 74 have type 2 diabetes. Regulation of diet (80.2%), exercise (481%), and herbal medicine (35.7%) as means of controlling type 2 diabetes (Kemenkes, 2018).

Degenerative diseases include heart disease. According to the 2018 Riskesdas, the incidence of heart disease rises with age: 2.4% for those 45-54 years old, 3.9% for those 55-64 years old, and 4.6% for those 65-74 years old. Women are more likely than men to develop heart disease (1.6% vs. 1.3%). At the age of 45 to 54, the prevalence of hypertension is 45.3%, at the age of 55 to 64, it is 55.2%, and at the age of 65 to 74, it is 63.2%. According to Riskesdas (2018), women have a higher rate of hypertension than men do (36.9 percent versus 31.3 percent).

11,924 people with degenerative diseases had hypertension, 19,190 people had heart disease, 19,190 people had diabetes mellitus, and 13,035 people had joint disease, according to the 2018 Riskesdas data from West Kalimantan (Riskesdas, 2018). According to Riskesdas (2018), there were 837 people with high blood pressure, 652 people with heart disease, 1,423

people with diabetes mellitus, and 968 people with joint disease in the Riskesdas Bengkayang Regency.

Data that were discovered by researchers during PBL activities in Patok Hamlet from January 9 to January 28, 2022, in the intended area of Marunsu Village, Samalantan District. Regarding the health education activities (Penkes) that the researchers conducted, eleven elderly people stated that they were unaware of how to prevent degenerative diseases like hypertension, diabetes, heart disease, and osteoarthritis. In the meantime, there were three elderly individuals who were knowledgeable about disease prevention.

In light of the preceding description, researchers recognize the significance of carrying out additional research in 2022 in Marunsu Village, Samalantan District, to investigate the connection between the behaviors of elderly people and their knowledge of degenerative diseases. We need a nursing procedure to deal with these cases. The nursing process is an activity that serves a purpose, which is systematic nursing practice. The nurse uses a comprehensive knowledge base to assess the client's health status, make thoughtful diagnoses and research, determine the client's health outcomes, and plan, carry out, and evaluate the appropriate nursing actions to achieve these outcomes during the nursing process (Dermawan, 2012).

## **METHOD**

The method used in this study is analytic observational with a cross sectional study approach. The sampling technique in this study used total sampling, namely taking samples from the entire existing population, namely all elderly people with degenerative diseases in Patok Hamlet, Marunsu Village, Samalantan District. Data was collected using a questionnaire. The analysis technique uses the chi-square test.

## **RESULTS AND DISCUSSION**

### **1. Knowledge of Degenerative Diseases.**

With an alpha of 5%, it is possible to draw the conclusion that there is a significant relationship between degenerative disease prevention behavior and knowledge with a p value of 0.011. This indicates that H1 is accepted and Ho is rejected, indicating that in Patok Hamlet, Marunsu Village, Bengkayang Regency, West Kalimantan, in 2022, there is a connection between knowledge and behavior to prevent degenerative diseases.

Knowing is the result of knowing, and people experience knowledge when they sense an object. The five senses—sight, hearing, smell, taste, and touch—are what allow us to perceive. The domain of knowledge plays a crucial role in the formation of one's actions. Human sensing, or knowing something about it through one's senses (eyes, nose, ears, and some others), is what we call knowledge. The intensity with which the object is perceived has a significant impact on the amount of time needed to produce this knowledge. According to Notoatmodjo (2010), the senses of hearing and sight account for the majority of a person's knowledge.

### **2. Behavior for Preventing Degenerative Diseases**

The majority of respondents had negative behavior, including as many as 15 people (53.6%), while a small number of respondents had positive behavior, including as many as 13 people (46.4%). Knowledge, attitudes, and actions are all manifestations of behavior, which is the result of all kinds of experiences and interactions with the environment. According to

Notoatmodjo (2010), a person's behavior is his or her response to stimuli that come from both within and outside of him. In contrast, behavior, as defined by Wawan (2011), is an action that, whether consciously or unconsciously, has a specific frequency, duration, and purpose. A collection of various factors that interact with one another makes up behavior.

Rosmala Dewi et al.'s research is in line with this study's findings. generative in 2021 in Sipodeceng Village, the Baranti Health Center's working area, as a result of an increase in public awareness following health education on degenerative diseases. As many as 93% of respondents indicated that their level of knowledge improved after receiving counseling on the knowledge of the elderly.

### **3. Relationship between Knowledge and Degenerative Disease Prevention Behavior**

Statistical test results that have a p value of 0.008 (p value 0.05) indicate that there is a significant relationship between knowledge and behavior to prevent degenerative diseases. With an alpha of 5%, this means that the relationship is significant.

This study's findings are consistent with those of a 2019 study by Qori'atul Mashluhah titled "The Relationship Between Elderly Knowledge Level and Gout Arthritis Prevention Behavior at the Elderly Posyandu, Betiting Village, Cerme District, Gresik Regency." prevention of gout arthritis in Gresik Regency's Cerme District's Betiting Village Posyandu. Gout arthritis prevention decreases proportionally to the number of respondents who lack knowledge. Spearman's rho between the level of knowledge on the behavior of preventing gout is known to be 0.442 with a significance value of 0.004, which means 0.01. This value was obtained after the Spearman test.

The findings of a second study that was conducted in 2019 by Bazzar Ari Mighra and Wahyuningsih Djaali strengthened the findings of this one. According to the findings of the counseling activities that were carried out, it is possible to draw the conclusion that there was an increase in the elderly population's knowledge about stroke, hypertension, and diabetes mellitus in the Kampung Tengah area, with a difference in the average value of knowledge of 3.2. In addition, the elderly's enthusiastic participation in the discussions and Q&A sessions demonstrates a high level of health-related curiosity. In order for the elderly to independently maintain their health, they need to be aware of these degenerative diseases.

## **CONCLUSION**

The three texts discuss the relationship between knowledge and behavior in preventing degenerative diseases. The first text presents a statistical analysis indicating a significant connection between knowledge and behavior in preventing degenerative diseases in Patok Hamlet, Marunsu Village, Bengkayang Regency, West Kalimantan. The second text presents findings of negative behavior among the majority of respondents in a study in Sipodeceng Village and the importance of behavior as a response to stimuli. The third text highlights the consistent findings of two other studies in 2019, which support the connection between knowledge and behavior in preventing degenerative diseases. Overall, the three texts emphasize the importance of knowledge in shaping behavior and the significance of positive behavior in preventing degenerative diseases.

## REFERENCES

- Dermawan, D. (2012). Proses keperawatan penerapan konsep dan kerangka kerja. *Yogyakarta: Gosyen Publishing*.
- Dewi, S. K., Kusnanto, H., Pramantara, I. D. P., & Rahayujati, T. B. (2017). Status partisipasi dan kualitas hidup peserta pos pelayanan terpadu lanjut usia. *Jurnal Kesehatan Masyarakat, 11*(1), 28–40.
- Fitzpatrick, R., Fletcher, A., Gore, S., Jones, D., Spiegelhalter, D., & Cox, D. (1992). Quality of life measures in health care. I: Applications and issues in assessment. *British Medical Journal, 305*(6861), 1074–1077.
- Hill, A. F., Butterworth, R. J., Joiner, S., Jackson, G., Rossor, M. N., Thomas, D. J., Frosh, A., Tolley, N., Bell, J. E., & Spencer, M. (1999). Investigation of variant Creutzfeldt-Jakob disease and other human prion diseases with tonsil biopsy samples. *The Lancet, 353*(9148), 183–189.
- Kemenkes, R. I. (2013). Riset kesehatan dasar (Riskesdas) 2013. *Kemenkes RI. Jakarta*.
- Kemenkes, R. I. (2018). Hasil utama riset kesehatan dasar (Riskesdas) 2018. *Jakarta: Kementrian Kesehatan Republik Indonesia Badan Penelitian Dan Pengembangan Kesehatan*.
- Kovács, T. (2004). Mechanisms of olfactory dysfunction in aging and neurodegenerative disorders. *Ageing Research Reviews, 3*(2), 215–232.
- Mangoni, A. A., & Jackson, S. H. D. (2004). Age-related changes in pharmacokinetics and pharmacodynamics: basic principles and practical applications. *British Journal of Clinical Pharmacology, 57*(1), 6–14.
- Martinez, T. Y., Pereira, C. A. C., dos Santos, M. L., Ciconelli, R. M., Guimaraes, S. M., & Martinez, J. A. B. (2000). Evaluation of the short-form 36-item questionnaire to measure health-related quality of life in patients with idiopathic pulmonary fibrosis. *Chest, 117*(6), 1627–1632.
- Notoatmodjo, S. (2010). Metodologi Kesehatan. *Jakarta: Rineka Cipta*.
- Peter, C. K. (2013). Hidup Bersama Diabetes. *PT. Elex Media Komputindo*.
- Rejeski, W. J., & Mihalko, S. L. (2001). Physical activity and quality of life in older adults. *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences, 56*(suppl\_2), 23–35.
- Triana, A. (2019). DETEKSI DINI PENYAKIT DEGENERATIF PADA LANSIA DENGAN PEMERIKSAAN TEKANAN DARAH, GLUKOSA DARAH DAN ASAM URAT. *Prosiding Hang Tuah Pekanbaru, 6–9*.
- Troncale, J. A. (1996). The aging process: Physiologic changes and pharmacologic implications. *Postgraduate Medicine, 99*(5), 111–122.