

## ELDERLY EDUCATION ABOUT DENTAL AND MOUTH HEALTH AT POSYANDU, EAST CIPUTAT SOUTH TANGERANG

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### ABSTRACT

The elderly population that continues to increase every year results in more and more problems that often arise, especially health problems, because physical conditions have decreased every year. Elderly patients have limitations in carrying out activities including paying attention to and taking care of their oral health. The purpose of this study was to explain the importance of education for the elderly in maintaining oral and dental health. This research method uses Simple Random Sampling by using questionnaires and interviews with 50 elderly people, 39 women and 11 men in posyandu East Ciputat, South Tangerang. The results of the study obtained data in the form of the elderly age 57-67 years, the elderly work varied in the form of laborers, traders, retirees and no work. Senior high school education seniors, height and weight on average 154.5 cm and 58.7 kg. The drugs that are consumed routinely are hypertension drugs, diabetes drugs, gout drugs, stomach acid drugs and pain relievers. The conclusions obtained from this study, there is still a lack of knowledge of the elderly in the East Ciputat, South Tangerang regarding the importance of maintaining oral and dental health.

**Keywords:** health, elderly, teeth and mouth

### 1. INTRODUCTION

Aging is a natural thing that will be passed by everyone with the characteristics of reduced physical abilities including social activities, where there is a psychological dependence that causes problems for the family and the elderly themselves. The last stage of human development is aging/elderly which affects social, biological and psychological life. In the world, the increase in the age of the elderly/elderly has increased significantly compared to other age groups.

Based on data from the 2014 National Socio-Economic Survey (Susenas), the number of elderly people in Indonesia reached 20.24 million or 8.03% of the entire population of Indonesia, making it a country with an aging population structure. This also affects the life expectancy which has increased to 70.7 years (BPS, 2015). It is estimated that the percentage of elderly people in Indonesia will reach 11.34% in 2020 and Indonesia will become the 5th country with the most elderly population in 2025.<sup>1,2</sup>

Geriatrics is a health service for the elderly (elderly) that treats conditions and diseases related to the aging process (Setiati et al, 2009). According to the Law of the Republic of Indonesia No. 13 of 1998, the elderly is someone who has reached the age of 60 years and over.<sup>1</sup> Hawari in 2001 stated that the elderly is a condition characterized by a person's failure to maintain a balance against physiological stress conditions. This failure is related to a decrease in the ability to live and an increase in individual sensitivity. The characteristics of geriatric patients are multipathology, decreased physiologic reserve, atypical symptoms and signs of disease, decreased functional status, and malnutrition.<sup>1,2</sup>

The World Health Organization (WHO) divides the life cycle of the elderly into four groups, namely middle age (middle age) age group 45 to 59 years, elderly (elderly) aged 60-74 years, elderly (old) aged 60-75 and 90. years, very old age more than 90 years.<sup>3</sup>

According to Solomon et al: The "13 i" which consists of Immobility (immobilization), Instability (instability and falls), Intellectual Impairment (intellectual disorders such as dementia and delirium), Incontinence (urinary and pelvic incontinence), Isolation (depression), Impotence (impotence), Immuno-deficiency (decreased immunity), Infection (infection), Inanition (malnutrition), Impaction (constipation), Insomnia (sleep disorders), Iatrogenic disorder (iatrogenic disorder) and Impairment of hearing, vision and smell (hearing disorders, sight and smell).<sup>4,8,9</sup>

### 2. RESEARCH METHODS

This research method uses Simple Random Sampling by using questionnaires and interviews with 50 elderly people, 39 women and 11 men in posyandu East Ciputat, South Tangerang. The results of the study obtained data in the form of the elderly age 57-67 years.

### 3. RESEARCH RESULT

The results of the study on the elderly at the East Ciputat Posyandu, South Tangerang, obtained data regarding the condition of their oral health as follows;

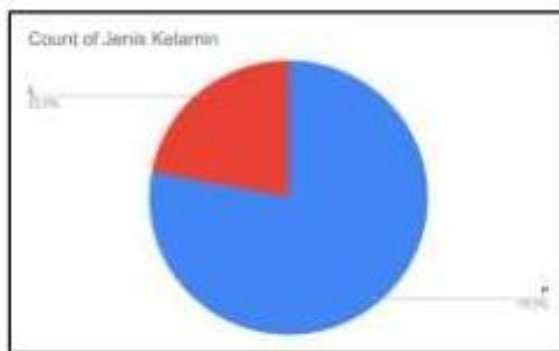


Figure 1. Gender of the elderly

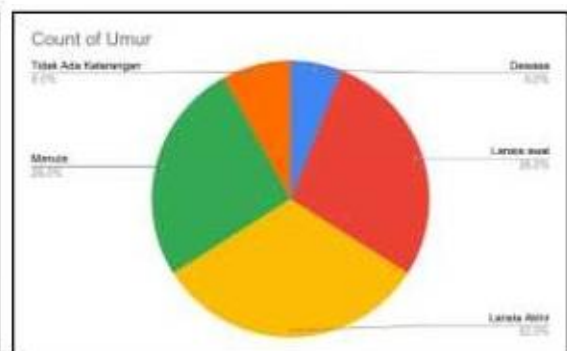


Figure 2. Elderly age

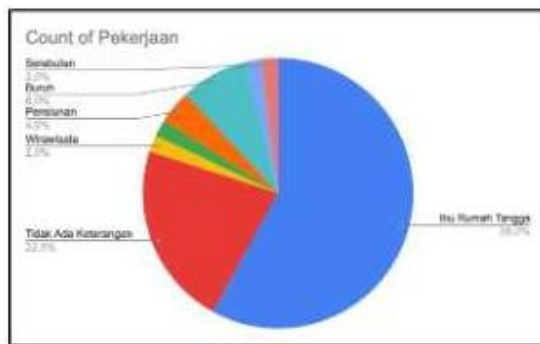


Figure 3. Employment of the elderly

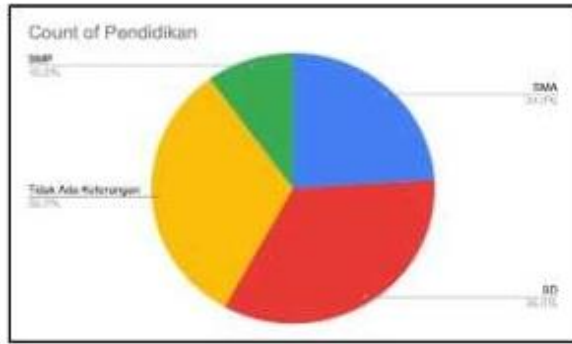


Figure 4. Educational background of the elderly

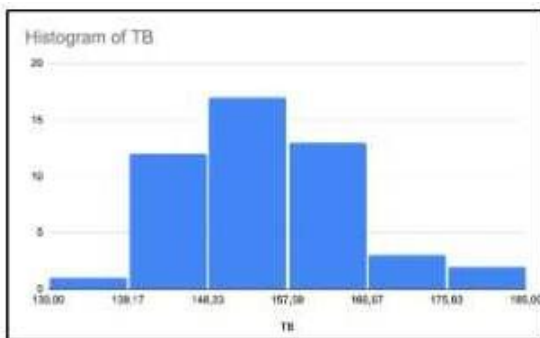


Figure 5. Range of elderly people's height (in cm)

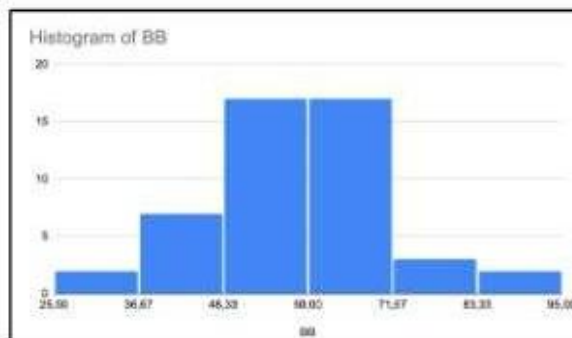


Figure 6. Weight range of the elderly (in kg)

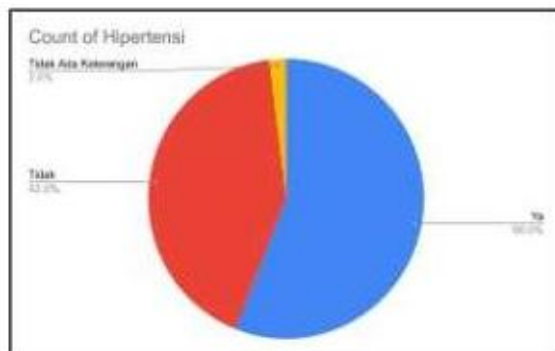


Figure 7. History of hypertension in the elderly

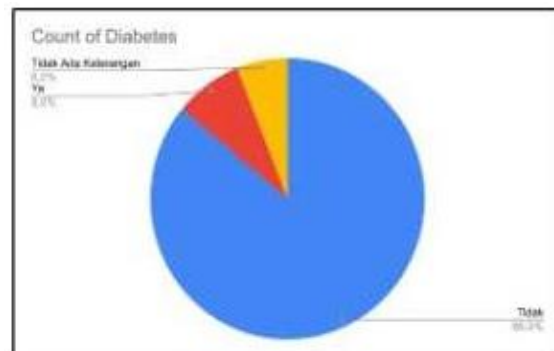


Figure 8. Diabetes history in the elderly

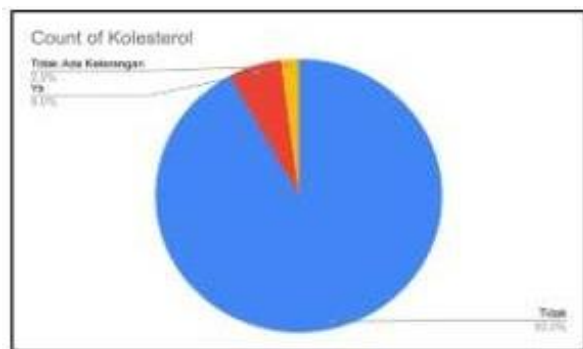


Figure 9. Cholesterol history of the elderly

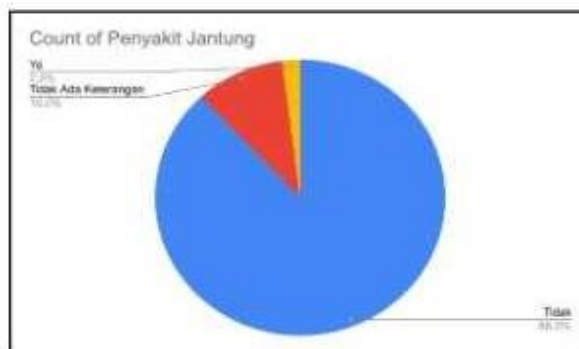


Figure 10. History of heart disease in the elderly



Figure 11. Education for the elderly

#### 4. DISCUSSION

The condition of the oral cavity of geriatric patients can be discussed through the condition of the bones, teeth, TMJ, mucous membranes, tongue and periodontium.<sup>10</sup> After passing the age of 35-40 years, approximately 1% of bone loss per year in women and men. Resorption exceeds deposition, resulting in loss of bone tissue.

In carrying out dental and oral health care for the elderly, it can be divided into 3 parts, namely 1) the elderly who are functionally independent. They have the ability to drive and/or use public transportation themselves to access health facilities. General dentists can safely treat this group, where dentists must have the necessary knowledge of the physiology, medicine and pharmacology associated with chronic disease patients and their effects on dental care. 2) Weak elderly. This group has a more complex history of systemic and pharmacotherapy, which may require consultation with the treating physician prior to invasive oral and dental treatment. This group includes people who can still access health facilities, even with someone's help. 3) Functionally dependent elderly, i.e. elderly living at home or in health institutions. The best way to provide oral health services for this group may be directly in their own environment. Elderly people who are weak and functionally dependent have many obstacles when accessing health facilities to obtain dental and oral health services, some of the obstacles are: 1) Socio-economic barriers, namely a. Financial constraints, b. Lack of dental and oral health insurance, c. Lack of social support; 2) Common barriers related to health, namely: a. Presence of several co-morbidities, b. Polypharmacy, c. Cognitive disorders such as dementia, d. Reduced mobility, e. Limited independence; 3) Oral health problems that make dental care more, namely: a. Xerostomia, b. Root caries, c. The extent of tooth decay that must be restored, d. Inability to maintain oral hygiene independently.

In the elderly, atrophy is caused by resorption that occurs continuously. Alveolar bone is the first bone to lose its mass. The periosteal and periodontal surfaces of the alveolar bone have decreased resistance to oral trauma, inflammation,

or disease. Alveolar bone resorption or residual ridge is caused by various factors such as age, gender, and the patient's health status when the tooth is extracted, including extraction technique, patient's diet, the presence of local factors, and the use of dentures.

The condition of the teeth is different from other parts of the body in that the reparative or regenerating capacity of the tissue is very limited. Also the blood vessels and nerves become less active with age causing the average pulp vitality limit to be 70 years. The anatomical changes of tooth structure such as enamel cannot regenerate/repair itself and decrease its permeability, dentin has decreased permeability, sensitivity, and pain conduction, apical foramen shrinks, teeth become brittle, teeth look darker, and increased sensitivity to diarrhea. and thermal, reduced translucency.

Changes in TMJ function occur in elderly individuals. Signs of TMJ changes such as clicking, limited jaw opening, and deviation of the mandible on function, with the main symptom is pain. Oral mucosal changes that are common in the elderly are atrophic changes. Clinically, the surface epithelium changes to become thinner, drier, less elastic, less vascularized, less attached to the underlying connective tissue and bone. Several symptoms may be associated with these changes, including xerostomia (mouth dryness) and a sensation of pain or burning on the tongue, palatal, or oral mucosa.

Periodontal tissue conditions such as gum tissue in elderly individuals usually experience a decrease in the teeth, which then results in the exposed surface of the teeth and roots. The rate of progression of gingival recession is related to age, tooth movement, inflammation resulting from disease, oral maintenance habits, and heredity.

While the ligaments in the elderly due to the aging process affect the progressive loss of soft tissue bonds which can cause the roots to open and the teeth to become loose. Changes in the vascularity of the tongue occur very little compared to other organs. There is controversy as to whether aging affects papillae atrophy, increased fissure formation, and decreased taste sensitivity of the tongue.

Regular brushing of teeth every day can actually reduce the buildup of plaque on the surface of the teeth. It's just that, the elderly who experience a decrease in their gums or gum recession, must really pay attention to the right brushing technique. Use a toothbrush with soft bristles and a toothpaste that contains fluoride.

The use of antiseptic mouthwash is also important for dental and oral health. The substances contained in it are beneficial for the surface of the teeth and the oral environment. In addition, compounds in mouthwash that act as bacteria killers are also effective in treating gingivitis or gingivitis.

Caring for dental and oral health for the elderly Meanwhile, for the elderly who wear full dentures, effective cleaning and maintenance must still be carried out. Brush and rinse your dentures daily. Next, don't forget to remove the denture while you rest at night.

Soak the denture in warm water or water that has been filled with a special denture cleanser. Don't forget to clean and massage the tissues under the dentures at least once a day. It is useful for improving circulation and tissue health.

Finally, have regular check-ups with your dentist to check the health of your teeth and mouth. This is so that if a problem occurs, the dentist can immediately address it.

Taking care of oral health for the elderly is very important. In addition to routinely cleaning their teeth, the elderly should reduce their consumption of sweet foods, maintain a healthy diet, and stop smoking. In addition, do not forget to check your teeth regularly to the dentist.

The conclusions obtained from this study, there is still a lack of knowledge of the elderly in the East Ciputat, South Tangerang regarding the importance of maintaining oral and dental health.

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