

The trends of physical and mental health as indicators of non-communicable diseases in families: A descriptive study

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Abstract

Physical discomfort due to chronic illness can occur in any individual. Especially non-communicable diseases, these chronic diseases occur due to lifestyle factors in the family, genetics, and aging. Non-communicable diseases can be prevented with early detection and prevention efforts. The purpose of this study is to see an overview of the incidence of non-communicable diseases in the community. The research design uses a descriptive study. The research was conducted in the Wonopringgo Health Center work area. The samples were taken using simple random sampling technique. The number of samples was 973 respondents with a minimum age of adolescence. The instrument used was a demographic questionnaire with a survey of the type of disease suffered. The analysis used frequency distribution and obtained the results that as many as 67 respondents suffered from physical diseases with an average age of 54.36 years. A total of 53 respondents had hypertension and 14 respondents had diabetes mellitus. A total of 4 respondents suffered from mental disorders with an average age of 48.5 years. The majority of respondents with physical and mental problems are women. The results of the study were obtained that the average healthy respondents were 26.45 years old. This proves that the disease is not contagious and becomes chronic in the elderly. Therefore, early detection efforts are important in determining efforts to prevent non-communicable diseases from early on by assessing risk factors in the family.

Keywords

Early detection, Diabetes mellitus, Hypertension, Non-communicable diseases

Introduction

Non-communicable diseases (NCDs) are diseases that are not caused by microorganism infections. Cases of non-communicable diseases include hypertension, coronary heart disease, heart failure, chronic kidney disease, stroke, type 2 diabetes, thyroid disorders, osteoporosis, cancer and blood disorders [1]. Non-communicable diseases are the main cause of the global disease burden. Deaths due to NCDs account for 78% and occur in developing countries [2].

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Indonesia, the third most populous country after China and India with a population of 270 million, has undergone a rapid demographic and epidemiological transition over the past few decades. The threat of NCDs is expected to increase as the population ages. This is projected with the achievement of a quarter of the population by 2070 being elderly [3]. In addition, the development of technology also contributes to lifestyle changes. The unhealthier lifestyle are increased, the higher the risk of developing NCDs in the community [4].

The shift in the risk of NCDs has also occurred in adolescents and adults. These NCDs include stroke, cardiovascular disease, and diabetes [5]. The shift in the prevalence of NCDs that threaten the young population requires more optimal detection and prevention efforts. This is because if NCDs are not controlled, eating becomes a threat to Indonesia that with the decline in community productivity due to NCDs [6].

In addition to efforts of NCDs prevention with various lifestyle modifications such as reducing the consumption of salt, sugar, fat, alcohol, and tobacco, increasing physical activity, and getting enough rest [7], early detection efforts are also needed so that cases can be detected faster, and further treatment can be decided appropriately. This is supported by previous research which stated that prevention plays an important role in reducing the risk of NCDs because NCDs are caused by preventable and modifiable factors [8]. The faster the detection process, the faster the preventive measures. The purpose of this study is to see an overview of the incidence of non-communicable diseases in the community.

Method

The research design uses a descriptive study. The research was conducted in the Wonopringgo Health Center District Area. Sampling using simple random sampling. The sample size of 973 respondents with a minimum age of adolescence, has not been examined for the last 6 months. The instrument used is a demographic questionnaire with the contents of a survey of the characteristics and types of diseases suffered. The data was analyzed using a central tendency.

Results and Discussion

The research conducted on 973 respondents obtained the results that the average age of respondents who experienced physical problems was older than mental health problems. Among physical health problems, it was found that hypertensive complaints are the most common complaints found in the community. Women suffer from more diseases than men. More clearly, Table 1 presents the results of this study.

The increase in NCD cases has triggered the world's efforts to prevent and deal with this condition, especially in developing countries, including Indonesia. In fact, NCD has become a priority in the development plans of all countries. As part of these efforts

to reduce NCD- related deaths by 25% by 2025 [9]. The increase in NCD cases is influenced by socio- demographics. Among them are age and gender.

Table 1. Physical overview and characteristics (n=973)

Variable	Number	Mean of Ages	Women	Man	Diabetes Mellitus	Hypertension
Physical Complaints	67	54.36	47	20	14	53
Healthy	902	26.45				
Total	973					

Previous research has explained that age, gender, and education level are related to the incidence of diabetes mellitus [10]. Another study stated that old age increases the risk of hypertension by 8.4 times [11]. Another study mentions the relationship between age and sex with cardiovascular diseases [12]. In line with this study, the average person who has physical complaints, namely hypertension and diabetes mellitus, is 54 years old and female.

Previous research stated that as we age, the risk of developing diabetes mellitus increases by 0.215 times [10]. The research is also supported by another study that states that age increases risk factors for diabetes mellitus 18 times related to metabolic disorders [13]. This shows that age risk factors remain a vigilance for the community to avoid NCDs.

Previous research found a significant relationship between age and the risk of diabetes mellitus and hypertension. Age over 45 years has an 8.4 times higher risk of suffering from hypertension compared to those who are younger [11]. In accordance with this study, people who suffer from NCDs are over 45 years old. Physical changes and defense mechanisms that occur with age, such as changes in arteries and neurohormonal mechanisms, can be risk factors for diabetes mellitus and hypertension in the elderly population.

Detection efforts as part of the prevention of NCDs in the community provide valuable information for the first facility health unit. This can be used as a guideline in conducting NCD management in the community. NCD management in the community can be done by conducting regular health checkups, maintaining a healthy lifestyle, such as exercising regularly and eating a healthy diet, as well as increasing public understanding of the risk of diabetes mellitus through education and socialization, can help prevent this disease.

Conclusion

The development of NCDs in the community is dominated by the elderly. The majority of respondents with physical and mental problems are women. The results of the study were obtained that the average healthy respondents were 26.45 years old. This proves that the disease is not contagious and becomes chronic in the elderly. Therefore, early detection efforts are important in determining efforts to prevent non-

communicable diseases from early on by assessing risk factors in the family. Future research can carry out preventive efforts to reduce the risk of NCDs.

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