

THE RELATIONSHIP BETWEEN FAMILY ROLES AND PREVENTION AND RISK OF NON-COMMUNICABLE DISEASES IN ADOLESCENTS

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ABSTRACT

Adolescence is a period of searching for identity and if it fails it will cause various problems such as an unhealthy lifestyle, especially during this pandemic, many teenagers are at home, physical activity is decreasing, they are at risk of experiencing non-communicable diseases (PTM) and PTM development in Indonesia continues to increase due to unhealthy lifestyles, so it takes the role of the family to be the first and main protector that is good in supporting the growth and health of adolescents. This study's objective was to determine the relationship between Family role and the prevention and risk of PTM in adolescents. This research is analytic with a cross sectional design, carried out on 19 to 23 September 2022. The population and sample are all students in first semester, a total of 90 students. The results showed that students who had a good family role, the prevention efforts of students were in the good category as many as 19 (39.6%) and students who had sufficient family roles, the risk of PTM events in adolescents was in the high risk category as many as 11 (26.2%). The results of the statistical chi-square test yielded a value of $p=0.012$ it can be concluded that there is a relationship between family role and efforts to prevent non-communicable diseases and the results of the statistical chi-square test yielded a value of $p= 0.039$, it can be concluded that there is a relationship between the role of the family and the risk of non-communicable diseases in adolescents in Makassar. This demonstrates that the family is crucial in efforts to prevent PTM in adolescents as soon as possible.

Keywords: *Adolescence, Family role; Prevention and Risk Non Commicable Disease*

1. INTRODUCTION

Adolescents make up a sizable group of the population and account for almost 20% of the population in Indonesia. Adolescents are the nation's generation as future leaders and will play a major role as drivers, especially in the field of development in the future. Adolescence is a period of self-discovery which is a very important phase that requires the nation's attention as an effort to prevent the failure of self-recognition which will have an impact on various problems such as decreased or low achievement at school, inappropriate relationships, and so on. (Martina & Redjeki, 2020). The problems experienced by adolescents have an impact on the behavior and health status of adolescents themselves. Moreover, adolescents are easily influenced by peers and social media so that they are prone to being influenced by unhealthy behavior, or getting incorrect health and nutrition information (Handayani et al., 2020).

NCDs not only threaten adult and elderly groups but also threaten adolescents because the development of NCDs in Indonesia continues to increase due to unhealthy lifestyles. Based on Riskesdas data in 2018, there was an increase in NCD indicators in adolescents aged 18 years, namely adolescents with high blood pressure increased from 25.8% to 34.1%, adolescents with obesity showed an increase from 14.8% to 21.8%, adolescents who smoked also showed an increase from 7.2% to 9.1%, even adolescents with cancer also showed an increase from 1.4 per to 1.8 per mile, even other NCD data, namely showing that at the age of starting 15 years the prevalence of stroke from 7 increased to 10.9 per mile, chronic kidney disease from 2.0 per mile to 3.8 per mile, diabetes showed an increase from 6.9 to 10.9% (Direktorat P2PTM, 2019)

The increasing incidence of NCDs will cause an additional burden on society and especially the government because it requires large costs and high technology in efforts to deal with NCDs. So lifestyle changes are starting to be very important as early as possible and can be started in adolescence. Early detection can be done starting in adolescence in order to detect NCD risk factors so that they can control risk factors as early as possible. Early detection of NCD risk factors includes measuring body mass index as well as measuring blood sugar and measuring blood pressure, educating healthy living behaviors and interviewing risk behaviors with targets in the adolescent phase at least 15 years old. So the role and support of parents is very important as the core family of adolescents is needed to be able to control the risk of NCDs as early as possible in adolescents (Sukiman, 2019).

Adolescent health comes from parents who are nuclear families who have a major role in efforts to prevent NCDs in adolescents due to improvement, this is in accordance with Law No. 52 of 2009 concerning family development in the context of developing population quality through improving adolescent health. So the healthy family approach becomes one of the strategies as a media approach to healthy families. An important aspect of disease prevention is the emphasis on the family unit. A family is expected to be responsible for meeting the health demands of its family members to achieve quality family health. (Friedman Marlyn M, 1998).

Therefore, the role of parents is very important to achieve increased knowledge of adolescents about disease prevention. The active role of parents in NCD prevention efforts, the healthier the behavior of adolescents to prevent a disease (Riadini, I., Ramadani, 2020).

2. RESEARCH METHODS

Analytical method with cross sectional design is a research method used to analyze the relationship between family roles with the prevention and risk of non-communicable diseases in adolescents. The population in this study were all students at one private campus in Makassar, who were in the category of adolescents 15-19 years totaling 100 students.

Accidental sampling technique is a sample technique used which amounted to 90 students. the research was conducted on September 19-26, 2022. To support this research using a family role questionnaire that has been tested for validity and

reliability using Cronbach alpha. There are 17 statements on the family role questionnaire that will be filled in by respondents using a Likert scale. Scoring if answering always score 4, often score 3, sometimes score 2 and never score 1. Then the infectious disease risk questionnaire and the NCD early detection screening questionnaire by measuring blood sugar, blood pressure, abdominal circumference and BMI. The measurement results if all normal then low risk, if 1-2 abnormal out of 4 normal then medium risk and if 3-4 abnormal out of 4 normal then high risk.

3. RESULTS

Table 1
Analysis of the Relationship between Family Roles and NCD Prevention Efforts in Adolescents

Variable	NCD Prevention Efforts						p
	Good		Enough		Less		
	F	P	F	P	F	P	
Family Roles							
Good	19	39.6	27	56.3	2	4.1	0.012
Enough	12	28.6	19	45.2	11	26.2	

Based on table 1 shows the results using the chi square test 2 x 3 table read on pearson chi square because the expected count is 6.07 with 90 respondents, obtained a p value = 0.012 with $\alpha = 0.05$, indicating a p value $< \alpha$ (0.05), then there is a relationship between family roles and efforts to prevent NCDs in adolescents.

Table 2
Analysis of the Relationship between Family Role and Risk of NCDs in Adolescents

Variable	Early detection of NCDs						p
	Low Risk		Medium Risk		High Risk		
	F	P	F	P	F	P	
Family roles							
Good	29	60.4	14	29.2	5	10.4	0.039
Enough	15	35.7	16	38.1	11	26.2	

Based on table 2 shows the results using the chi square test 2 x 3 table read on pearson chi square because the expected count is 7.47 with 90 respondents, the result of p = 0.039 where the value of $\alpha = 0.05$. This shows that the p value $< \alpha$ (0.05), so there is a relationship between Family Role and the Risk of NCD Events in Adolescents.

4. DISCUSSIONS

1. Relationship between Family Role and NCD Prevention Efforts in Adolescents

There is a relationship between family roles and efforts to prevent NCDs in adolescents with a p value of 0.012 ($p < \alpha$). The results of this study are in line with research (Ambarsari, 2021) about the role of family in the activeness of adolescents in posbindu for the prevention of non-communicable diseases. That the role of the family is needed to build and ensure that the family is in a healthy condition, especially in adolescents because the adolescent group is in the growth and development phase and in the phase of finding identity so that it has a tendency to have risky health behavior. Risk factors for non-communicable diseases experienced by adolescents are increased blood sugar levels, increased blood pressure, obesity so that the body mass index is very excessive, all of which are generally caused by unhealthy diets, lack of physical activity, smoking and drinking alcohol. (Direktorat P2PTM, 2019). Families have a duty in overcoming health problems, the family's task in overcoming health problems is to recognize problems in family health, decide on health actions needed by the family, provide care to the family in a sick condition, modify a healthy home environment, utilize health service facilities to the community. In the task of recognizing health problems to the family, the family should not ignore health which is a family need. (Friedman & Marlyn M, 1998). Therefore, it is very important to make efforts to prevent non-communicable diseases in family members, especially in adolescent family members. (Hamdan Hariawan, Martini Tidore, 2020).

With the role of the family, it will form health maintenance behavior which is a person's effort to maintain and or maintain

their health to avoid disease so that disease prevention behavior is formed, and health improvement behavior so that it is expected to form health improvement behavior in the form of a person's efforts to practice healthy living to maintain and improve their health, to avoid disease. (Herawati et al., 2020). This is evident in this study, if the role of the family is good then the NCD prevention efforts of adolescents / individuals will also be good, namely there are 19 respondents (39.6%).

For family members, especially adolescents, the presence of the family functions as a facilitator, source of knowledge, encourager, source of hope, and can help foster a sense of security and comfort. The family environment is very important, especially during this pandemic, because the family environment provides the most important basis for a person, especially adolescents, to have healthy habits, behaviors and lifestyles. (Satuan Tugas Penanganan COVID-19 Nasional, 2020).

Several efforts can be made by families to prevent the occurrence of NCDs in children and adolescents, namely families can access information is one of the needs that affect the implementation of family roles in maintaining health. The more sources of information, types of information obtained and accessible by the family, the more knowledge will increase which has an impact on efforts to prevent non-communicable diseases. In addition, families also try to maintain communication and interaction between family members to create stability and maintain health. The family's ability to educate, meet the needs of each member, discipline children and adolescents to be able to behave healthily, instill clean and healthy living behaviors, motivate and strengthen each other is considered as optimizing the role of the family. (Syahbana et al., 2022).

It was also found in interviews with respondents that their families always remind them to live healthy, eat on time, maintain food hygiene, maintain the nutrition of their food and prepare time to discuss with their adolescents about health and exercise habits in order to achieve healthy living. Especially if there are NCDs in their family, the family will further increase efforts to prevent NCDs by creating parenting patterns that support healthy physical growth and development by providing assistance, providing motivation and efforts to maintain their health so that non-communicable diseases do not occur.

The role of the family is very important to realize a prosperous, happy, safe and healthy family - the family plays an important role in the formation of healthy habits - so it is very important to understand the physical health of adolescents. (Ulfah, 2021).

Therefore, as a result, families with adolescent children in particular should continue to promote healthy lifestyle habits starting at home. This is because families play an important role in the health development of adolescents.

2. Relationship between Family Role and Risk of NCDs in Adolescents

Based on the results of the chi square statistical test, the p value = 0.039 ($\alpha < 0.05$), there is a relationship between family roles and the risk of NCD events in adolescents. In this study, blood pressure, blood sugar, body mass index and abdominal circumference were measured as early detection of non-communicable diseases.

If the family role is good, the incidence of NCDs in adolescents is also found to be in the low risk category. It is from the knowledge of adolescents that attitudes are derived. Adolescent knowledge is mostly obtained through family efforts to support,

educate, supervise, and provide an overview of how to overcome health problems. In addition, the family is also a good role model for adolescents and sets a good example for them. These adolescents engage in regular physical activity and exercise, do not make extreme lifestyle changes, and can manage healthy and quality thoughts that have an impact on providing comfort. Thus, these various healthy behaviors help adolescents avoid NCDs. (Hamdan Hariawan, Martini Tidore, 2020). This is evident in respondents who have families consisting of parents with awareness of the dangers of NCDs in their children and adolescents will further increase efforts to prevent NCDs in their families, so that it appears from the results of early detection of adolescents in the low risk category of NCDs.

The results of this study also show that an adequate family role will lead to a moderate to high risk of adolescents experiencing non-communicable diseases. The risk of NCDs in adolescents is due to various bad habits of adolescents and also the lack of family support. Families should help adolescents understand that every decision they make, especially those that affect their health, will have positive and negative impacts. Families play an important role in shaping adolescent habits that will influence their personal development and impact their future. (Fitriani & Usrina, 2021).

Based on the results of interviews with respondents who have a high risk of NCDs due to unbalanced eating patterns and diets that often consume high-fat, high-sugar foods so that increasing body weight leads to obesity which cumulatively over a period of time will cause hypertension, diabetes and even stroke, this is in accordance with the guidelines for preventing NCDs in adolescents. (Direktorat P2PTM, 2019). The existence of cultural factors, namely the

habit of consuming meat because of the traditional feast that is the origin of the region. Some respondents, namely the community, always consume high-cholesterol food categories, especially as a sign of honor, which is a habit of the diet of adolescents and adults so that they can be at risk of NCDs. (Gaol & Simbolon, 2022).

Today's adolescents lead unhealthy lifestyles that increase their chances of developing NCDs. NCD prevention, which is one of the components of healthy lifestyle choices aimed at improving health, has not been practiced by these adolescents. Although adolescents have sufficient knowledge coupled with a good family role, it will be back to the individual adolescent to always maintain health and efforts to prevent NCDs. It is evident from this study that in good family roles, but there are adolescents who have a low risk and high risk of experiencing NCDs.

Therefore, it is very necessary for the role of the family to provide emotional, appreciation, information and instrumental support, especially to adolescents in order to provide a sense of being more valued and will affect behavior, improve psychological well-being, which will have an impact on the prevention of NCDs since adolescence. (Samosir, 2020).

Based on the results of this study, most of the respondents were adolescents 46 people (51.1%) based on the results of early detection of NCDs were in the category of moderate risk and high risk of NCDs, this is because in the digital era as it is today, coupled with the pandemic period so that mobility is one of the conveniences offered by everything. This causes many adolescents to lead a sedentary and increasingly inactive lifestyle. which has an impact on the fulfillment of adolescent nutrition. They tend to utilize digital facilities in food selection so that it cannot be ascertained the cleanliness of the food and the nutritional

content in it even though the danger of certain Non-Communicable Diseases (NCDs) can be reduced if the dietary needs of adolescents are met optimally. In fact, by applying the principles of NCD prevention, most NCDs can be prevented (Triana et al., 2021). Therefore, it is hoped that teenagers can adopt a healthy lifestyle, such as eating a balanced diet and engaging in regular physical activity, to change their lifestyle for the better. Since living a healthy lifestyle has many benefits for the body - making blood pressure stable and normal, blood sugar levels that are also in the normal range, and a body mass index that is in accordance with the stages of adolescent growth and development - this will help produce healthy, imaginative, and critical teenagers for the progress of the Indonesian nation (Handayani et al., 2020).

5. CONCLUSIONS

From the results of research on 90 adolescent respondents it was concluded that: There is a relationship between family roles and efforts to prevent NCDs in adolescents and there is a relationship between family roles and the risk of NCD incidence in adolescents. Therefore, it is highly expected that health workers provide health education to increase the role of the family to assist and motivate adolescents to adopt a healthy lifestyle so as to prevent non-communicable diseases from adolescence.

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