



Factors Related to Parental Involvement in the Prevention of Health Risk Behaviors among Adolescents: A Cross-sectional Study in East Java Indonesia

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Abstract

BACKGROUND: Adolescent development is a period of searching for self-identity including behavioral changes. Parental involvement is needed to prevent health risk behavior in adolescents.

AIM: The purpose of this study was to analyze the factors associated with parental involvement in the prevention of risky behavior in adolescents.

METHODS: The research design used cross-sectional through online distribution (Zoho form). The population in this study were parents who had adolescents attending senior high school in East Java. Based on consecutive sampling for a period of three months, 704 samples were obtained. The independent variables include demographic data (education of father and mother, gender of the child, number of children, means of transportation, type of child's education, and knowledge), while the dependent variable in this study was parental involvement. Data analysis used the Spearman rank correlation with a significance level of $\alpha = 0.05$.

RESULTS: The results showed that there was a significant relationship between the number of children ($p = 0.033$), means of transportation ($p = 0.000$), and parental knowledge ($p = 0.04$), while the results of other factors were the father's education ($p = 0.92$), the mother's education ($p = 0.35$), gender of the child ($p = 0.64$), and the type of education of the child ($p = 0.66$).

CONCLUSION: Parental involvement in preventing health-risk behavior in adolescents can be increased through controlling the number of children, means of transportation used by children, and parents' knowledge about the importance of preventing health-risk behaviors in adolescents.

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Introduction

Adolescence is a developmental period in search of self-identity. The role of parents is important to help adolescents find their identity [1]. Parents have an important role in the lives of adolescents including academic achievement, identity development, prevention of bullying and prevention of health risk behavior, and even a role in maintaining personal health [2], [3], [4]. Based on the reproductive health survey of Indonesian adolescent and the National Family Planning Coordinating Board (BKKBN), it showed that around 5912 adolescent girls and 6578 adolescent boys aged 15–19 years had sexual intercourse before marriage [5]. In Addition, based on data from the Indonesian Child Protection Commission the period of 2016–2020, it showed that there were 263 children who used narcotics, alcohol and smoking [6]. The role of parents in adolescent health is clearly seen

in its relationship in preventing alcoholic behavior and smoking behavior [3]. Besides, health risk behaviors include free sex and aggressive behavior, which are also closely related to interactions between parents and adolescents [7].

Health risk behavior in adolescents is strongly influenced by various factors including the environment, family economic status, and the lack of interaction between parents and adolescents [8]. Adolescents need love, attention, and security guarantees from parents in living their lives [9]. The strong relationship between parents and adolescents can minimize the emergence of health risk behaviors and other negative behaviors in adolescents [10]. Parental involvement in adolescent life consists of four aspects, namely, parental supervision, parental monitoring, parental connectedness, and parental bonding [11]. Parental involvement is closely related to smoking behavior and drug use [12]. Parental involvement in adolescent life is also closely related to bullying behavior in adolescents [13].

There have been many studies which state that parental involvement is very important in the lives of adolescents, especially to prevent health risk behaviors. However, the factors related to parental involvement in the prevention of health risk behaviors (smoking, drug abuse, pre-marital sex, aggressive, etc.) in adolescents have not been elucidated. Based on the theory of the health promotion model, health promotion behavior is very dependent on antecedent factors including individual characteristics, namely, education, knowledge, and socioeconomic status [14]. The purpose of this study was to analyze the factors associated with parental involvement in the prevention of health risk behaviors in adolescents.

Methods

Study design

The research design used was cross-sectional with correlation analysis. The population was parents who had children in adolescence in East Java. The sample was selected based on inclusion criteria including; (1) parents of adolescents aged 15–19 years old, (2) parents of adolescents enrolled in Senior High School/Vocational High School/Islamic Senior High School, (3) parents who can fill out online questionnaires, and (4) parents who are willing to be the respondents in this study. The researchers distributed online questionnaires for 3 months (July –September) and obtained 704 respondents from 96 senior high school in East Java. The independent variable in this study was demographic data (education of father and mother, gender of the child, number of children, means of transportation, type of child's education, and knowledge), while the dependent variable in this study was parental involvement.

Procedure

Concerning the COVID-19 pandemic situation, the data collection was done through the spread of online questionnaires or social media applications to the parents of high school students and high school teachers (for helping spread the questionnaires to their students) in Surabaya and East Java. Before filling out the questionnaire, respondents got a detailed explanation of the research. Then, if they agreed, the respondents gave the signature directly through the online media as proof of approval. Respondents who agreed then continued to fill out the questionnaire completely.

Instrument

There were two kinds of questionnaires. Questionnaire for measuring factors related to parental

involvement used a demographic data questionnaire filled out independently by parents. Meanwhile, to measure the level of knowledge of parents, the researchers compiled knowledge questionnaires. The knowledge questionnaire consists of five questions with responses of the right and wrong. The parameters for compiling a knowledge questionnaire consist of (1) definition of health-risk behavior in adolescents, (2) etiology, (3) prevention, (4) causes of risky behavior on family, and (5) complications of health-risk behavior in adolescents. The correct answer was given a score of 1, while the wrong answer was 0. The maximum score was 5. The higher the score obtained, it means that the better knowledge of parents about preventing health-risk behavior in adolescents.

The parental involvement questionnaire was adopted from research [15]. This questionnaire consists of four questions that showed parental involvement in knowing the adolescents' activities in the past 30 days. The four contents of the question were (1) checking the adolescent's homework, (2) checking the adolescents' belongings surreptitiously, (3) understanding the adolescents' problems and worrying about them, and (4) knowing the adolescent's activities at leisure. The answer responses consist of five options, including, always with a score of 5, often with a score of 4, rarely with a score of 3, once with a score of 2, and never with a score of 1. The maximum score is 20, and the minimum score is 4. The higher the score obtained is, the better the parental involvement. The parental involvement was divided into three levels: High (score ≥ 16), moderate (score 11–15), and low (score < 11).

Data analysis

The collected data were analyzed using Spearman rank correlation statistical test with a level of $\alpha = 0.05$.

Ethical aspect

This research was conducted with respect for human rights by applying ethical principles to human subjects. This research has obtained ethical clearance from the Health Research Ethics Commission of the Faculty of Nursing, Universitas Airlangga with certificate number 2057-KEPK.

Results

The results of the study showed that the number of children who attended high school was almost equal between females and males. Most of parents' education was Junior High School. However,

there were also parents with an elementary education level. The most type of transportation used by children was motorbikes (59.8%) and a few children took public transportation to school. Most of the parents had two children (43.3%), but there were parents who had more than three children (17.1%) (Table 1).

Table 1: Demographic characteristics of respondents n = 704

Characteristics	n (%)
Gender of student	
Male	303 (43)
Female	401 (57)
Father's education	
Elementary school	71 (10.1)
Junior high school	357 (50.7)
Senior high school	151 (21.4)
Bachelor	125 (17.8)
Mother's education	
Elementary school	140 (19.9)
Junior high school	176 (25)
Senior high school	219 (31.1)
Bachelor	169 (24)
Type of transportation	
Escorted by parents	213 (30.3)
Riding motorbike	421 (59.8)
Taking public transportation	55 (7.8)
Combination of transportation types	15 (2.1)
Number of children	
One	48 (6.8)
Two	305 (43.3)
Three	225 (32)
>Three	126 (17.9)

Table 2 showed that more than 50% of parents had high level of parental involvement (58.1%); however, there were less of parents which had low level of parental involvement.

Table 2: Classification of parental involvement in preventing health risk behavior in adolescents

Parental involvement	n (%)
High	409 (58.1)
Moderate	268 (38.1)
Low	27 (3.8)

Table 3 shows that of the various factors that play a role in parental involvement in preventing health risk behavior in adolescents, there are three factors that have a significant relationship, namely, the type of transportation ($p = 0.000$; $r = -0.13$), the number of children owned ($p = 0.033$; $r = -0.08$), and parental knowledge ($p = 0.04$; $r = -0.07$). The type of transportation used by adolescents has a negative relationship with parental involvement. This means that the more adolescents who use motorbikes to school, the lower the parental involvement. Likewise with the number of children owned by parents, the more children they have, the lower the parental involvement. Parental knowledge has a negative relationship with parental involvement, which means that the better the level of knowledge, the lower the parental involvement.

Table 3: The relationship between demographics factors and parental involvement in preventing health risk behavior in adolescents

Variables	p	R
Gender	0.64	-0.01
Father's education	0.92	0.004
Mother's education	0.35	0.03
Type of transportation	0.000	-0.13
Number of children	0.033	-0.08
Type of education	0.66	0.01
Parental knowledge	0.04	-0.07

Discussion

The results showed that parental involvement was formed by several factors, namely, the type of transportation of adolescents to school, the number of children owned by parents, and the level of knowledge of parents about health risk behavior in adolescents. Based on the results of distributing online questionnaires to parents, it showed that most adolescents rode their own motorbikes to school. However, there were also those who were escorted by parents to school. There are several reasons for parents to let adolescents ride their own motorbikes to school, including so as not to be late for school, not to interfere with parents' work so that teenagers are enthusiastic about going to school [16]. Parental involvement is very important in adolescents who ride their own motorbikes to school [17]. This is because the number of accidents in minors, including adolescents, is very high, namely, in 2015–2019, there were 139,000 incidents [18]. Thus, if adolescents use their own motorbikes to school, parental supervision must be stricter.

The number of children belongs to the parents has a negative correlation with parental involvement in preventing health risk behavior in adolescents. The more children that the parents have, the lower is the parental involvement. A large number of family members has an impact on increasing needs [19]. A large number of children causes parents to have to divide their attention to all children so it can also cause a lack of attention. Parents do not have enough time to check schoolwork, youth activities during free time, and attention to understand the problems experienced by adolescents. Parents' role is crucial to prevent health risk behavior among adolescents [20].

Knowledge has an important role in parental involvement to prevent health risk behavior in adolescents. Parental knowledge has a significant relationship with parental involvement. Knowledge is the basis for human behavior [21]. Knowledge concerning (1) health-risk behavior in adolescents, (2) etiology, (3) prevention, (4) causes of risky behavior on family, and (5) complications of health-risk behavior in adolescents is important so that parents can take precautions. Type of transportation, the number of children, and the knowledge of parents are important things to consider in an effort to increase parental involvement. Parental involvement in preventing health-risk behavior in adolescents can be increased through controlling the number of children, means of transportation used by children, and parents' knowledge about the importance of preventing health-risk behaviors in adolescents.

Conclusion

Type of transportation, number of children and knowledge of parents are important things to consider

in an effort to increase parental involvement. Parental involvement in preventing health-risk behavior in adolescents can be increased through controlling the number of children, means of transportation used by children and parents' knowledge about the importance of preventing health-risk behaviors in adolescents.

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