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Research Article

Street Literacy as an Effort to Improve Healthy Behavior of Street Teenagers: Is it effective?

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Abstract

Background: Street teenagers are one of the groups vulnerable to health problems. It is evident from basic health research that smoking behavior has started since the age of 10 years, with 13.4% of adolescents having used cigarettes regularly every day and 9.63% of adolescents already familiar with alcohol. Street teenagers with all their limitations are required to help the family's economy and must be willing to share time between work and study or play in accordance with their developmental tasks. If this is allowed, then Indonesia will lose so many potential young generations in the future. Street literacy by providing reading sources about health for street teenagers and mentoring is expected to increase the enthusiasm of street teenagers to care about their health, so that the adaptive behavior of teenagers can increase. **Objective:** This study aims to analyze the effectiveness of street literacy on increasing healthy behavior in an effort to prevent the health problems of street teenagers. **Methods:** This research is a quasi-experimental with a pretest and posttest with one group design. The research was conducted by implementing street literacy activities for three months starting July-September 2021. The sample of this research was 60 street teenagers, from the Akur Kurnia halfway house in Jakarta and the Ahmad Dahlan halfway house in Yogyakarta. The research variable is the independent variable: street literacy which is oriented to cognitive and behavioral development, while the dependent variable is the behavior of street teenagers towards preventing teenager health problems which includes knowledge, attitudes, and skills or actions of street youth towards health prevention. Data analysis in this study used the paired sample test. **Result:** the application of street literacy can increase the knowledge ($p=0.000$), attitudes ($p=0.000$) and skills ($p=0.000$) of street teenagers in health prevention. **Conclusion:** street literacy is effective in improving the health behavior of street teenagers.

Keywords: Street literacy, street teenagers, health behavior

INTRODUCTION

Street teenagers are one of the groups vulnerable to health problems that require special attention and services. Many factors cause teenagers to live on the streets, including poverty which pushes them to work, peer influence, disharmony, family violence, changes in family structure due to the death or divorce of their parents so that teenagers run away from their families. Another study conducted by the Directorate of Child Social Welfare and SKTS in 2013 explained that 72.25% of economic reasons for helping parents are factors that encourage children to be on the streets, 76.58% of children still live with their parents (children on the street) and 86.67% of street children are still in school. The results of the two studies above are strengthened by a qualitative study of street youth families in Jakarta conducted by Chairani et al. which states the influence of friends, imitating the work of previous parents as buskers and reasons for working to help the family economy are factors that cause teenagers to be on the streets.^{1,2}

Street teenagers who spend most of their time on the streets to work, play and other activities are very vulnerable to health problems and crime. The harsh life of street teenagers makes street children not spared from acts of violence such as sexual harassment, premarital sex, drug abuse, and even becoming drug couriers (McMurray, 2003). This condition is

in accordance with the results of the Indonesian Demographic and Health Survey 2017 which states that 67.7% of adolescents have had premarital sex, even in the 15-19 years age range some have become mothers. The results of the 2018 Basic Health Research make it clear that smoking behavior has started since the age of 10 years, with 13.4% of adolescents having used cigarettes regularly every day, and 9.63% of adolescents already familiar with alcohol.³⁻⁵

The above health problems occur because street teenagers are not able to balance the development of culture due to modernization which can affect their social life. The condition of social inequality, especially economic difficulties, causes cultural lag, namely differences in the level of progress of the culture of a society. Street teenagers with all their limitations are required to help the family's economy and must be willing to share time between work and study or play in accordance with their developmental tasks. If this is allowed, then Indonesia will lose so many potential young generations in the future. Therefore, the government is expected to be able to develop the potential of the young generation with character that can be formed through family, school, and community involvement.⁶

The complex problems of street youth require special and appropriate handling, where they can no longer be classified as children and are not appropriate if they are included in the adult group. The limited health services that are friendly to the needs of teenagers, including the very limited guidance of street youth, is one of the factors that exacerbates the occurrence of adolescent

health problems. These limitations can be seen from the opening hours of service practices at the Community Health Center which coincide with school time, officers who do not care about the needs of teenagers, the negative stigma of street youth, so that teenagers are afraid to do health consultations. Referring to the results of Chairani's research stating that street teenagers have high self-efficacy to take advantage of health services, this is not easily realized if there are no parents or street youth companions who take them to health services. The number of families who do not know about the Adolescent Care Health Program (PKPR) service at the Community Health Center is one of the obstacles that families have not optimally utilized health services for teenagers.⁷⁻¹⁰

Street teenagers who are the focus of this research are street youth in the Jakarta and Yogyakarta areas. The region was chosen based on data from the Indonesian Ministry of Social Affairs which states that West Java province has the largest number of street children, namely 5,849 children (32%), DKI Jakarta province 1,766 children (9.8%) in third place, and DI Yogyakarta province 719 (4.0%) in fifth. Based on the results of the researcher's observations, many street youths were found who had started smoking, did not pay attention to basic needs such as nutrition and personal hygiene, did not pay attention to school achievement.¹¹

The results of an interview with one of the street teenagers who work as buskers in Jakarta, stated that the main motivation of teenagers to work is not only to help the family economy, but also to meet the secondary needs of teenagers. Teenagers also stated that they had tried smoking and some had even become smokers, inhaled glue because it was cheap, and some had even tried marijuana. Teenagers complain that they are still limited in receiving information on adolescent health, if any, they get it when they go to the Community Health Center, newspapers, leaflets, or posters. Information received by teenagers is also still limited about the dangers of smoking and drugs, while other health information they rarely get. The limited availability of adolescent health reading materials in the shelter is also one of the factors that make it difficult for teenagers to get information about health.

The results of an interview with one of the coaches of the LKSA Akur Kurnia, East Jakarta and the Mandiri Foundation of Depok City, which is a shelter for street children, the efforts they have made are still general in nature through job training, art training, involving social or religious activities. Health services are still very limited, health workers focus more on health problems for toddlers or PAUD students. Health services, including the provision of adolescent health information, are still lacking in helping adolescents solve their health problems. The limited literacy of street teenagers, especially health, is one of the inhibiting factors for changing adolescent healthy behavior. Therefore, the optimization of the health literacy movement on street youth needs to be realized, so that from an early age street teenagers know health information that is suitable for their adolescent needs and there is an increase in adolescent healthy behavior.

The phenomenon described above illustrates the magnitude of the challenge to overcome health problems in street youth as a health marginal group. Referring to this condition, which was reconstructed in the researcher's thinking as a nurse, is how to involve and empower all potentials in society to create a young generation that is healthy, productive, and able to overcome the various challenges it faces. The role of nurses as community nursing service providers, educators, researchers, case managers, collaborators, facilitators, and

reformers needed to realize these expectations. Community nursing services provided by nurses are professional services based on nursing knowledge and tips. The target of nursing interventions is not only teenagers, but also involves the surrounding environment such as a halfway house to provide reading material about health that is interesting and easy to get for teenagers. This condition has inspired researchers to examine the effectiveness of street literacy in increasing the healthy behavior of street teenagers, as an effort to promote health through increasing the adaptive behavior of street teenagers in overcoming their health problems.

MATERIALS AND METHODS

This research is a quasi-experimental research with pre-post test with one group design. The research was conducted by implementing street literacy activities for three months starting July-September 2021. The sampling method used was simple random sampling, with the criteria for the sample criteria: street children who are teenagers (12-20 years old); street teenagers, namely teenagers who are on the streets to work or play daily, such as at terminals, stations, or red lights, but still live with their parents; are in the construction of a halfway house; and street youth are willing to be sampled. The sample of this study was 60 street teenagers, from the Akur Kurnia halfway house in Jakarta and the Ahmad Dahlan halfway house in Yogyakarta. The research variable is the independent variable: street literacy which is oriented to cognitive and behavioral development, while the dependent variable is the behavior of street adolescents towards the prevention of teenagers health problems which includes the knowledge, attitudes, and skills of street teenagers towards health prevention.

The data collection instrument in this study was carried out using a questionnaire as the behavior of street teenagers compiled by researchers based on a literature review. Assessment of adolescent behavior consisting of knowledge, attitudes, and skills of street youth in an effort to prevent health problems was carried out using a questionnaire. This questionnaire is a modification of the questionnaire that has been used by researchers with the reliability coefficient of knowledge = 0.630; attitude=0.837; and skills = 0.790.

Data collection before the intervention (pre-test) was carried out by distributing questionnaires directly to respondents who were in the halfway house chosen as the research site. The facilitators of street teenagers were involved as numerators totaling 7 people who were tasked with observing the actions or actions of the respondents while at the shelter before and after participating in the street literacy program. The way researchers avoid technical errors in conducting research, previously a meeting was held between researchers and street youth assistants to equalize perceptions, implementation strategies and guidance carried out on street teenagers.

The intervention was carried out simultaneously, namely first conducting training on street teenager facilitators in collecting data by observing what had been done. Subjectivity in collecting observation data is minimized by conducting an interrater reliability test between the researcher and numerator in each halfway house using the Kappa statistical test. The results of the interrater reliability test of ten enumerators were (0.73-1.00) which means the agreement is on average good (good agreement). The implementation of the intervention in this study involved seven facilitators as field assistants. The facilitator is a trained practitioner and observer on youth issues. The last activity in this study was collecting data after the intervention (post-test) with the same procedure as before the intervention. Data analysis in this study used the paired sample test.

RESULT

The results of the analysis of 600 research respondents are: middle age adolescents (14-16 years) is the largest proportion; the largest proportion of respondents are male; most respondents have school status; the largest proportion of respondents with non-formal working status; all respondents during the pandemic lived with their parents, although with limited environmental conditions. The analysis above proves that street teenagers who live daily on the streets to work or play are a high risk group for adolescent health problems (Table 1).

Table 1. Frequency distribution of respondents based on their characteristics

Characteristics	n	%
Gender	Male	28
	Female	22
Age	12 - 13 years old	18
	14 - 16 years old	34
	17 - 20 years old	8
School status	School	50
	No school	10
Working status	Working	49
	Not working	11
Living together	Parents	60
	Friends	0
	Halfway house	0

The results of the effectiveness test before and after the application of street literacy obtained knowledge ($p = 0.000$), attitudes ($p = 0.000$) and skills ($p = 0.000$), meaning that the application of street literacy was effective in increasing the knowledge, attitudes and skills of street teenagers in health prevention (Table 1).

Table 2. The results of the street literacy effectiveness test on the healthy behavior of street teenagers

Variable	Mean \pm SD	p-value
Knowledge	Pre-test	11.10 \pm 2.25
	Post-test	18.53 \pm 1.66
Attitude	Pre-test	54.67 \pm 6.64
	Post-test	69.62 \pm 6.64
Skill	Pre-test	30.33 \pm 2.41
	Post-test	36.57 \pm 1.51

DISCUSSION

Knowledge about the prevention of health problems in street teenagers in street literacy interventions

Based on the results of data analysis, it was proven that the first hypothesis of the study was accepted, meaning that there was an increase in the average score of street teenagers knowledge about the prevention of health problems in street adolescents who followed street literacy ($p < 0.000$). The difference in knowledge from before and after the intervention is substantially significant towards the possibility of changes in street teenagers behavior in an effort to prevent the risk of drug abuse. This also proves that the application of street literacy in increasing the knowledge of street teenagers.

The results of this study are in line with the results of research conducted by Hanaa et al that there was a significant increase in knowledge among street youth, after

participating in the drug abuse prevention education program, namely: knowledge of both adolescents increased from 17.5% to 52.6 %. This opinion was reinforced by other researchers, who stated that education is very important to protect and prevent health hazards for street children. Educational programs are crucial and can increase support for prevention of drug use for street children, given the low level of educational programs regarding drug use for street children.^{12,13}

Increased knowledge is expected to help street youth when experiencing anxiety, set norms, advocate, broaden street youth perceptions of the problems they face, and take appropriate action in solving problems. Street literacy with developed assistance is expected to help street youth by helping each other gain knowledge about preventing adolescent health problems, which can affect street youth's perception of themselves as a personal system. The personal system is closely related to the concept of perceptions or views of street youth about events that are closely related to experience, knowledge and feelings. Perception is also influenced by the reciprocal interaction between individuals and family members, and groups of teenagers who are part of the interpersonal, as well as a form of social support given to street teenagers.^{14,15}

Attitude about the prevention of health problems in street teenagers in street literacy interventions

Based on the results of data analysis, it proves that the second hypothesis of the study is acceptable, meaning that there is an increase in the average score of street youth attitudes about preventing health problems among street adolescents who follow street literacy ($p < 0.000$). The results of data analysis also illustrate that there are differences in the attitudes of street youth about preventing drug abuse, which are higher after three months of implementing street literacy.

The results of this study are in accordance with previous research which stated that there was an increase in the positive attitudes of street youth regarding the prevention of drug abuse after participating in a health education program. The research also proves that cognitive abilities that are formed through information-giving techniques that are in accordance with the needs of adolescents will have a positive impact on providing a sense of security for adolescents, guiding adolescents towards emotional responses, and appropriate behavior. Emotional response is seen as a conscious or unconscious cognitive evaluation, which relates to the affective domain or attitude.^{12,16}

Referring to the above theory, attitude is another domain of behavior which is a person's reaction and readiness to react to certain stimuli. The formation of a good attitude is usually influenced by good knowledge, although it cannot be denied that someone who has good knowledge does not necessarily have a good attitude.¹⁷ Affective or attitude development is influenced by 4 components: secure attachment, modeling, guidance, and positive coaching. Research interventions carried out in stages at the individual level of street youth, street youth groups, and street youth families are expected to fulfill these four components, which support adolescents to have positive perceptions and attitudes towards efforts to prevent health problems.

The increase in adolescent attitudes is also influenced by adolescent psychosocial development according to Erikson which states that adolescents aged 12-18 years are in the stage of identity versus role confusion, with adolescent characteristics more focused on developing self-identity to make goals. long term, and seeks to increase self-esteem. While adolescents aged 18-21 years are at the stage of intimacy versus isolation, that is, if adolescents are able to adapt and have high self-confidence, then an intimate and mutually beneficial relationship will be achieved by adolescents, but on the contrary, if they fail, they will experience social isolation, namely the inability of adolescents.

create mutually satisfying or beneficial relationships. This psychosocial development of course will greatly affect street youth in their attitude, because usually adolescents will be very and easily influenced by peers. Street literacy with assistance is expected to help improve the attitudes of street youth in their attitude towards preventing health problems.^{18,19}

Skill about the prevention of health problems in street teenagers in street literacy interventions

The results of the previous analysis prove that the third hypothesis in this study is acceptable, namely the average score of skills or actions in preventing health problems in street teenagers who follow street literacy ($p <0.000$). Substantial differences are very significant and are expected to influence the formation of healthy behavior of street teenagers.

Skill or action is a person's ability to behave in an effort to achieve certain goals. The skill domain includes not only motor movements, but also the manifestation of cognitive mental functions, as well as the results of developing cognitive and attitude domains.¹⁷ The improvement of the skills or actions of street youth in the intervention group is very relevant to the basic concept of the implementation process of implementing street literacy interventions with behavior-oriented mentoring. The intervention process carried out at the individual, youth group, street youth level is focused on practicing effective communication, empathy, self-control, the use of adaptive coping mechanisms when stressed, training to reject negative influences assertively, and providing reinforcement for positive behavior.

CONCLUSION

Based on the results of the study, it can be concluded that there is street literacy is effective in improving the health behavior of street teenagers.

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CONFLICT OF INTEREST

The author declared that don't have conflict of interest

ETHICAL CLEARANCE

The study was conducted after obtaining approval from the Ethics Committee of the Health Polytechnic of the Ministry of Health Yogyakarta No. e-KEPK/POLKESYO/0701/VI/2021

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