



# The Relationship between Education Level and Community Participation in Health Promotion Activities in Pangkajene and Kepulauan Regency, 2025

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**Abstract.** Health promotion is one of the key efforts to improve the community's health status by enhancing knowledge, attitudes, and healthy behaviors. The success of health promotion programs is strongly influenced by the level of education within the community. Individuals with higher education levels tend to understand and apply health messages more easily, thereby increasing their participation in health promotion activities. This study aimed to determine the relationship between the level of education and community participation in health promotion activities in Pangkajene and Kepulauan Regency in 2025. This research employed a quantitative method with a cross-sectional design. The sample consisted of 467 respondents selected through total sampling. Data were collected using a questionnaire distributed via the KoboCollect application, covering variables of education level and participation in health promotion activities. Data were analyzed using univariate and bivariate analyses with the Chi-Square test at a significance level of  $p \leq 0.05$ . The results showed a significant relationship between education level and community participation in health promotion activities. People with higher education levels tended to be more active in health promotion programs. It is recommended that health centers (Puskesmas) adjust their health promotion methods according to the community's educational background to improve the effectiveness of health message delivery.

**Keywords:** Education, health promotion, community participation, public health center

## 1. Introduction

Health promotion is an essential component in efforts to improve public health status, primarily through behavioral change and increased awareness of the importance of healthy living. According to Notoatmodjo (2014), health promotion is a process of community empowerment that enables people to maintain and improve their health. The success of health promotion programs is often influenced by social and demographic factors, one of which is the level of education. Health promotion can be seen as a reinforcement of the concept of health education. While health education focuses on modifying individual behavior toward healthy living, health promotion has a broader scope as it not only emphasizes behavioral change but also the creation of an environment conducive to such change (WHO, 1984).

Conceptually, health promotion is understood as an effort aimed at influencing individuals or groups to adopt healthy behaviors. Operationally, both health promotion and health education include various activities designed to improve knowledge, develop positive attitudes, and encourage the practice of maintaining and enhancing community health. According to Lawrence Green (1980), health education in the context of forming healthy behavior should target not only individuals but also the factors influencing behavior, such as predisposing, enabling, and reinforcing factors.

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Preventive efforts to raise public awareness of the importance of health can be implemented through health promotion methods such as health education or counseling. Such activities are intended not only to provide information but also to change community behavior toward healthier lifestyles. Behavioral change is strongly influenced by knowledge, motivation, and environmental support. As knowledge increases through education and counseling, people become more aware of the importance of healthy living and disease prevention (Green & Kreuter, 2005). Therefore, health counseling plays a vital role in building collective awareness about the importance of maintaining health and preventing diseases.

The implementation of health education methods enables the initiation of public health maintenance that begins at the level of individuals, families, groups, and extends to the broader community. Face-to-face health education sessions, especially for communities with limited access to information media and health services, play a crucial role in empowering them with necessary health knowledge. Health education also plays an important role in increasing public awareness of sanitation and environmental health (Hapsari & Handayani, 2020). In this regard, education about healthy living patterns is an essential step in promotive and preventive efforts to improve public health. It functions not only as a medium for information dissemination but also as an educational tool that encourages changes in attitudes and behaviors related to health.

The goal of health education is to shape healthy behavior through a continuous learning process (Notoatmodjo, 2010). Education influences an individual's knowledge and attitudes toward health. People with higher education levels tend to understand health information more easily and participate more actively in health promotion activities (Sulaeman, 2020). Conversely, lower education levels may hinder understanding and the adoption of clean and healthy living behaviors.

Several challenges are encountered in implementing health programs in Pangkajene and Kepulauan (Pangkep) Regency, South Sulawesi Province, including limited access to health services in remote, border, and island areas due to inadequate transportation and limited cross-sectoral cooperation in health development. The unequal distribution of health personnel and overlapping duties among health workers also remain issues.

Based on preliminary observations in one subdistrict of Pangkep Regency, it was found that most of the population had a senior high school education (34.5%), while only 0.6% had attained a master's degree. This condition raises a question about whether the level of education is related to community participation in health promotion activities. Therefore, this study aims to analyze the relationship between the level of education and community participation in health promotion activities.

## 2. Methods

This study employed a quantitative approach with a cross-sectional design, in which data were collected at a single point in time to determine the relationship between two variables. The study was conducted in Pangkajene and Kepulauan (Pangkep) Regency, South Sulawesi, during January 2025. The research activities consisted of direct observation, respondent interviews, and the collection of additional data relevant to the research objectives.

The study population comprised all residents of District X, with a total sample was 467 respondents. A total sampling technique was applied, in which all members of the population who met the inclusion criteria (residing in the area for  $\geq 6$  months, aged  $\geq 18$  years,

willing to participate as respondents, and having signed the informed consent form) and did not meet the exclusion criteria (inability to communicate or refusal to participate) were included in the study sample. The research instrument consisted of a structured questionnaire assessing educational level and community participation in health promotion activities. The instrument was validated ( $r$ -value  $> 0.70$ ) and demonstrated high reliability (Cronbach's  $\alpha = 0.89$ ). Data were analyzed using univariate and bivariate analyses. In addition, the Chi-Square statistical test was applied to determine the relationship between variables, with a significance level of  $p \leq 0.05$ . The results were presented in tables and described narratively to address the research objectives.

### 3. Results and Discussion

Based on the research conducted, data were obtained regarding The Relationship between Education Level and Community Participation in Health Promotion Activities. The following are the results of the cross-tabulation.

**Table 1.** The Relationship between Education Level and Community Participation in Health Promotion Activities in Pangkajene and Kepulauan Regency, 2025

Education Level	Community Participation in Health Promotion Activities				Total		<i>p</i>
	Ever Participated		Never Participated				
	n	%	n	%	n	%	
High Education	160	34.2	46	9.9	206	44.1	0.001
Low Education	140	30.0	121	25.9	261	55.9	
Total	300	64.2	167	35.8	467	100	

The Chi-Square test confirmed a significant relationship between education level and participation in health promotion activities ( $\chi^2 = 10.96$ ;  $df = 1$ ;  $p = 0.001$ ). These findings imply that individuals with higher levels of education are more likely to participate actively in health promotion activities. This finding is consistent with Widyastuti (2021), who stated that education plays a crucial role in increasing public awareness of the importance of health promotion. Similarly, research conducted in Hallakodanuan Village, Ile Mandiri Subdistrict, East Flores Regency, found a positive and significant relationship between the level of formal education and community participation (Piran, 2020).

The theory developed by Lawrence Green states that individual or community health is influenced by two main factors: behavioral and non-behavioral factors. Behavioral factors are determined by predisposing, enabling, and reinforcing factors. Predisposing factors include knowledge, attitudes, beliefs, traditions, social norms, and other elements inherent in individuals and communities. Enabling factors refer to the availability of health services and accessibility to those services, while reinforcing factors involve the attitudes and behaviors of health workers. Green emphasized that health education plays an essential role in modifying and strengthening these three factors to align with program objectives, thereby fostering positive community behavior toward health initiatives (Notoatmodjo, 2003).

The findings of this study indicate that the higher a person's level of education, the greater their tendency to participate in health promotion activities. Most respondents with higher education (77.7%) had participated in health promotion activities, whereas only 53.6% of those with lower education had done so. Theoretically, Lawrence Green (2005) explains that

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health behavior is influenced by predisposing factors (such as knowledge, attitudes, and beliefs), enabling factors (such as access to health services), and reinforcing factors (such as support from health workers). Adequate education enhances predisposing factors and strengthens individuals' motivation to adopt healthy behaviors. Furthermore, Rogers' (1983) Diffusion of Innovations theory suggests that individuals with higher educational attainment tend to be more open to innovations, including new information and health promotion programs.

People with higher education levels tend to have a better understanding of health promotion materials and are more active in activities organized by community health centers (Puskesmas). This is because education influences an individual's ability to process information and make informed health-related decisions (Notoatmodjo, 2014). Conversely, individuals with lower education levels may face difficulties understanding health messages, leading to lower participation rates. Therefore, it is necessary to implement educational strategies tailored to the community's educational background, such as using visual media, simple language, and community-based approaches.

The relationship between health education and health promotion is a planned combination of educational, political, environmental, regulatory, and organizational mechanisms that support actions and living conditions conducive to the health of individuals, groups, and communities. Meanwhile, health education is defined as any combination of planned learning experiences based on sound theories that provide individuals, groups, and communities with the opportunity to acquire information and skills needed to make quality health decisions (WHO, 2014). These results highlight the importance of continuously strengthening health promotion efforts by taking into account the community's educational background so that the information delivered can be effectively understood and applied by all.

In the local context of Pangkep, geographical determinants such as the distance to health facilities, the archipelagic landscape, and prevailing collective cultural norms substantially influence community participation. Health centers (Puskesmas) located in the island regions should adapt their health promotion strategies by employing community-based approaches, incorporating local languages, utilizing visual media, and engaging community leaders to enhance the effectiveness and cultural acceptability of health messages.

## Conclusions

There is a significant relationship between the level of education and community participation in health promotion activities in Pangkajene and Kepulauan Regency in 2025. People with higher education levels tend to be more active in health promotion activities. It is recommended that community health centers (Puskesmas) adjust their health promotion methods according to the educational background of the community so that health information can be effectively received and implemented.

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### Conflicts of Interest

The authors declare no conflict of interest.

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