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The Effect of Health Promotion Strategies on the Level of Clean and Healthy Living Behavior (PHBS) in Household Settings in Penanggalan Sub-district of Subulussalam

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Author's contribution

The sole author designed, analyzed, interpreted and prepared the manuscript.

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Original Research Article

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ABSTRACT

Clean and healthy living behavior is essentially the basis for preventing humans from various diseases. Health is everyone's dream and need. The principle of clean and healthy living behavior (PHBS) is one of the cornerstones and health development programs in Indonesia. The purpose of this study is to analyze the influence of health promotion strategies (advocacy, atmosphere building, and community empowerment movements) on the level of Clean and Healthy Living Behavior (PHBS) in Household Settings in Subulussalam City Subdistrict. The population of this study was all heads of families in Penanggalan Kota Subulussalam District. The sample of this study is part of the heads of families from the number of heads of families in Penanggalan District, which is 14,394 households. Measurement of independent variables using the Likert Scale, with

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some conditions. The results showed that PHBS most respondents (56 people, 56%) were in the Healthy II category, followed by Healthy IV as many as 25 respondents (25%), healthy III as many as 14 respondents (14%), and healthy I as many as 5 respondents (5%). This condition shows that most respondents have not met the healthy category standards set by the Ministry of Health, namely PHBS healthy category IV.

Keywords: Health promotion stategy; clean and helathy behavior.

1. INTRODUCTION

Clean and healthy living behavior is essentially the basis for preventing humans from various diseases. Health is everyone's dream and need [1-6]. The principle of clean and healthy living behavior (PHBS) is one of the cornerstones and health development programs in Indonesia [7-10].

Clean and Healthy Behavior (PHBS) in the Household Order, in order to achieve the level / classification of Healthy IV which is the target expected by the government [11-16].

It is hoped that the results of this analysis can contribute to solving PHBS problems at the research site, and can contribute to the development of health promotion management knowledge.

2. METHODS

2.1 Types of Research

This research is a survey with an explanatory research type, which is aimed at analyzing the effect of health promotion strategies (advocacy, atmosphere building and community empowerment) with the level of Clean and Healthy Living Behavior (PHBS).

2.2 Research Location and Research Time

The location of the study is the working area of the Penanggalan Health Center, Penanggalan District, Subulussalam City. The reason for choosing the location is: the discovery of Clean and Healthy Living Behavior (PHBS) problems at the research site. According to data/information from the Subulussalam City Health Office and the Penanggalan Health Center, in 2022. This research was carried out for 6 (six) months from July 2022 to December 2022.

2.3 Population and Research Sample

The population of this study was all heads of families in Penanggalan Kota Subulussalam District. Based on data from the Subulussalam City health office (2022), it is known that the number of heads of families in Penanggalan District is 14,394 households.

The sample of this study is part of the head of the family above, with the sample size can be calculated using the following formula (Nasir, 2003):

$$n = N/N.d^{2} + 1$$

With the condition :

 $\label{eq:n} \begin{array}{l} n = number \mbox{ of samples;} \\ N = total \mbox{ population;} \\ d2 = set \mbox{ precision (10\%); so that:} \\ n = 14,394/14,394 \ . \ (0.1)2 + 1 = 14,394/144.94 \\ n = 99.31 \ \mbox{households} \\ n = 100 \ \mbox{ Households.} \end{array}$

According to the calculation above, the number of samples of this study was obtained as many as 100 heads of households. The selection of respondents spread across the Penanggalan District was carried out with the formula: ni = fi.n; provided that Ni = Strata I sample; fi = number of samples of each stratum divided by the sum of the entire population; and n = number of samples; with the calculation results detailed in Table 1.

KK sampling in one village based on the results of multiplying the proportion by the number of villages, carried out by simple random sampling, until it meets the number of 100 RTs.

No	Nama Desa	Ju mlah sampel tiap strat	A Jumlah Sampel
1	Marindal I	4389	30.49=31
2	Marindal II	2442	16.96 =17
3	Penanggalan Kp	2712	18.84 =19
4	Sigara-gara	1517	10.53 =11
5	Penanggalan I	1334	9.26 = 9
6	Penanggalan II	1068	7.41=7
7	Lantasan Lama	469	3.25 = 3
8	Lantasan Baru	463	3.21 = 3
	Total sampel	14394	100

Tabel 1. Lokasi sampel penelitian

2.4 Data Collection Methods

Primary data were obtained through the interview method with a direct interview type, guided by a list of research questions. Secondary data were obtained through documentation studies from the Subulussalam City health office, North Sumatra provincial health office, the Indonesian Ministry of Health, and the Penanggalan Health Center.

Especially for the list of research questions, in order to become a valid and reliable research instrument as a data collection tool, validity and reliability testing are carried out.

The results of the validity test analysis using the product moment correlation statistical test obtained the following results. The results of the product Moment statistical test show that the Advocacy variable item, the atmosphere building variable item, and the community empowerment movement variable item are valid because r counts each variable item > (0.361) r table.

A question is said to be reliable if the respondent's answers to the auestion (questionnaire) are consistent or stable over time. Reliability refers to an understanding that an instrument is trustworthy enough to be used as a data collection tool because the instrument good. Instruments that are alreadv is trustworthy, reliable will produce reliable data as well. If the data is true and in accordance with reality, then the number of times taken will still be the same. The technique used to test the research questionnaire, is a single test double trial technique, namely by testing the instrument to a aroup of respondents. Another time the instrument was given to the original group to work on again. Then the two results were correlated (Arikunto, 2005).

2.5 Operational Variables and Definitions

2.5.1 Health Promotion Strategy (Free Variable)

Health promotion strategies are a group of independent variables, with the following definition: A set of ways, efforts or mechanisms consisting of Advocacy, Community Development, and Community Empowerment to support the actions of individuals, families or communities in improving the quality of their health. In this study, Promotion Strategy is measured from 3 variables, with operational definitions as follows:

Advocacy: A planned effort or process to obtain commitment and support from related parties, which is measured by the availability of facilities/infrastructure, human resources (HR), socialization, and completeness of data.

Build the Atmosphere: Is an effort to create opinions or social environments that encourage community members to want to carry out Clean and Healthy Living Behavior that is promoted; which is measured by the implementation of meetings, competitions, and counseling activities.

Community empowerment: Is an effort to increase community awareness and independence to change in Clean and Healthy Living behavior, with the size of the formation of posyandu, health cadres and organizing health groups.

Each indicator of the independent variable will be compiled in the form of a question, as a data collection tool (questionnaire); And each question is available 5 categories of answer choices, namely: Very Good / Very Useful, Good / Useful, Less Good / Less Useful, Not Good / Not Useful, Very Not Good / Very Not Useful.

2.6 Level of Clean and Healthy Living Behavior (Dependent Variable)

The level of Clean and Healthy Living Behavior in the household setting is a group of dependent or dependent variables [17-21]. The definition of PHBS is an effort to provide learning experiences for individuals, families, groups and communities, by opening communication channels, providing information and conducting education, in order to improve knowledge, attitudes and behaviors, through the approach of Advocacy, Community Development and Community Empowerment so that they can apply healthy ways of life, in order to maintain, maintain and improve public health [22-28].

2.7 Measurement Methods

Measurement of independent variables using the Likert Scale, with the following conditions:

- Health promotion is measured through 3 variables, namely: advocacy, atmosphere building, and community empowerment. Advocacy variables are measured through four (4), indicators; The atmosphere building variable is measured through three (3) indicators, and the community empowerment variable is measured through three (3) indicators.
- 2. Indicators on variables are developed into questions
- 3. Each question has 5 answers, and only 1 answer must be chosen by the respondent
- 4. Each answer is graded with the following conditions:
 - a. Very good/very useful, value 5

- b. Good/ useful, value 4
- c. Less good / less useful, value 3
- d. Not good / not useful, value 2
- e. Very not good/ very useless, value

Based on the provisions above, the measurement of the independent variable can be detailed in Table 2.

The dependent variable is measured using the Interval Scale, under the following conditions:

- 1. PHBS is measured through 10 variables, and each PHBS variable is developed into 1 question. Thus, PHBS will be developed into 10 questions in the guestionnaire.
- 2. Each question has 2 answers, namely: Yes and No; and respondents were asked to choose 1 answer from each question.
- 3. The answers selected by respondents to the 10 questions will be summed, based on the YES or NO answer category.
- 4. The number of respondents' answers according to explanation no. 3; further accumulated, categorized, and scored; provided that:

a. Unhealthy = 10 PHBS indicators not met, Score = 20

b. Healthy I = 1-3 PHBS indicators met, score = 40

c. Healthy II = 4-6 PHBS indicators met, score 60

d. Healthy III = 7-9 indicators met, score = 80e.Healthy IV = 7-9 PHBS indicators met plus healthy funds. score = 100.

Variabel bebas	Pert	Nilai 1 pertanyaan	Nilai 1 Variabel/1 Responden
A. Advokasi, ind:		5= Sangat baik	75 = Sangat baik
1.Sarana/ prasarana	4	4= Baik,	60 = Baik
2.SDM	4	3= agak baik	45 = kurang baik
3.Sosialisasi	4	2= kurang baik	30 = tidak baik
4.Kelengkapan data	3	1= sangat kurang baik	15= sangat tidak baik
B. Bina Suasana, ind:		5= Sangat baik	50 = Sangat baik
1.Pertemuan	3	4= Baik,	40 = Baik
2.Perlombaan	2	3= agak baik	30 = kurang baik
3.Penyuluhan	5	2 = kurang baik	20 = tidak baik
		1 = sangat kurang baik	10 = sangat tidak baik
C. Pemberdayaan		5 = Sangat baik	50 = Sangat baik
Masyarakat, ind:		4= Baik,	40 = Baik
1.Posyandu	3	3 = agak baik	30 = kurang baik
2.Kader Kesehatan	2	2= kurang baik	20 = tidak baik
3.Pengorganisasian	5	1= sangat kurang baik	10 = sangat tidak baik

Table 2. Measurement of the independent variable

Vari	abel PHBS:	Kategori	Jlh Indikator	Skor
1.	Pertolongan persalinan oleh tenagakesehatan	Tidak Sehat	0	20
2.	Bayi diberi ASI ekslusif	Sehat 1	1-3	40
3.	Jaminan Pemeliharaan Kesehatan			
4.	Ketersediaan air bersih	Sehat II	4-6	60
5.	Ketersediaan jamban sehat			
6.	Kesesuaian luas lantai dengan jumlah penghuni	Sehat III	7-9	80
7.	Lantai rumah bukan tanah	Sehat IV	7-9+ Dana Sehat	100
8.	Tidak merokok di dalam rumah			
9.	Melakukan aktifitas fisik setiap hari			
10.	Makan buah dan sayur setiap hari			

Table 3. PHBS variability

Determination of scores for answer categories described in condition no.4; following the prevalence in the use of percentage figures covering PHBS indicators, and further in this study the percentage figures are translated into Scores.

2.8 Data Analysis Methods

The statistical test used to analyze the causality relationship of variables in this study is Multiple Regression, which is to analyze how much promotion influence health (advocacy, atmosphere building, and community empowerment) has on the level of clean and healthy living behavior in household settings in sub-district the of Penanggalan Kota Subulussalam.

3. RESEARCH METHODS

3.1 Research Site Overview

Penanggalan District is one of the sub-districts in Subulussalam City, North Sumatra Province, with an area of 46.79 km2, consisting of 8 villages with 49 hamlets, and regional boundaries, next to: (1) North, with Medan city and Percut Sei Tuan district, (2) South, with STM Hilir subdistrict and Biru-biru sub-district, (3) East, with STM Hilir sub-district and Tanjung Morawa subdistrict, and (4) West, with the sub-districts of Deli Tua and Medan City (Dinkes Subulussalam, 2022).

The population of Penanggalan District is 70,801 people, consisting of 35,902 men and 34,899 women, with the number of heads of families as many as 14,394 households, and the average

family members are 5 people. Specific population data recorded at the puskesmas, shows that the number of poor families is 12,680 households, infants are 1918 people, toddlers are 7089 people, couples of childbearing age (PUS) are 11,272 people, pregnant women (pregnant women) are 11698 people, maternity mothers (bulin) and nipas who are assisted by health workers are 1698 people, and women of childbearing age are 1154 people (Puskesmas Penanggalan, 2022).

The distribution of population in Penanggalan sub-district is relatively uneven in 8 villages, namely: (1) Penanggalan = 4389 KK, (2) Lae Bersih = 2442 KK, (3) Kampong Baru = 2712 KK, (4) Profit = 1517 KK, (5) Kuta Tengah = 1334 KK, (6) Peranginan = 1068 KK, (7) Lae Kombih = 469 KK, and (8) Jontor = 463 families (Puskesmas Penanggalan, 2022).

Penanggalan sub-district has 1 puskesmas, and is named Puskesmas Penanggalan. Thus, the working area of the Penanggalan Health Center is the same as the Penanggalan District area (Puskesmas Penanggalan, 2022).

Supporting health facilities or related to the Penanggalan Health Center, including: (1) 2 auxiliary health centers, (2) 51 active posyandu, (3) 8 Usila posyandu, (4) 5 Polindes, and (5) 25 private medicine centers (Puskesmas Penanggalan, 2022).

The number of personnel in the Puskesmas Penanggalan is 64 people, with relatively varied types of personnel, including 3 general practitioners, 3 dentists, and the highest number of staff are midwives as many as 28 people.

No	Jenis Tenaga Kesehatan	Jumlah			
1	Dokter Umum	3			
2	Dokter Gigi	3			
3	Sarjana Kesehatan Masyarakat	3			
4	Bidan/ akademi bidan	28			
5	Perawat/ akademi perawat	8			
6	Sanitarian	1			
7	Asisten Apoteker	3			
8	Gizi	2			
9	Analis Kesehatan	2			
10	Pendidikan Kesehatan	2			
11	Perawat Gigi	2			
12	Lain-lain (non kesehatan)	5			
	Total	64			

Table 4. List of Health Workers and their amount

Based on the explanation of the Head of the Penanggalan Puskesmas (May, 2022), it is known that the number of puskesmas staff who manage or carry out PHBS activities is 30 people, with types of personnel including general practitioners including the head of the puskesmas, public health scholars, sanitarians and midwives in the village.

organizational Based on the structure. Puskesmas Penanggalan is led by the Head of Puskesmas, who oversees 5 health service organizational units, namely: (1) Family welfare section, main tasks in the fields of maternal health, child welfare, family planning, old age, and nutrition; (2) Health Services Section, the main duties in the fields of medicine, pharmacy, laboratory, dental and oral, psyche, eve, SP2TP, general polyclinic, sports health, visitation register, and PHB; (3) Infectious Disease Prevention and Eradication Section, the main task of disease prevention or immunization, disease observation, P2 ML, and P2B2; (4) Environmental Health Section, the main task of environmental health management; and (5) Counseling Public Health Section, the main tasks of PKM, PSM, P.I., facilities and methods, UKS, and Posyandu. Furthermore, the Head of the Puskesmas also oversees 8 other health service units, namely: 2 auxiliary health centers, and 6 village midwives who open services in 6 villages (Puskesmas Penanggalan, 2022).

3.2 Characteristics of Respondents

The results showed that most respondents (68 people; 64%) were aged between 26 to 43 years, with female respondents (89 people; 89%) more than men (Table 4).

The greater number of female respondents compared to men, due to: (1) this study did not limit respondents based on gender, and (2) research activities were carried out in the morning to evening, so that more women were at home than men.

The results showed that most respondents (44 people; 44%) had a high school education, and 37 (37%) had an education.

Based on the domicile of respondents, it is known that respondents in Marindal I village are the largest (31 people; 31%), followed by Penanggalan KP village as many as 19 people (19%), and Marindal II as many as 1 person or 17%. The large number of respondents in these 3 villages is due to the larger population compared to the other 5 villages.

The results showed that most respondents had 4 family members and 5 people, respectively (30%) and 28%), others had family members > 5 people and < 4 people. The results showed that most respondents were housewives, namely 64%, and respondents were the least farmers (3%).

3.3 Health Promotion Strategies and Clean and Healthy Living Behaviors

Health Promotion Strategy is measured through the variables of Advocacy, Community Development, and Community Empowerment. The Healthy Living Behavior or PHBS is measured through 10 PHBS indicators.

The results showed that most respondents (64 people; 64%) rated the advocacy aspect in the category as unfavorable. As for the aspect of

building the atmosphere, as many as 50 respondents (50%) rated it unfavorably, and as many as 30 respondents (30%) rated it good. Furthermore, for the aspect of community empowerment, most respondents (57 people; 57%) rated it not good, and as many as 23 respondents (23%) rated it not good.

The results showed that most respondents (46 people; 46%) rated Health Promotion Strategies (Advocacy, Community Development,Community Empowerment), categorized as unfavorable, and as many as 31 respondents (31%) rated Health Promotion Strategies categorized as not good.

3.4 Analysis Results

Multiple regression tests were used to predict the effect of health promotion strategies (advocacy, community building, and community empowerment) on the level of Clean and Healthy Living Behavior (PHBS).

Based on the results of the Multiple Regression test, it can be concluded (Table 5), that:

- All variables of health promotion strategy have an influence on the level of PHBS, with a significance level (sign) below 5% (0.05), namely: Advocacy, sign 0.011; (2) Build an atmosphere, sign 0.005; and (3) Community empowerment, sign 0.0001.
- 2. Together, the factors of advocacy, atmosphere building, and community empowerment have an influence on the

occurrence of variations in PHBS levels, amounting to (R^2 value = 0.566 x 100%) 56.6%. Thus, PHBS respondents were determined by other factors or factors outside the Health Promotion Strategy by 43.4%.

- 3. Partially, the community empowerment factor has a relatively greater influence (0.104) on the PHBS level, compared to the atmosphere building factor (0.81) and advocacy (0.043).
- 4. Based on the test results, a theoretical equation can be compiled, the effect of health promotion strategies (advocacy, atmosphere building, and community empowerment) on the level of Clean and Healthy Living Behavior (PHBS), namely: Ý (PHBS) = -1.062 + 0.104(P. Community) + 0.081(B. Atmosphere) + 0.043 (Advocacy).

Based on the above equation, it can be interpreted that: if the factors of advocacy, atmosphere building, and community empowerment are improved or improved, it can be estimated that the Clean and Healthy Living Behavior (PHBS) of respondents will also improve for the better.

The results of statistical residual analysis show that the values of the cumulative probability distribution of data are located around a straight line or the normality requirements are met so that the conditions of the regression equation are met.

No	Var. Independen: Strategi Promosi Kesehatan	В	Sign
1	Advokasi	0,043	0,011
2	Bina Suasana	0,081	0,005
3	Pemberdayaan Masyarakat	0,104	0,0001

Table 5. Factors of advocacy, atmosphere building, and community empowerment

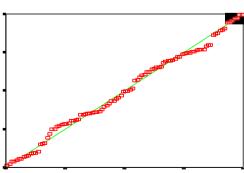
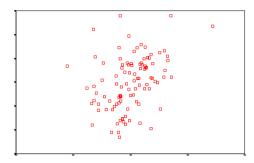
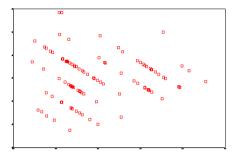


Fig. 1. Normal P-P plot of regression stand dependent variable: phbs

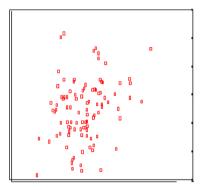
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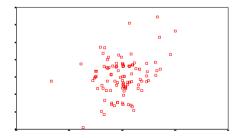
Scatterplot dependent variable: phbs



(a) Partial regression plot dependent variable: phbs



(b) Partial Regression Plot Dependent Variable: phbs



(c) Partial Regression Plot Dependent Variable: phbs

Fig. 2. Homoscedacity in Advocacy, Community Development, and Community Empowerment for PHBS (a), Advocacy for PHBS (b), Community Development for PHBS (c), and Community Empowerment for PHBS (d)

The relationship between the predicted value and the Studentized Delete Residual for the PHBS variable shows that the distribution of data does not form a certain line pattern, so the regression model is feasible. Thus the assumption of homoscedacity is fulfilled.

4. DISCUSSION

4.1 Level of Clean and Healthy Living Behavior

This study measures PHBS through 10 indicators set by the Ministry of Health of the Republic of Indonesia, namely:

- (1) Childbirth assistance by health workers,
- (2) Babies are exclusively breastfed,
- (3) Have health care guarantees,
- (4) Availability of clean water,
- (5) Availability of healthy latrines,
- (6) Suitability of floor area with the number of occupants,
- (7) The floor of the house is not a dirt floor,
- (8) Do not smoke in the house,
- (9) Do physical activity every day, and
- (10) Eat fruits and vegetables every day.
 Furthermore, the achievement of PHBS is determined through the categories of Healthy I (1 to 3 indicators), Healthy II (4-6 indicators), Healthy III (7 to 9 indicators), and Healthy IV (7 to 9 indicators + healthy funds).

Based on the provisions above, respondents who are in the same healthy category can have varying PHBS indicators. For example, the achievement of the healthy category of respondents for PHBS, namely:

- Healthy Achievement I, respondents have 1 to 3 PHBS indicators, for example: (a) respondent 1, has indicators of clean water availability, does not smoke in the house, and the floor of the house is not soil; and (b) respondent 2, has indicators of maternity assistance by health workers, healthy latrines, and exclusive breastfeeding. The most dominant is that all respondents stated that they have healthy latrines.
- 2. Healthy Achievement II, respondents have 4 to 6 PHBS indicators, for example: (a) respondent 3, has indicators of clean water availability, availability of healthy latrines, suitability of floor area with the number of occupants, the floor of the house is not a dirt floor, and (b) respondent 4, has indicators of not smoking in the house, doing physical activity every day, eating fruits and vegetables every day, Exclusive breast milk, healthy latrines, and the floor of the house is not from the ground. The achievement of the most dominant indicator is that overall

respondents choose childbirth assisted by health workers.

- 3. Healthy Achievement III. respondents have 7 PHBS indicators, for example: to 9 a.respondent 5, has indicators of maternity assistance by health workers, infants are exclusively breastfed, have health care guarantees, availability of clean water, availability of healthy latrines, suitability of floor area with the number of occupants, the floor of the house is not the ground floor; and (b) respondent 6, has indicators of childbirth assistance by health workers, infants are exclusively breastfed, availability of clean water, availability of healthy latrines, suitability of floor area to the number of occupants, floor of the house is not dirt floor, do not smoke in the house, do physical activity every day, and eat fruits and vegetables every day. The dominant indicators chosen by all respondents ; Childbirth is assisted by health workers, drinking water ownership, ownership of healthy latrines, the floor of the house is not from the ground and does not smoke in the house.
- Healthy Achievement IV, respondents have 7 4. to 9 PHBS indicators plus healthy funds, for example: (a) respondent 7, have indicators of childbirth assistance by health workers, babies are exclusively breastfed, have health maintenance guarantees, availability of clean water. availability of healthy latrines, suitability of floor area with the number of residents, the floor of the house is not a dirt floor, do not smoke in the house, do physical activity every day; and (b) 8 respondents, have PHBS indicators do not smoke at home, do physical activity every day, eat fruits and vegetables every day, childbirth assistance by health workers, babies are exclusively breastfed, have health care guarantees and the availability of clean water. The most dominant indicator is carried out, namely childbirth assistance assisted by health workers.

The results showed that PHBS most respondents (56 people, 56%) were in the Healthy II category, followed by Healthy IV as many as 25 respondents (25%), healthy III as many as 14 respondents (14%), and healthy I as many as 5 respondents (5%). This condition shows that most respondents have not met the healthy category standards set by the Ministry of Health, namely PHBS healthy category IV.

The results showed that the condition of PHBS at the research location, especially the PHBS condition of research respondents, tended to be influenced by various factors, including aspects of the Health Promotion Strategy.

4.2 Effect of Health Promotion Strategy on PHBS Rate

The results of the analysis show that health promotion strategies (Advocacy, Community Development, and Community Empowerment) have an influence on the level of PHBS, with the significance level of all variables below 5% or 0.05. The contribution of health promotion strategies (advocacy, atmosphere building, and community empowerment) to the occurrence of PHBS respondents was 56.6%. Thus, the PHBS rate of respondents was determined by other factors or factors outside the Health Promotion Strategy by 43.4%.

The results of the analysis also provide estimates that if promotional strategies (advocacy, atmosphere building, and community empowerment) are improved or improved, the PHBS respondents will also improve for the better. Furthermore, partially, the community empowerment factor has a relatively greater influence (0.104) on the PHBS level, compared to atmosphere building (0.081) and advocacy (0.043).

The results of these studies tend to be in line with the opinions of experts (such as Green, 1980; McKenzie, 2007; Notoadmodjo, 2005), which can be concluded that promotion strategies are important determinants of healthy behavior of society, families, and individuals.

Institutionally, the results of this study show similarities with the provisions of the Committee on Health Education and Promotion Terminology quoted by McKenzie (2007), the results of the 4th International Conference on Health Promotion cited by Liliweri [29], and the Decree of the Ministry of Health of the Republic of Indonesia, which makes health promotion strategies an important determinant of healthy behavior, and makes health promotion strategies as programs to improve healthy behavior or clean and healthy living behavior (PHBS) from the community, family, and individuals.

Based on the explanation above, it can be seen that the better the implementation of promotional strategies will be able to help or encourage the improvement of the quality of healthy living behavior of the community, family or individual.

The above views can be explained through behavioral approaches and health promotion developed by experts (such as Sarwono, 1993; Green, 1980; McKenzie, 2007), which can be described simply, as follows:

- Healthy behavior is the response of society, family, or individuals to stimuli about healthy, sick, health services, food, drink, and the environment. Healthy behaviors include health care measures, treatment seeking, and environmental management actions that affect health.
- 2. Health promotion creates and provides a scope of enablers, facilitators, and reinforcing factors to change behavior from unhealthy to healthy behavior.
- 3. Promotion Strategy, which includes advocacy factors, community empowerment movements, atmosphere building, is a method or set of procedures or methods carried out to accommodate the implementation of possible factors, factors facilitation, and reinforcing factors, in order to change unhealthy behavior into healthy behavior.
- 4. Quality Clean and Healthy Living Behavior as a result of the implementation of health promotion strategies, must still be well maintained through the implementation of continuous or continuous promotion strategies.
- 5. Support beyond Health Promotion Strategy factors, to improve healthy behaviors such as health sector policies, economy, education, environment, and industry, as well as a deep understanding of family or community characteristics, which supports the creation of easier situations for communities, families, and individuals to form clean and healthy living behaviors.

Based on the description of the research data, it can be seen that most respondents (46 people; 46%) rated health promotion strategies (advocacy, atmosphere building, community empowerment), categorized as not good, and as many as 31 respondents (31%) rated health promotion strategies categorized as not good. This condition shows that the health promotion strategy program which includes advocacy, atmosphere building, and community empowerment activities, carried out by puskesmas in general is not good or optimal.

According to the Ministry of Health of the Republic of Indonesia (2006), Puskesmas is the leading health service facility to implement health promotion strategies in health development in Indonesia. Thus, the level of performance of puskesmas in implementing health promotion strategies will affect the level of achievement of PHBS for the community, family, or individual. The results of an interview with the Head of the Puskesmas and the Person in Charge of the Health Promotion Program of the Puskesmas Penanggalan (May, 2022) can be seen that the health promotion strategy has been carried out by the puskesmas, through the following stages of the process:

- 1. Preparation of Health Promotion Strategy Planning, which includes advocacy activities, atmosphere building, and community empowerment movements, is prepared through cross-program activities at puskesmas and cross-sector at the subdistrict level.
- Meeting between Heads of Puskesmas at the City/Health Office level to formulate the substance of planning and implementing health promotion strategy activities, including advocacy activities, atmosphere building, and community empowerment movements.
- Dissemination of the results of the City meeting to cross-sectors in sub-districts and cross-programs in puskesmas, to village midwives and institutions in villages, such as officers, posyandu, and free medical services.
- 4. Implementation of health promotion strategy activities, through advocacy, atmosphere building, and empowerment activities with target types, are individuals, families, community groups, and masses (discussed in detail in the sub-chapters of advocacy, atmosphere building, and community empowerment below).
- 5. Evaluation of the implementation of health promotion strategy activities, through evaluation of the implementation of advocacy activities, atmosphere building, and community empowerment.

Based on the results of an interview with the Head of the Penanggalan Health Center (May, 2022), it can be seen that the implementation of health promotion strategy programs to increase PHBS for the community, families, and individuals by the puskesmas; facing problems or obstacles, including: (1) Puskesmas does not

have experts or professionals in the field of health promotion. (2) Health promotion activities are still a component of the duties of most nurses. limited midwives or (3) costs. promotional facilities and infrastructure, (3) The population is relatively large, and heterogeneous of demographic, socio-cultural, and economic characteristics; (4) relatively large working area; (5) suboptimal cross-sectoral support at both the sub-district and village levels; and (6) rapid environmental development, which cannot be regulated or managed by the puskesmas.

4.2.1 The effect of community empowerment on PHBS levels

The results showed that 57% of respondents rated aspects of community empowerment as not good, as many as 23% of respondents rated them not good, and only 19% rated them good. Furthermore, the results of the analysis showed that partially, community empowerment factors had a relatively greater influence (0.104) on PHBS levels, compared to atmosphere building factors (0.81) and advocacy (0.043).

Based on the above facts, it can be seen that the results of this study which show that empowerment has an influence on PHBS respondents, are relatively in accordance with the opinions of experts (such as Notoadmodjo, 2003; Green, 1980; and McKenzie, 2007) who affirm that community empowerment can determine or influence human behavior, such as clean and healthy living behavior or PHBS.

4.2.2 The effect of atmospheric development on PHBS levels

The results showed that the atmosphere building factor was rated by 50 respondents (50%) to be categorized as unfavorable, as many as 18 respondents (18%) rated it not good, and only 32 respondents (32%) rated it good to very good. Furthermore, the results of the analysis showed that partially, atmosphere building had an influence and contribution (0.81) to the occurrence of PHBS levels.

Based on the facts above, it can be seen that in general the atmosphere building measured through indicators of meetings, competitions, and counseling activities carried out by puskesmas can be categorized as not good; and this condition affects the PHBS of respondents.

4.2.3 Effect of advocacy on PHBS levels

The results showed that most respondents (64 people; 64%) rated the advocacy aspect in the category less good, 17 respondents (17%) rated it not good, and 19 respondents (19%) rated it good to very good. Furthermore, the results of the analysis show that partially, advocacy has an influence and contribution (0.043) to the occurrence of PHBS levels. Thus, the advocacy aspect is the variable that contributes the lowest to the occurrence of PHBS levels of respondents compared to aspects of community empowerment and atmosphere building.

Advocacy as a component of promotion strategies, which partially affects respondents' PHBS, theoretically shows conformity with expert opinions (such as Notoadmodio, 2006; Green, 1980; McKenzie, 2007), which can be explained that advocacy as an element of health promotion strategies can influence the healthy behavior of communities, families or individuals, Advocacy measured through indicators of the availability of facilities and infrastructure, human resources, socialization, and completeness of data is a tool and strategy of actors (health promotion officers) to get commitment and support from related parties who are expected to later contribute to the implementation of PHBS activities so that the content of PHBS messages can be accepted into knowledge, understood, and subsequently implemented by the target

5.CONCLUSION ADN ADVICE

5.1 Conclusion

Based on the results of research and discussion, conclusions can be drawn:

Health Promotion Strategies (Advocacy, 1. Community Development. Community Empowerment,) are considered by most respondents (77%) to range from poor to not good categories. Based on the variables of health promotion strategies, it is known that: (a) the Advocacy Aspect was assessed by most respondents (81%) from the category of less good to not good, (b) the Aspect of Atmosphere Development was assessed by most respondents (68%) from the category of less good to not good, and (c) The Community Empowerment aspect was assessed by most respondents (81%) from poor to very bad.

- 2. The level of Clean and Healthy Living Behavior or PHBS level most respondents (61%) range from Healthy category I to II, and as many as 14% of respondents are in category III. This condition is still far from meeting the best PHBS level standards set by the Indonesian Ministry of Health, namely the Healthy IV category. Every achievement of the PHBS level according to the Healthy category, then the healthy level in the same category indicators can vary.
- 3. The results of the analysis show that Health Promotion Strategies (through the variables of Advocacy, Community Development, Community Empowerment) have an influence on PHBS, with a significance level below 5% or 0.05. Together, the factors of Advocacy, Community Development, and Community Empowerment have an influence on the variation in PHBS levels, amounting to 56.6%. Partially. the Community Empowerment factor has a relatively greater influence (0.104) on the PHBS level. Based on the theoretical equations of the analysis results, it can be interpreted that: If health promotion strategies (through Advocacy, Community Development, and Community Empowerment factors) are improved or improved, it can be expected that Clean Living Behavior will increase or improve.
- 4. The implementation of health promotion strategies for PHBS carried out by puskesmas tends to be not optimal, due to obstacles or problems: (1) do not have health promotion experts/professionals, (2) health promotion is still a component of the duties of most midwives or nurses, (3) limited costs, promotional facilities and infrastructure, (3) relatively large population. and heterogeneous demographic characteristics. sociocultural, and economic; (4) relatively large working area; (5) suboptimal cross-sectoral support at the sub-district and village levels: and (6) rapid environmental development, which cannot be regulated or managed by the puskesmas. This condition may result in the achievement of PHBS levels. It is estimated that this condition affects the causality relationship of health promotion strategies with PHBS levels; and in accordance with the results of the study which showed that around 43.4% of PHBS rates were influenced by

factors outside health promotion strategies. This phenomenon is not part of the analysis of this study, so further research is important.

5. There are indications that community/family/individual characteristics (such as education, economic capacity, access to information) have a role to play in relation to the achievement of PHBS levels: so that the level of PHBS achieved by the community/family/individual is not only influenced or determined by the implementation of promotion strategies by the puskesmas. Respondents have the ability to independently provide various PHBS indicators, such as latrines, clean water, seeking treatment to health workers, procuring facilities or carrying out sports, making house floors from cement or ceramics, providing clean water, and trash cans, some of which do not smoke. This is in accordance with the results of research which shows that around 43.4% of PHBS is influenced by factors outside health promotion strategies. This phenomenon is not part of the analysis of this study, so further research is important.

5.2 Advice

Based on the results of the study, discussion, and conclusions of the study, suggestions can be prepared as follows:

- 1. Health Policy. It is very important to establish a city-level health policy that availability of sufficient ensures the facilities professionals. funds. and infrastructure for health promotion programs (advocacy, atmosphere building, and community empowerment) organized by puskesmas, to increase community PHBS. Based on the implementation of decentralization. the Regional health Government has the authority to realize the policy, either in the form of Regional Regulations or Regent Decrees.
- 2. Management of Community and Business Potential. Puskesmas must be able to manage the potential of the community and business world in the puskesmas work area through a persuasive advocacy approach; This is done by gathering officials from several agencies domiciled in the sub-district, village officials, community leaders (religious, educators, social or customary, youth), and entrepreneurs to

play an active role in health development in the Puskesmas work area. As for what is expected from these figures, are: support for funds, facilities and infrastructure, willingness to become figures and cadres driving health development, contributing ideas and thoughts, and helping recruit community members for health cadres who serve as health promotion workers for PHBS.

- 3. Analyze the situation. Situation analysis activities are needed as a
- basis for planning and implementing health promotion strategies. Puskesmas should conduct a comprehensive analysis of the community situation as a basis for planning a promotion strategy for PHBS.
- Cross-sector. Puskesmas should improve the quality of cooperation across sectors or between government organizational units at the sub-district level and community organizations in the community, which are engaged in youth, religion, social, education, health, and other relevant fields.
- 6. Further research. The results of this study support the behavioral theory developed by experts, which asserts that health promotion strategies have an influence on healthy behavior or clean and healthy living behavior (PHBS). However, based on the results of the study, it is known that the scope of this research is relatively limited.

CONSENT

It is not applicable.

ETHICAL APPROVAL

It is not applicable.

COMPETING INTERESTS

Author has declared that no competing interests exist.

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