

**Research Article**

# Indicators of the Healthy Indonesia Program in Remote Areas

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**Abstract.** The Healthy Indonesia Program is part of the nine priorities agenda of President Jokowi Dodo and Vice President Jusuf Kalla, namely relating to improving the quality of life of Indonesians. The success of the Healthy Indonesia Program, which uses a family approach, is measured by the healthy family index which is a combination of 12 indicators. This study aimed to present data for the healthy family index and the 12 healthy family indicators for remote areas. This was a descriptive cross-sectional study which was conducted during April 2019 in remote areas of East Nusa Tenggara, Indonesia. 320 households participated in the study, consisting of 1,293 people. Proportional random sampling was used to select the participants. Data on the healthy family index were collected using a healthy family profile questionnaire. The results of this study indicated that there are several indicators that need to be considered by the Government. First, most couples of reproductive age (61% of 288 households) do not use contraception. Second, most families have family members who are active smokers (70% of the 320 households). Next, only 33% of the 14 tuberculosis patients and 49% of the 144 hypertension patients receive standard treatment. Finally, 100% of the six people with mental health disorders in this study do not receive appropriate treatment. This study also showed that the majority of people in these remote areas were identified as pre-healthy families. This study provides basic data on 12 indicators of healthy families that are essential for further research and for the Government to further develop the Healthy Indonesia Program in this research area. All families in remote areas should be visited regularly by health workers, and these health workers are expected to increase health promotion related to the problematic indicators identified.

**Keywords:** family approach, Healthy Indonesia Program, healthy family, healthy indicators

## 1. Background

The Healthy Indonesia Program is one program of the nine priority agenda of President Jokowi Dodo and Vice President Jusuf Kalla, namely improving the Quality of Indonesian Human Life. The Healthy Indonesia Program then became the main Health Development program which was planned to be achieved through the Ministry of Health's Strategic Plan for 2015-2019. The Healthy Indonesia Program is implemented by enforcing three main pillars, namely: (1) the application of a healthy paradigm, (2) strengthening of health

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services, and (3) the implementation of national health insurance. The adoption of a healthy paradigm is carried out with a strategy of mainstreaming health in development, strengthening promotive and preventive efforts, and empowering the community. Strengthening health services is carried out with strategies to improve access to it, optimize the referral system, and improve quality using a continuum of care approach and health risk-based interventions. Whereas the implementation of national health insurance is carried out with a strategy of expanding targets and benefits, as well as quality and cost control. All of the strategies are aimed at achieving healthy families [1].

The family approach in this program is the development of home visits by community health centers and the expansion of community health care efforts, which include the following activities: (1) visiting the family for data collection on family health profiles and database updating, (2) visiting the family in the context of health promotion as promotive and preventive efforts, (3) visiting the family to follow up on health services in buildings, (4) data and information utilization from the family health profile for community organizing/empowerment and primary health center management. The main target of this program is a family since the family is the smallest unit in society that determines the health status of the community. In addition, the family also has duties in health sector ranging from (1) recognizing the health problems experienced by family members, (2) making decisions for appropriate health actions, (3) providing care to sick family members, (4) maintaining home conditions that are beneficial for health and the personality development of family members, and (5) maintaining reciprocal relations between family and health facilities. Therefore, it is expected that through the program, families can help themselves (independently) in the health sector and play an active role in realizing public health [1, 2].

Furthermore, the success of the healthy Indonesia program through family approach is measured by the healthy family index which is a combination of 12 indicators. The twelve indicators are as follows: (1) families' participation in Family Planning program, (2) mothers give birth in health facility, (3) babies get complete basic immunization, (4) babies get exclusive breast milk, (5) children under five get growth monitoring, (6) patients with pulmonary tuberculosis get treatment according to the standards, (7) hypertension sufferers take medication regularly, (8) people with mental disorders get treatment and are not abandoned, (9) no family members smoke, (10) families are members of the national health insurance, (11) families have access to clean water facilities, and (12) families have access to or use healthy toilet. The more indicators that a family can fulfill, the family status will lead to a healthy family. However, as of June 8, 2017, the number of families recorded in the application of healthy families was

1.70% from families in 34 provinces. East Nusa Tenggara Province was at number 29, which was 0.06%. The data showed that the coverage for family visits in East Nusa Tenggara province was very low [1]. In addition, based on the coordination meeting on the operational implementation of the program with all heads of health offices in December 2017 showed that out of 22 districts in East Nusa Tenggara, there were still 3 districts that had 0.00% coverage for family visits. As a result, the healthy family index cannot be calculated in those 3 districts [3]. One of which is the study area. In connection with this, it was realized that the success of the healthy Indonesia program through the family approach was also largely determined by the roles and responsibilities of other sectors outside the health sector [1]. Moreover, to the best authors' knowledge, there are no recent published studies of healthy family indicators in remote areas of Indonesia. Thus, a study of the healthy family index and the indicators in the study area was needed. These findings could help the government in providing the healthy family index at sub-district level in order to achieve the Ministry of Health's Strategic Plan for 2015-2019. These findings are also useful for government and health workers to design the appropriate intervention based on the 12 indicators of the healthy family index.

## 2. Objective

This study aimed to present the data of healthy family index and the healthy family indicators in remote areas.

## 3. Methods

### 3.1. Research design

The design of this study was a descriptive cross-sectional survey.

### 3.2. Setting, sample and sampling

The district where this study was conducted had 1 primary health center. The working area of the primary health center consists of 4 villages where the distance to the village of Hebing is 1.5 KM, the distance to the village of Natakoli is 10 KM, the distance to the village of Egon Gahar is 15 KM, and the distance to the village of Hale is 5 KM. Each village has a polindes (village delivery ward) with a midwife, who only operates 2 days a week. There is only 1 operational car owned by the primary health center. The road

situation in this sub-district is still potholes and has not been paved, there are no public vehicles, only some taxibikes (ojek). This region also does not have access to electricity and water from the government. This condition shows that people in remote areas really need access to health. This research was conducted on April 4 to April 13 2019 in Mapitara district, Sikka regency, East Nusa Tenggara Province. The total population in this district is 1,608 households consist of Number of households in Hale village: 605 families, Hebing village: 434 families, Natakoli village: 292 families, Egon Gahar village: 277 families.

The total sample of this study was calculated using the Slovin formula, which is as follows:

$$n = \frac{N}{1 + N \epsilon^2}$$

Based on this formula, the minimum sample in this study was 320 households consisting of 1,293 people in four villages. The sampling used to select respondents is proportional random sampling.

### 3.3. Data collection

The data were collected using questionnaire. Data collection was carried out by researcher and 4 health cadres. Prior to data collection, The researcher gave training for 2 days (10 hours) to 4 health cadres about the research objectives, the methods used, and the process of collecting data using a questionnaire.

Data on the healthy family index was taken using a healthy family profile questionnaire issued by the Ministry of Health of the Republic of Indonesia [1]. This questionnaire consists of 2 parts, namely: 1) demographic data such as the age of the householder and all family members, work, education, and the number of family members. 2) 12 indicators of healthy family index data. The response types of answers to these 12 questions are yes, no, and does not apply to the family. The answer "yes" is given the Y code, the answer "no" is given the T code, and the answer "does not apply to the family" is given the N code. In addition, the interview process is also carried out to respondents who do not meet some healthy family indicators. After getting the 12 indicator data, the researcher did the calculation to determine the index of a healthy family. The formula used is as follows [1]:

Healthy Family Index = the number of Y-coded indicators divided by 12- the number of N-coded indicators

Based on this formula, the index of healthy family is categorized into 3 types of families, namely 1) healthy family if their index value is  $> 0.80$ ; 2) pre-healthy family if the index value is  $0.50 - 0.80$ ; and 3) unhealthy family if the index value is  $< 0.50$ .

The operational definitions of the 12 family indicators are in accordance with the definition issued by the Ministry of Health [1], namely:

1. Families join the Family Planning program: If the family is still in fertile age, husband or wife or both are officially registered as Family Planning program participants and / or use contraception. In this case not including women of childbearing age who plan to have children, the number of children is less than 2, women of childbearing age who have experienced menopause under the age of 54 years old, and fertile women who experience reproductive disorders.
2. Maternity mothers in health facilities: if there are postpartum mothers in the family (babies aged 0-12 months), delivery is done in health care facilities.
3. Babies get complete basic immunizations: if there are children in the family aged 12-23 months and have received complete basic immunizations (HB0, BCG, DPT-HB1, DPT-HB2, DPT-HB3, Polio 1, Polio 2, Polio 3, Polio 4, and Measles) at the age of 0-11 months.
4. Babies are given exclusive breastfeeding for 6 months: If there are babies aged 7-23 months, the babies for the first 6 months are only breastfed.
5. Growth of children under five is monitored every month: if there are children aged 2-59 months in the family, those children's body weight is measured to be recorded in children's health services.
6. Patients with pulmonary tuberculosis get treatment according to the standard: if there is a family member who has been coughing for 2 weeks in a row and has not been cured or diagnosed as a patient with pulmonary tuberculosis, then the patient is treated according to doctor or healthcare instructions.
7. Patients with hypertension get regular medical treatment: if there are families members in the family aged  $> 15$  years who are based on measurements are hypertension sufferers, they should seek treatment according to health workers or doctor's instructions.
8. People with severe mental disorders are not neglected: if there are family members in the family who suffer from severe mental disorders, the sufferer is treated or not abandoned, or not put up on stocks.

9. No smoker among family members: if the family does not have a member who smokes cigarettes or other tobacco products.
10. The family has access to clean water: if the family has access to water from PDAM, pump well, dug well or protected spring for daily use.
11. The family has access / uses a healthy toilet: if the family has or uses a means to defecate in the form of a toilet or gooseneck.
12. The family has become a member of the national health insurance: if all family members have a membership card for the Health Insurance Provider and / or other health insurance membership card.

### 3.4. Statistical analysis

A descriptive statistic was used in this study to present the percentage and frequency of 12 healthy family indicators and the healthy family index.

### 3.5. Ethical consideration

This study was approved by Citra Husada Mandiri Ethical Committee (ERB No. 050/D/2018). Prior to data collection, the researcher has asked the permission from head of province, head of district, head of sub-district, head of villages, and head of community health centre of the study area. All respondents were explained the purpose and benefits of this research. Participants who were willing to involve in this study were given informed consent sheets.

## 4. Results

### 4.1. Characteristics of respondents

Out of 320 householders, there are 134 people who have completed primary school education (42%) and the least is university graduates, 11 people (12%). The results of this study also showed that the majority of householders work as farmers (91%), while those who work as civil servants and entrepreneurs / private sector are 3%. In addition, this study also showed that of the 320 households, most families had at least 3 children, with a minimum of 1 person and a maximum of 10 people.

TABLE 1: The 12 indicators of healthy family

No	12 Indicators of Healthy Family	n	%	Total n
1	Participation in the family planning program	111	39	288 households
2	Mothers give birth in health facility	15	100	15 mothers
3	Babies received complete basic immunizations	16	100	16 children
4	Babies received exclusive breast milk	16	89	18 children
5	Children under five received growth monitoring	25	78	32 children
6	Patients with pulmonary tuberculosis received standards treatment	8	33	24 patients
7	Hypertension patients take medication regularly	71	49	144 patients
8	People with mental disorder received treatment and not being neglected	0	0	6 patients
9	No smokers in the family members	225	70	320 households
10	All family members have National Health Insurance	240	75	320 households
11	Family have access to clean water	307	96	320 households
12	Family have access or using healthy toilet	246	77	320 households

#### 4.2. Indicators of families' participation in the Family Planning program

Out of 320 families, there are 288 households with married couples of reproductive age. Out of the 288 households, most couples of reproductive age did not participate in the Family Planning program, namely 177 (61%).

#### 4.3. Indicator of mothers who give birth in health facility

Of 320 families, there are 15 children under the age of 12 months. Of these 15 children, 100% of children are born in health care facilities.

#### 4.4. Indicator of babies in getting complete basic immunizations

Of 320 families, there are 16 children aged 12-23 months. Of the 16 children 100% received complete basic immunizations.

#### **4.5. Indicator of babies in receiving exclusive breast milk**

Of 320 families, there are 18 children aged 7-23 months. Of the 18 children, 89% (16 children) received exclusive breast milk and 11% (2 children) did not receive exclusive breast milk.

#### **4.6. Indicators of children under five in getting growth monitoring**

Of 320 families, there are 32 children aged 2-59 months. Out of these 32 children, 78% (25 children) of mothers bring their children to the integrated health post to monitor the growth of their children.

#### **4.7. Indicator of patients with pulmonary tuberculosis in getting treatment according to standards**

Of 320 families, there are 24 people who suffer from tuberculosis. Out of these 24 people, only 8 (33%) did regular treatment, while 16 (67%) did not take medication regularly or were yet to receive treatment.

#### **4.8. Indicator of hypertension sufferers in taking medication regularly**

Of 320 families, there are 144 people who suffer from hypertension. Out of these 144 people, the majority of people with hypertension (51%) do not take regular medication.

#### **4.9. Indicator of people with mental disorder in getting treatment and not being neglected**

Of 320 families, there are 6 people who suffer from severe mental disorders (Schizophrenia) and all of them do not get treatment.

#### **4.10. Indicator of family members as non-smokers**

Of 320 households, there are 70% of families (225 families) who have family members who smoke. Of the 225 families, 1125 family members are smokers. When compared with a total of 1293 people, 87% of respondents were smokers.



#### 4.11. Indicator of family membership in National Health Insurance

Out of 320 families, 25% of families do not have National Health Insurance.

#### 4.12. Indicator of family in having access to clean water

Out of 320 households, 13 families (4%) still do not use clean water as a source of drinking water.

#### 4.13. Indicator of family in having access or using healthy toilet

Of 320 households, 74 households (23%) still do not have healthy toilet. Defecation and urination are done in the garden or in the backyard of the house.

#### 4.14. Healthy family index

Based on the results of this study, there were 52% of families classified as pre-healthy families, 29% of families classified as healthy families, and 19% of families classified as unhealthy families.

### 5. Discussion

The results of this study indicate that there are several indicators of healthy family that need to be considered by the government in increasing the index of healthy family. First, most couples of reproductive age (61%) have not used contraception. Based on the results of this study, it can be seen that although the government has launched a Family Planning program where "two children are enough", most families still have not joined the Family Planning program. One strategy that must be undertaken by the government in an effort to increase participation in Family Planning is to increase health promotion regarding Family Planning and ensure access to the preferred method of contraception for women and couples. It is crucial to secure women's welfare and autonomy, while supporting health and community development [4]. Many factors can cause high number of couples of reproductive age who use no contraception or join a Family Planning program. These factors are limited method choices; limited access to contraception (especially among young people, or unmarried people); great distance to health services; fear or experience of side effects; lack of knowledge; lack of husband

support; attitudes of couples of reproductive age; cultural or religious opposition; poor quality of services available; and gender-based barriers [5, 6, 7, 8]. However, the results of the study cannot be applied in this area because of the cultural differences between the country and Indonesia, especially in remote areas. Therefore, further research is needed to find out what factors influence couples of reproductive age in participating in this remote Family Planning program. Health workers in remote areas and the government can provide appropriate interventions by knowing these causative factors. This will also have a positive impact in increasing the healthy family index in remote areas.

Second, most families have family members who are active smokers (70%). If seen from the characteristics of respondents, there are more householders who graduated from elementary school compared to other levels of education. In addition, the majority of householders in these remote areas work as farmers. The distance from the village to health services is also quite far and there is no public transportation other than taxibike which is also very minimal in number to reach health services. The results of this study are similar to those described by Roberts et al. [9] and the Centers and Diseases Control Prevention [10] that smoking behavior in rural area is more numerous compared to those who live in urban areas. People in rural areas are more likely to have lower incomes, lower educational attainment, and more limited access to health services. Previous studies [11, 12, 13] recommends that some of the high handling cases of smoking in remote areas is to conduct a smoking cessation program in a patient's home or community, increase the price for tobacco products and the establishment of smoke-free policies to limit smoking habits at the level of remote areas. This indicator needs special attention from the government. From interviews conducted by researcher with village heads and community leaders, it was found that there were no regulations set in the village regarding smoking bans, even giving cigarettes to guests who come to the house or older people is an activity performed by the community to show respect for people who visit their houses or older people. Further research is needed to analyze the factors, especially the link between culture and smoking behavior in communities in this remote area.

Third, tuberculosis and hypertension patients who did not take standard treatment were 67% of 24 patients and 51% of 144 patients respectively. This study also shows that the high percentage of patients suffering from hypertension and tuberculosis do not carry out routine checks and do not consume drugs regularly. From the interviews conducted by researcher to these respondents, 10 out of 24 tuberculosis patients and 40 out of 144 hypertension patients explained that one of the reasons they did not

take medication was that they felt the disease was a common disease. In addition, the distance from their home to the primary health center is quite far (10 -15 KM) given that there is no public transportation and they have to walk. They said the time spent walking to the primary health center was better for gardening. Health workers are highly expected to conduct health promotions and conduct visits to patients door to door in accordance with the program launched by the government, namely the healthy Indonesia program through a family approach.

Finally, this study shows that out of 320 households, there are 6 people who suffer from severe mental disorders and all of them do not receive standard medical treatment. People with mental disorders often become marginal people whose existence has been forgotten by millions of residents. In fact, as citizens, people with mental disorders still have the rights as those of other communities, especially the right to get health services and other rights both from the community and the government. Mental health problems in remote areas are not the concern of policy makers related to several things such as mental health has not become a priority agenda, government investment in mental health is still low including human resources for mental health services, and budget for mental health programs is very small and not worth the burden emerged. Mental health resources are still concentrated in psychiatric hospitals in big cities, thereby affecting access and continuity of mental health services. Mental health services have not been evenly integrated in primary services; there is still a lack of trained mental doctors and nurses, availability of good types of drugs, and the amount is still lacking. Most primary health centers do not run mental health programs [14]. In the primary health center where the study was conducted there were no psychiatrists, psychologists, or mental health nurses on duty. Therefore, the further research questions that need to be discussed are "What is the effort to deal with people with mental disorders in remote areas? What are the obstacles for handling people with mental disorders in remote areas? What forms and efforts should be made to deal with people with mental disorders in remote areas? This really needs special attention from health workers and local government.

This study has limitations where this research is only a descriptive research so that the results of this study cannot be generalized to other remote areas. Nevertheless, this study provides basic data on 12 indicators of healthy family that are essential for further research and development of the Healthy Indonesia program with a family approach in this research area.

## 6. Conclusion

The results showed that there were still several indicators of healthy family index that need to be considered by the government. Firstly, half of the fertile age couples had not participated in the Family Planning program. Next, tuberculosis and hypertension patients who received standard treatment were only 33% and 49% respectively. Thirdly, the majority of households have family members who smoke. Lastly, 100 % of people with mental disorders in this study didn't receive appropriate treatment. This study also showed that the majority of people in remote areas were identified as pre healthy family.

Therefore, all families in remote areas should be visited regularly by health workers. Health workers are expected to increase health promotion related to the several problematic indicators of a healthy family index. The results of this study also could be used by the government in improving family health status based on a healthy family index and healthy family indicators.

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## Conflict of Interest

The authors have no conflicts of interest to report.

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