

## Original Research Article

# NURSE STRATEGY FOR FREE STUNTING OF INDONESIA BASED ON E-PERAMPING IN MOJOKERTO DISTRICT

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### Abstract

**Background.** Stunting is a condition where children fail to grow and develop according to their age due to lack of nutrition during pregnancy and the first 1000 days of life. Based on the results of the SSGI survey in 2021, 27.4% or 25,806 toddlers are experiencing stunting (Detik Jatim, 2022). Stunting has long-term effects besides growth and development, it also carries a risk of diabetes, hypertension, obesity and death from infection. The Covid-19 pandemic has prevented the public and health workers from meeting in person, so media is needed to supervise and assist in preventing stunting.

**Objectives.** This study aims to determine the community's response to the e-peramping website as an effort by nurses to prevent stunting in Mojokerto Regency based on the website.

**Methods.** The research method uses development with descriptive analysis, collecting data using a questionnaire on the e-peramping website. The population of Mojokerto Regency is 1,159,593 people and the research sample is 225 respondents, the sampling technique uses accidental sampling.

**Results.** The results showed that the e-peramping website was suitable for the purpose and agreed with all the questions given by the researcher at 69.6%.

**Conclusion.** E-peramping website really helps the community to get information and nurse assistance about stunting.

**Keywords:** e-Peramping, Nurse, Stunting

## INTRODUCTION

Stunting according to the Ministry of Health (2018) is a condition of growth failure in children (body and brain growth) due to long-term malnutrition. Thus, children are shorter than normal children of their age and have delays in thinking. Meanwhile, according to WHO, stunting is a developmental disorder experienced by children to malnutrition,

repeated infections, and inadequate psychosocial stimulation (Detik Health, 2021).

Stunting itself is caused by a long-term lack of nutrition that occurs from the time the fetus is in the womb to the beginning of a child's life (the first 1000 days of birth). Apart from experiencing stunted growth, stunting is also often associated with causes of brain development that are not optimal. This can

affect mental abilities and learning is not optimal, as well as poor learning achievement. In addition, the long-term effects caused by stunting and other conditions related to malnutrition are often considered as a risk factor for diabetes, hypertension, obesity and death from infection.

The Covid-19 pandemic situation that occurred in the last 2 years has made it difficult to reach the health facilities provided by the Government. The recommendation to keep their distance makes it difficult for the community to go directly to Posyandu or other health facilities to get direct and detailed health information, especially stunting. of introduction. Based on the results of the 2021 Indonesian Nutritional Status Study, the national stunting rate has decreased by 1.6 percent per year from 27.7 percent in 2019 to 24.4 percent in 2021 but there are still 7 provinces showing a trend of increasing stunting rates in 2019 – 2021 namely Papua, Banten, North Sulawesi, Riau Islands, North Kalimantan, Jambi and West Papua (Prihatini Z, 2022).

The prevalence of stunting in Indonesia is better than Myanmar (35%), but still higher than Vietnam (23%), Malaysia (17%), Thailand (16%) and Singapore (4%). Currently, in some areas the prevalence rate is below 20% but still does not meet the target of the 2024 RPJMN of 14% (Indonesia Ministry of Health, 2021). The stunting rate in East Java Province has decreased. Calculated data for 2019-2021. In 2019 stunting in East Java was 26.85%, in 2020 it was 25.64% and in 2021 it was 23.5% but even though this figure has decreased it is still far from the national target of 14% (East Java Ministry of Information and Communication, 2022).

According to the Regent of Mojokerto, Ikfina Fahmawati explained, the number of toddlers in her area as of January 2022 was 94,182 people. Based on the results of the 2021 SSGI survey, 27.4 percent or 25,806 toddlers are experiencing stunting (Detik Jatim, 2022). This is the basis of our research because the number of stunted toddlers in Mojokerto

Regency is still far from the national target of 14%. Stunting cases that occur in Indonesia, especially in the Mojokerto region, are caused by a lack of knowledge about stunting and how to prevent it and the lack of nutritional supervision. This will have an impact on the growth and development of children, they often do not pay attention to the nutritional intake given to children. Like children during solids, many mothers only give instant brewed porridge without providing other nutritional intake such as vegetable and animal protein (chicken, meat, eggs, fish). So, to reduce this problem, supervision and assistance is needed for pregnant women and mothers who have children under five. Supervision and assistance can be carried out by health workers in electronic media (handphone) by accessing the stunting prevention website. Through this website, pregnant women and mothers with children under five can consult at home and do not need to go to a health worker.

**Objective(s):** Base on this study aims to determine the community's response to the e-peramping website as an effort by nurses to prevent stunting in Mojokerto Regency based on the website. E-peramping as a medium for information and assistance regarding stunting in Mojokerto Regency.

## **METHODS**

### *Study Design*

This study uses the development research method, namely the development method according to Borg and Gall (1989). Development research is basically a research method that produces a product as the final output. There are three main stages in this research, namely preliminary studies, development, and testing. Then analyzed using descriptive analysis.

### *Setting*

This research was conducted in Mojokerto Regency, as a place for data collection, data analysis and data interpretation. The time of

this research is for 1 (one) month from 27 May – 26 June 2022.

*Research Subject*

Respondens of this study is all residents in Mojokerto Regency. Based on data from the Central of Statistics for Mojokerto Regency in 2020, the male population is 584,209 people and the female population is 575,384 people.

The Respondens of this study is a portion of the population in Mojokerto Regency as many as 225 respondents. Sampling was taken by accidental sampling, i.e. anyone who coincidentally meets the researcher can be used as a sample and is suitable as a data source. Determine the sample based on predetermined research criteria, namely being willing to be a respondents and owning an android cellphone

*Instruments*

In this study, researchers used a questionnaire instrument that was used to measure the level of public satisfaction with the existence of e-peramping with 3 (three) components studied, namely content, interface and feedback/assessment. This questionnaire consisted of 14 questions. All of these items and measuring instruments are favourable. This scale uses a Likert model scale with four alternative answers, namely Strongly disagree (STS), Disagree (TS), Agree (S) and Strongly agree (SS).

*Data Analysis*

Data Analysis includes collecting, tabulating and presenting data. The process of collecting data in this study was carried out after the researchers obtained permission from the Dian Husada Mojokerto College of Health to conduct research together with a cover letter for research permits addressed to Bakesbangpol, Health Service and Village Nurses. After obtaining permission, the researcher then met the village nurse to conduct a preliminary study and formulate the problem. The next step is to create an e-peramping Website and then continue with e-peramping. Website Testing. The link to the e-peramping

website, namely [bit.ly/E-PerampingDH](http://bit.ly/E-PerampingDH), will then be disseminated to village and community nurses.

*Ethical Consideration*

this study has received ethical committee approval etichal association of health research nursing academy Dian Husada number 244-KEPK/DH.

**RESULTS**

*Descriptive Analysis*

The e-peramping website is a website that helps the community to get closer to sources of information, especially related to stunting, namely by consulting village nurses. Contains 5 (five) pages, namely stunting data, stunting info, activities of village nurses, contacts of nurses in the sub-district, and communication of village nurses.

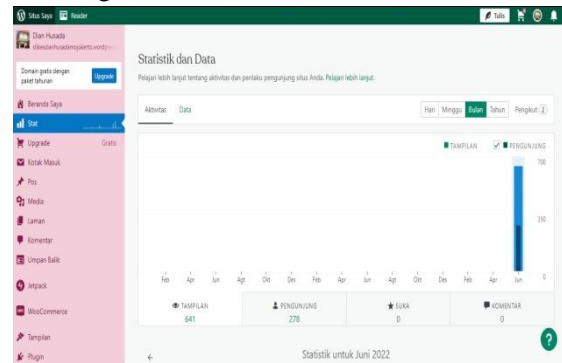


Figure 1. Display of The First Page (Home) on the e-Peramping Website

Figure 1 shows that the e-peramping website has been visited 278 times with a total of 641 views, 640 from Indonesian citizens and 1 from foreign nationals the United States. The characteristics of the respondent's in this study are as follows:

Table 1. Characteristics of participant's

Characteristics	Description	n	%
Respondent's age	< 20 years	35	15,56
	20-29 years	160	71,10
	30-39 years	19	8,44
	40-49 years	9	4,00
	≥ 50 years	2	0,90
	Total	225	100,00
Gender	Male	20	8,90

Characteristics	Description	n	%
	Female	205	91,10
	Total	225	100,00
Gestasional age	Trimester 1	6	30,00
	Trimester 2	11	55,00
	Trimester 3	3	15,00
	Total	20	100,00

Based on the characteristics of the responden's in table 1 it can be explained the age of the responden's was dominated by responden's aged 20-29 years, namely 160 responden's. This shows that at that age the responden's already has the ability to make decisions, it is hoped that the responden's will still have high concern and enter a period of marriage and have children.

Gender is dominated by female sex as many as 205 p responden's. The high number of female responden's compared to men can be understood that it is the mother who pays more attention to the condition of the child and prepares for a good pregnancy.

As many as 20 responden's were pregnant and dominated by the 2nd trimester of pregnancy. The purpose of collecting data on gestational age was that the village nurses who were consulted understood the condition of their clients, whether they were pregnant or not, and their gestational age so that in the conseling, information, and education process there were more points needed in certain trimester mothers conveyed by nurses.

*Preliminary Study Stage*

Preliminary studies are carried out both through literature and field research with empirical studies. The results of this study are used to support preliminary studies in the field. The literature and literature studied are related to the development of communication media. While the field study was carried out with various activities, namely observation, interviews and documentation.

*Development Stage*

At this stage, drafting of website materials is carried out, looking for hosting that is easy to

operate and website design. The next stage is the input of the material that has been obtained in the preliminary study into the e-peramping website. The e-peramping website can be accessed via the link [bit.ly/e-perampingDH](http://bit.ly/e-perampingDH).

*Testing Stage*

At this testing stage the e-peramping website link is disseminated to the public to assess community satisfaction in using E-Slimmer. The initial step taken by the respondents was to visit the e-peramping website, then read about stunting data, stunting material, then respondents could see how real nurses are taking efforts to prevent stunting and respondents could consult via whatsapp with village nurses. Furthermore, respondents can evaluate the available websites on the home section.

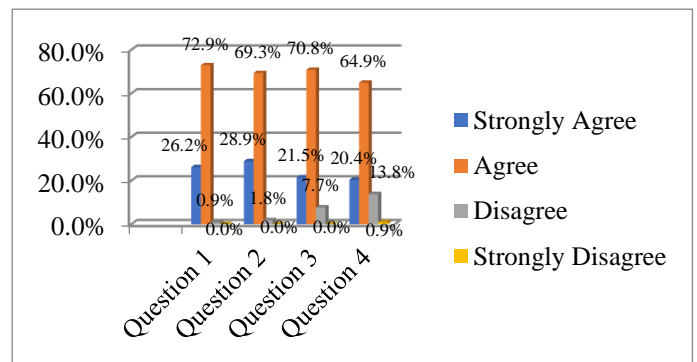


Figure 2. Survey Results on The Contents of e-Peramping

From the results of the Figure 2 obtained data from Sunday, June 26, 2022 at 00.00 PM that for all questions regarding the content of e-peramping it was found that the majority of responden's agreed by 69.5%. In the four question items there was still an average of 6% (14 responden's) stated that they did not agree, this was due to the diverse characteristics of the responden's 's, responden's 's of various ages from young to old, so that their level of education was different, this could affect a person's ability to receive new knowledge and information.

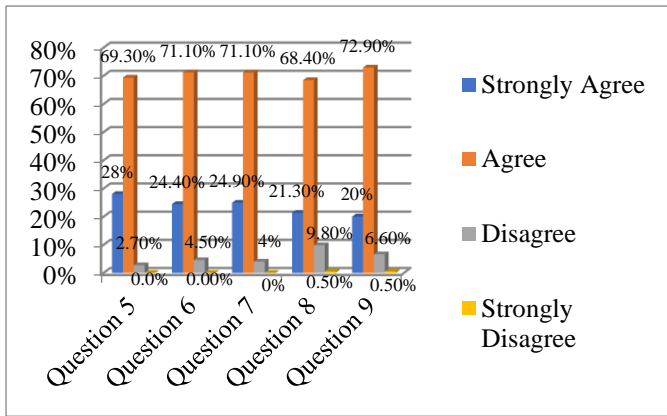


Figure 3. Survey Results on The e-Peramping Interface

From the results of figure 3, it is obtained that for all questions regarding the e-peramping Interface, it is obtained that the majority of respondents said they agreed at 70.6%. In these 5 question items there is still an average of 27% (60 respondents) stating Disagree this is due to the diverse age of the respondents which can affect a person's ability to operate the website so they do not understand the features available in it so they do not get the necessary information, and the unstable network in the respondents area also had an effect so that respondents found it difficult to access the website and failed to get the desired information from the website.

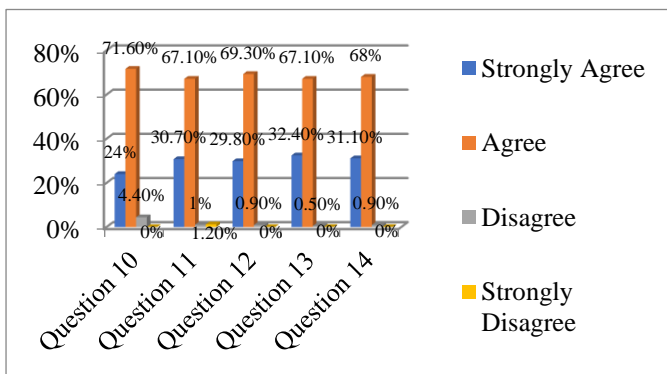


Figure 4. Survey results on feedback and evaluation of e-peramping

Results from figure 4 it was found that for all the questions on feedback and evaluation of e-peramping it was obtained that the majority of respondents said they agreed at 68.6%. In these 5 question items there is still an average of 8% (18 respondents) stating that they do not agree.

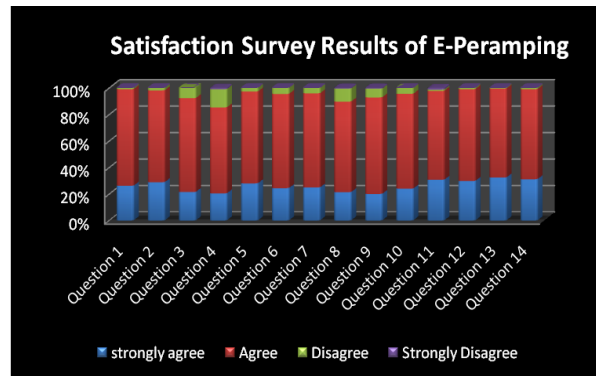


Figure 5. Results of The e-Peramping Satisfaction Survey

From figure 5 it is known that most of the respondents agreed with all the questions given by the researcher. This shows that the e-peramping website is in accordance with the intent and purpose of making the e-peramping website, namely providing information related to stunting and providing assistance to the community, especially regarding stunting.

### DISCUSSION

Electronic media is a new form of development of mass communication media through electronic devices to spread news. Examples are television, radio and devices with the internet whose use is increasingly widespread in this digital era (Times Indonesia, 2018). The existence of electronic media makes it easier for pregnant women to access more knowledge or information about stunting. Reducing the incidence of stunting requires special monitoring and assistance. This assistance and monitoring can be carried out through handphone electronic media which is linked to the e-peramping website. The e-peramping website itself is equipped with information regarding stunting and the cell phone numbers of village nurses in every sub-district in Mojokerto Regency. So that the community can directly contact the village nurse contact according to where they live to consult about stunting.

### CONCLUSION

Most of the respondents (69.6%) stated that they agreed with all the questions given by the researcher. This shows that the e-peramping

website is in accordance with the aims and objectives of making the E-peramping website, namely providing information related to stunting and providing assistance to the community, especially regarding stunting. In the three aspects of the respondent satisfaction survey questionnaire, there were still respondents who said they did not agree. This was due to the diverse characteristics of the respondents, the ability of a person to operate different websites and an unstable network.

## SUGGESTIONS

### 1. For Respondents

It is hoped that it can prevent stunting in children as early as possible by increasing knowledge about stunting, how to prevent it and how to fulfill children's nutrition before their birth.

### 2. Health Agency

It is hoped that it can maximize the utilization of the E-Slimming Website with the aim of accelerating the application for a Stunting Free Indonesia.

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## DECLARATION OF CONFLICTING INTEREST

Related to conflict of interest that arise when conducting research.

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## AUTHOR CONTRIBUTION

### Author 1:

Master of plan, collecting data

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Arrange the content and write the article

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## REFERENCES

- Borg, W. R. and M. D. Gall. 1989. Educational Research: An Introduction. Fifth Edition. New York and London: Longman
- DIRECTORATE OF HEALTH PROMOTION AND COMMUNITY EMPOWERMENT MINISTRY OF HEALTH RI. 2018. Getting to Know Stunting and Malnutrition. Causes, Symptoms and Prevention. Accessed 8 June 2022, web site: Recognizing Stunting and Malnutrition. Causes, Symptoms, and Prevention (kemkes.go.id)
- DPD PPNI PACITAN DISTRICT. 2017. Definition of nurses and nursing. Accessed 8 June 2022, web site: DPD PPNI PACITAN DISTRICT: Definition of nurses and nursing (dpdppnipacitan.com)
- East Java seconds. April 14, 2022. A series of moves by the Regent Ikfina to suppress stunting in Mojokerto Regency. Accessed 12 June 2022 <https://www.detik.com/jatim/berita/d-6033572/sederet-jurus-bupati-ikfina-tekan-stunting-di-kabupaten-mojokerto>
- East Java Communication and Information. 18 July 2022. Arumi: During the Pandemic, the Stunting Rate in East Java has decreased. Accessed June 12, 2022. <https://kominfo.jatimprov.go.id/read/umum/arumi-di-masa-pandemi-angka-stunting-di-jatim-mengalami-penurunan>
- Indonesian Ministry of Health. 24 May 2018. This is the cause of stunting in children. Retrieved 12 June 2022 <https://www.kemkes.go.id/article/view/18052800006/ini-pembebab-stunting-padaanak.html#:~:text=Stunting%20represents%20%20fails%20growth,and%20has%20delayed%20in%20thinking.>
- Jember Polytechnic Staffing. 2021. Law (UU) Regarding Information and Electronic Transactions. Accessed 10 June 2022, web site: Law (UU) Concerning Electronic Information and Transactions | Jember State Polytechnic (polije.ac.id)

MINISTRY OF HEALTH REPUBLIC OF INDONESIA. 2018. This is the cause of stunting in children. Accessed 8 June 2022, web site: Ministry of Health of the Republic of Indonesia (kemkes.go.id)

Prihatini Z. 2022. 5 Provinces Record Stunting Cases, BKKBN: Needs Support from Many Parties to Lower Numbers. Accessed June 15, 2022, website: <https://www.kompas.com/sains/read/2022>

/02/24/190100523/5-provinsi-catat-cases-stunting-tertinggi-bkkbn--need-support-a lot? page=all

Second Health. January 14, 2021. What is Stunting? This Meaning, Causes, and Prevention in Children. Accessed June 12, 2022. <https://health.detik.com/berita-detikhealth/d-5334137/apa-itu-stunting-ini-arti-Cause-dan-prevention-in-children>

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