

THE EFFECT OF IN-HOUSE TRAINING ON IMPROVING THE KNOWLEDGE OF HEALTH WORKERS IN NURSING CARE SERVICES FOR CHILDREN WITH STUNTING AT THE BEKASI REGENCY GENERAL HOSPITAL

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ABSTRACT

The prevalence of stunting in Indonesia is still high, at 18.7% in 2023. The service of the national priority program accelerating the reduction of stunting is hospital quality indicators. The study aims to find out the effect of the in-house training to improve the competency and knowledge of health workers in providing the service to children with stunting. The quasi-experiment conducted to 31 health workers in charge of taking care of children with stunting in Bekasi Regency Regional General Hospital. The data collection is conducted using an online questionnaire. The result shows the respondent characteristics are women (90,3%), mostly in the range age 30-39 years old (41,9%) and the most education background as a Ners professional program (38,7%) and diploma nurse (29,7%). Paired T test shows the mean difference of the score between pre-test and post-test ($P < 0,001$) with mean difference of 34,5%. It is expected Bekasi Regency Regional General Hospital to provide the training or technical guidance regularly to improve the competencies of health workers especially nurse and midwife as their roles to provide the health care service to the children with stunting. Thus, the implementation of the program for handling children with stunting can run more optimally and with quality.

Keywords: *stunting, knowledge, in-house training, nursing care, hospital*

INTRODUCTION

Children are defined as stunted if their height-for-age is more than two standard deviations below the WHO Child Growth Standards median. (WHO, 2013). Stunting is not only affect the physical growth but cognitive development and increase of the risk of morbidity and mortality (Beal et al., 2018). Children with stunting has an long term consequences such as including bad school performance, lower

earning potential as adults, and a higher likelihood of developing diseases such as diabetes and heart disease (Black et al., 2013).

The prevalence of stunting has decreased in the last few years around the world. In 2022, estimates of 148 Million children under 5 years old diagnosed with stunting globally, however, Africa and South Asia continue to have the highest rates of stunting (UNICEF et al., 2023). In Indonesia

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the prevalence of stunting has continued to decrease over the past five years. In 2018, prevalence of stunting is 30,8% and in 2019 is 7,6% (Kementerian Kesehatan RI, 2018). In 2021, it decreased to 24,4%, and by 2022 the prevalence reached 21,6% (Kementerian Kesehatan RI, 2022). In 2023, the national stunting prevalence is 18.7%, and the to reduce it to 14% by 2024 (Kementrian Kesehatan RI, 2023).

West Java is one of the priority stunting interventions due to its large population. The Stunting Control Program in West Java, especially in Bekasi Regency has contributed to the acceleration of reduction of Stunting in Indonesia. In West Java, the prevalence of stunting decreased from 24,5% in 2021 to 20,2% in 2022. Meanwhile, the stunting rate in Bekasi Regency has also been reported to have decreased the prevalence of stunting from 21.5% in 2021 to 17.8% in 2022 (Kementerian Kesehatan RI, 2021; Kementerian Kesehatan RI, 2022). This decline is in line with broader provincial and national trends. This positive trend reflects concerted efforts at different levels of government to improve child nutrition and health outcomes. However, ongoing commitments and targeted interventions are critical to achieving the national stunting reduction target of 14% by 2024.

Based on the Ministry of Health Republic Indonesia regulation 2022 states one indicator quality of the hospital is national priority program to accelerate the reduction of stunting. Hospitals expected to participate in reducing the number of stunting and wasting. To support this National Priority Program, hospitals must intervene and manage nutrition, strengthen the referral network to subordinate hospitals and First Level Health Care Facility (Bahasa: FKTP-*Fasilitas Kesehatan Tingkat Pertama*) in their area, and make referrals to nutrition problems. The stunting and wasting

prevalence reduction program also includes increasing the understanding and awareness of staff, patients, and families about the issue. Hospitals must have programs in place to reduce the prevalence of stunting and wasting. The program should include increased awareness and understanding of health workers and employees, patients, and families about the issue, the implementation of specialized interventions, and the implementation of maternal and childcare hospitals.

The Bekasi Regency Regional General Hospital (Bahasa: RSUD), which is owned by the Bekasi Regency Regional Government, supports the national program policy to overcome stunting. Bekasi Regency Regional General Hospital has succeeded in developing an application to handle stunting called CANTINGMAS with a good category above 80%. But there is something that needs to be concerned strategically to improve the stunting control program and risk of stunting in the Hospital, such as updating guidelines and implementation of better stunting nursing care service. (Subardi et al., 2024). The availability of nursing care guidelines for stunting risks and clinical pathways is a management effort that can help nurses optimize the implementation of stunting prevention programs (Lestari et al., 2023).

Previous study in primary health care, 2,7% health workers have knowledge of stunting control is quite low (Piola et al., 2024). The Bekasi Regency Regional General Hospital is conducting in-house training to develop guidelines of the nursing care in stunting patients. This study aims to find out the effect of in-house training on improving the knowledge of health workers in nursing care services for children with stunting at the Bekasi Regency Regional General Hospital.

METHODS

The study is quasi-experiment with one group pre-test and post-test. Sampel are 31 nurses and midwife who has a role to handling the children patient with stunting in the hospital. In-house training conducted on 21-23 August 2024. The subject of the training is regarding promotive and preventive management in stunting, nursing care for children with stunting (curative and rehabilitative aspects), problem formulation and intervention in stunted children and assessment materials for curative and rehabilitative efforts. Data collection was carried out using an online questionnaire. The knowledge variable consisted of 16 questions about nursing care services for children with stunting. Knowledge was measured 2 times, before and after the training. The data using univariate and bivariate analysis. Univariate analysis to describe each variable by presenting the value of frequency distribution

and percentage for categorical data and presenting mean values, standard deviations, minimum and maximum values for continuous data. Bivariate analysis to find the effect of training on knowledge improvement using a paired T test with a confidence level of 5% ($\alpha=0.05$). This study has obtained ethical approval with number: KP.11/8702/RSUD/2024 from Bekasi Regency General Hospital.

RESULTS

The results of the study obtained by most of the respondents were 28 women (90.3%) and the most were in the age group of 30-39 years old 13 people (41.9%). Based on educational background, had a Ners profession program 12 (38.7%) and diploma nursing degree 9 (29.7%). The results of the analysis of respondent characteristics can be seen in Table 1.

Table 1. Overview of Respondent Characteristics (N=31)

Characteristic	Number (n)	Percentage (%)
Gender		
Man	3	9,7
Woman	28	90,3
Age		
20-29 years old	6	19,4
30-39 years old	13	41,9
40-49 years old	6	19,4
≥50 years	6	19,4
Education		
D3 Midwifery	3	9,7
D3 Nursing	9	29,0
Ners	12	38,7
S1 Midwifery	5	16,1
S2 Nursing	2	6,5

Knowledge instrument consists of 16 questions measured 2 times, pre-test and post-test. Based on distribution of item of the question, the increase of the level of knowledge of the health workers about

instruments for conducting nutritional screening in children (93.5%), principles applied in the administration of complementary foods (64.5%), nursing issue found in children with stunting (64.5%),



nursing interventions given to children with stunting (51.6%) and indicators of breast milk adequacy in infants with exclusive breastfeeding at the age of 2 months (48.4%), discharge planning that needs to be carried out in children with stunting (29%) and feeding coverage for infants and children (25.8%). Based on the results of the post-test,

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there are still several questions with insufficient knowledge achievements, such as anthropometric results that are important to see by health workers while at the Posyandu (41.9%) and nutritional screening results (51.6%). An overview of the distribution of health worker's knowledge questions can be seen in Table 2.

Table 2. Score of Knowledge based on the Question Items (n=31)

No.	Question Item	Correct Answer (%)		
		Pre-test	Post-test	Difference
1.	Specific interventions that can be carried out to overcome stunting	87.1	100.0	12.9
2.	Definition of stunting	77.4	96.8	19.4
3.	Coverage of feeding infants and children	51.6	77.4	25.8
4.	Direct causes of stunting	93.5	96.8	3.3
5.	Important anthropometric results seen by health workers while at the Posyandu	19.4	41.9	22.5
6.	Nursing skills according to nurse competency standards, which are directly related to infant and child feeding practices	29.0	100.0	71.0
7.	Indicators of breast milk adequacy in exclusively breastfeeding babies at 2 months of age	48.4	96.8	48.4
8.	Principles applied in the provision of complementary foods	6.5	71.0	64.5
9.	Nursing problems that may arise during breastfeeding in the condition of a healthy child	74.2	87.1	12.9
10.	Instruments for conducting nutritional screening in children	6.5	100.0	93.5
11.	The nutritional status of patients with nutritional screening results showed a value of 3	51.6	51.6	0.0
12.	Nursing problems found in pediatric patients with stunting	32.3	96.8	64.5
13.	Parameters used for screening for TB in children (IDAI)	80.6	96.8	16.2
14.	Discharge planning that needs to be done for children with stunting	45.2	74.2	29.0
15.	Nursing interventions to children with stunting	32.3	83.9	51.6
16.	Interventions carried out by nurses to identify and manage balanced nutritional intake	83.9	100.0	16.1

Table 3 showed the mean score knowledge before the training (pre-test) is 51,2%, and the score after training (post-test)

(357-364) increased to 85,7% with mean difference of 34,5%, as described in the figure 1.

Table 3. The Effect of In-House Training on Improving the Knowledge of Health Workers in Nursing Care Services for Children with Stunting at the Bekasi Regency Regional General Hospital in 2024 (N=31)

Knowledge	N	Mean	SD	Min-Max	Mean Difference	p-value
Pre-test	31	51,2	10,9	31,3 – 81,3	34,5	<0,001
Post-test	31	85,7	6,5	75,0 – 100,0		

The results of the T dependent test obtained p-value <0.001, meaning that there was a difference in the knowledge score of health workers between before and after in-

house training in nursing care services for children with stunting at Bekasi Regency Regional General Hospital.

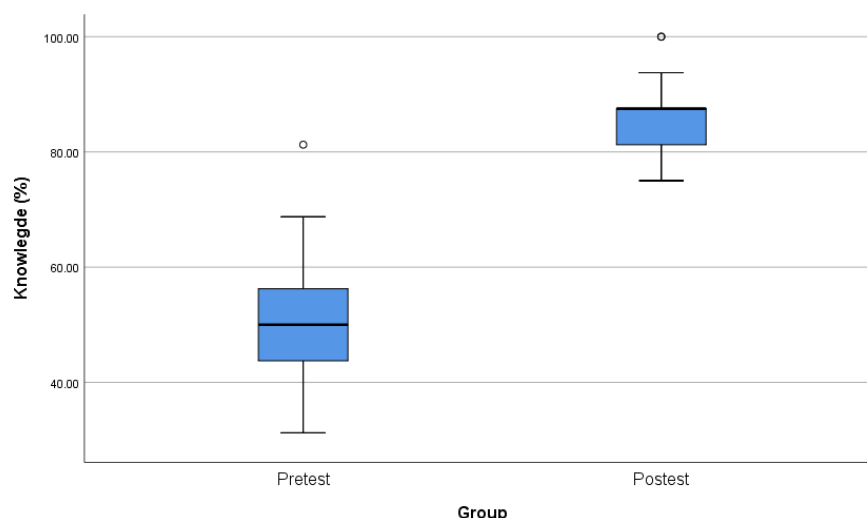


Figure 1. Pre-Test and Post-Test knowledge score in-House Training for Stunting Nursing Care at Bekasi Regency Regional General Hospital

DISCUSSION

The results of the study found that there was an effect of in-house training to increase the knowledge of health workers in nursing care services for children with stunting at the Bekasi Regency Regional General Hospital ($p < 0.001$). The results obtained were that the average knowledge score increased by 34.5% from the average pretest which was 51.2% to 85.7% in the post-test. This shows that in-

house training has a good effect to increase the knowledge of health workers related to promotive and preventive management in stunting, nursing care for children with stunting (curative and rehabilitative aspects), problem formulation and intervention in stunted children and assessment of curative and rehabilitative efforts. The other study in Kesugihan II Cilacap Public Health Care in 2021 showed increasing knowledge and

competency of the health workers 41,8% after being given care or intervention on children with malnutrition or stunting (Kusnaeni et al, 2021). This research is also supported by research at Wonosobo Regency Hospital which also shows an increase in the average knowledge score in 130 nurses after participating in 3S in-house training in 2023 (SDKI, SLKI, SIKI) (Purnamasari et al., 2023).

In-house training is strategic approach focuses on improving the skills, knowledge, and competencies of healthcare workers, which directly meets the specific needs of organizations such as hospitals. Health workers in hospitals have an important role in providing nursing care to children with stunting. In-house training allows the health care to acquire or improve competencies and become more capable in their roles.

Nurses and midwives are professionals who directly provide care to patients and families in an integrated manner through independent, collaborative and delegative tasks. In carrying out child nursing care, nurses and midwives have roles and responsibilities as educators, counselors, coordinators and collaborators, ethical decision-makers, and researchers. So it is important for nurses and midwives to have skills in providing nursing care, especially to children with stunting (Damanik & Sitorus, 2020).

They are responsible for maintaining patient safety and preventing stunting by providing quality care services by involving other professionals (Hanny et al., 2022). Research on 40 medical record files in accredited public and private hospitals in Singkawang in 2022 shows that there is an increase in compliance care in the implementation of child nutrition care through strengthening the role of nurses in charge of care. Therefore, the success of a stunting nursing care service for children is

highly determined by the method of providing professional nursing care to maintain the quality and safety of patients.

One of the first steps in strengthening the role of nurses and midwives in providing care is by increasing knowledge. (Hanny et al., 2022). By increasing knowledge, it expected to increase understanding and encourage a person's awareness to take an appropriate action or behavior. This is in accordance with the results of research related to in-house training in hospitals conducted on 156 nurses in Hospitals X on the accuracy of nursing care documentation. Participants had an improvement in the quality of nursing care documentation after participating in in-house training (Felisitas A Sri S & Sutiarsih, 2020).

The implementation of in-house training can be right on target according to the needs of hospitals in increasing the nursing care knowledge of health workers. By analyzing the need for skills, in-house training is an effective and efficient training to be applied in health services.

CONCLUSION

Based on the description above, the results of the study show that there is an influence of in-house training on the improvement of health workers' knowledge in nursing care services for children with stunting at the Bekasi Regency Regional General Hospital. It is hoped that there will be an increase in the competence of health workers by enriching and refreshing nursing care service materials for children with stunting periodically at the Bekasi Regency Regional General Hospital. The follow-up of this training needs to be monitored and implemented related to the implementation of nursing care for children with stunting according to the guidelines that have been set, so that the implementation of the program for handling children with stunting at the Bekasi

Regency Regional General Hospital can run more optimal and quality.

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