

INTRODUCTION

The prevalence of stunting in Indonesia, the results of measurements from integrated nutrition, show that the national stunting prevalence is 21.5%.¹ In 2021 to 2023 there was a decrease in the prevalence of stunting, namely in 2021 from the target of 21.1% the realisation was 24.4%, in 2022 from the target of 18.4% the realisation was 21.6%, and in 2023 the target of 16.0% the realisation was 21.6%. So based on this data it can be concluded that every year the target of reducing stunting prevalence has decreased but is quite far from the target. Based on the record, the decrease in 2023 with 2022 only decreased by 0.1% according to the Indonesian Toddler Nutrition Status Survey.²

In addition, the prevalence of stunting is still above the target set by WHO which is 20% and the RPJMN 2020-2024 target of 14%.³ According to SSGI (National Nutrition Status Survey) in Central Java there are 29.1%. According to data from the Sragen Regency Health Office in the month of in 2022 the stunting rate in 2022 was 24.3% and in the working area of Puskesmas Mondokan is the highest prevalence of stunting cases, namely 417 stunting cases.⁴ The Mondokan Puskesmas working area consists of 9 villages namely Sono Village, Tempelrejo Village, Trombol Village, Pare Village, Jekani Village, Kedawung Village, Jambangan Village, Gemantar Village, Sumberejo Village.

Stunting is a nutritional problem associated with stunted height growth caused by a lack of fulfilment of nutritional needs for a long time, where the analysis of malnutrition is measured starting from the length or height according to age (TB/U) with a z-score value <-2 standard deviations (SD).⁵

Stunting is influenced by several factors including family income, maternal nutrition knowledge, parenting, history of infectious diseases, immunisation history, protein intake, and maternal nutrient intake. Where nutri is the main player in the development of fetal conditions in the womb. So that the fulfilment or improvement of nutrition and health of pregnant women is related to knowledge, education level and attitudes in fulfilling nutrients during pregnancy. Low knowledge and inappropriate practices are barriers to improved nutrition. In general, people do not realise how important nutritional intake is during pregnancy and the first two years of life.⁶

The results of interviews with posyandu cadres said that education about stunting prevention efforts during pregnancy is still low. So that to improve the nutritional status of pregnant women, it is necessary to have a companion to provide nutrition education, assistance to pregnant women must be carried out compensately.⁷

Human Development Cadres (KPM) are selected community cadres who have empathy and are willing to dedicate themselves, take part in human development in the village, especially in monitoring and facilitating the convergence of stunting reduction.⁸

In addition, KPM is part of the acceleration team to reduce stunting at the village level, especially in assisting the village government in preparing village-level planning in stunting prevention, therefore KPM can provide assistance including counseling/ providing information aimed at to increase access to information and health services to families, especially pregnant women.⁹ The novelty of the research that the researchers conducted was that KPM cadres were given



training using lawren green theory in solving problems in the community, and innovation diffusion theory in conducting health promotion. The research was conducted for 1 month and the mentoring was conducted 3 times a meeting.

Based on the description of the problems above, the problem formulation in the research conducted by the researcher is how the influence of Human Development Cadre (KPM) assistance on stunting prevention behaviour in first and second trimester pregnant women in Mondokan Village, Sragen Regency. The purpose of this study is to analyse the effect of Human Development Cadre (KPM) assistance on stunting prevention behaviour.

MATERIALS AND METHODS

This research uses a Quantitative approach, this type of research is experimental, quasi-experimental design with sub-design one group pre-test and post-test only one group, without a control group. The research was conducted in Mondokan Village. The subjects in the study were first and second trimester pregnant women. Pre-test was conducted before the intervention to determine the extent of stunting prevention behaviour. The sample of pregnant women who received assistance from KPM in the working area of the Mondokan health centre was 38 pregnant women, determining the sample using Purposive Sampling. the assistance activities were carried out at the posyandu with 10 KPM. The instruments in the study used questionnaires and flip sheets about stunting education. Bivariate data analysis using the Friedman test. The questionnaire used by researchers adopted from previous researchers. The intervention was given for 1 month 3 times, where the pre test was done once and the post test

was done 3 times. KPM is tasked with providing education related to stunting ranging from understanding, causes, symptoms and prevention of stunting. Education conducted by KPM for 15 minutes.

RESULTS

Table 1. Frequency distribution of respondents based on Demographics

Demographic characteristics	n	%
Age Group		
≤20	8	21.1
21-25	6	15.8
26-30	9	23.7
31-35	10	26.3
≥36	5	13.2
Total	38	100
Education level		
Primary school	5	13.2
Junior high school	7	18.4
High school	22	59.9
Diploma/PT	4	10.5
Total	38	100
Occupation		
Midwife	1	2.6
Nurse	1	2.6
Teacher	2	5.3
Contract/cs	1	2.6
HOUSEWIFE	33	86.8
Total	38	100
Never	47	83,9
Total	56	100,0

Source: Primary data, 2025

Table 1 shows that the age of most pregnant women at the age of 31-35 years is 26.3%, in addition to high school education, there are more, namely 59.9%. Then in the characteristics of the most dominant occupation as a housewife, which is 86.8%. So with the frequency based on these demographics, it can be concluded that the knowledge and attitudes of pregnant women are low.



Table 2 shows that the Human Development Cadres (KPM) in the Mondokan Puskesmas working area with the most categories are 30-40 years old, the education level shows that all KPM have a high school education level and for the length of work most have worked for 2 years. Based on the characteristics of KPM in the Mondokan Puskesmas working area, KPM knowledge needs to be improved better related to health problems in the community, so researchers provide knowledge related to green law theory and innovation diffusion theory.

Based on table 3, it can be seen that the level of knowledge of pregnant women in trimester I and II in the *pre-test* was in the sufficient category as many as 4 pregnant women (10.5%) while pregnant women with a poor level of knowledge were 34 pregnant women (89.5%). After the assistance, the level of knowledge of pregnant women in trimester I and II has increased. This can be seen in the first post-test results of pregnant women with good knowledge category as many as 11 people (28.9%), and the moderate category to 25 people (65.85%). In the second and third *post-test* results, there was an increase in the number of respondents with good knowledge category, which was (89.5%). In general, the level of knowledge of respondents has increased after receiving assistance.

The attitude in table 4 shows that the *pre-test* results before treatment / assistance, the attitude of pregnant women towards stunting prevention efforts is in the good category as many as 10 pregnant women (26.3%) and in the bad category as many as 28 pregnant women (73.7%). The attitude of pregnant women changed after the first assistance with the results of the first *post-test*, 34

pregnant women (89.5%) were in the good category and 4 pregnant women (10.5%) were in the bad category. The results of the second *post-test* and the third *post-test* also showed significant changes in attitude, namely 37 pregnant women (97.4%) and 38 pregnant women (100%) in the good category. In general, the respondents' attitudes have changed/improved after the assistance.

Table 5 shows the results of statistical tests on knowledge variables at pretest 1-post test 1 to pretest 3-post test 3 $p=0.000>0.05$ from these results indicate that there is a relationship between KPM and Knowledge. Then on the attitude variable at pretest 1-post test 1 to pretest 3-posttest 3 $p=0.000>0.05$ from these results it can be concluded that there is a relationship between KPM and attitude, so that these results show that H_0 is rejected, which can be concluded between before and after the intervention there is a significant relationship between the intervention of human development cadre assistance (KPM) on knowledge and attitudes to prevent stunting in first and second trimester pregnant women in Sragen.

DISCUSSION

The knowledge of pregnant women before the KPM assistance was mostly in the category of less knowledge, after the first assistance by KPM, experienced an increase in the category of enough. In the third assistance, the level of knowledge of pregnant women in trimester I and II was mostly in the good category. The results in this study are $p=0.000<0.05$, meaning that there is an effect of KPM assistance on the knowledge of first and second trimester pregnant women to prevent stunting.



Table 2. Characteristics of Human Development Cadres in the Mondokan Health Centre Working Area

Initial s	Age (year)	Education Last education	Length of service (years)	Area/Location of Assistance
VSK	33	SMA	2	Sono Village
CHD	42	SMA	3	Tempelrejo
MAE	40	SMA	3	Trombol
HBT	36	SMA	2	Pare
RRG	35	SMA	2	Jetaksari
FPW	41	SMA	2	Kedawung
MSM	36	SMA	2	Jambangan

Source: Secondary Data, 2025

Table 3. Frequency Distributions of Respondents' Knowledge Level in Stunting Prevention in the Mondokan Health Centre Working Area

Category Knowledge	Assistance I		Assistance II		Mentoring III			
	Pre-test		Post-Test I		Post-test II		Post-test III	
	n	%	n	%	n	%	n	%
Good	0		11	28.9	34	89.5	36	89.5
Enough	4	10.5	25	65.8	4	10.5	2	5.3
Less	34	89.5	2	5.3	0	0	0	0
Total	38	100	38	100	38	100	38	100

Source: Primary Data, 2025

Table 4. Frequency Distributions of Respondents' Attitude Levels in Stunting Prevention in the Mondokan Health Centre Working Area

Category Attitude	Assistance I		Assistance II		Mentoring III			
	Pre-test		Post-test I		Post-test II		Post-test III	
	n	%	n	%	n	%	n	%
Good	10	26.3	34	89.5	37	97.4	38	100
Less	28	73.7	4	10.5	1	2.6	0	0
Total	38	100	38	100	38	100	38	100

Source: Primary Data, 2025

Table 5. Friedman Test of Respondents' Knowledge and Attitude Variables Before and After Stunting Prevention Assistance in the Mondokan Puskesmas Working Area

Variables	Measurement	P-value
Knowledge	Pre test	0.001
	Pre test 1-post test 1	0.001
	Post test 2-post test 2	0.003
	Post test 2-post test 2	0.000
Attitude	Pre test	0.000
	Post test 1-post test 1	0.001
	Post test 2-post test 2	0.000
	Post test 3-post test 3	0.000



Source: Primary Data, 2025

The results of this study are in accordance with research conducted in Kesugian Cilacap that cadre assistance affects the success of breastfeeding mothers in exclusive breastfeeding.¹⁰ It is also supported by previous researchers explaining that nutrition education conducted by cadres can increase the knowledge of pregnant women, breastfeeding mothers and mothers of infants under five in efforts to prevent stunting.¹¹

The increase in knowledge of first and second trimester pregnant women is further supported by the theory that knowledge is curiosity that occurs after the hearing process. This statement can be said that the knowledge of pregnant women has increased due to curiosity about the explanation or education about stunting, the question and answer process or discussion given by KPM during the mentoring process.¹² Before being given the intervention, respondents were given a pre-test first to find out the knowledge of pregnant women, after the pre-test the dominant respondent's knowledge was still low and then after being given an educational intervention by KPM, there were 89.5%.

Then the KPM provided education to respondents related to stunting prevention, then the respondents were carried out post test-pre test 1, namely the respondents' knowledge increased where the most dominant respondents in the moderate knowledge category were 65.8%, until the post test-pre test 3 respondents' knowledge increased significantly, namely post-pre 2 and 3 respondents, the most dominant respondents' knowledge was good at 89.5%. The intervention

was given for 3 consecutive days because the more often education is given by KPM to pregnant women, the respondent's memory increases so that knowledge increases.

This is also in accordance with previous research explaining that mentoring activities carried out by cadres can improve pregnant women's knowledge and *self-care* behaviour of pregnancy nutrition management.¹⁴ This is related to the culture of pregnant women in Sragen who like to consume junk food so that this KPM is very important in educating pregnancy nutrition management.

Previous research explained that through assistance to 30 mothers of infants showed an increase in the average score of maternal knowledge about fulfilling infant nutrition, maternal actions were still the focus of assistance.¹⁵

The attitude of pregnant women in the working area of Puskesmas Mondokan, Sragen Regency, has changed. The results showed that in the initial test (pre-test) there was an attitude of pregnant women with a poor category of 73.7%, but the attitude of pregnant women changed after the first assistance was carried out, namely an increase in the attitude of respondents from the poor category to the good category. The attitude of pregnant women continues to increase with the good category, seen in the results of the second and third assistance post-test, namely there are 89.5% and 100% in the 3rd post-test in the good category.

The p-value on the attitude of first and second trimester pregnant women in preventing stunting is $p=0.000$, meaning that there is an effect of



assistance carried out by KPM on the attitude of first and second trimester pregnant women in the Mondokan puskesmas working area in preventing stunting because the $p\text{-value} < 0.05$. This is in line with previous research explaining that the mother's positive attitude due to the good knowledge that the mother has about stunting, the better her behaviour in preventing stunting.¹⁶ The statement is also clarified by diamonds saying that after being given education about preventing stunting the mother's attitude has increased, namely becoming good.¹⁷

In accordance with previous research, it is said that someone who has a good attitude will definitely not take negative actions related to health.¹⁸ Attitude is a reaction or response that is still closed from a person to a stimulus or object that involves a person's opinion and emotional factors, besides that attitude also involves thoughts, feelings and attention.¹⁹

In line with previous research, it explains that attitudes are influenced by thoughts, beliefs, and feelings, besides that it is also influenced by a person's tendency to act, so that people who have good knowledge will have a good attitude so as to produce positive behaviour.²⁰

In accordance with TPB theory, it explains that factors that influence a person's attitude are influenced by subjective norms and one's perceptions. So that the existence of KPM can change the perception of pregnant women so that the attitude of pregnant women becomes good or positive.²¹

The success of the intervention was because researchers always evaluated KPM in providing education to pregnant women and researchers always accompanied KPM.

CONCLUSION AND SUGGESTIONS

The conclusion of this study is that there is an effect of Human Development Cadre (KPM) assistance on the knowledge and attitudes of first and second trimester pregnant women in the working area of the Mondokan Health Centre, Sragen Regency in preventing stunting. Increase the capacity of Human Development Cadres (KPM), especially stunting prevention efforts both at the sub-district and health centre levels.

It is recommended to the health centre that the annual Activity Implementation Plan at the health centre level prioritises prevention, especially prevention of stunting at 1000 HPK by not neglecting case handling efforts. Suggestions to further researchers to be able to develop this KPM with other innovations so that the media used in promotion becomes more attractive.

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CONFLICT OF INTEREST

The authors declare that there are no conflicts of interest that could affect the results or interpretation of this study.

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