Health Believe Model of Growth Monitoring to Prevent Child Stunting by Mothers in the Pregnancy Classroom

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Abstract. The rapid growth and development in the first 1,000 days of life makes monitoring children's growth and development very important at this age. Monitoring growth and development is expected to always be a priority for parents, especially mothers, from pregnancy to the age of 2 years. The problem of stunting is currently a global issue as well as in Indonesia. Growth monitoring can help monitor stunting conditions. The purpose of this study was to determine the health belief model analysis related to growth and development monitoring to prevent stunting in children by mothers in pregnancy classes. The method used was descriptive quantitative. The sample selection was carried out using a purpusive sampling technique at the Depok III Sleman Health Center in May 2023. The sample of this study amounted to 17 respondents. The results of the study stated that most respondents perceived stunting as not vulnerable to children by 65%, perceived seriousness of stunting by 53%, perceived benefits of preventing stunting were considered not useful by 65%, perceived obstacles were mostly no obstacles by 53%, the majority of cues to action were encouraged to act to prevent stunting by 59%, and most were confident regarding stunting prevention by 53%. Perceptions that are still not optimal can be caused by knowledge that is not optimal. So it is necessary to strengthen monitoring of child growth and development in pregnant women's classes, so that preparation when children grow can be more optimal.

Keywords: Health Believe Model, Growth Monitoring, Prevent Chlid Stunting, Mothers, Pregnant Classroom.

1. Introduction

The first 1,000 days of life are calculated from the moment of fertilization in the mother's womb until the child is 2 years old. By the age of 2, a child's height has reached half the height of an adult and their brain development has reached 80% of the adult brain [1]. The rapid growth and development in the first 1,000 days of life makes monitoring child growth and development very important at this age. The problem of stunting has become a global

issue as well as in Indonesia [2]. Growth monitoring can help monitor stunting conditions [3].

Based on the prevalence of stunting in Indonesia in 2020 of 27.67%, it is 24.1%, whereas the 2020 target is 24.1% [4]. Evaluation of stunting in 2022 at 21.6% [5]. In Yogyakarta has a stunting rate of 16.4% [6]. Stunting is a growth disorder problem that will interfere with development. So, parents must monitor the growth and development of their children, especially at the age of less than 2 years. Growth and development monitoring is an activity to find early growth deviations (poor nutritional status, short children), developmental deviations (late speech), and mental-emotional deviations (concentration disorders and hyperactivity) [7]. Growth and development monitoring aims to determine the growth and development of children and find early growth and development disorders so that they can be followed up immediately for better results. Early monitoring can be done when the child is in the womb [8].

Growth screening is done by weighing, measuring length/height and head circumference. The data is then plotted onto the age- and sex-appropriate growth curve in the child health book. Meanwhile, developmental screening can be done by direct observation of infants/children by health workers and also using questionnaires answered by parents or using the Maternal and Child Health Book. Screening/monitoring is conducted on all children aged 0-6 years (by health workers at the Public health center level), all infants/children at high risk (by pediatricians in hospitals) [9] [10].

The behavioral process begins with the perception of an individual. Perception in the health belief model theory is developed by looking at 6 components of the formation of a perception, namely perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy [11] [12], [13].

Midwives have competence in providing care to mothers and children during the 1000 HPK (First Day of Life). Public health center Depok III is one of the midwifery services that provides comprehensive care related to maternal and child health. This study aims to analyze the health believe model related to growth and development monitoring to prevent stunting in children by mothers in the pregnant class at Public health center Depok III Sleman. It is hoped that with this research, midwives will understand the process of forming child growth monitoring behavior through the health belief model theory.

2.   Tools and Method

The method used is descriptive quantitative. The data collection method in this study uses survey techniques [14]. The population in this study were pregnant women who carried out ANC (Antenatal Care) at the Depok III Health Center. The research subjects used inclusion criteria, namely mothers who have had children with a maximum of Gravida 2 and come to

pregnancy classes. The sampling technique used purposive sampling, the number of research subjects was 17 people. The tool used was a closed questionnaire. Questionnaire to assess the health belief model of monitoring child growth and development to prevent stunting. The questionnaire has been tested for validity and reliability. The questionnaire about the Health Believe Model (HBM) has 20 numbers and is declared valid, with the number r count> from r table (0.482), and reliable with the number r count (0.704) > r table (0.482). The questionnaire is considered valid and reliable, so it is suitable for research use.

3.   Term and Discussion

The research was conducted on July 5-6, 2023 at the Depok III Health Center through pregnant women's classes. The following are the results of the research implementation:

3.1.   Research Results

The results of the study consist of an explanation of the characteristics of the respondents, an explanation of the health belief model which consists of 6 parts.

Respondent Characteristics

Respondent characteristics consist of age, pregnancy, education, and occupation, as follows.

Table 1. Respondent Characteristics

No	Characteristics		n=17	%
1	Age	20-35 tahun	15	88%
		>35 tahun	2	12%
2	Pregnancy History	Primigravida	8	47%
		Multigravida	9	53%
3	Education	Junior High School	3	18%
		Senior High School	7	41%
		Diploma	2	12%
		Bachelor degree	4	24%
		Master degree	1	6%
4	Jobs	Housewife	10	59%
		Private employee	4	24%
		Self-employed	2	12%
		Civil service	1	6%
	Totally		17	100%

Table 1 states that the majority of respondents were of reproductive age at 88%, most were more than 1 pregnancy or multigravida at 53%, most respondents had a high school education at 41%, and the majority of respondents' jobs were housewives, at 59%.

Health Believe Model

The health belief model consists of 6 components, namely: perceived susceptibility, perceived seriousness, perceived benefits, perceived barriers, cues to action, and self-belief, with the following explanation:

Table 2. Health Believe Model (HBM)

No	HBM		n=17	%
1	Perceived Vulnerability	Not Vulnerable	11	65%
		Vulnerable	6	35%
2	Perceived seriousness	Not Serious	8	47%
		Serious	9	53%
3	Perceived benefits	Not Helpful	11	65%
		Helpful	6	35%
4	Perception of barriers	No Obstacles	9	53%
		Obstacles	8	47%
5	Cue action	No Action	7	41%
		Driven to Action	10	59%
6	Self-confidence	Not Sure	8	47%
		Sure	9	53%
		Totally	17	100%

Table 2 states that most respondents mostly perceive that stunting is not vulnerable to children by 65%, the perception of the seriousness of stunting is mostly considered serious by 53%, the perception of the benefits of preventing stunting is considered not useful by 65%, the perception of obstacles is mostly no obstacles by 53%, the majority of cues to action are encouraged to act to prevent stunting by 59%, and most are confident regarding stunting prevention by 53%.

3.2.   Research Discussion

Caturtunggal sub-district is included in Depok sub-district, Sleman regency, Yogyakarta Special Region. Caturtunggal itself is included in the working area of Depok III Community Health Center, which is located in the Sleman region bordering the city of Yogyakarta. The distance to the provincial capital is 5.5 km, so most of it is a very strategic suburban area [15]. With a very strategic area, it can be said that this area is in an urban area.

Respondents mostly have good education and reproductive age. With education and reproductive age, respondents are expected to have good knowledge, so that they are able

to have the right perceptions and behaviors for their children. Respondents' jobs are also mostly housewives, so they have plenty of time to get information related to child growth and development. Respondents also mostly have a history of previous pregnancies, so they have sufficient experience for the next pregnancy.

Pregnant women are mostly in their reproductive age, which is 20-35 years old. Reproductive age can be said to be a young age, so it is easy to get new knowledge. However, there is a study in Korea that says, at the reproductive age of 19-45 years old is sick, it turns out that out of 270 pregnant women at reproductive age, half have poor knowledge [16].

A second pregnancy is a second experience, so it is expected that the mother has more experience. This can be seen from the majority of mothers who are pregnant with their second child. Having a job, it is expected to be able to provide more experience and information due to the scope of its work space. While mothers who work at home as housewives have flexible time to get information. Most of the mothers had a high level of education, namely stratum 1. Confirmed by a study in Turkey, that out of 743 pregnant women respondents, working mothers had higher scores on the pretest than non-working mothers [17].

Higher education is expected to provide higher knowledge for mothers. It was seen in a study on nutrition during pregnancy in Turkey, that those with higher education had higher pretest scores than those with primary school education [17].

Of these characteristics, there is no significant impact on the perception of growth and development monitoring and behavior on growth and development monitoring. Seen in the health belief model related to the perception of monitoring children's growth and development, most choose monitoring children's growth and development is considered not vulnerable, not useful. But still consider that this problem is seriously done, even encouraged to act if there is a problem. With the belief that their children will be fine. Meanwhile, when viewed from the behavior of monitoring child growth and development, most respondents said that it was not good.

Pregnancy classes are expected to bring good effects to mothers, but there are conditions where there are perceptions that are still not significantly expected. It can be seen that in the health belief model, there are 3 components that are positively higher, but there are still perceptions that are negatively lower, namely perceived vulnerability, perceived benefits, and perceived barriers. This also corroborates a study in Iran on 60 pregnant women who were divided into two, given treatment and as controls related to maternal skills, attitudes, and skills, stating that maternal knowledge in the second and third trimester was significantly higher in the intervention group compared to the control group. However, the education program had no effect on maternal attitudes and there was no difference between the attitudes of the two intervention and control groups. In contrast, education had a positive

effect on maternal practices and a significant difference was revealed between the practices of the two groups [18].

Pregnancy classes can have a good impact on the gathering of pregnant women with similar or different problems. They have a goal that their pregnancy can go well, so that labor and postpartum are smooth as well as being able to breastfeed well. The effect of participating in pregnancy classes was also studied in Banyuwangi, where participation in pregnant women's classes reduced the risk of pregnancy anemia [19]. Therefore, it is very important to empower pregnant women so that they fully understand their needs which will affect their health behavior, whether in the form of pregnancy classes or not. In accordance with a study conducted in Yogyakarta, empowering pregnant women has a significant positive effect on the behavior of pregnant women [20].

Pregnant women who live in cities, with high education, most of which work at home (more time), have a tendency to have growth and development problems during pregnancy that lead to stunting are not considered vulnerable, even the perception of uselessness is quite major, and considers that it is not an obstacle that the growth and development of their children will be disrupted. However, the majority of pregnant women already have serious thoughts that child development is very important to pay attention to, even have cues to act if needed, and have beliefs related to monitoring growth and development related to stunting.

4.   Conclusion

Perceptions that are still not optimal can be caused by knowledge that is not optimal. So it is necessary to strengthen monitoring of child growth and development in pregnant women's classes, so that preparation when children grow can be more optimal. Midwives can make this research as a basic material, that even with high educational conditions, it does not necessarily provide good knowledge and health perceptions, so education can always be provided for pregnant women in pregnant women's classes.

Authors' Contributions

All authors were involved in the research and article development with agreed tasks. Here we explain the authors' contributions to this article: conceptualizing the research from the beginning and conducting the final approval of the revision to be published were the tasks of TNYAA, while data collection, data analysis and interpretation were carried out by NWU, and article preparation and critical revision of the article by PWU.

Acknowledgments

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