



Implementation of UMKM based on Participation, Innovation And Digitalization In Achieving SDG's Through Ced Prevention at PMB Sarfina Br Sembiring 2023

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ABSTRACT

In dealing with the complex problems of Chronic Energy Deficiency or CED, lecturers and students of STIKes Mitra Husada Medan through grants from the Partnership-Based UMKM Development program produce PMT (Additional Food Packages) nutritious food Green Bean Cookies and Peanut Honey by utilizing the potential of local food and education pattern consumption. Midwife's independent practice Sarfina as place health services where the reach of this clinic business is expected to become wider with the implementation of innovation, digitalization and participation in the prevention of CED through technology in the service process health. This is research is an intervention study with a cross sectional design. Participants are prospective brides, pregnant women and postpartum mothers who meet the inclusion and exclusion criteria. Retrieval and collection of research data was carried out using the probability purposive sampling method. A total of 82 participants took part in study This. This research was conducted at the PMB Sarfina Br Sembiring clinic in November-December 2023. Results & Conclusions from each of the 10 respondents or 33.3% of prospective brides, pregnant and postpartum women, there is an influence of participation, namely increasing the knowledge of prospective brides and grooms 28%, pregnant women 30% and postpartum 12%. Meanwhile, product innovation shows an increase in the weight of prospective brides, pregnant and postpartum women, but there is no increase in arm circumference and the influence of Shopee application technology and other applications seems that the average knowledge of health shop partners is 31.6% less compared to shopee and other applications.

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INTRODUCTION

According to Riskesdas, in 2018, the highest prevalence of risk of chronic energy deficiency (CED) in women of childbearing age is experienced by women aged 15 - 19 years, reaching 36.3% of malnutrition problems caused by direct causes, main problems at the household level which influence nutritional status in women (Riset Dinas Kesehatan 2018). With pregnancy outcomes and the health and survival of the mother and child in the future. In Indonesia, nationally, the prevalence of CED in female women (aged 15 - 19 years) tends to increase from 2018 by 33.5% and in 2020 by 36.3%. Prevalence of CED in non-pregnant women aged 15 - 19 years (Untung and Syayadi 2021).

In North Sumatra in 2019, the Community Health Center in carrying out women's health activities showed that there were 601 community health centers, only 357 community health centers implemented Caring Health Services for Women (PKPR), namely 59.40%. The three districts/cities with the most community health centers provided women's health services, namely ; Deli Serdang has 34 health centers (100%), Mandailing Natal has 26 health centers (100%) and Serdang Bedagai has 20 health centers (100%). Meanwhile, there are districts/cities where there are no community health centers that provide women's health services, namely Asahan , South Nias , Pakpak Bharat, North Nias , Gunung Sitoli (Jessi Gustina et al. 2023).

According to the Law of the Republic of Indonesia Number 4 of 2019 concerning Midwifery, Article 49 Letter A, the midwife's authority to provide midwifery care during the pre-pregnancy period includes, among other things, providing communication, information and health education to women from the time they are pregnant until before pregnancy in the context of planning pregnancy, birth planning, and preparation for parenthood (Undang-Undang RI 2019).

In accordance with the KEPMENKES Law 320 of 2020 concerning professional standards for midwives regarding the scope of midwifery care for women, one of which is regarding reduced appetite and obesity which can cause Chronic Energy Deficiency or CED, midwives have a level of ability 1 (knows), namely being able to master theoretical knowledge that supports the midwife's competence so that she can explain to clients and their families, colleagues, and other professions about the principles, objectives, procedures and risks that may arise in Health Services (Niland et al. 2020).

Chronic Energy Deficiency or often heard of as KEK is a condition of a person who experiences a nutritional imbalance in the body, characterized by a woman's persistent lack of appetite, weight loss resulting in health problems for women. (Textbook of Disadvantages Energy Chronicle (Fakhriyah, S.Si.T. et al. 2021)

CED is a disease that is often experienced by women of childbearing age, including prospective brides. CED describes inadequate energy and protein intake. One indicator to detect the risk of CED and nutritional status of WUS is to carry out anthropometric measurements, namely measuring the upper arm circumference (LILA) on arms that do not often carry out heavy movement activities. The threshold value used in Indonesia is a mean LILA value <23.5 cm which indicates that there is a risk of chronic energy deficiency in the group of women of childbearing age (Angraini 2018).

Nutritional fulfillment can be met with additional food. The characteristic of peanut honey is that it contains red beans and honey of red beans and honey which contains 2% folic acid, 9% protein, 57% carbohydrates, 0.2% calcium, 4% fiber in a serving size of 20g packaging.

Red beans are a food that is high in iron (Fe) and high protein content, according to research on the Effect of Adding Red Bean Flour on Organoleptic Properties, Nutritional Value, and Testing the Acceptability of Camerungu Rolled Sponge Cake in Young Women. There is a significant effect of adding red bean flour to the food made ($p < 0.005$) because the addition of red beans contains high energy and protein to reduce CED (Azmi et al. 2021).

Honey contains minerals including; sulfur (S), calcium (Ca), copper (Cu), manganese (Mn), iron (Fe), phosphorus (P), chlorine (Cl), potassium (K), magnesium (Mg), iodine (I), zinc (Zn), silicon (Si), sodium (Na), molybdenum (Mo) and aluminum (Al) while potassium in honey contains vitamins E, vitamin C and vitamins B₁, B₆ and folic acid. According to Nur Islamiyah's research, 2017 The Effect of Honey on Hemoglobin Levels of Class normal hemoglobin levels which affect the woman's BB and LILA (Islamiyah 2017).

Green beans contain many benefits, one of which is to prevent and reduce CED in pregnant women, with its high protein content it can help meet the needs of pregnant women during pregnancy. As a food source of protein, this plant is in the most important position after soybeans and peanuts in Indonesia. This plant is widely used as the main processed ingredient, food or drink mixture, cosmetics and medicines by both household and industrial consumers. Mung bean seeds are rich in vitamins A, B, C, E, K, folate, zinc, phosphorus, potassium, iron, manganese, magnesium and selenium (Widhya Hartiwi, Wijana, and Rindang Dwiyani 2017).

Based on the background above, the author is interested in conducting research with the title "Implementation of UMKM Based on Participation, Innovation and Digitalization In achieving the SDGs target, the national prevalence of CED pregnant women fell by 5% through Preventing CED at PMB Sarfina Br Sembiring in 2023" which aims to prevent Chronic Energy Deficiency at healthy reproductive age. Through the implementation of this activity, it is hoped that participation, innovation, and technology will influence the reduction of CED among prospective brides and grooms, pregnant women, and anticipating the problem of malnutrition among postpartum mothers.

RESEARCH METHOD

This research is an intervention study with a cross sectional design. The research location was carried out at the PMB Sarfina Br Sembiring clinic in November 2023 – December 2023. This research data was obtained by filling out a questionnaire in the form of a Google Form. This research involved 82 participants using sampling techniques for prospective brides, pregnant women and postpartum women who met the inclusion and exclusion criteria. The questionnaire is divided into three parts consisting of assessing the level of knowledge regarding chronic energy deficiency, the impact of product innovation on increasing body weight for consumption of Green Bean and Honey Bean Cakes as well as the level of knowledge regarding I-commerce marketing of STIKes, Mitra Huasa Medan UMKM Products which are useful in preventing CED .

The calculated data is presented in a table using statistical software analysis, then descriptive analysis is carried out to analyze the characteristics of the research sample which includes the level of knowledge and participation of prospective brides, pregnant women and postpartum mothers in consuming the innovative green bean cookies and peanut honey products.

RESULTS

This research was conducted by the PMB Sarfina Br Sembiring clinic in November 2023– December 2023. This research data was obtained by filling in pretest and posttest questionnaires in the form of Google forms. This research involved 82 participants consisting of 16 prospective brides and grooms, 27 pregnant women and 39 postpartum women in Polonia subdistrict. Retrieval and collection of research data was carried out using the probability purposive sampling method by taking 10 people from each cluster.

Table 1. General description of respondents

Category	n (Person)	n%
Future bride and groom	10	30 (33.3)
Pregnant mother	10	30 (33.3)
Postpartum Mother	10	30 (33.3)

Table 2. Description of Knowledge after being given communication, information and health education to Prevent the Occurrence of CED

Category	Knowledge level	
	Before n%	After n%
Future bride and groom	52	80
Pregnant mother	60	90
Postpartum Mother	60	72

Table 3. Description of the Effect of Consuming Green Bean and Honey Nut Cookies for 7 Days on the Weight Gain of Prospective Brides, Pregnant and Postpartum Women

Category	Regular consumption of green beans for 7 days	
	Body Weight n%	Arm Circumference n%
Future bride and groom	100	0
Pregnant mother	100	0
Postpartum Mother	100	0

Category	Regular consumption of peanut honey for 7 days	
	Body Weight n%	Arm Circumference n%
Future bride and groom	100	0
Pregnant mother	100	0
Postpartum Mother	100	0

Table 4. Mitra Huasa Medan UMKM products through Mitra Health Store (MaS), Shopee and applications other .

Category	Knowledge Level %	
	Health Store Partners	Shopee, Other Apks
Future bride and groom	30	70
Pregnant mother	35	65
Postpartum Mother	30	70

DISCUSSIONS

Table 1 explains the general description of 10 respondents each or 33.3% of prospective brides, pregnant and postpartum women. The occurrence of CED in pregnant women is caused by various factors. Harismayanti and Syukur's research in 2021 shows that the CED problem is influenced by several factors, namely consumption patterns, parity, nutritional intake, economics, knowledge, consumption of additional food, and consumption of FE tablets. Apart from that, there are factors

that greatly influence the incidence of CED, namely the consumption patterns of pregnant women and the mother's weight (BB) before pregnancy (Syahid et al. 2023).

So the targets for this research are prospective brides, pregnant and postpartum women. Because the main cause of CED in pregnant women is that before pregnancy, mothers experience a lack of energy, because the needs of pregnant people are higher than mothers who are not pregnant. Pregnancy causes an increase in energy metabolism, therefore the need for energy and other nutrients increases during pregnancy.

This is also supported by As'Ad, 2002. KEK mothers are mothers who have a tendency to suffer from KEK. To ensure that a mother is at risk of CED, the mother needs to have her LILA and Body Mass Index (BMI) checked before becoming pregnant. Mothers who have a LILA size < 17.0 are at risk of developing CED (Bloom and Reenen 2011).

Table 2. Review of Knowledge after being provided with preventive communication, information and health education. At CED there was an increase in knowledge of prospective brides and grooms by 28%, pregnant women by 30% and postpartum women by 12%. Of the third cluster, postpartum mothers themselves had the least increase in knowledge because the postpartum period is a time of stress, and in practice, most postpartum mothers lack focus during material exposure because their babies are crying.

This is also appropriate with research conducted by Muliawati in 2012 in munifah 2023, shows that on the mother pregnant with the majority KEK parity Mother already pregnant Once give birth 2-4 times. This matter happen Because Mother not enough care will nutrients consumed mother who has several times pregnant and giving birth , then possibility Lots will found circumstances health impaired (anemia, lack nutrition) (Munifah, Rohmatin, and Hafshawaty Zainul Hasan Probolinggo 2023).

As for those who explain that the success factors in implementing education are influenced by the methods and media used when the education takes place. Methods and media that vary according to technological developments are assumed to make the information conveyed to prospective brides, pregnant and postpartum women more interesting and easier to receive and understand in applying the information conveyed (Anon n.d.).

Figure 3. Overview of influence innovation which is Green Bean and Peanut Honey products increase body weight in catin , pregnancy and postpartum . Result of giving green bean cookies and peanut honey for 7 days was found results enhancement candidate's weight bride , mother pregnancy and postpartum However No There is increase circumference arm.

This matter in line with research carried out by Miskah is known that of 73 respondents show from source information power health that has increase normal weight as many as 16 people (47.1) and the majority increase excess weight as many as 18 people (52.9). Non- powered health that has increase 21 people (53.8) had normal weight and the majority increase excess weight as many as 15 people (38.5). From the results Data analysis using the Chi-Square test is known that No there is connection between source information with increase mother 's weight during pregnancy with p value = 0.163 > 0.05 (Syahid et al. 2023).

However matter This No in accordance with Diny 2012, research LiLA , height , and age have sufficient contribution Good namely 50.5% in explain BMI. That means , every increase LiLA by 1 cm will increase The BMI value is 0.815 kg/m². Because each cluster has increase body weight 0.5-0.8 kg however no There is increase circumference arm matter This may be influenced by the activities carried out every the day (Ariyani, Achadi, and Irawati 2012).

Figure 4. Level overview knowledge regarding I-commerce marketing Mitra Huasa Medan STIKes UMKM products through Mitra Health Store (MaS), Shopee and applications other seems average knowledge health store partners 31,6% more A little compared to shopee and applications other . This is the result Because application the it has been installed previously whereas for Mitra Health Store (MaS) must order via the web and delivery No visible in the application .

matter This is also supported by Muhamad Fadhil, 2019 with data from dailysocial where in 2018 online buyers are leaving basket shop online before finish payment (shopping cart abandonment) is as much as 69%. Shopping cart abandonment happen during the online shopping process , where consumer enter to a website, browsing web pages For choose goods , put interesting stuff to in basket shop and compare items in basket shopping the until Finally customer do payment or leave basket shopping the . Shopping cart abandonment potential cause decline e-commerce transactions as targeted by the government . Lots of it online shoppers are leaving basket shopping in Indonesia is Because various reason among them namely : (1) must make account , (2) long-winded forms , (3) lack of testimony , (4) no ensure guarantee security , (5) the website is not mobile friendly (Gustaman and Dewi 2019).

CONCLUSION

There is an influence of participation where there is an increase in knowledge, innovation in green bean cake and bean honey which increases weight gain for prospective brides, pregnant women and postpartum women. However, the level of knowledge is lacking in the use of technology, especially the Heath Store (Mas) participant partner website which mostly uses the Shopee application and other parties who have installed the participants' cellphones.

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