

Empowering Pregnant Women with Health Promotion Strategies to Prevent Chronic Energy Deficiency (CED): Systematic Review

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ABSTRACT

Background: Pregnant women's nutrition is very important for the growth and development of the fetus. Nutrition for pregnant women is very important for the development and growth of the fetus. The application of the concept of a health promotion model strategy as the right strategy to improve and prevent CED is urgently needed.

Purpose: To find out changes in the behavior of empowering pregnant women with a strategic model of a health promotion approach to prevent CED.

Method: The method used systematic review. Articles were searched using keywords that had been determined by the researcher then the articles were extracted based on inclusion and exclusion criteria. Thus, found 7 articles suitable for analysis.

Results: Changing behavior by empowering pregnant women using health promotion strategies in preventing CED has proven to be very effective. But in its application it becomes a complex thing because of the diversity of cultures in Indonesia.

Conclusion: The diversity of community characteristics can affect the application of the model of empowering pregnant women in preventing CED. Several other factors such as beliefs and environment that are understood also affect the understanding of each individual.

Keywords: empowerment of pregnant women, health promotion, prevention of KEK

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BACKGROUND

Maternal health and reducing maternal mortality remain a major concern in low- and middle-income developing countries (Stans et al., 2018). Global maternal mortality and morbidity is recognized in the SDG's sustainable improvement goals with the aim of setting a vision to change the world by 2030 covering seventeen indicators related to maternal health (Transforming our World: The 2030 Agenda for Sustainable Development : Sustainable Development Knowledge Platform, tt). Maternal nutrition is very important for the development and growth of the fetus, as well as the health of the child, throughout the life journey (Ashman et al., 2016). Healthy antenatal food intake supports fetal development thereby preventing the development of congenital malformations, premature birth and low birth weight (Koletzko et al., 2019).

Pregnancy is often considered an ideal time to increase food intake, with most opportunities in antenatal care (Wilkinson & McIntyre, 2012). Increased interest in nutrition, pregnant women's trust in health service providers, increased self-motivation to change a habit or even something that has become a cultural tradition to improve better pregnancy conditions (Fowles et al., 2012). Understanding the relationship between maternal nutrition and fetal health through social determinants requires in-depth exploration of the various factors, processes, constellations, powers, institutions and interests influencing maternal nutrition in the household, community, culture and surrounding area.(König et al., 2017). Maternal nutritional practices, access to resources and food distribution systems that are influenced by socio-economic settings, family and community culture can determine health such as anemia, malnutrition (chronic energy deficiency), and other diseases during pregnancy (Williams et al., 2012).

Indonesia is the fourth most populous country in the world administratively with 34 provinces and 420 regencies (The Republic of Indonesia health system review, tt). The under-five mortality rate decreased from 53 to 31 deaths per 1000 lives and the infant mortality rate decreased from 41 to 26 deaths per 1000 live births (World Bank Open Data, tt). However, maternal mortality is still high, ranking third in Asian countries with 210 deaths per 1,000 live births in 2010 and striking disparities still occur in various regions. For example, in East Java, it is still in the 6 provinces with the highest rate of maternal mortality in Indonesia(Bhanbhro et al., 2020).

The definition of empowerment according to(Koelen & Lindstrom, 2005)namely "empowerment is the process of people gaining mastery over their own lives, they learn to understand themselves by seeing closer support between their goals and their feelings about how to achieve those goals and learn to see between effort and results(Toomey, 2011). Central to empowerment is the idea that healthcare professionals use bottom-up strategies to help support problems that arise on their own(Bryant et al., 2019). Confusion and unclear information obtained by most pregnant women chooses to avoid foods that are rumored to be bad for pregnancy but instead it will have a bad impact on their pregnancy because they have made the wrong decision.(Bianchi et al., 2016)according to a study conducted by Bookari et al (2017) that perceptions and beliefs about pregnant food intake are still lacking and supported by Garnweidner (2013) where in the empowerment process it is not only important to involve the community in responding to issues or problems that are widely spread but involves finding appropriate solutions and actions to address them. Empowerment is about something that is sought by a person himself, not just coercion on the community itself(Tveiten & Knutsen, 2011).

Evidence-based health promotion currently provides solutions to problems and issues that are unpleasant to the wider community. Successfully integrate communication about nutrition into optimal antenatal care, eliminating perceived nutritional limitations and self-efficacy by providers and time constraints (Kiajamali et al., 2017). According to McCalman et al (2016) defines health promotion as a tool that has been measured in accordance with the theory that supports and integrates nutrition communication during pregnancy into current pregnancy practice. With better implementation of Health promotion into practice, insight into its feasibility and effectiveness is needed (McCalman et al., 2016). The literature on the feasibility and effectiveness of nutritional interventions during pregnancy has been reviewed many times but little has been discussed about the role of health promotion models for the empowerment process of preventing chronic energy deficiency during pregnancy. Therefore the application of the strategy concept of empowerment activities for pregnant women with the Health promotion model approach looks promising for success but empowerment which specifies the continuity and success of the Health promotion model as the right strategy to improve and prevent CED is still very minimal so that a deeper study is needed regarding this matter. the.

OBJECTIVE

To find out changes in the behavior of empowering pregnant women with a strategic model of a health promotion approach to prevent CED.

METHOD

Research studies in this systematic review are adjusted to the inclusion criteria of the authors as follows: (i) studies must be published as original articles, (ii) articles published at least the last 5-10 years which are references in writing, (iii) study articles use qualitative methodology or the outcome parameters reported to support the results of a systematic literature review, (iv) the contents of a study article on health promotion models on strategies for empowering pregnant women to prevent chronic energy deficiency. Whereas the exclusion criteria are aimed at articles that are not reputable, do not have clear abstracts and are not full free text, and are not in English or Indonesian.

Articles were identified by database search (Pubmed, sciendirect, googlescholar). title, abstract and keywords using search. A systematic review was carried out based on PRISMA to see the process of filtering quality and adequate articles in writing this article.

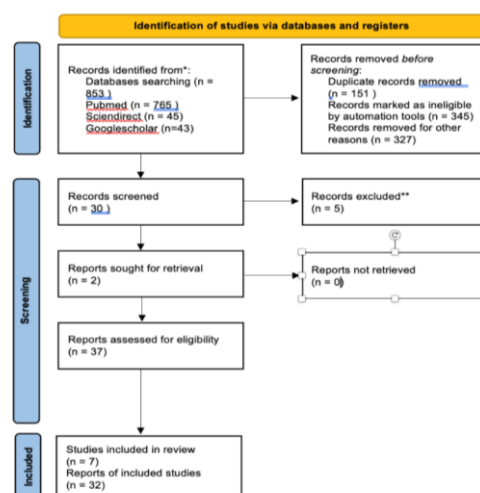


Figure 1: PRISMA flowchart of journal selection

RESULTS

A literature review was carried out and those that met the inclusion criteria were 7 article studies and used a qualitative research design. 7 articles met the inclusion criteria and were of sufficient quality after a critical appraisal assessment according to the article selection flow chart chart. The findings of this study included several countries, namely 2 from the Netherlands, 1 France, 1 North Ghana, 1 Indonesia and 2 from Australia. The research study applied qualitative methods which were sourced from various adequate studies.

Table 1: mapping of the results of the study characteristics of the articles

No	Name and Year	Country	target group	Research design	Evaluation of results
1.	(Bhanbhro et al., 2020)	Indonesia	19 Pregnant women	Qualitative	Findings on cultural themes and attitudes of support, eating patterns, attitudes of empowering pregnant women towards providing information about food intake
2.	(Dalaba et al., 2021)	northern Ghana	There are 5 groups of pregnant women participants from the age range of 18-45 years	Qualitative	The theme of the finding is the influence of beliefs and culture, wrong mindsets about food intake, the importance of empowerment, health promotion approaches from health workers
3.	(Super et al., 2021)	Wageningen, Holland	13 pregnant women with chronic energy deficiency and low socioeconomic conditions	Qualitative	The discovery of 5 perspectives, namely regarding health promotion regarding food intake, healthy food strategies, aspects of motivation and approaches to health promotion, empowerment in seeking information
4.	(Bianchi et al., 2016)	France	7 groups of pregnant women involving 40 research subjects	Qualitative	There are 2 external and internal criteria in the internal theme there is the application of eating patterns, self-empowerment regarding their weight, while

					externally there are influences from the social environment, information media, health services regarding the proper health promotion process
5.	(Bookari et al., 2017)	Australia	17 pregnant women	Qualitative	There is experience of women in seeking nutritional information for pregnant women, strategies for finding appropriate sources of nutrition for pregnant women, efforts of health service providers in carrying out health promotion approaches for the process of empowering pregnant women in meeting nutritional needs during pregnancy
6.	(Subasinghe et al., 2014)	India	17 practitioners and 17 pregnant women	Qualitative	The discovery of the empowerment and participation of health workers in the treatment of pregnant women with low nutritional status and the right health promotion practitioners to launch the empowerment indicator activities is going well
7.	(Brandstetter et al., 2014)	Australia	Pregnant women with low economic status and a state of nutritional concern	Qualitative	Treatment of empowering strategies for seeking information on healthy food, physical activity, and appropriate weight and treatment of approach models in carrying out health promotion.

DISCUSSION

After mapping according to the results of the review of article studies, the authors then determine the findings obtained and evaluate the results and carry out the categories as follows :

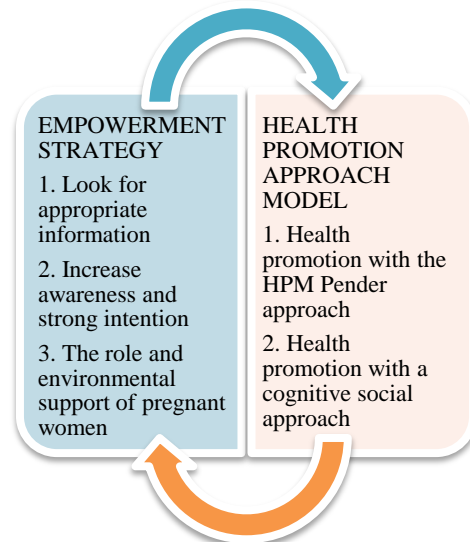


Figure 1: chart of systematic literature review results

After the mapping is done, the authors classify it based on 2 sub-themes, namely the empowerment strategy, as well as the health promotion model approach.

Empowerment strategy

Empowerment strategies are very important to show empowerment activities to pregnant women and also health workers providers or implementers to continue to improve skills for the sake of effective empowerment. According to Bianchiet et al (2016) raising awareness among pregnant women in France is very much in line with other developed countries which will increase the application of healthy eating patterns, the right means of caring for children from the womb. In accordance with the statement from Block et al (2018) regarding food welfare which has changed since empowerment was implemented due to the right health promotion approach so that positive psychological, physical, emotional and social relationships shape good character for individuals and society (Wesołowska et al., 2019). Apart from that, when seeking information, when a pregnant woman has empowered herself, she will be very voluntary in finding the right information and in accordance with what she is experiencing. Empowerment also changes the behavior of the application in actively seeking information, but there are also those who feel that they are too independent in searching. information so that there is concern about getting inappropriate sources so that it will be more dangerous for himself and also the fetus in the womb(Kiajamali et al., 2017). The role of the support of the surrounding environment such as parents, husbands and the closest community will also influence the success of the empowerment strategy. The following is a schematic generated from several reviewed journals:

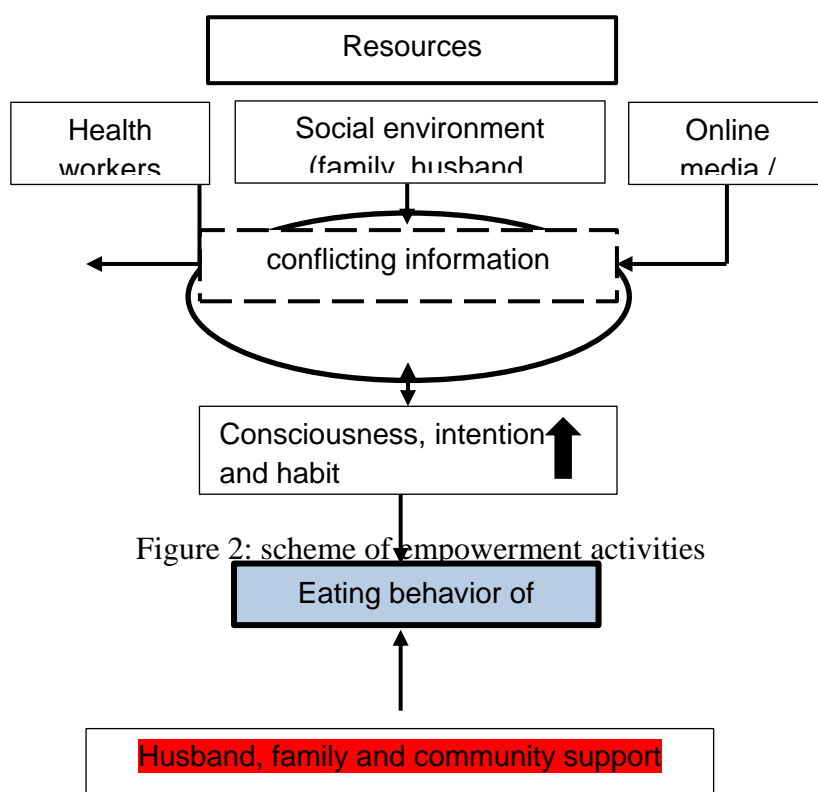


Figure 2: scheme of empowerment activities

Health promotion approach model

One method of behavior change based on knowledge and information is to promote health (health promotion). Health promotion changes patterns of human health behavior from bad to better, this is in accordance with the explanation by Mahendra et al (2019) because the process of changing behavior is related to the approach of using health promotion (Saunders et al., 2005). Khumar and Pretha (2012) state that efforts to promote health can be directed at priority health conditions, such as the process of preventing or treating pregnant women with chronic energy deficiency. In accordance with the statement from Salazar et al (2015) that health promotion is carried out to enrich and extend the life of citizens and can be done as an approach to improve something happening in certain populations (Wilkinson & McIntyre, 2012). Based on the Ottawa charter, health promotion is defined as the process of empowering people to take control and improve health to achieve physical, mental and social well-being and to be able to make changes to address environmental problems. (Soltani et al., 2017).

Several experts have provided basic theories regarding individual changes towards better and optimal health. Empowerment using the HPM approach model is effective in improving eating patterns and nutritional intake habits in pregnant women, HPM supports increasing the effect of interventions in conducting self-education, increasing education on pregnant women's knowledge so that there are positive changes (Aşcı & Rathfisch, 2016) in accordance with the statement from Pender et al (2011) that individuals will commit themselves to change an action based on perceived benefits, obstacles are overcome, and there is a change in mindset to build and continue positive behavior, namely improving nutritional intake in pregnant women who have chronic energy deficiency (Goodarzi-Khoigani et al., 2018). Theory in behavior change with a health promotion approach is needed to increase support for interventions that can be adapted at any time for each individual (Chen & Hsieh, 2021). The health promotion approach in social cognitive theory (SCT) is the main thing that

is important and can be a determinant of health promotion in changing health behavior (Zamani-Alavijeh et al., 2019). This is consistent with the results of Silveira and Motl's (2019) study regarding the effectiveness of SCT with health promotion on increasing activity in people with the disease showing that a supportive environment, social support and self-efficacy are important correlates with health promotion supported by statements from uszynski et al (2018) that self-efficacy in improving daily activities is being able to handle challenging conditions and is a major factor in overall physical activity ability because it influences goals, plans and benefits from changes in daily life activities (Stans et al., 2018).

CONCLUSION

Changing behavior by empowering pregnant women, a health promotion strategy in preventing CED, has proven to be very effective, but the implementation of the empowerment strategy program and the health promotion model approach is a complex and efficient matter due to the diversity of cultures in Indonesia and the beliefs that are understood, requiring an understanding of the various acceptances of the health system. newest society. The characteristics of the population and the implementation of empowerment programs with great benefits make health promotion intervention strategies specific and effective. Findings from the entire literature that strengthening the right health promotion model makes empowerment activities well received and supported by strategies promoting the prevention of CED can increase adherence, confidence, absorption of counseling, changes in diet and improvement in the quality of food intake. In addition, inadequate environmental factors such as poverty, lack of awareness, areas that do not care require swift and fast handling.

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