Utilization of the PPD application as a preventive effort for post partum blues

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ABSTRACT

The puerperium is a period when a mother will go through tiring days compared to the physical and psychological period of pregnancy which will further cause feelings of stress/depression. Mothers experiencing excessive stress have an impact on decreasing interest and interest in babies and the ability to care for their babies properly, not being enthusiastic about breastfeeding so that the health and development of the baby is not optimal. The novelty of this community service activity can provide education regarding the prevention of postpartum depression by using an application. This service activity was attended by posyandu cadres, couples of childbearing age (PUS), pregnant women and postpartum mothers. The purpose of this service activity is to increase public understanding of the prevention of postpartum depression, to be skilled at self-detection and its citizens about postpartum depression. The target of this activity is 40 people. The activity method is carried out twice by giving a pre test, lecture and followed by a post test by filling out a questionnaire. The evaluation was carried out with cadres by conducting interviews on their understanding of prevention of postpartum depression. The results achieved in this activity are that the community gains knowledge about postpartum depression.

KEYWORDS
Post partum blues;
application;
anxiety

1. Introduction

The postpartum period is a period when the mother will experience tiring days in dealing with pregnancy, both physically and psychologically, which in turn causes feelings of stress/depression [1]–[5]. Postpartum mothers are too stressed which can cause a decrease in interest in the baby and the inability to care for the baby optimally, not enthusiastic about breastfeeding which leads to hygiene, health and growth, the child's development becomes not optimal. Mothers who experience postpartum depression need proper support, because the role of the mother is very influential on the growth and development of children related to the role of the mother in the family. Mothers who lack social support are inevitably more likely to feel worthless and less supported by their husbands and families, so women who lack social support during the puerperium are more vulnerable to depression.

Postpartum has been widely studied by previous researchers. Association of quality of inpatient postpartum recovery with postpartum depression: A prospective observational study researched by Ben Hayoun [1]. Case 39-2022: 31 Year Old Woman with Postpartum Abdominal Pain and Fever studied by Little [6]. The Postpartum Cliff—Missed Opportunities to Promote Maternal Health in the United States was studied by Cohen [7]. Postpartum Depression Lasts Longer Than Previously Estimated by Rubin [8]. Experiences of early postpartum mothers in Shenzhen and their need for home visiting services: a qualitative exploratory study researched by Xiao [9].

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Information technology, especially the current development of computers, plays a major role in providing assistance to humans to overcome various kinds of problems in the fields of industry, trade, education, and almost all areas of human life [51]. Computers, mobile phones or other electronic devices have been widely used, especially in the health sector [52]. Current computers/machines equipped with various capabilities are able to recognize the human condition, one of which is related to health [53]. The health information system is one of the 6 building blocks or a major component in a health system [54]. Android is one of the operating systems used on cellular phones and touch screen tablet computers based on Linux [55]. The basis of the Android operating system is the Linux kernel which is open source so that the Android operating system allows developers to always create their own Android applications that can be used for various mobile devices [56]. Apart from that, the use of technology in the early detection of psychological disorders in children was carried out in his community service activities. Based on this proves that the more useful the advancement of technology today so that it can help society.

Information technology has been widely studied by previous researchers with health problems. The role of beliefs and habits in the adoption of mHealth by elderly people in Hong Kong: the health technology service acceptance (HTSA) model was researched by Liu [57]. Building Health Information Technology for Vaccination of National Institutes of Health Staff was researched by McKeeby [58]. Information and communication technologies for the improvement of cognitive function in healthy older adults: a systematic review protocol researched by Pastells-Peiró [59].

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In this community service activity, it will be discussed about an information system for postpartum mothers using Android smartphone media, it is hoped that with this mobile android it can help postpartum mothers to always know about matters related to postpartum health and reduce the occurrence of post partum blues. The solution offered as an effort to prevent postpartum depression is by providing education and explaining the use of the application to health cadres, couples of childbearing age, pregnant women and postpartum women. The need to activate health care facilities to provide supporting facilities such as counseling about the postpartum period, postpartum danger signs, abnormalities that can occur during the postpartum period, by providing posters, distribution of brochures/pamphlets.

2. Method

According to Tafal in Sukiarko, the purpose of health training in general is to change the behavior of individuals and communities in the health sector shown in Figure 1. The figure shows that this goal is to make health a valued thing in society, to help individuals to be able to independently or in groups carry out activities to achieve a healthy life. The principle of health training is not just classroom lessons, but a collection of experiences anywhere and anytime, as long as the training can affect knowledge, attitudes, and habits.

2.1. Situation Analysis

The first stage identified the location and data on the place of implementation at the Lingga Health Center and Sui Ambawang Health Center, and continued coordination with the responsible midwife at the posyandu in Lingga Village and Central Java Village, and prepared an implementation schedule.

2.2. Preparation

The executor prepares the counseling plan, designs the postpartum depression risk evaluation format, prepares evaluation questionnaires, prepares permits and records targets and participants.

2.3. Implementation

The implementation of this community service begins with distributing pre-test questionnaires about postpartum depression to posyandu cadres, couples of childbearing age (PUS), pregnant women and postpartum mothers.

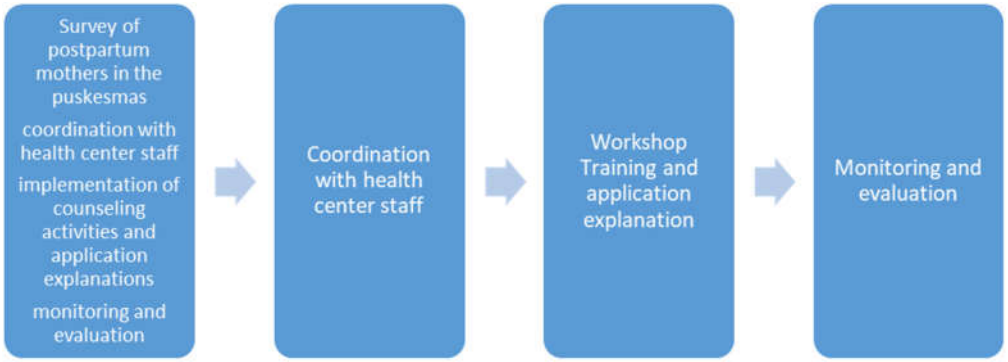

Fig. 1. Implementation of Activities

2.4. Place and time

Place of Dedication for childbirth in the working area of Arjowinangun, Malang City. Time for Community Service Activities June to July 2023.

3. Results and Discussion

Table 1. Distribution of community service participants' knowledge before and after being given education

	Pre test			Post Test		
	Mean	Median	SD	Mean	Median	SD
Education and Application explanation	8,95	8	3,7	14.2	14.5	2.6

Community empowerment is an important factor that cannot be ignored. Health empowerment in the health sector is the main objective in health promotion. The community is one of the global health promotion strategies for empowerment (empowerment) so that community empowerment is very important to do so that the community as the primary target has progress. In the community service activities that have been carried out, the results are in the form of an information system about pregnant women and children that is presented in mobile form, so that it can be used on Android smartphones. This application is an Android-based mobile application that is useful for obtaining information for postpartum mothers based on the parameters needed for each menu. In this system, users will also be given information about weekly maternal nutritional needs based on the development of postpartum mothers. In this application there are also several additional features to help postpartum mothers and children in obtaining their health information.

Postpartum depression is a form of depression experienced by mothers because at that time it is a period of transition that is quite stressful. The period after giving birth is a period when the mother has to adapt to the changes that occur within her, both physically and psychologically, as well as the social changes that are experienced due to giving birth and caring for the baby. However, not all mothers can adapt to these changes, so they experience disorders such as stress, anxiety, and even depression. Counseling education by health workers is very important to prevent postpartum depression is very important. The knowledge gained will form a person's introduction to himself with all his abilities, both his thoughts, will, and feelings. The importance of providing this counseling for postpartum mothers is so that they can pay more attention to their condition, namely having their condition checked regularly

by attending the posyandu. The incidence of post partum blues in postpartum women is a predictor of the possibility of post partum depression a few months after giving birth. This makes it possible for health workers, especially nurses and midwives, together with mothers and families to discuss alternative actions to prevent postpartum depression.

4. Conclusion

The use of technology that helps as a learning medium must be adapted to meet the needs of the postpartum mother's health information system, which is faster. Currently, there are many mobile-type applications that are able to meet the health information needs of postpartum mothers as an effort to prevent post partum blues.

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Author Contribution

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Conflict of Interest

The authors declare no conflict of interest.

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