# Management of perinatal depression by non-health specialist workers in Indonesia

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### ARTICLE INFO

# ABSTRACT

#### Article history

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#### Keywords

Perinatal depression Psychotherapy Perinatal mental health Non-health specialist workers Perinatal depression has become a public health concern because of the burden of the disease for mother and children as well as the community in large. The management of perinatal depression is needed, yet there is a low-resource of mental health specialist in Indonesia. Psychotherapy interventions by non-health specialist workers in some developing countries have shown benefits for perinatal depression. The study aims to analyze the interventions for perinatal depression by non-health specialist workers based on studies from other developing countries. The type of the study is an in-depth study using secondary data. Data were obtained from online databases, including PubMed, Global Health Cochrane Library, PsycINFO and additional search. The total number of studies found was 743, 705 studies were available for assessment after removing the duplicate, 55 abstracts were reviewed, and 42 studies included. A conceptual framework developed by the author was used to guide data collection and analysis. Psychotherapy interventions implemented in Pakistan, Turkey, China, and India were analyzed using Assessment of Applicability and Transferability criteria. The most applicable and transferable interventions for the management of perinatal depression in Indonesia were Cognitive Behavioural Therapy and participatory women group. This study indicates that interventions by non-health specialist workers could reduce the interventions gap for perinatal depression. The stakeholders are recommended to adapt the interventions into a cultural context and integrate it into existing maternal and child health program.

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#### **1. Introduction**

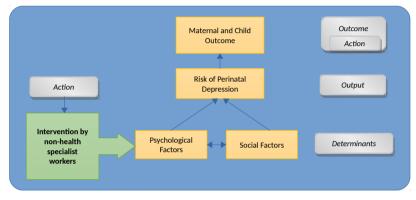
Indonesia Health Country Profile 2013 showed maternal and child health in Indonesia had indicated an improvement, but some indicators have not yet achieved the national and global target (Ministry of Health of Indonesia, 2013). Baron et al, (2016) stated neglected issue of maternal mental health might be contributing to the failure of improving maternal and child health. Globally, perinatal depression is the largest proportion of the perinatal mental health illness among women in childbearing age (Baron et al, 2016; Edwards et al, 2006; Najia and Atif, 2015). World Health Organization (WHO) reported 10% of women in developed countries have depressive syndrome during the perinatal period, while 20% of women in low-income and middle-income countries (LMIC) suffer from perinatal depression (WHO,2015). In Indonesia, the prevalence of postnatal depression was 22% with most them had mild levels of depression (Edwards et al, 2006). Meanwhile, the estimated prevalence of antenatal depression was 7.4%-20% among pregnant women (Kurniawan et al, 2013).

Perinatal depression can affect behavior, cognition and coping mechanism of mothers which have adverse health outcomes for mother and infant, such as low birth weight and malnutrition (Brittain et al, 2015). There are some intervention gaps for perinatal depression in Indonesia, including the small number of mental health specialists. Some LMICs have successfully implemented psychotherapy delivered by non-health specialist workers to overcome the intervention gap. For example, Cognitive Behaviour Therapy (CBT) in Turkey and Pakistan have shown a reduction in the perinatal depression (Rahman et al, 2008; Tezel and Gozum, 2005). This study aims to analyze the interventions for perinatal depression by non-health specialist workers based on studies from others developing countries to address perinatal depression in Indonesia.

# 2. Methods

# 2.1. Study Design

The type of study is an in-depth study which will explore different interventions for perinatal depression but not connected to a specific program in Indonesia.



**Fig. 1:** Conceptual framework for management of perinatal depression by non-health specialist workers

# 2.2. Method of Data Collection

A database search of PubMed, Global Health Cochrane Library, and PsycINFO from 2000 to 2016 was conducted to identify studies from LMIC describing interventions delivered by any non-health specialist workers. Search terms was carried out using multiple combinations of the terms using character "AND" or "OR", including perinatal depression, antenatal and postnatal depression, psychotherapy interventions, and developing countries.

The inclusion criteria consisted of interventions for perinatal depression by any non-health specialist workers in LMIC according to World Bank. The target interventions are pregnant women and/or women in the postpartum period and/or women at risk of perinatal depression. The criteria for exclusion consisted of the interventions delivered by mental health specialist workers (i.e. psychiatrist and psychiatric nurse) and the studies conducted in high-income countries.

#### 2.3. Data Extraction

The process of data selection was inspected independently by the author. The articles identified from the databases search then removed duplicates using software (Endnotes). The remaining articles was screened from the titles and abstracts based on the research questions. The full-text of the selected articles was reviewed, and some articles were excluded for explained reasons.

## 2.4. Data Analysis

The analytical tool used to analyze the interventions was Assessment of Applicability and Transferability [3]. Applicability defines as whether the interventions can be implemented in Indonesia regardless the outcome is, by considering political, social, resources (human and finance) and organizational expertise and capacity. Transferability defines as whether the interventions would be as effective as implemented in the study setting, by considering magnitude of the reach of populations and characteristics of target population. The criteria will be rated using Likert scale and stated as (--) very unfavourable; (-) favourable; ( $\pm$ ) uncertainty; (+) favourable; (++) very favourable (Wang et al, 2006).

## 3. Results

#### **3.1. Description of Studies**

The articles identified through databases searching was 743, while from additional sources was 21. There were 705 studies available for assessment after removing the duplicate, 55 abstracts were reviewed, and finally 42 studies included. This study has come up with some interventions by non-health specialist workers to reduce the psychological and social risk classified into two subcategories: psychological and psychosocial interventions (Dennis and Dowswell, 2013).

#### 3.2. Appraisal of Psychological Interventions

Define abbreviations and acronyms the first time they are used in the text, even after they have been defined in the abstract. Abbreviations such as IEEE, SI, MKS, CGS, sc, dc, and rms do not have to be defined. Do not use abbreviations in the title or heads unless they are unavoidable.

# 3.2.1. Cognitive Behavioural Therapy (CBT)

CBT was implemented in Pakistan and delivered by trained village-based primary health workers called Lady Health Workers (LHW) (Rahman et al, 2008). The intervention was integrated into existing health system and consisted of 16 sessions. The pregnant women in the intervention group showed less prevalence of maternal depression compared to control group at six months and 12 months follow-up (Rahman et al, 2008; Sockol et al, 2011).

This intervention would be acceptable in the current political climate since it in line with the Community-Based Mental Health Efforts promoted by Ministry of Health of Indonesia (++). The intervention used 'Thinking Healthy' term instead of 'depression' to avoid the psychiatric label. It also focused on addressing the economic and social problem faced by mothers by developing LHW - patient relationship (++) (Chowdary et al, 2014; Rahman et al, 2008). In term of resources, Indonesia has Kader who has similar roles to LHW. However, the Kader has not received any training on perinatal mental health intervention, and the national mental health budget is low (+). The organizational feasibility was rated as favorable (+) as the interventions were integrated into the existing health system and it involved community health workers (CHW) who need to be trained. However, following the impressive results of this intervention, WHO has published a guideline for applying Thinking Healthy Programme in low-resources setting by CHW (WHO, 2015). This guideline would, therefore, make the organizational feasibility very favorable (+) if it were followed thoroughly. As for the transferability, it was rated as favorable (+) since it would be expected to reach wide population, yet the characteristics of Pakistan population was slightly different from Indonesia.

## 3.2.2. Problem Solving Training (PST)

PST implemented in Turkey is one of the CBT approaches which develop skills for solving interpersonal and social problem in everyday life by nurses. The results of this intervention showed that nursing care was more effective than problem-solving education alone, but the combination of both interventions was better for reducing depressive postpartum syndrome (Tezel and Gozum, 2005). This intervention would likely to be supported in the current political climate because the nursing care had been proved to reduce depressive postpartum syndrome and it is relevant to the current nursing role (rated ++ for political acceptability). Regarding social acceptability, this intervention has no ethical issue since this is a standard postpartum care by a nurse with the addition of problem-solving training (++). The intervention utilized the role of the nurse in delivering postpartum care and PST. Therefore, this intervention could be rated as favorable if the nurse does not only deliver the service and the number of health worker in PHC is adequate for delivering home-visit. As for the moment, it would rate as uncertain  $(\pm)$ . In Indonesia, the standard postnatal care minimum four times visits, including the psychological assessment for mothers. Thus, this additional PST on this program would be more beneficial for mothers and help to improve perinatal mental health well-being. This remarks very favorably (++) from the organizational point of view. Regarding the transferability, this intervention would be uncertain  $(\pm)$  to be applied in Indonesia as the socio-demographic characteristics of Indonesia and Turkey is not matched.

## 3.2.3. Interpersonal Psychotherapy (IPT)

The intervention was adapted from IPT approach targeted client's interpersonal relationship as a point of intervention. In China, midwives delivered IPT in two group sessions and telephone follow-

up within two weeks after childbirth. The pregnant women involved in this study showed better improvement of perceived social support, psychological well-being, and postpartum depressive symptoms after received IPT-oriented childbirth education (Gao et al, 2011).

From the political point of view, this intervention would be rated as uncertain  $(\pm)$  since the trial was implemented on a voluntary basis and not integrated to any maternal and child health program. The focus of this program was related to cultural practice namely 'doing a month' that refers to the traditional Chinese custom of having a mother rest at home and often under the care of her motherin-law for a month after childbirth. However, the 'doing a month' practice did not exist in the majority of Indonesian society. For that reasons, the social aspect would be rated as favorable (+). Regarding resources, this would be rated as very favorable (++) as the childbirth education program mostly delivered by midwives. The transferability is unfavorable (-) because the characteristic of Chinese and Indonesia population are not matched (Gao et al, 2011).

#### 3.3. Participatory Women's Group

This intervention aimed to improve birth outcomes in the population indicated by reductions in neonatal mortality rate (NMR) and maternal depression scores as the primary outcome. The facilitators of this intervention were CHW who facilitated a certain number of women who had just given birth to learn, develop, and implement strategies to address maternal and newborn health problems. The activities of the participatory group were identified and prioritized difficulties, planned strategies, put strategies into practice and assessed effect. The result of the intervention was a reduction in moderate depression by 57% in year three as a result of a better community support and action (Tripathy et al, 2010; Chowdary et al, 2014).

From the political perspective, this is very favorable (++) as it facilitated community members to express their opinion and helped the health committee to understand the health problem in the field. This intervention would be unfavorable (-) to be implemented in some regions in Indonesia regarding social acceptability as there is a culture practice that women who have given birth would be asked to stay at home with their baby for 40 days. Regarding human resource, the Kader can be trained to deliver this intervention, but the surveillance team needs to be recruited. As for financial acceptability, this intervention was evidenced as a low-cost intervention compared to regular mental health care (+) (Tripathy et al, 2010; Dennis and Dowswell, 2013). However, the structural issue of the organization may be a barrier as this intervention requires a training and support structure to manage the facilitators as well as the surveillance team and the health committee (±). The characteristics of rural Indian population are quite similar regarding maternal and child health indicator (+). Regarding the reach, the participatory group would help to reach the poorest and being scalable compared to home-visit (++).

Assessment Criteria	Intervention			
	СВТ	PST	IPT	Participatory Group
Applicability				
Political	++	++	+	++
Social	++	++	+	-
Resources availability	+	±	++	+
Organizational capacity	++	++	++	±
Transferability				
Magnitude of the reach	++	++	-	++
Characteristic of target population	+	±	-	+

Table 1. Summary of the Interventions Appraisal

Rating scale: ++ very favorable, + favorable, ± uncertain, - unfavorable, -- very unfavorable interventions: CBT (Cognitive Behavioural Therapy), PST (Problem Solving Training), IPT (Interpersonal Psychotherapy)

#### 4. Conclusion and Recommendation

This study has shown the need for mental health well-being during the perinatal period. Besides, it shows the interventions for perinatal depression by non-health specialist workers could be successfully implemented in low-resource countries. Some psychological interventions from developing countries have been analyzed using Acceptability and Transferability criteria, including CBT, Problem Solving Training, and Participatory Women's Group, IPT. As a result of the appraisal, the most acceptable and transferable interventions are CBT and participatory women's group. The recommendations of this study are to adapt and integrate this intervention into the existing maternal and child health program following further research on it.

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