

VALIDATING THE MYANMAR VERSION OF THE EDINBURGH POSTNATAL DEPRESSION SCALE AS A SCREENING TOOL FOR POSTPARTUM DEPRESSION

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Abstract. The Edinburgh Postnatal Depression Scale is a tool designed to detect postpartum depression (PD) and has been validated in several countries, but not in Myanmar. This study aimed to validate the Myanmar version of the Edinburgh Postnatal Depression Scale (M-EPDS) as a screening tool to detect PD among postpartum mothers in Bago Township, where the women's sociodemographic characteristics are similar to the majority of Myanmar women. A cohort of 332 postpartum mothers at 6-8 weeks, aged 18 years and over, able to read and write the Myanmar language, and willing to give informed consent were prospectively recruited and assessed using a self-reported M-EPDS at an outpatient department of a public hospital, and clinically interviewed for DSM-5 (SCID) diagnosis of minor or major depressions by a psychiatrist at a private clinic. The prevalence of PD according to M-EPDS was 19.9% (66/332), whereas 9 (2.7%) were diagnosed with major depression, and 24 (7.2%) with minor depression by DSM-5 criteria. The reliability of M-EPDS was satisfactory, Cronbach's alpha was 0.804. The optimal cut-off score for major depression was 10/11, with a sensitivity of 100.0%, specificity of 82.4%, positive predictive value (PPV) of 13.6%, negative predictive value (NPV) of 100.0% and accuracy (area under curve) of 94.7%. The optimal cut-off score for combined depression was 8/9, with a sensitivity of 90.9%, specificity of 67.2%, PPV of 23.4%, NPV of 98.5% and accuracy of 84.5%. The M-EPDS is an acceptable tool for screening PD in Myanmar where no other PD screening tool is available.

Keywords: postnatal depression, screening, validation, Myanmar version, EPDS

INTRODUCTION

Postpartum depression (PD) is a non-

psychotic depressive episode associated with childbirth that usually begins within the first four weeks after delivery (APA, 2013) or in the first year after birth (ACOG, 2018). The timeframe for PD is debated but most researchers use a period between 1 to 3 months following childbirth in their studies (O'Hara and Wisner, 2014). Maternal PD occurs in up to 20% of all new mothers (Miller,

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2002). Due to differences in assessment measures and the monitored duration of PD period in studies (O'Hara and Swain, 1996), there is a wide variation in the reported prevalence of PD which ranges from 8% to 26% (Shorey *et al*, 2018). The prevalence of PD is lower in high income countries than in low- and middle-income countries (Parsons *et al*, 2012). About 10% of mothers experiencing PD were reported with major depression (ACOG, 2018).

Although PD is a serious public health problem, it is treatable medical illness. Untreated PD has a three-fold impact: on mothers, on their partners' well-being, and on the cognitive outcomes of their babies (Cox and Holden, 2003; O'Hara and McCabe, 2013). Several previous studies consistently found that mothers experiencing PD showed less contact behaviour and communication compared with non-depressed mothers. Evidence is mounting that PD is associated with later problems in children's emotional and behaviour adjustment (Beck and Driscoll, 2006).

Only a minority of postpartum mothers suffering from depression are identified by healthcare providers since the symptoms are usually appear as normal physiologic responses after delivery (Coates *et al*, 2004; Thio *et al*, 2006). The need to identify mothers experiencing PD at an early stage has gained much attention because of the potential tragic complications for mother and child when the condition is unrecognized and poorly managed. (de Castro *et al*, 2015; Shrivastava *et al*, 2015). Mothers need to be screened periodically throughout the first 12 months after delivery. Screening once is not enough if a mother screens negatively, indicating that she is not currently experiencing high levels of PD symptoms. When a mother is screened

negatively at the 6-week postpartum check-up, it cannot be concluded that she will not develop PD during the first year of postpartum period (Beck and Driscoll, 2006).

The Edinburgh Postnatal Depression Scale (EPDS) is a self-report screening tool consisting of 10 items, and the most used screening tool to identify PD in many countries. EPDS has been translated into many languages and validated in many countries. Validation studies of the EPDS are usually conducted 6-12 weeks postpartum (APA, 2013; Department of Health, Government of Western Australia, 2006). In Myanmar, the EPDS was translated into Myanmar language by the Department of Mental Health, University of Medicine 1, Yangon, and it has been used to assess maternal depression in psychiatrists' operational research and postgraduate students' theses. In those assessments, to identify mothers with depression, the recommended cut-off score of 9/10 by the original English language manual was used since there is no validated cut-off score for the Myanmar language version (Cox *et al*, 2014; Department of Health, Government of Western Australia, 2006).

In Myanmar, the screening of maternal depression is not included in antenatal or postnatal care services in either the public or private sectors. Diagnosis of maternal depression and treatment services for mothers with depression can only be received in psychiatric hospitals and other facilities with outpatient mental health services. There is limited available information and knowledge about PD. The lack of a standardized or validated screening tool is another major challenge in the screening of PD among Myanmar mothers. Furthermore, there has been no formal study of the validation of

the Myanmar version of the EPDS as a screening tool and no published baseline data for the prevalence of PD in Myanmar. Therefore, this study aims to validate the Myanmar version of the Edinburgh Postnatal Depression Scale (M-EPDS) using the Diagnostic and Statistical Manual of Mental Disorders, fifth edition (DSM-5, SCID) criteria (APA, 2013) among 6-8 weeks postpartum mothers in Bago Township, Myanmar.

MATERIALS AND METHODS

Study design, study site and study samples

This cross-sectional study was conducted at the Maternal and Child Health (MCH) Clinic of Bago General Hospital located in Bago Township, Bago (East) region of Myanmar. Urban areas of Bago Township were chosen since the sociodemographic characteristics of the women there are similar to those of the majority of Myanmar women. A two-stage cluster sampling was used to select study samples. In stage I, 11 of 23 urban wards were selected by simple random sampling. In stage II, 6-8 weeks postpartum mothers were recruited from each selected ward by consecutive sampling. Inclusion criteria were: 6-8 weeks postpartum mothers aged 18 years and over; able to read and write Myanmar language; intent to stay in the current residing area for at least 3 months after delivery and willing to give informed consent. Postpartum mothers with a mental health disorder; severe medical conditions that would limit participation in the study, and postpartum mothers where delivery was by a traditional birth attendant were excluded.

The sample size was estimated using the single-proportion formula (Daniel and Cross, 2013) and a 95% confidence interval. The sample size calculation was based on

the 16.8% result from a previous survey in neighbouring Thailand (Limlomwongse and Liabsuetrakul, 2006). The precision was set at 4.25% and the sample size was calculated to be 298 postpartum mothers.

Study procedure

During the study period, August to December 2018, 6-8 weeks postpartum mothers from 11 urban wards of Bago Township attending a Maternal and Child Health Clinic were prospectively recruited. Participants were informed of the objectives and methods of the study and their cooperation and participation were requested. After agreement, participants signed an informed consent. All recruited postpartum mothers completed the baseline characteristics form and the self-reported M-EPDS in a private area before or while waiting for a routine postpartum check-up. They then attended an interview with a psychiatrist at a private clinic in Bago Township to detect minor and major depressive symptoms using the DSM 5 (SCID). The psychiatrist was blinded to the previous M-EPDS scores. The principal investigator performed the data analysis separately from the psychiatrist.

Instrumentations

Mother's baseline characteristics: there were 12 questions including age, education, parity, number of children, occupation, household size and household average monthly income.

Depressive disorder: M-EPDS was used to assess mothers' PD. The M-EPDS is a 10-item self-report scale translated from the original EPDS (Cox *et al*, 1987) into Myanmar language by the Department of Mental Health, University of Medicine 1, Yangon, Myanmar (Department of Health, Government of Western Australia, 2006). The EPDS was designed to identify

mothers experiencing depressive symptoms in the postpartum period. Each statement in the questionnaire has four possible responses, which are scored from 0 to 3 depending on the severity of the response, resulting a score range of 0 to 30. Higher scores indicate more severe depressive symptoms. The Cronbach's alpha was 0.804.

Structured Clinical Interview for DSM-5 (SCID): the SCID is a semi-structured interview used to determine a formal diagnosis according to the DSM-5 criteria (APA, 2013). Major depressive episodes and disorders were diagnosed in women who showed at least five out of nine specific symptoms of the DSM-5 criteria in which at least one of the symptoms is either a depressed mood or loss of interest or pleasure. Minor depressive episodes and disorders were diagnosed in those women who showed at least two symptoms in which at least one of the symptoms is either a depressed mood or loss of interest or pleasure but not more than four specific symptoms of DSM-5 criteria.

Data analysis

Data were entered using EpiData Entry version 2.0.7.22 (Christiansen and Lauritsen, 2010). Data analysis was performed using Statistical Package for the Social Sciences (SPSS) version 18.0 (SPSS Inc, Chicago, IL). Descriptive statistics such as mean, standard deviation, frequency and percentage were used to describe all study variables. ANOVA was performed to compare mean scores of M-EPDS of the diagnostic groups. Multiple comparisons were made with the Bonferroni correction (Shaffer, 1995). The validity of the screening tool was evaluated by measuring sensitivity, specificity, accuracy, positive predictive

values (PPV), and negative predictive values (NPV) from M-EPDS scores and the independent (gold standard) diagnosis of minor and major depressive episodes and disorders in postpartum mothers by the psychiatrist. The optimal or best cut-off score to diagnose minor or major depressive disorders of M-EPDS was obtained from the receiver operating characteristic (ROC) curve plotted using sensitivity and specificity values.

Ethical consideration

The research was approved by the Human Research Ethical Review Committee of the Faculty of Public Health, Mahidol University (COA. No. MUPH 2017-019; February 7, 2017) and the Ethics Review Committee, Department of Medical Research, Myanmar (Approval No. Ethics/DMR/2017/054; April 7, 2017). Signed informed consent was obtained from participants. Confidentiality of data was ensured at every stage of data collection and analysis. Postpartum mothers diagnosed with a minor or major depressive episode or disorder by the psychiatrist during the study were referred to Bago General Hospital for further management.

RESULTS

Baseline characteristics

Of the 332 postpartum mothers participated in this study, 40.1% were aged 30 years and over with the mean age of 28.4 years. Seventy-one point one percent had secondary education or higher. Fifty point nine percent were multiparous and 50.0% had up to one child. Three point one percent were professional and 56.3% were housewives or unemployed. Fifty-four point eight percent had more than 4 immediate family members. Roughly 55.1% were in households with incomes

above the average monthly income of 240,000 Myanmar Kyat (approximately USD160). The prevalence of PD according to M-EPDS was 19.9% as shown in Table 1.

Psychometric characteristics of M-EPDS

Of the 332 mothers, 9 had major depression and 24 had minor depression according to the DSM-5 (SCID) criteria.

Table 1
Baseline characteristics of research participants.

Baseline characteristics	Number (n = 332)	%
Age (yr)		
<20	18	5.7
20-29	181	54.5
30-39	124	37.3
40-49	8	2.4
Mean ± SD = 28.4 ± 5.9; Range = 18-46		
Highest education		
Primary school	96	28.9
Secondary school	180	54.2
>Secondary school	56	16.9
Parity		
Primiparous	163	49.1
Multiparous	169	50.9
Number of children		
0 - 1 child	166	50.0
2 children	98	29.5
3 children and more	68	20.5
Occupation type		
Unemployed or housewife	187	56.3
Manual (unskilled and skilled)	88	26.5
Sales, services and clerical	47	14.1
Professional and managerial	10	3.1
Household size		
Up to 4 members	150	45.2
>4 members	183	54.8
Household average monthly income (Myanmar kyat) ^a		
≤240,000	149	44.9
>240,000	183	55.1
Median=300,000; Range =90,000-1,500,000		
M-EPDS, depression		
Depressive	66	19.9
Not depressive	266	80.1

^a1,500 Myanmar Kyat (K1,500) = USD1; M-EPDS: Myanmar version of the Edinburgh Postnatal Depression Scale.

The M-EPDS mean score of mothers with major depression was higher than the M-EPDS mean score of mothers with minor depression and mothers with no depression. From ANOVA and multiple comparisons made with the Bonferroni correction it was found that the M-EPDS mean scores of mothers with major and minor depression were significantly higher than the M-EPDS mean score of mothers with no depression ($p < 0.001$). It was also found that M-EPDS mean score of mothers with major depression was significantly higher than M-EPDS mean score of mothers with minor depression (14 vs 10.8, $p = 0.016$) as shown in Table 2. The results of the sensitivity, specificity, PPV and NPV for M-EPDS scores found in the 332 mothers at different cut-off scores for major (for diagnostic purposes) and combined depression (for screening purposes) are presented in Table 3.

The ROC curves demonstrated that

the optimal sensitivity and specificity of the M-EPDS in postpartum mothers with major depression was found at 10/11 cut-off point (Fig 1). At this threshold, we found 100.0% sensitivity, 82.4% specificity, 13.6% PPV, 100.0% NPV and 94.7% accuracy (area under curve). Increasing the threshold to 11/12, the sensitivity was reduced to 88.9% but specificity and PPV were increased to 87.3% and 16.3% respectively, whereas NPV decreased to 99.6%. Lowering the threshold to 9/10, the sensitivity and NPV remained at 100.0% but specificity and PPV were decreased to 75.2% and 10.1% respectively.

Of the 9 mothers with major depression according to the DSM-5 (SCID) criteria, all screened positively with the M-EPDS. While for the 323 mothers without depression according to the DSM-5 (SCID) criteria, 57 screened positively and 266 negatively with the M-EPDS. Thus, a PPV of 13.6% and a NPV of 100.0

Table 2

Median, mean and standard deviation (SD) of the Myanmar version of the Edinburgh Postnatal Depression Scale (M-EPDS) scores and multiple comparison diagnosed by DSM-5 (SCID).

Mothers	M-EPDS score		
	Median	Mean	Standard deviation (SD)
Major depressive ($n = 9$)	14.0	14.7	3.4
Minor depressive ($n = 24$)	9.5	10.8	2.9
No depressive ($n = 299$)	7.0	6.8	3.6

M-EPDS: Myanmar version of the Edinburgh Postnatal Depression Scale.

The M-EPDS mean score of mothers with major depression > those with minor depression > those with no depression. From ANOVA and multiple comparisons made with the Bonferroni correction, it was found that M-EPDS mean scores of mothers with major and minor depression were significantly higher than the M-EPDS mean score of mothers with no depression ($p < 0.001$). M-EPDS mean score of mothers with major depression was significantly higher than M-EPDS mean score of mothers with minor depression ($p = 0.016$).

Table 3
Performance of M-EPDS in screening 6-8 weeks postpartum of research participants with different cut-off scores (shown in percentages).

Cut-off score	Major depressive episode			Combined depressive episode				
	Sensitivity	Specificity	PPV ^a	NPV ^a	Sensitivity	Specificity	PPV ^a	NPV ^a
7/8	100.0	54.2	5.7	100.0	90.9	57.5	19.1	98.3
8/9	100.0	63.2	7.0	100.0	90.9	67.2	23.4	98.5
9/10	100.0	75.2	10.1	100.0	63.6	77.3	23.6	95.1
10/11	100.0	82.4	13.6	100.0	60.6	84.6	30.3	95.1
11/12	88.9	87.3	16.3	99.6	54.5	89.6	36.7	94.7
12/13	66.7	91.6	18.2	99.0	42.4	93.6	42.4	93.6
13/14	55.6	96.6	31.3	98.7	27.3	97.7	56.3	92.4
14/15	44.4	97.5	33.3	98.4	21.2	98.3	58.3	91.9

^a at a prevalence of 2.7% for major depressive episodes and 9.9% for combined (major and minor) depressive episodes; PPV: Positive predictive value; NPV: Negative predictive value.

% for M-EPDS were obtained.

For a combined depressive episode, the optimal cut-off point was found at 8/9 (Fig 2). At this threshold, we found 90.9% sensitivity, 67.2% specificity, 23.4% PPV, 98.5% NPV and 84.5% accuracy (area under curve). Increasing the threshold to 9/10, sensitivity was reduced to 63.6% but the specificity was increased to 77.3%, PPV increased to 23.6%, while NPV decreased to 95.1%. Lowering the threshold to 7/8, sensitivity remains 90.9% but specificity, PPV and NPV were decreased to 57.5%, 19.1%, and 98.3% respectively.

Of the 33 mothers with combined depression according to the DSM-5 (SCID) criteria, 30 screened positively and 3 negatively with the M-EPDS. While for the 299 mothers without combined depression according to the DSM-5 (SCID) criteria, 98 screened positively and 201 negatively with the M-EPDS. Thus, a PPV of 23.4% and a NPV of 98.5 % for M-EPDS were obtained. Depressed mothers were referred to Bago General Hospital for further management.

DISCUSSION

The EPDS is the most well-known and widely used instrument for assessing PD. The original EPDS has been translated into more than 36 languages, including Myanmar language, and validated for about 20 languages in many countries (Department of Health, Government of Western Australia, 2006). The optimal cut-off points vary from one population to the other (Cox and Holden, 1994). For each language, there is specific recommended cut-

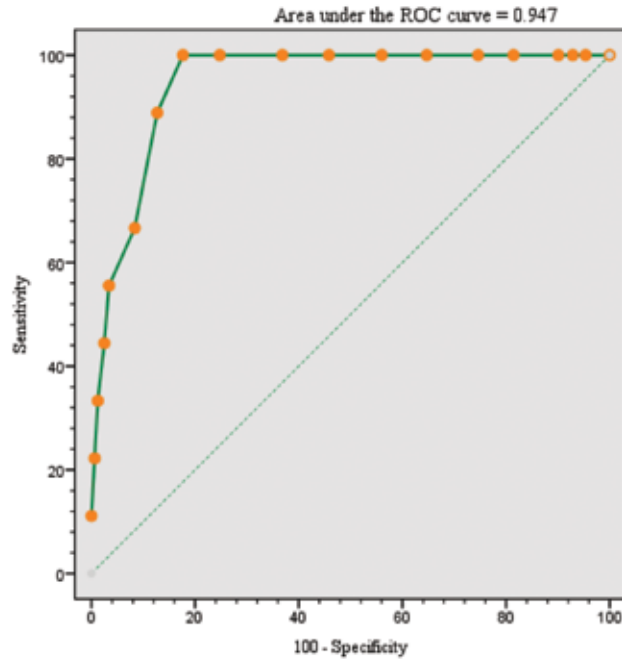


Fig 1-Receiver operating characteristic (ROC) curve of the M-EPDS for major depressive episode among 6-8 weeks postpartum mothers at the 10/11 cut-off score.

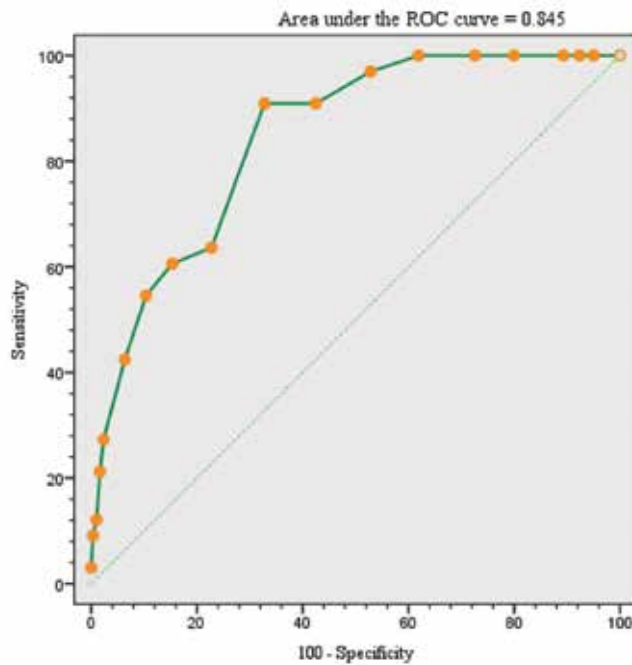


Fig 2-Receiver operating characteristic (ROC) curve of the M-EPDS for combined depressive episode among 6-8 weeks postpartum mothers at the 8/9 cut-off score.

off point to be used in PD screening. To the best of our knowledge, ours is the first validation study conducted with Myanmar-speaking mothers residing in Myanmar. However, there was a previous study to validate of M-EPDS with 131 Myanmar-speaking and 544 Karen-speaking mothers in Maela, the largest refugee camp in Thailand, and Mawker Thai near Mae Sot, a border town in Thailand (Ing *et al*, 2017).

The reported prevalence of PD usually varies with study population, sample size and sampling method, screening tool, and timing of assessment (Bhusal *et al*, 2016; Fisher *et al*, 2012; O'Hara and Swain, 1996). At 6-8 weeks postpartum, our study cut-off score of 10/11 with M-EPDS for major depression detected that 19.9% (95% confidence interval (CI): 15.6-to 24.2) of postpartum mothers were likely to be suffering from major depression. This figure is slightly higher than the estimated PD prevalence of 13.0-19.2% that came from a meta-analysis and systematic review of studies from high-income countries (O'Hara and Swain, 1996; Gavin *et al*, 2005). PD prevalence of our study is also higher than the overall prevalence in Asia (16%; 95% CI: 13-20) that came from a recent systematic review and meta-analysis examining prevalence and incidence of PD among healthy mothers (Shorey *et al*, 2018). Our study's proportion of possible PD is also slightly higher than the pooled global prevalence of 17.7% (95% CI: 17-19) that came from 291 studies conducted in 56 countries using the Edinburgh Postnatal Depression Scale (Hahn-Holbrook *et al*, 2018).

The M-EPDS mean scores of mothers with major and minor depression were significantly higher than the M-EPDS mean score of mothers with no depression ($p < 0.001$). It was also found that M-EPDS

mean score of mothers with major depression was significantly higher than M-EPDS mean score of mothers with minor depression ($p = 0.016$). This is consistent with a study in Hungary (Toreki *et al*, 2014) which showed a significant difference between the EPDS mean scores for mothers with major and minor depression.

In our study, M-EPDS performed well and displayed good sensitivity and specificity to detect major depression during the 6-8 weeks postpartum period at the best cut-off score of 10/11 (score 11 or greater). It also performed well to detect combined major and minor depression at the best cut-off score of 8/9 (score 9 or greater). The M-EPDS sensitivity for major depression is higher than the sensitivity for combined major and minor depression (100.0% vs 90.9%) since inclusion of minor depression in the definition of PD leads to lower M-EPDS sensitivity (Eberhard-Gran *et al*, 2001)

The optimal cut-off score for major depression in our study, 10/11, is the same as the optimal cut-off score to detect major depression of studies in Denmark (Smith-Nielsen *et al*, 2018), and Ireland (Leahy-Warren *et al*, 2012). However, it is slightly higher than the one, 9/10, reported in the Myanmar-speaking portion of Thai-Myanmar border study (Ing *et al*, 2017). The sensitivity (100% vs 100%), specificity (82.4% vs 96.7%), PPV (13.6% vs 60%) and NPV (100% vs 100%) of the Myanmar-speaking portion of the Thai-Myanmar border study are better than in our study. This might be due to the higher prevalence of major depression found in Myanmar-speaking mothers participating in the Thai-Myanmar border study than in our study (4.7% vs 2.7%). The optimal cut-off score for major depression in our study, 10/11, was lower than in studies from

Malaysia (11/12) (Abdul Kadir *et al*, 2009), India (11/12) (Mariam and Srinivasan, 2009), Morocco (11/12) (Agoub *et al*, 2005), Nigeria (11/12) (Adewuta *et al*, 2006), Norway (11/12) (Berle *et al*, 2003), Sweden (11/12) (Wickberg and Hwang, 1996), Nepal (12/13) (Bhusal *et al*, 2016; Ho-Yen *et al*, 2006; Regmi *et al*, 2002), and Hungary (12/13) (Toreki *et al*, 2014).

A cut-off score of 10/11 was suggested for detecting major depression in our study with sensitivity of 100%, specificity of 82.4%, PPV of 13.6%, and NPV of 100%. With this cut-off score, the screening tool was sensitive enough to detect 9 out of 9 postpartum women (100%) with major depression, but only one out of every 7 postpartum women screening positive (13.6%) would be depressed. This would overestimate the prevalence of suspected depression in the population. The very low PPV was due to the low prevalence of major depression (2.7%) in our study population. This result is similar to findings in Brazil (Santos *et al*, 2007), the Netherlands (Bergink *et al*, 2011), Spain (Vázquez and Míguez, 2019), Thailand (Pitanupong *et al*, 2007), and Turkey (Aydin *et al*, 2004).

The optimal cut-off score for combined major and minor depression in our study, 8/9, is higher than studies from Thailand (6/7) (Pitanupong *et al*, 2007) and Hungary (7/8) (Toreki *et al*, 2014). However, it is lower than studies from USA (9/10) (Beck and Gable, 2001), Norway (9/10) (Berle *et al*, 2003), and Spain (10/11) (Garcia-Estevé *et al*, 2003). This cut-off score is also lower than the 12/13 (score 13 or greater) cut-off score reported in the original EPDS used for screening PD (Cox *et al*, 1987). Apart from the difference in the cut-off scores between the studies, the sensitivity found in current study with a cut-off of 8/9 for

combined depression was slightly higher (90.9%) than that (86%) reported in the original EPDS version with a cut-off of 12/13 (Cox *et al*, 1987). In contrast, the specificity at the optimal cut-off found in our study (67.2%) is lower than that (78%) reported in the original EPDS version with its best cut-off score.

Currently, a lower cut-off score of 9/10 is recommended for community screening of PD to ensure that all potential depression cases are identified. Our study cut-off score for combined depression is 8/9 (score 9 or greater), a score that could identify 90.9% of all possible depression cases. The sensitivity of M-EPDS becomes lower (63.6%) for combined depression in our sample if we use the recommended cut-off score of 9/10 but the specificity (67.2% vs 77.3%) and PPV (23.4% vs 23.6%) will be higher than our study (Table 3).

A high sensitivity value is usually desired for screening purposes to detect the majority of cases with major depression in the screened population. However, it should be noted that high sensitivity is not always the priority in every situation. A trade-off between sensitivity and specificity of a screening test usually depends on the screening purpose and the context. In a resource-limited country like Myanmar, specificity is sometimes prioritized in order to use the limited available resources in the most effective way and not overwhelm clinical services with many unnecessary referrals. A missed case of depression is undesirable but increasing sensitivity without regard for PPV seems unreasonable in the context.

A well-defined cut-off score for each local setting is essential for screening to estimate the PD burden in each country. The cut-off score of M-EPDS identified by our study was 10/11 for major depression

and 8/9 for combined major and minor depression. The wide variation in cut-off scores seen in different validation studies might be due to differences in the translation process, study methodology, sample characteristics, sample size, testing time, and social and cultural dimensions (Bhusal *et al*, 2016; Gibson *et al*, 2009).

There were three limitations in this study. Firstly, most recruited participants during the study period had completed secondary or higher education and the proportion was higher than general education level of urban women in Bago Township, Bago (East) Region as well as women of Myanmar. This factor may therefore limit the generalizability of our findings to other populations. Secondly, due to the stigma and feelings of shame associated of mental illness, including depression, in Myanmar there could be under-reporting of depressive symptoms. Thirdly, the low PPV in this study was due to the influenced of low prevalence of combined depression compared to the prevalence found by other studies with higher PPVs (Santos *et al*, 2007; Vázquez and Míguez, 2019). Furthermore, the low PPV caused an increase in false positives which implies that more assessments are needed to confirm the diagnosis of a depressive disorder.

In conclusion, this study showed that M-EPDS is an acceptable screening tool to detect PD in Myanmar where no other screening tool for PD is available. The optimal cut-off scores for major depression and combined major and minor depression are 10/11 and 8/9 respectively. Although further validation studies are required to standardize a cut-off score for M-EPDS, the tool should be introduced in postnatal care clinics to screen for PD since the evidence suggests

that untreated of mothers experiencing PD can cause serious consequences for both mothers and children.

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