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Mental Health Literacy of Maternal and Paternal Postnatal Depression in a Community Sample of Romanian Adults

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**Abstract**

Postnatal depression affects a large proportion of Romanian parents, but no existing research has examining knowledge of postnatal depression in Romanian adults. To rectify this, we examined the ability of Romanian adults to correctly identify cases of maternal and paternal postnatal depression, as well as attitudes towards cases of postnatal depression. A total of 1,248 Romanian adults were presented with vignettes describing cases of maternal or paternal postnatal depression. Based on the vignettes, participants were asked to report if they thought anything was wrong with the targets and, if so, to describe what they thought was wrong. Participants also rated the targets on a several attitudinal dimensions. Participants were more likely to indicate that something was wrong when the target was female (67.9%) compared to male (46.4%). Of those who believed something was wrong, 57.7% of participants correctly described the female target as experiencing postnatal depression, but only 37.1% did so for the male target. Women held significantly more positive attitudes toward the targets than men, particularly when the target was female. Mental health literacy of postnatal depression appears to be poor in Romanian adults compared to other national groups, especially in the case of paternal postnatal depression.

**Keywords:** Maternal postnatal depression; Paternal postnatal depression; Mental health literacy; Symptom recognition; Depression

**Implications for Practice**

Routine screening for depression and other mental health conditions in Romanian parents, alongside national educational and awareness programmes, are urgently needed. Such efforts, in turn, are likely to reduce the social and economic burden of poor mental health literacy of postnatal depression in a rapidly developing nation.

**Lay Summary**

The results of this study suggest that knowledge of postnatal depression is relatively poor in Romania, particularly in terms of paternal (as opposed to maternal) postnatal depression. This may reflect the historical marginalisation of the experiences of fathers experiencing psychological distress both in terms of public awareness, as well as research and practice. A better understanding of public understandings of postnatal depression may assist healthcare practitioners in diverse national settings better serve the mental healthcare needs of new parents.

**Author Note**

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**Introduction**

 *Mental health literacy* refers to the ability to recognise and differentiate mental health disorders and symptoms, knowledge of how and where to seek information relating to mental health disorders, and cognitions that influence the ability to identify symptoms and seek appropriate help (Jorm, 2012, 2015; Jorm et al., 1997; Spiker & Hammer, 2019). Converging lines of evidence suggest that mental health literacy is generally poor among community samples in many nations, as indexed primarily through their inability to correctly identify cases of mental ill-health (for a review, see Furnham & Swami, 2018). This is important because poor mental health literacy contributes to low rates of help-seeking for mental health problems (e.g., Jorm et al., 1997), as well as to stigmatising attitudes towards individuals with mental health disorders (e.g., Reavley & Jorm, 2011). Conversely, improving mental health literacy has the potential to empower communities to take action for better mental health and thus reduce the social and economic burden of mental ill-health (Jorm, 2012, 2020; Kelly, Jorm, & Wright, 2007).

 Research on mental health literacy is now well-developed and includes studies reporting on the development of measures of mental health literacy, examinations of associations of mental health literacy with other constructs (e.g., help-seeking intentions), and surveys of mental health literacy in diverse populations (for a review, see Furnham & Swami, 2018). In terms of the latter, however, it is also apparent that some mental health conditions have received limited coverage in extant research. One such condition is postnatal (or postpartum) depression, a non-psychotic depressive disorder that occurs after the birth of a child (O’Hara & Wisner, 2014; Philpott, 2016), usually up to a year after delivery (Stuart-Parrigon & Stuart, 2014). Meta-analyses and studies have concluded that 6-13% of mothers (Gaynes et al., 2005; O’Hara & Swain, 1996) and 5-10% of fathers (Glasser & Lerner-Geva, 2019; Paulson & Bazemore, 2010) experience postnatal depression – about twice the rate of the general population. Extensive evidence documents the detrimental impacts of postnatal depression on parents themselves (e.g., elevated risk of suicide, reduced relationship quality; Letourneau et al., 2011; Quevedo et al., 2011), parent-child attachment and bonding (Paulson, Dauber, & Leiferman, 2006), and child behavioural outcomes (Netsi et al., 2018; Sanger, Iles, Andrew, & Ramchandani, 2015). In addition to these impacts on family systems, postnatal depression also places a heavy burden on healthcare systems and national economies (Bauer, Parsonage, Knapp, Iemmi, & Adelaja, 2014; Edoka, Petrou, & Ramchandani, 2011).

Empirical (Fonseca, Gorayeb, & Canavarro, 2015; Ko, Farr, Dietz, & Robbins, 2012; Musser & Foli, 2013; Philpott & Corcoran, 2018) and first-person narratives (Swami, 2019) suggest that mothers experiencing depressive symptoms are much more likely than fathers to be diagnosed and receive optimal healthcare. In part, this reflects the perpetuation of erroneous public beliefs about postnatal depression, such as the myth that the condition is only triggered by gender-specific factors (e.g., pregnancy- or postpartum-induced hormonal changes, delivery complications, unsuccessful breastfeeding; Chew-Graham, Sharp, Chamberlain, Folkes, & Turner, 2009; Ugarriza, 2002), which in turn leads to perceptions that fathers are “immune” to depressive symptoms (Oxley, 2017). In a similar vein, postnatal depression is sometimes viewed as being primarily or solely caused by neurochemical changes that only affect women (e.g., changes in progesterone, oestrogen, and prolactin during pregnancy) (Swami, 2019). Although this is erroneous (many men experience similar neurochemical changes during the antenatal period), this overemphasis on biological over broader psychosocial causal factors may mean that men remain “invisible” in terms of public perceptions of depression following childbirth (Veskrna, 2010).

More broadly, understandings and experiences of mental illness are also gendered (Oliffe, Kelly et al., 2010; Oliffe, Robertson, Kelly, Roy, & Ogrodniczuk, 2010), with symptoms of mental ill-health perceived as inconsistent with traditional masculine norms that emphasise strength, robustness, and stoicism. In this view, men experiencing or vocalising symptoms of mental ill-health may be perceived as transgressing normative expectations of masculinity (Connell & Messerschmidt, 2005; Courtenay, 2000), which has a dual impact on mental health literacy (Swami, 2012). First, lay individuals may be less likely to reach for mental ill-health when explaining the psychological distress experienced by fathers, instead recasting their difficulties in a manner that would be consistent with masculine norms (e.g., explanations based on tiredness or stress). Second, even where paternal postnatal depression is framed in terms of mental ill-health, lay individuals may still hold more negative attitudes toward fathers, precisely because their condition is perceived as transgressive (cf. Swami, 2012). In short, there are reasons to think that mental health literacy of postnatal depression may shape the belief that fathers are less likely to experience postnatal depression than mothers, which in turn may affect help-seeking behaviours among parents (Swami, 2019).

To date, however, the majority of studies in this area have focused on knowledge of maternal postnatal depression (e.g., Branquinho, Canavarro, & Fonseca, 2019; Highet, Gemmill, & Milgrom, 2011; Kingston et al., 2014; Smith, Gemmill, & Milgrom, 2019). For example, the ability to correctly identify case vignettes representing maternal postnatal depression was found to be relatively high among an Australian community sample (77.5% accurate; Thorsteinsson, Loi, & Moulynox, 2014) and Australian midwives (93.9% accurate; Hauck, Kelly, Butt, Whittaker, & Badcock, 2015). In contrast, only one previous study has included case vignettes of both maternal and paternal postnatal depression (Swami, Barron, Smith, & Furnham, 2019). This study found that, in an online sample of British adults, participants were more likely to indicate that something was “wrong” when the target was female (97.0%) compared to male (75.9%). Of those who believed something was wrong, 90.1% of participants correctly described the female target as experiencing postnatal depression, but only 46.3% did so for the male target. Rather, participants viewed the difficulties of the male target as one of everyday stressors (e.g., tiredness, lack of sleep) as opposed to symptoms of mental ill-health. Participants also rated the female target’s condition as significantly more distressing, as more difficult to treat, were significantly more sympathetic to the female target, and were significantly more likely to suggest that the target seek help when they were female.

 In the present study, we sought to build on the work of Swami and colleagues (2019) by examining mental health literacy of maternal and postnatal depression – operationalised through symptom recognition in case vignettes – in a community sample of Romanian adults. This is important because cultural contexts may affect mental health literacy in substantive ways (Furnham & Swami, 2018), especially where national mental health awareness and public health services are relatively less developed (Motjabai, 2010; Ng, Chan, Shields, & da Costa, 2019). Specifically, studies of mental health literacy in Romania are extremely scarce (Todor, 2013), but what little evidence that does exists suggests negative stereotypes of people experiencing mental ill-health are common (e.g., that they are dangerous and should be avoided or segregated) (Macsinga, 2011; Neaçsu, 2013; Zlati, Oh, & Baban, 2011). In addition, scholars have noted that the ability to start and care for a family are qualities that are exalted by Romanians (Dănilă & Băban, 2018; Popescu, 2009), which may impact on perceptions of individuals who struggle to do so. This may be particularly true of men, for whom the building of an enlarged family is seen as an important component of hegemonic masculinity (Norocel, 2015).

 As such, there is an urgent need to better understand public understandings of postnatal depression in the Romanian context, which we sought to achieve through a replication of the work of Swami and colleagues (2019). Our primary hypothesis was that Romanian participants would be more likely to correctly identify a case of maternal compared to paternal postnatal depression. For exploratory purposes, we also examined whether these responses would vary as a function of parental status. In addition, we examined the impact of target and participant gender on attitudes toward cases of postnatal depression. Following previous work (see Swami & Furnham, 2018), attitudinal responses were operationalised in terms of perceived distress, treatment difficult, sympathy, and likelihood of recommending the target seek help – dimensions that mirror both definitions of mental health literacy (Jorm, 2012, 2015; Jorm et al., 1997; Spiker & Hammer, 2019), as well as stigmatising attitudes towards individuals with mental health disorders (e.g., Reavley & Jorm, 2011). In this regard, we hypothesised that participants would evidence more negative attitudes toward a male case of postnatal depression compared to a female case with identical symptoms. Based on findings that men have poorer mental health literacy than women (e.g., Gibbons, Thorsteinsson, & Loi, 2015; Holzinger, Floris, Schomerus, Carta, & Angermeyer, 2012; Swami, 2012), we also predicted that male participants would have significantly more negative attitudes than women.

**Method**

**Participants**

Our sample consisted of 1,248 Romanian citizens, of whom 858 were women and 390 were men. Participants ranged in age from 18 to 86 years (*M* = 32.37, *SD* = 14.79) and the majority (98.6%) self-reported their ancestry as ethnic Romanian. In terms of educational attainment, 3.7% reported having no formal qualifications, 36.6% as having completed secondary education, 24.3% as being in full-time tertiary education, 26.7% as having an undergraduate degree, 7.1% as having a postgraduate degree, and 1.7% as having another qualification. Of the total sample, 35.5% reported as having at least one child and the mean number of children reported in the sample was 1.14 (*SD* = 0.67).

**Materials**

 **Case vignettes.** Case vignettes of postnatal depression were taken verbatim from Swami and colleagues (2019). These vignettes describe a case of maternal and paternal postnatal depression, respectively, that meet *Diagnostic and Statistical Manual-5* (*DSM-5*; American Psychiatric Association, 2013) diagnostic criteria for major depression with a perinatal-onset specifier (see Appendix 1). Following presentation of the vignettes, participants were asked if they believed “anything was wrong” with the individual described (1 = *yes*, 2 = *no*). The framing of the question in this way helps to minimise socially-desirable responding and is consistent with previous work (Swami et al., 2019; Thorsteinsson et al., 2014). If participants provided an affirmative answer, they were asked – using an open-ended question – to indicate what they believed was wrong. Responses to this item were coded using maximal response coding by two independent judges (the second author and an independent judge unaffiliated with the study and naïve to the study aims); that is, responses were scored as correct only if they mentioned postnatal depression, postpartum depression, or depression (for details, see Swami et al., 2019). Inter-judge reliability was .95, indicating a high degree of agreement. In addition, participants were asked to rate, on 7-point scales based on Swami (2012), how distressing they believed the conditions described in the vignettes were (1 = *not at all distressing*, 7 = *extremely distressing*), how difficult they believed it would be to treat the conditions (1 = *not at all difficult*, 7 = *extremely difficult*), and how sympathetic they felt toward the persons described in the vignettes (1 = *not at all sympathetic*, 7 = *extremely sympathetic*). They were also asked to indicate, assuming they were friends with the persons describe, how likely they would be to suggest that the targets seek help for their problems (1 = *not at all*, 7 = *definitely*).

 **Demographics**. Participants were asked to provide their demographic details consisting of gender, age, relationship status, educational attainment, ethnicity, and number of children.

**Procedures**

Ethics approval for the project was obtained from the relevant departmental ethics committee at the West University of Timișoara (approval number: 27244). Between January and June 2019, the second to fourth authors directly recruited participants from areas of congregate activities (e.g., parks, shopping areas, public libraries) in Timișoara, the third largest city in Romania. Potential participants were approached opportunistically and, if they met inclusion criteria (Romanian citizens, of adult age, and fluent in Romanian), they were provided with brief information about the project and participant requirements. If an individual agreed to take part in the study, they were asked to provide written informed consent. Participants were randomly assigned to complete paper-and-pencil questionnaires with either the vignette of the female (women *n* = 440, men *n* = 184) or male target (women *n* = 418, men *n* = 206). The order of presentation of items in the questionnaire was counterbalanced for each participant, with demographic items completed last. The questionnaire was anonymous and completed in portable and private stations set up for the purposes of the study. Upon return of completed questionnaires, participants were provided with written debriefing information. All participants took part on a voluntary basis and were not remunerated for participation.

**Results**

Missing values represented < 1.0% of the total dataset and were replaced using the mean replacement technique. To test our hypothesis, we first examined whether participants thought “anything was wrong” with the targets presented in the vignettes. Participants were significantly more likely to indicate that something was wrong with regards to the female target (67.9%) compared to the male target (46.4%), χ2(1) = 57.74, *p* < .001. When the target was female, women (71.3%) were significantly more likely than men (59.3%) to indicate that something was wrong, χ2(1) = 8.56, *p* = .003. When the target was male, there was no gender difference in the likelihood of indicating that something was wrong (women = 48.2%, men = 42.5%), χ2(1) = 1.73, *p* = .188. There were no significant differences in these responses as a function of parental status, either for the female target, χ2(1) = 2.26, *p* = .133, or male target, χ2(1) = 0.63, *p* = .428, so parental status was not analysed further.1

 Of those who believed that something was wrong with the female target, the most common description of what was wrong were postnatal/postpartum depression or depression (57.7%). Other common responses were tiredness or exhaustion (14.4%), stress (3.7%), and anxiety (3.1%), although 22.1% indicated that they did not know or were uncertain. These responses did not vary as a function of participant gender, χ2(5) = 3.06, *p* = .690. Of those who believed there was something wrong with the male target, the most common responses were postnatal/postpartum depression or depression (37.1%), tiredness or exhaustion (19.7%), feeling neglected (17.8%), and stress (11.7%), while 24.7% did not know or were uncertain. These responses did not vary as a function of participant gender, χ2(5) = 7.19, *p* = .207. Of the total dataset, only 20.4% of participants correctly identified that the female target was experiencing postnatal depression or depression and only 8.4% did likewise when the target was male.

To test the hypothesis that participants would evidence more negative attitudes toward a male case of postnatal depression, a series 2 x 2 analyses of variance (ANOVAs) was conducted, with target gender and participant gender as the independent variables, and ratings of perceived distress, treatment difficulty, sympathy, and likelihood of recommending help, respectively, as the dependent variables (see Table 1 for descriptive statistics). The first ANOVA with ratings of distress indicated that there was no significant interaction, *F*(1, 1244) = 4.01, *p* = .062,p2 < .01. There were, however, significant main effects of target gender *F*(1, 1244) = 15.62, *p* < .001,p2 = .01 (the female target’s condition was rated as significantly more distressing), and participant gender, *F*(1, 1244) = 33.35, *p* < .001, p2 = .03 (women rated the targets’ conditions as more distressing than men).

The second ANOVA with ratings of treatment difficult indicated no significant interaction, *F*(1, 1244) = 0.04, *p* = .852, p2 < .01, and no main effect of participant gender, *F*(1, 1244) = 0.97, *p* = .325, p2 < .01. There was, however, a significant main effect of target gender, *F*(1, 1244) = 7.61, *p* = .006, p2 = .01, with the female target’s condition rated as significantly more difficult to treat than the male target’s condition. The ANOVA with ratings of sympathy showed no significant interaction, *F*(1, 1244) = 0.50, *p* = .478, p2 < .01. There were, however, significant main effects of target gender, *F*(1, 1244) = 19.78, *p* < .001, p2 = .02 (participants expressed greater sympathy for the female target), and participant gender, *F*(1, 1244) = 13.16, *p* < .001, p2 = .01 (women expressed greater sympathy than men). Finally, the ANOVA with likelihood of recommending the target seek help indicated no significant interaction, *F*(1, 1244) = 0.03, *p* = .866, p2 < .01. There were, however, significant mains effect of target gender, *F*(1, 1244) = 28.43, *p* < .001, p2 = .02 (participants were more likely to recommend the female target seek help), and participant gender, *F*(1, 1244) = 50.76, *p* < .001, p2 = .03 (women were more likely than men to recommend that help be sought).2

**Discussion**

In the present study, we replicated previous work (Swami et al., 2019) examining mental health literacy of postnatal depression in a hitherto neglected national group, namely Romanian adults. Our results indicate relatively poor mental health literacy of postnatal depression in our sample. When the target was female, just over two-thirds of participants thought something was “wrong” (compared with 97.0% in Swami et al., 2019) and, of these participants only about a half correctly identified that the female target was suffering from postnatal depression (compared with 90.1% in Swami et al., 2019). When the target was male, less than a half of our sample thought something was “wrong” (compared with 75.9% in Swami et al., 2019) and, of these respondents, only about a third correctly described the male target as experience postnatal depression (compared with 46.3% in Swami et al., 2019). Overall, these results suggest substantively poor recognition of postnatal depression in our Romanian sample compared to previous work (Swami et al., 2019; Thorsteinsson et al., 2014, but also suggest much poorer mental health literacy of paternal compared to maternal postnatal depression.

 The substantively lower rates of mental health literacy of postnatal depression in the present study compared to earlier research may reflect national differences in mental health awareness (Tirintica et al., 2018). That is, it might be posited that awareness of depression as a mental health condition that affects parents – particularly fathers – is lagging in Romania. Although studies of mental health awareness in Romania remain scarce (Todor, 2013), there is evidence from other Eastern European nations that lack of understanding and misconceptions of mental illness are widespread (e.g., Krupchanka et al., 2016, 2017, 2018). In particular, there may be relatively poor awareness of postnatal depression in Romania because it is perceived as being inconsistent with “personhood” or parenthood in this national context, where the ability to start and care for a family are emphasised and exalted (Dănilă & Băban, 2018; Popescu, 2009). Put differently, it is possible that mental illness is perceived as being inconsistent with, or anomalous to, conceptions of parenthood and family life in Romania: a good parent is one that is free from psychological distress (Enătescu, Enătescu, & Enătescu, 2014; Robila, 2002). Such perceptions may be exacerbated because of the underdevelopment of community care for mental ill-health in Romania (Saxena, Thornicroft, Knapp, & Whiteford, 2007), as well as disillusionment in with the national healthcare system (see van der Sijpt, 2018).

 When participants did correctly identify that something was “wrong” with the targets, most correctly identified that the female target was experiencing postnatal depression – although, importantly, a substantial proportion also indicated that they did not know or were uncertain as to what was “wrong”. The responses were more concerning *vis-à-vis* the male target, where the belief that the target was experiencing stress, tiredness or exhaustion, or feeling familial neglect were common than responses that accurately indicated postnatal depression. This suggests a tendency to view the experiences of parents – especially fathers – undergoing significant psychological distress not in terms of mental ill-health, but rather to emphasise experiences that are common to many new parents. It is likely that this again reflects poor mental health awareness in Romania, where misunderstandings about parental mental health affect how participants related to the vignettes presented in the survey. It may also reflect beliefs among Romanians that depression is a form of stress caused by daily worries (Beldie et al., 2012). Beyond mere misunderstandings, however, it is also possible that gender role ideologies shape reflections of mental health among Romanian adults. In this sense, previous studies – with primarily Western populations – has suggested that understandings of mental illness are often gendered (Oliffe, Kelly et al., 2010; Oliffe, Robertson et al., 2010), with symptoms of mental ill-health perceived as inconsistent with masculinity (Swami, 2012). In Romania in particular, the building of an enlarged, healthy family under the guidance of men is seen as a constitutive component of the proper performance of masculinity (Norocel, 2015). In this context, therefore, symptoms of mental illness may be perceived as being particularly incompatible with the enactment of fatherhood.

 In the present study, we also examined attitudes toward the case vignettes and our results were broadly consistent with our hypotheses. Specifically, we found that participants reported significantly lower perceived distress with regards the male target’s condition, believed that the male target’s condition would be easier to treat, expressed less sympathy for the male target, and were less likely to suggest that the male target seek help. Also consistent with our hypotheses, we found that men generally held more negative attitudes toward the targets compared to women. In broad outline, these findings are consistent with previous research suggesting that women have less negative attitudes toward cases of mental ill-health compared to men (e.g., Gibbons et al., 2015; Holzinger et al., 2012; Swami, 2012). Having said that, it should be noted that the effect sizes for these gendered effects were very small in all cases. It may, therefore, be argued that although target gender has a noticeable impact on symptom recognition, both target and participant sex are much less influential in terms of shaping attitudes toward persons experiencing psychological distress following the birth of a child.

 A strength of the present study was the recruitment of a large community sample of adults. However, our recruitment method may have also introduced unintended sampling biases, as reflected in the comparatively larger number of women who agreed to take part in the study. In addition, because sampling took place in a single Romanian city, we cannot be certain that our results will be replicable in other Romanian sites. This is particularly the case as there may be a range of intra-national factors that influence mental health literacy, including socioeconomic status or social class, levels of education, and experiences with mental healthcare (Furnham & Swami, 2018). In the context of Romania specifically, it has been suggested that intra-national historical and cultural differences across regions – particularly in terms of urban-rural residence and population density – may have an impact on mental health knowledge and behaviours (Sandu, 2011). Replicating our study in other regions of Romania will, therefore, be important, as will replication work in other Eastern European nations. In particular, the recruitment of representative samples of Romanian adults would allow scholars to be certain that the present results are not limited by regional or recruitment biases.

 A further limitation of the present work was the reliance on case vignettes to operationalise mental health literacy of postnatal depression. Although this method allowed us to make comparisons with previous research that used the same methodology (Swami et al., 2019), vignettes may have poor ecological validity (Furnham & Swami, 2018). In everyday life, individuals are unlikely to be confronted with pre-packaged case studies or descriptions of symptomatology, which means that – although the present methodology provides an index of mental health literacy – our study design may not translate well to lived experienced. In a similar vein, because the vignettes described a stranger, we cannot be certain that participants would respond in the same manner if similar symptoms were experienced by participants themselves. For example, there is some evidence that women sometimes experience difficulty recognising symptoms of postnatal depression in themselves (Abrams, Dornig, & Curran, 2009). Using qualitative research designs in future studies may help scholars to better understand the attitudes toward postnatal depression among Romanian adults, particularly in terms understanding factors that might influence poor mental health literacy.

 These limitations notwithstanding, the present results suggest relatively poor mental health literacy of postnatal depression in Romanian adults. We suggest that our findings are important in light of emerging evidence that a large proportion of Romanian parents meet diagnostic criteria for postnatal depression (Enatescu et al., 2014, 2017), including over 50% of mothers in our specific research site (Enătescu et al., 2014). Given that parents in Romania are not routinely screened for postnatal depression or other mental health conditions (Wallis et al., 2012), poor mental health literacy of postnatal depression may act as a serious impediment to optimal mental healthcare in the postnatal period. Routine screening for depression and other mental health conditions in Romanian parents (Wallis et al., 2012), alongside national educational and awareness programmes are, therefore, urgently needed (Ciumăgeanu, Crăciun, Popescu, Sfetcu, & Micluҭia, 2010). In addition, the provision of intensive, professionally-based postnatal support for the family unit as a whole may help to reduce the number of women and men who develop postnatal depression (for a review, see Dennis, 2005).

 More broadly, the results of the present study alongside earlier findings (Swami et al., 2019) suggest that there may be some urgency to understanding men’s experiences of postnatal depression internationally. Given the historical and contemporaneous marginalisation of such experiences (Swami, 2019), a better understanding of the psychological distress experienced by some fathers, as well as lay attitudes and reactions to such distress, may help healthcare practitioners better meet men’s mental healthcare needs. For example, to the extent that fathers experience, manifest, and understand psychological distress differently from women (Oliffe, Kelly et al., 2010; Oliffe, Robertson et al., 2010), it may mean that targeted interventions are necessary to facilitate the entry of fathers experiencing postnatal depression into mental healthcare services. In this scenario, the barriers and facilitators to entry into services may vary widely across national and cultural contexts, as the results of the present study suggest, which in turn requires a better understanding of how such factors affect mental health literacy in different social identity groups.

**Footnotes**

1 At the request of a reviewer, we also examined distributions as a function of educational qualifications, but there were no significant differences for either target (all χ2 < 5.55, all *p*s > .352).

2 At the request of a reviewer, we also examined correlations between attitudinal responses and participant age. The only significant correlations that were observed were for distress when the target was female (*r* = -.25, *p* < .001) and distress when the target was male (*r* = -.24, *p* < .001).

**References**

Abrams, L. S., Dornig, K., & Curran, L. (2009). Barriers to service use for postpartum depression symptoms among low-income ethnic minority mothers in the United States. *Qualitative Health Research*, *19*, 535-551. doi:10.1177/1049732309332794

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders-5*. Washington, DC: American Psychiatric Association.

Bauer, A., Parsonage, M., Knapp, M., Iemmi, V., & Adelaja, B. (2014). *The costs of perinatal mental health problems*. London: Centre for Mental Health.

Beldie, A., den Boer, J. A., Brain, C., Constant, E., Figueira, M. L., Filipcic, I., … Wancata, J. (2012). Fighting stigma of mental illness in midsize European countries. *Social Psychiatry and Psychiatric Epidemiology*, *47*, S1-S38. doi:10.1007/s00127-012-0491-z

Branquinho, M., Canavarro, M. C., & Fonseca, A. (2019). Knowledge and attitudes about postpartum depression in the Portuguese general population. *Midwifery*, *77*, 86-94. doi:10.1016/j.midw.2019.06.016

Buist, A., Speelman, C., Hayes, B., Reay, R., Milgrom, J., Meyer, D., & Condon, J. (2007). Impact of education on women with perinatal depression. *Journal of Psychosomatic Obstetrics and Gynecology*, *28*, 49-54. doi:10.1080/01674820601143187

Chew-Graham, C. A., Sharp, D., Chamberlain, E., Folkes, L., & Turner, K. M. (2009). Disclosure of symptoms of postnatal depression, the perspectives of health professionals and women: A qualitative study. *BMC Family Practice*, *10*, 7. doi:10.1186/1471-2296-10-7

Ciumăgeanu, M., Crăciun, I., Popescu, C., Sfetcu, R., & Micluҭia, I. (2010). Educating communities in mental health issues: The Romanian case. *Journal of Educational Sciences*, *12*, 71-77.

Connell, R. W., & Messerschmidt, J. W. (2005). Hegemonic masculinity: Rethinking the concept. *Gender and Society*, *19*, 829-859. doi:10.1177/0891243205278639

Courtenay, W. H. (2000). Constructions of masculinity and their influence on wellbeing: A theory of gender and health. *Social Science and Medicine*, *50*, 1385-1401. doi:10.1016/S0277-9536(99)00390-1

Dănila, I., & Băban, A. (2018). Representations of infertility as reflected in on-line discussion forums in Romania. *Cognition, Brain, Behavior*, *22*, 85-98. doi:10.24193/cbb.2018.22.06

Dennis, C.-L. (2005). Psychosocial and psychological interventions for prevention of postnatal depression: Systematic review. *British Medical Journal*, *331*, 15. doi:10.1136/bmj.331.7507.15

Edoka, I. P., Petrou, S., & Ramchandani, P. G. (2011). Healthcare costs of paternal depression in the postnatal period. *Journal of Affective Disorders*, *133*, 356-360. doi:10.1016/j.jad.2011.04.005

Enatescu, V. R., Bernad, E., Gluhovschi, A., Papava, I., Romosan, R., Palicsak, A., … Enatescu. I. (2017). Perinatal characteristics and mother’s personality profile associated with increased likelihood of postpartum depression occurrence in a Romanian outpatient sample. *Journal of Mental Health*, *26*, 212-219. doi:10.3109/09638237.2016.1149802

Enatescu, V. R., Enatescu, I., Craina, M., Gluhovschi, A., Papava, I., Romosan, R., … Bernad, E. (2014). State and trait anxiety as a psychopathological phenomenon correlated with postpartum depression in a Romanian sample: A pilot study. *Journal of Psychosomatic Obstetrics and Gynecology*, *35*, 55-61. doi:10.3109/0167482X.2014.914491

Enătescu, V. R., Enătescu, I., & Enătescu, V. (2014). Sociodemographic and obstetrical risk factors in mothers with postnatal depression from Timiș County: A preliminary survey. Paper presented at the Second Congress on Resilience, Timișoara, May 8-10.

Fonseca, A., Gorayeb, R., & Canavarro, M. C. (2015). Women’s help-seeking behaviours for depressive symptoms during the perinatal period: Socio-demographic and clinical correlates and perceived barriers to seeking professional help. *Midwifery*, *31*, 1177-1185. doi:10.1016/j.midw.2015.09.002

Furnham, A., & Swami, V. (2018). Mental health literacy: A review of what it is and why it matters. *International Perspectives in Psychology: Research, Practice, Consultation*, *7*, 240-257. doi:10.1037/ipp0000094

Gaynes, B. N., Gavin, N., Meltzer-Brody, S. Lohr, K. N., Swinson, T., Gartlehner, G., … & Miller, W. C. (2005). *Perinatal depression: Prevalence, screening accuracy, and screening outcomes* (Evidence Report/Technology Assessment No. 119; AHRQ Publication No. 05-E006-2). Rockville, MD: Agency for Healthcare Research and Quality.

Gibbons, R. J., Thorsteinsson, E. B., & Loi, N. M. (2015). Beliefs and attitudes towards mental illness: An examination of the sex differences in mental health literacy in a community sample. *PeerJ*, *3*, e1104. doi:10.7717/peerj.1004

Glasser, S., & Lerner-Geva, L. (2019). Focus on fathers: Paternal depression in the perinatal period. *Perspectives in Public Health*, *139*, 195-198. doi:10.1177/175791318790597

Highet, N. J., Gemmill, A. W., & Milgrom, J. (2011). Depression in the perinatal period: Awareness, attitudes and knowledge in the Australian population. *Australian and New Zealand Journal of Psychiatry*, *45*,223-231. doi:10.3109/00048674.2010.547842

Holzinger, A., Floris, F., Schomerus, G., Carta, M. G., & Angermeyer, M. C. (2012). Gender differences in public beliefs and attitudes about mental disorder in Western countries: A systematic review of population studies. *Epidemiology and Psychiatric Sciences*, *21*, 73-85. doi:10.1017/S2045796011000552

Jorm, A. F. (2012). Mental health literacy: Empowering the community to take action for better mental health. American Psychologist, 67, 231-243. doi:10.1037/a0025957

Jorm, A. F. (2015). Why we need the concept of “mental health literacy”. *Health Communication*, *30*, 1166-1168. doi:10.1080/10410236.2015.1037423

Jorm, A. F. (2020). We need to move from “mental health literacy” to “mental health action”. *Mental Health and Prevention*, *18*, 200179. doi:10.1016/j.mhp.2020.200179

Jorm, A. F., Korten, A. E., Jacomb, P. A., Christensen, H., Rodgers, B., & Pollitt, P. (1997). Public beliefs about causes and risk factors for depression and schizophrenia. *Social Psychiatry and Psychiatric Epidemiology*, *32*, 143-148. doi:10.1007/BF00794613

Kelly, C. M., Jorm, A. F., & Wright, A. (2007). Improving mental health literacy as a strategy to facilitate early intervention for mental disorders. *Medical Journal of Australia*, *187*, S26-S30. doi:10.5684/j.1326-5377.2007.tb01332.x

Kingston, D. E., McDonald, S., Austin, M.-P., Hegadoren, K., Lasiuk, G., & Tough, S. (2014). The public’s views of mental health in pregnant and postpartum women: A population-based study. *BMC Pregnancy and Childbirth*, *14*, 84. doi:10,1186/1471-2393-14-84

Ko, J. K., Farr, S. L., Dietz, P. M., & Robbins, C. L. (2012). Depression and treatment among U.S. pregnant and nonpregnant women of reproductive age, 2005-2009. *Journal of Women’s Health*, *21*, 830-836. doi:10.1089/jwh.2011.3466

Krupchanka, D., Kruk, N., Murray, J., Davey, S., Bezborodovs, N., Winkler, P., … Sartorius, N. (2016). Experience of stigma in private life of relatives of people diagnosed with schizophrenia in the Republic of Belarus. *Social Psychiatry and Psychiatric Epidemiology*, *51*, 757-765. doi:10.1007/s00127-016-1190-y

Krupchanka, D., Kruk, N., Sartorius, N., Davey, P., Winkler, P., & Murray. J. (2017). Experience of stigma in the public life of relatives of people diagnosed with schizophrenia in the Republic of Belarus. *Social Psychiatry and Psychiatric Epidemiology*, *52*, 493-501. doi:10.1007/s00127-017-1365-1

Krupchanka, D., Chrtkova, D., Vítkova, M., Munzel, D., Čihařová,M., Růžičková, T., … Sartorius, N. (2018). Experience of stigma and discrimination in families of persons with schizophrenia in the Czech Republic. *Social Science and Medicine*, *212*, 129-135. doi:10.1016/j.socscimed.2018.07.015

Letourneau, N., Duffett-Leger, L., Dennis, C. L., Stewart, M.., & Tryphonopoulos, P. D. (2011). Identifying the support needs of new fathers affected by post-partum depression: A pilot study. *Journal of Psychiatric and Mental Health Nursing*, *27*, 479-485. doi:10.1111/j.1365-2850.2010.01627.x

Macsinga, I. (2011). Romanian adolescents’ lay theories on mental illness. *Journal of Evidence-Based Psychotherapies*, *11*, 237-252.

Motjabai, R. (2010). Mental illness stigma and willingness to seek mental health care in the European Union. *Social Psychiatry and Psychiatric Epidemiology*, *45*, 705-712. doi:10/1007.s00127-009-0109-2

Neaçsu, D. (2013). Public understanding of mental illness: Results from a Romanian sample. *Journal of Experiential Psychotherapy*, *16*, 30-35.

Netsi, E., Pearson, R. M., Murray, L., Cooper, P., Craske, M., & Stein, A. (2018). Association of persistent and severe postnatal depression with child outcomes. *JAMA Psychiatry*, *75*, 247-253. doi:10.1001/jamapsychiatry.2017.4363

Ng, R. M. K., Chan, T. G., Shields, G., & da Costa, M. P. (2019). Global mental health and psychiatry education. In S. Okpaku (Ed.), *Innovations in global mental health* (pp. 1-14). Geneva: Springer Nature. doi:10.1007/978-3-3319-70134-9\_69-1

Norocel, O. C. (2015). The panoptic performance of masculinity for the Romanian ethno-national project: Disciplinary intersections in populist radical right print media. *DiGeSt: Journal of Diversity and Gender Studies*, *2*, 143-156. doi:10.11116/jdivegendstud.2.1-2.0143

O’Hara, M. W., & Swain, A. M. (1996). Rates and risk of postpartum depression: A meta-analysis. *International Review of Psychiatry*, *8*, 37-54. doi:10.3109/0954026909037816

O’Hara, M. W. O., & Wisner, K. (2014). Perinatal mental illness: Definition, description, and aetiology. *Best Practice and Research Clinical Obstetrics and Gynaecology*, *28*, 3-12. doi:10.1016/j.bpobygn.2013.09.002

Oliffe, J. L., Robertson, S., Kelly, M. T., Roy, P., & Ogrodniczuk, J. (2010). Connecting masculinity and depression among international male university students. *Qualitative Health Research*, *20*, 987-998. doi:10.1177/1049732310365700

Oliffe, J. L., Kelly, M. T., Johnson, J. L., Bottorff, J. L., Gray, R. E., Ogrodniczuk, J. S., & Galdas, P. M. (2010). Masculinities and college men’s depression: Recursive relationships. *Health Sociology Review*, *19*, 465-477. doi:10.5172/hesr.2010.19.4.465

Oxley, R. (2017). Pregnant men: Paternal postnatal depression and a culture of hormones. In V. Kirby (Ed.), *What if culture was nature all along?* (pp. 90-109). Edinburgh: Edinburgh University Press.

Paulson, J. F., & Bazemore, S. D. (2010). Prenatal and postpartum depression in fathers and its association with maternal depression: A meta-analysis. *Journal of the American Medical Association*, *303*, 1961-1969. doi:10.1001/jama.2010.605

Philpott, L. F. (2016). Paternal postnatal depression: An overview for primary healthcare professionals. *Primary Health Care*, *26*, 23-27. doi:10.7748/phc.2016.e1120

Popescu. R. (2009). *Introducere în sociologia familiei* [*Introduction to the sociology of the family*]. Iasi: Polirom.

Quevedo, L., da Silva, R. A., Coelho, F., Pinheiro, K. A., Horta, B. K., Kapczinski, F., & Pinheiro, R. T. (2011). Risk of suicide and mixed episode in men in the postpartum period. *Journal of Affective Disorders*, *132*, 243-246. doi:10.1016/j.jad.2011.01.004

Reavley, N. J., & Jorm, A. F. (2011). Stigmatizing attitudes towards people with mental disorders: Findings from an Australian national survey of mental health literacy and stigma. *Australian and New Zealand Journal of Psychiatry*, *45*, 1086-1093. doi:10.3109/00048674.2011.621061

Robila, M. (2002). Child development and family functioning within the Romanian context. *Families in Eastern Europe*, *5*, 141-154. doi:10.1016/S1530-3535(04)05009-5

Sandu, D. (2011). Social disparities in the regional development and policies of Romania. *International Review of Social Research*, *1*, 1-30. doi:10.1515/irsr-2011-0001

Sanger, C., Iles, J. E., Andrew, C. S., & Ramchandani, P. G. (2015). Association between postnatal maternal depression and psychological outcomes in adolescent offspring: A systematic review. *Archives of Women’s Mental Health*, *18*, 147-162. doi:10.1007/s00737-014-0463-2

Saxena, S., Thornicroft, G., Knapp, M., & Whiteford, H. (2007). Resources for mental health: Scarcity, inequity, and inefficiency. *The Lancet*, *370*, 878-889. doi:10.1016/S0140-6736(07)61239-2

Smith, T., Gemmill, A. W., & Milgrom, J. (2019). Perinatal anxiety and depression: Awareness and attitudes in Australia. *International Journal of Social Psychiatry*, *65*, 378-387. doi:10.1177/0020764019852656

Spiker, D. A., & Hammer, J. H. (2019). Mental health literacy as theory: Current challenges and future directions. *Journal of Mental Health*, *28*, 238-242. doi:10.1080/09638237.2018.1437613

Stuart-Parrigon, K., & Stuart, S. (2014). Perinatal depression: An update and overview. *Current Psychiatry Reports*, *16*, 468. doi:10.1007-s11920-014-0468-6

Swami, V. (2012). Mental health literacy of depression: Gender differences and attitudinal antecedents in a representative British sample. *PLoS ONE*, *7*, e49779. doi:10.1371/journal.pone.0049779

Swami, V. (2019, May). Dads get sad too. *The Psychologist*, pp. 28-32.

Swami, V., Barron, D., Smith, L., & Furnham, A. (in press). Mental health literacy of maternal and paternal postnatal (postpartum) depression in British adults. *Journal of Mental Health*. Advanced online publication. doi:10.1080/09638237.2019.1608932

Thorsteinsson, E. B., Loi, N. M., & Moulynox, A. L. (2014). Mental health literacy of depression and postnatal depression: A community sample. *Open Journal of Depression*, *3*, 101-111. doi:10.4236/ojd.2014.33014

Tirintica, A. R., Andielkovic, I., Sota, O., Pirlog, M. C., Stoyanova, M., Mihai, A., & Wallace, N. (2018). Factors that influence access to mental health services in South-Eastern Europe. *International Journal of Mental Health Systems*, *12*, 75. doi:10.1186/s13033-018-0255-6

Todor, I. (2013). Opinions about mental illness. *Procedia: Social and Behavioral Sciences*, *82*, 209-214. doi:10.1016/j.sbspro.2013.06.247

Ugarriza, D. N. (2002). Postpartum depressed women’s explanation of depression. *Journal of Nursing Scholarship*, *34*, 227-233. doi:10.1111/j.1547.5069.2002.00227.x

van der Sijpt, E. (2018). The pain and pride of “angel mothers”: Disappointments and desires around reproductive loss in Romania. *Medical Anthropology*, *37*, 174-187. doi:10.1080/01459740.2017.1294171

Wallis, A., Fernandez, R., Oprescu, F., Chereches, R., Zlati, A., & Dungy, C. (2012). Validation of a Romanian scale to detect antenatal depression. *Open Medicine*, *7*, 216-223. doi:10.2478/s11536-011-0130-1

Zlati, A., Oh, J., & Baban, A. (2011). Mental illness stigma among Romanian adolescents. *Journal of Child and Adolescent Psychology*, *3*, 67-76.

Table 1. *Descriptive Statistics of the Impact of Target Gender and Participant Gender on Attitudes toward Postnatal Depression.*

|  |  |  |
| --- | --- | --- |
| Item | Female Vignette | Male Vignette |
|  | Female participants | Male participants | Female participants | Male participants |
|  | *M (SD)* | *M (SD)* | *M (SD)* | *M (SD)* |
| Distress | 5.60 (1.58) | 4.74 (2.00) | 4.94 (1.83) | 4.54 (1.87) |
| Difficulty of treatment | 4.49 (1.88) | 4.40 (1.95) | 4.19 (1.92) | 4.05 (1.88) |
| Sympathy | 5.70 (1.59) | 5.26 (1.56) | 5.18 (1.77) | 4.88 (1.65) |
| Likelihood of recommending help | 6.66 (0.94) | 6.08 (1.61) | 6.23 (1.37) | 5.61 (1.88) |

**Appendix 1**

**Maternal Postnatal Depression Vignette**

Kate is 30 years old. She and her partner had a baby 4 weeks ago. Since then, she has been feeling really down. She has not enjoyed things the way she normally would. In fact, nothing gives her pleasure. Even when good things happen, they don't seem to make Kate happy. She has to force herself to get through the day, and even the smallest things seem hard to do. She finds it hard to concentrate on anything and has no energy at all. Even though Kate feels tired at night, she still can’t sleep, and wakes up too early in the morning. Kate feels worthless and feels like giving up. Her family has noticed that she hasn’t been herself since the baby was born. She doesn’t feel like talking and isn’t taking part in things like she used to.

**Paternal Postnatal Depression Vignette**

Adam is 30 years old. He and his partner had a baby 4 weeks ago. Since then, he has been feeling really down. He has not enjoyed things the way he normally would. In fact, nothing gives him pleasure. Even when good things happen, they don't seem to make Adam happy. He has to force himself to get through the day, and even the smallest things seem hard to do. He finds it hard to concentrate on anything and has no energy at all. Even though Adam feels tired at night, he still can’t sleep, and wakes up too early in the morning. Adam feels worthless and feels like giving up. His family has noticed that he hasn’t been himself since the baby was born. He doesn’t feel like talking and isn’t taking part in things like he used to.