Research paper

Cultural factors influencing antenatal depression: A cross-sectional study in a cohort of Turkish and Spanish women at the beginning of the pregnancy

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ABSTRACT

Background: Depression is the most frequent mental disorder during pregnancy, and its prevalence is at least as high as that of postnatal depression. Differences between Western and Eastern countries may exist according to cultural and educational factors.

Objective: to determine the influence of social and cultural factors on the mood state of a multicultural sample of 514 Turkish and Spanish pregnant women at the beginning of the pregnancy.

Methods: Between October and December 2017 250 Turkish and 264 Spanish pregnant women attending their first pregnancy medical check-up between 10 and 12 weeks of pregnancy were recruited (264 in Málaga, 102 in Istanbul and 148 in Antalya). These women completed a questionnaire that included the Turkish or Spanish validated versions of the Edinburg Postnatal Depression Scale (EDS) and a series of questions related to health status, general mood, and sociodemographic variables.

Results: Turkish women scored significantly higher with a mean value of 12.1 (SD 4.2) against 7.6 (SD 4.3) of Spanish women. Coping strategies and matters of women´s concern were also different. A total of 9.1% of Spanish and 30% of Turkish scored over cut-off point of 13. We found differences in EDS scores regarding the type of work, working status, and educational level. Family structure and perceived support were identified as specific risk factors for antenatal depression (AD). The multivariate regression model showed that best predictor variables for EDS score in the global sample were the country of recruitment, the number of living children, the pregnancy planning and the perceived partner´s support.

Conclusions: Our results confirm the existence of important differences in AD prevalence between Turkish (30.0%) and Spanish (9.9%) pregnant women. Some sociocultural features like having more children, unplanned pregnancies, or perceiving poor support from the partner, become important vulnerability factors.

1. Introduction

While childbirth is usually considered a biological event, the pregnancy is branded by social constructs, and shaped by cultural perceptions and practices in different societies (Withers et al., 2018). Accordingly, pregnancy can be time of joy and positive expectations, but also of stress and difficulties (Biaggi et al., 2016). The first trimester is a period of intense physical and psychological adaptation (Akçalı Aslan et al., 2014; Çalıkoğlu et al., 2018), and while some women will adapt easily, others will experience psychological disorders (Biaggi et al., 2016; Çalıkoğlu et al., 2018). The processes and life events surrounding

the perinatal period increase the risk for the onset or the relapse of psychiatric disorders like antenatal depression (AD) (Cantwell and Smith, 2009). Some predictor factors as life stress, history of depression, lack of social support, domestic violence, or unintended pregnancy have been reported in previous studies (Lancaster et al., 2010).

The prevalence of depressive disorders during pregnancy ranges from 6% to 14% (Bennett et al., 2004; Gaynes et al., 2005; Howard et al., 2014), and figures are similar or higher than postnatal depression (Heron et al., 2004; O' hara and Swain, 1996; O'Hara and Wisner, 2014). Although postnatal depression is known to be particularly high in some Asian countries like Israel or Turkey, with prevalence over 20%

(Glasser et al., 2000; Senturk et al., 2011), less is known about the prevalence of antenatal depression (AD). Prevalence rates ranged from 16.8% to 22% in two Turkish studies on antenatal depression at first trimester of the pregnancy (Akçalı Aslan et al., 2014; Karatayli, 2007). In Spain and in other Western countries, AD prevalence has been reported to range from 9.5% (González-Mesa et al., 2018) to 14.8% (de la Fe Rodríguez-Muñoz et al., 2017) at first trimester.

It´s worth mentioning that differences between Western and Eastern countries may exist according to cultural and educational factors. Eastern populations have been considered to be more family centred (Schatz et al., 2012) and usually show more collective-oriented values tending to be more conservative and religious than others (Cukur et al., 2004). These factors might influence not only the social and familial support to pregnant women, but also the way that women experience maternity.

Spanish and Turkish population share the peculiarity to be Mediterranean countries, with a long Islamic past, that in last decades have experienced a process of rapid economic and social change. Nowadays, both are secular states but while in Turkey 99% of population is Islamic (Eurydice, 2018), 70.6% of Spanish population is Catholic, what makes them to show some specific cultural characteristics (Centro de Investigaciones Sociológicas, 2018).

We designed this research to learn about the influence of social and cultural factors on the mood state of a multicultural sample of 514 Turkish and Spanish pregnant women at the beginning of the pregnancy.

2. Methods

Between October and December 2017 a total of 250 Turkish and 264 Spanish pregnant women attending their first pregnancy medical check-up between 10 and 12 weeks of pregnancy in three different cities, Istanbul (*n*: 102), Antalya (*n*: 148) and Malaga (*n*: 264), were recruited for study by means of consecutive sampling. These women completed a questionnaire that included the Turkish (Aydin et al., 2004) or Spanish validated versions of the Edinburg Postnatal Depression Scale (Garcia-Esteve et al., 2003) and a series of questions related to health status (medical and reproductive history, pregnancy planning, weight, height, body mass index, tobacco and alcohol consumption), general mood (distress perception and reasons of concern at the moment of the interview), sociodemographic variables (age, level of education, profession and work activity, yearly income, marital status and cohabitants in the household), psychological comorbidity (history of depression), history of assisted reproduction, partner´s support and stress coping strategies. Women with multiple pregnancies, who could not speak Turkish/Spanish, illiterate, and those that refused to participate were excluded from the analysis.

2.1. Instruments

EDS (Cox, 1996) is a self-administered questionnaire, initially developed for the detection of postpartum depressive symptoms. Most recently, EDS has been used for screening depression during pregnancy (Bergink et al., 2011). It consists of 10 questions of multiple choice, with 4 alternatives each, with scores of 0 to 3 according to the increasing severity of the symptoms. It has been validated in a large number of countries and cultures, including Spain (Garcia-Esteve et al., 2003) and Turkey (Aydin et al., 2004).

2.2. Population

We have studied 514 healthy pregnant women at 10 to 12 weeks that attended their first medical control. Of them, 148 were attended at Akdeniz University Hospital in Antalya (Turkey), 102 at Kavas Obstetrics & Gynaecology Clinic in Istanbul (Turkey) and 264 at Regional Maternity Hospital in Malaga (Spain). Regional Maternity

Table 1
Sociodemographic features.

Main sociodemographic features	Spanish n (%)	Turkish n (%)
Age	31.7	30.3
Immigrants[a]	19 (7.3%)	7 (2.8%)
Religion[a]		
Muslim	4 (1.6%)	249 (99.6%)
Christian	200 (80.3%)	1 (0.4%)
Other	45 (18.1%)	–
Education		
Primary	42 (16.3%)	40 (16%)
Middle	56 (21.8%)	54 (21.6%)
High School[a]	65 (25.3%)	103 (41.2%)
University[a]	94 (36%)	53 (21.2%)
Yearly income	13,250 €	12,641 €
Work activity[a]		
Housewife	32 (13.2%)	178 (71.2%)
Self-employment	28 (11.2%)	53 (21.2%)
Employees	138 (56.7%)	17 (6.8%)
Managers	5 (2%)	2 (0.8%)
Working status[a]		
Full time	115 (49.1%)	49 (19.6%)
Part time	62 (26.5%)	25 (10%)
Not working	57 (24.4%)	176 (70.4%)
Marital status[a]		
Single	118 (47.6%)	4 (1.6%)
Married	117 (47.2%)	241 (96.4%)
Other	13 (5.2%)	5 (2%)
Cohabitants in household[a]		
1–3	196 (75.1%)	153 (61.4%)
4–5	58 (22.3%)	69 (27.6%)
>5	7 (2.8%)	28 (11.2%)
Partner´s excitement, interest and support[a]		
Yes	228 (88.4%)	109 (43.6%)
No	30 (11.6%)	141 (56.4%)

[a] Significant differences.

Hospital in Malaga is a tertiary centre that belongs to the public health system of Andalusia where half of the deliveries in the province are attended. Akdeniz University Hospital is a tertiary level hospital with 1050 bed capacity with 33 specialized clinical departments and is one of the leading medical centres in Turkey and Sisli Obstetrics & Gynaecology Clinic is a private centre for obstetric and gynaecological health care assistance in Istanbul. Main features of participants have been included in Tables 1 and 2.

2.3. Procedures

Once the corresponding administrative permissions and ethical approval were obtained, we began our fieldwork, giving the patients a self-administered questionnaire when they arrived at the hospital for their first obstetric visit. They were given no time limit for completing the questionnaire. The questionnaires clarified the voluntary and anonymous nature of the study, and the researchers' contact information was provided in case of complaints.

Between October and December 2017, 1200 pregnant women attended their first pregnancy medical check-up between 9 and 12 weeks of pregnancy in three different settings: 610 at Malaga University Hospital, 375 at Akdeniz University Hospital and 215 at Sisli Obstetrics & Gynaecological Clinic. Among them, by means of consecutive sampling, 514 pregnant women were recruited, 264 women in Spain, and 250 in Turkey setting (142 Antalya and 108 Istanbul).

All recruited women completed the questionnaire.

2.4. Statistical analysis

We performed a first analysis of the frequency distribution of the independent variables. To determine the prevalence of depression in the sample we used the validated cut-off point of 13, so that a score of