IUL School of Social Sciences and Humanities

Department of Social and Organizational Psychology

Arriving “that time of the month”: A gendered account of the healthcare of women with premenstrual symptoms.

Rita Margarida de Jesus Morais Brites

Thesis presented in partial fulfilment of the requirements for the degree of

Doctor in Psychology

Specialty in Clinical and Health Psychology

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Abstract

Studies show that healthcare professionals (HP) can be indifferent to women with premenstrual syndromes, a prevalent and potentially disabling condition affecting 2 to 40% of women. The recognition of premenstrual syndromes as a legitimate health problem has been limited, contributing to its underdiagnosis and undertreatment. To uncover some factors accounting for its underdiagnosis and undertreatment and drawing upon gender stereotypes and representations theories, this thesis aimed to investigate: (1) how HP's gender awareness has been conceptualized, operationalized, and investigated in its relationship to health outcomes and (2) the extent to which HP's gender awareness could be associated with their representations of women with premenstrual syndromes and their implications for clinical encounters and the doctor-patient relationship. To meet aim 1, a *scoping review* on gender awareness in health (Study 1) and a psychometric validation of the *Nijmegen Gender Awareness in Medicine Scale* (N-GAMS.pt; n= 1048 medical students; Study 2) were conducted. To meet aim 2, a quasi-experimental study conducted with 256 medical students (Study 3) and a qualitative study with 32 physicians (Study 4) were conducted. Findings showed that gender awareness is a three-dimensional construct with potential to reduce gender bias, if properly conceptualized and operationalized with a triangulation of measures including the N-GAMS. HP share gendered representations about these women, which potentially contribute for its underdiagnosis and undertreatment. This thesis clarifies the theoretical underpinnings of gender awareness and its relation to HPs representations of women with premenstrual symptoms. It contributes to increase HPs gender awareness hence fostering healthcare equity.

Key-words: Premenstrual syndromes, Gender awareness, Gender representations, Women studies.

PsycINFO Codes:

2970 Sex Roles & Women's Issues

3020 Group & Interpersonal Processes

3040 Social Perception & Cognition

3360 Health Psychology & Medicine

3410 Professional Education & Training

RESUMO

Estudos mostram profissionais de saúde (PS) indiferentes a mulheres com síndromes pré-menstruais, condições prevalentes e potencialmente incapacitantes que afetam 2 a 40% das mulheres. O reconhecimento destas síndromes como um problema de saúde legítimo tem sido limitado, contribuindo para o seu sub-diagnóstico e sub-tratamento. Para compreender alguns fatores responsáveis pelo seu subdiagnóstico e subtratamento, e com base em teorias sobre estereótipos e representações de género, esta tese abarcou dois objetivos: (1) compreender como é que a consciência de género (CG) de PS tem sido conceptualizada, operacionalizada e investigada na sua relação com resultados de saúde e (2) investigar a associação entre CG e as representações de PS sobre estas mulheres e quais as implicações para encontros clínicos e relação médico-paciente. Respondendo ao primeiro objetivo, uma *scoping review* sobre CG em saúde (Estudo 1) e uma validação psicómetrica da *Nijmegen Gender Awareness in Medicine Scale* (N-GAMS.pt; n= 1048 estudantes; Estudo 2) foram realizadas. Respondendo ao segundo objetivo, um estudo quasi-experimental conduzido com 256 estudantes (Estudo 3) e um estudo qualitativo com 32 médicas/os, foram realizados. Os resultados mostraram a CG enquanto construto tri-dimensional com potencial para reduzir enviesamentos de género, se elaborado e operacionalizado através de triangulação de medidas incluindo a N-GAMS. Ainda, os PS partilham representações genderizadas acerca destas mulheres contribuindo potencialmente para o seu subdiagnóstico e subtratamento. Esta tese clarifica os fundamentos da CG e a sua relação com as representações de PS sobre estas mulheres. Esta tese contribui para aumentar a CG de PS promovendo equidade em saúde.

Palavras-chave: Síndromes pré-menstruais, Consciência de género, Representações de género, Estudos sobre mulheres.

PsycINFO Codes:

2970 Papéis sexuais & Questões femininas

3020 Grupos & Processos interpessoais

3040 Perceção Social & Cognição

3360 Psicologia da Saúde & Medicina

3410 Educação profissional & Treino

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CHAPTER 1. General introduction

Once upon a time there was a girl in her twenties who complained to her female gynecologist about her premenstrual symptoms. After months of research about her symptoms she was truly confused and thought that maybe the symptoms were medically relevant. The gynecologist's rapid answer was "I'm going to prescribe you a contraceptive pill, but you also have to control that inside yourself". At that time, that girl did not know what she had nor intended to use contraceptive pills. She didn't complain again anymore.

This is the story of many women with premenstrual symptoms who complain to their doctors. Twenty to forty percent of women in childbearing age can be affected by the Premenstrual syndrome (PMS), *i.e*., a set of physical, cognitive, emotional and behavioral symptoms that occur cyclically during the luteal phase of the menstrual cycle and resolve quickly at or within a few days of the onset of menstruation. It is also estimated that about 2 to 6% of women suffer from Premenstrual Dysphoric Disorder (PMDD), a severe form of PMS (e.g., American College of Obstetricians and Gynecologists [ACOG], 2000; Braverman, 2007; Direkvand-Moghadam, Sayerhmiri, Delpished & Sattar, 2014; American Psychiatric Association [APA], 2013). Consequences of these conditions have been reported at individual (e.g., significant suffering by depressed mood and other symptoms), relational (e.g., marital problems) and socioeconomic levels (e.g., significant loss of work productivity and high costs related to healthcare; e.g. Braverman, 2007; Cunningham, Yonkers, O'Brien & Eriksson, 2009).

Serious delay occurs in help seeking. The majority of women who suffer from these conditions do not seek professional help and when they do, they struggle to see their complaints validated and legitimized (e.g., Alexander, Taylor & Fordyce, 1986; Braverman, 2007; Brown & Zimmer, 1986; Freeman, 2003; Halbreich, Borenstein, Pearlstein & Kahn, 2003; Weisz & Knaapen, 2009). Indeed, a couple of studies in the 80s have shown that healthcare professionals can be indifferent to women with premenstrual symptoms (e.g.,

Alexander et al., 1986; Brown & Zimmer, 1986), which could ultimately result in their underdiagnosis and undertreatment. Whether this is still an issue nowadays and which factors could contribute to healthcare professionals' indifference have not been systematically studied. This thesis will generally address this gap in the literature. More specifically, as to uncover some of the factors accounting for the underdiagnosis and undertreatment of women with premenstrual symptoms, this thesis will address the role of healthcare professionals' gender awareness and their representations of women with premenstrual symptoms.

Improving healthcare professionals' gender awareness has been pointed out as potentially decreasing gender biases in healthcare (e.g., Verdonk, Benschop, de Haes, Mans & Lagro-Janssen, 2009; Verdonk, Benschop, de Haes, & Lagro-Janssen, 2009). In health care, sex and gender are distinguished as different theoretical concepts. Sex is the descriptive label based on the biological characteristics used to categorize human in males and females, and it is also called 3D-gender, based on genes (chromosomes), gonads (hormones), and genitalia (reproductive organs) (Deaux, 1985; Fine, 2017; Unger, 1979; Unger & Crawford, 1993). Gender is the explicative and prescriptive label that refers to socially constructed and shared representations of what means to be and act as a man or a woman in a certain society in a given time (Deaux, 1985; Unger, 1979; Unger & Crawford, 1993). Gender awareness in health care is a set of positive attitudes towards considering sex and gender issues in health and illness, health professionals' reflexivity towards their own social location and gender norms and beliefs, and the knowledge and skills that are necessary to incorporate them into medical practice (Miller, King, Wolfe & King, 1999; Verdonk, Benschop, de Haes & Lagro-Janssen, 2008; Verdonk et al., 2009; Verdonk, 2015). Physicians' higher levels of gender awareness towards women with premenstrual symptoms can be revealed by: (a) showing sensitivity towards these patients' gendered specific needs; (b) being aware of their own gender stereotyped representations about these women and how they influence their clinical

practice (c) knowing and understanding the influence of sex and gender-related factors in premenstrual issues, and (d) possessing the appropriate skills to apply their knowledge to medical practice. Conversely, lower levels of physicians' gender awareness mean lower levels of knowledge, skills and sensitivity towards patients' needs and stronger gender stereotypical views of these women.

Low levels of gender awareness may reflect healthcare professionals' stereotyped representations about these women, which may influence diagnose and treatment decisions. Indeed, women's reproductive health issues, including menstruation issues, are very often stigmatized (e.g., Johnston-Robledo & Chrisler, 2011) involving jokes, beliefs and myths about the women with premenstrual symptoms portraying them as *menstrual monsters* (Chrisler, Rose, Dutch, Sklarsky & Grant, 2006). Adding the fact that PMS and PMDD are unique conditions of women, they may possibly activate gender stereotypical representations of how women "are" and "should be" in healthcare professionals' views (e.g., Amâncio, 1994; Burgess & Borgida, 1999; Kite, Deaux & Haines, 2008). For instance, these stereotyped representations may contain a set of characteristics that are socially constructed and typically attributed to women (e.g., *neurotic*, *aggressive* and *hysterical*; Alexander et al., 1986; Goudsmit, 1994), and that can lead to psychologizing and downplaying their complaints. Therefore, this thesis will provide a better understanding of how healthcare professionals' gender awareness has been investigated over the last decades and analyze the extent to which gender awareness may be associated to healthcare professionals (gendered) representations about women's premenstrual symptoms and, more importantly, the implications of these two factors for the perceptions of clinical encounters and the doctor-patient relationship.

The following introduction is organized in six main sections. The first section presents a detailed description of the characteristics and burden of premenstrual syndromes and their

potential treatment options. The second section presents evidence for the recognition of premenstrual syndromes as a health problem by women with premenstrual symptoms themselves as well as by healthcare professionals. Then, the third section, will stress the importance of gender awareness for decreasing gender bias and promoting equity in healthcare, in general, and regarding premenstrual issues, in particular. The fourth section highlights the importance of healthcare professionals' gendered representations in health and the fifth section highlights the importance of gendered representations specifically about women with premenstrual symptoms. Finally, section six will present the specific goals and the outline of the present thesis.

Premenstrual what? The description of the phenomenon

Throughout their lives, many women report experiencing a set of symptoms before menstruation that, to a lesser or greater extent, influence their lives at many levels. The first reference to "Premenstrual Tension" was coined by physician Robert Frank in 1931 in order to report the experience of fifteen women with irritability related issues. Later on, the term "Premenstrual Tension" was replaced by "Premenstrual Syndrome" by physicians Katharina Dalton and Robert Greene (1953), who defined a *cluster* of symptoms that can affect women in the premenstrual phase. The description of the phenomenon convinced the scientific community sufficiently and they adopted the concept as we know it. Nevertheless, the concept is quite complex and not well-understood. Over 200 symptoms have been related to PMS even though only a small part of them can be explained by the changes in the menstrual cycle (e.g., Braverman, 2007; Freeman, 2003). It is estimated that 20 to 40% of women in their reproductive years suffer from PMS, and that 1.8% to 5.8%% of women of reproductive age suffer from PMDD (APA, 2013; Braverman, 2007; Cunningham et al. 2009; Direkvand-Moghadam et al., 2014; Kelderhouse & Taylor, 2013). However, these values have

undergone oscillations in the various studies that report them (Halbreich, Borenstein, Pearlstein & Kahn, 2003) due to different definitions, criteria and methods used.

Table 1.

Diagnosis Criteria for Premenstrual Syndrome (PMS) Adopted from the American College of Obstetricians and Gynecologists (AGOC, 2000).

Premenstrual Syndrome

1. Diagnosis made if there is (a) a report of at least one of the affective symptoms and; (b) one of the somatic symptoms are present in; (c) the three prior menstrual cycles during the 5 days before the onset of menses.

Affective symptoms	**Somatic symptoms**
Depression	Breast tenderness
Anger outbursts	Abdominal bloating
Irritability	Headache
Anxiety	Swelling of extremities
Confusion	
Social withdrawal	

2. The symptoms must resolve within 4 days of the onset of menses and not recur until day 12 of the cycle.
3. The symptoms must be present in at least two cycles during prospective recording.
4. The symptoms must adversely affect social or work-related activities.

The described symptoms should be recorded in the absence of pharmacological therapy, use of hormones, drugs and alcohol and should interfere with women's professional or social activities, hence, cause suffering (AGOG, 2000; Braverman, 2007). Interference in daily activities may include marital/relational conflicts, parental problems, social isolation, legal problems, suicidal ideation, as well as problems related to school and/or work including

poor performance, delays and absenteeism (Braverman, 2007; Mortola et al., 1989; Mortola et al., 1990).

Although diagnostic criteria have been established, the differentiation between PMS and PMDD is far from being clear (Braverman, 2007). In part, the criteria established by ACOG (2000) and APA (2013) to define PMS and PMDD overlap, but PMDD is more related to serious mood problems leading to a higher level of dysfunction. Opinions about the relationship between PMS and PMDD are divided, leading some authors (e.g., Johnson, 2004; Speroff & Fritz, 2005) to reiterate that PMDD is a more severe form of PMS, and therefore both should be viewed on a continuous scale. Other authors (e.g., Halbreich, 2004) mention that the most correct is to dichotomize them based on their physical and emotional symptoms rather than characterizing them on a continuum of the same entity. PMDD is a depressive disorder and has well defined diagnostic criteria by the American Psychiatric Association (2013). In the 5th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-V, 2013, pp. 171-172), the following diagnostic criteria were described (Table 2):

Table 2.

Diagnosis Criteria for Premenstrual Dysphoric Disorder (PMDD) Adopted from the 5th edition of The Diagnostic and Statistical Manual of Mental Disorders (DSM-V) of American Psychiatric Association (2013).

Premenstrual Dysphoric Disorder
A. In most menstrual cycles, at least five symptoms must be present in the final week before the onset of menses, start to improve within a few days after the onset of menses, and become minimal or absent in the week postmenses.
B. One (or more) of the following symptoms must be present:

1. Marked affective lability (e.g., mood swings, feeling suddenly sad or tearful, or increased sensitivity to rejection).
2. Marked irritability or anger or increased interpersonal conflicts.
3. Marked depressed mood, feelings of hopelessness, or self-deprecating thoughts.
4. Marked anxiety, tension, and/or feelings of being keyed up on the edge.

C. One (or more) of the following symptoms must additionally be present, to reach a total of five symptoms when combined with other symptoms from criterion B.

1. Decreased interest in usual activities (e.g., work, school, friends, hobbies).
2. Subjective difficulty in concentration.
3. Lethargy, easy fatigability, or marked lack of energy.
4. Marked change in appetite; overeating; or specific food cravings.
5. Hypersomnia or insomnia.
6. A sense of being overwhelmed or out of control.
7. Physical symptoms such as breast tenderness or swelling, joint or muscle pain, a sensation of "bloating", or weight gain.

Note: The symptoms in the criteria A-C must have been met for the most menstrual cycles that occurred in the preceding year.

D. The symptoms are associated with clinically significant distress or interference with work, school, usual social activities, or relationships with others (e.g., avoidance of social activities; decreased productivity and efficiency at work, school, or home).

E. The disturbance is not merely an exacerbation of the symptoms of another disorder, such as depressive disorder, panic disorder, persistent depressive disorder (dysthymia), or a personality disorder (although it may co-occur with any of these disorders).

F. Criterion A should be confirmed by prospective daily ratings during at least two symptomatic cycles. (Note: The diagnosis may be made provisionally prior to this confirmation.)

G. The symptoms are not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication, other treatment) or another medical condition (e.g., hyperthyroidism).

As previously described, premenstrual symptoms may greatly interfere in women's daily activities during the luteal phase. Psychological suffering and loss of quality of life are direct consequences of PMS and PMDD (e.g., Braverman, 2007; Campagne & Campagne, 2006; Direkvand–Moghadam et al., 2014) as one of the major concerns evidenced in the literature are the consequences of these conditions for family and social relationships (Cunningham et al., 2009). Interestingly, it seems that the description of PMS consequences are more often focused on the burden for significant others that for the women themselves. Women with PMS have more days of relational problems than other women (Braverman, 2007), interfering with their family life, increasing relationship distress including problems with sexual relationships (Campbell, Peterkin, O'Grady & Sanson-Fisher, 1997), and children's care (Hylan, Sundell, & Judge, 1999).

Consequences at other levels including at the professional and socio-economic level have also been reported (e.g., Braverman, 2007; Cunningham et al., 2009; Direkvand–Moghadam et al., 2014). For instance, women with moderate to severe symptoms have higher labor productivity losses (Cunningham et al, 2009; Hylan et al., 1999) and more health-related costs than those who do not have these symptoms or only have mild symptoms. Women who are diagnosed with PMS show higher levels of work absenteeism and decreased performance (Cunningham et al., 2009; Hylan et al., 1999). Similarly, the diagnosis of PMS

is related to more health costs related to consultations, tests, radiology services (Braverman, 2007). In sum, these personal, relational and socioeconomic consequences reflect the serious impairment and burden that PMS and PMDD may represent in the lives of these women.

Given these consequences more research about this phenomenon is needed. The resolution of most health problems focuses on knowing the underlying etiology for effective treatment. However, the etiology of PMS and PMDD remains unknown (e.g., Ismaili et al., 2016; O'Brien et al., 2011; Zendehdel & Elyasi, 2018). A narrative review carried out by Zendehdel & Elyasi (2018) pointed out that an interaction of several biological, psychological and social factors may be involved in the etiology of PMS and PMDD. Related to biological factors, the role of hormones is obviously salient but also the role of genetics and body metabolites. Ismaili et al. (2016), in a fourth consensus paper about the management of premenstrual disorders (PMDs) of the International Society for Premenstrual Disorders (ISPMD), pointed out that the biological etiology of premenstrual disorders is a complex interaction between ovarian steroid alterations of the menstrual cycle and diverse neurotransmitters including serotonin.

Due to the complexity of the etiology of the PMS and PMDD multiple symptom clusters, there is no universal standard treatment. Indeed, several possible treatment approaches have been described in the literature (for a review see, Braverman, 2007, Halbreich, et al., 2003, Kaur, Gonsalves, & Thacker, 2004, Rapkin, 2003). First, nowadays lifestyles have a preponderant role in people's health, in general, and women's health in particular. Unsurprisingly, healthy nutrition, moderate exercise and effective stress management strategies are recommended for those who want to lead a healthy life, and also for women with PMS/PMDD. Regarding their diets, some minerals (like calcium; Thys-Jacobs, McMahon & Bilezikian, 2007) and vitamins (like vitamin B6 or pyridoxine; Wyatt, Dimmock, Jones, Shaughn & O'Brien, 1999) have been described as providing significant

improvements in PMS and PMDD (Braverman, 2007; Cunningham et al., 2009; Shulman, 2010; Steiner, 2000; Yonkers & Simoni, 2018; Weisz & Knaapen, 2009). Supplements of calcium have been shown to play a significant role in reducing certain physical and emotional symptoms. Magnesium may play a role in reducing depressed mood and fluid retention even though its effects are contradictory in the literature (Walker, De Souza, Vickers, Abeyasekera, Collins & Trinca, 1998; Khine, Rosenstein, Elin, Niemela, Schmidt & Rubinow, 2006). Vitamin B6 is pointed out in the treatment of emotional symptoms and vitamin E in the treatment of some emotional and somatic symptoms (Braverman, 2007; Cunningham et al., 2009; Thys-Jacobs et al., 2007; Wyatt et al., 1999). Also, some medicinal plants (e.g. *ginkgo biloba*; *vitex agnus-castus*) have shown efficacy when ingested with due care (Braverman, 2007). As regards dietary habits, some authors recommend the elimination of refined carbohydrates and the intake of complex carbohydrates rich in tryptophan and advocate for the reduction of foods rich in sodium and caffeine, as well as for low-fat consumption and increased fiber intake (Braverman, 2007; Cunningham et al., 2009; Shulman, 2010; Steiner, 2000). However, there is little scientific evidence for interventions involving reduced ingestion of sugar and eating small and frequent meals to support their efficacy (Cunningham et al., 2009). Also, some studies have corroborated that physical exercise, compared to a sedentary lifestyle, improves the symptoms of PMS in some women. Moreover, some techniques have been referenced with regard to stress management such as biofeedback, self-hypnosis, relaxation exercises, massage, reflexology, guided imagery, light therapy and yoga (Braverman, 2007). Although all these treatments related to women's lifestyle changes are recommended in the literature, more scientific support is needed to prove their efficacy (Braverman, 2007; Cunningham et al., 2009).

Second, psychoeducation techniques that provide information on hormonal cycle and menstruation may also be useful (Braverman, 2007; Morse, 1999). Morse (1999), in a study

with university students diagnosed with PMS, showed a decrease in premenstrual symptoms with an interventional health promotion technique, positively restructuring perceptions about the menstrual cycle. Cognitive-behavioral psychotherapy (CBT) or group psychotherapy has been indicated when psychological symptoms are most significant. CBT may prove to be particularly effective in the treatment of PMDD (Braverman, 2007; Shulman, 2010).

Third, given that PMS and PMDD are related to the menstrual cycle, the suppression of ovulation has been used in its treatment (Braverman, 2007; Cunningham et al., 2009; Shulman, 2010; Steiner, 2000; Yonkers & Simoni, 2018). Thus, oral contraceptive pills are seen by many authors as the first-line medical treatment (Braverman, 2007; Weisz & Knappen, 2009; Yonkers & Simoni, 2018). However, the pill's efficacy in reducing premenstrual symptoms is not demonstrated, and it may even contribute to worsen the symptoms of some women. There are multiple types of oral contraceptive pills that could contribute to different patterns of hormonal balance, which may be the basis for their inconsistent effectiveness in regulating PMS and PMDD symptoms. Adverse drug effects should also be considered, as these sometimes appear in the form of new premenstrual symptoms. Moreover, several studies have shown that oral contraceptive pills appear to be more effective in the treatment of physical symptoms rather than the treatment of emotional symptoms (Braverman, 2007).

Fourth, serotonin reuptake inhibitors (SSRIs) have been the first-line medical treatment used in PMDD (Braverman, 2007; Cunnigham et al., 2009), with proven efficacy when administered either during all the menstrual cycle or just in the luteal phase (Yonkers & Simoni, 2018). Moreover, some studies have shown the beneficial effects of using anxiolytics and other antidepressants in the treatment of somatic and emotional symptoms (Braverman, 2007; Ryu & Kim; 2015; Steiner, 2000).

In sum, despite their 'official' status as a diagnoses, PMS and PMDD are surrounded by controversy and a lack of insight into their underlying mechanisms – they seem to be different health problems depending on the perspective taken: metabolic, hormonal, or mental. Several causes have been associated to PMS and PMDD, but their etiology remains unknown. In the literature, several treatments are indicated, and when symptoms are mild, lifestyle changes are recommended, stressing the importance of attending to diet and exercise (Braverman, 2007; Shulman, 2010). Furthermore, psychotherapy could help these women to better manage their symptoms and engage in more positive lifestyles. When physical symptoms predominate, oral contraceptive pills and nonsteroidal anti-inflammatory drugs may be recommended (NSAIDs; Braverman, 2007; Shulman, 2010). When mood-related and emotional symptoms are predominant, a treatment based on SSRIs should be considered (Braverman, 2007; Shulman, 2010). If there are no positive responses to these treatments, other possibilities (e.g. GnRH agonists) should be evaluated and appropriate precautions taken always under medical advice (Braverman, 2007; Shulman, 2010).

Regardless of the uptake of PMS and PMDD as diagnoses in official diagnostic standards and the availability of treatments to improve women's quality of life, it seems that many women and health-care professional do not recognize PMS and PMDD as legitimate health issues (e.g., Browne, 2015; Chrisler et al., 2006; Cunningham et al., 2009; Kraemer & Kraemer, 1998; Lete et al., 2011; Weisz & Knaapen; 2009). The next section dwells on the potential barriers that may have been hampering the perception of PMS and PMDD as legitimate health conditions.

PMS and PMDD: Recognizing and legitimizing a health problem

Despite the high prevalence of PMS and PMDD, their debilitating symptoms and potentially serious consequences, their recognition by both women and health professionals as legitimate and potentially disabling health problems has been severely limited. Indeed,

PMS and PMDD diagnoses are surrounded by medical controversy, contributing to the lack of complaints by women with premenstrual symptoms and also to the few performed PMS and PMDD diagnoses (e.g., Browne, 2015; Chrisler et al., 2006; Rodin, 1992; Weisz & Knaapen; 2009). Diagnoses of PMS and PMDD are difficult to perform if symptomatic women do not talk about their symptoms or complain in the consultation room (e.g., Lete et al., 2011). A study conducted to assess the attitudes of Spanish women with premenstrual symptoms showed that only 18.7% of women with PMS and 25% with PMDD sought medical advice (Lete et al., 2011). The reasons for not seeking medical help were rooted in women's perceptions that changes in menstrual cycle are a natural process and inherent to the female condition (Lete et al., 2011). Another study with 1045 women in the United States, England and France suggested that the search for treatment for PMS is associated with the severity of the symptoms (Hylan, et al., 1999). However, less than half of women with severe symptoms sought treatment and the remaining half believed that no treatment would help them.

Moreover, there is evidence showing that even in the presence of complaints, few healthcare professionals make diagnoses of PMS and PMDD (Alexander et al.1986; Weisz & Knaapen; 2009). Indeed, the way that healthcare professionals respond to premenstrual complaints may also influence women's healthcare seeking behaviors. Lete et al. (2011) showed that about 20% of women with PMS or PMDD complaints who sought the help of a healthcare professional did not find an appropriate response to their needs. Possibly related to health professionals' inappropriate responses to these complaints, some authors have predicted that 90% of women with PMDD (Cunningham et al., 2009; Halbreich, et al., 2003; Shulman, 2010) and 20% of women with PMS do not get a proper diagnosis nor a treatment (Lete et al., 2011). Indeed, PMS and PMDD diagnoses by physicians are rare (Weisz & Knaapen, 2009). For example, 220 women in the U.S.A. diagnosed with PMS, mentioned

that physicians failed to identify, diagnose or treat it (Kraemer & Kramer, 1998). The few women who sought for medical assistance complained about their symptoms several years before getting a diagnose, which was often made following their own suggestion (Halbreich et al., 2003; Kraemer & Kraemer, 1998). In fact, when women are asked about their experiences during consultations, 54% stated that they felt being treated disrespectfully (Brown & Zimmer, 1986). Expressions like "*it is all in your head*", "*it is part of being a woman*" and "*go home and pull yourself together*" were reported by women with premenstrual symptoms as given by healthcare professionals in the consultation room (Brown & Zimmer, 1986). After the PMS or PMDD diagnosis many of the patients are prescribed medications (Lete et al., 2011; Weisz & Knaapen, 2009), only a few are advised to change their lifestyle and some still remain undertreated as their symptoms are not considered important and expected to disappear spontaneously (Lete et al., 2011).

The foregone suggests that several factors may account for the underdiagnosis and undertreatment of PMS/PMDD. However, current knowledge on the role of psychosocial mechanisms that may account for these patients underdiagnosis and undertreatment is still scarce. This thesis will contribute to bridge this gap by investigating the role of health-care professionals gender awareness and their representations of women with premenstrual symptoms. In the following section, the role of gender awareness in decreasing gender bias in health, in general, and in diagnosing and treating premenstrual symptoms will be presented.

Does being gender aware truly matters? The importance of gender awareness to diagnosing and treating women with premenstrual symptoms

Men's and women's health are not only determined by sex-related biological factors (e.g., hormones) but also by more complex gender-related psychosocial factors which influence individual's health behavior and how they are approached in health care settings (Maas et al., 2011). Coronary Heart Disease (CHD) is one of the well-researched and

alarming examples of the dangers of ignoring the role of both sex and gender as disease determinants. For example, several studies showed that women are, on average, 10 years older than men when they manifest heart disease and usually 20 years older at the time of their first myocardial infarction (Mosca et al., 2007; Regitz-Zagrosek et al., 2016). Among other causes, hormonal make-up (estrogens) is associated with such sex-related differences in CHD, which should be considered by physicians for appropriate treatment (Appelman, Rijn, Haaf, Boersma & Peters, 2015). Gender stereotypical representations of the patient with CHD as a male also accounts for delays in women's identification of their own CHD symptoms and their underdiagnosis by health care professionals (Appelman et al., 2015). Therefore, both sex, gender, and their interactions must be addressed in research and practice, in order to prevent gender bias in medicine that may put at risk women's and men's health and well-being.

More than 20 years ago, Ruiz and Verbrugge (1997) indicated two types of gender biases in health care research and practice. First, researchers and practitioners *assumed equality of men and women*, *i.e.*, that health determinants (e.g., disease risks) for women and men are similar when they are not. For example, female-specific factors, such as certain pregnancy complications (e.g., diabetes) or early menopause, are important risk factors for the development of CHD later in life, which are often not considered (Appelman et al., 2015). Second, there are *assumed differences between men and women*, *i.e.*, that sex-related differences in health determinants exist when this is not the case. For example, precordial pain is more often attributed to anxiety and psychosomatic issues when presented by a woman and more often interpreted as a symptom of myocardial infarction when presented by a man (Colameco, Becker & Simpson, 1983; Chiaramonte and Friend, 2006). Verdonk et al. (2009) extended the conceptualization of gender biases in medicine by distinguishing four ways in which gender has been ignored in medicine. First, medicine may be seen as *gender-*

blind because it often does not consider gender when it is relevant, referring for instance to the exclusion of women from clinical trials (Lagro-Janssen, 2007; Verdonk et al., 2009). The exception is women's reproductive health issues, as many other issues related to women's health have been neglected by medical research. As a corollary of its gender blindness, medicine is also *male biased* because its body of knowledge often assumes an androcentric perspective for several types of diseases that affect both men and women (Pinn, 2003) and often overlooks women's health issues (e.g., the relationship between menopause and occupational health; Bendien et al., 2019). Male bias also leads to the treatment of female symptoms as outliers. For example, in the case of CHD the symptoms most often reported by women are frequently viewed as atypical (Verdonk et al., 2009). The male bias may also account for the "pathologization" and treatment of women's normal body functions in their different life cycles (e.g. menopause) (Verdonk et al., 2009). These two ways in which gender has been ignored in medicine - *gender-blindness* and *male bias* (Verdonk et al., 2009) – reflect an *assumption of equality between men and women (*Ruiz and Verburgge, 1997*)* when such is not the case.

Third, physicians' *gender role ideologies, i.e.*, their stereotypical beliefs and attitudes towards males and female patients and doctors may also play a role in health-care settings (Verdonk et al., 2008; Verdonk et al., 2009). For instance, in a study developed by Adams et al., (2007), healthcare professionals more readily sought psychological cues and explanations for women's symptoms compared to men's symptoms for CHD. These situational aspects may produce gender bias regarding the underdiagnosis of CHD and under referral to cardiologists (Verdonk et al., 2009). In short, these biases reflect an *assumption of differences between men and women* (Ruiz and Verbrugge, 1997) when they do not exist. Finally, regardless of the growing body of evidence showing the impact of sex and gender on health, *gender inequality* has been disregarded as a health issue and as a disease determinant in itself, creating a barrier

to tackling gender biases. Gender equality is the absence of discrimination on the basis of a person's sex, either in terms of opportunities, resource allocation or access to services. Nowadays, gender equality is set as a development goal as it contributes to the achievement of other goals such as the improvement of the quality and efficiency of health care. Although equality under the law and economic opportunity is best served in a gender-neutral way, equity in health care means respect for difference without losing sight of gender inequalities (Verdonk et al., 2009).

As already shown, sex and gender are important determinants of health and several types of gender biases are pointed out in the literature. Indeed, serious consequences may result from these gender biases. A lack of awareness of gender biases poses a system failure and thus, forms a serious problem affecting health care provision, for women in particular but also for men, and contributes to the perpetuation of inequities in health-care provision (Verdonk, Mutinga, Leyerzapf, & Abma, 2019). Some authors have argued that increasing healthcare professionals' gender awareness ensures men and women's equal access to opportunities, resources and health services (i.e., promoting *gender equality;* Hammarström et al., 2013; Verdonk et al., 2009*)* but also, adequate understanding, incorporating and adjustment of the provided healthcare to the specific health-related needs of men and women to safeguard fairness in health outcomes (promoting *gender equity*; Hammarström et al., 2013; Verdonk et al., 2009).

Gender awareness was defined, conceptualized and operationalized for the first time by Miller et al. (1999). These authors defined a Model of Gender Awareness in Veterans Administration Health Care in the United States of America, developed in a context where the needs of veteran women were severely overlooked. Miller et al.'s gender awareness model (1999) included three dimensions: *gender sensitivity*, *i.e*., the degree to which a healthcare professional is aware of and sympathetic towards the needs and requirements of

female patients; *gender ideology*, representing healthcare workers' attitudes towards female patients and; *knowledge,* i.e. the degree to which healthcare workers possessed accurate information about female patients and their needs. The authors conceived of these dimensions as interrelated, e.g., *gender sensitivity* and *gender ideology* towards female veterans could influence the way in which healthcare professionals seek and retain information/*knowledge* about these women and their health-related needs. In sum, this model provided a first conceptualization of gender awareness as an intra-individual attribute characterized by three components that can be measured and applied to different healthcare professionals.

Later on, Verdonk et al. (2008) expanded the concept of gender awareness, introducing it as a broader concept related to the understanding of gender issues involved in health processes of women but also men, patients and doctors. Verdonk et al. (2008) also suggested three conceptual dimensions of gender awareness (*sensitivity*, *ideologies* and *knowledge*), and operationalized its attitudinal components in a self-report scale aiming at assessing medical student's gender awareness: (1) *gender sensitivity*, i.e., the extent to which medical students are sensitive and sympathetic to the impact of gender in medical practice; (2) *gender-role ideology towards patients*, i.e., medical students' stereotypical views towards male and female patients and; (3) *gender-role ideology towards doctors*, i.e., medical students' stereotypical views towards male and female doctors.

If (future) health-care professionals' gender awareness may be important to reduce gender bias in health care in general, it may be particularly important when it comes to the care of exclusive male or female health conditions, such as the case of PMS and PMDD. Indeed, concerning women with premenstrual issues, health care professionals' gender awareness means having a sensitive attitude towards these patients, understanding gender equality as a health determinant, as well as having the knowledge of the influence of sex and gender issues in premenstrual syndromes and all the controversies surrounding them. It also means

reflexivity, which refers to taking a step back, and reflecting on their own values, norms, and social identities and how these may influence their clinical practice (Andersson, Verdonk, Johansson, Lagro-Janssen, & Hamberg, 2012; Verdonk, et al., 2008; Verdonk et al., 2009; Verdonk, 2015). Given the potential relevance of health care professionals' gender awareness for the promotion of gender equity and equality in health, and hence, in the assessment and treatment of PMS/PMDD, this concept will play a central role in the present thesis. More specifically, this thesis will aim to generally understand: (1) how gender awareness in health has been investigated over the last two decades and (2) how gender awareness is associated to healthcare professionals' stereotypical representations of women with premenstrual syndromes. The extent to which healthcare professionals adhere to more gender stereotypical views of women with PMS/PMDD, hence reflecting lower levels of gender awareness, may play a central role in accounting for PMS/PMDD underassessment and treatment. The next section will address the main theories on gender stereotypes and representations, their application to health, in general, and premenstrual issues, in particular.

The bad news is that you suffer from "gender stereotyping": The importance of gender representations to the health of women with premenstrual symptoms

Gender representations on health have been extensively studied, not just regarding their influence on men's and women's health behaviors (e.g., Courtenay, 2000; Garfield, Isacco & Rogers, 2008; Helgeson, 1990; Kaplan & Marks, 1995; Spence, Helmreich & Holahan, 1979; O'Brien, Hunt & Hart, 2005) but also their effects on social interactions that take place in clinical encounters (e.g., Bernardes, 2010; Bernardes, Keogh & Lima, 2008; Broverman, Broverman, Clarkson, Rosenkrantz, & Vogel, 1970; Goudsmit, 1994; Helgeson, 2012; Samulowitz, Gremyr, Eriksson & Hensing, 2019). Gender representations include gender stereotypes, gender roles and institutionalized ideologies, consolidated in a social construction process of differences between men and women that reveals to be, dynamic,

asymmetrical and changeable in social interactions (e.g., Amâncio, 1992, 1993a, 1994; Bernardes, 2010; Deaux, 1985). Gender stereotypes are a type of social stereotypes that consist of cognitive structures that incorporate knowledge and expectations about the characteristics, roles and behaviors of men and women, which are socially acquired, constructed and shared (Burguess & Borgida, 1999; Deaux, 1985; Ellemers, 2018). Gender stereotypes influence our judgments and assessments about men and women, often leading to prejudice and discrimination (Deaux, 1985; Deaux & Kite, 1993; Deaux & La France, 1988; Hamilton & Trolier, 1986). (Gender) stereotypes are the result of the interaction between information processing, motivational and identity factors, dynamics of relations between groups and ideological factors (Allport, 1954; Lippman, 1922). The perception of the existence of two dimorphic sexual categories (men vs. women) is based upon perceptually salient biological features related to sexual and reproductive characteristics (e.g., capacity to give birth, physical strength). Such sexual categories are then associated with other judgements or social values and are emotionally laden (e.g. "hysterical", "aggressive"), making social categorization independent of the structure of the physical world. Humans undertake this process of social categorization to simplify information that normally culminates in excessive generalizations. Gender is one of the master categories being acquired through socialization (Verdonk, et al., 2019; Zemore, Fiske & Kim, 2000) and gender stereotypes comprise a descriptive component but they are prescriptive as well (Burguess & Borgida, 1999). The descriptive component of gender stereotypes consists of the socially constructed and acquired beliefs about characteristics, roles and behaviors that women/men possess (e.g. emotional/aggressive), whereas the prescriptive component includes the normative expectations about how women/men should be or behave (e.g. being caring/dominant, Burguess & Borgida, 1999).

At the beginning of the millennium, the psychologist Susan Fiske and her colleagues argued that, generally, stereotypes include two main dimensions of contents: the perceived competence and the perceived warmth (Fiske, Cuddy, Glick & Xu, 2002). Indeed, the Stereotype Content Model (Fiske et al., 2002) assumes that many stereotypes include frequent mixed combinations of competence and warmth, defined by different ratings on one dimension coupled with ratings on the other dimension. Also, variables such as outgroup status and competition predict different attribution ratings of competence and warmth. Subsequently, different and mixed competence-warmth combinations result in different stereotypes of many outgroups such as elderly, poor people, Asians and also men and women. Regarding gender stereotypes, for instance, traditional women are described as rating low on competence but high on warmth dimension. The group of women is frequently portrayed as disrespected but pitied "which carries overtones of compassion, sympathy and even tenderness, under the right conditions" (Fiske et al., 2002, p. 880). In contrast, non-traditional women (such as businesswomen, feminists, lesbians or athletes) are depicted as highly competent but not warm (Glick & Fiske, 2001a; 2001b; Fiske et al., 2002). These results found by Fiske et al., (2002) corroborate the several studies that have been developed since the 1960s to identify the contents of gender stereotypes shaping the way people represent men and women. These studies have shown some consistencies in the representations of masculinity and femininity across cultures and until nowadays (Amâncio, 1992, 1993b, 1994; Broverman, et al., 1970; Ellemers, 2018; Fiske et al., 2002; Rocheblave-Spenlé; 1964; Rosenkrantz, Vogel, Bee, Broverman & Broverman, 1968). Indeed, male stereotypes are organized around a *competence cluster* (Ellemers, 2018; Fiske et al., 2002), composed by socially valued characteristics such as *agency*, independence, rationality, emotional stability, dynamism, aggression, dominance, and self-assertion. In turn, female stereotypes remain in the opposite pole, characterized by emotional instability, passivity and

submission, characteristics negatively valued. Moreover, femininity is linked to a *cluster* of warmth (Ellemers, 2018; Fiske et al., 2002), which include affective *expressiveness* and *communality* such as agreeableness and empathy. This dimension is generally positively valued in the female stereotype.

Recently, Ellemers (2018), reviewing the literature on gender stereotypes, corroborates an association of the *agency* dimension to the male stereotype and the *expressiveness/communality* dimension to female stereotype. Specifically, greater *agency* in men is associated to assertiveness and performance and greater *communality* in women is associated to warmth and care for others. As such, it is also expected that in men's priorities is work and in women's priorities is family. This also may account for the neglect of men's needs for interpersonal connection and women's need for professional achievement. Moreover, the content of the male stereotype seems to be more diverse, more valued, and closer to the representation of the ideal adult person when compared to the female stereotype that is specific, contextualized and restricted to women's roles (Amâncio, 1992; 1993a, 1993b; 1994; Eagly & Kite, 1987; Rocheblave-Spenlé, 1964; Rosenkrantz et al., 1968).

In the 80s and 90s in the Portuguese society, Amâncio (1992, 1993a, 1993b, 1994) sought to go beyond the classic studies of Social Psychology on gender stereotypes aiming to associate a set of stereotypical traits to the feminine and masculine stereotype. Indeed, Amâncio (1992, 1993a, 1993b, 1994) searched for an ideological explanation for the constitution of stereotypes around such traits, through the identification of the meanings they carried in relation to a referent, which was, in this case, the image of an adult person. The results showed the proximity of the male stereotype to the adult stereotype and the distance of the female stereotype in relation to this supra-ordered category. This phenomenon became known as Symbolic Asymmetry (Amâncio, 1992, 1993a, 1993b, 1994, 2017). Indeed, Amâncio (1992, 1993a, 1993b, 1994) found that the female stereotype was composed by

traits and characteristics with different valences. On one hand, physical and affective traits related to the role of women in the family were considered positive, traits of dependence and submission were considered negative and traits related to the emotions and expression of feelings did not have consensus regarding their evaluation. On the other hand, these studies showed that the male stereotype did not embody physical traits, did not present a category that was globally negative, and did not point to any specific role or function of men. The male stereotype was then only composed of a diversity of generally valued adult competences. The distance of the female stereotype to the referent of an adult person was due to the inclusion of physical and dependence traits in the female stereotype that were absent in the male and adult stereotype. Consequently, the scarcity and specificity of meanings associated to the female stereotype allow this category to raise a more accurate knowledge of the person to whom it applies. Conversely, the multiplicity of competences included in the masculine stereotype reflect a subjective model of an autonomous, self-determined and ideal person, regardless of any specific function and context (Amâncio, 1992; 1993a, 1993b, 1994).

Corroborating this pattern of findings termed Symbolic Asymmetry (1992, 1993a, 1993b, 1994, 2017) a study performed by Eagly & Kite (1987), found that the nationality stereotype contained dimensions common to the male but not the female stereotype. This symbolic asymmetry was also explored in Connell's (1995; 2002) concept of hegemonic masculinity. Indeed, the contents of such gender stereotypes are a reflection of a gender ideology rooted in western contemporary societies as to maintain a gender order. Such ideology represents the ideal pattern of being as a person and as man, contributing to perpetuate the relations of dominance between men and women – patriarchy – maintaining the *status quo*. The male stereotype reiterates a set of social practices like heterosexuality, strength, resistance, dominance, autonomy, individuality, stoicism, rationality and

competence greatly valued and promoted by western contemporary societies. In sum, gender representations do not only describe and prescribe different characteristics and roles to men and women. These representations also include characteristics that are differently valued reflecting status asymmetries between the sexual groups, hence, continuously reinforcing patriarchy.

But how can these gender representations influence individuals' health? Like any other individual, healthcare professionals also share such gender representation and may act upon them in their clinical situations. Indeed in clinical contexts, gender representations have a special relevance because they can influence the processes of clinical decision-making, and subsequently, influence men's and women's health. However, the activation and application of health-care professionals' gender stereotypes to their clinical practices and interactions will not occur in the same way across all situations (e.g., Deaux & Major, 1987). Indeed, in order to explain the interactive nature of gender, Deaux & Major (1987) proposed a model that perceives gender-linked behaviors, as flexible, multidetermined and contextually dependent. In this perspective, interpersonal or intragroup interactions are perceived as gendered identity negotiation processes, where individuals often experience the inherent conflict between internal consistency and the response to contextual demands in order to maintain a positive image in the eyes of themselves and others. The model identifies three structural elements of any interaction: the perceiver, the target, and the context. The perceiver (e.g., health-care professional) enters in the interaction with their complex gender belief system (including stereotypes), the target (e.g., patient) also enters in the interaction with his/her own self-system (including gender identity) and finally, the situation may vary in how gender issues are more, or less, salient. In sum, gender is a component of ongoing social interactions in which the perceivers emit expectations, the target negotiates his/her own gender identity in the situation, and the context shapes the resultant behavior. A first

assumption of this model is that both the perceiver and the target, will base their judgments or behaviors on their gender-belief systems when they are activated, that is, when they are accessible in memory. Many factors could contribute to the activation of gender-belief systems, such as a predisposition for schematic processing of information, but also the presence of physical characteristics and other presentation styles from the target. Characteristics of the situation may also activate these gender-belief systems. For instance, in clinical contexts, the presentations of symptoms with strong gender connotations such as premenstrual symptoms could be an influencing factor in the activation of these systems.

Later on, Deaux & La France (1998) argued that we must understand these dynamics according to the social structures, ideologies and power factors that are involved in such interactions. This points again at the role of culturally prevailing ideologies in Western societies, such as the ideology of hegemonic masculinity (Connell, 1995; 2002) in gender interactions. Thus, gender representations involve dynamic processes of gendered interactions that go beyond the barriers of factual knowledge by giving the floor to stereotypes, attitudes, ideologies, and potentially leading to discriminatory behaviors.

Gender representations' impacts on health and disease processes have been extensively investigated (e.g., Bernardes, 2010; Bernardes et al., 2008; Bernardes & Lima, 2010; Broverman et al., 1970; Goudsmit, 1994; Helgeson, 2012; Samulowitz, et al., 2019). Broverman et al. (1970) found that the representation of female patients in clinical context diverged from the image of male patients and adults in general because they were considered more "submissive," "less independent," "less aggressive," "less competitive," "more easily influenced," "more emotional," and "less objective". Since then, the role played by gender representations in accounting for gender biases in the assessment and treatment of several health conditions has been amply investigated. For instance, gender biases have been investigated in the treatment of mental health (Broverman et al., 1979) pain, (Bernardes,

2010; Bernardes et al., 2008; Bernardes & Lima, 2010; Samulowitz et al., 2019), depression (Helgeson, 2012), Coronary Heart Disease (CHD) (Helgeson, 2012) and several other illness and health conditions processes. For instance, a recent systematic review (Samulowitz et al., 2019) showed that women in pain are perceived as hysterical, emotional, complaining, not wanting to get well, malingerers and as fabricating pain in their heads. Conversely, men are seen as being stoic, tolerating and denying pain. As such, men are described as more autonomous, avoiding seeking healthcare and not talking much about their pain. These reviewed studies supported the existence of gender bias in clinical encounters including gender bias in the prescribed medication (Samulowitz et al., 2019). Also, women with chronic pain, frequently reported being mistrusted and psychologized by their healthcare professionals (Samulowitz et al., 2019). In fact, studies describing the narrative of women in pain showed that their pain were not take it seriously and that neglectful attitude by the healthcare professional play a significant role in the results (Lillrank, 2003; Samulowitz et al., 2019).

Also, healthcare professionals seem to respond differently to depression in men and women (Helgeson, 2012). In this specific disease, women are more frequently associated to the "typical depressed person" than men. Depression is also accompanied by several ambiguous and diffuse symptoms normally associated to women and for that reason gender-connoted. Fatigue and difficulties in concentration are examples of symptoms that can be present in depression, which can be also indicators of several other diseases and health conditions just like PMS or in more serious cases PMDD. In the presence of these symptoms healthcare professional might be more likely to activate a depression schema when the patient is a woman. Representations of depression are strongly connected with the representations of women, which can lead to several consequences such as over-medicalization in women and neglect of depression symptoms in men (Helgeson, 2012).

A reverse pattern of gender biases is found in the case of CHD (Helgeson, 2012). The "typical cardiac patient" is an older white man. For this reason, women frequently deviate from the healthcare professionals' representations of the person with CHD and the diagnosis of women with CHD may be less frequently called to memory (Helgeson, 2012). This results in a series of consequences for women. Namely, women compared to men are less likely to receive drug therapy, *percutaneous transluminal coronary angioplasty* and *coronary bypass surgery* (Helgeson, 2012; Kattainen et al., 2005; Travis 2005).

In sum, health-care professionals' gender representations may influence the way men's and women's symptoms are interpreted, assessed and treated in clinical encounters, hence, contributing to gender biases in health-care contexts.

Gendered representations of women with premenstrual symptoms

Although there is enough literature showing how gender representations can influence different health and disease processes (e.g., Bernardes et al., 2008; Bernardes, 2020; Bernardes & Lima, 2010; Samulowitz, et al., 2019), empirical studies directly investigating healthcare professionals' representations of women with pre-menstrual symptoms are almost non-existent. Some studies focus on the perceptions of women (Brown & Zimmer, 1986; Lee, 2002; Nash & Chrisler, 1997; Reilly & Kremer,1999; Sveinsdóttir, Lundman & Norberg, 1999; Sveinsdóttir, Lundman & Norberg, 2002; Wong, 2011) or their partners (King, Ussher & Perz, 2014; Makuch, Osis, Padua & Bahamondes, 2013; Reberte, Cogo de Andrade, Hoga, Rudge & Rodolpho, 2013) regarding premenstrual issues. Moreover, a recent study carried out by Hermosa and Mejía (2016) sought to understand the Spanish gender representations of two fundamental menstrual stages of women's lives: menarche and menopause. Findings showed that both menarche and menopause are considered rites of passage associated with differently valued gender contents, generally associated to female fertility. Whereas

menarche is positively valued because it symbolizes fertility, sexuality and "becoming a woman", menopause is negatively valued because it symbolizes loss of fertility, sexuality and the aging process. In sum, if these studies have investigated the representations of the stages of the menstrual and/or fertility cycle they do not tap into the representations of women *per se*.

Indeed, evidence for healthcare professionals' representations about women with premenstrual symptoms is quite scarce. To the best of my knowledge, the only study found so far with this specific aim was carried out by Alexander et al. (1986). This study aimed at understanding the perceptions of general practitioners (GPs) about PMS and women with PMS comparing to the typical woman. The main results showed that about half of the GPs reported that women with PMS were *not* significantly different from the typical woman. However, physicians who considered that there were differences reported that women with PMS were more likely to be hypochondriac, introverted and intelligent, to be married, to have small families and to belong to the higher social class.

Although this study provides interesting data for research on representations of PMS and women with PMS, it leaves plenty of questions unanswered. What are the current health-care professionals' representations of women with premenstrual symptoms? How are these shaped by gender dynamics? Do these representations influence clinical encounters and premenstrual symptoms underassessment and undertreatment? These are some of the questions that are still without an answer.

By drawing upon theories on gender stereotypes and representations (Amâncio, 1994; Kite, et al., 2008; Spence & Helmreich, 1980) this thesis will generally aim to bridge these gaps. I generally hypothesize that reporting a set of symptoms including pain and also mood fluctuations, distress, anxiety and depression could set women with premenstrual symptoms apart from the hegemonic masculine values of self-control, agency, instrumentality,

autonomy, and dominance, usually more associated to the 'typical man' (e.g., Amâncio, 1993b; 1994; Burgess & Borgida, 1999; Eagly & Kite, 1987; Helgeson, 1994; Kite, et al., 2008; Spence & Helmreich, 1980). Also, by manifesting irritability, anger, and aggressiveness women with premenstrual symptoms could lose the most valued core component of femininity, i.e. interpersonal competence (e.g., being affectionate and communal; Chrisler et al., 2006; Cosgrove & Riddle, 2003; Lorber & Moore, 2002). The majority of symptoms that characterize PMS and PMDD are gendered *per se* (e.g., Chrisler & Caplan, 2002), i.e., they are regularly attributed to other syndromes or diseases that prevail in women. Given the fact that PMS and PMDD are exclusively women's health conditions, they are specifically positioned to distance these women from valued and gendered ideals of being (e.g., Amâncio, 1994; Deaux & La France, 1998; Deaux & Major, 1987; Ellemers, 2018; Kite et al., 2008; Lorber & Moore, 2002; Spence & Helmreich, 1980). Such stigmatized (and potentially gendered) representations could be one of the psychosocial factors that account for the underdiagnosis and undertreatment of women with premenstrual symptoms. This thesis will explore this assumption. In the following section a summary of the specific aims and outline of this thesis are provided.

Aims and outline of the present thesis

To uncover some of the factors accounting for the underdiagnosis and undertreatment of women with premenstrual symptoms, this thesis has two general aims. The first aim is to provide a better understanding of how healthcare professionals' gender awareness, which bears the potential to decrease gender biases in health care (e.g., Verdonk et al., 2009), has been conceptualized, operationalized and investigated in its relationship to health outcomes. The second aim is to investigate the extent to which gender awareness may be associated to (future) healthcare professionals' (i.e. medical students and physicians) representations about

women with premenstrual symptoms and their implications for the perceptions of clinical encounters and the doctor-patient relationship.

The present thesis is organized in six chapters including this introduction. Chapters two to five present the empirical studies. In chapter six, a general discussion is presented in which the empirical studies are discussed and implications for research and practice are presented.

Related to the first general aim, **study one (chapter 2)** will provide a systematic analysis of how gender awareness research has evolved since its conceptualization by Miller et al. (1999). Specifically, this *scoping review* aims to investigate how gender awareness has been conceptualized, operationalized and what evidence supports its relationship with health-related outcomes. The second specific goal of the present thesis is to adapt and validate the Nijmegen Gender Awareness in Medicine Scale to the Portuguese population (N-GAMS, Verdonk et al., 2008). This scale is one of the few measures that has been developed and validated (Verdonk et al., 2008), and provides a theoretically grounded and multi-dimensional assessment of health-care professionals' gender awareness in medicine. This correlational study was conducted with medical students to test the scale's three-fold underlying structure and extending its criteria-related validity. The study of the adaptation and validation to the Portuguese population of the N-GAMS is presented in detail in **chapter three (study 2)**.

Regarding to the second general aim of this thesis, my third specific goal is to understand the extent to which representations of women with PMS/PMDD reflected stereotypical gendered representations. In this study (study 3), the main aim is to understand the role of medical students' gender awareness on their representations of women with PMS and PMDD. Drawing upon gender stereotype and representations theories (e.g., Amâncio, 1994; Deaux & La France, 1998; Deaux & Major, 1987; Ellemers, 2018; Kite et al., 2008; Spence &

Helmreich, 1980), it is expected that: (a) compared to the representation of the typical woman, women with premenstrual symptoms would be perceived as (hypothesis 1) less socially competent (typically feminine) and (hypothesis 2) less dominant and instrumental (typically masculine) and; (b) these effects would be stronger among medical students with stronger gender-role ideologies towards these patients, i.e., with higher adherence to gender stereotypical views about female patients (hypothesis 3). This quasi-experimental study involving medical students is presented in **chapter four (study 3).** My fourth specific goal is to investigate the contents of physicians' representations of women with PMS/PMDD, the extent to which such representations were gendered, and finally, understand the implications of these gendered representations to perceptions of clinical encounters and doctor-patient relationship. This qualitative and exploratory study was carried out by interviewing female and male obstetricians/gynecologists and general practitioners, and a thematic data analysis was performed. This study is presented in **chapter five (study 4).**

Finally, chapter six finishes present an overall discussion of the findings, a critical reflection on their theoretical and empirical contributions to the field, also pointing to future directions for further research and practice.

CHAPTER 2. What is Gender Awareness in health? A *scoping* review of the concept, its operationalization, and its relation with health outcomes

ABSTRACT

Background: Gender awareness as a concept emerged in the 1990s and aimed to provide awareness and sympathy towards the needs of women, measuring healthcare providers' attitudes towards women and understand if providers possessed the knowledge to provide appropriate care. Gender awareness incorporates three sub-dimensions: *gender sensitivity, gender ideology* and *knowledge*. Gender awareness is discussed for its potential to minimize gender bias in health care and thus, to improve ecological validity of research. This study entails a *scoping* review providing an analysis of how gender awareness has been conceptualized and operationalized in research and what findings have supported the concept's relationship with health-related outcomes.

Methods: A database search was conducted on PubMed, PsycINFO and ERIC. The relevance of 2,589 articles was assessed, a remainder of 14 empirical studies were selected and included in the review.

Findings: Results showed that conceptual confusion surrounded the gender awareness concept; gender awareness and *gender sensitivity* were often presented as interchangeable. Most papers aimed to measure and compare levels of gender awareness among health professionals. Five studies focused on the implementation of intervention programs aiming to increase healthcare professionals' gender awareness. Nevertheless, the relationship of gender awareness with relevant health-related outcomes was not studied.

Discussion: Findings stress the need to further clarify the theoretical underpinnings of gender awareness and to collect empirical evidence testing the contention that increasing healthcare professionals' gender awareness will decrease gender bias in health care.

Keywords: Gender awareness, Gender Sensitivity; Review; Conceptualization; Operationalization; Health;

Introduction

Sex and gender are determinants of individuals' health (e.g., Crolla & Bamforth, 2011; Dielissen, Bottema, Verdonk & Lagro-Jassen, 2011; Gahagan, Gray, Whynacht, 2015; Gochfeld, 2010; Verdonk, Benschop, de Haes & Lagro-Janssen, 2009). Sex is a descriptive concept often used to categorize human beings into males and females based on their biological characteristics (Deaux, 1985; Unger, 1979; Unger & Crawford, 1993). Gender refers to socially constructed and widely shared representations of what it means to be and act as a man or a woman in a certain society, i.e., masculinity and femininity (Deaux, 1985; Unger, 1979; Unger & Crawford, 1993; Tannenbaum, Greaves & Graham, 2016; Verdonk et al., 2009). One of the most well-known and alarming examples of the dangers of ignoring the role of sex and gender as disease determinants is the case of coronary heart disease (CHD). Ignoring the role of sex and gender in the development of CHD often results from serious gender biases in etiology attributions and symptom interpretations (e.g., precordial pain is more often misattributed to anxiety when presented by women than men) (Appelman, Rijn, Haaf, Boersma & Peters, 2015; Maas et al., 2011; Mosca et al., 2007; Regitz-Zagrosek et al., 2016). This often leads to underdiagnosing and undertreating women's CHD, ultimately accounting for their higher mortality and morbidity rates after (un)recognized myocardial infarctions (Abbey & Stewart, 2000; Bello & Mosca, 2004; Biddle, Fallavollita, Homish & Orom, 2019; Jacobs & Eckel, 2005; Westerman, & Wenger, 2016).

It has been argued that increasing healthcare professionals' gender awareness may be a main strategy to minimize gender biases in health and their deleterious consequences for men and women (e.g., Verdonk, et al., 2009). Increasing healthcare professionals' gender awareness would imply promoting positive attitudes towards considering the role of sex and gender in health and illness and having the knowledge and skills necessary to incorporate them into clinical practice, as to promote more equitable health care (e.g., Verdonk et al.,

2009). However, this is easier said than done. Despite the huge amount of evidence on gender biases in health (e.g., Appelman et al., 2015; Maas et al., 2011; Mosca et al., 2007; Regitz-Zagrosek et al., 2016; Verdonk et al., 2009) and the surmounting body of knowledge on the role of sex and gender in health and illness, research on implementing and validating the importance healthcare professionals' gender awareness seems to be lagging behind (e.g., Celik, Lagro-Janssen, Widdershoven & Abma, 2011; Lindsay, Rezai, Koine & Osten; 2019). Given the strategic importance of this concept for promoting gender equity in health care, this review generally aims to investigate how researchers have conceptually and empirically approached gender awareness in health-related contexts over the past 21 years, since it was first conceptualized by Miller, King, Wolfe and King (1999).

Gender Awareness: Conceptualization, relevance and implications

Miller et al. (1999) authors defined a *Model of Gender Awareness in Veterans Administration Health Care* in the United States of America, where the health needs of veteran women, a growing population in this context, were severely overlooked. In that era, it was relevant to conceptualize gender differences from the perspective of healthcare professionals and to develop a conceptual model about gender awareness in the health services to guide research and intervention. Miller et al.'s gender awareness model offered a broad concept that included three dimensions: *gender sensitivity*, i.e., the degree to which a healthcare worker was aware of and sympathetic towards the needs and requirements of female patients; *gender ideology*, representing healthcare workers' stereotypical attitudes towards female patients and; *knowledge,* i.e., the degree to which healthcare workers possessed accurate information about female patients and their needs. The authors conceived of these dimensions as interrelated, e.g., *gender sensitivity* and *gender ideology* towards female veterans could influence the way in which healthcare professionals seek and retain information/*knowledge* about these women and their health-related needs. The three-

dimensional model could be applied to healthcare professionals (physicians, nurses, etc.) as well as clerical personnel (administrators and managers, physical plant workers, technicians, etc.). In sum, this model provided a first conceptualization of gender awareness in health care as an intra-individual attribute characterized by three components, which could be measured and applied to different healthcare professionals.

To the best of our knowledge, so far two literature reviews about gender awareness in health-related contexts have been published. Celik et al. (2011) carried out a systematic review aiming at identifying the opportunities and barriers for the implementation of gender sensitive healthcare. According to these authors, healthcare professionals' gender sensitivity meant to have the ability to incorporate gender differences in their actions in medical practice. Their review included 11 studies from a total of 752 articles identified and assessed in CINAHL, PsycINFO, Medline, EBSCO and Cochrane (1998-2008). The results showed that gender sensitivity implementation depended on several opportunities and barriers at (Celik et al., 2011): (1) professional level (i.e., including gender issues in medical curricula, training professionals); (2) organizational level (i.e., culture, infrastructures, protocols and guidelines of medical institutions) and; (3) political level (i.e., national policies, decentralization of the policies). A successful implementation of gender sensitivity in health care would be intimately related to professionals, structures and systems. Also, in a recent mixed-methods systematic review, Lindsay et al. (2019) aimed to understand which gender sensitivity training programmes or interventions for healthcare professionals were undertaken to evaluate outcomes and to document areas for further research. Lindsay et al. (2019) defined gender sensitivity as a key component of patient-centered care, referring to healthcare professionals having knowledge of sex and gender differences in health and the skills to incorporate it into their practice. In their review, 29 studies were included from a total of 2,320 articles identified in seven databases: EMbase, JSTOR, PsycINFO, Medline,

Healthstar, CINAHL and Scopus (1998-2018). The results showed that 14 studies focused on gender sensitivity related to reducing gender bias and 15 studies focused on addressing the needs of Lesbian, Gay, Bisexual and Transgender (LGBT) patients. Of all these studies, 37% showed significant improvements in gender-related attitudes, knowledge and practices after gender sensitivity training. Multiple training methods were used to teach gender-sensitive care and the content of training included learning about sex/gender terminology, understanding gender inequalities in health, stigma and discrimination and also communication skills. Although the authors concluded that gender sensitivity training for healthcare professionals is increasing, they also pointed out that there is insufficient evidence to determine its efficacy.

There are several issues in these two reviews that laid the ground for the present study. First, in both reviews the authors have conceptualized and used the term of gender sensitivity instead of gender awareness (Celik et al., 2011; Lindsay et al., 2019). This points towards a possible conceptual confusion around these two concepts that may potentially undermine gender awareness research and intervention. Indeed, a potential conceptual confusion between these two concepts may bear deleterious implications for gender awareness measurement strategies and, ultimately, implementation. Such confusion regarding gender awareness' conceptualization and operationalization may hamper the process of obtaining systematic knowledge about the relationship between gender awareness and health-related outcomes in several health and disease processes, namely, in reducing gender bias. In fact, none of these reviews shows the impact of gender awareness on health-related outcomes, such as diagnoses, prescriptions of exams or treatments. In sum, although recent research suggests that implementing interventions on gender awareness is important, the lack of clarity on how to achieve such implementation may also be the results of an unprecise and unclear

understanding and use of the concept of gender awareness, its operationalization and therefore, its potential to reduce gender bias.

Our main goal is to conduct a *scoping review* to specifically provide answers to the following questions: (1) How has gender awareness been defined and conceptualized?; (2) How has gender awareness been operationalized?, and; (3) What evidence supports the relationship between gender awareness and health-related outcomes?

Method

Drawing upon the guidelines for conducting scoping reviews (Arksey & O'Malley, 2005; Garrard, 2011; Mays, Roberts & Popay, 2011), this literature review study was carried out in four steps: 1) identification of records; 2) abstract screening; 3) eligibility assessment and inclusion of articles (see Figure 1), and; 4) data extraction and synthesis (see Table 3).

Record Identification

Articles were identified through searches conducted in three electronic databases - PubMed, PsycINFO, and ERIC - for papers published between 1999 (year of Miller's seminal paper) and May 2019. The search was conducted based on two distinct strategies: 1) searching for the following key-words "gender awareness", "gender sensitivity", "gender responsiveness" "gender reflexivity", "gender reflectivity" and "gender consciousness" in the three mentioned databases and; 2) in order to extend the results, the key-words "gender" and "awareness" or one of the related concepts as "sensitivity" or "responsiveness" or "reflexivity" or "reflectivity" or "consciousness" were individually introduced in PubMed and PsycINFO (databases that provided a greater number of relevant papers based on the search strategy described above). The keyword "health" was also added as subject classification term in this search strategy. In total, 2,589 articles were found with duplicates; 181 duplicates were identified and removed (see Figure 1). Also, one article was found by serendipity.

Abstract screening

After the removal of the duplicates (n=181), 2,409 abstracts remained to be screened. Based on the reading of title and abstract, all records written in a language known by at least one of the team members (i.e., English, Portuguese, Spanish, Dutch or French) and focusing on health and gender awareness-related concepts were screened. All non-empirical papers that were not directly relevant to our research questions were excluded, as well as those that fulfilled the following exclusion criteria: 1) articles without primary data; 2) books, reports,

dissertations and other types of non-peer-reviewed publications; 3) articles that did not consider gender awareness or gender awareness-related concepts as an intra-individual attribute, and; 4) not health-related. The reference lists of the included articles were analyzed, but no further relevant articles were found. The abstract screening was conducted by the first author of the present paper (RM). Two thousand three hundred and ninety papers were removed after abstract screening (see Figure 1).

Eligibility and Inclusion

Nineteen full-text papers were read entirely and assessed for eligibility by the first author (RM) and rechecked by the coauthors (SB or PV). The same inclusion and exclusion criteria were also applied in this step. Five papers were excluded because they were not relevant for our research questions and/or fulfilled the exclusion criteria (see Figure 1). Based on this selection process, 14 articles were included. PUBMED produced the highest number of relevant articles (8) followed by PsycINFO (4) and ERIC (1). Paper 7 (Hammarström, Wiklund, Stålnacke, Lehti, Haukenes & Fjellman-Wiklund, 2016) was identified by serendipity discovery (see Figure 1).

Data synthesis

All articles were examined using the matrix method for literature reviews (Garrard, 2011). This method consists in elaborating a table (see Table 3) that includes the important parameters to be compared. In this review, these parameters were: study setting, main aims, conceptualization of gender awareness, participants, methodology, operationalization of gender awareness, main findings of the study. With the information on these parameters we aimed to provide answers to our main research questions.

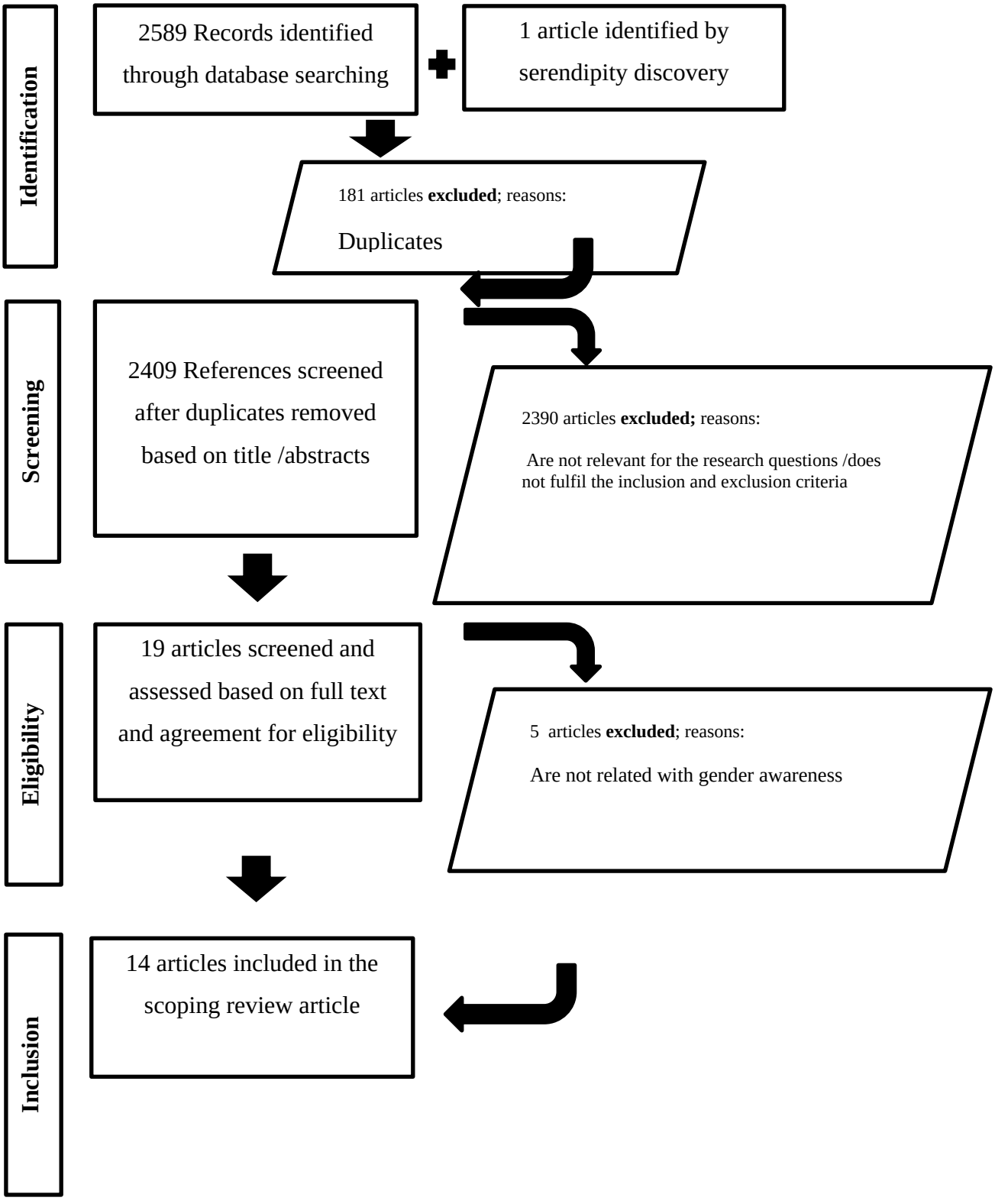


Figure 1. Flowchart diagram based on PRISMA Statement 2009

Table 3.

Matrix of Reviewed Studies

ID	Author(s) and year of publication	Setting	Main Aims	Gender awareness Conceptualization	Participants	Methodology	Gender awareness operationalization	Main Findings
1	Andersson, Verdonk, Johansson, Lagro-Janssen & Hamberg (2012)	The Netherlands-Radboud University *Nijmegen* Medical Centre /Sweden - Umeå University	Compare attitudes towards gender and gender stereotyping between Dutch and Swedish male and female medical students.	Gender awareness means that physicians have the knowledge and competence to recognize and include gender as an important determinant of health and illness into their daily practice. It is also being aware and reframing stereotyped assumptions and beliefs about men's and women's behaviors, skills, and needs.	480 Swedish first-year medical students (54% females) and 616 Dutch first-year medical students (68% females)	Quantitative Cross-sectional – Self-report measures (Nijmegen Gender Awareness in Medicine Scale (N-GAMS) and socio-demographic characteristics)	N-GAMS with three sub-scales: *gender sensitivity* (14 items), *gender-role ideology* towards patients (11 items) and towards doctors (7 items). The 32 items were answered in a five-point Likert scale.	Swedish and Dutch students differed in *gender sensitivity* (Dutch were more gender sensitive) *gender-role ideology* (Swedish stereotyped less). Male students in both countries agreed more with stereotypical statements than female students.
2	Celik, Klinge, van der Weijden, Widdershoven	The Netherlands - Radboud University	Analyze whether GPs' gender sensitivity can be increased by	Gender sensitivity was defined instead of gender awareness.	9 experienced GPs (8 men and 1 woman) and 9 GPs in their third year of training (2	Quantitative - A training program with gender sensitive recommendations for angina pectoris,	A score of Gender Sensitivity in all registration forms were coded to measure the	Gender sensitivity can be stimulated among trained professionals. On average, GPs applied

	& Lagro-Janssen (2008)		a training programme	Gender sensitivity means sensitivity to gender issues on the clinical decision processes.	men and 7 women. One experienced GP was paired with GP in training.	depression and urinary incontinence was developed and implemented. GPs filled in registration forms for 100 patients.	effects of the program.	two out of three recommendations to all patients. More registration forms were completed for female than for male patients for the three conditions.
3	Celik, Lagro-Janssen, Klinge, van der Weijden & Widdershoven (2009)	The Netherlands - Radboud University Nijmegen and Maastricht University Medical Centre	Identify the facilitators and barriers perceived by GPs to maintain a gender approach in family practice.	Gender awareness is the acknowledgement and understanding of gender questions by professionals.	9 pairs of GPs (11 male and 7 female)	Qualitative - Nine semi-structured interviews were used to collect the data The data was analyzed by a deductive content analysis using theory-based methods.	Does not apply.	Gender awareness, repetition and reminders, motivation triggers and professional guidelines were found to facilitate gender sensitivity. Lacking skills and routines, skepticism, heavy workload and the timing of implementation were found to be barriers to gender sensitivity.
4	Dielissen, Bottema, Verdonk & Lagro-Janssen (2009)	The Netherlands	Describes the development and a pilot evaluation of a teaching program in gender specific medicine for GPs training.	Not reported	The training programme was developed by four expert GPs. The evaluation of the programme by 286 female and 145 male GPs Registrars (plus 11 that did not report their sex).	Quantitative – The training programme was composed by five tutorials about gender issues (e.g., gender and cardiovascular diseases/urinary incontinence) and the evaluation of each (including the learning methods) of them was made through agreement with five to seven statements.	Five to seven statements (Likert scales of five points) to evaluate the program.	GP registrars evaluated the course positively. No significant sex differences were found in programme evaluation, but tendentiously female registrars valued the programme higher. In their formulation of own learning points, registrars affirm their understanding of gender in health.
5	Dielissen, Verdonk, Wieringa-de Waard, Bottema & Lagro-Janssen (2014)	The Netherlands	Compare the change in GPs trainees' gender awareness following a modular gender medicine	Not reported	Three groups of trainees: 75 in a modular cohort, 72 in a mainstream cohort and 60 in a control cohort (139 female and 65 male GPs Trainees) at two different times, T1	Quantitative - Two gender medicine teaching methods were compared: a modular approach (n = 75; five tutorials with specific gender issues by a biopsychological	N-GAMS and a 16-item gender *knowledge* questionnaire	Significant difference along time in gender *knowledge* scores between the modular cohort (highest score), compared with the mainstream and control cohorts respectively. No significant

			program vs. a mainstream gender medicine program.		(2007) and T2 (2010-2011).	perspective) versus a mainstream approach (n = 72; traditional courses included gender issues based on a biomedical perspective). Both teaching methods were compared with a control cohort (n = 60). N-GAMS was used to assess Gender Awareness and 16 questions to assess Knowledge		differences between cohorts on *gender sensitivity* and *gender-role ideology*. Females revealed significantly higher gender awareness than males, but the latter were not unaware.
6	Eisenberg, Dahlstrom, Neeman, Carnovale & Ellwood (2013)	Australia - Australian University	Assess the effect of Women's Health (WH) rotation (intervention about female reproduction, clinical practices of obstetrics, gynecology, etc.) on final year students' level of Gender Awareness.	Gender awareness is the collective term for *gender sensitivity* (competence to recognize and adapt gender differences without resorting to negative stereotypes) and *gender-role ideology* (perceptions and acceptance of stablished stereotypes).	30 students undertaking the 8-week WH rotation' and 33 students undertaking the senior medicine and surgery (SMS) rotation	Quantitative - Pretest-posttest with completion of N-GAMS. The N-GAMS were introduced at two times (one week before and 8 weeks after the beginning WH rotation and 2 weeks after the beginning of SMS rotation). The only socio-demographic characteristics considered in this study were sex and rural stream involvement.	N-GAMS	Students receiving a WH teaching program had a higher level of *gender sensitivity* when compared to those who do not receive this program. However, seven weeks later there were no significant differences between the groups when sex differences were considered. There were no differences between groups in *gender-role ideology* in either of the two times.
7	Hammarström, Wiklund, Stålnacke, Lehti, Haukenes & Fjellman-Wiklund (2016)	Sweden – Pain Rehabilitation Clinic at Umeå University Hospital	Develop a tool for increase awareness of gendered and intersectional processes in clinical	Not reported	595 women and 266 men in quantitative analysis and 10 patients, 7 healthcare professionals in pain rehabilitation and 8 GPs and their trainees	Mixed – Self-administered questionnaires in quantitative analysis and individual semi-structured interviews	A tool composed by 15 questions (10 of these 15 questions are directly related to gender issues, i.e., gender sensitivity,	A tool composed of 15 questions was developed to assess and select patients for pain rehabilitation. Men were more often referred to physiotherapy and x-ray than women, regardless self-reported pain

			assessment of patients, based pain rehabilitation case.		working at one primary healthcare center in Umeå for qualitative analysis	and focus group for qualitative analysis	stereotypes and specific knowledge about pain problems in men and women)	intensity, pain activity and pain localization. Higher pain scores were not related to selection to multimodal rehabilitation. The higher scores of pain, the less likely women were referred to rehabilitation.
8	Risberg, Hamberg & Johansson (2003)	Sweden - Swedish University	Analyze whether (and how) gender in different medical relationships varies with physician sex and specialty and explore how might this be related to working climate and segregation of women and men in various medical specialties.	Not reported	468 specialists in clinical departments of the university hospital and in family medicine. 333 male and 135 female physicians	Quantitative – cross-sectional, Self-report measures (items about importance of gender and socio-demographic measures)	Five items about the importance of gender consisting of statements to agree or not agree with on a 100mm visual analogue scale. Open-ended questions below each statement were done.	There were differences in the importance given to gender between all specialty groups mainly due to disparities among men. The probability for a male family physician to assess gender as important in professional relationships were three times higher, and for a male non-surgical doctor two times higher when compared to a male surgical doctor. Female teachers assessed gender as important to a higher degree than male teachers. Among women there were no significant differences between specialty groups.
9	Salgado, Vogt, King & King (2002)	USA - Veterans Health Administration	Developing a reliable and valid method to measure Gender Awareness focused on female's veterans	Gender awareness is composed of the three interrelated components of *gender-role ideology* (stereotypes), *gender sensitivity* (sympathy towards female healthcare needs) and	Healthcare workers (an average of 60% female healthcare workers in all the steps of instrument development)	Quantitative, Cross-sectional, self-report measures	Gender Awareness Inventory-VA (GAI-VA) is composed by scales to assess *ideology*, sensitivity and *knowledge*).	GAI-VA is composed by three subscales, 29-item sensitivity measure; a 20-item ideology measure and a 20-item knowledge measure. In a series of psychometric inquiries, evidence for reliability and validity was generally established. The internal reliability for 29-item sensitivity was .83, for ideology was .87 and for knowledge was .67. Convergent and discriminant validity was stablished correlating GAI-VA with general

				knowledge (accurate information regarding female patients).				measures of *gender-role ideology* and social desirability. Also, criterion validity was assessed through vignettes assessing healthcare judgements related to female patients.
10	van Leerdam, Rietveld, Teunissen, & Lagro-Janssen (2014)	The Netherlands - Radboud University	Analyze whether gender medicine has been taught in daily practice during clerkship	Not reported	29 students who finished medical/surgical clerkship (15 females and 14 males)	Qualitative – Focus groups were carried out in order to understand how gender issues were present in daily practice during clerkships The analysis were analyzed according the principles of constant comparative analysis.	Does not apply.	Gender differences were barely discussed during the clerkships. Three main explanatory themes: insufficient knowledge; unawareness; and minor impact of gender issues. Students feel that they have not sufficient competencies to become gender-sensitive doctors.
11	Verdonk, Benschop, De Haes & Lagro-Janssen (2008)	The Netherlands - Radboud University Nijmegen Medical Centre	Developing a reliable and valid method to measure Gender Awareness	Gender awareness includes two attitudinal components: *gender sensitivity* (ability to perceive existing gender differences, issues and inequalities and incorporate these into strategies and actions) and *gender-role ideology* (healthcare worker's attitude towards male and female	280 women and 133 men Medicine students	Quantitative – N-GAMS with several change steps	N-GAMS	N-GAMS is composed of three subscales, *gender sensitivity* (14 items, *gender-role ideology towards patients* composed by 11 items and *gender-role ideology toward doctors* composed by 7 items. Reliability and validity were recognized. The internal reliability for 14-item measure was .80, for 11-item measure .85 and for 7-item measure .80. Content validity was supported by the three components and construct validity was assessed and partially stablished testing three specific hypotheses in study.

				patients and doctors)				
12	Verdonk, Benschop, de Haes, Mans & Lagro-Janssen (2009)	The Netherlands	Discuss and compare answers of Education directors and change agents related to the gender mainstreaming in medical education	Not reported	7 women and 11 men Education directors (in their faculties) and change agents (i.e., change agents worked in the educational institute or chaired a curriculum committee and had a coordinated project within the faculty)	Qualitative - Eighteen semi-structured interviews. A discourse analysis and a thematic analysis were carried out order to analyze the gender mainstreaming in medical education	Does not apply.	Obstacles for gender mainstreaming in medical education were implicit in four themes: (1) biomedical knowledge was perceived to be gender neutral; (2) the importance of gender was downplayed, particularly in comparison with culture/ethnicity; (3) social accountability was hardly mentioned and gender inequalities in health was framed as feminist political issues and not medical issues; and (4) the communication with staff, students and other relevant people must be careful to increase acceptance and avoid overt resistance.
13	Vogt, Stone, Salgado, King, King & Savarese (2001)	USA – Veterans Health Administration	Assess Gender Awareness of Veterans Health Administration employees and analyse how demographic characteristics are associated with the levels of Gender Awareness	Gender awareness is composed of the three interrelated components of *gender-role ideology* (stereotypes), *gender sensitivity* (sympathy towards female healthcare needs) and *knowledge*	622 VHA employees across New England Region 64% female participants with direct patient contact (e.g., physicians, nurses, technicians, and other professional and nonprofessional groups who deliver health care) and ancillary patient contact (e.g., clinic receptionists and clerks)	Quantitative, cross-sectional, self-report measures	GAI-VA	High levels of Gender Awareness overall. Generally, 83% of VHA workers held positive stereotypes towards female patients, 86% are aware and sympathetic towards the unique needs and requirements of female patients and related to knowledge, VHA workers are more varied. For instance, 84% knows the women's healthcare guidelines but just 37% knows about women's VHA care utilization. Female VHA workers scored significantly higher than VHA male workers

				(accurate information regarding female patients).				on ideology (t(605)= 5.07; p<.001) and sensitivity (t(605)= 2.60; p<.001). Related to demographic variables, only education was significantly and positively related with the three components of Gender Awareness.
14	Vogt, Barry, & King (2008)	USA - Veterans Affairs healthcare setting	Improve healthcare workers' Gender Awareness through the application of a brief computerized educational intervention	Gender awareness is composed of the three interrelated components of *gender-role ideology* (stereotypes), *sensitivity* (sympathy towards female healthcare needs) and *knowledge* (accurate information regarding female patients).	231 participants at T1 (questionnaire assessing Gender Awareness and other characteristics), 167 participants at T2 (Gender Awareness program) and 107 participants at T3 (Gender Awareness reassessment). Of the 169 participants that completed at least two time points 158 (89 women and 69 men) has at least sufficient data to compute gender awareness scores. Participants with direct patient contact (e.g., physicians, nurses) and ancillary patient contact (e.g., lab technicians, receptionists).	Quantitative - Pretest-posttest equivalent control group design with GAI-VA	GAI-VA	Significant improvements in *gender sensitivity* and *knowledge* for participants in the treatment condition compared to the control condition. With several exceptions, the intervention was similarly effective across employee groups.

Results

How has gender awareness been conceptualized?

Most studies included in this review provided a definition and conceptualization of gender awareness (see Table 3; # 1, 3, 6, 9, 11, 13, and 14) and/or Gender Sensitivity (#2). Of the seven studies explicitly conceptualizing gender awareness, three (#1, 6 and 11) stated that it included two attitudinal components: (1) *gender sensitivity*, i.e., the ability to perceive existing gender differences, issues and inequalities and incorporate these into strategies and actions, and; (2) *gender-role ideology*, i.e., healthcare worker's attitudes towards male and female patients and doctors. These definitions were based on Miller's theoretical model (Miller et al., 1999) but also on literature about gender biases in health care and the Stereotype Content Model (Fiske, Cuddy, Glick & Xu, 2002; Verdonk, Benschop, De Haes & Lagro-Janssen, 2008; World Health Organization, 1998;). In three other studies (#9, 13 and 14), an explicit dimension of *knowledge was* also included and defined as accurate information about the needs, trends and policies regarding female patients including also the knowledge about the services available for them inside the Veterans Health Administration (based on Miller et al., 1999; Salgado, et al., 2002). It should be noted that in the latter three studies (#9, 13 and 14) the definition of gender awareness was exclusively focused on the very specific context of women's health in U.S.A. Veterans Health Administration. In study #3 gender awareness was defined as a sub-dimension of gender sensitivity, referred to "(…) *the recognition and understanding of gender questions by professionals*" (pp. 1221), hence reflecting a broader definition of gender awareness compared to those mentioned before.

Six studies did not explicitly define gender awareness (#4, 5, 7, 8, 10 and 12), despite focusing on aspects of the construct as identified in other articles included in this scoping review. These articles focused on: (1) the implementation of intervention programs aiming at evaluating a developed training program about gender issues integrated in a medicine

curriculum (#4); (2) testing the long-term efficacy of a gender medicine program directed to general practitioners (#5); (3) developing tools to increase awareness of gendered and intersectional processes in clinical assessment of patients based on pain rehabilitation case (#7); (4) analyzing whether (and how) gender in different medical relationships varies with physician sex and specialty and exploring how this might be related to working climate and segregation of women and men in various medical specialties(#8); (5) focusing on teaching gender medicine on daily medical practice during clerkships (#10), and finally; (6) focusing on gender integration in medical education (#12).

Study 2 defined gender sensitivity instead of gender awareness. Indeed, and mirroring the conceptual confusion between "sex" and "gender" (e.g., Oakley, 1972; Unger, 1979), gender awareness and gender sensitivity seem to be sometimes presented as interchangeable constructs. There are at least three types of misunderstandings surrounding gender awareness and gender sensitivity. First, the definition of gender sensitivity in a broader way without clarifying what gender sensitivity entails, such as in study 2, which defines gender sensitivity as sensitivity to gender issues in clinical decision-making processes, but without elaborating on the nature of "gender issues". Study 2 evaluated the development and implementation of an education program on gender and health in three types of conditions: angina pectoris, depression and urinary incontinence. Recommendations for change about these three conditions incorporated increasing *gender sensitivity* but also *gender-role ideologies* (e.g., "*a recommendation to integrate gender considerations for depression was based on "women report more symptoms consisted with anxiety than men"*) as well as specific knowledge about the three conditions (e.g., *" general practitioners should consider sexual issues in the management of incontinence, since it is a risk factor for sexual dysfunction on both women and men"*). The authors only conceptualize gender sensitivity, but its operationalization involves the operationalization of other possible dimensions of gender awareness as initially

conceptualized by Millers' seminal paper. Second, the two concepts - gender awareness and gender sensitivity - are used interchangeably. For instance, one of these studies (#3) defined gender awareness as the acknowledgement and understanding of gender questions by health professionals. Here, it seems that gender sensitivity was the main construct that included gender awareness as a sub-dimension. Miller et al. (1999) conceptualized gender awareness and gender sensitivity exactly in opposite way; gender awareness was the main construct and gender sensitivity as a sub-dimension. Third, some papers did not explicitly define gender awareness but used related concepts which caused further confusion. For example, studies refer to "gender-sensitive care" (#4), "gender sensitive doctor-patient communication", "gender sensitive consultation" (#4, 5) without clarifying the concepts and their operationalizations.

In sum, despite these conceptual misunderstandings and although some studies did not define gender awareness or have only mentioned one of its dimensions (i.e., gender sensitivity), a significant part of these studies used the three-fold concept of gender awareness as proposed by Miller et al.'s (1999) theoretical model.

How has gender awareness been operationalized?

In several studies, gender awareness was measured by the *Gender Awareness Inventory – Veterans Administration* (GAI-VA; Salgado et al., 2002; #9, 13, 14) or the Nijmegen *Gender Awareness in Medicine Scale* (N-GAMS; Verdonk et al., 2008; #1, 5, 6, 11). Other quantitative operationalizations of gender awareness were used in four studies (#2, 4, 7, 8), and in studies 3, 10, and 12 qualitative methodologies were used.

The GAI-VA, is a self-report instrument developed within the USA Veterans Health Administration that operationalized gender awareness in three dimensions: *gender sensitivity* (29 items; e.g., *women veterans at this hospital should have access to care by experts in women's health*), *gender-role ideology* (29 items; e.g., *compared to men, women's physical*

complaints are more likely to be caused by mental problems) and *knowledge* (20 items; e.g., *which of these services is routinely available to female VA patients? (a) abortions; (b) infertility services; (c) menopause management; (d) b and c.).* The attitudinal scales were measured with a 5-point Likert scale ranging from 1= *strongly disagree* to 5=*strongly agree.* The knowledge component was measured by a standard multiple-choice format. The GAI-VA was validated with a sample of 619 healthcare workers from two large Veteran Health Administration medical centers. The instrument showed a three-factor solution including *sensitivity*, i*deology* and *knowledge* and good internal reliability (αs> .75; Salgado, et al., 2002). GAI-VA levels of gender awareness correlated positively with scores on the Sex-Role Egalitarianism Scale (except for levels of sensitivity in women) and with scores on Attitudes Toward Women Scale, providing support for its convergent validity. Discriminant validity was supported by the absence of correlations between gender awareness and social desirability and negative affectivity. Also, criteria-related validity was preliminary supported, suggesting that scores on GAI-VA may predict judgements related to care offered to women veterans. This instrument is a tool to administrators and policy makers to compare levels of gender awareness over time. Also, GAI-VA has the purpose to understand the kind of care given to these women, understanding their remaining needs and providing initiatives to better health care.

Compared with the GAI-VA, the N-GAMS operationalized *gender sensitivity* and *gender-role ideologies* differently. In the GAI-VA, the operationalization is directed towards women of the United States' veteran population that is traditionally marked by men. The N-GAMS operationalized both attitudinal components to measure whether medical students were sensitive and sympathetic towards the impact of gender in medical practice. Also, the measurement of *gender-role ideologies* was extended by assessing stereotypes towards male patients and physicians. However, the N-GAMS did not include a measure of knowledge as

an integral part of their validation process. N-GAMS operationalized gender awareness into just two attitudinal components: *gender sensitivity* (14 items; e.g., *in non-sex-specific health disorders the sex/gender of the patient is irrelevant*) and *gender-role ideology* towards patients (11 items; e.g., *female patients compared to male patients have unreasonable expectations of physicians*) as well as towards doctors (8 items; e.g., *male physicians put too much emphasis on technical aspects of medicine compared to female physicians*). All scales were measured in a 5-point Likert scale ranging from 1= *strongly disagree* to 5=*strongly.* Despite the scale's focus on both attitudinal components of gender awareness, nine items were developed in order to measure *knowledge* (e.g., *read the statement. Is it true or false? In women, a depression is more often masqued by alcohol abuse than in men.*) but they were not part of the process of N-GAMS development and validation. The N-GAMS psychometric properties were investigated with a sample of 393 Dutch students from health sciences and medicine courses. A principal component analysis showed a three-factor solution and final Cronbach's alphas were equal or above .80 for all subscales. Findings supported good constructs and criteria-related validity of the scale: (1) *gender sensitivity* and *gender-role ideologies* were negatively correlated; (2) male students held stronger *gender-role ideologies* than female students, and; (3) gender awareness was related to patient centeredness. N-GAMS may be used to evaluate graduate or postgraduate courses and specialist trainings and it may offer a baseline for assessment and reassessment to all who are implementing a gender perspective in medical education (Verdonk et al., 2008). In sum, both instruments – the GAI-VA and the N-GAMS – despite needing further validation studies, have shown reasonable psychometric properties and have support for research and intervention application purposes.

The four studies using other quantitative measures to operationalize gender awareness used: (1) a score of gender sensitivity to evaluate the results of a training program (#2); (2) study 4 used several single items to evaluate a gender intervention program (#4); (2) a tool

composed of questions on gender issues (#7), and; (3) several items with a 100mm visual analogue scale about the importance of gender (#8). None of these studies explored the psychometric characteristics of these measures. In study 2, gender sensitivity was operationalized through a set of gender sensitive recommendations for three diseases (angina pectoris, depression and urinary incontinence; e.g., *GPs should consider sexual issues in the management of patients with incontinence, since incontinence is a risk factor for sexual dysfunction in men and women*, general gender recommendation for men and women with urinary incontinence), during a training program in order to increase GP's gender sensitivity. GPs were trained to put these gender recommendations in practice and coded their adherence to the gender recommendations as gender sensitive (=1) or not (=0). In study 4, several theoretical tutorials about gender issues (e.g., Gender and cardiovascular diseases/urinary incontinence), were developed by GPs with expertise and committed to gender issues and implemented in a 3-year training programme for GPs and evaluated by them. After the implementation of the program, the GPs were asked to evaluate it with five to seven statements expressing their opinion about the learning itself but also about the teaching methods rated on a scale from 1-5. Answers were dichotomized so a response of 1, 2, or 3 suggested a negative evaluation of the program and a response of a 4 and 5 express an acceptance of the program. In study 7, 15 questions of which 10 directly related to gender issues were developed in order to assess and stimulate and increase physicians' awareness of gender and intersectional processes in clinical assessment of pain patients. For instance, the questions *Do we consider pain among men as more severe than among women?* operationalized sensitivity but also beliefs and stereotypes towards men and women. Finally, in study 8, the extent to which healthcare professionals agreed with five statements about the importance of gender (e.g., *The patient's gender is of importance in consultation)* was

assessed on a 100mm visual analogue scale ranging from (1) “I do not agree at all”=1 to “(5) I agree completely”.

Finally, as for the studies that assessed gender awareness or its related concepts with qualitative methodologies, on study 3, the data was analyzed by a deductive content analysis using theory-based methods, performed to generate facilitators and barriers to gender sensitivity. In study 10, the data were analyzed according to the principles of constant comparative analysis and three main explanatory themes regarding gender awareness were identified: insufficient knowledge, unawareness and minor impact. Finally, in study 12, a discourse analysis and a thematic analysis were carried out in order to analyze the obstacles for gender mainstreaming in medical education.

In sum, most studies have used one of those two instruments to measure gender awareness: the GAI-VA and the N-GAMS. However, other types of measures like checklists, questions and items, were also specifically developed to measure gender awareness or related concepts.

How does gender awareness relate to health outcomes?

None of the studies included in this review provided an answer to this question. Studies were different with respect to their goals, methods and findings but the relationship between gender awareness and various health indicators was not tested. Instead, some studies (#2, 4, 5, 6, 14) focused on the implementation of interventions or training/teaching programs in order to establish or increase gender awareness (or gender sensitivity; # 2, 4). In these studies, the main goal was to understand how programs or interventions increased gender awareness or gender sensitivity (#2, 4, 5, 6, 14), to compare programs/interventions (# 5, 6), or to assess a possible increase of gender awareness over time (#5, 6, 14). Results showed that gender sensitivity could be increased among healthcare professionals (#2), and that they recognize their sensitivity to the importance of gender issues (#4). Programmes’ efficacy in

increasing gender sensitivity (#6, 14) and knowledge (# 5, 14) was assessed and ensured, but these effects did not necessarily last over time (#6). However, none of the studies revealed evidence about the potential influence of gender awareness on patients' health-related outcomes or quality and equity of provided health care (e.g., diagnoses, treatments).

Discussion

This study aimed to understand how gender awareness has been conceptualized, operationalized and whether support has been found for its relationship with health-related outcomes. A discussion of the main findings for each one of these three topics is presented below, where the main trends and gaps in the literature and future directions for research are identified.

What does it mean to be gender aware after all?

Regarding the conceptualization of gender awareness, only 6 out of the 14 included studies drew upon Miller et al.'s (1999) model to conceptualize gender awareness in two or three interrelated dimensions - *sensitivity*, *ideologies* (*#1, 6 and 11*) and *knowledge (#9, 13 and 14*). This shows the lack of theoretical depth that has been given to the concept. Specifically, what these studies show is that there is no established 'identity' of gender awareness within psychological models, which jeopardizes its research and, consequently, intervention development efforts. Moreover, only about a quarter of the studies addressed *knowledge* as a relevant dimension that should be conceptualized as an integral part of gender awareness. Gender awareness is a complex construct involving attitudinal components such as *sensitivity* and *ideologies* and a factual component of *knowledge*. The results found in this *scoping review* regarding to the conceptualization of gender awareness, may be related to the inherent difficulty to incorporate such different components in just one construct.

Reflecting the weak theorizing of the concept, study 2 vaguely defined gender sensitivity, study 3 vaguely defined gender awareness as a subdimension of gender sensitivity and other six studies did not explicitly define gender awareness (#4, 5, 7, 8, 10 and 12). Although most studies included in this review did provide a definition of gender awareness, inconsistencies were found in the conceptualization of the construct. Accuracy and uniformization would be helpful in the conceptualization of gender awareness and its

theoretical roots. Indeed, related to the conceptualization of gender awareness one main issue should be pointed out, namely, the confusion between gender awareness and gender sensitivity.

As previously described, there are three different types of misunderstandings in the conceptualization of gender awareness and gender sensitivity. First, providing a vague definition of gender awareness or gender sensitivity without clarifying what the concepts entail. Second, the two concepts - gender awareness and gender sensitivity - are used interchangeably. Third, the absence of an explicit definition of gender awareness but the use of related concepts which caused further confusion (e.g., “gender sensitive care” or “gender-sensitive doctor-patient communication”. Gender awareness as a psychological and hypothetical construct derives its scientific value from the shared meaning it represents, and whether the construct is clearly articulated in the literature. Moreover, a clearly defined gender awareness concept may become a useful tool that facilitates the understanding of gender issues in health research and in medical education. However, the existence of conceptual confusions between the concept of gender awareness and gender sensitivity may currently be hampering the heuristic value of these concepts. Regarding these misunderstandings between gender awareness and gender sensitivity, our vision is that being sensitive to gender issues is just one dimension of being aware of these questions. Thus, in line with the conceptualization by Miller et al. (1999) and Verdonk et al. (2008) gender awareness is a broader concept that subsumes gender sensitivity, which specifically refers to a positive attitude towards to the importance of considering the role of sex and gender in health-related issues.

Gender awareness measurement: Do we really *know* what we're measuring?

In turn, the operationalization of gender awareness reflects a variability of procedures, from developed and validated self-report instruments (GAI-VA, #9, 13, 14 or N-GAMS, #1, 5, 6, 11) to less studied measures (#2, 4, 7, 8) and includes the use of qualitative methodologies (#3, 10 and 12). Just half of the studies included in this review assessed the construct by using instruments specially developed and validated to measure gender awareness (GAI-VA and N-GAMS). If we consider that the GAI-VA is a highly specific tool (focused on the health of VHA females), we conclude that the N-GAMS is the only instrument developed so far to address gender awareness as an intra-individual attribute of healthcare professionals. The other half of the studies developed specific measures tailored to their study goals. The diversity of such operationalization strategies in part reflects the inherent difficulties in the conceptualization of gender awareness. Moreover, being such a broad concept including attitudinal, knowledge and behavioral components, its proper operationalization could only be accomplished through the triangulation of several measures. Indeed, only the triangulation of measures may allow assessing the dimension of competence of the gender awareness concept in full. Partly, this competence is conceptualized through *gender sensitivity* (Verdonk et al., 2008) which refers to being sympathetic to sex and gender issues and being capable of addressing them in clinical practice. However, the developed instruments so far (GAI-VA and N-GAMS) can only tap into (some) attitudinal and stereotypical dimensions of the concept. So, as to assess the complexities of gender awareness as a competence, besides the existing self-report measures, tests could be used to assess knowledge and, e.g., observational systems could be used to assess clinical skills.
It should also be noticed that assessing the knowledge components also has its challenges. *Knowledge* may be a difficult component to operationalize because it means specific and accurate information about gender issues on a disease (Miller et al., 1999). In the studies

included in the present review *knowledge* was defined as accurate information about the needs, trends and policies regarding female patients and services available for them inside the Veterans Health Administration (based on Miller et al., 1999; Salgado et al., 2002). This definition illustrates very well the specificity that *knowledge* must achieve. One of the issues that may account for the fact that most studies did not explicitly assess *knowledge* is precisely this specificity. Indeed, most studies included in this *scoping review* focused on the incorporation of gender issues in health and illness in general, instead of being focused on one specific health condition or disease. Nonetheless, *knowledge* as an explicit component should be considered in the operationalization of gender awareness as a competence, as it is intimately interrelated with the other aspects of gender awareness. For instance, Miller et al. (1999) pointed out that doctors' *gender sensitivity* and/or *gender-role ideologies* may influence how doctors seek and evaluate factual information in order to consider a diagnose, or to provide adequate treatment or services. This suggests that the three components *gender sensitivity*, *gender ideology*, and *knowledge* are interrelated. Healthcare professionals need *knowledge* to be gender aware, but they also need to be gender aware enough to find *knowledge* acceptable to their practice. Vice versa, the search for this specific *knowledge* will only be undertaken if they are aware that gender issues really matter to clinical practice.

Finally, there were some studies that did not seem to measure gender awareness. For example, study 4 conducted an evaluation of a gender program composed by five tutorials about gender issues (e.g., gender and CHD) but it did not include a measure of gender awareness to test the effectiveness of the program. Moreover, some of these studies, there was a complete lack of information on the psychometric characteristics of the measures used.

Is gender awareness associated to health-related outcomes?

Regarding our third question, we did not find studies that provided evidence for the relationship between gender awareness and health-related outcomes – in fact, that relationship does not seem to be studied. Despite an extensive literature suggesting that gender awareness might have a potential effect on targeting gender biases in health care (e.g., Verdonk et al., 2008; Verdonk et al., 2009, Verdonk, Benschop, de Haes, Mans, & Lagro-Janssen, 2009), this contention does not seem to be directly supported by empirical evidence. The previously highlighted conceptualization and operationalization problems may be a potential barrier for gathering evidence on the relation between gender awareness and health outcomes. Moreover, gender is not a single issue - multiple other social identities affect people's lived experiences and these social identities 'color' each other (e.g., socioeconomic status (SES), race; Verdonk, Mutinga, Leyerzapf, & Abma, 2019). Doctors' high levels of gender awareness can still be insufficient to target bias, when they do not take into account other aspects of diversity; being an older woman is associated with different health experiences than being a younger woman, a woman of color, a woman with a migrant background. These experiences are grounded in structural, historical, locations with distinct privileges and disadvantages that have consequences for health and health care. Hence, the larger competence of 'gender awareness' incorporates *what* knowledge is true (e.g. in decision making processes), *when and where* (e.g., at the consultation, urgency, etc.), and under *which conditions* (e.g., men and women's other social identities, their contexts), as well as *how* health providers' social identities affect the provision of health care (e.g., reflexivity towards personal assumptions, beliefs, or stereotypes about the presentation of complaints at consultation room by women or men across their backgrounds).

Limitations and Implications for Future Research

Some limitations may be pointed out to this review. In a *scoping review,* the included papers are not subject of quality assessment, which holds a potential for bias. Moreover, the problems previously highlighted in conceptualizing gender awareness may have in themselves hampered the methodological search strategy used in this *scoping review*. Although we have conducted a review with two search strategies as to identify most relevant papers, our findings show that a number of similar concepts are used in the literature including "gender-sensitive care", "gender sensitive doctor-patient communication", "gender sensitive consultation" that are very often confused with gender awareness.

This *scoping* review has provided an overview on how gender awareness has been conceptualized, operationalized and investigated in its association with health-related outcomes. Given the previously described patterns of trends and gaps in the literature, we suggest some recommendations for future studies in order to improve gender awareness research and intervention. First, the conceptualization of gender awareness should include its three components: *gender sensitivity, gender ideologies* and *knowledge* (Miller at al., 1999; Verdonk et al., 2008). Gender awareness must be a broader concept that included knowing, considering and implementing sex and gender differences with respect to men and women, patients and doctors, and across other aspects of diversity such as class, 'race', or age (Verdonk et al., 2019). The concept should also be adapted to the specificities of health contexts and include particular relevant stereotypes and knowledge. It should be noted that *gender sensitivity* encompasses two distinct attitudinal components: 1) considering sex and gender issues when relevant (being sensitive to consider gender issues) and; 2) addressing them into their clinical practice (being sensitive to address gender issues). Second, it is important that further studies produce more specific *knowledge* about the influence of sex and gender regarding some diseases. This could be helpful to legitimate *knowledge* as a relevant

component of gender awareness but also for its appropriate operationalization. Therefore, *knowledge* must be properly introduced and evaluated into medical curricula and in gender awareness assessment and intervention programs (Ludwig et al., 2015; Verdonk et al, 2009; Zelek, Phillips & Lefebvre, 1997;). It is our contention that these could be important steps towards a broader understanding and implementation of gender awareness in health care. In addition, adequate operationalization of gender awareness can only be achieved through triangulation of measures. Hence, it is necessary to develop tools and instruments to assess, or observe, *how* healthcare professionals are sensitive to address and integrate gender issues into their clinical practice. Also, as gender does not play the same role in all the contexts and all the cultures, further validation of the GAI-VA and N-GAMS for other cultures is one way to improve these measures and consequently, the operationalization of gender awareness. Finally, future studies should focus on healthcare professionals' gender awareness in relation to health outcomes, for instance by relating gender awareness to a specific illness or health issue and by incorporating an intersectional approach (e.g., Hankivsky et al., 2017).

In sum, the results of this *scoping review* allowed to clarify the theoretical underpinnings of gender awareness conceptualization, operationalization and their relation with health-related outcomes. This *scoping review* should not be seen as an end itself but as a starting point for future studies and research, being relevant to researchers but also to provide guidance to physicians, directors, policy makers, and other healthcare professionals interested and concerned about gender awareness in health. The main contribution of this *scoping review* was to provide (a) a clear picture of how this construct has been studied, and (b) clues for future research and intervention purposes. Sex/gender should no longer be underestimated as a health determinant and evidence is needed to support the positive implications of gender aware healthcare professionals and practices.

CHAPTER 3. Gender awareness in medicine: Adaptation and validation of Nijmegen gender awareness in medicine scale to Portuguese population (N-GAMS)

Part of this chapter is based on the paper: Morais, R., Bernardes, S., & Verdonk, P. (2019). Gender awareness in medicine: adaptation and validation of Nijmegen gender awareness in medicine scale to Portuguese population (N-GAMS). *Advances in Health Sciences Education, 25,* 457-477. doi: 10.1007/s10459-019-09936-y

ABSTRACT

Healthcare professionals' gender awareness has been presented as a mechanism to minimize gender biases in health. The present paper aimed to adapt and validate the Nijmegen Gender Awareness in Medicine Scale (N-GAMS, Verdonk et al., 2008) to the Portuguese population, also addressing some limitations of its original study, namely by: (1) testing the scale's three-fold underlying structure and (2) extending the study of its criteria-related validity, by analyzing sex-related differences in medical students' gender awareness and the associations between gender awareness and empathy and sexism. One thousand and forty-eight medical students (M_{age}= 22.90; 67.1% women) filled out the Portuguese version of the N-GAMS (N-GAMS.pt) along with measures of Physician Empathy and Sexism. A Parallel Analysis and an Exploratory Factor Analysis suggested the presence of three factors. A Confirmatory Factor Analysis showed a good fit of the hypothesized three-factor structure: (1) *gender sensitivity* (n = 6 items; α= .713); (2) *gender-role ideologies towards patients* (n = 7 items; α= .858) and; (3) *gender-role ideologies towards doctors* (n = 5 items; α= .837), with a positive association between the latter two (*r*= .570; *p* <.001). The N-GAMS.pt also showed good criteria-related validity. Namely, as hypothesized: (1) more empathic students reported more *gender sensitivity* and lower endorsement of *gender-role ideologies*; (2) higher hostile and benevolent sexism were associated to higher endorsement of *gender-role ideologies*; and (3) higher hostile sexism was associated to lower *gender sensitivity*. Implications of the N-GAMS for research and interventional purposes are discussed.

Keywords: Gender awareness; Gender sensitivity; Empathy; Sexism; Scale development.

Introduction

Gender biases in medicine and health care are pervasive and one of the key drivers of health-related inequities (Hamberg, 2008; Humphries et al., 2017; Mosca, Barrett-Connor, Wenger, 2011; Poínhos, 2011; Wei, George, Chang & Hicks, 2017). Some authors have argued that increasing healthcare professionals' gender awareness, i.e., positive attitudes towards considering sex and gender issues in health and illness and the knowledge and skills necessary to incorporate them into medical practice, may contribute to promote gender equity in health care (e.g., Verdonk, Benschop, de Haes, Mans & Lagro-Janssen, 2009). The development of reliable and valid measures of gender awareness is the cornerstone for empirically supporting the contention that increasing physicians' gender awareness will contribute to prevent gender biases in health care and, ultimately, assessing the effectiveness of intervention programs aimed at increasing healthcare professionals' gender awareness (e.g., Dielissen, Verdonk, Wieringa-de Waard, Bottema & Lagro-Janssen, 2014; Eisenberg, Dahlstrom, Carnovale, Neeman & Ellwood, 2013). It is the general goal of this paper to contribute to such endeavor by aiming to adapt and validate to the Portuguese population one of the main measures developed so far to assess healthcare professionals' gender awareness - The Nijmegen Gender Awareness scale (Verdonk, Benschop, De Haes & Lagro-Janssen, 2008). In doing so we also seek to contribute to further validate this measure of gender awareness in medicine.

Measuring Gender Awareness in health care

Since gender awareness in health care was conceptualized for the first time (Miller, King, Wolfe and King, 1999), several measures have been used to operationalize it. These measures are very different in their characteristics and in what they intend to assess, in part reflecting an ongoing debate surrounding the gender awareness construct (e.g., Miller et al., 1999; Khoury & Weisman, 2002; Verdonk et al., 2009). However, to the best of our

knowledge, so far only two scales have been developed and validated to provide a theoretically grounded, multi-dimensional assessment of healthcare professionals' gender awareness: (1) the Gender Awareness Inventory – Veterans Administration (GAI-VA, Salgado, Vogt, King & King, 2002) and; (2) the Nijmegen Gender Awareness in Medicine Scale (N-GAMS, Verdonk et al., 2008).

Drawing upon Miller et al.'s (1999) Model of Gender Awareness, the GAI-VA was developed and validated for the United States of America veteran population, where women are a minority in a context traditionally marked by men. The GAI-VA assesses healthcare professionals': (1) *gender sensitivity*, i.e., the degree to which they are aware of and sympathetic towards the needs and requirements of female veteran patients; (2) *gender ideology*, i.e., their attitudes towards these patients and (3) *knowledge*, i.e., accurate information about these patients and their specific needs. Despite its reasonable psychometric properties (Salgado et al., 2002), its specific focus on female veteran patients hampers a more generalized use of the measure to assess healthcare professionals' gender awareness towards both women and men in other healthcare contexts.

The N-GAMS overcomes this limitation by aiming at assessing medical students' gender awareness towards male and female patients in general, and expanding it towards male and female physicians. Its original validation study (Verdonk et al., 2008) suggests that it assesses three dimensions: (1) *gender sensitivity*, i.e., the extent to which medical students are sensitive and sympathetic to the impact of gender in medical practice (14 items); (2) *gender-role ideology towards patients,* i.e., medical students' stereotypical views towards male and female patients (11 items) and *(3) gender-role ideology towards doctors*, i.e., medical students' stereotypical views towards male and female doctors (8 items). All sub-scales showed good reliability (alphas equal and above .80). Findings also suggested good criteria-related validity. Indeed, as hypothesized: (1) as compared to male medical students,

female students held less gender stereotypes towards patients and doctors and (2) patient centeredness, i.e., being more involved in psychological issues and holding more open, empathic and democratic attitudes, was positively associated with *gender sensitivity* among male and female medical students and negatively associated with *gender-role ideologies towards patients* only among female medical students. In sum, previous findings suggest that the N-GAMS may be a reasonably good measure of (future) physicians' gender awareness.

Since its development, the N-GAMS has been used to: (a) assess and compare Dutch and Swedish medical students' gender awareness (Andersson et al., 2012); (b) assess the effect of an intervention program about female reproduction, clinical practices of gynecology and obstetrics, and other women health-related issues in medical students' levels of gender awareness (Eisenberg et al., 2013); and (c) compare differences in General Practitioner trainees gender awareness' following different gender medicine programs (Dielissen et al., 2014). These studies emphasize the relevance and applicability of this scale in several contexts, namely, to assess cultural differences in gender awareness and also the efficacy of gender training programs focused on increasing gender awareness.

Study aims and hypotheses

The main goal of the present study is to adapt and validate the N-GAMS to the Portuguese population. As far as we know, there are currently no validated instruments to assess Portuguese (future) healthcare professionals' gender awareness. While pursuing this objective, we also aimed to further validate the N-GAMS, by addressing some limitations of its original study (Verdonk et al., 2008). First, regarding the N-GAMS construct validity, the three-fold underlying structure of the scale was never tested, as the original study only presented the results of a principal component analysis. Therefore, our first goal was to test the underlying 3-factor structure found by Verdonk et al (2008), where gender awareness is composed by *gender sensitivity,* and two correlated factors, i.e., *gender-role ideology towards*

patients and gender-role ideology towards doctors (model 1). This model was tested and confirmed against two alternative models: 1) gender awareness as a unique and first-order factor (model 2) and; 2) gender awareness as a second-order factor with *gender sensitivity* and *gender-role ideology* as first-order factors (model 3). We hypothesized that model 1 would show a better fit to the data than models 2 and 3 (Hypothesis 1). Also, and in line with the results of Verdonk et al. (2008), we expected that *gender-role ideology towards patients* would be positively correlated with *gender-role ideology towards doctors* (Hypothesis 2), proving empirical support to N-GAMS construct validity.

Second, we aimed at extending the study of the measure's criteria-related validity, as in the original study it was only tested against the following criteria: students' sex and patient centeredness. As such, we aimed to assess the relationship between gender awareness and physician empathy, sexism and years of medical education. Empathy has been an important construct in the context of patient care, generally defined as the ability of physicians to understand patients' emotions and perspectives, expressing their care and concerns about them (Hojat et al., 2003). It is our contention that such empathic ability may be positively associated with doctors' sensitivity to the impact of gender in medical practice, as both constructs require perspective taking skills. Therefore, we hypothesized that medical students' empathy would be positively correlated with their *gender sensitivity* (Hypothesis 3.1). Conversely, we expected that more empathic medical students would uphold less stereotypical views of both patients and doctors (Hypothesis 3.2).

Also, as *gender-role ideologies* are assessing individuals' adherence to stereotypical views of patients and doctors, these constructs may to some extent be associated with sexism. Two types of sexist attitudes have been identified in the literature: hostile and benevolent sexism (Glick & Fiske, 1996). Hostile sexism reflects hostility towards women and benevolent sexism reflects a stereotypical attitude towards women in a subjectively positive

in feeling tone (for the observer) including behaviors typically categorized as prosocial or intimate. Therefore, our hypothesis (Hypothesis 4.1) was that sexism (hostile and benevolent) would be positively correlated with *gender-role ideologies*, but, in turn, negatively associated with *gender sensitivity* (Hypothesis 4.2).

As for years of medical education, on one hand, we could expect that, given the still dominant biomedical model in medical training (Engel, 1977), more years of education would make medical students less aware of psychosocial influences and diversity issues, hence, decreasing their gender awareness. On the other hand, previous studies showed that older medical students showed higher gender awareness (Andersson et al., 2012), which may in part be due to a role played by medical education. Given these conflicting expectations, our aim was to explore the relationship between years of medical education and gender awareness.

Finally, we intended to replicate the hypothesis postulated by Verdonk et al. (2008) regarding sex-related differences in gender awareness; namely, we expected that female students would have higher levels of *gender sensitivity* and lower levels of *gender-role ideologies* as compared to male students (hypothesis 5).

Method

Participants

This study was conducted with a convenience sample of 1048 medical students (67.1% women; 27.1% men and 5.8% did not mention their sex) from 8 Portuguese medical schools. The female/male proportion of medical students in our sample was similar to the female (65.9%)/male (34.1%) proportion of students enrolled in Portuguese medical schools in the year the data collection took place (2016; POR DATA, 2019). Their ages ranged from 18 to 55 years (M = 22.90; SD = 4.38). Participants were attending different course years – first year (12%), second year (14.6%), third year (18.1%), fourth year (19.1%), fifth year (17.4%) and sixth year (18.8%) and, on average, they reported 3.72 years (SD = 1.64) of medical education. Although 39.4% of the students did not know yet which medical specialty they would like to pursue, some pointed out to surgery (14.9%) and internal medicine (11.1 %) as their preferred medical specialties. Most students (99.29%) had Portuguese nationality, were single (92.3%) and did not have any children (97.2%). Most students' fathers (79.7%) and mothers (83.2%) had a paid professional activity. Also, 45% of students' fathers and 54.2% of their mothers had a higher education degree (e.g., bachelor, master). There were no differences between female and male participants regarding the majority of sociodemographics. However, male participants are significant older (M=23.42, SD=5.24) than female participants (M=22.69, SD=3.97; t(984)=2.377, p=.018).

Instruments

The Nijmegen Gender Awareness in Medicine Scale (N-GAMS). To adapt and validate the N-GAMS to the Portuguese population we followed international guidelines for the adaptation and cross-cultural validation of instruments for measuring psychological constructs (Beaton, Bombardier, Guillemin & Ferraz, 2000; Guillemin, Bombardier &

Beaton, 1993). Two bilingual researchers, familiarized with the N-GAMS, and one bilingual researcher not familiarized with it were asked to independently translate the instrument from English to Portuguese. The three translations were compared to achieve a final consensual translation. The final translation was sent to a bilingual professional translator to perform the back translation, which was then compared with the English version of the N-GAMS for semantic equivalence. Small changes were made to linguistic expressions as to facilitate their understanding in Portuguese. Finally, the instructions were slightly adapted to an online questionnaire. Participants were asked to rate the extent to which they agreed with each item on a scale ranging from 1 (Totally disagree) to 5 (Totally agree).

Jefferson Scale of Physician Empathy – students version (JSPE-spv). Medical students were asked to fill out the Portuguese version of the JSPE-spv (Aguiar, Salgueira, Frada & Costa, 2009; Magalhães, Salgueira, Costa & Costa, 2011). This measure was used to assess physician empathy as to support N-GAMS criteria-related validity. The Portuguese version of the JSPE-spv is a reliable ($\alpha > .76$), valid and stable instrument.

The JSPE-spv is composed of 20 items, answered on a Likert scale ranging from 1 (totally disagree) to 7 (totally agree), which assess 3 dimensions of physician empathy: (1) perspective taking (10 items, e.g., *physicians should try to think like their patients in order to render better care*); (2) compassionate care (8 items, e.g., *I believe that emotions have no place in the treatment of medical illness- reversed*) and; (3) standing in the patient's shoes (2 items, *e.g. because people are too different it is difficult to see things from patients' perspective - reversed*). To assess some of the psychometric properties of this instrument in our sample, a principal axis factoring analysis (orthogonal rotation) was conducted [KMO = .899; Bartlett's χ^2 (171) = 5372.202, $p < 0.001$]. One item "*physicians should not allow themselves to be influenced by strong personal bonds between their patients and their family members*" was eliminated because it loaded on one separate factor and had the lowest

communality (.073). Based on the Kaiser criterion, three factors were extracted, accounting for 46.53% of the total variance: (1) compassionate care (n = 7 items, α = .739), (2) perspective taking (n = 10 items, α = .673) and (3) standing in patient's shoes (n = 2 items; r_{sb}= .767). A Confirmatory Factor Analysis (CFA) showed satisfactory fit indexes for this factorial structure model (χ^2 [149] = 484.071, $p < 0.001$; CFI = 0.936; NFI = 0.911; IFI = 0.936; RMSEA =0.047). It should be noted, however, that only the perspective taking and compassionate care subscales (r=.496, p<.001) were used in the analyses since they are the dimensions which explain the majority of variance, making the third dimension "standing in patient's shoes" a residual two item factor. Scores on perspective-taking and compassionate care subscales were computed by calculating the average of their respective items; higher indicate higher perspective-taking and compassionate care.

Ambivalent Sexism Inventory (ASI). The ASI was also used to assess sexism in order to support N-GAMS concurrent validity. The Portuguese version of the ASI (Costa, Oliveira, Pereira & Leal, 2015) is composed of 22 items that assess sexist attitudes towards women. Eleven items assess hostile sexism and 11 items assess benevolent sexism. The items were answered on a Likert scale from 1 (totally disagree) to 5 (totally agree). To avoid an excessively lengthy data collection protocol, we sought to reduce the number of items to 14; 7 of hostile sexism (e.g., *most women interpret innocent remarks as being sexist*) and 7 of benevolent sexism (e.g., *women should be cherished and protected by men*). The items kept in the present study were the ones that presented the highest factorial loadings in Costa et al.'s study.

To assess some of the psychometric properties of this instrument in our sample, a principal axis factoring analysis (oblimin rotation) was conducted [KMO = .901; Bartlett's χ^2 (78) = 4423.513, $p < 0.001$]. The item "*in a disaster, women need not to be rescued first*" was previously eliminated because it had a difference below .30 between the loadings on at

least two factors and the lowest communality (.116). Based on the Kaiser criterion, two factors were extracted, accounting for 51.30% of the total variance: (1) hostile sexism (n = 7 items, α = .868) and (2) benevolent sexism (n = 6 items, α = .752), which were significantly correlated (r= .509; p < .001). CFA showed satisfactory fit indexes for this factorial structure model (χ^2 [64] = 397.197, p < 0.001; CFI = 0.924; NFI = 0.911; IFI = 0.924; RMSEA =0.074).

Procedure

This study was carried out *online* using Qualtrics software (Qualtrics, Provo, UT) and following the ethical and deontological guidelines of ISCTE-Instituto Universitário de Lisboa (ISCTE-IUL) and the Portuguese Board of Psychologists (Ordem dos Psicólogos Portugueses, 2011). First, we asked permission to the Boards of all Medical Schools in Portugal (eight schools) to conduct an online study about gender issues in Medicine. The Boards of every school approved the data collection protocol and one person from the administrative staff at each school was responsible for diffusing the online protocol among students, through their institutional e-mails. The first author sent weekly reminders to the staff members responsible for diffusing the protocol. The reminders were sent weekly during two months (between February and April of 2016) as to significantly increase the sample.

Participants were invited to collaborate on a study about gender issues in Medicine. The participation was voluntarily, and students were assured that their responses were anonymized and treated confidentially. The protocol included the questionnaires by the following order: the N-GAMS, the JSPE-spv, the ASI and, finally, a set of sociodemographic questions. The online protocol took an average of 10 minutes to complete; participants who spent less than five minutes filling it out were excluded from the final sample (n=39). We randomly allotted two 50€ vouchers to all participants.

Data analysis

Data were analyzed with version 23 of IBM SPSS (IBM Corp., 2015) and IBM AMOS (Arbuckle, J. L., 2014). First, N-GAMS item distribution for the total sample (n = 1048) were analyzed. Before starting the analyses all the items of the *gender sensitivity* subscale were reversed except items GS-1, GS-2 and GS-13 (duly marked on the Table 4). Afterwards, we ran a Parallel Analysis (O'Connor, 2000), commonly used to determine the number of components to retain in an Exploratory Factorial Analysis (EFA). Then, we ran a Principal Axis Factoring (PAF) analysis with oblique rotation with all N-GAMS items in a random subsample of about half of the original sample (n = 509). Items with a difference below .30 between the loadings on at least two factors, with the lowest communalities (<.20) and higher levels of asymmetry (skewness/SE skewness>[2.0]) were gradually eliminated.

Then, a CFA was performed using maximum likelihood estimation with the second random subsample (n = 539) with no missing data. The CFA was run to test the hypothesized three-fold factorial structure of the Portuguese version of the N-GAMS (henceforth N-GAMS.pt) against two other alternative models: 1) gender awareness as a unique and first-order factor and 2) gender awareness as a second-order factor with *gender sensitivity* and *gender-role ideology* as first-order factors. The latent variables' variance was constrained to one and correlated errors were kept fixed, observed variables were free, and the degree of freedom was greater than zero. Multiple fit indexes were chosen reflecting different features of model fit. Criteria for a good fit were established following the guidelines by Hu & Bentler (1999), Maroco (2010), Schermelleh-Engel, Moosbrugger, & Müller (2003). Given that most N-GAMS.pt items did not present a normal distribution, a nonparametric method (bootstrap) with 5,000 subsamples was used to validate the previously obtained results.

N-GAMS.pt factors were then obtained by calculating the average of their respective items; the higher the scores the higher medical students' *gender sensitivity* and adherence to

gender-role ideologies. Afterwards, we investigated the relationship between these factors and sociodemographic characteristics (i.e., age, preferred medical specialty, father's professional situation, mother's professional situation, father's education level, mother's education level and number of children). No significant relationships were found. In line with the Central Limit Theorem, and given the large sample size, we used *Pearson* correlations to investigate the relationship between the three gender awareness dimensions to test N-GAMS.pt construct validity (hypothesis 2), and between gender awareness dimensions, physician empathy (hypotheses 3.1 and 3.2), sexism dimensions (hypotheses 4.1 and 4.2) and years of medical education to test N-GAMS.pt criteria-related validity. Also to investigate N-GAMS.pt criteria-related validity, we performed a one-way MANOVA to analyze sex-related differences on *gender-role ideology* towards patients and doctors and a *t*-test to analyze sex-related differences *gender sensitivity* (hypothesis 5).

Results

Descriptive analysis of N-GAMS items

As shown in Table 4, participants' answers covered the entire scale range (min = 1 and max = 5) for almost every item. The means ranged between 1.54 and 4.39. Most of the items did not present a normal distribution, especially the items of the *gender sensitivity* subscale, showing high levels of Skewness (Skewness/SE of Skewness >|2.0|) and Kurtosis (Kurtosis/SE of Kurtosis >|2.0|).

Table 4.

Descriptive Statistics for the Total Sample (n=1048) and Exploratory Factor Analysis for the Random Subsample (n=509) of the N-GAMS.pt

	Descriptive statistics						Factor Loadings		
Item	*M*	*SE*	Min	Max	Skewness/ SE of Skewness	Kurtosis/ SE of Kurtosis	GS	GRI-patients	GRI-doctors
Differences between male and female patients are so small that physicians can hardly take them into account (GS-12, reversed)	4.08	.69	1	5	-9.52	9.96	.632		
In non-sex-specific health disorders the sex/gender of the patient is irrelevant (GS-4, reversed)	3.72	1.07	1	5	-12.66	1.89	.583		
In communicating with patients it does not matter to a physician whether the patients are men or women (GS-10, reversed)	3.71	1.10	1	5	-12.29	0.69	.513		
Physicians who address gender differences are not dealing with the important issues (GS-9, reversed)	3.94	.84	1	5	-12.70	8.91	.511		
Physicians should only address biological differences between men and women (GS-3, reversed)	3.93	1.03	1	5	-15,26	6.24	.505		
It is not necessary to consider gender differences in presentation of complaints (GS-14, reversed)	4.09	.78	1	5	-15.25	15.06	.466		
Women expect too much emotional support from physicians (GRI-patients-4)	2.66	.97	1	5	-0.12	-5.38		.817	
Women more frequently than men want to discuss problems with physicians that do not belong in the consultation room (GRI-patients-3)	2.83	1.10	1	5	-2.39	-7.18		.813	
Women are larger consumers of health care than is actually needed (GRI-patients-6)	2.41	.94	1	5	1.71	-5.25		.708	

Male patients are less demanding than female patients (GRI-patients-5)	2.34	.99	1	5	4.20	-5.54	.673	
Men appeal to health care more often with problems they should have prevented (GRI-patients-11)	3.07	1.05	1	5	-5.32	-4.01	.597	
Medically unexplained symptoms develop in women because they lament too much about their health (GRI-patients-8)	2.07	.92	1	5	7.32	-3.05	.542	.158
Men do not go to a physician for harmless health problems (GRI-patients-7)	2.39	1.02	1	5	4.68	-5.46	.520	.128
Male physicians are more efficient than female physicians (GRI-doctors-3)	1.54	.73	1	4	15.80	5.44		.827
Male physicians are better able to deal with the work than female physicians (GRI-doctors-6)	1.59	.74	1	5	16.01	8.76		.808
Female physicians needlessly take into account how a patient experiences disease (GRI-doctors-5)	1.75	.73	1	5	8.82	0.62		.662
Female physicians extend their consultations too much compared to male physicians (GRI-doctors-2)	2.06	.81	1	5	6.43	-0.63	.222	.540
Female physicians are too emotionally involved with their patients (GRI-doctors-7)	1.99	.85	1	4	7.31	-2.21	.221	.522
Items removed from the Exploratory Factor Analysis								
Addressing differences between men and women creates inequity in health care (GS-1)	2.31	1.09	1	5	9,29	-2.14		
Physicians' knowledge of gender differences in illness and health increases quality of care (GS-2)	4.39	.71	1	5	-17.90	19.31		
A physician should confine as much as possible to medical aspects of health complaints of men and women (GS-5, reversed)	3.69	1.11	1	5	-8.97	-2.81		
Physicians do not need to know what happens in the lives of men and women to be able to deliver medical care (GS-6, reversed)	4.00	.80	1	5	-10.23	5.31		

Differences between male and female physicians are too small to be relevant (GS-7, reversed)	2.79	1.10	1	5	1.21	-5.62
Especially because men and women are different, physicians should treat everybody the same (GS-8, reversed)	3.04	1.12	1	5	-1.93	-5.73
In communicating with patients it does not matter whether the physician is a man or a woman (GS-11, reversed)	3.00	1.22	1	5	-1.81	-7.53
For effective treatment, physicians should address gender differences in etiology and consequences of disease (GS-13)	4.32	.72	1	5	-19.96	27.82
Male patients better understand the approach of physicians than female patients (GRI-patients-1)	1.80	.80	1	5	8.59	-1.67
Female patients compared to male patients have unreasonable expectations of physicians (GRI-patients-2)	1.89	.80	1	4	6.49	-3.55
Female patients complain about their health because they need more attention than male patients (GRI-patients-9)	2.07	.92	1	5	7.86	-2.43
It is easier to find causes of health complaints in men because men communicate in a direct way (GRI-patients-10)	2.13	.92	1	5	7.28	-2.53
Male physicians put too much emphasis on technical aspects of medicine compared to female physicians (GRI-doctors-1)	2.25	.91	1	5	5.02	-2.86
Female physicians are more empathic than male physicians (GRI-doctors-4)	2.11	.99	1	5	7.67	-3.94
Compared to female physicians, male physicians are too hurried in their consultations (GRI-doctors-8)	1.96	.83	1	5	8.27	1.07

Note. GS =*Gender sensitivity*, GRI-patients = *Gender-role ideology towards patients* and GRI-doctors =*Gender-role ideology towards doctors.*

Loadings below .10 were remove

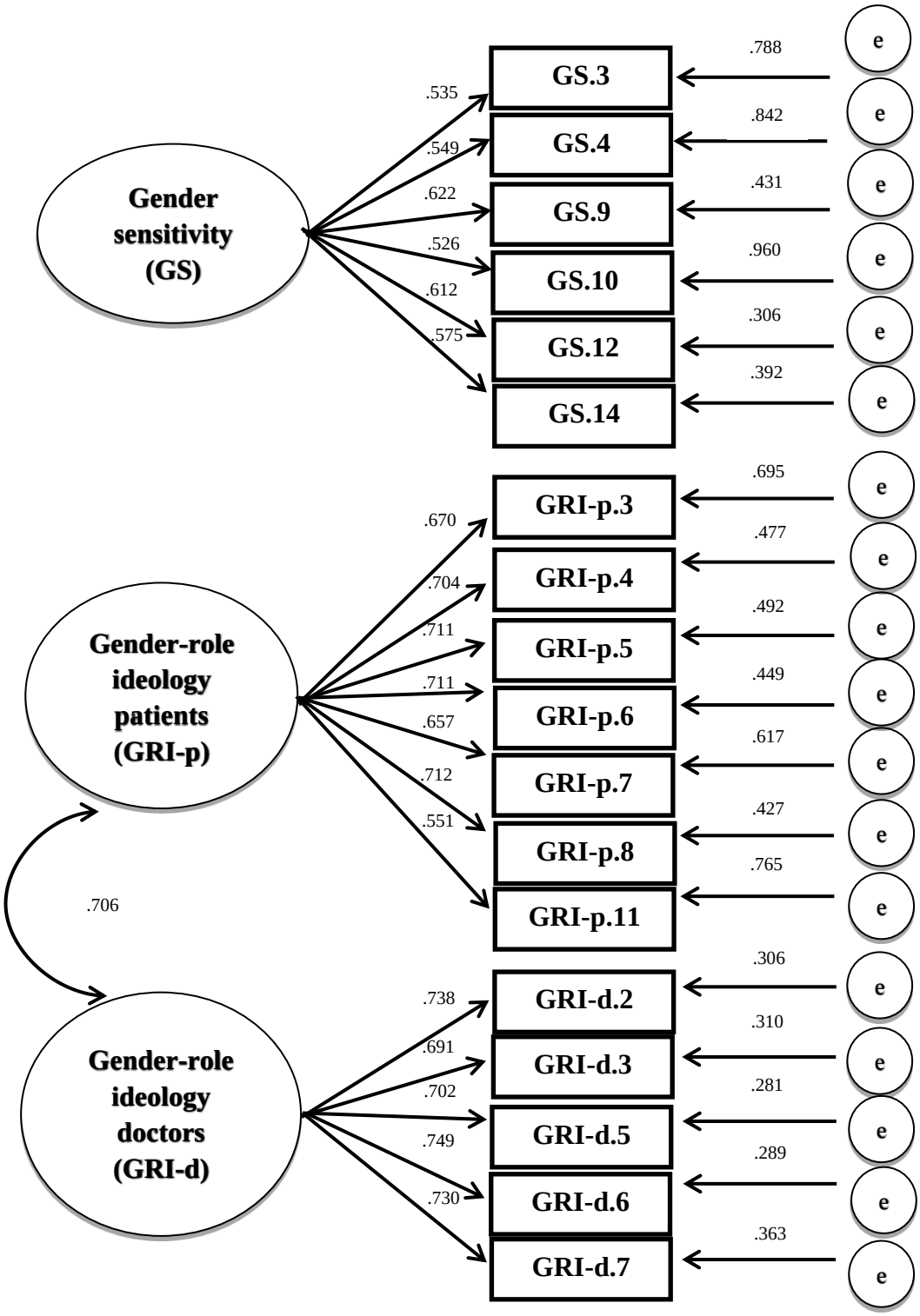
Construct Validity

Parallel analysis and exploratory factor analysis. A parallel analysis was conducted suggesting that only factors with eigenvalue of 1 or more should be retained, corroborating a 3-factor structure. As for the EFA, the sampling adequacy was guaranteed (KMO = .890; Bartlett's χ^2 [153] = 3002.829, p < .001). Based on the Kaiser criterion, three factors were extracted accounting for 52.15% of the total variance: 1) *gender sensitivity* (n = 6 items) 2) *gender-role ideology towards-patients* and (n = 7 items) 3) *gender-role ideology towards-doctors* (n = 5 items).

It should be noted that 15 items were removed from the final EFA solution due to their low communalities and/or high cross loadings (see Table 4). Eight items were removed from the *gender sensitivity* subscale, four from the *gender-role ideology towards patients* subscale and three from the *gender-role ideology towards doctors* subscale. All eliminated items are presented in Table 4.

Regarding the correlations between N-GAMS.pt factors, *gender-role ideology towards patients* and *gender-role ideology towards doctors* were positively correlated (*r*= .570; *p* <.001; n=1048). Also, *gender sensitivity* showed a negative and very weak correlation with *gender-role ideology towards doctors* (*r*= -.079; *p* =.010; n=1048). However, no significant correlations were found between *gender sensitivity* and *gender-role ideology towards patients*.

Confirmatory Factor Analysis. The first model tested was the one obtained from the previous EFA – the 3 factors model (hypothesized model; Figure 2) with *gender-role ideology patients* and *gender-role ideology doctors* correlated.



Note. See Table 4 for correspondence between item codes and full items

Figure 2. Confirmatory Factor Analysis of The N-GAMS.pt (n=539)

As shown in Table 5, the fit indexes of the hypothesized model were better than the alternative models that did not improve the data fit. Alternative model 2, i.e., gender

awareness as a second-order factor with *gender sensitivity* and *gender-role ideology* as first-order factors, showed the worst fit to the data.

Table 5.

Fit Indexes Comparison between hypothesized and alternative models (n=539)

Structural models	Description	χ^2	*DF*	χ^2/DF	CFI	NFI	IFI	RMSEA
Hypothesized Model	See Fig. 1	252.954	129	1.961	.963	.927	.963	.042
Alternative model 1		674.649	126	5.354	.835	.806	.836	.090
Alternative model 2		718.178	135	5.320	.825	.794	.826	.090

Note. Alternative model 1 is gender awareness as a unique and first-order factor and alternative model 2 is gender awareness as a second-order factor with *gender sensitivity* and *gender-role ideology* as first-order factors.

Because of the underlying non-normality of the items, a nonparametric method (bootstrap) was subsequently used as to validate the results obtained by the parametric method (maximum likelihood). As it can be seen in table 6, the bias between the 2 methods was minimal, showing that the difference between the results obtained by the parametric method and the nonparametric method is almost nonexistent.

Table 6.

Comparison of Estimates Obtained from Maximum Likelihood and Bootstrap Methods (n=539)

Items	Maximum Likelihood Standardized Estimates	Bootstrap Standardized Estimates	Bias
GS.12	.612	.612	.000
GS.4	.549	.548	-.001
GS.10	.526	.526	.000
GS.9	.622	.621	-.001
GS.3	.535	.534	-.001
GS.14	.575	.575	.000
GRI-p.4	.704	.703	-.001
GRI-p.3	.670	.668	-.002
GRI-p.6	.711	.710	-.001
GRI-p.5	.711	.711	.000
GRI-p.11	.551	.549	-.002
GRI-p.8	.712	.712	.000
GRI-p.7	.657	.657	.000
GRI-d.3	.691	.691	.000
GRI-d.6	.749	.749	.000
GRI-d.5	.702	.702	.000
GRI-d.2	.738	.738	.000
GRI-d.7	.730	.729	-.001

Note. See Table 4 for a correspondence between item codes and full items

N-GAMS.pt Reliability and Sensitivity

Participants' *gender sensitivity* (n= 1048) scores covered the full-scale range, from 1 to 5. On average, participants presented moderate-to-high levels of *gender sensitivity* (*M* = 3.91, *SD* = .60). This factor presented a negatively skewed (-8.90) and a platykurtic (7.69) distribution and good internal reliability (α_{GS} = .713).

Participants' *gender-role ideology towards patients* scores ranged from 1 to 4.43 and on average, participants held low-to-moderate gender stereotypical views of patients (*M* = 2.54, *SD* = .73). This factor presented a symmetric (-3.05) and leptokurtic (-2.84) distribution and showed very good internal reliability ($\alpha_{GRI\text{-}p}$ = .858).

Finally, participants' *gender-role ideology towards doctors* scores ranged from 1 to 3.80 and on average, participants held weak gender stereotypical views of doctors (*M* = 1.79, *SD* = .60). This factor presented a positively skewed (6.73) and leptokurtic (-2.21) distribution and showed very good internal reliability ($\alpha_{GRI\text{-}d}$ = .837).

Criteria-related validity

Physician empathy and Gender awareness. *Gender sensitivity* presented a very weak and positive correlation with perspective taking and a weak and positive correlation with compassionate care (Evans, 1996, for reference values of correlation size). *Gender-role ideology towards patients* was very weak and negatively correlated with compassionate care. Also, *gender-role ideology towards doctors* was very weak and negatively correlated with perspective taking and weak and negatively correlated with compassionate care (see table 7).

Table 7.

Pearson Correlations between Gender Awareness, Years of Medical Education and Physician Empathy and Sexism (n=1048).

	Years of medical education	Physician Empathy		Sexism	
		Perspective taking	Compassionate care	Hostile sexism	Benevolent sexism
Gender Sensitivity	.104**	.130**	.289**	-.071*	n.s.
GRI-patients	-.112**	n.s.	-.157**	.563**	.417**
GRI-doctors	-.084**	-.130**	-.319**	.500**	.407**

Note. * p<.05, **p<.001. GRI-patients means *gender-role ideology towards patients* and GRI-doctors means *gender-role ideology towards doctors*.

Sexism and gender awareness. *Gender sensitivity* and hostile sexism was very weak and negatively correlated. *Gender-role ideology towards patients* and *doctors* presented moderate and positive correlations with hostile and benevolent sexism (see table 7). No significant correlations were found between *gender sensitivity* and hostile or benevolent sexism.

Years of medical education and Gender Awareness. Years of medical education presented a very weak and positive correlation with *gender sensitivity* and very weak and negative correlation with *gender-role ideology towards patients* and *towards doctors* (see table 7).

Sex-related differences in Gender Awareness. Multivariate tests showed significant sex-related differences in *gender-role ideologies* **(***F*(2,984) = 9.616; *p*= <.001). More specifically, significant sex-related differences were found in *gender-role ideology towards patients* and *doctors*. As compared to male students, female students held slightly less gender stereotypes towards patients ($M_{females}$= 2.51, $SD_{females}$= .72; M_{males}= 2.62, SD_{males}= .75; *F*(1,985)= 4.674; *p*= .031) and doctors ($M_{females}$= 1.74, $SD_{females}$= .55; M_{males}= 1.92, SD_{males}= .68; *F*(1,985)= 19.131; *p*< .001). No significant sex-related differences were found on *gender sensitivity* (*t*(985)= 1.024; *p*= .306).

Discussion

This study aimed to adapt and validate the Nijmegen Gender Awareness in Medicine Scale (N-GAMS; Verdonk et al., 2008) to the Portuguese population, also suppressing some limitations of its original study by testing its underling 3-factor structure and further assessing its criteria-related validity. As to achieve this goal a large Portuguese sample of medical students of all medicine schools in the country was used.

N-GAMS.pt Construct Validity and Reliability

Our first goal was to test the hypothesized N-GAMS.pt underlying 3-factor structure (Verdonk et al., 2008), in which gender awareness was composed by *gender sensitivity*, and two correlated factors, i.e., *gender-role ideology towards patients and gender-role ideology towards doctors*. We hypothesized (hypothesis 1) that this model would show a better fit to the data than two alternative models, namely: 1) gender awareness as a unique and first-order factor and; 2) gender awareness as a second-order factor with *gender sensitivity* and *gender-role ideology* as first-order factors.

Our preliminary analysis (parallel and exploratory factor analysis) suggested retaining the expected three factors (Verdonk et al., 2008), after the removal of eight items from the *gender sensitivity* subscale, four items from the *gender-role ideology towards patients* subscale and three items from the *gender-role ideology towards doctors* subscale. One of the reasons behind the exclusion of this amount of items from the original N-GAMS (Verdonk et al., 2008) may pertain to differences in the extraction methods that were used. Whereas Verdonk et al. (2008) reported using a principal component analysis, in the present paper we used a principal axis factoring, which is the most appropriate method to extract latent factors based upon variables' common variance, considering error variance (Schmitt, 2011). In other words, items that in the original version (Verdonk et al., 2008) might have loaded into a component due to shared error variance, could have been easily eliminated from the N-

GAMS.pt. Most of the eliminated items were, to some extent, redundant regarding the final pool of items, which makes this version of the N-GAMS.pt a more parsimonious measure as compared to the original N-GAMS.

Our first hypothesis was confirmed by (parametric and non-parametric) Confirmatory Factor Analyses; the three-factor model showed indeed a better fit to the data than the two alternative models. Our results also showed that gender-role ideologies are a construct directed at different targets (patients and doctors), which is congruent with previous research (e.g., Anderson & Johnson 2003; Cuddy, Fiske & Glick, 2004; Verdonk et al., 2008). Also, in line with the original study (Verdonk et al., 2008), and supporting our second hypothesis, students who reported stronger endorsement of gender stereotypical views of patients also showed a stronger endorsement of gender stereotypical views of physicians. This result suggests a common ground for gender stereotypes towards patients and doctors (Verdonk et al., 2008). Also replicating previous findings, students' *gender sensitivity* showed no significant association with the endorsement of *gender-role ideologies* (Verdonk et al., 2008). This means that these are independent subdimensions of the attitudinal component of gender awareness that eventually need to be specifically and independently targeted in interventions. As for the N-GAMS.pt reliability and sensitivity, all three factors showed good internal consistency and were sensitive to participants' differences in *gender sensitivity*, *gender-role ideology towards patients* and *gender-role ideology towards doctors*.

On the whole, these findings give support to the construct validity, reliability and sensitivity of N-GAMS.pt and suggest that its three-fold structure seems to be a robust psychological model for medical students' gender awareness. The stability and robustness of this conceptual model is stressed by the fact that it has been replicated in a sample of participants with different cultural backgrounds as the ones used in the original sample (Verdonk et al., 2008). It should be noticed, however, that like its original version, the N-

GAMS.pt is only measuring the attitudinal component of gender awareness. Indeed, although the N-GAMS.pt may show that a medical student reports high scores on gender awareness, i.e., high on *gender sensitivity* and low on *gender-role ideologies*, he/she might lack the knowledge (e.g., know the influence of sex and gender on cardiovascular diseases) and the skills (e.g., reflexivity) necessary to promote gender equity in his/her practice (Verdonk et al., 2009).

Criteria-related Validity

We expected that medical students' empathy would be positively associated with *gender sensitivity* (hypothesis 3.1) and negatively associated with *gender-role ideologies* (hypothesis 3.2). Our findings have, to some extent, supported our hypotheses. Medical students endorsing higher perspective-taking and compassionate care also showed slightly more sensitivity to the relevance of considering sex and gender issues in medical practice and lower endorsement of gender stereotypical views of doctors. Higher endorsement of compassionate care was also slightly associated with lower endorsement of stereotypical views of the patient. Interestingly, it was the emotional dimension of empathy (compassionate care) that showed the strongest association with *gender sensitivity*. Also, it was only this dimension that was associated with lower endorsement of gender stereotypical views regarding patients. These results are in line with our assumption that empathy and *gender sensitivity* are both concepts that require perspective taking skills but mostly feeling patients' emotions as ones' own. Although the cognitive dimension is dominant in empathic medical relationships (Hojat, 2009; Hojat et al., 2003), these results suggest that interventions directed at the emotional component of empathy may help increase medical students' gender awareness.

Regarding sexism, we expected that both hostile and benevolent sexism would be negatively associated with *gender sensitivity* (hypothesis 4.1) and positively associated with

gender-role ideologies (hypothesis 4.2). Again, our results seemed to support our hypotheses. Higher levels of hostile and benevolent sexism were moderately associated with a stronger endorsement of *gender-role ideologies towards patients* and d*octors*. These associations seemed to be stronger between hostile sexism and *gender-role ideologies*. Indeed, the positive tone of benevolent sexism, which is often less perceived as sexism *per se* than hostile sexism (Barreto & Ellemers, 2005), might account for its weaker association with *gender-role ideologies*, as the latter present a more explicit devaluing tone towards female patients and doctors. Overall, these associations are not surprising as *gender-role ideologies* represent stereotypical views towards patients and doctors and gender stereotypes are indeed the basis of sexism (Swann, Langlois & Gilbert, 1999).

Although sexism shows considerable associations with the stereotypical components of gender awareness, the association with *gender sensitivity* was much weaker and it only barely showed a significant negative association with hostile sexism. These findings are consistent with the previously mentioned lack of association between students' *gender sensitivity* and their endorsement of *gender-role ideologies*. Again, this suggests that although medical students may hold strong sexist attitudes towards women they may also hold positive attitudes towards taking sex and gender issues into consideration in their medical practice. This would indeed be a worst-case scenario, where such integration would be based on gender stereotypical beliefs, thus reinforcing gender disparities in medicine. Again, this highlights the need to devise specific interventions to tap both *gender sensitivity* and sexism/*gender-role ideologies*, independently.

As for the role of medical training, Portuguese medical students become slightly more gender sensitive and adhere less to *gender-role ideologies* as their years of medical education increase. Given the generally high association between students' age and medical years of education, these findings are partially in line with previous studies that have shown that older

Dutch and Swedish medical students show higher levels of gender awareness (Anderson et al., 2012). One explanation for these results may lie in the fact that as medical education increases physicians' thinking becomes more diverse and complex, they have more varied clinical experience and this contact with diversity may account for more positive attitudes towards the consideration of sex and gender issues in medical practice and a lower adherence to a binary view of male/female patients/doctors.

Finally, sex-related differences were found in *gender-role ideologies towards patients* and *doctors*, but contrary to what was expected this was not true for *gender sensitivity* (hypothesis 5). Portuguese female students showed a lower endorsement of *gender-role ideologies towards patients* and *doctors* than male students. These findings replicate the results found among Dutch and Swedish medical students (Anderson et al., 2012) and are consistently in line with many other studies that have shown that, on average, men more strongly endorse gender stereotypes than women (Anderson et al., 2012; Ridgeway & Correll, 2004; Verdonk et al., 2008). It should be noted, however, that rates of endorsement of *gender-role ideologies* were, overall, relatively low. This might be accounted for by the fact that we were using an explicit measure of stereotype endorsement, hence, more susceptible to social desirability. It is also interesting to note that students reported lower endorsement of *gender-role ideologies towards doctors* than *towards patients*. This reveals an ingroup favoritism bias that is a natural part of social categorization processes and serve the goal of promoting a positive social identity (Brewer, 1979; Cadinu & Rothbart, 1996; Stangor & Leary, 2006; Zebrowitz, Bronstad, & Lee, 2007).

In sum, most of our findings showed the expected associations between the N-GAMS.pt subscales and four main criteria - students' sex, empathy, sexist attitudes and years of medical education – reflecting the measures' good criteria-related validity.

Strengths, Limitations and Implications for Future Research

One of the major strengths of this study is the support of the N-GAMS.pt construct validity by replicating and confirming its underlying factor structure in a large sample of medical students of all Portuguese medical schools. This not only speaks to the study's ecological validity but also, to some extent, to the cross-cultural stability of the measure. This study also extends the knowledge on the psychometric qualities of the N-GAMS.pt criteria-related validity, by showing how its subscales are associated with students' sex, empathy, sexism and years of medical education.

Like any other study, however, this one also bears some limitations. First, the fact that we have only conducted this study with medical students, with little or no clinical practice, preempts any conclusions about the qualities of the measure to assess trained physicians' gender awareness. Although we may assume that the N-GAMS.pt will be a valid and reliable measure to assess trained physicians' gender awareness, future studies are needed to extend its use to the medical professionals. Second, although we present a large sample of medical students with a female/male proportion similar to that of the Portuguese medical student population, our sample is not representative. This curtails our ability to generalize our findings and draw norms for gender awareness assessment. Third, the N-GAMS.pt is only measuring the attitudinal component of gender awareness. A comprehensive assessment of medical students' gender awareness would also entail assessing their knowledge on how sex and gender may influence individual's health and health care and their skills to incorporate such knowledge in their clinical practice. Therefore, assessing medical students' gender awareness will necessarily require methods beyond pencil-and-paper instruments (e.g., test and scales), namely, gender awareness skills observation (e.g., Dielissen, Verdonk, Bottema, Kramer & Lagro-Janssen, 2012).

Despite these limitations, this study bears important implications for research and practice. As for research, this study showed that N-GAMS.pt is a parsimonious, valid and reliable tool to assess the attitudinal components of medical students' gender awareness in future research and intervention projects. Given the lack of scales to assess gender awareness this is an important methodological contribution. This measure may be useful to advance knowledge about the relationship between medical students' gender awareness and quality of care.

As for the implications for practice, the N-GAMS.pt may be particularly useful for monitoring the effectiveness of medical education projects or specific training programs aiming at increasing medical students or physicians' gender awareness. The fact that *gender sensitivity* and *gender-role ideologies* were shown to be independent, suggests that interventions must be directed at both subdimension simultaneously, as to promote effective changes in gender awareness. Thus, interventions should, on one hand, seek to make medical students' attitudes towards sex and gender issues in medicine more positive, and, on the other hand, help them identify their own gender stereotypes and how and when these influences their medical practice. The N-GAMS.pt may be useful in tapping the effects of training and intervention on these different subdimension of gender awareness.

In sum, the N-GAMS.pt is a short, valid and reliable tool to assess the attitudinal component of medical students' gender awareness, which bears important contributions for medical education fields and for future research on the role gender awareness in healthcare quality and equity.

CHAPTER 4. "That time of the month": Gender-related double jeopardy of premenstrual symptoms

Part of this chapter is based on the paper: Morais, R., Bernardes, S., & Verdonk, P. (submitted). "That time of the month": gender-related double jeopardy of premenstrual symptoms. *Psychology of Women Quarterly*.

ABSTRACT

Despite being prevalent and potentially disabling, premenstrual syndromes are often under-diagnosed and under-treated. Drawing upon gender stereotype and representations theories, it was our contention that premenstrual symptoms, by distancing women from valued and gendered ideals of being, could account for such biases. This study tested this contention by investigating: (1) medical students' perceptions of women with premenstrual symptoms as compared to their representation of the "typical woman" and (2) the extent to which medical students' adherence to *gender-role ideologies towards patients* modulated such perceptions. Two hundred and fifty-six medical students (75.5% women) participated in a between-subjects experimental design, 3 (type of character) by 2 (participants' sex). Participants were asked to report the extent to which a set of 33 stereotypical feminine or masculine traits fit the 'typical woman' or, as described in written vignettes, a woman with premenstrual syndrome (PMS) or premenstrual dysphoric disorder (PMDD). Regardless of their sex or *gender-role ideologies towards patients*, medical students perceived women with premenstrual symptoms as *less* affectionate and communal but also *less* dominant and instrumental than the "typical woman". These findings showed that women reporting premenstrual symptoms are in a gender-related double jeopardy, which may ultimately contribute to their discrimination in clinical settings.

Keywords: Gender stereotypes; Femininity; Masculinity; Premenstrual syndrome; Premenstrual Dysphoric Disorder; Medical Students.

Introduction

Twenty to 40% of women can be affected by Premenstrual Syndrome (PMS), i.e., a set of symptoms that occur cyclically during the luteal phase of the menstrual cycle and resolve quickly at or within a few days of the onset of menstruation (Braverman, 2007; Ryua & Kim, 2015; Yonkers & Simoni, 2018). About two to 8% of women suffer from Premenstrual Dysphoric Disorder (PMDD), a more severe form of PMS (e.g., Kelderhouse & Taylor, 2013; Yonkers & Simoni, 2018). These syndromes bear deleterious consequences for women (e.g., depressed mood), their families (e.g., relational problems) and also to society (e.g., significant loss of work productivity and increased direct healthcare costs; Cunningham, Yonkers, O'Brien & Eriksson, 2009; Direkvand–Moghadam, Sayehmiri, Delpisheh & Kaikhavandi; 2014).

Despite their high prevalence and adverse consequences, some authors estimate that 90% of women with PMDD (Cunningham et al., 2009) and 20% of women with PMS do not receive a diagnosis nor a treatment (Lete et al., 2011). Women with PMS often seek help for several years before being diagnosed and often report that the diagnosis was their suggestion with the agreement of the physician (Kraemer & Kraemer, 1998). Although lack of knowledge about premenstrual syndromes may contribute to this pattern of findings (Kraemer & Kraemer, 1998), healthcare professionals' (HPs) gendered perceptions (i.e., perceptions with gender connotations) of women with PMS/PMDD may also influence their assessment and treatment decisions. This paper generally aimed to investigate the latter.

Reports of mood and behaviour changes related to the menstrual cycle can be traced back to the ancient Greeks (Anson, 1999; Di Giulio & Reissing, 2006). The idea that women become unstable, uncontrolled, 'hysterical' and deviant when they are menstruating has been associated to premenstrual syndromes for long (Lorber & Moore, 2002; Chrisler, Rose, Dutch, Sklarsky & Grant, 2006). This idea seems to be deep rooted in dominant gender

representations, i.e., socially constructed and shared beliefs about how wo(men) are and should be (Lorber & Moore, 2002). Nonetheless, empirical studies directly investigating the extent to which such gender representations influence individuals' perceptions of women with PMS/PMDD are almost non-existent. To the best of our knowledge, only Alexander, Taylor & Fordyce (1986) sought to do this by exploring general practitioners' perceptions of women with premenstrual symptoms as compared to other women. Approximately half of the general practitioners thought that these patients were more likely to be hypochondriacs, introverted and intelligent, as well as being married, to have small families and being from a higher social class. Although this study showed that some physicians may attribute very specific individual and social characteristics to patients based on their report of premenstrual symptoms, it still falls short from uncovering the gender dynamics behind these inferences.

Drawing upon theories on gender stereotypes and representations (Amâncio, 1994; Kite, Deaux & Haines, 2008; Spence & Helmreich, 1980) it is our contention that premenstrual symptoms, by distancing women who present them from valued and gendered ideals of being, may put them at risk of prejudice and discrimination. By reporting affective symptoms such as mood fluctuations, distress, anxiety and depression, women may be set even further apart from the hegemonic masculine values of self-control, agency, instrumentality, autonomy, and dominance, usually more associated to the 'typical man' (e.g., Amâncio, 1994, Burgess & Borgida, 1999; Helgeson, 1994; Kite, Deaux, & Haines, 2008; Spence & Helmreich, 1980). By showing irritability, anger, and aggressiveness, women may also lose the most valued core component of femininity, i.e., interpersonal competence (e.g., being affectionate and communal; Chrisler et al., 2006; Cosgrove & Riddle, 2003; Lorber & Moore, 2002). Finally, physical symptoms, such as pain, may also contribute to distance women from valued gendered ways of being; e.g., a study by Bernardes & Lima (2010) showed that a woman with chronic low back pain was perceived as being less feminine

(expressive) but also less masculine (dominant and instrumental) than the a "typical woman". In short, women reporting premenstrual symptoms may be in a gender-related double jeopardy. The first aim of this study was to test this contention with a sample of medical students. We expected that as compared to the "typical woman", women with premenstrual symptoms would be perceived as: (H1) *less* socially competent (typically feminine) and (H2) *less* dominant and instrumental (typically masculine).

The second aim was to investigate whether medical students' adherence to *gender-role ideologies towards patients*, i.e., stereotypical beliefs about trait-related and behavioural differences between male and female patients (Verdonk, Benschop, De Haes, & Lagro-Janssen, 2008), would moderate the previous effects. As the activation and application of gender stereotypes to process information is more likely among those who show stronger adherence to such stereotypical beliefs (Helgeson, 2017), we expected that the previous effects would be stronger for medical students' who reported higher adherence to *gender-role ideologies towards patients* (H3).

Method

Participants

Based on an *a priori* power analysis (G*Power, version 3.1.9.2) for a 2 x 3 ANOVA, the minimum sample size was set at 251 participants, for an alpha of 0.05, a power of 0.95 and to detect a medium effect size (f=0.25). 256 medical students (75.5 % women; 24.1 % men and 0.4% other sex) from 4 Portuguese medical schools participated in this study. Their ages ranged from 17 to 40 years (M = 23.61; SD = 5.11) and their years of medical education ranged from 1 to 6 (M=3.63; SD =1.70). Only 15.7% reported having some training in gynecology and obstetrics. Most students (95.9 %) were Portuguese, single (89.6 %) and did not have children (94.4 %).

Experimental design and Procedure

This study was a 3 (type of character: woman with PMS vs. woman with PMDD woman vs. "typical woman") by 2 (participants' sex: man vs. woman) experimental between-subjects design.

The study was carried out online using Qualtrics software (Qualtrics, Provo, PT) and complied to the ethical guidelines of ISCTE-University Institute of Lisbon (ISCTE-IUL). After the approval of the medical schools' directive board, students were invited to collaborate on a study on gender issues in Medicine. Five hundred and fifty-seven students started filling out the online protocol, but only the 256 who completed it in full were included in the study. Medical students started the protocol by providing their informed consent, where anonymity and confidentiality were ensured. Then, they were randomly assigned to the three experimental conditions.

Participants in the "woman with PMS" or "woman with PMDD" conditions were presented with a written vignette depicting the respective clinical case (see section on the independent variable). After acknowledging that they had fully read the vignette and after being warned that they could not go back to read it again, participants proceeded to rate the extent to which gender-related traits applied to their personal impression of the woman depicted in the vignette (see dependent variables). Afterwards, manipulation check questions and the *gender-role ideology towards patients* subscale were presented. Participants who were allocated to the "typical woman" condition just had to rate their representation using the same set of gender-related traits and, afterwards, fill out the *gender-role ideology* scale. Finally, participants' sociodemographic characteristics were collected. Participants took, on average, 15 minutes to complete the protocol. Two 40€ vouchers we randomly allotted among the participants.

Manipulation of the independent variable

Participants in the "typical woman" condition were asked to picture in their heads the image that "*people in their society generally have of a typical woman*". This procedure is commonly used in gender stereotype research (e.g., Bernardes & Lima, 2010) to tap into the individual's representation of the prototypical member of a social category (i.e., women), i.e., an abstract representation of the most common and typical exemplar of the category often exhibiting its most central and consensual features (Rosch, 1975; Visser, 2002). Participants in the other two conditions were presented with a written vignette depicting a case of a woman with PMS or PMDD. By comparing the image of the "typical woman" with the image of the woman with PMDD and PMS in terms of their gender-related traits, we could assess the extent to which participants' perceptions of women with premenstrual symptoms distanced themselves from their prototypical representation of women. Next follows the full version of the written vignettes:

Woman with PMS. *A 27-year-old woman reports symptoms related to her menstrual cycle. During last year, this woman has experienced bloating and abdominal pain associated with some irritability that appears about a week before the onset of each menstruation. These symptoms only disappear around the 4th day of menstruation and remain absent at least until the 12th day of their menstrual cycle. These symptoms have been interfering with her daily life activities, namely, causing some work-related absences and relational problems with her partner. These symptoms are not caused by hormonal contraceptives and are not due to any other illness or disorders.*

Woman with PMDD. *A 27-year-old woman reports symptoms related to her menstrual cycle. During last year, this woman has experienced bloating and severe abdominal pain associated with marked irritability, depressed mood, tearfulness, and feelings of hopelessness that appear about a week before the onset of each menstruation.*

These symptoms only disappear a few days after the onset of menstruation and remain absent for at least a week thereafter. These symptoms have been seriously interfering with her daily life activities, namely, causing several work-related absences and serious relational problems with her partner. These symptoms are not caused by hormonal contraceptives and are not due to any other illness or disorders.

The PMS scenario was developed drawing upon the American College of Obstetricians and Gynecologists' criteria to diagnose PMS (ACOG, 2000). The PMDD scenario was developed drawing upon the American Psychiatric Association criteria to diagnose PMDD (APA, 2002, 2014). A professional gynecologist confirmed the rigor and realism of the clinical scenarios.

Manipulation check. To check whether participants in the "woman with PMS/PMDD" conditions had understood the written vignettes three questions were asked: 1) *"How do you rate the intensity of this woman's abdominal pain?"* answered on a Visual Analogue Scale (VAS) from 0 (no pain) to 10 (worst imaginable pain); 2) *"How do you rate the intensity of this woman's emotional distress?* answered on a scale from 0 (no intense) to 10 (extremely intense); 3) *"To which extent do you believe these symptoms interfere in this woman's daily activities?* answered on a scale from 0 (nothing) to 10 (extremely). We expected that the woman with PMDD would be perceived as feeling more intense pain, more emotional distress and more symptom interference in daily activities than the woman with PMS.

Dependent variables

Gender-related stereotypical traits. A list of 33 traits (18 typically masculine and 15 typically feminine traits) previously tested for the Portuguese population (Amâncio, 1994) was presented. Participants were asked to assess to which extent each one of the traits fit their impression of the woman with SPM/PMDD or "typical woman", on a 7-point Likert scale

ranging from 1 (does not apply) to 7 (totally applies). A Principal Axis Factoring (PAF) analysis with orthogonal rotation with all the traits was conducted. Items with cross-loadings (<.30), with the lowest communalities (<.20) and higher levels of asymmetry (skewness/SE skewness> [2.0]) were gradually eliminated. Three factors were extracted accounting for 64 % of the variance: 1) Masculinity-dominance, i.e., typically masculine traits conveying a sense of social dominance (careless, authoritarian, macho, disorganized, virile, rigid, dominant and superior; α=.907); 2) Masculinity-instrumentality, i.e., typically masculine traits conveying an autonomous, task-oriented and agentic posture (independent, strong, courageous, rational, objective, fighter and sure of herself; α= .861) and; 3) Femininity-interpersonal competence, i.e., typically feminine traits related to being affectionate, warm and communal (sentimental, emotional, sensitive, affectionate and affable; α=.914). Scores were computed by calculating the average of their respective items; the higher the score the higher the attributions of gender-related traits.

Gender-role ideologies towards patients. The *Gender-role ideology towards patients* subscale of the Portuguese version of the Nijmegen Gender Awareness in Medicine Scale (N-GAMS.pt, Morais, Bernardes & Verdonk, 2020) was administered to assess medical students' stereotypical views towards male and female patients. It is composed by 7 items with good internal reliability (α=.810; e.g., *women expect too much emotional support from physicians*) answered on a Likert scale ranging from 1 (totally disagree) to 5 (totally agree). Scores were computed by calculating the average of the items; the higher the score the higher the students' adherence to *gender-role ideologies*.

Data Analysis

Data were analyzed with version 23 of IBM SPSS (IBM Corp., 2015). The sole participant who reported being part of a sex category other than male or female was excluded from the analyses, hence, only participants who self-reported as male or female were

included. First, variable distributions were analyzed. Socio-demographic variables (age, years of medical education, training in gynecology and obstetrics, nationality, civil status and number of children) were not significantly associated to our dependent variables. As such, these variables were not included in subsequent analyses. To test H1 and H2, we performed a 2 (participant's sex) by 3 (type of character) MANOVA over all gender-related traits dimensions, followed by Tukey HSD post-hoc tests. We have also used PROCESS macro version 3.1 by Hayes (2018) to conduct a logistic regression analysis to test whether *gender-role ideologies towards patients* moderated the relation between type of character and gender-related trait attribution (H3).

Results

Manipulation checks

As expected, and compared to the woman with PMDD , the woman with PMS was perceived as having less intense pain (M_{PMDD}= 6.76, SD_{PMDD}= 1.33 vs. M_{PMS}= 6.14, SD_{PMS} = 1.51 ; t(176)= -2.863, p=.005), lower distress (M_{PMDD}= 6.94, SD_{PMDD}= 2.06 vs. M_{PMS}= 6.10, SD_{PMS}= 2.01; t(176)= -2.728, p=.007) and lower symptom interference in daily activities (M_{PMDD}= 8.15, SD_{PMDD}= 1.75 vs. M_{PMS}= 7.17, SD_{PMS}= 2.00; t(176)= -3.439; $p\leq$ .001).

Mean differences in gender-related trait attributions

The multivariate tests showed significant main effects of participants' sex (F (3,238) = 4.748, p=.003) and type of character (F (6,476) = 13.588, p<.001) over the attributions of gender-related traits. No significant interaction effect was found (F (6,476) = .987, p= .433). As Table 8 shows, male students attributed more *masculinity-dominance* traits overall than female medical students. Although the mean levels of *masculinity-dominance* were all below the scale mid-point, the typical woman was perceived as being more *dominant* than the woman with PMS (p<.001) and the woman with PMDD (p<.001). Such effect accounted for almost 10% of the total variance of *masculinity-dominance.* A similar pattern was found for

the *masculinity-instrumentality* dimension, but the mean levels were generally closer to the scale mid-point and only around 5% of the variance was accounted for. Finally, the typical woman was perceived as more interpersonally competent than the woman with PMS (p<.001) and the woman with PMDD (p<.001). The latter, however, was perceived as more affectionate and communal than the woman with PMS (p<.001). Such effect accounted for almost 25% of the total variance of *femininity-interpersonal competence*.

Table 8.

Univariate Main Effects of Participants' Sex and Type of Character on Gender-related Attributions

Trait dimensions	Participant's sex				Type of character				
	M (SD)		*F*	*η²*	*M (SD)*			*F*	*η²*
	Men	Women			Typical	PMS	PMDD		
Masculinity_ dominance	2.96 (.93)	2.42 (1.09)	14.344 **	.056	3.20[a] (.62)	2.20[b] (1.19)	2.38[b] (.99)	13.258**	.099
Masculinity_ instrumentality	3.83 (.91)	3.63 (1.15)	*n.s.*		4.12 [a] (.62)	3.53 [b] (1.32)	3.46 [b] (1.04)	6.747**	.053
Femininity_ interpersonal competence	4.41 (1.07)	4.12 (1.53)	*n.s.*		5.39 [a] (.76)	3.33 [b] (1.45)	4.14[c] (1.05)	39.458**	.247

** p≤.001; n.s. = non significant; different superscript letters identify significant mean differences.

Moderator role of gender ideologies towards patients

The mean levels of adherence to *gender-role ideologies towards patients* were below the scale mid-point; female students reported lower adherence (M=2.44; SD=.69) than male students (M=2.70; SD=0.69). *Gender-role ideologies towards patients* did not significantly moderate the relation between type of character and *masculinity-dominance* (F(2,248)= 0.831; p=.437), *masculinity-instrumentality* (F(2,248)= 1.512; p=.223) or *femininity-interpersonal competence* (F(2,249)= 2.236; p=.109).

Discussion

This study investigated medical students' perceptions of women with PMS and PMDD as compared to the representation of the stereotypical woman. We expected that women with PMS and PMDD were perceived as *less* interpersonally competent (H1) and *less* dominant and instrumental (H2) than the typical woman. These effects would be stronger among medical students who reported higher adherence to *gender-role ideologies towards patients* (H3).

As expected, women with premenstrual symptoms suffered a big loss in the attribution of interpersonal competence (H1), by being perceived as much less affectionate and communal than the typical woman. The presence of premenstrual symptoms stroke against the most valued core of femininity, i.e., being interpersonally competent (Braverman, 2007; Chrisler et al., 2006; Lorber & Moore, 2002; Rodin, 1992; Taylor, 2006). Interestingly, this effect was stronger for the woman who only presented mild irritability, less pain and lower relational interference (PMS) than for the woman who presented marked irritability along with more pain, distress and disability (PMDD). One possible interpretation for this finding is the notions that the presence of more intense physical and emotional suffering may have *buffered* the negative impact of irritability on medical students' judgments over women's interpersonal competence. This striking effect on the attribution of interpersonal competence may, eventually, reduce healthcare professionals' empathy towards these women's complaints, possibly leading to their invalidation and neglect.

As hypothesized, both women with premenstrual symptoms were equally considered *less* dominant and instrumental compared to the typical woman (H2);indeed, premenstrual symptoms set them even further apart from the values of self-control, agency, instrumentality, more often associated to ideals of masculinity (e.g., Amâncio, 1994, Burgess

& Borgida, 1999; Kite et al., 2008; Helgeson, 1994; Spence & Helmreich, 1980). Such losses, however, were less striking than the loss of interpersonal competence, as the levels of instrumentality and dominance attributed to the typical woman were already moderate to low, in line with other previous research (Helgeson, 2017; Kite et al., 2008; Spence & Helmreich, 1980). Nonetheless, perceiving these women as having poor self-control, agency and work orientation may, eventually, increase healthcare professionals' likelihood of attributing their complaints to "being hysterical" or "looking for secondary gains", and possibly leading to their loss of credibility and psychologization.

Finally, it should be noted that this pattern of findings was found regardless of medical students' sex and, against what we expected (H3), regardless of their adherence to *gender-role ideologies towards patients*. These results suggest that gender representations of women with premenstrual symptoms are strong and pervasive. By making inferences about female patients' personalities based solely on their symptoms, medical students place them in a gender-related double jeopardy, which may increase their risk of having their complaints under-diagnosed and under-treated.

Limitations and directions for future research

This study bears some limitations. First, as this study was conducted with medical students, the extent to which our findings may be generalized to physicians or other healthcare professionals (e.g., nurses) or even students with different cultural backgrounds is unknown. Also, although we have constructed the clinical scenarios as to depict the most prevalent and pervasive PMS and PMDD sets of symptoms (Braverman, 2007; Cunningham, et al., 2009; Yonkers & Simoni, 2017), it is unknown whether these findings would be replicated with other sets of premenstrual symptoms. More importantly, we cannot determine which particular symptoms were responsible for driving the changes in gender representations. Also, although care was taken to build realistic clinical scenarios, the

external validity limitations usually associated with the use of written vignettes should be considered. Finally, the extent to which such gender-related double jeopardy may actually account for the undertreatment of women with premenstrual symptoms is also unknown. Future studies would be needed to replicate these findings with other healthcare professionals, with other cultural backgrounds, in real clinical settings, and investigating the consequences of such gendered perceptions for health care practices.

This study bears, however, important implications. To the best of our knowledge it is one of the first studies conceptualizing and finding evidence of the gender dynamics possibly behind the underassessment and undertreatment of premenstrual symptoms. It also highlights the relevance of increasing healthcare professionals' and medical students' gender awareness (e.g., Verdonk, Benschop, de Haes, & Lagro-Janssen, 2009), as to eventually reduce gender biases in the diagnosis and treatment of premenstrual syndromes.

CHAPTER 5. Premenstrual drama queen or beast of burden? Physicians' gendered representations of women with premenstrual symptoms in clinical encounters

ABSTRACT

Despite its deleterious consequences for women, premenstrual syndromes are often under-diagnosed and under-treated. Physicians' gendered representations of women with premenstrual symptoms may partially account for these biases, because they have implications for clinical encounters. Drawing upon gender stereotypes and representation theories, this study explored the extent to which physicians' representations of women with premenstrual syndromes bear gendered connotations, and what the implications are for doctor-patient encounters. Individual semi-structured interviews were conducted with 32 physicians (11/6 female/male General Practitioners and 10/5 female/ male Obstetricians-Gynecologists). Based on their professional experiences, physicians were asked to describe their perception of 'easy' and 'difficult' cases of women with premenstrual symptoms, to express their representations of those women and their clinical relationships. Thematic analysis was used to analyze the data. Six representations of women with premenstrual symptoms emerged, five of which with clear gender connotations: histrionic, "naturally" disturbed, tolerant, hostile, and controlling patients. A last theme - women resistant to take medication – had less clear gender connotations. The histrionic, the "naturally" disturbed and the hostile women were perceived as the most "difficult" cases, bearing negative consequences to the doctor-patient relationship and diagnosis, whereas tolerant women were often depicted as the easy cases. Implications of these results for the diagnosis and treatment of women with premenstrual symptoms and for healthcare professionals' training are discussed.

Keywords: Gender representations; Femininity; Masculinity; Premenstrual syndromes; Premenstrual Dysphoric Disorder; Physicians.

Introduction

Some women may feel a constellation of symptoms such as pain, breast tenderness, bloating, irritability, mood swings, anxiety and depressive mood before their periods, often called "*that time of the month*". Premenstrual Syndrome (PMS) encompasses a set of physical, cognitive, emotional and behavioural symptoms that occur cyclically during the luteal phase of the menstrual cycle and resolve quickly at or within a few days of the beginning of menstruation (Braverman, 2007; Yonkers & Simoni, 2018). PMS affects 20 to 40% of women in childbearing age, and about 2 to 6% of women suffer from Premenstrual Dysphoric Disorder (PMDD), a more severe form of PMS (e.g., American Psychiatric Association, 2013; Kelderhouse & Taylor, 2013). These syndromes bear negative consequences for women (e.g., depressed mood and significant distress), their families (e.g., increased interpersonal conflicts) and also to society (e.g., losses in productivity and increased direct healthcare costs; Braverman, 2007; Cunningham, Yonkers, O'Brien & Eriksson, 2009; Direkvand–Moghadam, Sayehmiri, Delpisheh & Kaikhavandi; 2014; Kelderhouse & Taylor, 2013).

Furthermore, there is plenty of medical controversy surrounding premenstrual syndromes (PMS and PMDD) diagnosis (Browne, 2015; Chrisler, Rose, Dutch, Sklarsky & Grant, 2006; Rodin, 1992). Diagnosing and treating premenstrual syndromes seems challenging (Nevatte et al., 2013) and, some authors have estimated that 90% of women with PMDD (Cunningham et al., 2009; Halbreich, Borenstein, Pearlstein & Kahn, 2003; Shulman, 2010) and 20% of women with PMS do not receive a proper diagnosis nor treatment (Lete et al., 2011). Few doctors diagnose PMS and PMDD (Weisz & Knaapen, 2009) and many women with significant premenstrual symptoms do not seek medical help, as they often consider their symptoms "normal" and inherent to the "female condition" (Lete et al., 2011). The few women who seek medical assistance complain about their symptoms several years

before getting a diagnosis, often made at their own suggestion (Halbreich et al., 2003; Kraemer & Kraemer, 1998). After getting a diagnosis many of them are prescribed pharmacological treatments (Lete et al., 2011; Weisz & Knaapen, 2009), a few are advised to make lifestyle changes and some still remain undertreated as their symptoms are not considered important and are expected to disappear spontaneously (Lete et al., 2011).

Several factors may account for the underdiagnosis and undertreatment of PMS/PMDD. First, PMS and PMDD have unclear disease identities (e.g., Leventhal, Meyer & Nerenz, 1980; Leventhal, Nerenz & Steele, 1984). PMS is considered a syndrome and PMDD is considered a disorder/disease, which shows the lack of clear-cut definitions of what corresponds to normal or pathological variations of the menstrual cycle (e.g., O'Brien et al., 2011). Second, besides the problems related to their characteristics, premenstrual syndromes' etiology remains under investigated. Indeed, there is little knowledge beyond the fact that they seem to be the result of a complex interaction between ovarian steroid alterations of the menstrual cycle and diverse neurotransmitters including serotonin (Ismaili et al., 2016). Consequently, different criteria and methods are often used to diagnose PMS and PMDD (e.g., American College of Obstetrics and Gynecology, 2000; American Psychiatric Association, 2013; Chrisler et al., 2006; Di Giulio & Reissing, 2006; O'Brien et al., 2011; Taylor, 2006). Third, given that premenstrual syndromes rest mainly on non-observable symptoms (irritability, mood swings, pain), which are often downplayed and not fully understood from a biomedical perspective (e.g., ; Barsky & Borus, 1999; Engel, 1977Wade & Halligan, 2004), these are often stigmatized (e.g., Johnston-Robledo & Chrisler, 2011). Indeed, social stigma surrounding menstruation issues is well recognized in popular culture involving jokes, beliefs, myths about women portraying those symptoms, who are often depicted as a "*frenzied, raging beast, a menstrual monster, prone to rapid mood swings and crying spells, bloated and swollen from water retention, out of control, craving chocolate,*

and likely at any moment to turn violent" (Chrisler et al., 2006, p.371). These stigmatizing representations of women with premenstrual symptoms may also contribute to perceptions of PMS-related issues rather as a social problem rooted in women's personalities, than as a "legitimate" health problem that deserves to be addressed by physicians regardless of its degree of severity. The extent to which physicians share these cultural representations of women with premenstrual syndromes may indeed color clinical encounters, eventually influencing their assessment and treatment decisions. As to the best of our knowledge, empirical studies directly investigating this latter issue are almost nonexistent, the general aim of this study was, by drawing upon gender-related theories (e.g., Amâncio, 1994; Kite, Deaux & Haines, 2008; Spence & Helmreich, 1980), to investigate physician's (gendered) representations of women with premenstrual symptoms and their implications for clinical encounters.

Gendered representations of women with premenstrual symptoms: A case of double jeopardy?

Healthcare professionals' representations of women with premenstrual symptoms are underexplored. An older study carried out by Alexander, Taylor & Fordyce (1986) aimed at understanding the perceptions of general practitioners (GPs) of women with PMS as compared to the "typical" woman. The main results showed that about half of the GPs reported that women with PMS were not significantly different from what they defined as the "typical" woman. However, physicians who considered that there were differences reported that women with PMS were more likely to be hypochondriacs, introverted and intelligent, to be married, to have small families and to belong to a higher social class. Although this study provided novel findings on the representations of women with PMS, it did not uncover the complex gender dynamics in which such representations may be rooted.

Indeed, it is our contention that, being unique women health conditions, PMS and PMDD may contribute to distancing these women from valued and gendered ideals of being, i.e., socially constructed and largely shared expectations about how women and men are and should be (Lorber and Moore, 2002), which are also often applied to patients in clinical encounters (e.g., Morais, Bernardes & Verdonk, 2020; Verdonk, Benschop, De Haes, & Lagro-Janssen, 2008). More specifically, and as we have previously argued (Morais, Bernardes & Verdonk, under review), the presence of premenstrual symptoms may put women in a gender double jeopardy. First, the manifestation of PMS/PMDD symptoms such as mood swings, distress, anxiety and even depression, is incompatible with hegemonic masculinity values of self-control, agency, instrumentality, autonomy, and dominance, usually more associated with men (e.g., Amâncio, 1993b; 1994, Burgess & Borgida, 1999; Eagly & Kite, 1987; Ellemers, 2018; Helgeson, 1994; Kite et al., 2008; Spence & Helmreich, 1980). Second, PMS/PMDD symptoms of irritability, anger, and aggressiveness can distance patients from valued ideals of femininity, such as communality, warmth and interpersonal competence, which are more often associated with women (Ellemers, 2018; Chrisler et al., 2006; Cosgrove & Riddle, 2003; Lorber & Moore, 2002). Finally, some studies showed that physical symptoms like pain, may also contribute to such gender double jeopardy; e.g., Bernardes & Lima (2010) revealed that a woman with chronic low back pain was perceived as being less feminine (expressive) but also less masculine (instrumental and dominant) than the "stereotypical woman".

As to begin testing the gender double jeopardy contention, Morais et al. (under review) conducted an experimental study comparing medical students' ratings of women with PMS, women with PMDD and the "stereotypical woman" in a set of gender-stereotypical personality traits. This study showed that, regardless of medical students' sex or their level of adherence to *gender-role ideologies* towards patients (Morais et al., 2020; Verdonk et al.,

2008), students found that women with premenstrual symptoms (PMS and PMDD) lost femininity-related traits associated to interpersonal competence as well as masculinity-related traits of dominance and instrumentality. However, this study had some limitations. First, it sought to explore the perceptions of medical students who, compared to trained physicians, have little or no clinical experience with women with premenstrual symptoms. Second, the experimental and quantitative nature of the study curtailed the exploration of the gendered meanings in which the representations of these patients are rooted and leaves little room for a deeper understanding. Third, the study also did not provide any insights into how these gendered representations could taint clinical encounters and the doctor-patient relationship. Indeed, evidence suggests that congruent or incongruent information with what we expect of women and men in clinical contexts influences the attention given to patients' complaints (Floyd, 1997), with potential implications for their diagnosis and treatment. To overcome these limitations, this paper specifically aimed to investigate physician's (gendered) representations of women with premenstrual symptoms and their association with implications of clinical encounters and doctor-patient relationship.

Method

Participants and Procedures

Seventeen General Practitioners (GP; 11 female and 6 male) and 15 Gynecologists/ Obstetricians (Ob-Gyn; 10 female and 5 male) participated in this study. All physicians were Portuguese, their ages ranged from 30 to 64 years (*M*= 40.07; *SD*= 10.05), 53.6 % were in a relationship and 64.3% had children. Almost half of the participants (46.9%) worked in healthcare centers, 46.9% in hospitals, 3.1% had a private practice as their main activity and 3.1% worked in a hospital setting and combined with private practice. More than one third of the participants (43.3%) was consulted by at least one woman with premenstrual symptoms during the previous month (*M*= 5.00; *SD*= 4.69; range 1-15). All GPs reported having some training in gynecology and obstetrics (3-month internship at least). The ratio of female/male physicians in both specialties was in line with the ratios observed in the Portuguese medical population (Ordem dos Médicos, 2017).

Most of the participants were recruited using a snowball-sampling strategy, and healthcare centers and hospitals were contacted in order to recruit GP and Ob-Gyn. The study was introduced to the participants as aiming to investigate physicians' perspectives of women with premenstrual symptoms. Ethical and deontological guidelines of ISCTE- University Institute of Lisbon (ISCTE-IUL) and the Portuguese Board of Psychologists (Ordem dos Psicólogos Portugueses, 2011) were followed. The confidentiality and anonymity of the responses were assured and permission to record the interview was requested. After physicians' informed consent, the interviews took place in their office, home or preferred public place available for the purpose. Interviews had on average a duration of 35 minutes. After each interview, sociodemographic characteristics were collected (sex, age, place of work, training in gynecology and obstetrics, nationality, civil status and having children).

Data collection technique

This study is part of a larger qualitative study, where individual semi-structured in-depth interviews were conducted. The interview script was divided in two sets of questions: 1) one set to analyze physicians' representations of premenstrual syndromes (described in another study) and 2) one set to analyze physician's representations of women with premenstrual symptoms.

The interview script regarding physicians' representations of women with premenstrual symptoms included four central topics and several strategies to stimulate an in-depth exploration of the emerging issues. The central topics were covered by the following open questions:

(1). "*Could you please tell me about your clinical experience with cases of women with premenstrual symptoms*?"

(2) "*Could you please describe a typical case of a woman with premenstrual symptoms?*".

(3) "*Now think of an 'easy case' and a 'difficult case' of PMS. Could you describe these cases/women? Why were they easy/difficult?*"

(4) For male physicians only: "*What is your personal experience with cases of women with premenstrual symptoms? Do you know anyone else outside your clinical practice with premenstrual symptoms? Has this helped you deal with the cases you encountered in your clinical practice?* For female physicians only: "*What is your personal experience with premenstrual symptoms? How has this helped you deal with the cases you encountered in your clinical practice?"*

As for the strategies, these aimed to emphasize the descriptive component of the (gendered) representations (i.e., "how women are perceived to be"; Burgess & Borgida, 1999) but also their prescriptive component (i.e., "how women should be"; Burgess & Borgida, 1999). Hence, to tap the former, questions were asked about physicians' first

impressions of these women, their complaints, ways of being and daily lives. To tap the latter, physicians were asked to consider whether women's complaints where appropriate in the clinical context. The interview script also included strategies to tap into contents of the representations that are not easily revealed in daily discourses due to social desirability. More specifically, a technique of substitution (Abric, 2003; Menin, 2006) was used by including the question *"How do you think your medical specialty colleagues perceive these women?*" immediately after physicians reported their own clinical experiences with these patients.

Data Analysis

A Thematic Analysis was used following the procedures described by Braun & Clarke (2006) and Hayes (2000). The *data corpus* consisted of thirty-two interviews. The data set consisted of all the content of the interviews that was related to the representations of women with premenstrual symptoms. A single coded chunk of data could be a word, quote or expression used by the interviewee, which translated into a meaningful unit of analysis. First, the data were read carefully to identify meaningful units of analysis relevant to the representations of women with premenstrual symptoms. Second, units of analysis dealing with the same issue were grouped together in broader analytic categories and given provisional definitions. The same unit of analysis could be included in more than one category. Third, the data were systematically and semantically reviewed and coded by the authors at a higher inferential level of abstraction to ensure that a name, definition, and exhaustive set of data to support each theme and sub-theme were identified. Finally, after themes emerged their content was one more time checked, analyzed and interpreted in order to understand if these representations about women with premenstrual symptoms were colored by stereotypical gender representations (e.g., Amâncio, 1994; Ellemers, 2018). Implications of these representations for clinical encounters were analyzed through the doctors' answers regarding their easy and difficult clinical cases. More specifically, all

meaningful units of analysis reflecting perceptions of several clinical and relational dimension of the clinical encounters were coded and, afterwards, associated to the themes and sub-themes regarding the representations of women with premenstrual symptoms. Overall, the thematic analysis resulted in 27 codes, which were grouped into six key themes and one sub-theme.

To ensure the quality of the data analysis and its results the following criteria were used (Braun & Clarke, 2006; Mays & Pope, 2000): (a) References appropriateness – all interviews were audio taped and *verbatim* transcribed; (b) Triangulation of participants – the data was collected from participants who had heterogeneous socio-demographic characteristics and professional and personal experiences with premenstrual symptoms; (c) Developing memos– some conceptual memos were created, explaining the change behind each decision about the development of themes over time; (d) Triangulation of researchers – and the second and third author of the present study regularly analyzed the results and discrepancies in the interpretation of data were discussed to reach consensus among the research team.

Results and Discussion

The most illustrative extracts for each theme and sub-theme are presented in the tables presented throughout this section. All themes and sub-themes represent different patients, reflecting types of women with premenstrual symptoms, which are categorized drawing upon the characteristics and behaviors they display and report in clinical encounters. The themes are presented from the most salient (i.e., with a higher number and diversity of units of analysis) to the less salient in physicians' interviews.

The histrionic patients: Somatising, overreacting, overly complaining

This theme represents physicians' understanding of women who somatise, overreact and overly complain, sometimes to get medical or significant others' attention (see Table 9 for the full definition, codes and illustrative extracts). These women are described as demonstrating overly dramatic behaviours or exacerbated reactions to a situation, being emotional, demanding and somatising daily life problems. The premenstrual symptomatology is sometimes seen as an alibi to vent daily life stress:

> *That they somatise those work conflicts and somatise it into bodily things that… so, it's the premenstrual syndrome, which is always a good excuse that exists for the woman, who has that… who has that stigma of the premenstrual syndrome that is something that can happen, because it's hormonal, right? And so it may be some kind of … an escape*; female Ob-Gyn.

Some of these women are even perceived as being aware that they are overreacting (e.g., *"So, in that sense, maybe they realize it. I think so, they realize it. Some people realize they are having exacerbated responses";* male Ob-Gyn). Indeed, previous studies have also corroborated this shared belief that some women use the premenstrual phase and symptomatology as a legitimate way to express their daily life frustrations (e.g., Anson, 1999). The reactions of this type of women show great emotionality but also some dependence and fragility that are frequently associated to less valued stereotypical femininity representations (e.g., Amâncio, 1994; Burgess & Borgida, 1999; Eagly & Kite, 1987; Ellemers, 2018; Kite et al., 2008; Spence & Helmereich, 1980). Also, by having these type of reactions these women may be set apart from values like self-control, autonomy, and dominance, which are valued ideals of being more associated to stereotypical masculinity (e.g., Amâncio, 1994, Burgess & Borgida, 1999; Eagly & Kite, 1987; Ellemers, 2018; Kite et al., 2008; Morais, et al., under review; Spence & Helmreich, 1980). For many years, the

menstrual cycle has been associated with characteristics such as instability, lack of control and mood changes. These characteristics are gendered *per se* (e.g., Chrisler & Caplan, 2002), often portraying women, and are frequently evaluated as negative and undesirable (e.g., Chrisler & Caplan, 2002; Chrisler et al., 2006).

This gendered representation bears several implications for the clinical encounter. *Histrionic patients* are usually referred to as the most difficult cases in clinical practice, in part by requiring many consultation resources:

> *But she was a woman who consumed many resources of our consultation, so, she would often come to the emergency consultation…she was a difficult contact. She is a patient with whom we…-it was hard to maintain a comfortable interaction with her in the consultation;* female GP.

In fact, this issue of being "difficult" has also been associated with women with endometriosis, which is a gynecological disorder with gender connotations (Young, Fisher & Kirkman, 2019). "Difficult patients" often lead to physicians' feelings of impotence (e.g., *(…) who is repeatedly saying the same complaints, that I already know, that I have heard 3, 4, 5 times and who will say nothing new and to whom I will provide nothing new;* male Ob-Gyn). Physicians also report strong ambivalence towards these patients. On one hand, by perceiving that patients are overly complaining, physicians may undervalue and invalidate these women's complaints (e.g., *"I don't know, but I think their complaints may be a bit devalued. It's possible. Because… I mean, I don't know. "Oh, she's hysterical (laughter)"* (female GP); *"(…) that one comes to complain about the same thing and has nothing"* (male Ob-Gyn). On the other hand, physicians "(…) *have learnt in general and family medicine that there is usually something behind the use or overuse of consultations;* (female GP). Drawing upon this belief, they may tend to take patients' complaints more seriously. But ambivalence may be paralyzing, which may be well associated to their feelings of impotence.

All physicians in our study mention these patients as a 'type', and they are one of the more frequently and consistently depicted across all interviews, regardless of physicians' specialty and sex. Therefore, it seems that this representation is quite salient and hegemonic.

Table 9.

The Histrionic Patients: Definitions, Associated Codes and Illustrative Extracts.

Theme and Sub-theme	Definitions	Codes	Illustrative extracts
1. *Histrionic patients*	Histrionic patients are women with premenstrual symptoms who seek the attention of medical staff or significant others. These women demonstrate overly dramatic behaviors or exacerbate responses to a particular situation, being emotional and demanding. They are perceived to somatise other problems they have in their lives. Premenstrual symptoms are sometimes seen as an alibi to vent daily life stress.	Annoying women Excessive complaint valorisation Long consultations Need for attention Psychosomatic	*I'm thinking, could it perhaps be a way of – first of all,* ***it might be a call for attention, right? It can absolutely be a way to seek attention, because when she insists, it is plausible that the woman has it, right?*** *Hormonally, it can be justified that this complaint exists. I am a woman, I am experiencing this phase of the cycle, now I am justified to feel this.* ***And so they might find a way to somatise the problems they have – psychological – at work, stress, marital problems. They might try to somatise it during that phase of the month, where they have plausible justification to do so.*** *So to speak. And maybe it isn't physiological, because there is no reason for that, with the pill it's all the same, she's always stable,* ***but they think that the time of the month is for that and they somatise their problems during that phase.*** *(Female Gynecologist)* ***It's the women who appeal more, who lead to very prolonged consultations, those who are a lot of work and that… all talk, no action.*** *We really like things that are concrete and everything that is not concrete we tend to escape a bit, isn't it? It is part of our scientific profile, I think. Evading those issues. I think they avoid them a bit.* ***They are annoying in the consultations.*** *(Female Gynecologist)* *Now, I believe they are uncomfortable before their periods. I believe that they might feel a bit more uncomfortable and they know their period is coming and they feel more swelling in their body, etc.* ***But then there are those women who reflect that more from an emotional point of view, from a behavioral point of view, of contact with others****. I think that also has an impact, obviously.* *(Male GP)*

1.1. Manipulative patients	Manipulative patients are a sub-type of histrionic patients that seek for medical attention and exacerbates their complaints in order to obtain secondary gains.	Secondary gains	*Sometimes it's because* ***they desire something else****, for example,* ***to have surgery and have their uterus removed.*** *(Female Gynecologist)* *Exactly, an 18-year-old girl, for example, who comes with – who mentions she always has pain and menstrual irregularity, and who has an abdominal pain that keeps her from going to school, who has strong breast tension which also makes it difficult for her to sleep.* ***Then we find out that she has a boyfriend, and has acne, and her friend has already told her that it helps with acne and that it would control her menstrual cycles and make them regular and that now they are not. And when we propose beginning a pill, it's fantastic and exactly what they wanted. So…*** *(Female GP)* ***I have adolescents who come here who I know want to start a contraceptive pill as a contraceptive method, but whose parents cannot know they have started their sexual lives.*** *So it's noticeable* ***that they maybe exaggerate the symptom a bit because they know their friend is taking the pill and it was like that – there have been cases where they came here and they stated openly that they had a sex life and wanted to start taking the pill but their parents could not know.*** *And I said that the pill can also be taken for other reasons not only – so, and then we speak and then they "Oh, so I will schedule a consultation and come with my mother and you can say that so I can start taking the pill." I get a bit… but I am not telling any lie, right? (Female GP)*

Manipulative patients are a type of *histrionic patients* who use the manifestation of their premenstrual symptoms to obtain secondary gains (see Table 9). For instance, adolescents who also want pills as a contraceptive and not just to relieve their symptoms:

> *Yes. Yes. Sometimes, they come with the ulterior motive of the contraceptive method, non-explicit, and consented by the mother for… the premenstrual syndrome, but this way they already have the mother's consent and then they can start their sex life in a non-explicit manner. Yes, there are also these situations.;* female GP.

Being manipulative or opportunistic is sometimes (but not always) associated with the stereotypical representation of femininity (e.g., Amâncio, 1994) and these attributes are generally perceived as negative.

Perceptions of these women as being manipulative in the consultation room can lead doctors to discredit their complaints and delay treatment when necessary:

> *I think there are different ways to deal with these situations or to approach these situations. Maybe, due to being a syndrome or a clinical situation that can bring some secondary gains, some work absenteeism or some justification from work, and the fact it is recurring, there may be some colleagues that maybe are not as alert to this pathology because, essentially, it also isn't a pathology that is very – it's something recent, right?*; female GP.

These perceptions may also lead to the medicalization of less severe cases of PMS:

> *But the truth is I also sometimes notice that they use this situation of "Oh, because she has a lot of pain, doctor, what can I do?" And I say, so, we start a pill – (…) Yes. So, they deceive their parents a bit. With some I – or they actually speak with beforehand –;* female GP.

Medicalization of women's health issues, in particular those related to women's menstrual cycle, are since long the subject of a debate in the literature (e.g., Browne, 2015; Chrisler & Caplan, 2002; Chrisler et al., 2006; Rodin, 1992; Taylor, 2006; Ussher, Perz & May, 2014), and contributes to the social idea that women are recurrently ill and to the fragility of women's body.

This representation was more frequent among female doctors, regardless of their specialty. This may simply be due to a sampling issue, as there were more female than male physicians participating in the study. However, it could also be interpreted as an attempt from female physicians to distance themselves of a negative image recurrently attributed to women (e.g., Amâncio, 1994).

"Naturally" disturbed patients: Mood and personality disorders

The second theme included descriptions of women who were perceived as essentially anxious, depressed or even with other mood and personality disorders (see Table 10). Physicians' perceptions of these women suggested that anxiety and mood changes could lead to catastrophizing (e.g., *maybe more anxious women, naturally more anxious, value these changes more and therefore verbalize them more;* female GP), bearing consequences for the patients and their significant other (e.g., *(…) cause suffering yes;* female Ob-Gyn), who could often neglect their symptoms *("oh, she is in a bad mood, let her be, just ignore it";* female Ob-Gyn). Indeed, some studies with male partners of women with premenstrual symptoms suggest that the latter feel victimized by these women, perceiving their experiences as unfair and undeserved, and often empathizing with the burden of premenstrual syndrome for others much more than for women (e.g., King, Ussher, & Perz, 2014). Also, "mood swings", listed as a symptom of premenstrual syndromes, sends the message that women's emotions are not culturally acceptable (Laws, Hey & Eagan, 1985; Lorber & Moore, 2002) leading sometimes to indifference towards them.

In line with the presence of distress and mood disorders is the perception that these women are dependent and emotional *(*e.g., *These are the most dependent ones, the more emotional ones (…);* female GP*),* which are core traits associated with less valued stereotypical representations of femininity (Amâncio, 1993b; 1994; Burgess & Borgida, 1999; Eagly & Kite, 1987; Ellemers, 2018; Helgeson, 1994; Kite et al., 2008; Spence & Helmereich, 1980), often spilling over to the representations of female patients (Samulowitz, Gremye, Eriksoon, & Helsing, 2018). It seems that the presence of anxiety, depression and mood changes sets these women further apart from the representation of the "ideal patient", who is self-controlled and agentic and, hence, more typically masculine (e.g., Amâncio, 1994, Burgess & Borgida, 1999; Eagly & Kite, 1987; Ellemers, 2018; Kite et al., 2008;

Morais et al., under review; Spence & Helmreich, 1980). In other words, these *"naturally" disturbed* patients not only loose more socially desirable and valued masculine characteristics but also are perceived as presenting more socially undesirable and less valued feminine characteristics, just like *histrionic patients*

However, the clinical implications that these two types of patients bring to the clinical encounters are slightly different. Whereas the implications of the *histrionic* patient mostly occur in the doctor-patient relationship, the implications of the *"naturally" disturbed patient* occur mainly as diagnostic issues. Indeed, like the histrionic patients, the "naturally" disturbed women are also often referred to as the most difficult cases to deal with in medical practice. This may be related to the perceived overlap between the affective symptoms of PMS and other mental health issues:

> *Which I notice, when there is difficulty in treating this, the difficulty has to do with the part itself - that is, it is not the premenstrual syndrome itself that we are treating, it is a woman who is already anxious and depressed by definition and that these symptoms will aggravate the symptoms of the underlying disease …;* male GP.

Indeed, there is some evidence of clinical cases of comorbidity between premenstrual syndromes and depression or even bipolar disorders (e.g., Cirillo, Passos, Bevilaqua, López & Nardi, 2012). These evidences are better consolidated in cases of PMDD (APA, 2013; Cirrillo et al., 2012) that are normally more severe than PMS. In such cases, doctors may have trouble knowing (…) *where does the depressive syndrome end and where do the symptoms related to the premenstrual syndrome begin? (*male GP). This overlap bears implications for the way these women are diagnosed and treated. The ambiguity makes the PMS diagnosis harder, unclear, time consuming and sometimes perceived as less important than other more well-established diagnosis (e.g., depression) which may not be the patient's main complaint:

The case I remember best is that woman who read on the internet and came to me saying she had this exact diagnosis [PMS]. For me, it is the case that most – I clearly thought she had a reactive depressive disorder to a family problem and that by chance got worse on those days, she did indeed have some symptoms. And I don't doubt that it did aggravate on those days. But in no way was it something pure, a pure diagnosis. And the difficulty was to not medicate her only for those days. What she wanted was some medication that alleviated only those days. And what I wanted to do was a two-fold treatment: alleviate those days, but maybe treat the rest as well; male GP.

These findings go in line with previous evidence showing that these women wait several years until the correct diagnosis and sometimes they also have to suggest the physician the PMS diagnosis (Kraemer & Kraemer, 1998).

It should be noticed that the representation of the *"naturally" disturbed patient* is quite consistent across the interviews given by male and female doctors. It is, however, a theme that is more salient in the interviews provided by GPs than Ob-Gyns, which may be related to the former's biopsychosocial holistic view on patients.

Table 10.

"Naturally" Disturbed Patients: Definition, Associated Codes and Illustrative Extracts.

	Theme	Definition	Codes	Illustrative extracts
1.	*"Naturally" disturbed patients*	Depicts women with premenstrual symptoms who are described as "naturally" or essentially anxious. It also includes women with some depressive symptoms or even mood or personality disorders. Depression is the most commonly referenced mood disorder. In other words, anxiety and depression characterize these women. In these cases, the existing underlying disorder exacerbates the PMS symptoms.	Anxiety Depression Personality Pathology Dependency	*Maybe **more anxious women, naturally more anxious, who value these changes more and therefore verbalize them more.*** *(Female GP)* ***A depressed woman who will repeatedly make the same complaints**, that I already know, that I have heard 3, 4, 5 times and who will not say anything new and to whom I will not offer anything new."* *(Male Gynecologist)* *So… but rule of thumb, when that happens, it is usually with people who have some background, or **have a typically anxious personally trait, or have a personality disorder, or they already have a more advanced psychiatric disorder.*** *(Male GP)*

The tolerant patient: Normalizing and accepting symptoms

The tolerant patient is a theme depicting patients who normalize and accept their symptoms as part of the menstrual cycle, with few complaints (see Table 11). Even in the presence of premenstrual symptoms, these are never the first motive for the consultation:

> *So, it's rare for a woman to come complain to me only with premenstrual symptoms. When they complain, it's never the main complaint. Very rarely is it the main complaint. Premenstrual, not during, you know? It's never the main complaint. And then they are really vague*; female Ob-Gyn.

This representation goes in line with studies showing that around 90% of women with premenstrual symptoms never complain about their symptoms to a physician because they believe that these are normal and inherent to the female condition (Lete et al., 2011). Indeed, the assumption of the "normality" of premenstrual symptoms is quite common, even among

women with no premenstrual symptoms and male partners of women with premenstrual symptoms (e.g., Makuch, Osis, Pádua & Bahamondes, 2012; Wong, 2011).

Enduring pain and suffering without complaints is often associated with stereotypically masculine traits, such as being strong, independent and even superior (Samulowitz et al., 2018). These traits are globally assessed as positive and desirable (e.g., Amâncio, 1992, 1994). A mechanism of normalization of symptomatology seems to underlie their tolerant posture:

> *How she deals with it, exactly. And even the woman does not feel the need for any type of intervention. She knows that during those one or two days she will be a bit more irritated, she will have a headache, and solves it with a [painkiller] or paracetamol and nothing else is needed. And maybe the woman does interpret that as a real problem that needs some type of intervention. So, she fits it into her daily life;* female GP.

Indeed, the naturalization and normalization of the premenstrual symptoms could ultimately lead to women living with debilitating symptoms (e.g., *and they live. And sometimes even with a bit more exuberant symptoms;* female Ob-Gyn).

These women are often depicted as "good patients":

> *These are those women who are calmer, between their thirties and forties, I would place them as a bit older, a bit more mature, who cope with this very calmly. "Doctor, it's not worth to take paracetamol, it's not worth to take the anti-inflammatory medication this will go away. I already know that on that day I will feel like that. It's ok, I keep moving forward"*; female Ob-Gyn.

Women as "good patients" are indeed often perceived as accepting the physician's recommendations and judgements about their diagnosis, treatment and prognosis or even accepting that nothing could be medically done for them (Young et al., 2019). Despite being perceived as easy cases - (e.g., *(…) the easiest is, precisely, the patient who arrives at the*

consultation and verbalizes, but in a very mild way and without the valorisation of the symptom; female GP) - these women may be at a greater risk of undertreatment, due to the denial of their complaints by both parties:

> *There is nothing wrong with that woman. So, why is she complaining when this is perfectly normal? She has already lived with this for so many years, why is it now a reason to come to the consultation asking for help… right? So, when there is nothing wrong, there is nothing to cure. So, I think it is a bit this perspective;* female GP.

This may sometimes happen even in the presence of severe *(*e.g., and they live. And sometimes even with more exuberant symptoms; female Ob-Gyn). Indeed, in the absence of complaints physicians won't look at this as a real problem nor search for several ways of approaching these issues. This theme is more salient in the interviews of female Ob-Gyn and female and male GPs.

Table 11. *The Tolerant Patients: Definition, Associated Codes and Illustrative Extracts.*

Theme	Definition	Codes	Illustrative extracts
3. Tolerant patients	Depicts women with premenstrual symptoms that normalize or accept their symptoms as a natural part of their menstrual cycle. They endure their symptoms with few or no complaints	No complaining at all Normalization of symptoms Complaints self-controlling Acceptance	*It's a matter of, it's those women who complain because they are worried because it might be something. And when someone says "No, it's normal that this happens,"* ***they become satisfied with that explanation, they accept the normalcy and say "Ok, I can live with this, it doesn't interfere that much" and then they never speak of the issue again.*** *(Female Gynecologist)* *Especially because* ***I think that many women assume that it is normal. So, it is not an illness, so they don't complain to their doctor****. (Female GP)* *Sub-diagnosing, exactly.* ***Because the person does not value it, because socially and traditionally there was a mother and grandmother who said it was normal and she also had it and that it would be like that for the rest of the woman's life. Or simply because premenstrual syndrome is spoken about as a given and inevitable and there is no remedy. Ok. And they end up naturalizing this****. (Male GP)*

The hostile patients: Becoming beasts

The fourth theme – *the hostile patients* - has aggressiveness at its core (see Table 12). Women's aggressiveness is triggered essentially by irritability, a symptom that often characterizes premenstrual syndromes. Irritability is a common emotional state, but the consequences of this irritability to women's interpersonal relationship is the core of this theme. These women are depicted as aggressive, which is perceived in a gradient of intensity, ranging from having no patience at all (e.g., *Some of them do, they might say that, as a premenstrual syndrome, they get irritated, that no one has patience for them, right?;* male Ob-Gyn), to the most serious cases in which they are perceived as becoming potentially dangerous for themselves (e.g., *(…) or have suicidal attempts;* female Ob-Gyn) and others (e.g., *(…) they are almost capable of killing the person on the other side. And sometimes they do. Sometimes they do. (…);* female Ob-Gyn). This theme stresses the power of transformation of PMS on women's lives (e.g., (…) *in those days… they turn into beasts. Beasts with everybody, everywhere (…);* female Ob-Gyn). The irritability, anger, and aggressiveness characterizing these women puts at stake the most valued core component of femininity, i.e., interpersonal competence (e.g., being affectionate and communal to others; their competence to relate with others; Chrisler et al., 2006; Cosgrove & Riddle, 2003; Ellemers, 2018 Lorber & Moore, 2002; Morais et al., under review). These findings are supported by our earlier quasi-experimental study (Morais et al., under review), showing that women with premenstrual symptoms are perceived by medical students as much less interpersonally competent (warm and expressive) that the "typical woman". Also, aggressiveness is negatively evaluated and associated to *a more stereotypical representation of masculinity* (e.g., Basow, 1986; Archer, 2004). As such, these women are depicted as counter-stereotypical, either by being less stereotypically feminine (less affectionate and interpersonally competence) and more typically masculine (more aggressive).

All physicians in our study mention these patients, regardless of their specialty and sex. Despite being a hegemonic representation, physicians did not explicitly explore its implications for clinical encounters. One possible explanation may be related to the fact that these patients are rare in clinical encounters. Physicians representations may be much more rooted in ideas about how women relate to significant others:

> *Yes, not only in professional terms, but sometimes in terms of our friends, social expressions… it is normal that our friends, knowing that we are gynaecologists "Oh, when I this and that, this happens to me and get headaches and I argue with everyone and I get angry with my children and the house becomes chaos." It is easy to say that it is a premenstrual syndrome*; female Ob-Gyn.

Table 12.

The Hostile Patients: Definition, Associated Codes and Illustrative Extracts.

Theme	Definition	Codes	Illustrative extracts
4. Hostile patients	Includes women with premenstrual symptoms who are rude and aggressive to others. They cross others, sometimes being provocative. These women do not accept the contrariety, and are not tolerant nor patient. Their levels of hostility range from mere impatience to more extreme cases of physical violence.	Aggressive Impossible to stand "they turn into beasts" "out of control"	*On those days they get…* ***they turn into beasts. Beasts towards everybody, everywhere.*** *They* ***are very aggressive, they have no patience for anything. And they feel exactly that, that if someone bothers them too much, they are almost capable of killing the person on the other side. And sometimes they do. Sometimes they do****. (Female Gynecologist)* *Probably in this topic, if the people say* ***"Oh, I get really aggressive, either verbally aggressive or physically aggressive."*** *That must exist, I don't know. That must exist. (Female GP)* ***She is more irritated, everyone can see it, she feels more nervous, but if we touch the topic of menstruation, she would have the nerve to hit us.*** *(Male Gynecologist)*

The controlling patients: Juggling multiples roles

This theme includes women who present difficulties in managing their own lives due to their need for control and high standards of achievement (e.g., *those women are demanding,*

controlling, over their own bodies. They don't let things flow as easily; female Ob-Gyn). The premenstrual phase then provides an opportunity to somatise the stress and role conflicts they have, and the physicians seem to assume that women would do so deliberately (e.g., *and so they might find a way to somatise the problems they have- psychological – at work, stress, marital problems.;* female Ob-Gyn). As premenstrual symptoms negatively affect women's personal and professional lives, they want to change this (e.g., *(…) so this affects them at work and they feel the need to, because it's something that actually harms their jobs and careers;* female GP). These assumptions about this type of women with premenstrual symptoms relies on the idea that women's bodies are and should be controllable – otherwise women cannot properly manage their lives and have no control over their own bodies. These women are typically associated with traits of instrumentality and agency normally associated to the masculine stereotype (e.g., Amâncio, 1994, Burgess & Borgida, 1999; Eagly & Kite, 1987; Ellemers, 2018; Kite et al., Deaux, & Haines, 2008; Spence & Helmreich, 1980) and globally assessed as positive and desirable. However, there is somewhat a paternalistic tone in physicians' discourse that diminishes these women's ability to manage multiple roles:

> *And so having lower capability to manage the multitasks that women perform nowadays and.. there is also a decrease in the ability to concentrate, of memory, and all this interferes not only in their functioning inside their home, but at work, you know? Much like with their partners, this is a very complicated situation for these women because this drags on throughout their lives;* Male GP.

Somehow these women are seen as broken, as having broken roles, broken jobs and families: (e.g., *those women who have dysfunctional and separated and divorced families, who are alone with two or three kids, ares likely to have… the most problematic women. I think it has a lot to do with that* (Female Ob-Gyn).

No implication of these cases was mentioned for the clinical encounters. Female Ob-Gyn and GP usually mentioned this type of women. Some references to 'controlling women' were also found in the interviews of male GPs.

Table 13.

The Controlling Patients: Definition, Associated Codes and Illustrative Extracts.

Theme	Definition	Codes	Illustrative extracts
5. The controlling patients	Describe women with premenstrual symptoms that have difficult professional and relational lives. These women have several work and relational responsibilities that cause them stress. Stress could possibly exacerbate the premenstrual symptomatology. The premenstrual phase is also seen as the ideal phase to somatise this stress and conflicts they may have in their private lives.	Many responsibilities Difficult professional and relational lives Body-controlling Overload Stress	*They are women* ***who work.*** *I think they are women* ***who work and are very active women****….* ***In terms of their work life. And who have many responsibilities. And maybe this aggravates the situation a bit more, right? The stress they have – they are women who always live under stress, right? They always have a large component of stress in their work.*** *And they are likely in their thirties and forties, it's the most common. It's where I see them complaining the most about this. (Female Gynecologist)* ***(…)*** *They are younger women,* ***who work, who are demanding (…) for professional reasons, who also suffer due to not being able to meet their duties,*** *so to speak,* *(Female Gynecologist)* ***They are women who are professionally active, so this affects them at work and they feel the need to, because it's something that actually harms their jobs and careers.*** *(Female GP)*

The resistant patients: Low adherence to prescribed pharmacological treatments

This theme does not seem to bear explicit gender connotations and includes women with premenstrual symptoms who normally do not want to take any type of pharmacological treatment are engaged in other type of treatments such as complementary and alternative medicine. Non-adherence to prescribed treatments is very common and widespread to several health conditions and diseases (e.g., Dunbar-Jacob & Mortimer-Stephens, 2001; Ingersoll & Cohen, 2008; Sidorkiewicz, Tran & Ravaud, 2018). However, the resistance of these women to taking pills could lead to the under-treatment of PMS-related complaints.

Also, pharmacological treatment is one of the most common treatments administrated by physicians (e.g., Braverman, 2007; Yonkers & Simoni, 2018) and patients' resistance could also generate feelings of impotence in physicians:

> *A difficult case would be, for example, a patient – and there are many women who, for example, do not want to take the pill, for whom this could immediately be a problem in their minds, right? And they don't want to take medication in general. They don't fully explain to us the situation or they already come with other medication which is difficult for us to control, for example, natural, homeopathic medication. Sometimes, they are taking two, three different ones… which we are unfamiliar with, with which we have no experience and can't manage, you know?*; male GP.

Although the reference to these patients is not as salient in the interviews, these women are perceived as difficult cases by all doctors regardless of their specialty and sex.

Table 14.

The Resistant Patients: Definition, Associated Codes and Illustrative Extracts.

Theme	Definitions	Codes	Illustrative extracts
6. *The resistant patients*	Describes women with premenstrual symptoms who normally do not want to do any type of pharmacological treatment or who resist when this is the first treatment option. It also includes women who are doing other types of treatments, namely natural or homeopathic treatments to decrease their premenstrual symptoms.	No compliance Compliance withdrawal Natural treatments	*But there are women for whom this is not a solution.* ***They want to have a month without complaints, without anything that interferes with their quality of life, without pharmaceutical drugs, you know?*** *(Female Gynecologist)* *And then we can give them estrogens but it is not the same thing. It is not the same thing.* ***And then some people also don't want to take them, you know?*** *(Male Gynecologist)* *And then people come with an idea or they already have preconceived ideas. I think there is great stigma surrounding hormonal treatments. There is a lot of stigma. They have their risks, but people run away from them ((laughter)). There are many women who avoid them like the plague. And on the other end, there are women who want everything, anything, they are all for it. (Male GP)*

Concluding Remarks

This paper specifically aimed to investigate physicians' (gendered) representations of women with premenstrual symptoms and their implications for clinical encounters and the doctor-patient relationship. We thematically analysed physicians' interviews and identified major themes depicting how they represent patients with premenstrual symptoms. Overall, our findings showed that physicians' representations of women with premenstrual symptoms are to a large extent gendered, i.e., coloured by stereotypical *gender representations,* which then bear potential implications for the technical and relational processes that may unfold in the clinical encounters. In other words, physicians' talk denoted a tendency to judge these women as easy or difficult drawing from a set of beliefs, stereotypes and gendered values, potentially influencing their behaviour towards them.

The fact that representations of patients with premenstrual symptoms are rooted in gender stereotypes may be interpreted as a sign of physicians' low levels of gender awareness in general and towards premenstrual issues in particular (Morais, Bernardes & Verdonk, 2020; Verdonk et al., 2008). Indeed, the physicians in this qualitative study seem to strongly engage in *gender-role ideologies* towards these patients (Morais et al., 2020; Verdonk et al., 2008) while simultaneously reflect low sensitivity to the importance of gender in clinical practice. This includes a lack of awareness of the implications of these gendered representations to the clinical encounters (Morais et al., 2020; Verdonk et al., 2008).

Overall, physicians represent some women with premenstrual symptoms, such as the *hostile patients,* as having lost the most valued core of femininity (e.g., being caring and gentle). These results replicate previous findings from our quantitative study conducted among medical students (Morais et al., under review). In that study, representations were pervasive regardless of the participant's sex or level of adherence to *gender-role ideologies*.

Some women with premenstrual symptoms, such as the *"naturally" disturbed*, the *histrionic* and *manipulative*, were also perceived as possessing negative characteristics associated with stereotypical representations of femininity (e.g., volatile, dependent, fragile, opportunistic) and, in line with our previous experimental study (Morais et al., under review), losing valued and desirable characteristics associated with stereotypical representations of masculinity (e.g., autonomy and agency). Thus, overall our findings support our gender double jeopardy contention (Morais et al., under review); the presence of premenstrual symptoms such as irritability, anger, and aggressiveness distance women from the most valued core of femininity (i.e., being caring and gentle), while symptoms such as anxiety, mood swings and depression distance them from generally valued characteristics associated with hegemonic masculinity (Connel, 1995, 2002), such as agency, instrumentality and dominance. These results also suggest that women with premenstrual symptoms seem to be trapped into very restricted behavioural patterns in the consultation room, where affective symptoms are not allowed and are truly discredited and neglected. Indeed, the serious consequences of affective premenstrual symptoms seem to be more emphasized for significant others (e.g., partners) than for the women themselves (Cunnigham et al., 2009).

Our findings also show that stereotypical *gender representations*, by shaping physicians' representations towards women with premenstrual symptoms, function as *perceptual filters,* which ultimately explain why our stereotypes are so resistant to change (e.g., Basow, 1986). Characteristics such as being anxious, depressed, emotional and complaining are intimately associated with largely shared and constructed meanings of femininity (Amâncio, 1994; Chrisler & Caplan, 2002; Chrisler et al., 2006; Cosgrove & Riddle, 2003). These characteristics are also incorporated in the representations of women with premenstrual symptoms, which ultimately strengthen and perpetuate stereotypical representations of femininity. This could also explain why the *histrionic patients* and the

"naturally" disturbed patients were the most pervasive. Conversely, *hostile* and *controlling patients* were acting counter stereotypically and consequently were less salient in interviews, also carrying fewer implications for clinical practice. In sum, according to physicians, women with premenstrual symptoms can be divided in subtypes (e.g., Helgeson, 2017; Unger, 2001); sometimes seen as contradictory (e.g., *histrionic* but also *tolerant and controlling*), but nevertheless constructing a dynamic system fit together in an organized, gendered, structure.

Besides unravelling the gendered roots of physicians' representations of women with premenstrual symptoms, our findings point out potential implications for clinical encounters. Establishing and maintaining a good therapeutic relationship is perceived as being hampered when facing *histrionic patients*. Doctors' representations of '*manipulative patients*' may either contribute to the medicalization of the menstrual cycle or the dismissal of premenstrual complaints. In the presence of *"naturally" disturbed patients* problems and confusions in the diagnosis and treatment processes may arise. *Tolerant patients* may be at risk of undertreatment due to how complaints are downplayed, whereas those seen as *resistant patients* may be at risk of undertreatment due to low rates of treatment adherence. In sum, almost all of these (gendered) representations could have clinically relevant outcomes because of difficulties in establishing and maintaining the doctor-patient relationship and neglect, underdiagnose and undertreatment of symptoms.

Some limitations of this study should be pointed out. First, given the qualitative nature of the present study, its results can only be discussed considering the specificities of the present sample. Indeed, there may be cultural, Portuguese, specificities related to the healthcare system that prevent fully extrapolating the findings to the general population of physicians or even other healthcare professionals. As for methodological limitations, the technical medical discourse which physicians are trained to endorse constituted a barrier to accessing gendered representations. A large part of the medical discourse was focused on the

"clinical case" rather than the women with premenstrual symptoms, showing a dehumanized side of medicine, which makes stereotypes officially disappear while unofficially they are well alive. The fact that the interviewer was a female may have increased social desirability, potentially making some physicians more cautious and uncomfortable in sharing their perspectives about the topic. Future studies may want to use the "normative decontextualisation technique", controlling the sex of the interviewer (Abric, 2003; Menin, 2006), in order to create a more comfortable and safe space for participants to share their views, mitigating social desirability issues.

Despite its limitations, this study provides theoretical and practical implications. As far as we know, it was the first study exploring physicians' gendered representations of women with premenstrual symptoms. Indeed, this study is rich in conceptual clues for future studies that aim to analyse the relation between these gendered representations of women with premenstrual symptoms and of female patients in general. Healthcare professionals are involved in decision-making processes about women's health, which stresses the need to further investigate with other methodological approaches what the implications are of these gendered representations for health care. One practical implication of these results may be related to the effects of gender stereotyping. If women with premenstrual symptoms are seen for instance as *histrionic, "naturally" disturbed, hostile* they may internalize such beliefs. In other words, gendered representations can become *self-fulfilling prophecies*, reinforcing physicians' stereotypes. Finally, this study highlights the need for healthcare professionals' gender awareness interventions related to premenstrual issues. Most of physicians' representations about these women reflect relatively low levels of sensitivity towards these women's needs and to the impact of gender in these syndromes. Accurate assessment and training on gendered representations of these women are needed to increase sensitivity towards the impact of gender in premenstrual issues and towards the needs of women with

premenstrual symptoms, deconstructing stereotypes and providing better health care, and raising gender awareness towards premenstrual issues (Verdonk et al., 2008; Verdonk, Benschop, de Haes, Mans & Lagro-Janssen, 2009).

Further studies should explore these representations among other types of healthcare professionals and with other study designs. For instance, representations of nurses working in family planning consultations should be explored since a nursing appointment often precedes a medical appointment, where some recommendations or treatments may be provided. Exploring nurses' representations may help to understand the gender dynamics involving underlying social identities and experiences of some sub-types of women with premenstrual symptoms. For instance, this may demonstrate that the nonexistence of complaints of the *tolerant patients* could be a result of previous counseling and not just as a normalization of the menstrual cycle issues. In future studies, with different designs, it may also be interesting to explore differences between gendered representations of male and female GPs and Ob-gyn. For instance, GPs and Ob-gyn's may have different motivations and interests in premenstrual issues and consequently, different gendered representations of these women reflecting distinct implications for clinical encounters.

In sum, our findings demonstrate the plural (and eventually contradictory) set of gendered representations that put these women with premenstrual symptoms further apart from valued and gendered ideals of being, which may potentially account for their underdiagnosis and undertreatment.

CHAPTER 6. General discussion

Revisiting the findings of the present thesis

The present thesis intended to uncover some of the factors accounting for the underdiagnosis and undertreatment of women with premenstrual symptoms, with two general aims. Its first general aim was to offer a better understanding of how healthcare professionals' gender awareness has been conceptualized and measured since the Miller, King, Wolfe & King (1999) seminal paper. Its second general aim was to examine the extent to which gender awareness could be related to healthcare professionals' (i.e., medical students and physicians) representations of women with premenstrual symptoms and the implications of these representations for clinical encounters and the doctor-patient relationship.

In this general discussion, the points previously described will be interpreted in depth in the following two sections. The first section will provide an integrated interpretation of the first two studies included in this dissertation, which will meet the first general goal. Subsequently, in the next section I will provide an integrated interpretation of the last two studies, meeting the second general aim. Finally, this general discussion will be closed by discussing the main conclusions of the present thesis, including its limitations, strengths, and contributions to future research.

Being gender aware: Understanding how gender awareness has been conceptualized and measured since 1990s

Regarding the first general aim of this thesis, its first specific goal was to provide a *scoping review* of how gender awareness research has evolved over the past 20 years since its conceptualization by Miller et al. (1999). This *scoping review* (**study 1**) was presented in detail in **chapter two** and aimed to investigate how gender awareness has been conceptualized, operationalized and what evidence supports its relationship with health-related outcomes. This study found that despite the assumed potential of gender awareness to

reduce gender biases (e.g., Verdonk, Benschop, de Haes, Mans & Lagro-Janssen, 2009), some relevant problems were revealed regarding the conceptualization of gender awareness, its operationalization and its relation with health outcomes, suggesting that there is still a long way to go to understand its role in reducing gender biases. The findings, based on 14 empirical studies, revealed the lack of theoretical depth that has been given to the concept. In other words, despite its conceptualization by Miller et al. (1999) more than two decades ago, gender awareness it still often researched without being integrated within a conceptual model and it still surrounded by conceptual confusions. Difficulty integrating Miller et al.'s (1999) model in gender awareness research, the only conceptual model available, may be one of the several problems regarding its conceptualization. One of the reasons that may be underlying this lack of integration may lie in the fact that the model is specifically centered on the health of women veterans. Indeed, just a minority of studies sought to conceptualize gender awareness furthering Miller et al.'s (1999) conceptual dimensions and several others provided vague and ambiguous definitions of the concept. These difficulties may be the cause of the lack of evidence on how gender awareness improves health-related outcomes, for example, regarding the diagnosis and treatment of several diseases. As discussed later in this thesis (**study 4**, **chapter 5**), questions about conceptualization and measurement of gender awareness may shape the understanding of how gender issues potentially influence healthcare professionals decisions' regarding women with premenstrual symptoms. For instance, problems in conceptualizing gender awareness may result in difficulties to obtain factual knowledge about these women and about premenstrual syndromes. Finally, these conceptualization problems do not allow clarification of the role of gender awareness in the reduction of biases towards these women. In order to clarify some confusions and to contribute to future research on gender awareness it was proposed (**study 1**, **chapter 2**) that the concept of gender awareness should indeed include three components: *gender sensitivity*,

gender ideologies and *knowledge* (Miller at al., 1999; Verdonk, Benschop, De Haes & Lagro-Janssen, 2008). Also, this concept and its components should be adapted to the specificities of health contexts (for instance to premenstrual syndromes specificities) and include particularly relevant stereotypes and knowledge. Finally, it should be noted that *gender sensitivity* encompasses not only the component of considering sex and gender issues when relevant but also the component of having the skills to addressing them in the clinical practice. So more than being aware that these issues really matter, healthcare professionals should possess the necessary skills to apply them to practice.

Gender awareness is a concept with great potential as shown in this thesis. One of the issues to be explored in further studies is the conceptualization of gender awareness at different levels of analysis (Doise, 1986). In addition to the attitudinal component (including *sensitivity* and *ideologies*) and health professionals' knowledge (researched at an intra-individual level of analysis; Doise, 1986), gender awareness could be conceptualized as an ideology that gender impacts health and disease processes (gender awareness as ideology - ideological level; Doise 1986). This issue was discussed regarding other concepts such as the concept of gender or the concept of intercultural competence. Clarifying the level of analysis of gender awareness would also make a theoretical contribution to the existing literature as it would allow to deeply understand how this concept is related to stereotypes, representations, values and beliefs. Also, gender awareness must be a broader concept crossing with other aspects of diversity such race, culture and so on (Verdonk, Muntinga, Leyerzapf & Abma, 2019) and could be seen on a *continuum* of developmental stages similar to what has been done in cultural competence (e.g., Bennet, 2004; King & Baxter Magolda, 2005).

Operationalization issues were the second gap identified in the *scoping review* (**study 1**, **chapter 2**). The operationalization of gender awareness has been jeopardized by the variability of existing measures. The *scoping review* analyzes the use of different measures to

operationalize the concept, from developed, studied and validated instruments (as the case of the GAI-VA, Salgado et al., 2002 and the N-GAMS, Verdonk et al., 2008), to less studied measures with no information on their psychometric characteristics. Triangulation of measures is a good option and a recommendation to improve the operationalization of gender awareness, as previously suggested (**study 1, chapter 2**). The absence of empirical evidence supporting the relationship of gender awareness to health-related outcomes such as underdiagnoses or undertreatment, is possibly due the problems with conceptualization and operationalization, as well as from the domain-specificity that is required for gender awareness research. Taking the example of premenstrual syndromes, gender awareness research in this context requires: (a) knowledge about sex and gender issues related to premenstrual syndromes (e.g., such as potential causes and treatments); (b) being sensitive to premenstrual syndromes and towards the needs of these women, and; (c) awareness of stereotypes towards these women and how they may impact diagnosis and treatment of premenstrual syndrome. In sum, gender awareness research cannot be generalized to health in general, but it must be contextualized to certain health and illness issues, which then requires the operationalization of gender awareness to particular health domains.

Still, considering the first aim of this thesis, its second specific goal was to adapt and validate the Nijmegen Gender Awareness in Medicine Scale to the Portuguese population (N-GAMS, Verdonk et al., 2008). It was considered that the N-GAMS (Verdonk et al., 2008) had relevant psychometric characteristics to measure the attitudinal components of gender awareness in general, i.e., regarding to the importance of sex and gender issues in health in general. Therefore, it was chosen to be adapted and validated to the Portuguese population (Morais, Bernardes & Verdonk, 2020) since there were no validated instruments to assess Portuguese (future) health care professionals' gender awareness. An adapted and validated N-GAMS to the Portuguese population could contribute to medical education in Portugal (**study**

2, **chapter 3**). This scale is one of the few measures that has been developed and validated (Verdonk et al., 2008) to provide a theoretically grounded and multi-dimensional assessment of health-care professionals' gender awareness in medicine. The choice of the N-GAMS for adaptation and validation to the Portuguese population was due to the fact that this scale has the advantage of not focusing exclusively on female patients, such as GAI-VA (Salgado, Vogt, King & King, 2002), and also adds a component of *gender-role ideologies towards doctors* that can compromise health and promote gender bias. The correlational **study 2** (Morais et al., 2020) was held with 1048 medicine students of all medical schools in Portugal and allowed to overcome some limitations of the original study by testing and confirming the scales' underling 3-factor structure, composed by *gender sensitivity*, and two correlated factors, i.e., *gender-role ideology towards patients* and *gender-role ideology towards doctors*. Study 2 also contributed to further assess the N-GAMS criteria-related validity, with variables like participants' sex, empathy, and sexism. Parallel and Confirmatory factor analyses were introduced in this study with the objective of confirming the results obtained by Verdonk, et al. (2008) and showed a good fit of the hypothesized three-factor structure and good criteria-related validity. The N-GAMS.pt is a more parsimonious measure as compared to the original N-GAMS (Verdonk et al., 2008) representing an improvement of the concept's operationalization.

The N-GAMS.pt showed good reliability and sensitivity. It should be noticed, however, that similar to its original version, the N-GAMS.pt is only measuring the attitudinal components of gender awareness, and excludes the knowledge aspects. Indeed, although the N-GAMS.pt may show that although medical students' may report high scores on gender awareness in general, i.e., high on *gender sensitivity* and low on *gender-role ideologies*, they may still lack the *knowledge* (e.g., know the influence of sex and gender on several health and disease processes) and the skills (e.g., reflexivity, communication skills) necessary to promote gender

equity in practice (Verdonk et al., 2009). Therefore, one of the gaps identified in this research field is that while attempting to do justice to the complexity of the concept, these instruments usually effectively focus on their attitudinal component but effectively leave questions aside like *knowledge* and *skills* to address gender issues in clinical practice. For instance, on the gender sensitivity scale of N-GAMS.pt no valid items measure doctors' competence to address gender issues in the clinical practice. This further reproduces the operationalization difficulties as identified in the studies incorporated in the scoping review (**study 1**, **chapter 2**).

Despite these limitations, this study may be a relevant contribution to medical education in Portugal. Adapting and validating a gender awareness instrument is a practical contribution to medical education in Portugal which helps to understand levels of gender awareness of healthcare professionals. Surely, sex and gender issues require integration in intervention and training programs.

Once again, the concept of gender awareness in health may to promote gender equity but needs systematization, triangulation of measures and production of evidence that shows how gender awareness impacts on health issues and what its potential is in reducing gender bias. The present thesis represents a theoretical part (**study 1**, **chapter 2**) and an empirical (**study 2**, **chapter 3**) study in which I elucidate the "path" that the gender awareness research must take from now on. Gender awareness may reveal itself as a constructive concept in the reduction of gender biases, as long as it is properly elaborated and discussed in all areas where sex/gender affects women's health, including gynecological and obstetric issues.

"You are ovary-acting": Associations between gender awareness and healthcare professionals' representations about women with premenstrual symptoms and their implications for clinical encounters

One of the issues that links our two major general aims is precisely the concept of gender awareness. In the last two studies of my thesis I sought to understand to which extent gender awareness could be associated to healthcare professionals' representations of women with premenstrual symptoms and the implications of these two factors for their perceptions of clinical encounters and the doctor-patient relationship. As mentioned earlier, this association is challenging when there are so many inconsistencies in the conceptualization of gender awareness. In the present thesis, an overlap between the concept of gender awareness regarding premenstrual issues and the (gendered) representations of women with premenstrual symptoms was found. This overlap is due in part to both concepts having a component that involves adherence to stereotypes and their strong attitudinal component in general. Specifically, the last two studies presented in this thesis (**study 3** and **4**, **chapters 4** and **5**) showed that representations of these women are strongly gendered (i.e., anchored in the stereotypical representations of the typical man and woman; e.g., Amâncio, 1994; Ellemers, 2018; Kite, Deaux & Haines, 2008; Spence & Helmreich, 1980). Moreover, physicians' speeches reflected a general unfavorable attitude towards these women characterized by low sensitivity towards their needs and highly stereotypical views towards them, i.e., low gender awareness towards premenstrual issues. If representations towards these women were not rooted in gender stereotypes the overlap between these two concepts – gendered representations and gender awareness - seems unlikely. Gender stereotypes are a common component of the two constructs and for that reason it can be assumed that healthcare professionals that highly adhere to these gendered representations towards women with pre-menstrual symptoms are simultaneously less gender aware toward them (low levels

of *gender sensitivity* and high adherence to *gender ideologies*; Morais et al., 2020; Verdonk et al., 2008). Gender stereotypes are pervasive, dynamic, transversal to several contexts and articulated at different levels of analysis (Doise, 1986) providing, surprisingly, this overlap. Healthcare professionals' gendered representations' colored their clinical interactions with patients, potentially bearing implications for diagnoses and treatments. Low levels of gender awareness reflect strong stereotypical and gendered representations leading in many cases to psychologization, stigmatization and discrimination. This interpretation reflects what was found in the set of studies included in this thesis.

Studies three and **four** were carried out to answer to the second general aim of this thesis, with different methodologies, as to suppress a scarcity of studies on representations about women with premenstrual symptoms, in general. Until now, only Alexander, Taylor & Fordyce (1986) had explored this issue, pointing out that these representations could be an important issue related to what happens with these women in consultation, namely related to their diagnosis and treatment. However, Alexander et al.'s (1986) study was characterized by a series of limitations, including not being rooted in theory and not exploring the content of the representations. Drawing upon gender stereotype and representations theories (e.g., Amâncio, 1994; Deaux & La France, 1998; Deaux & Major, 1987; Ellemers, 2018; Kite, Deaux & Haines, 2008; Spence & Helmreich, 1980), **studies 3** and **4** (**chapters 4** and **5**, respectively) address the potential role of such representations in the underdiagnosis and undertreatment of women with premenstrual symptoms. Specifically, the studies highlight the potential implications of (the lack of) gender awareness and gendered representations towards these women for clinical encounters and the doctor-patient relationship. To the best of my knowledge, these studies are pioneering in conceptualizing and finding evidence for the gender dynamics possibly underlying the underassessment and undertreatment of premenstrual symptoms.

Regarding to the second general aim of the thesis, its third specific goal was to understand the extent to which representations of women with PMS/PMDD reflected stereotypical gender representations (**study 3**; **chapter 4**). Drawing upon gender stereotype and representations theories (e.g. Amâncio, 1994; Deaux & La France, 1998; Deaux & Major, 1987; Ellemers, 2018; Kite, et al., 2008; Spence & Helmreich, 1980), it was expected that compared to the representation of the typical woman, women with premenstrual symptoms would be perceived as: less socially competent (typically feminine) and less dominant and instrumental (typically masculine), and that; these previous effects would be stronger among medical students with higher adherence to gender-role ideologies towards these patients (Verdonk et al., 2008), i.e., gender stereotypical views about female patients. As expected, women with pre-menstrual symptoms suffered a big loss in the attribution of interpersonal competence, by being perceived as much less affectionate and communal than the typical woman. The presence of premenstrual symptoms contradicted the most valued core of femininity, *i.e*., being interpersonally competent (Braverman, 2007; Lorber & Moore, 2002; Chrisler et al., 2006; Rodin, 1992; Taylor, 2006). Moreover, premenstrual symptoms set women even further apart from the values of self-control, agency, instrumentality, more often associated with ideals of masculinity (e.g., Amâncio, 1994, Burgess & Borgida, 1999; Helgeson, 1994; Kite et al., 2008; Spence & Helmreich, 1980). Perceiving these women as having poor self-control, agency and work orientation may, eventually, increase healthcare professionals' likelihood of attributing women's complaints to "being hysterical" or "looking for secondary gains", possibly leading to women's loss of credibility and psychologization. Finally, it should be noted that these results were found regardless of medical students' adherence to *gender-role ideologies towards patients*. These results suggested that gender representations of women with pre-menstrual symptoms are strong and pervasive and place

these women in a gender-related double jeopardy, which may increase their risk of having their complaints under-diagnosed and under-treated.

This study is innovative in terms of establishing the relationship between representations of women with premenstrual symptoms and stereotypical gender representations, i.e., supporting the gender double jeopardy contention. Finally, it shows that these representations can be decisive factors for the discrimination of these women in clinical contexts because they lose universal and desirable characteristics (mostly associated with men), but also desirable and positive characteristics associated to their gender category. One of the gaps identified in this study was that it did not allow to identify exactly which symptoms were causing these women to lose dominance, instrumentality and interpersonal competence.

Suppressing some limitations of the previous study, with the fourth specific aim I sought to investigate the contents of physicians' representations of women with PMS/PMDD, the extent to which such representations were gendered, i.e., influenced by gender-role ideologies towards patients , i.e., stereotypical beliefs about trait-related and behavioral differences between male and female patients (Miller et al., 1999; Verdonk, et al., 2008) and finally, understand the implications of these social representations for clinical encounters and doctor-patient relationship (**study 4**, **chapter 5**). To the best of my knowledge, it is the first study exploring the meanings of physicians' gendered representations of women with premenstrual symptoms. Also, it is the first study that highlights the implications of such representations for these women and the importance of gender in clinical settings. The main results showed that physicians' representations of women with premenstrual symptoms can be categorized in six main themes, five of them with strong gender connotations, i.e. *histrionic patients (*with the sub-theme of *manipulative patients), "naturally" disturbed patients*, *tolerant patients*, *hostile patients* and *controlling patients* and finally, one theme with no gender connotations, i.e. *resistant patients*. Overall, these results showed that

physicians' representations of women with premenstrual symptoms are to a large extent gendered, *i.e*., coloured by stereotypical *gender representations,* which then bear potential implications for the technical and relational processes in the clinical encounters. The fact that representations of patients with premenstrual symptoms are rooted in stereotypical gender representations may be interpreted as a sign of physicians' low levels of gender awareness in general and towards premenstrual issues, in particular (Morais et al., 2020; Verdonk et al., 2008).

This last study provides some results that are in line with those found in the previous **study three** (**chapter 4**). Overall, physicians represent some women with premenstrual symptoms, such as *hostile patients,* as having lost the most valued core of femininity (e.g. being caring and gentle). Some women with premenstrual symptoms, such as the *"naturally" disturbed,* the *histrionic* and *manipulative*, were also perceived as possessing negative characteristics associated with stereotypical representations of femininity (e.g. volatile, dependent, fragile, opportunistic) and, losing valued and desirable characteristics associated with stereotypical representations of masculinity (e.g. autonomy and agency). Thus, this set of studies supports and reinforces our gender double jeopardy contention. In other words, the presence of a set of premenstrual symptoms such as irritability, anger, and aggressiveness distance women from the most valued core of femininity (i.e., being caring and gentle), whereas symptoms such as anxiety, mood swings and depression distance them from generally valued characteristics associated with hegemonic masculinity (Connel, 1995; 2002), such as agency, instrumentality and dominance.

Also, almost all of these (gendered) representations (except the *hostile* and *demanding* patients) could have clinically relevant outcomes, as they may hamper a good doctor-patient relationship and lead to symptom neglect, underdiagnosis and undertreatment. Namely, in the presence of a *histrionic patient,* establishing and maintaining a good therapeutic relationship

is perceived as difficult. Also, the representations of *manipulative patients* could contribute to the medicalization of the menstrual cycle or the dismissal of premenstrual complaints. The *"naturally" disturbed patients* could lead to problems and confusions in the diagnosis and treatment processes. *Tolerant patients* may be at risk of undertreatment due the downplaying of their complaints. Finally, the resistant patients may be at risk of undertreatment due to lower rates of treatment adherence. Overall, the potential implications of these representation for healthcare are mostly negative. These results show how women with pre-menstrual symptoms constitute a highly stigmatized minority group of patients. According to the existing literature, most of these women live in silence and it seems that those who complain are equally penalized. Healthcare bias towards these women seems to be a reality. In sum, these findings demonstrate the plural (and eventually contradictory) set of gendered representations that put these women with premenstrual symptoms further apart from valued and gendered ideals of being, which may potentially account for their underdiagnosis and undertreatment. In other words, behind the frequent and apparently innocent words "Leave her be, she is with her period", may lie serious health inequalities.

Limitations, strengths, and contributions for further research

Overall, the thesis has some limitations. First, this project has only tapped into the attitudinal component of gender awareness. As already known through our results, a comprehensive assessment of healthcare professionals' gender awareness would also involve assessing their *knowledge* about other relevant sex and gender issues influencing premenstrual syndromes. For instance, a great part of premenstrual symptoms are gendered *per se* (such as depression or irritability more frequently associated to women) influencing their diagnosis. Further studies should try to develop a specific *knowledge* test on premenstrual syndromes with the help of experts in the field. Still, future studies should triangulate measures in their designs to measure gender awareness comprehensively.

Second, our samples are representative neither of the medical student population (studies included in chapter **3** and **4**) nor of the physician population (qualitative study included in chapter **5**). Specifically in chapter **three,** although it was conducted with a large sample of medical students with a female/male proportion similar to the Portuguese medical student population, it was not possible to generalize the findings and draw norms for gender awareness assessment. Also, in chapter **five**, a we aimed to overcome the limitation of previous studies by including physicians with clinical experience with women with premenstrual symptoms instead of medical students, but the study's qualitative methodology precludes any generalization attempts.

Third, as this syndrome consists of a set of multiple symptoms (e.g., Braverman, 2007), another limitation is to understand which specific set of premenstrual symptoms enhances such gendered representations of patients. Although in the study presented in **chapter four** the most prevalent set of symptoms in PMS and PMDD was manipulated, premenstrual symptoms may show very different patterns and this may affect healthcare professionals' representations. The same holds for the study presented in **chapter five**, which

did not allow to assess the precise set of symptoms physicians were thinking of when picturing their representations. Therefore, whether these findings can be replicated with other sets of premenstrual symptoms is unknown. More importantly, it was not possible to determine which symptoms were responsible for driving the changes in gender representations. Further studies should address this issue.

Fourth, along with exploring and understanding the representations about these women as a factor involved in their underdiagnosis and undertreatment, healthcare professionals' representations of PMS and PMDD were not directly investigated. Assessing the effective knowledge doctors have about the syndrome and the way they represent it is considered one of the gaps in the current literature, which was explicitly not addressed in this thesis. Nonetheless, the representations physicians have about these women suggest little knowledge about the syndrome identity and treatment and a negative attitude towards it, as they seem to be considered of little relevance. Indeed, none of the doctors did not even differentiate PMS and PMDD, which can also be an important factor in the underdiagnosis and undertreatment of these women. Future investigations on doctors representations' of the syndrome is an important avenue for future research.

Finally, the researcher who conducted all these studies is a woman and a psychologist. Given that these are a set of studies in which gender issues are salient, this issue is intimately related to social desirability. This is a limitation because it may make the physicians uncomfortable when talking about this topic, as the interviewer may be a woman with premenstrual symptoms. Also, gender dynamics behind the interview is different. This limitation is particularly relevant for the study presented in **chapter five**.

Despite all the limitations described above, this thesis has several strengths and bears theoretical/empirical and practical implications for future research in this area. As for its theoretical/empirical contributions, first, this thesis clarifies the theoretical underpinnings of

conceptualizations and operationalizations of gender awareness providing guidelines for future gender awareness research. Second, it adds knowledge about the relation between gender awareness and gendered representations towards women with premenstrual syndromes. Third, this thesis is pioneer in putting forth and providing supporting evidence of the gender double jeopardy contention, which may partially account for the underdiagnosis and undertreatment of women with premenstrual symptoms. Forth, it also produces phenomenological knowledge about the implications of these factors for physicians' clinical encounters with patients with premenstrual syndromes. Fifth, it is the first set of studies to understand the gender dynamics behind the representations of women with premenstrual symptoms and the first to relate these representations to the implications for clinical encounters and the doctor-patient relationship. Lastly, this thesis reinforces the implications of gender stereotyping in health and disease processes.

Finally, as for its practical contributions, this thesis provided an adaptation and validation of N-GAMS to Portuguese population, which is one of the two specific instruments developed to measure the attitudinal component of gender awareness (**study 2**, **chapter 3**). This is an interesting practical contribution to medical education in Portugal since as of now there is a valid instrument to apply to medical students but also physicians to assess gender awareness. Adapting and validating an instrument is an important step not only as a practical contribution to the area of studies in which it intends to operate, but also because it allows to understand problems with the concept itself that should be added in future studies. In this way, the process of adaptation and validation of N-GAMS also proved to be a strength of the present thesis. Furthermore, the knowledge produced in the last two studies (**study 3** and **4**, **chapters 4** and **5**) may contribute to increase healthcare professionals' reflexivity, which may promote more healthcare equity in the assessment and treatment of women with premenstrual symptoms.

In sum, the present thesis constitutes a first step in understanding the factors that account to the underdiagnosis and undertreatment of women with premenstrual symptoms. Hopefully, this could be an important stepping-stone towards more equity in the health services provided to these women, improving their health and quality of life when arriving "that time of the month".

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APPENDIX A – N-GAMS.pt

PARTE 1

As frases que se seguem estão relacionadas com questões de género em Medicina. Indique o número que melhor descreve em que medida cada uma das frases corresponde às suas expectativas.

Pensa que...

		Discordo totalmente	Discordo	Não concordo nem discordo	Concordo	Concordo totalmente
1	o/as médico/as devem apenas abordar as diferenças biológicas entre homens e mulheres.	1	2	3	4	5
2	em doenças que não são específicas de um dos sexos, o sexo/género do/a paciente é irrelevante.	1	2	3	4	5
3	o/as médico/as que consideram diferenças de género não estão a tratar das questões importantes.	1	2	3	4	5
4	na comunicação com o/as pacientes, não interessa a um/a médico/a se estes são homens ou mulheres.	1	2	3	4	5
5	as diferenças entre pacientes homens e mulheres são tão pequenas que o/as	1	2	3	4	5

	médico/as mal as conseguem ter em consideração.					
6	não é necessário considerar as diferenças de género na apresentação das queixas.	1	2	3	4	5

PACIENTES

As frases que se seguem estão relacionadas com ideias sobre pacientes homens e pacientes mulheres. Indique o número que melhor descreve em que medida cada uma das frases corresponde às suas expectativas.

Pensa que…

		Discordo totalmente	Discordo	Não concordo nem discordo	Concordo	Concordo totalmente
1	as mulheres, mais frequentemente do que os homens, querem discutir problemas com o/as médico/as que não pertencem ao espaço da consulta.	1	2	3	4	5
2	as mulheres esperam demasiado apoio emocional por parte do/as médico/as.	1	2	3	4	5
3	os pacientes são menos exigentes que as pacientes.	1	2	3	4	5

4	as mulheres consomem mais cuidados de saúde do que aqueles que realmente são necessários.	1	2	3	4	5
5	os homens não vão ao médico/a por problemas de saúde inofensivos.	1	2	3	4	5
6	as mulheres desenvolvem sintomas medicamente inexplicados porque se lamentam demasiado acerca da sua saúde.	1	2	3	4	5
7	os homens recorrem mais frequentemente aos cuidados de saúde com problemas que deviam ter prevenido.	1	2	3	4	5

MÉDICOS/AS

As seguintes afirmações dizem respeito a comportamentos e competências dos médicos e das médicas. Indique o número que melhor descreve em que medida cada uma das frases corresponde às suas expectativas.

Pensa que…

		Discordo totalmente	Discordo	Não concordo nem discordo	Concordo	Concordo totalmente
1	comparativamente com os médicos, as médicas estendem demasiado as suas consultas.	1	2	3	4	5

2	os médicos são mais eficientes do que as médicas.	1	2	3	4	5
3	as médicas têm desnecessariamente em consideração como o/as pacientes vivenciam a doença.	1	2	3	4	5
4	os médicos são mais capazes de lidar com o trabalho que as médicas.	1	2	3	4	5
5	as médicas envolvem-se emocionalmente em demasia com o/as seus/suas pacientes.	1	2	3	4	5

APPENDIX B – Data collection protocol from study of chapter 3

INTRODUÇÃO

O objetivo deste estudo é **compreender de que forma as questões de género são abordadas na Medicina.**

Este questionário pretende obter a sua **opinião pessoal**. **Não existem respostas certas ou erradas e não será avaliado/a pelas mesmas.**

Os dados são **anónimos, confidenciais** e usados apenas para fins de investigação científica.

Para que este estudo seja válido é importante que responda a **todas as questões**. Caso tenha alguma dúvida, pedimos-lhe ainda assim que escolha uma de entre as possibilidades de resposta. O tempo médio de preenchimento deste questionário é de cerca de **10 minutos.**

Se tem questões ou comentários acerca deste questionário por favor contacte a investigadora responsável através do endereço de e-mail: rita_margarida_morais@iscte.pt

Muito obrigada pela sua participação neste estudo.

PARTE 1

As frases que se seguem estão relacionadas com questões de género em Medicina. Indique o número que melhor descreve em que medida cada uma das frases corresponde às suas expectativas.

Pensa que...

		Discordo totalmente	Discordo	Não concordo nem discordo	Concordo	Concordo totalmente
1	considerar as diferenças entre homens e mulheres cria desigualdades nos cuidados de saúde.	1	2	3	4	5
2	o conhecimento do/as médico/as sobre as diferenças de género na saúde e doença aumenta a qualidade dos cuidados.	1	2	3	4	5
3	o/as médico/as devem apenas abordar as diferenças biológicas entre homens e mulheres.	1	2	3	4	5
4	em doenças que não são específicas de um dos sexos, o sexo/género do/a paciente é irrelevante.	1	2	3	4	5

5	um/a médico/a deve cingir-se, tanto quanto possível, aos aspetos médicos das queixas de saúde dos homens e das mulheres.	1	2	3	4	5
6	o/as médico/as não precisam de saber o que se passa na vida dos homens e mulheres para serem capazes de prestar cuidados médicos.	1	2	3	4	5
7	as diferenças entre médicos e médicas são demasiado pequenas para serem relevantes.	1	2	3	4	5
8	especialmente porque homens e mulheres são diferentes, o/as médico/as devem tratar todos de igual forma.	1	2	3	4	5
9	o/as médico/as que consideram diferenças de género não estão a tratar das questões importantes.	1	2	3	4	5
10	na comunicação com o/as pacientes, não interessa a um/a médico/a se estes são homens ou mulheres.	1	2	3	4	5
11	na comunicação com o/as pacientes, não interessa se o médico é homem ou mulher.	1	2	3	4	5
12	as diferenças entre pacientes homens e mulheres são tão pequenas que o/as médico/as mal as conseguem ter em consideração.	1	2	3	4	5
13	para um tratamento adequado, o/as médico/as devem considerar as diferenças de	1	2	3	4	5

	género na etiologia e consequências da doença.					
14	não é necessário considerar as diferenças de género na apresentação das queixas.	1	2	3	4	5

PACIENTES

As frases que se seguem estão relacionadas com ideias sobre pacientes homens e pacientes mulheres. Indique o número que melhor descreve em que medida cada uma das frases corresponde às suas expectativas.

Pensa que…

		Discordo totalmente	Discordo	Não concordo nem discordo	Concordo	Concordo totalmente
1	os pacientes entendem melhor as abordagens do/as médico/as do que as pacientes.	1	2	3	4	5
2	comparativamente com os pacientes, as pacientes têm expectativas irrazoáveis sobre o/as médico/as.	1	2	3	4	5
3	as mulheres, mais frequentemente do que os homens, querem discutir problemas com o/as médico/as que não pertencem ao espaço da consulta.	1	2	3	4	5

4	as mulheres esperam demasiado apoio emocional por parte do/as médico/as.	1	2	3	4	5
5	os pacientes são menos exigentes que as pacientes.	1	2	3	4	5
6	as mulheres consomem mais cuidados de saúde do que aqueles que realmente são necessários.	1	2	3	4	5
7	os homens não vão ao médico/a por problemas de saúde inofensivos.	1	2	3	4	5
8	as mulheres desenvolvem sintomas medicamente inexplicados porque se lamentam demasiado acerca da sua saúde.	1	2	3	4	5
9	as pacientes queixam-se da sua saúde porque necessitam de mais atenção do que os pacientes.	1	2	3	4	5
10	é mais fácil encontrar as causas das queixas de saúde dos homens porque eles comunicam de forma direta.	1	2	3	4	5
11	os homens recorrem mais frequentemente aos cuidados de saúde com problemas que deviam ter prevenido.	1	2	3	4	5

MÉDICOS/AS

As seguintes afirmações dizem respeito a comportamentos e competências dos médicos e das médicas. Indique o número que melhor descreve em que medida cada uma das frases corresponde às suas expectativas.

Pensa que…

		Discordo totalmente	Discordo	Não concordo nem discordo	Concordo	Concordo totalmente
1	comparativamente com as médicas, os médicos põem demasiada enfâse nos aspetos técnicos da medicina.	1	2	3	4	5
2	comparativamente com os médicos, as médicas estendem demasiado as suas consultas.	1	2	3	4	5
3	os médicos são mais eficientes do que as médicas.	1	2	3	4	5
4	as médicas são mais empáticas do que os médicos.	1	2	3	4	5
5	as médicas têm desnecessariamente em consideração como o/as pacientes vivenciam a doença.	1	2	3	4	5

6	os médicos são mais capazes de lidar com o trabalho que as médicas.	1	2	3	4	5
7	as médicas envolvem-se emocionalmente em demasia com o/as seus/suas pacientes.	1	2	3	4	5
8	comparativamente com as médicas, os médicos são demasiado apressados nas suas consultas.	1	2	3	4	5

PARTE 2

Por favor, indique o seu nível de concordância com as seguintes afirmações:

(*Escreva nos quadrados, com letra legível, o número que corresponde ao seu nível de concordância das afirmações; em caso de engano, risque e escreva ao lado*)

Discordo fortemente						Concordo fortemente
1	2	3	4	5	6	7

Por favor, tenha em consideração que, nesta secção, quando nos referimos a “médicos”, estamos a considerar os profissionais de ambos os sexos.

	1. A compreensão que os médicos têm dos sentimentos dos pacientes e das suas famílias é um fator irrelevante para o tratamento médico ou cirúrgico.
	2. Os pacientes sentem-se melhor quando os médicos compreendem o que eles sentem.
	3. É difícil para um médico ver as coisas pela perspetiva dos seus pacientes.

4. Considero que, na relação médico-doente, compreender a linguagem corporal do paciente é tão importante quanto a comunicação verbal.
5. O bom sentido de humor de um médico contribui para um melhor resultado clínico.
6. Pelo facto das pessoas serem diferentes, é difícil para um médico ver as coisas da perspetiva dos pacientes.
7. Prestar atenção às emoções dos pacientes não é importante na colheita de histórias clínicas
8. A atenção dedicada às experiências pessoais dos pacientes não influencia os resultados do tratamento.
9. Os médicos deviam experimentar "colocar-se no lugar" dos seus pacientes quando lhes estão a prestar cuidados.
10. Os pacientes valorizam a compreensão que o médico tem dos seus sentimentos, o que é terapêutico em si mesmo.
11. As enfermidades dos pacientes só podem ser curadas com tratamentos médicos ou cirúrgicos; consequentemente, os laços emocionais dos médicos com os seus pacientes não têm qualquer influência significativa no tratamento médico e cirúrgico.
12. Questionar pacientes sobre o que se passa na sua vida pessoal é um fator sem importância na compreensão das suas queixas físicas.
13. Os médicos deviam tentar compreender o que se passa na cabeça dos seus pacientes, prestando mais atenção à sua comunicação não-verbal e linguagem corporal.
14. Creio que as emoções não têm lugar no tratamento da doença médica.

15. A empatia é uma competência terapêutica sem a qual o sucesso do médico é limitado.
16. Um componente importante do relacionamento de um médico com os seus pacientes é a compreensão do estado emocional do paciente e da respetiva família.
17. Os médicos deviam tentar pensar como os seus pacientes para prestarem melhores cuidados.
18. Os médicos não se deviam deixar influenciar por relações fortes de natureza pessoal com os seus pacientes e as suas famílias.
19. Não aprecio literatura não médica ou outras formas de arte.
20. Eu acredito que a empatia é um fator terapêutico importante no tratamento médico.

Seguem-se algumas questões sobre as suas crenças em relação a diferentes aspetos das relações entre homens e mulheres e sua relação na sociedade contemporânea. Assinale a sua concordância com cada uma das seguintes afirmações indicando o número que melhor corresponde à sua resposta.

		Discordo totalmente	Discordo	Não concordo nem discordo	Concordo	Concordo totalmente
1	Num desastre, as mulheres não deviam, necessariamente, ser resgatadas antes dos homens.					

2	A maioria das mulheres interpreta comentários ou atos inocentes como sendo sexistas.	1	2	3	4	5
3	As mulheres ofendem-se com demasiada facilidade.	1	2	3	4	5
4	Muitas mulheres têm uma qualidade de pureza que poucos homens possuem.	1	2	3	4	5
5	As mulheres deviam ser estimadas e protegidas pelos homens.					
6	A maioria das mulheres não consegue apreciar plenamente tudo o que os homens fazem por elas.	1	2	3	4	5
7	As mulheres procuram obter poder através de controlo sobre os homens.	1	2	3	4	5
8	As mulheres exageram os problemas que têm no trabalho.					
9	Quando uma mulher consegue que um homem se comprometa com ela, geralmente tenta dar-lhe rédea curta.	1	2	3	4	5
10	Quando as mulheres perdem com homens numa competição justa, elas costumam queixar-se de terem sido discriminadas.	1	2	3	4	5
11	Uma boa mulher deve ser colocada num pedestal pelo seu homem.	1	2	3	4	5

12	As mulheres, comparadas com os homens, tendem a ter uma sensibilidade moral superior.					
13	Os homens devem estar dispostos a sacrificar o seu próprio bem-estar para garantirem a segurança financeira para as mulheres nas suas vidas.					
14	As mulheres, comparadas com os homens, tendem a ter um sentido mais refinado de cultura e bom gosto.	1	2	3	4	5

PARTE 3

QUESTÕES SOCIODEMOGRÁFICAS

1. Sexo: Homem ☐ Mulher ☐
2. Idade:…….anos
3. Qual o ano do curso de Medicina que frequenta? .....
4. Qual a especialidade que tenciona fazer?

Medicina interna (incluindo cardiologia, geriatria, etc.) ☐

Psiquiatria ☐

Neurologia ☐

Pediatria ☐

Cirurgia (incluindo cirurgia geral, torácica, ortopédica, etc.) ☐

Ginecologia ☐

Medicina Geral e Familiar ☐

Saúde Pública (incluindo Saúde Ocupacional)

Nenhuma ☐

Outra ☐

Qual…….

Não sei ☐

Não se aplica ☐

5. Qual a sua nacionalidade?.....

6. Qual a situação profissional do seu pai?

Trabalhador ☐

Reformado ☐

Desempregado ☐

Outra ☐ Qual……

7. Qual a situação profissional da sua mãe?

Trabalhador ☐

Reformado ☐

Desempregado ☐

Outra ☐ Qual……

8. Quais as habilitações literárias do seu pai?

Não sabe ler nem escrever ☐

1º ciclo de escolaridade ☐

2º ciclo de escolaridade (6º ano) ☐

3º ciclo de escolaridade (9º ano) ☐

Ensino Secundário ☐

Ensino Superior ☐

Outro ☐ Qual……

9. Quais as habilitações literárias da sua mãe?

Não sabe ler nem escrever	☐	
1º ciclo de escolaridade	☐	
2º ciclo de escolaridade (6º ano)	☐	
3º ciclo de escolaridade (9º ano)	☐	
Ensino Secundário	☐	
Ensino Superior	☐	
Outro	☐	Qual……

10. Qual o seu estado civil?

Solteiro/a	☐	
Vivo em União de Facto	☐	
Casado/a	☐	
Outro	☐	Qual……

11. Tem filhos?

Não	☐	
Sim	☐	……(número de filhos)

12. Por favor, deixe aqui o seu endereço de e-mail se quiser participar no sorteio para receber um vale no valor de 50 euros utilizável na FNAC:

Muito obrigada pela sua participação!

APPENDIX C – Data collection protocol from study of chapter 4

INTRODUÇÃO

O objetivo deste estudo é **investigar de que forma questões de género são abordadas na medicina.**

Este questionário pretende obter a sua **opinião pessoal**. **Não existem respostas certas ou erradas e não será avaliado/a pelas mesmas.**

Os dados são **anónimos, confidenciais** e usados apenas para fins de investigação científica.

Para que este estudo seja válido é importante que responda a **todas as questões**. Caso tenha alguma dúvida, pedimos-lhe ainda assim que escolha uma de entre as possibilidades de resposta. O tempo médio de preenchimento deste questionário é de cerca de **10 minutos.**

Se tem questões ou comentários acerca deste questionário por favor contacte a investigadora responsável através do endereço de e-mail: rita_margarida_morais@iscte.pt

Muito obrigada pela sua participação neste estudo.

PARTE 1

I – Condição: Mulher típica

Gostaríamos de saber quais as características que, na sua opinião, AS PESSOAS EM GERAL atribuem À MULHER TÍPICA. Neste sentido, diga-nos em que medida cada um dos traços que seguidamente se apresentam se aplica à imagem que AS PESSOAS EM GERAL possuem da MULHER TÍPICA. Indique o número que melhor corresponde à sua opinião:

[apresentação da lista de traços]

II – Condição: Mulher com SPM

Leia atentamente a situação que seguidamente se descreve:

Uma mulher, com 27 anos, apresenta sintomas relacionados com o ciclo menstrual. No último ano, esta mulher diz ter sentido distensão e dor abdominal associadas a alguma irritabilidade que se apresentam cerca de uma semana antes do aparecimento de cada menstruação. Estes sintomas só desaparecem por volta do 4º dia da menstruação e permanecem ausentes pelo menos até ao 12º dia do seu ciclo menstrual. Estes sintomas têm vindo a interferir nas suas atividades diárias, nomeadamente, provocando algumas faltas ao trabalho e problemas relacionais com o companheiro. Estes sintomas não são provocados pela toma de contracetivos hormonais e não se devem a qualquer outra doença que esta mulher tenha.

Gostaríamos que imaginasse esta mulher e que formasse uma impressão pessoal sobre a mesma. Na sua opinião, em que medida cada um dos traços que seguidamente se apresentam se aplicam a esta mulher. Coloque um círculo em redor do número que melhor corresponde à sua opinião:

[apresentação da lista de traços]

II – Condição: Mulher com PDPM

Leia atentamente a situação que seguidamente se descreve:

Uma mulher, com 27 anos, apresenta sintomas relacionados com o ciclo menstrual. No último ano, esta mulher diz ter sentido distensão e dor abdominal intensas associadas a grande irritabilidade, tristeza, choro, desespero, bem como a uma sensação de grande incapacidade em lidar com as suas atividades diárias, que se apresentam cerca de uma semana antes do aparecimento de cada menstruação. Estes sintomas só desaparecem alguns dias depois do início da menstruação e permanecem ausentes pelo menos até uma semana após a mesma. Estes sintomas têm vindo a interferir seriamente nas suas atividades diárias, nomeadamente, provocando muitas faltas ao trabalho e problemas relacionais graves com o companheiro. Estes sintomas não são provocados pela toma de contracetivos hormonais e não se devem a qualquer outra doença que esta mulher tenha.

Gostaríamos que imaginasse esta mulher e que formasse uma impressão pessoal sobre a mesma. Na sua opinião, em que medida cada um dos traços que seguidamente se apresentam se aplicam a esta mulher. Coloque um círculo em redor do número que melhor corresponde à sua opinião:

[apresentação da lista de traços]

		Não se aplica nada	Aplica-se pouquíssimo	Aplica-se pouco	Aplica-se moderadamente	Aplica-se muito	Aplica-se muitíssimo	Aplica-se totalmente
1.	Emocional	1	2	3	4	5	6	7
2.	Segura	1	2	3	4	5	6	7
3.	Dominante	1	2	3	4	5	6	7
4.	Sentimental	1	2	3	4	5	6	7
5.	Objetiva	1	2	3	4	5	6	7
6.	Afável	1	2	3	4	5	6	7
7.	Afetuosa	1	2	3	4	5	6	7
8.	Ambiciosa	1	2	3	4	5	6	7
9.	Corajosa	1	2	3	4	5	6	7
10.	Sensível	1	2	3	4	5	6	7
11.	Feminina	1	2	3	4	5	6	7
12.	Superior	1	2	3	4	5	6	7
13.	Forte	1	2	3	4	5	6	7
14.	Bonita	1	2	3	4	5	6	7
15.	Autoritária	1	2	3	4	5	6	7
16.	Cuidada	1	2	3	4	5	6	7
17.	Curiosa	1	2	3	4	5	6	7
18.	Independente	1	2	3	4	5	6	7
19.	Aventureira	1	2	3	4	5	6	7
20.	Frágil	1	2	3	4	5	6	7
21.	Maternal	1	2	3	4	5	6	7
22.	Rígida	1	2	3	4	5	6	7
23.	Meiga	1	2	3	4	5	6	7

24.	Viril	1	2	3	4	5	6	7
25.	Racional	1	2	3	4	5	6	7
26.	Dependente	1	2	3	4	5	6	7
27.	Paternalista	1	2	3	4	5	6	7
28.	Inferior	1	2	3	4	5	6	7
29.	Machista	1	2	3	4	5	6	7
30.	Desorganizada	1	2	3	4	5	6	7
31.	Lutadora	1	2	3	4	5	6	7
32.	Descuidada	1	2	3	4	5	6	7
33.	Submissa	1	2	3	4	5	6	7

Para cada uma das questões que se seguem coloque um círculo em redor do número que melhor corresponde à sua opinião pessoal:

1. Como avalia a intensidade da dor abdominal relatada por esta mulher?

☺					☹					☹
0	1	2	3	4	*5*	6	7	8	9	10
Sem dor					Dor moderada					A pior dor que se pode imaginar

2. Como avalia a intensidade da perturbação emocional desta mulher?

0	1	2	3	4	*5*	6	7	8	9	10
Nada intensa					Moderadamente intensa					Extremamente intensa

3. Em que medida crê que estes sintomas interferem nas atividades diárias desta mulher?

1	2	3	4	5	6	7	8	9	10
Nada									Extremamente

4. Em que medida acredita que estes sintomas são determinados pela toma de contracetivos hormonais?

Sim ☐

Não ☐

5. Em que medida acredita que estes sintomas são provocados por outra doença que esta mulher tenha?

Sim ☐

Não ☐

PARTE 2

As frases que se seguem estão relacionadas com questões de género em Medicina. Indique o número que melhor descreve em que medida cada uma das frases corresponde às suas expectativas.

Pensa que...

		Discordo totalmente	Discordo	Não concordo nem discordo	Concordo	Concordo totalmente
1	o/as médico/as devem apenas abordar as diferenças biológicas entre homens e mulheres.	1	2	3	4	5
2	em doenças que não são específicas de um dos sexos, o sexo/género do/a paciente é irrelevante.	1	2	3	4	5
3	o/as médico/as que consideram diferenças de género não estão a tratar das questões importantes.	1	2	3	4	5
4	na comunicação com o/as pacientes, não interessa a um/a médico/a se estes são homens ou mulheres.	1	2	3	4	5
5	as diferenças entre pacientes homens e mulheres são tão pequenas que o/as médico/as mal as conseguem ter em consideração.	1	2	3	4	5
6	não é necessário considerar as diferenças de género na apresentação das queixas.	1	2	3	4	5

PACIENTES

As frases que se seguem estão relacionadas com ideias sobre pacientes homens e pacientes mulheres. Indique o número que melhor descreve em que medida cada uma das frases corresponde às suas expectativas.

Pensa que…

		Discordo totalmente	Discordo	Não concordo nem discordo	Concordo	Concordo totalmente
1	as mulheres, mais frequentemente do que os homens, querem discutir problemas com o/as médico/as que não pertencem ao espaço da consulta.	1	2	3	4	5
2	as mulheres esperam demasiado apoio emocional por parte do/as médico/as.	1	2	3	4	5
3	os pacientes são menos exigentes que as pacientes.	1	2	3	4	5
4	as mulheres consomem mais cuidados de saúde do que aqueles que realmente são necessários.	1	2	3	4	5
5	os homens não vão ao médico/a por problemas de saúde inofensivos.	1	2	3	4	5
6	as mulheres desenvolvem sintomas medicamente inexplicados porque se lamentam demasiado acerca da sua saúde.	1	2	3	4	5

7	os homens recorrem mais frequentemente aos cuidados de saúde com problemas que deviam ter prevenido.	1	2	3	4	5

MÉDICOS/AS

As seguintes afirmações dizem respeito a comportamentos e competências dos médicos e das médicas. Indique o número que melhor descreve em que medida cada uma das frases corresponde às suas expectativas.

Pensa que…

		Discordo totalmente	Discordo	Não concordo nem discordo	Concordo	Concordo totalmente
1	comparativamente com os médicos, as médicas estendem demasiado as suas consultas.	1	2	3	4	5
2	os médicos são mais eficientes do que as médicas.	1	2	3	4	5
3	as médicas têm desnecessariamente em consideração como o/as pacientes vivenciam a doença.	1	2	3	4	5
4	os médicos são mais capazes de lidar com o trabalho que as médicas.	1	2	3	4	5

5	as médicas envolvem-se emocionalmente em demasia com o/as seus/suas pacientes.	1	2	3	4	5

PARTE 3

QUESTÕES SOCIODEMOGRÁFICAS

13. Sexo: Homem ☐ Mulher ☐ Outro:…….

14. Idade:…….anos

15. Qual o ano do curso de Medicina que frequenta? .....

16. Qual a especialidade que tenciona fazer?

Medicina interna (incluindo cardiologia, geriatria, etc.)	☐
Psiquiatria	☐
Neurologia	☐
Pediatria	☐
Cirurgia (incluindo cirurgia geral, torácica, ortopédica, etc.)	☐
Ginecologia e Obstetrícia	☐
Medicina Geral e Familiar	☐
Saúde Pública (incluindo Saúde Ocupacional)	☐
Nenhuma	☐
Outra	☐ Qual…….
Não sei	☐
Não se aplica	☐

17. Tem formação em Ginecologia e Obstetrícia?

Sim ☐ Não ☐

5.1. Se sim, qual?.....

18. Qual a sua nacionalidade?.....

19. Qual a situação profissional do seu pai?

Trabalhador ☐

Reformado ☐

Desempregado ☐

Outra ☐ Qual……

20. Qual a situação profissional da sua mãe?

Trabalhador ☐

Reformado ☐

Desempregado ☐

Outra ☐ Qual……

21. Quais as habilitações literárias do seu pai?

Não sabe ler nem escrever ☐

1º ciclo de escolaridade ☐

2º ciclo de escolaridade (6º ano) ☐

3º ciclo de escolaridade (9º ano) ☐

Ensino Secundário ☐

Ensino Superior ☐

Outro ☐ Qual……

22. Quais as habilitações literárias da sua mãe?

Não sabe ler nem escrever ☐

1º ciclo de escolaridade ☐

2º ciclo de escolaridade (6º ano) ☐

3º ciclo de escolaridade (9º ano) ☐

Ensino Secundário ☐

Ensino Superior ☐

Outro ☐ Qual……

23. Qual o seu estado civil?

Solteiro/a ☐

Vivo em União de Facto ☐

Casado/a ☐

Outro ☐ Qual……

24. Tem filhos?

Não ☐

Sim ☐……(número de filhos)

Muito obrigada pela sua participação!

APPENDIX D – Data collection protocol from study of chapter 5

II – PARTE 1 - Introdução e Entrevista

Entrevista nº ____

(Nota introdutória: As questões deverão adaptar-se, sempre que necessário, ao sexo e à experiência do entrevistado.)

[Introdução para médicos/as Ginecologistas e obstetras]

"Bom dia/boa tarde. Obrigada por ter aceitado participar nesta entrevista. O meu nome é Rita Morais encontro-me a realizar um doutoramento em Psicologia no ISCTE-IUL. Tendo em conta que é especialista em Saúde ginecológica e obstétrica seria muito importante para nós compreender a sua perspetiva sobre as síndromes que as mulheres podem apresentar relacionadas com a menstruação. Vou começar por lhe colocar algumas questões sobre as síndromes pré-menstruais. Antes de começar queria apenas pedir-lhe a sua autorização para gravar estes dados. Os dados são confidenciais e utilizados apenas para fins de investigação científica. Posso então gravar?""

[Introdução para médicas/os de Medicina Geral e Familiar]

"Bom dia/boa tarde. Obrigada por ter aceitado participar nesta entrevista. O meu nome é Rita Morais encontro-me a realizar um doutoramento em Psicologia no ISCTE-IUL. Tendo em conta que a sua formação, abrange de uma forma genérica, a prestação de cuidados de saúde primários abrangendo pacientes, homens, mulheres e crianças de todas as idades seria muito importante para nós compreender a sua perspectiva sobre as síndromes que as mulheres podem apresentar relacionadas com a menstruação. Vou começar por lhe colocar

algumas questões sobre as síndromes pré-menstruais. Antes de começar queria apenas pedir-lhe a sua autorização para gravar estes dados. Os dados são confidenciais e utilizados apenas para fins de investigação científica. Posso então gravar?"

QUESTÕES CENTRAIS	**ESTRATÉGIAS DE MODERAÇÃO**
1. Em primeiro lugar, gostava que me citasse 5 palavras que vêm à sua cabeça quando pensa em síndromes pré-menstruais? **1.1.** Destas 5 quais são para si as duas mais importantes? Porquê? **2.** Gostaria que me falasse um pouco sobre a sua experiência clínica com casos de mulheres com sintomas pré-menstruais…Fale-me um pouco sobre isso. **2.1.** Descreva-me um caso típico de uma mulher com sintomas pré-menstruais… **3.** Agora, gostaria que pensasse num caso específico de uma mulher com sintomas pré-menstruais que para si fosse fácil de lidar e por outro lado que pensasse num caso difícil? Porque foi fácil/difícil?	*Explorar as representações sobre as síndromes pré-menstruais* • Identidade (sinais e sintomas) e.g., choro fácil, irritabilidade, distensão abdominal e mamária; Quais são os principais sinais e sintomas associados a estas síndromes? • Causas e.g., hormonais, stress; Quais pensa serem as principais causas das síndromes pré-menstruais? • Duração e.g., cíclica; Se tivesse que classificar a duração desta síndrome como a classificaria? • Consequências e.g., grau de interferência na vida da mulher; económicas; Estas síndromes têm consequências? Quais? E quem é mais afetado pelas mesmas? • Controlabilidade e.g., tratamento: medicação, exercício etc.; como é que se pode controlar estas síndromes? Existe tratamento para as mesmas? Quais? *Explorar as representações sobre as mulheres com síndromes pré-menstruais*

3.1. Fale-me um pouco sobre essas mulheres… **4.h.** Qual a sua experiência pessoal com casos de mulheres com sintomas pré-menstruais? Conhece alguém fora da sua prática clínica com sintomas pré-menstruais? De que forma é que isso o ajudou (ou não) a lidar com os casos que encontrou na sua prática clínica? **4.m.** Qual a sua experiência pessoal no que respeita à apresentação deste tipo de sintomas? De que forma é que isso a ajudou (ou não) a lidar com os casos que encontrou na sua prática clínica?	• Salientar os indícios que levaram a diagnosticar essas mulheres com SPM/PDPM e.g., que primeiros sinais o fizeram suspeitar que estava perante um caso de uma mulher com sintomas pré-menstruais • Salientar a componente descritiva dos estereótipos, isto é, a descrição dessas mulheres em termos pessoais e sociais e.g., quem é que são, que profissões têm, têm família? Que queixas trazem para a consulta? Qual a primeira impressão que tem destas mulheres? Como é que isso o/a ajuda a ajudá-las? • Salientar a descrição dessas mulheres do ponto de vista dos colegas de profissão e especialidade e.g., Como é que acha que os seus colegas de profissão e de especialidade vêem estas mulheres? • Salientar a componente prescritiva dos estereótipos e.g., Considerou as queixas destas mulheres adequadas para uma consulta de rotina? *Explorar a relação médico/a-paciente* • Emoções e.g., que emoções determinadas queixas despertaram em si?

- Relação e.g., empatia com mulheres com estas queixas; Considera importante colocar-se do ponto de vista destas suas pacientes para poder avaliá-las e trata-las?
- Comunicação e.g., como são abordadas e recebidas as queixas em consultas

Explorar as questões relativas ao diagnóstico e tratamento

- Critérios para o diagnóstico e.g., Que critérios utilizou para diagnosticar essa mulher com síndrome pré-menstrual?
- Decisões tomadas (talvez introduzir algumas perguntas sobre "processos")
- Tratamentos prescritos e.g., Na sua maioria as mulheres com sintomas pré-menstruais necessitam de tratamento? Costuma prescrever tratamento a estas mulheres? Quais?

Perguntas (eventualmente a fazer) sobre "processos":

O que é que lhe passou pela cabeça para tomar essa decisão?

O que é que o levou a fazer esse diagnóstico?

	Para chegar a essa decisão quais foi os passos que deu?

III- Conclusão da Entrevista

"Muito obrigado pela sua colaboração. Não sei se gostaria de colocar alguma pergunta ou acrescentar alguma informação em relação às questões que lhe coloquei?"

"Antes de terminarmos queria pedir-se e relativamente às questões anteriormente apresentadas, se poderia responder a este breve questionário para que se possa concluir a entrevista? Também, se me poderia deixar o seu contacto apenas para a eventualidade de estar disponível para participar em estudos futuros. Por fim, queria pedir-se se conhece algum colega seu, que possa estar disponível para conceder-me esta entrevista e se pode dar-me o seu contacto para eu poder abordá-lo? (questionários impressos em documento à parte)

Parte II – Questionário

Entrevista nº ____ (a preencher pela entrevistadora)

As frases que se seguem estão relacionadas com questões de género em Medicina. Indique o número que melhor descreve em que medida cada uma das frases corresponde às suas expectativas.

Pensa que...

		Discordo totalmente	Discordo	Não concordo nem discordo	Concordo	Concordo totalmente
1	o/as médico/as devem apenas abordar as diferenças biológicas entre homens e mulheres.	1	2	3	4	5
2	em doenças que não são específicas de um dos sexos, o sexo/género do/a paciente é irrelevante.	1	2	3	4	5
3	o/as médico/as que consideram diferenças de género não estão a tratar das questões importantes.	1	2	3	4	5
4	na comunicação com o/as pacientes, não interessa a um/a médico/a se estes são homens ou mulheres.	1	2	3	4	5
5	as diferenças entre pacientes homens e mulheres são tão pequenas que o/as médico/as mal as conseguem ter em consideração.	1	2	3	4	5

6	não é necessário considerar as diferenças de género na apresentação das queixas.	1	2	3	4	5

PACIENTES

As frases que se seguem estão relacionadas com ideias sobre pacientes homens e pacientes mulheres. Indique o número que melhor descreve em que medida cada uma das frases corresponde às suas expectativas.

Pensa que…

		Discordo totalmente	Discordo	Não concordo nem discordo	Concordo	Concordo totalmente
1	as mulheres, mais frequentemente do que os homens, querem discutir problemas com o/as médico/as que não pertencem ao espaço da consulta.	1	2	3	4	5
2	as mulheres esperam demasiado apoio emocional por parte do/as médico/as.	1	2	3	4	5
3	os pacientes são menos exigentes que as pacientes.	1	2	3	4	5
4	as mulheres consomem mais cuidados de saúde do que aqueles que realmente são necessários.	1	2	3	4	5

5	os homens não vão ao médico/a por problemas de saúde inofensivos.	1	2	3	4	5
6	as mulheres desenvolvem sintomas medicamente inexplicados porque se lamentam demasiado acerca da sua saúde.	1	2	3	4	5
7	os homens recorrem mais frequentemente aos cuidados de saúde com problemas que deviam ter prevenido.	1	2	3	4	5

MÉDICOS/AS

As seguintes afirmações dizem respeito a comportamentos e competências dos médicos e das médicas. Indique o número que melhor descreve em que medida cada uma das frases corresponde às suas expectativas.

Pensa que…

		Discordo totalmente	Discordo	Não concordo nem discordo	Concordo	Concordo totalmente
1	comparativamente com os médicos, as médicas estendem demasiado as suas consultas.	1	2	3	4	5
2	os médicos são mais eficientes do que as médicas.	1	2	3	4	5

3	as médicas têm desnecessariamente em consideração como o/as pacientes vivenciam a doença.	1	2	3	4	5
4	os médicos são mais capazes de lidar com o trabalho que as médicas.	1	2	3	4	5
5	as médicas envolvem-se emocionalmente em demasia com o/as seus/suas pacientes.	1	2	3	4	5

Parte 3 – Características Sociodemográficas

Entrevista nº ____

1. Sexo: Homem☐ Mulher ☐

(se a entrevistada for uma mulher fazer a pergunta 1.1.)

2. No último mês consultou alguma mulher com queixas/sintomas pré-menstruais?

Não ☐ Sim ☐ Quantas?.....

3. Idade:…….anos

4. Qual o seu local de trabalho? ……

[Questão 5 apenas para médicos/as de Medicina Geral e Familiar]

5. Tem Formação em Ginecologia e Obstetrícia?

5.1. Se sim, qual?.....

6. Qual a sua nacionalidade?.....

7. Qual a situação profissional do seu pai?

Trabalhador ☐

Reformado ☐

Desempregado ☐

Outra ☐ Qual……

8. Qual a situação profissional da sua mãe?

Trabalhador ☐

Reformado ☐

Desempregado ☐

Outra ☐ Qual……

9. Quais as habilitações literárias do seu pai?

Não sabe ler nem escrever ☐

1º ciclo de escolaridade ☐

2º ciclo de escolaridade (6º ano) ☐

3º ciclo de escolaridade (9º ano) ☐

Ensino Secundário ☐

Ensino Superior ☐

Outras ☐ Quais……

10. Quais as habilitações literárias da sua mãe?

Não sabe ler nem escrever ☐

1º ciclo de escolaridade ☐

2º ciclo de escolaridade (6º ano) ☐

3º ciclo de escolaridade (9º ano) ☐

Ensino Secundário ☐

Ensino Superior ☐

Outras ☐ Quais……

11. Qual o seu estado civil?

Solteiro/a ☐

Vivo em União de Facto ☐

Casado/a ☐

Outro ☐ Qual……

12. Tem filhos?

Não ☐

Sim ☐ ……(número de filhos)