Gender differences in mental health

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ABSTRACT

Effective strategies for mental disorders prevention and its risk factors' reduction cannot be gender neutral, while the risks themselves are gender specific. This paper aims to discuss why gender matters in mental health, to explain the relationship of gender and health-seeking behaviour as a powerful determinant of gender differences, to examine the gender differences in common mental health disorders, namely, depressive and anxiety disorders, eating disorders, schizophrenia, and domestic violence, and finally, to raise some recommendations stemming from this review.

Keywords: gender differences, health-seeking behaviour, mental disorders, sex

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INTRODUCTION

In 2002, World Health Organisation (WHO) passed its first Gender Policy, acknowledging the gender issue as important on its own. At about the same time, WHO began using the UN's Millennium Development Goals (MDGs), which go beyond the Health for All framework's focus on equity in general, specifying more particularly that gender equality and the empowerment of women are vital goals; MDG, Goal three.[1] Unfortunately, "gender" is increasingly used inappropriately as a substitute for "sex", particularly in biomedical literature, a tendency which has created confusion. Sex denotes biologically-determined characteristics, while gender indicates culturally- and socially-shaped variations between men and women.[2] Gender is related to how we are perceived and expected to think and act as women and men because of the way society is organised, and not because of our biological differences.[3] Absence of discrimination on the basis of a person's sex in opportunities, and the allocation of resources or benefits, or access to services, is gender equality. Therefore, gender equality refers to the fairness and justice in the distribution of benefits and responsibilities between women and men.[4]

Gender-based differences may emanate from a biomedical (genetic, hormonal, anatomical, physiological); psychosocial (personality, coping, symptom reporting); epidemiological (population-based risk factors); or even a more global perspective. The latter analyses large-scale cultural, social, economic, and political processes that ultimately produce differential health risks for women and men.[5] Rarely does biology act alone to determine health inequities. Social determinants, including gender, interact with each other and exacerbate biological vulnerabilities. For example, women's lower social autonomy exacerbates their biological susceptibility to the human immunodeficiency virus (HIV).[6] Also, a more than two-fold increase in risk has typically been found for those in the lowest social class compared to the highest, for psychological as well as physical morbidity.[7] Psychosocial risks accumulate during life and increase the chances of poor mental health and premature death.[8]

Mental health problems are among the most important contributors to the global burden of disease and disability. Mental and behavioural disorders are estimated to account for 12% of disability-adjusted life-years lost globally and 31% of all years lived with disability at all ages and in both sexes, according to year 2000 estimates. Yet, more than 40% of countries have no mental health policy, over 90% have no mental health policy that include adolescents and children, and over 30% have no mental health programmes.[9] For a long time, general practitioners have learnt from clinical experience that women receive more services for mental disorder in primary care settings than do men. On the other hand, psychiatrists and clinical psychologists are aware that the difference is less marked for specialist mental health services, and particularly hospital-based services. Service utilisation data may have important implications for health policy and services organisation. However, they simply indicate the extent of treatment, not the need for treatment. The clinician should therefore go beyond their clinical practice and acknowledge that they need help from epidemiologists and from epidemiologically-based research to be able to understand which sex, or which demographical group within each sex, has the greater risk of experiencing psychological distress and mental illness.[10]

The aim of this work is to discuss why gender matters in mental health, to explain the relationship of gender and health-seeking behaviour as a powerful determinant of gender differences, to examine the gender differences in common mental health problems, and to raise some recommendations stemming from this review to conclude the paper.

A similar PubMed search strategy to a study previously published by the author was followed to collect papers reviewed in the current study.[11] In a PubMed search

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within a single hour limit (on April 13, 2006), the Medical Subject Heading (MeSH) database of the MEDLINE for articles under the psychiatry and psychology category (mental disorders, behaviour and behaviour mechanism, psychological phenomena and process, and behavioural disciplines and activities) was explored, limited to the last 15 years (from January 1991 to April 2006). The search was then combined using the Boolean "AND" with the key words "gender difference" OR "sex difference". The abstracts of psychiatry and mental health publications with "gender difference" or "sex difference" in its title or text over the last 15 years were then reviewed. From the aforementioned rapid review, selected full papers were downloaded or requested, and thoroughly reviewed and comprised the current study references. Added to that, WHO publications and online documents about gender and health and/or gender and mental health were also reviewed and added to the references list.

WHY DOES GENDER MATTER IN MENTAL HEALTH?

A gender approach to health means to distinguish biological and social factors while exploring their interactions, and to be sensitive to how gender inequality affects health outcomes. A gender approach to mental health provides guidance to the identification of appropriate responses from the mental healthcare system, as well as from public policy. Gender differences clearly exist, even where the socioeconomic gradient may not be strong. Never married and separated/divorced men have higher overall admission rates to mental health facilities than women in the same marital status categories. In contrast, married women have higher admission rates than married men.[12] Gender, like other stratifiers, does not operate in isolation. It interacts in an additive or multiplicative way with other social markers like class and race.

Gender analysis improves understanding of the epidemiology of mental health problems, decisions and treatment of these problems in under-reported groups, and also increases potential for greater public participation in health.[2] Overlooking gender-based differences or gender bias could have drastic consequences. Doctors are more likely to diagnose depression in women compared to men, even when they have similar scores on standardised measures of depression or present with identical symptoms. Gender stereotypes regarding proneness to emotional problems in women and alcohol problems in men, appear to reinforce social stigma and constrain help-seeking along stereotypical lines. They are a barrier to the accurate identification and treatment of psychological disorders.[13] Women's mental health affects others in society. Their increasing presence in the workforce means that their mental health affects national productivity. Their social role as caregivers means that their mental health affects the mental health of their children and elderly parents. Moreover, understanding the needs of adolescent girls for services is important for many mental disorders, especially those that affect large numbers of young women, such as mood, anxiety and eating disorders. Finally, all that would be translated into better interventions and services for females and their community.[14]

GENDER AND HEALTH-SEEKING BEHAVIOUR

To reduce gender disparities in health, the provision of medical services alone is clearly inadequate.[15] Viewing health through a gender lens necessitates steps to improve women's access, affordability and appropriateness to the health services. Health services for women tend to focus on their reproductive functions, neglecting the needs of women outside the reproductive ages. A lack of female medical personnel is sometimes a barrier for women to utilise healthcare services.[16] Poor women find themselves without access to healthcare more often than men from the same social group, even in rich countries like the United States.[17] In many developing countries, women complain about lack of privacy, confidentiality and information about options and services available.[18] Another barrier is that medical doctors either attribute different meanings to identical symptoms for presenting male and female patients,[19] or attribute women's illnesses to psychiatric disorders and prescribe inappropriate medication.[3] Women's higher mental and physical morbidity have also been hypothesised as being caused by their gender sensitivity to physical cues and to the social acceptability of sick roles for women.[20] On the other hand, emotional and cognitive capacities of women themselves may limit their access to healthcare.[21] Amin and Bentley concluded that gender inequalities, manifested through fertility, marriage, and work norms, violence in marital relationships, and poor psychological health, have resulted in rural Indian women accepting high thresholds of suffering and not seeking treatment for their symptoms.[22]

GENDER DIFFERENCES IN MENTAL HEALTH DISORDERS

Astbury found that gender differences in mental disorders extend beyond differences in the rates of various disorders or their differential time of onset or course and include a number of factors that can affect risk or susceptibility, diagnosis, treatment and adjustment to mental disorder.[23] Gender differences in prevalence of mental disorders vary across age groups. Conduct disorder is the commonest psychiatric disorder in childhood, with three times as many boys as girls being affected.[24] During adolescence, girls have a higher prevalence of depression and eating

disorders, and engage more in suicidal ideation and suicide attempts than boys, who are more prone to engage in high risk behaviours and commit suicide more frequently.[25,26] In adulthood, women had a higher prevalence of most affective disorders and non-affective psychosis, and men had higher rates of substance use disorders and antisocial personality disorder.[27]

Men may develop alternative disorders in response to stress, such as antisocial behaviour and alcohol abuse. They may be more likely to have been socialised to express anger or other forms of acting out, whereas women may be more likely to have been socialised to express dysphoria in response to stress. In support of this, studies have shown that expected gender differences in depressive disorders were balanced out by higher male rates of alcohol abuse and drug dependency.[28]

DEPRESSIVE AND ANXIETY DISORDERS

Depression and anxiety are the most common comorbid disorders, and a significant gender difference exists in the rate of comorbidity. Their diagnosis is often associated with somatic complaints, and is known to affect around one in five people in the general community, and more than two in five primary care attenders in many countries.[29] Gender differences in rates or correlates of depression exist but may differ for different countries. In Alexandria, Egypt, the rate of having depressive symptoms in girls was almost double that in boys. In Oman, however, there was no significant difference.[30] Moreover, age at first onset of depression and bipolar disorder is similar in males and females.[31] Yet, adolescent girls have been found to be significantly more likely to experience low and moderate levels of depression and anxiety than adolescent boys.[32] Among adults, women presented slightly more often with milder types of depression than with severe depression in outpatient settings. However, no gender difference was found in the severity of depressive episodes among hospitalised patients.[33] No gender difference was found in the use of anti-depressive medication[34] nor in the response to it.[35]

Because gender interacts with other social determinants, women's strain due to stressful life events is a consequence of their differential sensitivity to events. It is a result of role differences, rather than women experiencing more events. Women only have a higher risk following crises involving children, housing and reproduction, rather than those involving finances, work and their marital relationship.[36] For physicians, the postpartum period is often perceived as one that requires little assistance other than the single visit recommended at 4–6 weeks after delivery. Yet, findings from longitudinal studies suggest that recovery from childbirth involves more than healing of reproductive organs.[37] Some women face serious problems such as depression.[38,39] The prevalence of major or minor depression among pregnant women ranges from 7% to 26%.[40] Depression during pregnancy is a strong predictor of postpartum depression,[41] and is associated with adverse foetal development; thus, the treatment of antepartum depression is critical.[42] The prevalence of postpartum depression ranges from 10% to 15% in the first year after childbirth, which may have deleterious effects on the women's relationships, her functional status, and her ability to care for her infant.[42,43] Many women with postpartum depression would not receive mental health services because primary care providers might be unable or unwilling to screen, treat, and/or refer the women. Therefore, eliminating the barriers of mental healthcare in the postpartum period and creating more awareness among primary care providers about women's mental health in this period is crucial.[43]

In general, women are not more vulnerable to negative life events than men are. However, women with no social support, who are exposed to life events, are more vulnerable than men without support. Accordingly, Dalgard et al concluded that the higher rate of depression in women is not explained by gender differences in negative life events, social support or vulnerability.[44] Chronic strain, low mastery, and rumination were each more common in women than in men, and mediated the gender difference in depressive symptoms. Rumination amplified the effects of mastery and, to some extent, chronic strain on depressive symptoms. In addition, chronic strain and rumination had reciprocal effects on each other over time, and low mastery also contributed to more rumination. Finally, depressive symptoms contributed to more rumination and less mastery over time.[45] The role of personality factors in gender differences has been studied by Goodwin and Gotlib, who found that the level of neuroticism, which was significantly higher among females, may moderate the association between the female gender and increased risk of depression among adults.[46]

Women report more worry and more cognitive variables associated with worry than men. Robichaud et al found that women reported more worry than men on two measures of the tendency to worry, as well as more worries about lack of confidence issues.[47] Women also reported a more negative problem orientation and engaging in more thought suppression, a type of cognitive avoidance.[47] Anxiety disorders include panic disorder, obsessive-compulsive disorder (OCD), post-traumatic stress disorder (PTSD), social phobia, and generalised anxiety disorder. Women outnumber men in each illness category except for OCD, in which both sexes have an equal likelihood of being affected. Not only are women more likely to have panic with concurrent agoraphobia, but they are more likely than men to suffer a recurrence of

panic symptoms after remission of panic.[48] The gender differences exist among patients with panic disorder in the feared consequences of anxiety symptoms as well as in the personality characteristics of extraversion.[49] Women are 2–3 times more likely to develop PTSD after trauma than males, and to have persistent symptoms.[48]

Whether gender differences in depression could be explained by gender differences in comorbid anxiety is still controversial. Simonds and Whiffen found that women are more likely than men to be diagnosed with either disorder alone or comorbidity.[50] Furthermore, the ratio of women to men who experience anxiety alone or anxiety in combination with depression, tends to be higher than the ratio of women to men who experience depression alone. Therefore, they concluded that attempts to explain the gender difference in rates of depression would benefit from the understanding that women are more likely to experience anxiety.[50] Somatic depression which is associated with high rates of anxiety disorders is much higher among women than men.[51] Yet, Parker and Hadzi-Pavlovic concluded that the female gender remained a significant predictor of depression after accounting for the effects of prior anxiety.[52]

EATING DISORDERS

The high variability of incidence found across very different populations and climates suggests that sociocultural or ecological factors play a substantial role in the aetiology of eating disorders.[53] The vast majority of people with eating disorders in the United States are adolescents and young adult women. In addition to causing various physical health problems, eating disorders are associated with illnesses such as depression, substance abuse, anxiety, and especially OCD. Eating disorders, including anorexia and bulimia, are more common in women.[54] The available literature indicates that anorexia nervosa is rare in the Arab culture.[55] Therefore, more than one study in the Arab world focused solely on young females.[56,57] Yet, the prevalence of both anorexia nervosa and bulimia was similar for both males and females in an Omani study,[58] whereas the prevalence of bulimia was higher among female adolescents in comparison to their male counterparts in Morocco.[59] The absence of gender differences in eating disorders in some studies could be explained by the probable comorbidity of anorexia or bulimia nervosa with obsessive-compulsive neurosis in the study patients. OCD patients have a substantial lifetime prevalence of anorexia and/or bulimia nervosa. However, no significant gender difference exists in the lifetime prevalence of eating disorders among patients with OCD.[54]

SCHIZOPHRENIA

Schizophrenia is the most chronic and disabling of mental disorders, with psychotic symptoms first appearing in the late teens or early twenties. Although men and women alike are affected and the lifetime morbidity risk is around 1% with little difference between them, there are differences in the age of onset, pattern of symptoms, brain structure impairment, response to treatment and outcome.[60] Lifetime onset age differs significantly between men and women, where men get ill with schizophrenia, on average, 4–6 years earlier than women.[61,62] However, Lewine concluded that sex, and not gender, was a significant predictor of age at first hospitalisation, while the gender perspective may best serve other aspects such as neuropsychological functioning.[63] Conversely, Naqvi et al found that there was no significant gender difference in the age of onset of the disorder.[64] The controversy could be explained through the findings of Salokangas et al.[65] They found that women have a later onset of schizophrenia than men, but only in its paranoid form.[65] Regardless of the later onset, women experience more hallucinations or more psychotic symptoms than men.[66] First admission to psychiatric institutions occurs 3–6 years later in females compared to males. No gender differences in number of re-admissions or length of stay during follow-up have been reported by most studies. In general, women require lower doses of medication than men during both acute and maintenance phases of the illness, at least until menopause.[28,66,67] Electroconvulsive therapy is significantly more effective in female patients than male patients suffering from schizophrenia.[68]

DOMESTIC VIOLENCE AND PHYSICAL ABUSE

Violence is a risk factor for injury and disability; mental health disorders (mood, anxiety, PTSD, eating disorders, sexual dysfunction, multiple personality disorder, OCD, and suicide); chronic pain syndromes and somatic complaints; and other negative health behaviours (smoking, alcohol and drug abuse, physical inactivity, overeating). Abused women are at increased risk for emergency room visits and hospitalisations.[69] In domestic violence, women are usually the victims of the attack and the perpetrator may well be motivated directly by the desire to demonstrate his own masculinity to enforce his male power and to control the women. This has led many experts to adopt the term, gender-based violence, to describe domestic violence.[3] A review of evidence from 40 well-designed population-based studies suggested that between 25% and 50% of women around the world report being victims of physical abuse by men at some point in their lives.[70] However, reliable data on the extent of domestic violence are sparse, particularly in developing and Arab countries. An explanation could be that women are often extremely reluctant to report attacks for fear of not being believed or being re-victimised. Moreover,

information is often not recorded in a systemic or sympathetic way. In Arab countries, domestic violence is not yet considered a major concern, despite its increasing frequency and serious consequences. Surveys in Egypt, Palestine, and Tunisia show that at least one out of three women is beaten by her husband. The indifference to this type of violence stems from the Arab's attitudes that domestic violence is a private matter. There is usually a justifiable response to misbehaviour on the part of the wife.[71] The prevalence of self-reported violence among pregnant women is also common, being 21% in a relatively-recent study.[72]

CONCLUSION AND RECOMMENDATIONS

Effective strategies for risk factors' reduction in relation to mental health cannot be gender-neutral, while the risks themselves are gender-specific, and women's status and life opportunities remain low worldwide. Low status is a potent mental health risk. For too many women, experiences of self worth, competence, autonomy, adequate income and a sense of physical, sexual and psychological safety and security, so essential to good mental health, are systematically denied. The pervasive violation of women's rights, including their reproductive rights, contributes directly to the growing burden of disability caused by poor mental health.[73] Therefore, an inter-disciplinary action to set policies which protect and promote women's autonomy and women mental health is crucial. Ministries of health should take steps to develop and integrate gender-relevant indicators in the existing national health information systems, and to find mechanisms to monitor gender sensitivity in the health system.

It should be a standard practice to disaggregate all epidemiological data by sex and age for all diseases and health conditions, allowing gender analysis of data and monitoring the sex-specific burden of disease over the lifetime. Besides documenting differences in prevalence rates of mental disorders and other diseases, it is crucial to examine how women's and men's differences – such as their roles and responsibilities, their knowledge base, their position in society, their access and use of health resources – influence the vulnerability to mental disorders. There is also a need to strengthen women's access to and control over resources that promote and protect health through addressing gender-based barriers to utilise services. We should not forget the importance to integrate a gender approach to health in training primary care providers to identify and to treat mental illness. Linking gender sensitivity to training as well as performance appraisals assures that the issue is taken seriously and translated into practice. More attention should be given to identify factors that would facilitate coping with stress or distress and to design intervention programmes on the communal as well as the primary care level. In addition, it is important to review, evaluate and strengthen community services and the role of non-governmental organisations to protect and promote women's autonomy and mental health. We should not overlook the importance of strengthening the role of media and education and training of media personnel to increase community awareness of women mental health, reducing the stigma of mental problems and promoting women's mental health.

The author wishes to acknowledge two limitations in his review. The first is that the current review is a traditional or non-systematic narrative review which was based on a selective approach of literature. The author selected papers that seemed to him to be appropriate to the review paper. Conversely, in meta-analysis, the selection is comprehensive and replicable, where studies are collected, coded, interpreted using statistical software. Hence, results in meta-analysis are more objective and exact than in the traditional review. However, in meta-analysis, one should focus on certain aims, which the author finds infeasible to implement in the current study. Actually, the current study has answered, posed, and pointed diversified issues, and the limitation of the paper length constituted a constraint for the author. Yet, in a future study, the author intends to use meta-analysis to investigate the controversy in gender differences in eating disorders. The second limitation is the dearth of mental health research in the Arab world.[11] That actually constituted another constraint for the author to elaborate more on the subject in the context of the local settings of Oman and the Arab world.

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