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Women and mental illness

One of the more consistent findings of epidemiological research is that women report symptoms of both physical and mental illness and consult doctors for these conditions at higher rates than men.[1] That finding stands in sharp contrast to the longer female life expectancy than that of males at every age. The explanation most often offered for this sex difference refers to strains and stresses associated with woman's biological state. From such a biological perspective women have been seen as the products and prisoners of their reproductive systems.[2] Such a view was held with particular vigour by nineteenth century physicians; as one explained in 1827 (in terms not unheard today), the female sex "is far more sensitive and susceptible than the male and extremely liable to those distressing affections which for want of some better term have been determined nervous, and which consist chiefly in painful affections of the head, heart, side, and indeed of almost every part of the system."[3]

Contemporary epidemiological research has looked closely at sex differences in depression and in particular those non-psychotic, mixed anxiety depressive disorders commonly coexisting with social difficulties which are said to affect up to one fifth of the general population.[4,5] Sex differences in the prevalence of minor psychiatric morbidity have been shown in many community surveys,[6-8] but a female preponderance has not been invariable.[9-11] Attempts to establish a biological explanation for women's higher rates have not been particularly successful. Recent reviews of the evidence of X linkage and for autosomal linkage with sex related liability thresholds conclude that neither hypothesis can account for the generally observed excess of female vulnerability to affective disorders.[12] Indeed, genetic factors are of negligible importance in most neurotic illnesses.[13] Although depression is known to be more frequent in the postpartum period the evidence that hormones have a causal role is, as yet, only circumstantial.[14-17] And contrary to widely held views the menopause has no effect on rates of depression.[18] Premenstrual tension and the use of oral contraceptives may, indeed, exercise an effect on depression rates, but this appears to be of small magnitude.[19] No study has yet succeeded in definitely correlating clinical mental states in men or women with concentrations of gonadal hormones.

Despite these generally negative findings the explanation that women are biologically vulnerable in some way dies hard. Yet the sex differences concerned may well have quite a different cause. Any discussions of the rates should take account of the samples of men and women being rarely homogeneous; they tend to differ in important social variables such as occupation, education, and income. There are obvious methodological advantages to be gained from studying a homogeneous sample, for if social variables are controlled or reduced and no sex difference in mood disorders is then found the possibility that remains is that those social factors account for the sex differences reported in other studies.

One of the few studies which attempted to do precisely this found a very much higher prevalence of anxiety, tension, and other mood disorders in women employed by the New York Telephone Company compared with men.[20] No account was given, however, of the sex differences of people's grades within the company hierarchy. Similarly, no account was given of the sex distribution within the two groups studied, but telephone operators were mostly women and the craftsmen mostly men. Thus the population was almost certainly not homogeneous for occupation or status. In addition, the residual population studied consisted of 90% of the men who had been continuously employed by the company over 20 years of follow up but only 10% of the women, presumably because most women married and left to raise a family. The sample of women studied contained, therefore, a disproportion of the single, widowed, and the divorced, who are often reported to have higher rates of illness than the married.[21]

Most studies of homogeneous populations have been of students, and in general they have failed to show sex differences in rates of depression. Parker reported a study of 242 students undertaking the one year postgraduate diploma of education at an Australian teachers' college.[22] The sexes were equally represented, and the response rate was high. No sex difference was found on the measures of depression, self esteem, duration of episodes, or frequency of depressive episodes. This study provided support for the findings of two others on comparable groups. S Golin and M A Hartz gave the Beck depression inventory to 446 college students and found that a quarter of both the men and the women scored as depressed (unpublished findings from the University of Pittsburg). Hammen and Padesky also gave the Beck inventory to 2272 college students enrolled at introductory psychology courses and found no sex differences in reporting depression.[23]

The need to seek and study homogeneous groups older than university students led Jenkins to select a sample of relatively homogeneous employed men and women drawn from a population of executive officers in the British Home Office.[24] The study made careful assessments using the general health questionnaire,[25] the clinical interview sche-

dule,[26] the social stress and supports interview,[27] and an assessment of various attitudes to work and of work satisfaction. No sex difference was found in the prevalence or outcome of minor psychiatric morbidity in such a homogeneous employed population. This finding supports the view that where sex differences in minor psychiatric morbidity are commonly found they are unlikely to be caused by constitutional differences but rather by differences in the social environment and social roles of men and women.

It could be argued, however, that this study was performed on a relatively childless population and that it is the experience of rearing children which exposes women's greater biological vulnerability to depression. Rosenfield studied the mental health of men and women rearing children and found that the men were more depressed than the women—not supporting the notion that rearing children exposes a greater biological vulnerability to depression in women than men.[28]

Social stresses and supports are implicated in the aetiology of minor psychiatric morbidity, but specific attempts to perform comparative studies between men and women are few. In general women seem not to experience more life events than men,[29] though women may experience more events of an undesirable nature than men by virtue of their lower socioeconomic state overall.[30] Women are also more exposed than men to low education, low income, low occupational status, and fewer leisure activities.[31] Women have less status and frequently earn less than men even when in comparable jobs.[32 33]

"Women are not healthy" wrote Emily Davies in 1866. "It is a rare thing to meet a lady of any age who does not suffer from headaches, languor, hysteria or some other ailment showing a want of stamina."[34] Miss Davies saw the answer to such invalidism in higher education, although many medical men of the time saw the root cause embedded in what they believed to be the remorseless biological demands placed by nature on womanhood.[35] Today, the argument continues.[24 36 37]

In view of the substantial genetic evidence that the excess of depression in women is environmental in origin rather than genetic; in view of the paucity of any direct endocrinological evidence linking mood change in men and women with gonadal hormones; in view of the evidence from homogeneous surveys that, when social variables are controlled and reduced, the sex difference disappears; and in the light of the nineteenth century experience, all claims that the excess of depression in women is explained by their reproductive biology—or indeed by their constitution in general —should be treated with grave caution.

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Massive bladder haemorrhage

Massive, recurrent bladder haemorrhage is a common complication of current treatments for cancer. It occurs in 10% of patients given irradiation for pelvic malignancy[1] and in up to 40% given cyclophosphamide,[2 3] where the bleeding may be further exacerbated by bone marrow depression. Similar massive bleeding may also be seen in patients with urothelial tumours, severe injuries of the bladder, or primary amyloidosis of the bladder.[4 5]

Recent reports have suggested that a simple, safe remedy for bleeding after irradiation may be alum solution as a bladder irrigation.[6-8] Alum works by precipitating protein on the mucosal surface and by strengthening intercellular bridges.[8] It is given by continuous bladder irrigation, is not absorbed, and has no systemic toxicity. The instillation is painless, does not damage the bladder mucosa, and controls bleeding effectively. Unfortunately, the same cannot be said of other agents which have been used for this distressing condition.

Five per cent to 10% formalin controls the bleeding in up to 80% of cases,[9 10] but it is absorbed systemically and so may cause toxicity and it may also cause severe mucosal damage. At least one death has been reported.[9] Formalin may also produce ureteric fibrosis as a result of the vesicoureteric reflux often present in patients with bladder disorders, but