

REVIEW

## Psychosomatic approaches to obstetrics, gynaecology and andrology – a review

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### Summary

This review aims to clarify the scope and clinical importance of psychosomatic approaches to obstetrics, gynaecology and andrology. This gradually expanding sub-specialty covers a wide domain of complex disease conditions that can be managed more effectively if the various biological, psychological and social aspects are recognised at the start and concurrent treatment initiated. The current need to practise biopsychosocial management of disease conditions is highlighted along with a description of what this would involve. The nine-field psychosomatic approach, which can be applied to everyday clinical encounters, has been illustrated. Clinical applications of the psychosomatic approach are discussed for various conditions including chronic pelvic pain, eating disorders, tokophobia, post-traumatic stress disorder, depression, menstrual disorders, infertility, bereavement and testicular cancer. Cultural considerations and the need for further research are also briefly discussed.

### Keywords

Psychosomatic obstetrics, psychosomatic gynaecology, psychosomatic andrology, biopsychosocial management

### Introduction

'Psychosomatic', as its etymology from the Greek suggests, refers to issues affecting both mind and body. Psychosomatic medicine considers the application of this concept to the understanding of disease processes, including their clinical evaluation. Such an approach entails that the management of diseases arising from mind–body interactions should include the assessment of biological, psychological and social aetiological factors (Bitzer 2007), and that treatment to address these issues should be tailored to the individual. This review aims to explain the importance of a psychosomatic approach in the conceptualisation of pertinent disease conditions and their management in obstetrics, gynaecology and andrology.

### Practising the psychosomatic approach – the overlap of specialties

There appears to be considerable misunderstanding about both the scope of psychosomatic obstetrics, gynaecology and andrology and who amongst health professionals should be concerned with it. This confusion has led to assumptions in certain quarters that psychosomatic interactions are mainly associated with issues such as 'hysteria', 'hypnosis' or 'the Oedipus complex', and that psychosomatic disorders should be managed exclusively by psychiatrists and psychologists. However, the actual scope of this

field is wide, with an overlap between specialties; though a multidisciplinary management of psychosomatic disorders from the outset has been suggested (Milburn et al. 1993; Newton and Chizawsky 2006), this seems impractical, given the current constraints in manpower and service provision in most health service settings. Obstetricians, gynaecologists and andrologists form a sizeable body of professionals who encounter patients with psychosomatic disorders in their daily practice and have to undertake their management independently, particularly where patients preferentially seek their advice or are specifically referred to them. Thus, combining a psychosomatic approach with their clinical expertise would aid considerably in the management of such disorders.

To elaborate further on the field covered by this approach, the reader is referred to the web pages of the British Society of Psychosomatic Obstetrics, Gynaecology and Andrology (BSPOGA). BSPOGA encourages 'a better understanding and improved management of the psychosocial, emotional and biological problems associated with pregnancy, birth and diseases of the reproductive organs in women and men, through education and training. This is relevant to the current needs of both the medical profession and the general public.' The psychosomatic domain encompasses normal and problematic aspects of:

- Pregnancy and childbirth
- Fertility, infertility and pregnancy loss

- Reproductive health issues which may give rise to psychosocial distress, such as menstrual problems, pelvic pain, vulval pain, sexual morbidity, paediatric gynaecology, contraception, menopause and tumours of the reproductive organs
- Communication and management related to specific problems e.g. obstetrical and gynaecological sequelae of assault, substance misuse and body image disorders
- Male specific conditions relevant to infertility, sexual health, benign and malignant conditions of the genital tract affecting the prostate, testes, etc.
- Associated mental conditions such as anxiety, post-traumatic stress disorder and depression

### **The current need for the psychosomatic approach**

The prevailing method of managing disease and conducting research is based on a biomedical model that targets organic causes of disease, but there is increasing recognition of the benefits of adapting a biopsychosocial model to clinical practice and research (Kleinman et al. 1978; Stanton et al. 2002). Moreover, globalisation with burgeoning uncertainties and increasingly hectic lifestyles, will impact on the health expectations of consumers and increase the demand for the more comprehensive approach incorporating psychosomatic thinking. This is relevant to the practice of obstetrics, gynaecology and andrology, where many physical disorders are exacerbated by psychosocial interactions, hence a biopsychosocial management of these disorders is being urged (Yolles 2001; Bitzer 2007). A psychosomatic approach to management can increase patient compliance (DiMatteo et al. 1994; Moore et al. 2004), reduce medico-legal complaints (Moore et al. 2000) and should prevent the over-utilisation of health care resources. Additionally, if medical investigators overlook the psychosocial aspect when applying the process of systematic exclusion in making a differential diagnosis for a condition with a biopsychosocial aetiology, efficient evaluation would be hampered.

### **Disease concepts, mind-body dualism and the shift towards the psychosomatic approach**

It has been understood since ancient times that when patients request help from a healer, it is usually because the unpleasant physical manifestations of disease have led to alterations in their behaviour and relationships, which they perceive as harmful. They express their discomfort both verbally and by physical aberrations; medical practitioners learn to identify disease from these cues in conjunction with ancillary biomedical investigations. Cure of a disease is said to have occurred when the physical and biomedical alterations, have returned to what is deemed normal. This method of judging cure by the clinician can be precisely applied to the specific treatment of certain clinical presentations, such as dysuria due to a microbial infection or intermenstrual bleeding due to a benign intrauterine polyp. Ideally however, it is when the patient perceives that he feels well enough to engage in routine activities, in addition to the medically confirmed physical cure, that he should be considered free of disease. This manner of thinking is incorporated into the psychosomatic approach to the evaluation of disease (Engel 1977).

During the 19th century, although William Smellie, the 'master of British Obstetrics' (Chamberlain 2007), wrote of the 'passions of the mind' associated with 'the lying in' (postpartum) period (Smellie 1852) and 'puerperal mania' was recognised (Smith 1856), management of these conditions was never built into maternity care strategies. In the first half of the 20th century, psychology was added to the concept of disease by Sigmund Freud with his psychodynamic and psychoanalytic applications, and by Adolf Meyer with his concept of psychobiology (Sadock and Sadock 2003). A few gynaecologists (Snaith and Ridley 1948; Jeffcoate 1969; Beard et al. 1977; Byrne 1984) followed in their wake, introducing psychology in the evaluation of gynaecological diseases. These gynaecologists had observed the close interaction of psychological and social factors in the pathogenesis of gynaecological complaints, but the clinical application of this perspective remained confined to their units; perhaps, the concomitant advances in biomedical technology that facilitated the assessment of the organic causes of disease marginalised the psychosocial aspects. This created a mind-body dualism in clinical management. Coinciding with the paradigm shift of the 1970s (Engel 1980; Capra 1986), consumers began voicing dissatisfaction with their medical care (AIMS 1992) and there were moves to address consumer concerns (Department of Health 1993). These moves agreed with the patient-centred approach advocated over the years (Balint 1969; Mead and Bower 2000) and are also consistent with the psychosomatic approach.

### **Understanding the clinical application of the psychosomatic approach**

In applying this approach, the psychological and social determinants of disease are considered simultaneously with the biological ones as factors which act by 'predisposing, precipitating and maintaining' the progression of the disease condition. This is referred to as a 'nine-field' assessment (see Table I), which in turn guides the choice of investigative tools and the relevant management (Bitzer 2007). When assessing a complaint, specific approaches (biopsychosocial history and examination) are used and the patient's perception and coping methods evaluated. The psychosomatic approach can be applied from the outset if the condition has already been categorised as a psychosomatic disorder, such as chronic pelvic pain or tokophobia, or where physical manifestations dictate complex or prolonged treatments that could precipitate a psychological condition, such as anxiety arising during the induction of puberty for primary amenorrhoea or during pregnancy following a stillbirth. Furthermore, the clinician may have to evaluate the development of co-morbidity and resistance to scheduled treatment of organic disease and consider whether the psychosocial perspective should be added because of a change in the patient's circumstances, such as withdrawal of partner support or redundancy. This would alter her perception of physical symptoms, making her depressed, for example, with symptoms of postnatal incontinence, or cause her to acquire psychosexual dysfunction when undergoing treatment for menorrhagia; even if the response to treatment of the presenting condition had been satisfactory previously. Apart from identification of the psychosomatic disorder, helping the patient cope with perceived distress and making timely inter-specialty referrals would be facilitated by considering

psychosomatic management options. The psychosomatic approach is not necessarily time consuming if routinely practiced; rather one learns the art of anticipating difficult consultations and judiciously apportioning more time to these.

### Clinical indications for a psychosomatic approach

Gynaecological and obstetrical manifestations that require a psychosomatic approach for their management are discussed below followed by a brief discussion of similar conditions in andrology. It is beyond the scope of this article to address all psychosomatic conditions, so I have selected conditions to highlight the diversity. They are of relevance to both the trainee and the experienced clinician, because in practice both have to make economically sound informed decisions; for example, it would be useful to be able to assess whether ovarian vein embolisation for chronic pelvic pain should be recommended, as its benefits far outweigh operant conditioning, or whether both treatments should be offered.

### Gynaecology and obstetrics

Applying the nine-field assessment is exemplified when discussing the first psychosomatic condition in detail.

#### *Conditions often referred to as psychosomatic or with psychological overlap*

There is an increased utilisation of health services by patients with psychosomatic disorders (Malmenström et al. 2006).

*Painful conditions. Pelvic pain*, expressed as lower abdominal pain, is one of the commonest complaints of women (Jeffcoate 1969; Samraj et al. 2005). Although discussed in the gynaecological literature for almost 150 years (Ferguson 1859), it remains an enigma (Mills 1978). It is said to be chronic when it lasts for 6 months or longer with a monthly prevalence rate of 21.5/1,000 and a monthly incidence of 1.58/1,000 (Zondervan et al. 1999). Chronic pelvic pain comprises 5% of new referrals to a general gynaecology clinic (Stones 2007). These patients are also seen by the gynaecologist as emergency admissions because of an acute exacerbation of the chronic condition. The local painful sensation can cause restriction of activities and sufferers repeatedly use health care resources with significant costs (Stones et al. 2005; Grace and Zondervan 2006). The presence of a demonstrable organic cause has

been reported as varying from 8% to 83% (Kresch et al. 1984; Levitan et al. 1985). Reported organic causes include endometriosis, adhesions, previous caesarean section and pelvic congestion, although the presence of these is not necessarily related to the pain (Castelnuovo-Tedesco and Krout 1970; Rapkin 1986). Laparoscopy has been used for diagnosis (Chamberlain 1978) and treatment, although its use as a front-line method of management is controversial (Nolan and Elkins 1993; Howard 1996; Stones 2007).

Chronic pelvic pain has been considered a psychogenic disease because no organic pathology is evident in many cases (Jeffcoate 1969), or the pain persists despite satisfactory treatment of an organic cause. Recognised psychosocial risk factors are sexual assault (Reiter and Gambone 1990; Collett et al. 1998), or physical assault (Rapkin et al. 1990; Schei 1991) and major depression (Walker et al. 1988); these can predispose, precipitate, maintain or aggravate the pain. It can also manifest as a defence mechanism to prevent spousal abuse (Haber and Roos 1985). Obtaining a comprehensive history with attention to sensitive issues (Mimoun 1988) is promoted in psychosomatic training.

In samples where psychosocial risk factors predominate and risky behaviour is more common, there is an increased risk of pelvic inflammatory disease with resulting adhesions, hence investigation of both organic and psychosocial causative factors should be instituted concomitantly. As chronic pain is a learned behaviour (Wood et al. 1990), chronic pelvic pain can persist even after a hysterectomy (Beard et al. 1984), causing frustration (Rapkin and Kames 1987; Kamm 1997) when treatment options get exhausted (Jeffcoate 1969), or depression (Richards 1973; Rohl et al. 2008). Again, the clinician's familiarity with the psychosomatic approach would facilitate communication (Fry et al. 1991; Alder et al. 2007) and help in selecting the appropriate treatment for any implicated organic and psychosocial causal factors, thereby discouraging prolonged poly-pharmacy and unnecessary use of medical care (Ries et al. 1981).

Other painful conditions, such as dysmenorrhoea and dyspareunia, sometimes co-exist with chronic pelvic pain (Zondervan et al. 2001) and can also be managed effectively using a psychosomatic approach. Psychosomatic management aims to restore normal function by giving the patient insight into her condition, reducing her anxiety or emotional distress and promoting muscular relaxation (Montenegro et al. 2008). Methods include operant conditioning, cognitive behaviour modification, biofeedback, hypnosis, acupuncture, small group therapy, counselling or prescribing antidepressants, as indicated (Ercolani et al. 1983; Stones et al. 2005).

Table I. Nine-field assessment of Mrs. SR's pelvic pain.

Factors	Biological	Psychological	Social
Predisposing	Premenstrual discomfort, dysmenorrhoea	Felt neglected, afraid as a child, low self-esteem	Parental abuse, average at school
Precipitating	Unprotected intercourse, pelvic infection, no control over fertility	Low mood, wanted to self-harm, suicidal, worrier	Covert violence in partners
Maintaining	Probable pelvic infection for several months, untreated	Lacking overall confidence, wanting to self-harm, anxious	Social/economic vulnerability

### *Psychosomatic approach to management in a British hospital*

When carrying out emergency hospital cover, the management of Mrs. SR, a 19-year-old British woman, with acute lower abdominal pain, was transferred to me. She had been given parenteral analgesia at admission, was on intravenous fluids and was fasted for a laparoscopic procedure. Initially she had agreed for the laparoscopy but voiced uncertainty as she awaited surgery. Surgical and medical causes of her pain had been ruled out and she was transferred to the gynaecology ward because of her long history of abdominal pain and vaginal discharge. Pelvic examination had been refused and an ultrasound imaging of the abdomen and pelvis appeared normal. Her previous medical records were unavailable and her brief medical history along with her attitude towards examination and treatment, prompted me to assess her further. I obtained a more comprehensive history using a psychosomatic, patient-centred approach. In brief, she had suffered from menstrual problems, felt low, had suffered physical abuse at home, leaving at 16 years, worked as a barmaid, had two relationships, and married someone she met whilst holidaying abroad. Her husband assaulted her frequently when under the influence of alcohol but she could not escape until he provided her funds to return to the UK to undergo a medical abortion. Her diagnostic work-up using the nine-field assessment is depicted in Table I.

She allowed me to carry out a pelvic examination with infection screening and decided against surgical intervention. Her pain and slight pyrexia subsided with antibiotics. A final psychosomatic diagnosis of pelvic infection with probable anxiety and depression was made. Support from the mental health and social services was discussed and her initial reluctance gave way to acceptance when she understood the need for additional care. At discharge a follow-up tailored to her diagnosis was arranged. A psychosomatic approach not only prevented unnecessary surgery but identified biological, psychological and social factors that could have maintained her pelvic pain, necessitating repeat hospital assessments unless addressed adequately. This form of management could have been facilitated if such an approach was part of the hospital's patient-care pathways.

*Eating disorders.* *Anorexia nervosa* is an eating disorder associated with obsessive weight loss and has been classified as a psychosomatic disorder. It is prevalent in 0.5% of young women with an age range from 8 years to the mid-30's (Bechtold 2001; Katz and Vollenhoven 2000). *Anorexia nervosa* is diagnosed when there is a refusal to maintain the minimal weight for height and age, intense fear of gaining weight even when significantly underweight, disturbed perception of body image and amenorrhoea for at least three menstrual cycles (American Psychiatric Association 2000a). There are two distinct types: the restricting type, where the weight is maintained by calorie restriction, and the bingeing/purging type, where there is excessive eating and purging with vomiting, use of laxatives, diuretics and enemas. The condition may be associated with changes in hypothalamo-pituitary-ovarian function. Presenting gynaecological complaints include primary and secondary amenorrhoea, irregular cycles, delayed puberty, infertility and sexual problems. It can be fatal, so assessment of physical risk is important (Morris and Twaddle 2007). A gradual increase in prevalence in

Western society has been attributed to the abundance of food (Katz and Vollenhoven 2000) and the present fashionable image of 'thinness' glamorised on the internet as, 'wannarexia' (Cohen 2007).

An original description of anorexia by Sir William Gull published in 1874, described it as a manifestation of 'under-nutrition' of 'central, not peripheral origin', probably alluding to the mind; leucotomy was practised for severe cases (Williams 1958). Risk factors which can precipitate and maintain the disease include stressful life situations, impulsive behaviour, substance abuse, depression, a troubled mother-daughter relationship and a family history of psychiatric disorders (Hsu and Crisp 1980; Bechtold 2001). Presentations include features of dehydration, dry skin with lanugo hair, bruising, signs of fatigue and congestive cardiac failure. Hospital admission for rehydration and nutritional supplementation followed by psychosocial support at home is sufficient for many anorexics. An assessment using a nine-field diagnostic work-up would help formulate an individualised management plan. Prolonged hospitalisation with intensive care may be indicated for the more severe cases. Infertility is common, so pregnancy is rarely associated. Exceptionally, it may be detected in an advanced state with pregnancy, when weight gain is extremely difficult (Grady-Weliky 2001). Moreover, these women are at a higher risk of miscarriage, low birth-weight, premature onset of labour and a higher perinatal mortality (Stewart 1992; Bulik et al. 1999), which in themselves merit close fetomaternal surveillance. Monitoring maternal and infant welfare until remission of anorexia occurs (Koubaa et al. 2005) would prevent adverse outcomes.

*Bulimia nervosa* is characterised by recurring cycles of overeating, followed by guilt, depression and anger (Katz and Vollenhoven 2000). It can also be of a purging or non-purging type. It may present to the gynaecologist as menstrual irregularities, body image problems, infertility and sexual problems (Abraham 1998). Compared with anorexia, its impact on pregnancy is less severe when maternal weight is usually normal, and the offspring heavier (Bulik et al. 1999; Grady-Weliky 2001) but features of hyperemesis gravidarum can develop. An increase in operative delivery (Lacey and Smith 1987; Grady-Weliky 2001) has been observed.

*Hyperemesis gravidarum*, defined as severe and protracted vomiting sufficient to cause fluid, electrolyte and nutritional disturbances along with weight loss, presenting during the first half of pregnancy (Nelson-Piercy 2002; Alalade et al. 2007), is reportedly prevalent in 0.03–1% (Grady-Weliky 2001). It has been associated with eating disorders (Lingam and McCluskey 1996; Grady-Weliky 2001), having similar psychosocial aetiology related to an immature personality with unresolved conflicts about pregnancy (McDonald 1968), decreased social support, anxiety and depression (Mazzotta et al. 2000; Köken et al. 2008). Other associations, such as a multiple or molar pregnancy and thyrotoxicosis (Jeffcoate and Bain 1985) must be excluded at the initial evaluation, because inadequate management can lead to metabolic derangements, coma and death. Perception of empathy in the clinician increases patient satisfaction (Munch and Schmitz 2006).

Treatment of these disorders includes symptomatic treatment of the physical manifestations and synchronised psychosomatic support, which may involve modification of

eating behaviour, individual psychotherapy or family therapy.

*Anxiety and mood disorders.* The remit of these disorders extends beyond psychology and psychiatry for they are not uncommon in women seeking advice from obstetricians and gynaecologists for physical complaints. They could go unrecognised with serious sequelae unless identified by biopsychosocial evaluation. Of the anxiety disorders, tokophobia and post-traumatic stress disorder are discussed here, whereas depression will typify the mood disorders.

*Anxiety disorders.* Tokophobia is an unreasonable fear of uterine contractions at childbirth (Hofberg and Brockington 2000). It is purportedly related to the woman's attitude towards childbearing, including false beliefs and her response to psychosexual adaptation during adolescence (Hofberg 2002). Tokophobia is considered as primary in nulliparae, or secondary to a bad experience of childbirth or depression. Precipitating factors include an unwanted pregnancy. She may have a fear of carrying an abnormal fetus (Szeverenyi et al. 1998). A need for repeated reassurances from health professionals, along with multiple somatic symptoms induced by fear, increases the use of hospital services. An elective caesarean delivery may be requested (Melender 2002; Di Renzo 2003), or epidural analgesia demanded at the onset of pre-labour contractions; fear can be reduced by psychotherapy (Sjögren 1998; Saisto et al. 1999).

*Post-traumatic stress disorder* is said to occur when one responds to a traumatic event by expressing fear, helplessness or horror (Brockington 1998; Yehuda 2002). Women are twice as more likely to develop this than men (Breslau et al. 1997). It manifests as re-experiencing the event, avoidance of reminders of the event and hyperarousal, occurring for at least a month (American Psychiatric Association 2000b). The lifetime risk for women of childbearing age is reported as being from 10.4% to 13.8% (Kessler et al. 1995; Loveland Cook et al. 2004) with a prevalence during pregnancy of 7.7% (Resnick et al. 1993); these may be underestimates as there is lack of recognition by health professionals and under-reporting by sufferers (Loveland Cook et al. 2004). Women may prefer to approach the primary care physician or the obstetrician, fearing stigmatisation if treated by a mental health team (Norris 1992; Samson et al. 1999).

Post-traumatic stress disorder can have variegated presentations, such as symptoms of miscarriage, ectopic pregnancy, dysmenorrhoea, pelvic pain, vulvodynia, sexual dysfunction or depression, thus eluding diagnosis if using a solely somatic approach (Lal 2006). Precipitating social factors include sexual assault, childhood or adult physical assault, or being threatened with death or serious injury. Depression during pregnancy (Maggioni et al. 2006) or an unhappy childbirth experience (Ayers and Pickering 2001), particularly an emergency caesarean (Wijma et al. 1997), can be associated. The sufferer may misuse drugs, especially nicotine and alcohol, with additional detrimental effects if pregnant. The risk of hyperemesis gravidarum and pre-term contractions is increased (Yehuda 2002). During labour the perception of pain is heightened and they may decline a pelvic examination and request a caesarean delivery (Ryding 1993). A non-traumatic 'redemptive'

birth experience following a traumatic one could be therapeutic (Reynolds 1997).

Treatments for anxiety disorders (Scheck et al. 1998; Bisson et al. 2007) include behavioural therapy, stress management, eye movement desensitisation and reprocessing (EMDR) and trauma-focused cognitive behaviour therapy. During labour, hypnosis may be helpful (Jenkins and Pritchard 1995).

*Mood disorders.* Depression can present during the premenstrual, peri-menopausal, ante and postnatal periods of women's lives, when emotional upheavals accompany corresponding hormonal changes. Non-recognition and under-treatment results in silent morbidity with substantial costs to the individual and society (Hirschfeld et al. 1997). An antenatal prevalence of 12–14% and a postnatal prevalence of 10–15% has been reported (Wisner and Wheeler 1994; Evans et al. 2001). The psychosomatic aetiology of depression includes a previous or family history of depression, stressful life events, poor marital relationships, generalised anxiety disorder and hypothyroidism (Kumar and Robson 1984; O'Hara et al. 1991; Oates 2008). Childbearing-related depression leading to suicide was the main contributor to the psychiatric causes of maternal death that have gained prominence in the 5th, 6th, and 7th confidential enquiries into maternal deaths (Lewis and Drife 2001; Lewis 2004; CEMACH 2007). These deaths could have been prevented by earlier recognition and adequate treatment of depression. The recognised ethnic differences in depressive symptomatology (Rickert et al. 2000) may have added to the communication problems that increased the risk of death (Ameh and van den Broek 2008), especially amongst ethnic minority groups. The continuing refinement of screening measures for identifying childbearing-related depression should address these issues (Cox and Holden 2003).

A self-report postnatal screening measure for depression, the Edinburgh Postnatal Depression Scale (EPDS), designed to be used in primary care (Cox et al. 1987), had a sensitivity of 86% and specificity of 78% at the recommended cut-off score of 12/13 for the sample studied. Although widely used, its limitations, including deliberate false negatives (Elliott 1994), cultural variations in self-reporting, inadequate responses or disagreement with the results (Whitton et al. 1996; Carter et al. 2005), suggest that scores should be interpreted cautiously. A lower predictive value when compared with health visitors' reports has been observed (Leverton and Elliott 2000). Moreover, if depressed mood is considered as a continuum from mild to severe, it is better represented by dysphoria (Green and Kafetsios 1997; Akiskal et al. 1997). The EPDS was not recommended as a stand-alone screening tool by the National Screening Committee; measuring disease by evaluating dysphoria as an alternative has been suggested (Elliott and Henshaw 2005), and this has been used in research settings (Campbell and Cohn 1991; Lal et al. 2008). In those identified by screening as being at higher risk of depression, further clinical evaluation using a diagnostic interview is advocated (NICE 2007). Depression is a recurrent disease; if inadequately treated it can cause both short- and long-term maternal morbidity, adverse effects on the child (Murray and Cooper 1996; Hay et al. 2001; Bonari et al. 2004) and depression in the partner (Ballard et al. 1994).

Where patient attitudes hamper open communication (Klitzman 2007), a psychosomatic approach would facilitate discussion and acceptance of early and on-going treatment. Intensive professional postnatal support, non-directive counselling, cognitive behavioural therapy or family therapy can be effective (Dennis 2005) but are not widely available (Bebbington et al. 1999). Pharmacotherapy is advisable for moderate to severe depression (Cohen et al. 2006; Oates 2008) but could be declined (Boath et al. 2004). Because obstetricians and gynaecologists commonly encounter depression, being trained in its management has been recommended (Schmidt et al. 1997; McKenzie-McHarg et al. 2007).

#### *Conditions not classified as psychosomatic but with psychosomatic overtones*

*Menstrual problems* are widely prevalent. These problems relate to perceived ill-health associated with what is considered as normal menstrual functioning by most women or where functioning lies outside normal parameters.

*Menarche* reportedly occurs at 12.8 years, although it ranges from 10 to 16.5 years (Garden and Topping 2001a), being influenced by race and body mass index (Kaplowitz et al. 2001). Abnormality is defined by early onset (precocious) at eight years, or delayed onset when menarche has not occurred by 17 years of age. As menarche heralds a female's ability to procreate and is associated with the development of secondary sexual characteristics, it holds great significance. Thus, any abnormality is worrying to the girl and her parents. These patients may be apprehensive when referred to the gynaecologist and need gentle handling during the history-taking, examination and investigations, which should preferably be non-invasive. If a constitutional delay is diagnosed and management merely consists of reassurance, less anxiety is generated. However, if endocrinological, chromosomal or structural anomalies are confirmed and complex hormonal or surgical treatments advised, the patient may experience feelings of denial, guilt and grief. There are implications for menstruation, sexual health, fertility and childbearing and patients may harbour feelings of anger and hostility towards the gynaecologist. Clear and empathetic communication can be enhanced using a psychosomatic approach, which would also benefit the gynaecologist by fostering skills to cope with hostility.

*Irregular menstrual cycles.* The gynaecologist may be approached if cycles are more frequent or longer than the average range of 23–39 days (Garden and Topping 2001b), if they are irregular, or if menstruation ceases altogether. Irregular cycles or amenorrhoea can present with polycystic ovarian disease which occurs in 5–10% of young adults (Lewy et al. 2001; Himelein and Thatcher 2006); it is sometimes associated with bulimia (Morgan et al. 2002) and more frequently with obesity. Accordingly, its prevalence has increased in the West along with the rising proportion of the overweight (Farshchi et al. 2007) and increasing obesity, which has risen in the past few years by 2.0- to 2.8-fold in the UK, and by 2.3- to 3.3-fold in the USA (Chinn and Rona 2001; Ebbeling et al. 2002). Associated psychosocial precipitating and maintaining factors (Hahn et al. 2005) need due attention.

*Menorrhagia, dysmenorrhoea and premenstrual syndrome.* Menorrhagia is a common gynaecological complaint.

Although suitable management strategies for dealing with organic causes exist, it may be helpful for the clinician to consider any aggravating psychosocial factors that could influence the patient's perception of symptoms. Treatment may be sought even if the objectively assessed menstrual loss is considered normal. Menstrual loss may be associated with dysmenorrhoea, bloating, low mood, irritability and other somatic symptoms which sometimes precede the flow and resolve after its onset. These premenstrual symptoms are often perceived as normal and dealt with as minor discomfort, but in some women they interfere with daily activities and cause distress (Hunter 2007), so gynaecological advice is sought. The gynaecologist classifies these symptoms as premenstrual syndrome and, if associated with overwhelming dysphoria, as premenstrual dysphoric disorder (Ismail et al. 2006), both of which need specific treatments (O'Brien 1993; Sadler et al. 2004). Premenstrual syndrome has been considered as a psychosomatic disorder possibly related to endocrinological and autonomic alterations (Matsumoto et al. 2006), but the aetiology remains nebulous and the management varied (Eriksson et al. 2002; RCOG 2007).

The gynaecologist usually treats the organic cause surgically and prescribes necessary medication. However, psychosocial factors which maintain the symptomatology need psychosomatic management, such as cognitive behavioural therapy, counselling or complementary therapy, to bring about lasting symptom relief or cure.

#### *Gynaecological co-morbidity requiring a psychosomatic approach*

A gynaecological diagnosis of certain conditions such as infertility, incontinence, cancer and menopausal symptoms, often reflects the interaction of physical and psychosocial ill-health. This is referred to as gynaecological co-morbidity (Malmenström et al. 2006) and is a recognised entity in psychosomatic gynaecology (Lal 2005; Bitzer and Tschudin 2008). Management of infertility and cancer using methods based on mind–body interaction has enhanced compliance and reduced stress, with improved outcomes (Domar et al. 1990). The psychosomatic aspect of infertility is described below.

*Infertility or Subfertility* can be defined as the inability to conceive despite regular unprotected intercourse for 1 year, or less where fecundity is lower, as with increasing age (Schover et al. 1994). Despite controversy about the usage and definition of 'infertility', the term is widely used (Taylor 2003; Penzias 2007). Sociocultural expectations strongly influence co-morbid angst with infertility; hence, treatment is sought. In many cultures the woman is held responsible for her inability to conceive, adding further to her guilt and suffering (Noorbala et al. 2007). Although assisted conception has variable outcomes it is the only hope for many couples, including those with unexplained infertility (Pandian et al. 2005), and sometimes leads to an irrational pursuit of conception (Pawson 2007).

Despite significant advances, such as the provision of pre-implantation genetic diagnosis to help couples with genetic disorders have normal babies (Zimon and Thornton 2007) or offering ovarian tissue transplantation to cancer survivors who are planning future families (Oktay et al. 2004; Yap and Davies 2007), the emotional and psychological effects of infertility and its management remain stressful (Andrews et al. 1991; Collins et al. 1992).

Stress can affect the woman's endocrinological milieu via the hypothalamo-pituitary-ovarian axis resulting in menstrual problems such as longer cycles (Hjollund et al. 1999) or amenorrhoea, including pseudocyesis (McDonald 1968). Nonetheless, there is controversy as to whether the psychogenic factor is the cause or the effect of infertility. This is complicated by the fact that reports on the assessment of distress have been based on self-report psychological questionnaires with the same limitations to accuracy as when applied elsewhere; patients' responses can be influenced by an intense need to appear as 'good patients' (Anderheim et al. 2005), so the results could underestimate their distress. Women undergoing assisted conception, such as IVF have high levels of stress, causing increased drop-out rates (Land et al. 1997; Smeenk et al. 2004). Pregnancy rates are increased after they undergo behavioural treatment (Domar et al. 1990), including stress management (Eugster and Vingerhoets 1999, Domar et al. 2000), suggesting that stress could be a contributory factor. Stress associated with infertility may cause sexual or marital conflicts (Andrews et al. 1991) and co-morbid anxiety or depression could manifest (Newton et al. 1990; Chen et al. 2004).

Perception of insensitive management and anger towards the attending professionals may aggravate communication problems. Patient-centred communication using a psychosomatic approach would facilitate doctor-patient interaction and assist in identifying couples' concerns. Counselling services are overstretched and a gynaecologist with psychosomatic awareness could defuse intense situations.

## Andrology

The discussions below reflect the scant attention given to psychosomatic aspects of andrology.

### *Eating disorders*

*Anorexia nervosa* in males is less common than in females although in the last decade, the prevalence has risen from 5% to 10% of all eating disorders (Katz and Vollenhoven 2000). In contrast to females, it has a later age of onset. It has strong links to psychiatric disorders such as depression and is associated with pre-morbid obesity and co-morbid substance abuse, along with sexual identity concerns and excessive exercising (Brinch et al. 1988; Katz and Vollenhoven 2000). *Obesity* in males is also a current health concern with potential psychosocial implications and can lead to hypogonadism during adolescence, necessitating hormonal manipulation (Castro-Magana 1984). Body-image, self-esteem and emotions would be affected, necessitating psychosomatic management.

### *Psychosomatic impact of failed pregnancy or partner's gynaecological treatment*

*Bereavement* occurs in fathers after stillbirth and neonatal death but possibly of a lesser severity than in mothers (Zeanah 1989). Depression and anxiety are common whereas post-traumatic stress disorder is rare (Turton et al. 2006). Fathers may experience shock, anger, emptiness and loneliness (Vance et al. 1995) along with marital discord (Clyman et al. 1980). Past stressful events or lack of social support may affect perception in vulnerable individuals (Zeanah et al. 1995). A psychosomatic approach would help in understanding the emotional

impact of bereavement on fathers and in the development of suitable support.

The impact of the treatment of one's partner is under-recognised, although it impacts on both emotional and social health, as discussed in a report regarding the psychosocial impact of the management of breast cancer on a husband whose wife was treated 17 years ago (Valerio Sáinz 2008). He could not get psychological support at the time, although he felt that 'the man suffers as much or more than his wife'. Ever since his wife survived a recurrence, he has experienced 'constant fear'. It is mentioned here merely to highlight the need for clinicians to understand the partner's requirements when dealing with gynaecological cancer, as mental support services for the male are underdeveloped.

### *Testicular tumour – biopsychosocial implications*

To illustrate management implications, the case of a 19-year-old student who presented with a painless testicular lump diagnosed as a seminoma is discussed here. He underwent a radical inguinal orchidectomy and adjunctive radiotherapy. He took leave of absence from his studies for 8 months and returned after a probable curative treatment.

His initial shock when informed of the diagnosis was followed by disbelief, anger, guilt and finally acceptance. He was concerned about its effect on his appearance, sexuality, fertility, relationships and desire to have a family. Facilities for freezing his sperm were not available locally. His self-esteem plummeted after the treatment and he was depressed. He felt that, although the surgical and radiotherapy procedures were explained, the relevant psychosocial issues were disregarded. These neglected issues, which were of great significance to him, could have been managed better had the clinicians been comfortable with discussing the emotional impact; psychosomatic training which promotes clinician-specific communication skills (Alder 2007) would have helped.

## Cultural sensitivity and the psychosomatic approach

The psychosomatic approach endorses the management of patients in a culturally sensitive manner, as patients relate to the culture to which they feel closest. In the West, 'depression' has replaced the previous term 'melancholia', whereas in parts of India depression refers to misery expressed by a 'painful heart' (Pilgrim and Bentall 1999). In some African languages one word covers both 'anger' and 'sadness'. Understanding the language and cultural practices of populations of interest can improve communication when managing disease and conducting research (Lal and Callender 2007), with potential economic benefits. An example of the practicality of this suggestion was demonstrated when using the EPDS in Uganda. The conceptual equivalence of this version of the EPDS could not be established despite translation into the local language, (Cox 1999) making such screening inappropriate.

## Research and the psychosomatic approach

Research on the psychosomatic aspects of obstetrics, gynaecology and andrology is limited. Most of the reported research is from Continental Europe, the Americas, Japan and Australia. The greater clinical use of the psychosomatic

approach in these countries when compared with Britain would encourage relevant research. Further research investigating the biological, psychological and social interactions in disease is needed to understand the clinical applications of the psychosomatic approach.

This article has attempted to elaborate on the diverse uses of the psychosomatic approach by giving a cross-section of its applications in various clinical conditions in psychosomatic obstetrics, gynaecology and andrology. Further reading is recommended.

### **Addendum: Promoting the psychosomatic approach by training in psychosomatic obstetrics, gynaecology and andrology**

Psychosomatic obstetrics and gynaecology has been a subspecialty of Obstetrics and Gynaecology in Continental Europe since the last century. Other than being introduced into the medical school curriculum, trainees have the option to specialise and practice using a psychosomatic approach. Structured training and teaching methods includes Balint-type discussions, role play and video case studies. There is a permanent representative of Psychosomatic Obstetrics and Gynaecology on the European Board and College of Obstetrics and Gynaecology (EBCOG). There are no opportunities for similar training and specialisation in Britain and this has implications for employment opportunities. The issue is under discussion as there are unmet needs for trainees. Trainees have voiced their interest at RCOG fairs and by phone-calls/e-mails to BSPOGA officers. Similar training in Andrology needs expansion.

**BSPOGA:** Learning and practising the psychosomatic approach is encouraged by BSPOGA, a multi-disciplinary society, which organises scientific meetings (open to all) and distributes relevant literature. The biopsychosocial health of health professionals is also promoted. Trainees with psychosomatic thinking or skills will respond in a more positive way to difficult patients and life's stresses.

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