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# Treatment of Sexual Dysfunctions by Sex Therapy and Other Approaches

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**Background.** The treatment of sexual dysfunctions underwent a great change when sex therapy was developed more than 25 years ago. Since then the treatment programme has been modified in various ways, the response to treatment evaluated and other treatment approaches introduced.
**Method.** A review of the literature concerning the application and outcome of sex therapy and other treatments for sexual dysfunction was conducted.
**Results.** The format of effective conjoint sex therapy is now fairly clear and there is good understanding of the sexual dysfunctions that respond best to this treatment and the couples most likely to benefit. Less is known about the effects of treatment of individuals without partners, bibliotherapy and combining sex therapy with marital therapy and with physical methods of treatment.
**Conclusions.** Sex therapy is now a well-established form of treatment. It should be more widely available for patients seen in psychiatry departments.

Masters & Johnson's book *Human Sexual Inadequacy* (1970) described a novel treatment approach for couples with sexual dysfunction, together with very impressive outcome data, and heralded the advent of 'sex therapy'. This approach is based on the notions that sexual dysfunction can have many causes, and that these can be tackled effectively with a treatment programme which combines education, homework assignments and counselling. Sex therapy was greeted with great enthusiasm on both sides of the Atlantic. Both clinical application and research investigations of the approach proliferated, although in retrospect it is clear that clinical enthusiasm for the approach far outstripped research evidence of its effectiveness.

The demand for help for sexual dysfunctions grew rapidly during the 1970s. In this country, sex therapy began to be offered in psychiatry and psychology departments, by family planning clinics and by the Marriage Guidance Council (now Relate). Developments in physical treatments, especially for erectile dysfunction, have recently drawn urologists into this field.

This paper includes a brief description of the nature of sexual dysfunctions and sex therapy, followed by an overview of the results of sex therapy for couples, including the effects of modifying the original Masters & Johnson approach and factors associated with outcome. The treatment of individuals without partners, group treatment, methods of augmenting sex therapy, 'bibliotherapy', new applications of sex therapy and physical treatments are reviewed, together with a summary of research findings for each approach.

## The nature of sexual dysfunctions and sex therapy

A reasonable, although not entirely satisfactory, definition of sexual dysfunction is the persistent impairment of the normal patterns of sexual interest or response. It is now customary to clarify sexual dysfunction into four categories according to the aspect of sexual function which is involved: disorders of sexual desire, disorders of arousal, difficulties concerning orgasm, and other problems which cannot be included in the first three categories. The ICD-10 (WHO, 1992) disorders are shown according to these categories in Table 1.

Table 1
Sexual dysfunctions according to ICD-10

| Aspect of sexuality affected | Men | Women |
|---|---|---|
| Sexual desire/interest | Lack or loss of sexual desire | |
| Sexual arousal | (Failure of genital response) | |
| | Erectile disorder | Sexual arousal disorder |
| Orgasm | Premature ejaculation<br>Inhibited orgasm | Orgasmic dysfunction |
| Other | Sexual aversion and lack of sexual enjoyment | |
| | | Vaginismus<br>Dyspareunia |

Modified from ICD-10, WHO (1992)

The problems of erectile dysfunction and female low sexual desire predominate among referrals to sexual dysfunction clinics. For example, a review of a series of couples referred to a sexual dysfunction clinic showed that, of those in which the male partners appeared to have the main problem, erectile dysfunction was identified in 63%, premature ejaculation in 16%, low sexual desire in 8% and retarded ejaculation in 6%; in the couples in which the female partners seemed to have the main problem, 61% had low sexual desire, 14% vaginismus, 11% dyspareunia and 9% orgasmic dysfunction (Catalan *et al*, 1990). In this study female arousal disorder was not recorded as a separate entity.

By no means all couples (or individuals) with sexual dysfunctions require, or are suitable for, intensive sex therapy. Brief counselling is often what is required, including education and advice, possibly combined with written material (see below). Factors affecting suitability for sex therapy are listed in Table 2.

In the 'standard' sex therapy practised these days, treatment usually includes presentation of a formulation of potential aetiological and maintaining factors, a graded programme of homework assignments, therapeutic work using cognitive and other strategies, and educational measures. General problems in a couple's relationship also often have to be addressed in the context of sex therapy.

Treatment is usually conducted by one therapist (see below), treatment sessions involve both partners and mostly occur weekly (see below), at least during the early phases of therapy. The programme lasts on average between eight and 20 sessions over a period of 3–9 months. While modifications and developments of this approach have been introduced, the core treatment strategies are usually maintained.

Table 2
Factors suggesting suitability for sex therapy

| | |
|---|---|
| (1) | The sexual problem has persisted for at least a few months |
| (2) | The problem is likely to be caused or maintained by psychological factors (even though physical factors may be relevant). |
| (3) | The problem is not secondary to general relationship difficulties. |
| (4) | The couple's general relationship is reasonably harmonious (sufficient for the partners to have a reasonable chance of working collaboratively on homework assignments and other aspects of treatment). |
| (5) | There is no current active major psychiatric disorder, nor serious alcohol or drug abuse. |
| (6) | The female partner is not pregnant. |
| (7) | The couple show reasonable motivation for treatment. |

Several detailed practical accounts of sex therapy are available (e.g. Hawton, 1985; Bancroft, 1989; Spence, 1991).

### Short-term outcome with sex therapy

In their 1970 book, Masters & Johnson reported their results of treating more than 500 couples and individuals without partners. Their overall initial 'failure rate' was 18.9%. Subsequent reports, however, described more modest results in both routine clinical practice (e.g. Bancroft & Coles, 1976; Hawton & Catalan, 1986) and controlled treatment studies, with overall improvement in about two-thirds of cases. Suggested explanations of this discrepancy between success rates include: the dubious method used by Masters & Johnson to report outcome (i.e. in terms of failures rather than successes); the uncertain nature of their outcome criteria; and biases in selection of patients.

There are marked differences in the response of the different sexual dysfunctions to sex therapy (e.g. Bancroft & Coles, 1976; Hawton & Catalan, 1986). An excellent response is obtained in nearly every case of vaginismus and a good outcome in a substantial majority of cases of erectile dysfunction of psychogenic origin. For treatment of lack of sexual desire, variable initial outcome results have been reported (e.g. Schover & LoPiccolo, 1982; Hawton & Catalan, 1986). The outcome is very often poor when the male partner has this problem. While Masters & Johnson (1970) claimed excellent outcome for the treatment of premature ejaculation, others have reported more modest results (e.g. Bancroft & Coles, 1976; Hawton & Catalan, 1986).

#### *Results of comparative and controlled studies*

Surprisingly few controlled outcome studies of sex therapy have included either waiting list or placebo control groups. However, one study in which changes in the sexual and general adjustment of couples who received treatment for a variety of sexual dysfunctions were compared with the changes which had occurred while they were on a 1–2 months' waiting list did demonstrate a clear beneficial impact of treatment (Heiman & LoPiccolo, 1983).

Unfortunately many comparative studies of sex therapy have had serious drawbacks (Bancroft *et al*, 1986). For example: most have included couples with different types of sexual dysfunction, without matching for type of dysfunction across treatment groups; treatment groups have usually not been matched for other important prognostic factors; some studies have used poor outcome criteria; and nearly all lack long-term outcome data.

The most sophisticated studies to date were conducted in the UK by Mathews *et al* (1976) and Dow (1983), in both of which sex therapy was compared with treatment by self-help instructions and very limited therapist contact. The study by Mathews and colleagues also included a third treatment condition, namely systematic desensitisation plus counselling. The results of both studies indicated more favourable outcome for couples who received sex therapy, although the differences in outcome between the groups were modest. Faults in the design of the studies, especially the inclusion of heterogeneous sexual dysfunctions, were likely to have resulted in an underestimation of true treatment differences.

### *The results of modifying the original treatment approach*

Several studies have evaluated modifications of the original Masters & Johnson approach, including daily treatment sessions with both partners and treatment by co-therapists (one of each gender). The results of comparative studies have shown that treatment less frequently than every day is likely to be more successful. In one study, twice-weekly treatment sessions resulted in better immediate outcome than daily treatment (Clement & Schmidt, 1983), and in another, weekly treatment sessions were more effective than daily sessions (Heiman & LoPiccolo, 1983). While one study (Carney *et al*, 1978) found little difference in outcome between weekly and monthly treatment sessions for couples in which the woman had 'sexual unresponsiveness', in another study women with a similar problem appeared to benefit more from weekly than from monthly treatment sessions (Mathews *et al*, 1983). Overall, there appears to be reasonable evidence in support of the now customary weekly treatment schedule (at least during the initial stages of therapy).

In all investigations which have addressed the question of whether sex therapy is more effective when provided by co-therapists or by single therapists, no major differences in outcome have been found (Mathews *et al*, 1976; Crowe *et al*, 1981; Clement & Schmidt, 1983; Mathews *et al*, 1983; LoPiccolo *et al*, 1985). While this might be explained by the small numbers of couples in such investigations, the absence of even trends between the effects of co-therapy and single therapy in several studies supports it. Thus in terms of both efficacy and economy of treatment it seems appropriate for therapists to work alone (although two therapists are useful for training purposes).

It is often asked whether the treatment outcome depends on the gender match between the therapist and the presenting partner. Two studies which have examined this question have found no evidence to suggest that the gender of the therapist makes any difference to outcome (Crowe *et al*, 1981; LoPiccolo *et al*, 1985). However, most clinicians believe that there are exceptions where, because of the nature of the sexual problem, one partner would benefit from being treated by a therapist of the same sex.

### *Factors associated with outcome of sex therapy*

Information has accumulated in recent years concerning prognostic factors for sex therapy for couples. This information is important not only in the selection of couples for treatment but also in the design of treatment studies, where it is desirable to match treatment groups for important prognostic variables (Bancroft *et al*, 1986).

The factors which have been identified as associated with the outcome of sex therapy in couples with a variety of sexual dysfunctions (e.g. Mathews *et al*, 1976; Whitehead & Mathews, 1977; Hawton & Catalan, 1986) are summarised in Table 3. A consistent finding is the importance of the quality of couples' general relationships. In a large series of couples Hawton & Catalan (1986) found that it was specifically the female partners' pre-treatment assessments of the relationship which were associated with outcome. This is obviously relevant to the assessment of couples before therapy. A further sex difference was that the male partners' apparent motivation for entering treatment was highly associated with outcome whereas that of the female partners was not. This finding, which is also relevant to assessment, could be interpreted either in terms of the model of sexuality embodied in sex therapy, or that the process of therapy itself is more acceptable to women than to men, so that the male partner's motivation is a major determinant of whether a couple is able to engage in and benefit from the therapy programme.

Table 3
Factors related to good prognosis in sex therapy

| |
|---|
| The quality of the couple's general relationship. |
| The motivation of the partners (especially of the male partner). |
| Psychiatric disorder in either partner (some studies). |
| Physical attraction between the partners. |
| Early compliance with the treatment programme (homework assignments). |

Specific factors are likely to affect the outcome of treatment of individual sexual dysfunctions. The success of treatment of disorders of female desire seems to be associated particularly with the couple's general relationship, interpersonal communication and attraction, sexual ease and confidence, and the male partner's motivation (Whitehead & Mathews, 1986; Hawton *et al*, 1991). In couples treated for erectile dysfunction, the outcome was associated with the female partner's pre-treatment sexual interest and enjoyment (Hawton *et al*, 1992). These findings and those of couples with female sexual dysfunction emphasise that therapy should focus on the needs of both partners. Specific difficulties may occur with couples of low socio-economic status (Hawton *et al*, 1992) and immigrant males (d'Ardenne, 1986).

### Long-term outcome of sex therapy

Masters & Johnson (1970) reported a 5.1% relapse rate 5 years after therapy for 313 couples who had shown a good immediate response to treatment. This result must, however, be treated with the same reservations as their end-of-treatment outcome data. Two follow-up studies were conducted in the 1980s, a postal study in America three years after treatment (de Amicis *et al*, 1985) and an interview study in the UK of couples 1–6 years (mean 3 years) following treatment (Hawton *et al*, 1986). Both were uncontrolled studies, but they produced remarkably consistent findings, indicating that the satisfactory short-term results of sex therapy for erectile dysfunction were reasonably well sustained in men in the longer term, whereas good immediate result for therapy for premature ejaculation persisted less often. Men with low sexual desire had a very poor long-term prognosis. The long-term results of treatment of female low sexual desire were often disappointing, whereas those for vaginismus were excellent. Couples in both the American and UK studies reported increased satisfaction with the sexual relationship at follow-up, and the UK study, in particular, showed evidence that the initial improved marital adjustment associated with sex therapy was largely sustained at follow-up. When relapses had occurred in the latter study, couples reported that communication between the partners about the problem, practising the techniques learned during sex therapy and an accepting attitude were helpful ways to deal with the difficulties.

### Treatment of individuals without partners

Many individuals seek help for sexual dysfunction without partners, either because they do not have one or because the partner does not wish to attend (Catalan *et al*, 1991). Sex therapy approaches for individuals have been developed (see Hawton, 1985; Cole & Gregoire, 1993) and some have been evaluated. These include self-exploration and masturbation training for women with orgasmic dysfunction (LoPiccolo & Lobitz, 1972) and masturbation training, education and exploration of attitudes for men with retarded ejaculation or erectile dysfunction (Zilbergeld, 1975; Cole & Gregoire, 1993). Masturbation training can also be used in treating men with premature ejaculation (Zeiss, 1978) and self-exploration and examination of attitudes in treating women with vaginismus (Hawton, 1985).

Clearly it is difficult to assess how effective these approaches are because their success must primarily be determined in terms of sexual behaviour with a partner. However, a relevant controlled treatment study was conducted by Whitehead *et al* (1987) with couples who presented because of "lack of sexual enjoyment or response in the female partner". Considerable improvements occurred in both those who received conjoint sex therapy and those who received individual therapy, although better results in terms of a decrease in the partners' anxiety in sexual situations were found with the conjoint treatment. The conjoint approach seems to be the treatment of choice for couples with this problem, but treatment of the female partner alone may be a reasonable alternative if both partners cannot attend. Evaluation of individual treatment of other sexual dysfunctions is still awaited.

### Treatment in groups

Group treatment of people with sexual dysfunctions was popular in the 1970s and early 1980s. It was first tried with women with orgasmic dysfunction and utilised the masturbation training programme of LoPiccolo & Lobitz (1972) plus the benefits of group interaction and support. Group treatments for men with erectile or ejaculatory difficulties were subsequently developed (Zilbergeld, 1975) and included social skills training and homework assignments concerning social interaction. There is evidence that both types of group treatment were reasonably effective (Leiblum & Ersner-Hershfield, 1977; Reynolds *et al*, 1981). Individuals of both sexes with sexual difficulties have been treated in the same groups. An uncontrolled study indicated that participants showed gains in sexual functioning and attitudes (Kayata & Szydlo, 1986).

Group treatment has also been used quite extensively to treat couples presenting with either the same sexual dysfunction or with mixed dysfunctions.

Group treatment of couples in which both partners had sexual dysfunction was found to be as effective as individual couple treatment, although there was a suggestion of more rapid early progress of the couples treated in a group (Golden *et al*, 1978). Similar outcomes were reported for group and individual couple treatment of couples in which the female partners had the main sexual problems (Duddle & Ingram, 1980). Unsurprisingly, however, group treatment is far less popular than individual couple treatment (Duddle & Ingram, 1980). Issues of confidentiality, the problems of attraction between partners of different couples and the difficulty therapists may have with couples' different rates of progress, must all further limit the usefulness of group treatment of couples.

### Bibliotherapy

There has long been interest in the extent to which couples or individuals could be helped by means of instruction manuals (an approach termed 'bibliotherapy') or other similar means (e.g. videotaped instructions). Obviously if this were reasonably effective it would save a great deal of therapists' time. There have been several well-controlled studies of bibliotherapy. The overall conclusion seems to be that it can be effective for some couples (Mathews *et al*, 1976), but probably only if they have no major general relationship difficulties (Dow, 1983). However, limited contact with the therapist, either by telephone or face to face, appears to be necessary for success in either couple or individual treatment (e.g. Zeiss, 1978; Trudel & Laurin, 1988). This, of course, raises questions about the efficacy of self-help manuals for sexual problems in people who do not actually seek professional help and who therefore do not have support and guidance while following a programme. Such manuals may be effective for people with minor difficulties.

### Sex therapy combined with marital therapy

In view of the importance for the outcome of sex therapy of general difficulties in relationship, a combined treatment approach for some couples might be more effective than either treatment alone. In a study of couples with mixed sexual dysfunctions who received sex therapy and marital therapy separately (in a group format) in a cross-over design, sex therapy appeared to help both sexual and marital adjustment whereas marital therapy only helped marital adjustment (Hartman & Daly, 1983). However, those couples with poorer general marital adjustment at the outset failed to show the differential benefits of sex therapy. Zimmer (1987) studied the effect of providing marital therapy prior to sex therapy for seriously distressed couples (two-thirds having considered separation) in which the women had secondary sexual dysfunctions (i.e. they had not previously had problems). An impressive effect of the combined marital and sex therapy was found when compared with sex therapy preceded by placebo treatment. In contrast to Hartman & Daly's finding, during the course of marital therapy considerable benefits were found in the couples' sexual adjustment, whereas sex therapy alone appeared to have less impact on general relationships. The difference between the findings of the two studies is presumably explained by differences in the degree of disharmony in the general relationship in the couples in the two studies, Zimmer having specifically studied very distressed couples. The results indicate that if couples seek help for sexual dysfunction and their general relationships are also disturbed, it is best to treat the general relationship difficulties first before they enter sex therapy.

## Other applications of sex therapy and further treatments for sexual dysfunction

### Sexual problems in victims of sexual abuse

Women who have suffered sexual abuse in childhood or adolescence often develop problems concerning sexual desire and arousal and may experience phobic or aversive reactions to sexual behaviour. A fairly comprehensive treatment programme is usually required for such women. Jehu (1988) has described one such programme which is based on cognitive behavioural principles and includes sex therapy for the women and their partners along with treatment for mood and interpersonal problems. As one might expect, individual or group therapy of the women alone often seems to be necessary before conjoint sex therapy can be introduced (Douglas *et al*, 1989).

### Sexual disorders associated with physical illness

Sexual dysfunctions are very common in people with physical illnesses (Schover & Jensen, 1988). Sex therapy, with its focus on communication and gradual rebuilding of a sexual relationship, is an attractive approach to such problems. It is surprising how little attention has been paid to its use in this context. Clinical experience indicates that the use of such therapeutic strategies can be helpful for problems precipitated or maintained by physical illness (Schover & Jensen, 1988).

### Sexual problems in alcohol abusers

Alcohol abuse often causes sexual problems in both sexes, but especially men, in whom erectile dysfunction, low sexual desire and ejaculatory problems are common and, as Fahrner (1987) found, frequently persist even after effective treatment for alcohol abuse. Fahrner has evaluated treatment of such men in groups where they received education, role-play in relation to social behaviour, and homework assignments, including masturbation training. At the end of treatment the men showed considerable improvements in sexual knowledge and attitudes, self-reported 'sociosexual behaviour' and sexual dysfunction, compared with a control group. Perhaps such treatment should be available as part of the overall treatment of severe alcohol abuse.

### Use of hormones

Hormonal treatments of sexual problems have received a great deal of attention. While there is convincing evidence of the benefits of testosterone therapy for men with erectile dysfunction due to proven hypogonadism, this does not seem to be helpful in men with psychogenic erectile problems (Davidson & Rosen, 1992). However, O'Carroll & Bancroft (1984) found that some men with low sexual drive but no evidence of hormonal abnormality were helped to some degree if they took a testosterone preparation. At one time there was a great deal of interest in the use of testosterone in the treatment of women with low sexual desire (Carney *et al*, 1978; Mathews *et al*, 1983; Dow & Gallagher, 1989). The upshot of these studies is that testosterone is ineffective unless used in doses likely to cause unacceptable androgenisation. However, in post-menopausal women with low sexual drive, especially those who have undergone a surgical menopause (oophorectomy), testosterone does have beneficial effects (Sherwin *et al*, 1985).

### Physical treatments for erectile dysfunction

Recent years have seen a considerable expansion in physical methods of treatment for erectile dysfunction. Most important among these are intracavernosal injections of vasoactive drugs, vacuum devices and yohimbine. Since this area of treatment was reviewed in depth recently (Gregoire, 1992) only brief mention will be made here. Intracavernosal injections are usually of papaverine, although some other drug such as prostaglandin $E_1$ may be used. They are mostly indicated in organic erectile dysfunction but are being used more and more to treat psychogenic cases, partly because of the ever-increasing demand for treatment of this problem and partly because urologists have increasingly taken on the treatment of men with erectile difficulties. Unfortunately there has been a virtual absence of controlled treatment studies.

Vacuum devices help produce erections by the creation of a vacuum in a plastic cylinder surrounding the penis using a pump, following which the device can be removed, a constriction ring then maintaining the erection.

Yohimbine, an oral $\alpha_2$-adrenoceptor antagonist, has been evaluated in the treatment of erectile dysfunction and found to produce benefit in a sizeable minority of cases, mostly psychogenic.

Such treatments should always include attention to the psychological needs of the patient, and especially of his partner. Failure to do so is likely to result in very poor outcome (Althof & Turner, 1992). Sex therapy can be combined usefully with physical treatment of men with either primarily psychogenic or organic erectile dysfunction, a combination of sex therapy and a vacuum device being perhaps the most effective (Althof & Turner, 1992).

## Conclusions

Sex therapy has become established, but changes in the types of problems being seen and in their complexity have meant that it is sometimes insufficient on its own and needs to be combined with other approaches (Zimmer, 1987; and see Leiblum & Rosen, 1988). There is still room for further evaluations of this type of treatment, particularly to identify people for whom it is most helpful and to assess its value in specific conditions such as sexual disorders related to physical illness. The recently introduced treatments for erectile dysfunction, especially intracavernosal injections of vasoactive drugs and vacuum devices, have undoubtedly broadened and improved the treatment of men with erectile dysfunction. There is however a considerable need for further investigation of the psychological aspects of such treatments, especially the extent to which attention to psychological and interpersonal factors may improve the outcome.

One further important aspect of the treatment of sexual dysfunction is the opportunity, or lack of it, for psychiatrists in training to develop skills in both the assessment and treatment of sexual difficulties. The skills can be taught effectively (e.g. Hawton, 1980) and can be useful in treating other psychiatric and psychological problems. Regrettably, very few psychiatric trainees appear to have opportunities for such training. This is an important deficiency in current training programmes which ought to be addressed.

This paper is also a chapter in a forthcoming Gaskell publication, *Clinical Topics in Psychotherapy* (ed. D. Tantam).

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