

Masters & Johnson – their unique contribution to sexology

MEMORY LANE

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SUMMARY

The scientific study of human sexuality is now accepted as mainstream practice but early researchers in the field often attracted considerable criticism. Masters and Johnson were pioneers in observing and describing normal sexual function and consequently they provided unique insights into helping to understand sexual dysfunction. Their contribution to describing the physiological process of sexual response alongside potential psychological factors resulting in and maintaining sexual dysfunction is widely acknowledged. Their work continues to influence contemporary sexual medicine and psychosexual therapeutic practice.

KEYWORDS

Medical gynaecology; sex therapy; in-patient treatment; out-patient treatment; sexologists.

provide authoritative accounts of the complete process of sexual activity. Local sex workers were used during the early part of the observations, who may have been more comfortable and experienced within sexual circumstances. Subsequently the studies progressed to the clinical environment, where typically White heterosexual married women were paired with a random male sex partner.

However, there are further limitations regarding the choice of volunteers. The requirement that patients had to be referred by someone in authority was reflected in many participants having a higher income and educational level, with over 70% having matriculated in a college or university. In the first five years of the subsequent treatment programme no patients were charged. In addition, physicians and clinical psychologists were allowed to self-refer: they constituted 17.5% of the total population of marital units and of these 48.4% involved at least one marital partner representing psychiatry (Masters 1970: p 356).

Reading the books again, one cannot fail to notice several of the limitations of sexologists of the time, including an apparent failure to recognise beyond the binary concept of men and women. The authors attempt to convey an openness and advancement at the time of their studies, citing the situation a half-century earlier when, for example, in the USA the non-orgasmic woman ‘was led (or under the pressure of propriety, forced) to believe that sexual responsivity was not really her privilege’ (Masters 1970: p 12). Without doubt, their observations and reports confirmed long-standing misconceptions that vaginal lubrication originated in the cervix and that orgasm response differed depending on whether it was consequent to vaginal or clitoral stimulation. The authors have been criticised for failing to accept the powerful influence of cultural factors on sexual stimulation and subsequent orgasmic response. This debate has been rehearsed and challenged several times since their work was published, but it remains generally held that orgasmic response is similar regardless of area of genital stimulation.

The four-stage sexual response model

Nearly 10 000 sexual acts were observed and formed the basis of the books. The identification

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Over half a century ago, William Masters, a medical gynaecologist, and Virginia Johnson, a research assistant, together published their first book, *Human Sexual Response* (1966). Their second, *Human Sexual Inadequacy*, appeared in 1970 and the couple married in 1971. Kinsey et al had described sexual behaviour in the human male in 1948 (and in the human female in 1953) but in their revolutionary research Masters & Johnson describe their direct observations of nearly 700 people either having sexual intercourse or masturbating (the latter could be manually or with the assistance of a device). Numerous physiological measures, including heart rate, breathing rate as well as lubrication, were recorded. Some of this detail had previously been published in medical journals earlier in the decade but had received relatively little attention or impact until the 1966 book was published (Levin 2008a).

Ethics, methods and contemporary understanding

The methodology and the ethical practice have been heavily criticised, and this is not just with the modern-day perspective on ethical practice. Regardless, the work was innovative and pioneering in their studies conducted between 1957 and 1965 and the texts

and classic description of the four-stage sexual response cycle of excitement, plateau, orgasm and resolution was announced. The refractory period is that time following an orgasm during which an individual is unable to experience another orgasm, and there is criticism of this descriptor by Levin (2008a). In his article he revisits the response cycle and critically reviews eight of the physiological aspects of the sexual arousal process from the original text. For example, a statement that the first physiological evidence of the human female response to any form of sexual stimulation is the production of vaginal lubrication (Masters 1970: p 69) is countered by subsequent research showing that recruitment of previously closed capillaries increases blood flow in the vagina microcirculation and that this is the first physiological evidence of female response to any form of sexual stimulation (Levin 2008b).

Another major criticism of this four-stage model was the failure to consider any psychological contributions to the sexual response. Several further models of sexual response, particularly the addition of a desire phase by Helen Kaplan in 1974 and subsequent circular models, are reviewed further by Wylie & Mimoun (2009), who describe how the linear models have evolved to incorporate a more sophisticated understanding of the complexity of female (and male) sexuality. This is important as the contemporary sexual response models can inform clinicians in better understanding how to help women and men with various sexual dysfunctions with more targeted interventions.

The therapeutic programme

Over recent decades the multiple contributory aetiologies have become much clearer. At the time of the studies the incidence of a physiological aetiology of 'sexual inadequacy' was reported as 'obviously very low' (Masters 1970: p 57), but they were correct in stating that there is never any excuse for treating physiological dysfunction as a psychological inadequacy and so on day 3 a full medical history, physical examination and laboratory evaluation would be conducted.

This was followed by a round-table discussion where both partners and the co-therapists would review the findings. Effectively, this was after 7 hours of history taking from the first couple of days as well as the medical evaluations on day 3. This would be considered excessive by many clinicians today, although a thorough assessment is still crucial and is often conducted alongside educational interventions at a much earlier stage of the consultation. The original round-table session would continue, and it is noted that it was 'often to the relief

of both partners, the co-therapist's summary of the causes and effects of the sexual dysfunction constitute a reinforcement and clarification of their own previously agreed-upon interpretations' (Masters 1970: p 68).

A ground-breaking clinical approach that Masters & Johnson named sensate focus would then commence. This replaced the typical approach up to that time of psychoanalysis or longer-term psychotherapy with one therapist, and sensate focus remains the central focus of work for many sex therapists. Sensate focus tasks and exercises 'prescribed' by modern day sex therapists are undertaken at home, unlike those at the programme undertaken in the 'privacy of their living quarters' (Masters 1970: p 71), and has probably been most influential for the many modifications to the sex therapy schedule that have continued to evolve in this post-modern era.

The role of the co-therapist team

In describing the role of therapists, some concepts noted by Masters & Johnson remain important today, particularly 'their most important role in reversal of sexual dysfunction is that of catalyst to communication' (Masters 1970: p 14). At the time of writing the books, foundation policy was to ensure representatives of the biological and behavioural disciplines in the teams of co-therapists. One member was a qualified physician and the other co-therapist was from the behavioural disciplines. The authors believed this provided an invaluable clinical balance to each team, with the latter contributing psychosocial consciousness of the distress of the marital units who were complaining of sexual inadequacy (Masters 1970: p 16).

Modern sex therapy has shifted from co-therapists except in training programmes and where a systemic approach is required for the more intransigent clinical scenarios. There is no evidence of improved results from use of co-therapists, and it is demanding on limited specialist resources. Another major difference from therapy today is that space was allowed for change to occur. In the original programme the two therapists would meet with the 'marital unit partners' daily for the 2 weeks of the intensive educational programme. The isolation from the demands of their everyday world and being treated as if they were guests was seen as contributory to the improvements reported. The subject of sex was exposed to daily consideration, with encouragement of attempts at sexual stimulation. Interestingly, another specific advantage cited was that 'if the distressed unit waits a matter of days after mistakes are made before consulting authority, the fears engendered by their specific episode of inadequacy or

"mistake" in performance increase daily in almost geometric progression'(Masters 1970: p 19).

Effectiveness of the early treatment programmes and conversion therapy

The reported effectiveness of the initial treatments is somewhat more favourable than that observed in modern-day therapy. One interesting example was the initial failure rate of just 2.2% for men with 'premature ejaculation', which the authors describe as a sexual dysfunction that should and could be brought fully under control in our culture within the following decade. It was suggested that this was on the proviso that staff establish an effective postgraduate training programme to provide such a result. Neither sex therapy nor pharmacological interventions have been able to demonstrate such effectiveness. The overall initial failure rate was reported as 18.9% (Masters 1970: pp 358–362).

When the authors report the results of 5-year follow-up, they are more upbeat, noting very few recurrences of problems except for 'secondary impotence'(Masters 1970: p 356). With the introduction of sildenafil and similar agents alongside more individualised therapy interventions, outcome nowadays is much improved. Likewise, pejorative terms such as premature, impotence, frigidity and superficial (dyspareunia) are now becoming less familiar in clinical practice and in the new ICD-11 classification system.

The sexual practices of gay and lesbian individuals were studied much later by Masters & Johnson in a programme running between 1968 and 1977. There has been vociferous criticism about how they reported that conversion therapy was undertaken with this group of volunteers – reporting a 71.6% success rate (Masters 1979) – a practice that is now universally condemned and outlawed by professional organisations.

Masters & Johnson's legacy

Notwithstanding the criticisms, it is without doubt that the work of Masters & Johnson was pivotal in helping to understand sexual response in a natural and healthy manner and helped greatly to bring about changes through education and sex therapy to improve the sexual lives of many. Physicians, educators, sex therapists and patients have benefited from their courageous albeit often decried observations and interventions. The books remain valuable and important reading for the practising psychosexual and couples therapist and for those in training. In recognition of their lifelong career excellence in the field, the World Association for Sexual Health awarded both a Gold Medal in 2005.

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Declaration of interest

None.

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