The pill and women’s sexuality

Sexual side effects have been neglected for far too long

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Oral contraceptives remain the most popular contraceptive method in the UK, particularly among younger women.1 Yet discontinuation rates are high, and side effects are one of the main reasons why women discontinue the pill.2 Research has focused on side effects such as breakthrough bleeding and breast tenderness.3 Although an association between pill use and impaired sexual functioning has been considered since the pill was first introduced,3 4 remarkably little research has investigated this possible link.

Why have possible pill related adverse sexual effects in women been neglected? Sexual side effects have been deemed “extremely difficult to assess” and described in the literature as “trivial” or a “nuisance.”5 The lack of attention might also reflect a sex bias. Sexuality related side effects have been high on the agenda of research into the development of a hormonal male contraceptive.3 As early as in 1982, the World Health Organization funded a six country study on acceptability of new male contraceptives that evaluated more than 20 aspects of male sexuality.6

Evidence

The evidence on oral contraceptives and sexual function derives from three types of studies: cross sectional comparisons of pill users and non-users, prospective studies assessing women starting to take oral contraceptives, and placebo controlled studies of women not using the pill for fertility control—for example, women who have been sterilised. Most studies are cross sectional and do not account for the survivor effect: women who experience adverse sexual changes after starting oral contraception are likely to have selected themselves out by discontinuing the pill. We also know that women using the pill as a contraceptive method differ from non-users in sexual attitudes and experience.7

Many prospective studies have included only superficial assessment of sexuality and of pre-pill characteristics that might be relevant predictors of sexual side effects. In one study that carefully assessed baseline characteristics of women that might be associated with discontinuation, only one (number of previous methods used) was associated with women stopping oral contraceptives; two of the strongest predictors of discontinuation were decreased sexual thoughts and reduced “arousability.”8

Only a handful of placebo controlled, double blind trials have been carried out. One placebo controlled comparison of combined oral contraceptives and progestogen-only oral contraceptives done in Scotland and the Philippines found negative effects of the combined pill on sexual interest in the Scottish women, about half of whom reported reduced sexual interest.9 In the Philippines, levels of sexual interest were not statistically significantly reduced, possibly because the women had much lower levels before starting the pill compared with the Scottish women. This finding highlights the need to consider the sexual culture and context of pill use.

Variable experiences

One of the most consistent findings has been the variability in women’s experiences, with some women showing improved sexual function after starting oral contraceptives and others showing adverse changes or no changes. We do not understand the mechanisms underlying negative effects when they occur, although speculation has focused on reduced concentrations of free testosterone induced by the pill. Only one study, however, systematically assessed sexual functioning in women starting on the pill and examined the relation between changes in testosterone and sexual side effects.10 This found that reduced frequency of sexual thoughts and sexual arousal was related to the drop in testosterone after starting the pill; however, crucially, many women who showed substantial reductions in testosterone did not show any impairment in sexual function. It could be that a minority of women are more sensitive to testosterone’s behavioural effects, but to date we have no marker of testosterone sensitivity in women.

Six decades on from the introduction of the pill, fundamental questions about its effects on women’s sexual function remain unanswered. How many women stop using the pill because of adverse effects on their sexuality? What distinguishes women who experience reduced sexual interest and enjoyment on oral contraceptives from those who do not? Are certain types of formulations less likely to be associated with negative effects? Although recent studies have compared sexual functioning in women using formulations containing different hormone doses or types of progestogen, the findings have been inconsistent.3 11

Clinically, it is important that providers discuss potential sexual side effects with their patients and also ensure that women are aware of the various formulations available, as some women may be less affected by a different pill.3 The effects of oral contraceptives on women’s sexuality are undoubtedly complex and involve psychosocial, relational, and cultural factors as well as hormonal influences. It will not be easy to establish whether, how, and in whom the pill produces adverse sexual effects; carefully planned, adequately funded research is needed. But as the ultimate value of a contraceptive method depends on its acceptability and usage, it is important that it is done.

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