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Framing sexual health research: adopting a broader perspective



The results of the third British National Survey of Sexual Attitudes and Lifestyles (Natsal-3), in *The Lancet*, provide extensive data from a large, representative population sample collected with the aim of better understanding sexual lifestyles and improving sexual health.¹⁻⁶ Major advances in research on sexuality and sexual lifestyles have been made in the past 25 years. When the first large-scale surveys of sexual behaviour were undertaken in the 1980s—the impetus provided by the emergence of the HIV epidemic—they were politically controversial in the UK and elsewhere.⁷ Since then, sexual behaviour has been surveyed worldwide;⁸ sampling strategies, question standardisation, and computer-assisted methods of data collection have improved data quality, and biological measures, such as prevalence of sexually transmitted infections (STI) and hormonal status, have been added to behavioural measures.⁹

These studies have documented the extraordinary changes in sexual behaviour that have occurred in the latter half of the 20th century, characterised, at least in wealthier nations, by a fall in age at first intercourse, increasing numbers of lifetime sexual partners, and changes in patterns of partnership formation and childbearing. Natsal-1 charted not only generational changes in sexual behaviour, but also changes in HIV risk behaviour during the 1980s. Natsal-2 captured the resurgence in risk characterised by increasing numbers of sexual partners, increasing proportions of men paying for sex, and increases in risk behaviour among men who have sex with men since 1990 as treatments for HIV became available and the widespread fear of AIDS in the 1980s diminished.¹⁰

Just as sexual behaviour is shaped by its social and historical context, so too is research in this specialty. The aims and content of Natsal and other sexual behaviour studies have evolved as the lens through which we view sexual health has changed. Natsal-3 used WHO's definition of sexual health to frame the design, analysis, and interpretation of the study; this approach views sexual health as not merely the absence of disease but recognises the importance of having pleasurable and safe sexual experiences that are free of coercion, discrimination, and violence.¹¹ This comprehensive formulation avoids framing

sexual health exclusively in terms of the prevention of adverse sexual health outcomes, and widens the remit to include enhancement of the quality of sexual experience and relationships. Despite being widely cited, however, this definition of sexual health has yet to be incorporated into public health practice. Unplanned pregnancy, HIV, and STIs have to date been the staple endpoints of interventions to improve sexual health, whereas sexual violence has received attention only recently and sexual wellbeing and satisfaction are rarely considered.

The case for adopting a more holistic approach to sexual health has generally been made on the grounds of the benefits for control and prevention of STIs, HIV, and unplanned pregnancy.^{12,13} Evidence that lends support to such claims is growing. For example, studies have reported associations between sexual violence against women and risk factors for acquisition of HIV and STIs^{14,15} and unplanned pregnancy.¹⁶ Mechanisms to explain these associations are both direct (forced sex is likely to be unprotected)¹⁴ and indirect (repeated abuse might lead to a reduced sense of self-worth and acceptance of high risk practices). And the links are bidirectional: sexual violence might lead to increased risk of unintended pregnancy and STIs, and disclosure of unintended pregnancy or infection to an intimate partner might trigger abuse.¹⁶

There has been limited research on the relation between the quality of sexual experience and risk of

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See [Editorial](#) page 1757

See [World Report](#) page 1770

See [Profile](#) page 1773

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unplanned pregnancy and STIs. What evidence there is shows that goals relating to sexual satisfaction shape both risk taking and the adoption of risk-reduction practices, including use of condoms and choice of contraceptive method and whether it is continued.¹⁷⁻¹⁹ Calls to incorporate pleasure into sexual health programmes have cited evidence of the increased effectiveness of interventions which do so.¹² The logic is simple. People have sex for various reasons, but mostly because it is pleasurable, and interventions that safeguard pleasure are more likely to work than those that do not.

The benefits in terms of infection and fertility control that result from improving the quality of sexual relationships could be regarded as justification enough for adopting a broader approach to sexual health. But the argument for including sexual wellbeing in a concept of sexual health is not merely that it can be harnessed to goals for the prevention of HIV, STIs, and unplanned pregnancy. Improving the quality of sexual experience and relationships is important in its own right.

Positive sexual experience is good for us. Regular sexual activity contributes to health²⁰⁻²² and quality of life. Men and women who enjoy an active sex life are fitter, have lower rates of depressive symptoms, and improved cardiovascular health as compared with those who do not,²³ although the causal directions of these associations are not always clear. By contrast, negative sexual experience is bad for us. The physical and psychological pain that results from acts of non-consensual sex, the effects on self-esteem of exploitative sex, and the effects on mental health of sexual dysfunction are considerable. Sexual violence is linked to a raft of negative health outcomes that can last a lifetime. The link between sexual satisfaction and the stability of relationships is well documented,^{24,25} and has health and social consequences—the implications of divorce and separation are of profound public health significance.

A life course approach is another important part of a broader perspective on sexual health. A narrow conceptualisation of sexual health excludes the sexual health needs of large subgroups of the population. The sexual health of young people is under constant scrutiny, but the emphasis is usually on preventing unintended pregnancy and STIs. Yet the research

reported in Natsal-3⁶ and elsewhere shows that unwanted sex is most likely to occur at an early age, and that sexual problems are not exclusive to older people, but affect young people too.⁴

The sexual expression of older people has, until recently, been a neglected issue. The incidence of STIs and adverse reproductive health events is lower in older people than in younger people. Although the advent of pharmacological treatments has stimulated research in this area, its predominantly biomedical perspective has perpetuated the view that sex is problematic in later life. Sexual activity in later life is also neglected in the policy arena. Sexual health is not included in policy documents concerned with the health of older people,^{26,27} whilst older people are paid scant attention in policy relating to sexual health.^{28,29} As men and women live longer, new stages of the later life course are emerging when sexual activity beyond the reproductive years remains important, and valued. Additionally, chronic health conditions and treatments for them might affect both sexual activity and satisfaction in older people, but this is seldom addressed in public or clinical discourse.

Why is there such resistance to a broader approach to sexual health? One reason could be that a focus on adverse biomedical outcomes is more comfortable for practitioners and less controversial for policy makers. Clinicians and researchers alike find it easier to ask about matters that relate to safer sex than to raise sensitive issues of pleasure, power, and exploitation. The same is true of those who provide sex education. Pleasure rarely features in sex education curricula,³⁰ and when it has, it has provoked outrage or derision.³¹ Teaching young people how to achieve sexual enjoyment is unacceptable in most cultures. Instead, curricula typically focus on reproductive maturation and conception.

Locating sex within the context of procreation might be easier to deal with, but sexual activity is not primarily, or even necessarily, about reproduction. Sex is more often recreational and communicational than procreational, and is increasingly recognised as such. In a growing number of contexts globally, the separation of sexual activity from reproduction is well under way as contraception, abortion, and assisted reproduction have weakened the natural link. Sexual behaviours that are not essential to conception have become easier to

discuss and have gained greater acceptance; they include masturbation, oral and anal sex, same-sex practices, and sex in groups among whom reproduction may not be possible or might have conventionally been deemed inappropriate. In many cultural contexts, what was once seen as deviance or perversion is increasingly referred to as diversity.

Public health research and practice has to adapt to these changes. Building sexual lifestyles and the quality of sexual experience and relationships into the overall framework of human wellbeing across the life course is an essential first step. Without this framework a vicious cycle is set up such that data on the interactions between sexual experience and health and wellbeing are not available to inform and guide policy agendas, and without the demand for data dictated by policy, research on the broader aspects of sexuality is neither commissioned nor undertaken. Sexual violence, pleasure, and satisfaction should be routinely incorporated in sexual health datasets, as both explanatory variables and outcomes in studies of sexual behaviour, and as endpoints in trials of the effectiveness of sexual health interventions.

The HIV/AIDS epidemic was pivotal in stimulating and legitimising research into sexual health, but also constrained its scope to quantification of key drivers of transmission. The 21st century has begun with a new set of public health challenges. Sex has been described as the new lifestyle discovery, and new forces are shaping sexuality. The ubiquity of the internet as a source of sexual contacts and communication, the growth of sex tourism, and increased access to pornography are setting new expectations of sexual conduct. Moreover, media representations of sexual expression are helping to create new and sometimes unhelpful norms. An important, but generally unrecognised, function of sexual behaviour research is to correct myths and misinformation, and to counter unhelpful and unrealistic expectations by revealing normative ranges of behaviour.

Inevitably, even in the 6 years since preparations for Natsal-3 began, new influences on sexuality have emerged that will need to be addressed the next time Natsal is undertaken. But, 25 years on from the first Natsal feasibility study, we have moved a long way from the political ban that nearly prevented the first survey, to a position in which sexual lifestyles are increasingly

recognised as a mainstream and legitimate focus of public health policy, practice, and research.

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Statins: new American guidelines for prevention of cardiovascular disease

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Guidelines released on Nov 13, 2013, by the American Heart Association (AHA) and the American College of Cardiology (ACC) for the management of cholesterol are a major step in the right direction.¹ These new guidelines emphasise prevention of stroke as well as heart disease, focus appropriately on statin therapy rather than alternative unproven therapeutic agents, and recognise that more intensive treatment is superior to less intensive treatment for many patients. Furthermore, the new ACC/AHA guidelines show that for individuals in whom statin therapy is clearly indicated (such as those with previous vascular disease or LDL cholesterol ≥ 4.9 mmol/L [190 mg/dL]) the benefits on heart attack, stroke, and cardiovascular death significantly outweigh the risks for developing diabetes or myopathy. Moreover, by eliminating emphasis on LDL treatment targets and the need to measure concentrations of creatine kinase during follow-up, the new guidelines greatly simplify care for the general medicine community. These changes are substantial and will improve patient care.

It is in the realm of primary prevention that the new guidelines are likely to be more controversial. The ACC/AHA guidelines use a newly developed risk prediction algorithm based on "hard" atherosclerotic events² to recommend initiation of statin therapy in primary prevention patients with a predicted 10-year risk of greater than or equal to 7.5%, and consideration of statin therapy in patients with 10-year risks of between 5% and 7.5%. In patients with type 1 or

type 2 diabetes, the threshold of greater than or equal to 7.5% is used to select between high-intensity and moderate-intensity statin regimens, defined as daily regimens that reduce LDL cholesterol by more than 50% or between 30% and 50%. As described in the guidelines, these new criteria could result in more than 45 million middle-aged Americans who do not have cardiovascular disease being recommended for consideration of statin therapy (33 090 000 at $\geq 7.5\%$ 10-year risk; 12 766 000 at > 5.0 – 7.4% 10-year risk); this is about one in every three American adults, many of whom are already on statin treatment under the older US guidelines.

It is reasonable to ask if any global risk prediction score is needed in 2013 to allocate statin therapy in primary prevention. Between 1995 and 2008, six major primary prevention trials, which included more than 55 000 men and women, showed statins to be effective in primary prevention for the reduction of myocardial infarction and stroke among those with raised LDL cholesterol (WOSCOPS, MEGA),^{3,4} reduced HDL cholesterol (AFCAPS/TexCAPS),⁵ raised concentrations of C-reactive protein (JUPITER),⁶ diabetes (CARDS),⁷ or hypertension (ASCOT-LLA).⁸ Thus, trial-based guidelines that rely on randomised experiments rather than estimates from epidemiological models could instead be used to write statin guidelines.⁹

No trial of statin therapy has ever used a global risk prediction score as an enrolment criterion, so basing