

CLASSIC PAPERS

SEX, STATISTICS AND STEREOTYPES

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The development of the science of epidemiology in the 18th and 19th centuries led to a greater understanding of the causes of disease related to the physical environment; unsafe water, poor sanitation and industrial pollution were identified amongst many other factors. During the 20th century, it was a logical progression for the same epidemiological principles to be applied to the social sciences, as researchers sought to quantify patterns of human behaviour and to examine the effect of lifestyle choices on health. The post-Second World War period saw a number of such studies which were to have far-reaching implications, including Doll and Bradford Hill's seminal work on smoking and lung cancer [1].

However the publication in 1948 of the study by Kinsey et al into sexual behaviour patterns in American men [2] caused something of a stir in both popular and scientific circles. Although there had been earlier publications on human sexuality, most of these had been aimed at a professional readership rather than at a wider audience. Indeed, in an attempt to limit their accessibility, some had been published in Latin [3] although it is said that this did not prevent them from achieving best-seller status. Kinsey's publication (and its successor dealing with female sexual behaviour [4]) marked the beginning of a new era of openness. In the years that followed, a succession of sexually explicit scientific publications was to follow, but in time even the most detailed of these lost their impact on a society in which sexual references and imagery had become commonplace. The publication of the results of the second (2000) UK National Survey of Sexual Attitudes and Lifestyles (NATSAL) [5] warranted only a brief mention in the media [6] despite presenting figures showing that early sexual experience, multiple partners and use of commercial sex workers were common in the UK.

In his paper, Neild describes the current (early 1950s) Army policy for prevention of sexually transmitted diseases (STD, now more commonly known as sexually transmitted infections (STI)), based on education and the encouragement of abstinence, the latter to be encouraged by concentration on physical fitness, military duties and hobbies in order to "sublimate" the natural sexual instinct. He rightly quotes Kinsey's scepticism that such a policy could be effective. Nearly a century earlier, Edmund Parkes, the first Professor of Military Hygiene, had advocated similar measures: *"As aids to continence, great physical and mental exertion are most powerful. It would seem that, during great exercise, the nervous energy is expended in that way, and erotic thoughts and propensities are less prominent; so also with mental exercise, in perhaps a less degree. The establishment of athletic sports, gymnasia, and comfortable reading rooms in the army, may be expected to have some influence."* [7] The modern literature suggests that the still widely-held belief that energetic exercise can reduce the desire for sexual activity does not stand up well to scientific scrutiny. Several studies in athletes, who may be considered representative of those who undertake strenuous

physical activity, have shown that they are no less likely to indulge in sexual activity than non-athletes, particularly for males [8], and may indeed be more likely to take risks [9].

Neild quotes Kinsey's observations in respect of military personnel and perceptively notes that *"Professionally trained officers . . . are inclined to blame all of the sexual activities which enlisted men have upon the organization [sic] of the armed forces themselves"*, before making a plea for a better understanding of *"the origins of the sexual patterns of men in uniform"*. His comment that behavioural patterns are likely to already be established by age 16 (quoting Kinsey) is highly consistent with the modern NATSAL finding that the average age at first intercourse is now 16 for both males and females, implying that most will have already established a pattern of sexual behaviour before joining the military.

Perhaps the aspect of the paper which most distinguishes this paper from a modern work on sexual behaviour however is its emphasis on the alleged differences between the social classes. This continues a pattern which can also be seen in Parkes' writings, but which had almost completely disappeared from Western social studies by the end of the 20th century.

Ultimately though, Neild's paper disappoints. Although he makes a valiant attempt to summarise Kinsey's lengthy book, and introduces some of the sociological issues associated with human sexual behaviour and its implications for the military, he does not provide firm proposals for the "sociological approach" to the "prevention of venereal disease" which the title promises, but merely recommends that a reappraisal of current policy should take place in the light of this new report. However this lack of firm direction must be seen in the context of the period at which it was published, and the author's courage in opening debate on what was then a highly controversial topic is to be commended. It is interesting that, more than half a century after the paper's publication, the belief that the Army can and indeed has a moral obligation to influence the sexual behaviour of its members still persists strongly.

About the Author

Frederic Guy NEILD was born on 1 January 1917 in Shanghai. He was educated at Shrewsbury School [10] and qualified in medicine at St Thomas's Hospital, London in 1940 and was commissioned on a wartime emergency commission on 3 Jan 1941. He served in India from 1941 to 1946, principally as RMO to 153 Gurkha Parachute Battalion. In 1952 he was awarded the Parkes Prize. He obtained the Diploma in Public Health in 1953 and, the following year, the Diploma in Industrial Health. In the years that followed he saw service in Cyprus and West Africa, where he commanded the BMH at Kaduna, Nigeria. In 1963 he was appointed Assistant Professor of Army Health at the Royal Army Medical College, Millbank, and was promoted to Colonel the following year [11]. He returned to Cyprus in 1966 as Chief Medical Officer HQ UNFICYP. He finished his service as Chief Instructor at the Army School of Health, finally retiring from the Army in 1972. He died on 7 August 1999 at the age of 82.

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The Prevention Of Venereal Disease: A Sociological Approach

J R Army Med Corps.

Major F. G. NEILD, M.R.C.S., D.P.H., D.I.H.

In the review [1] on the "Report on the Health of the Army, 1949-1950," the resistance to any marked decline in the incidence of venereal disease was noted. It was pointed out that during the last half-century the incidence dropped steeply to World War I—incidentally concomitantly with that of alcoholism—and that although, since then, there have been some marked fluctuations, the level has not appreciably altered. "Do we know all the factors involved?" asks your reviewer, and without, perhaps, answering the question, does at least suggest a study of Kinsey. It is therefore to review this evidence that this paper has been written.

The present Army preventive policy [2] is based essentially on an educational one supported by two main premises and on partially optional preventive methods. The first main premise is that in any large group of men there are three sub-groups: (a) Those accustomed to promiscuity, (b) those with little interest in sex, and (c) a much larger group who, although given to much free talk among themselves, have little real experience of matters of sex. The second is that continence is the only sure method of preventing venereal disease infection and that the suppression of the natural sexual instinct is possible without injury to health, and that sublimation can be obtained by concentration on games, general physical fitness, military duties and obligations, literature, hobbies and so on. Yet in spite of this teaching, the incidence in certain theatres* remains obstinately high, and in fact has always reflected the surrounding civil-one. A few years ago it would not have been possible to question these premises, as normal standards of sexual behaviour were not known, but today we have available the report of the Kinsey investigation [3].

Much that is sensational has been written regarding the Kinsey report: that the men investigated were gross extroverts, that the samples were biased and that, anyway, it did not apply to any other country; but that is not the conclusion of considered opinion. Swyer [4] writes: "So valuable is the factual content of these works, that the attempt to summarize their main conclusions has been made. Their universal validity is, of course, out of the question; the sexual mores of different communities vary widely, and it is not, therefore, to be supposed that the behaviour of North Americans is necessarily closely reflected by those of other countries. On the other hand, there are good reasons for supposing that the major tendencies revealed in this study have many applications outside the United States. Some of the statistical results have proved so startling—even to the author—that the extreme care taken to ensure their validity deserves emphasis; indeed, the first 156 pages of the 730-odd pages of text are devoted to this question, and the means necessary to obtain maximum accuracy. Recent critical

scrutiny has given little reason to doubt the correctness of the main conclusions reached."

So let Kinsey [5] speak. He first considers the total sexual outlet for the human male under six heads, those of masturbation, nocturnal emissions, heterosexual petting, heterosexual relations, homosexual relations, and unnatural relations. He finds [6] that the maximum total outlet occurs in the teens when the average figure for the U.S. population is almost exactly 3.4 per week. This rate is reached between adolescence and 20 years of age. He [7] writes that the fact that the unmarried male still manages to find an outlet of 3.4 per week demonstrates the failure of the attempt to impose complete abstinence upon him. The sources of this outlet must be a matter of bewilderment to those who have supposed that most males remained continent until marriage. Nocturnal emissions do not provide any considerable portion of the total outlet, in spite of the fact that many persons have wished that to be the case. Masturbation is a more frequent outlet among the upper social level males where, during the last two or three decades, it has been allowed as a not too immoral substitute for pre-marital relations; but most of the less-educated 85 per cent. of the population (*i.e.*, those not going to college) still consider masturbation neither moral nor normal. For the mass of unmarried boys; nearly three-quarters of the U.S. population [8], heterosexual relations still provide the main outlet. This means that the majority of the males in the sexually most potentially active period of their lives have to accept clandestine or illegal outlets, or to become involved in psychological conflicts in attempting to adjust to reduced outlets. With the data now available, biologists, psychologists, physicians, psychiatrists and sociologists should be enabled to make better analyses of the problem which has heretofore been imposed on this unmarried male in his middle and late teens, and in his twenties. On the attached table [9] will be seen the figures for the incidence of some of the different outlets taken by the various social and educational levels in males of the age groups 16-26.

Kinsey finds [10] that the total incidence of these outlets for the younger generation is almost identical with that of the older, except that in pre-marital relations there has been a transference from prostitutes to companions and that a larger number of the younger generation is involved at an earlier age in such activities as masturbation, nocturnal emission and petting. He feels that this is largely attributable to the fact that the younger generation of the lower social level is becoming adolescent a year or so sooner due to the all-round improvement in health due to better standards of sanitation, medical care and nutrition.

Kinsey [11] finds that each social level is convinced that its pattern is the best of all patterns; but each level rationalizes its behaviour in its own way. The upper level rationalizes on the basis of what is right or wrong. For this group, all socio-sexual behaviour

* "Report on the Health of the Army, 1951-52" gives the incidence of venereal disease for Korea and Japan as 387 and 262 per 1,000 for the years 1951 and 1952 respectively.

becomes a moral issue. Morality and sexual morality became more or less synonymous terms. Many persons at this level believe that there are few types of immorality which are more enormous than sexual immorality. Proper, straight, upright, honourable, clean, fine, wholesome, manly, and pure refer primarily to abstinence from socio-sexual relations. Their opposites refer to participation in non-marital relations. Honour, fidelity and success in marriage are understood to involve the complete absorption of the individual's sexual urge in relations with his wife. There is nothing of which persons at this level are more afraid than a charge of immorality, as immorality is defined by the group. There is no disgrace that is more feared than that which may result from sexual scandal. Sex is so clearly a moral issue that many persons in the group consider it a religious obligation to impose their code upon all other segments of the population. Lower social levels, on the contrary, rationalize their patterns of sexual behaviour on the basis of what is natural or unnatural. Pre-marital relations are natural, and they are, in consequence, acceptable. Masturbation is not natural, nor is petting as a substitute for heterosexual relations, nor even as a preliminary.

He writes [12] that officers in the armed forces are faced with problems of dealing with persons of diverse social levels who are brought together into a single closely knit community. Since most of the community have not gone beyond the tenth grade in school, most of the men in the armed forces have lower level patterns of behaviour. Some of the officers come out of the ranks and comprehend these patterns. Professionally trained officers who are products of West Point or Annapolis, or some other special school, are more likely to come from better educated levels. Some of the incongruities between the rules of the armed forces and the administration of these rules are products of these differences in the backgrounds of officers and enlisted men. During times of peace, the better educated segments of the population are sufficiently isolated to be unaware of the sexual patterns in the mass of the population. In times of war, when these upper level groups are suddenly thrown into close contact with these other levels, they are startled to discover the realities of sexual behaviour. They are inclined to blame all of the sexual activities which enlisted men have upon the organization of the armed forces themselves. The specific data we have indicate that very few of the men in the armed forces are as active sexually as they would have been at home in times of peace, but the upper level, especially the older generation, is unaware of this. Considerable pressure, in consequence, is brought upon military officials to establish and enforce rules, and upon Congress to enact laws which are designed to force all of the heterogeneous group which constitutes a draft army into an upper level pattern of sexual behaviour. The demand is fortified by an emphasis upon the danger of venereal disease; but it is certain that many of the persons who discuss disease are more concerned over the morals of the men for whom the Government has suddenly become responsible. Such an issue could be grasped more intelligently if more people understood the origins of the sexual patterns of the men in uniform.

There is not even evidence [13] that patterns of sexual behaviour are materially altered among men in the armed forces during a period of war. Precise calculation will have to come later, but the available data now indicate that it is a small portion of the men who go into the armed forces who materially modify their pattern of behaviour after they leave home. The data are conclusive that such patterns in the case of the male are largely established by the age of 16, and no sort of circumstance, however catastrophic, materially alters them for more than a very few persons in their later years. It is true that many a man has had his first experience in heterosexual relations after he got into the armed forces; but most of these men would have begun their relations at about that age if they had stayed at home. The men who have the most relations after getting into the armed forces are, for the most part, the men who would

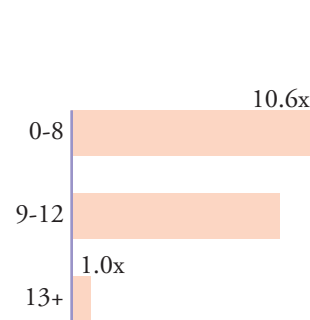
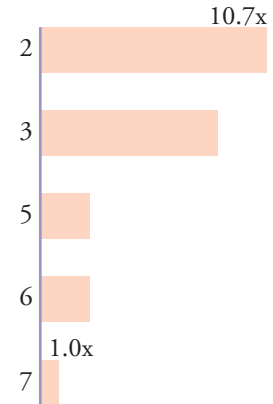
Educational Level**Occupational Class**

Table 1. Total Pre-Marital Relations

For single males of age group 16-20 relative lengths of bar compare mean frequencies for the group. Note similarity of data based on educational levels and data based on occupational classes.

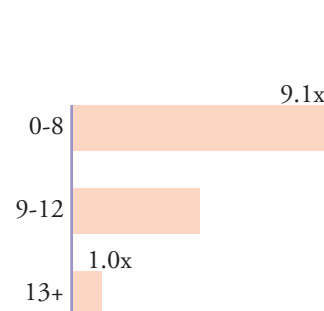
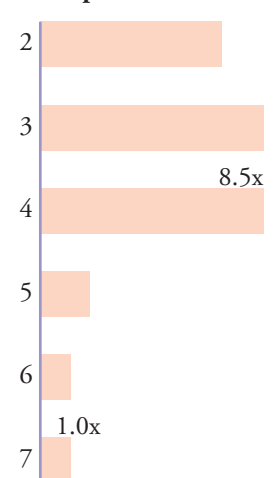
Educational Level**Occupational Class**

Table 2. Pre-Marital Relations With Prostitutes

For single males of age group 16-20 relative lengths of bar compare mean frequencies for the group. Note similarity of data based on educational levels and data based on occupational classes.

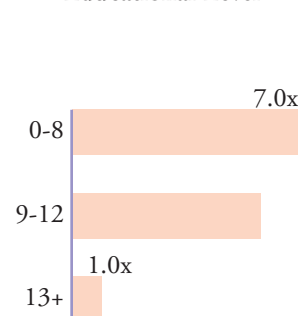
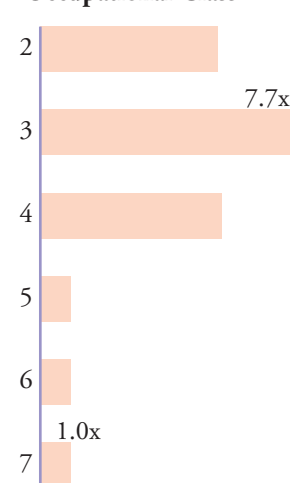
Educational Level**Occupational Class**

Table 3. Total Extra-Marital Relations

For married males of age group 21-25 relative lengths of bar compare mean frequencies for the groups. Note similarity of data based on educational levels and data based on occupational classes.

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Notes

The three American *Educational Levels* represent those of grade and high school and college. They are very roughly the equivalent of the British standards of Primary, Secondary, and University education.

The American *Occupational Classes* are:

0. Dependents.
1. Underworld.
2. Day labour.
3. Semi-skilled labour.
4. Skilled labour.
5. Lower white collar group.
6. Upper white collar group.
7. Professional group.
8. Business executive group.
9. Extremely wealthy group.

On the other hand, the Registrar General only recognizes five classes, of which the highest (1) is the professional group.

have had the most if they had stayed at home. The men who find most of their war-time relations with prostitutes are the men who would have found most of their experience with them at home and the men who avoid prostitutes in the armed forces avoid them for the same reasons that they would have avoided them at home.

As for sublimation [14], Kinsey states that if, from the list of low-rating males, one removes those who are physically incapacitated, natively low in sexual drive, sexually unawakened in their younger years, separated from their normal sources of sexual stimulation, or timid and upset by their suppressions, there are simply no cases which remain as clear-cut examples of sublimation. Whether there is partial sublimation among individuals with higher rates of outlet, it would be much harder to determine. Certain it is that among the many males who have contributed to the present sample, sublimation is so subtle or so rare as to constitute an academic possibility rather than a demonstrated actuality. In view of the widespread and easy acceptance of the theory and the efforts that such a large proportion of the population has made to achieve this goal, one might have expected better evidence of its existence, at least among the sexually least active 5 per cent. of the males in the population.

Although Kinsey is not specifically concerned with the prevention of venereal disease, he does write [15] this: "The meaning of the pre-marital relations will vary with its relation to venereal disease. At the college level, nearly all of the relations are had with a condom. Most of the pre-marital relations are had with girls of the same level. Consequently the incidence of venereal disease acquired by these persons is exceedingly low. On the other hand, the incidence of venereal disease resulting from pre-marital relations at the lower social levels, where condoms are not often used, is as high as and probably higher than is ordinarily indicated in the social hygiene literature."

Now it is necessary to attempt to evaluate these findings in relation to the United Kingdom in the absence of any similar comparable statistical investigation. However, a recent work by Lavers and Seebom Rowntree [16], the eminent Quaker philanthropist and sociologist, provides interesting confirmatory data. They start their book with a selection from 900 social case histories which they had personally obtained. Although they emphasize that the selection of these case histories was as random as they could make it, they do stress that they are not sufficient to base any accurate statistical significance. However, for what that is worth, the over-all sexual pattern that emerges is not dissimilar from that presented by Kinsey. In addition, many figures are quoted to give the factual background to English life and leisure. Among the many various figures given are to be found those for alcohol and tobacco consumption per head of population, the incidence of cinema- and church-going and also the number of

prostitutes in London, 10,000, of whom 2,000 are estimated in the West End. They suggest that if each prostitute has on an average twenty-five male contacts a week, that would require a total of a quarter of a million male contacts during the same period. They note that in 1939 one bride in every six was pregnant on her wedding day, and we also learn from the C.M.O. [17] to the Ministry of Health that one child in every twenty-one born is illegitimate.

These figures make all one's preconceived ideas topsy-turvy and leave one both flustered and bewildered. Perhaps it is best, in order to look forward clearly, to go back and study first the pattern in the old agrarian society. In it, Alva Myrdal [18] states: "Pre-marital relations may or may not have been exceptional. But there was, however, a structuralized system of mores controlling the meeting and mating of the young within which sexual experimentation could occur. The preliminaries to marriage were fairly well adjusted to that type of society. Youth could be given great relative freedom in playful mating experimentation in this stable society. Such experimentation could be tolerated because it was always 'safe,' meaning that, if relations were involved and if a pregnancy occurred, the male partner was practically always known and marriage followed. In the course of social development industrialization set in. Its effects did not come primarily through a shift in mores but through increased mobility. The breaking up of the stationary life of the village or of the community of the homesteads deprived the existent organization for mating and marrying of one of its primary sanctions. Relations within courtship now involved risks. The migrant labourers, and foremost among them the navvies, the industrial workers, and the commercial travellers, did not have the same respect for local girls as the local men, implying either abstinence from relations or if relations, finally marriage. And the girls did not have at their disposal the impact of the whole society to force men into marriage if relations resulted in issue. Even in the cases where the men could be reached, parents would not look on them with satisfaction unless they possessed land."

Now, perhaps, it is easier to understand the rationale of the strict principles of morality of the last century, and why, as is well known, *pari passu*, a large degree of clandestine prostitution was required to flourish. If, therefore, Kinsey's premises that the total sexual outlet varies little in regard to time or in regard to change in mores, and that the adult pattern is largely fixed in the late teens are accepted, is it not time that, in accordance with these facts, current policy in regard to the prevention of venereal disease should be freshly appraised?

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