SESSION I. Changing patterns of sexual behaviour

Patterns of sexual behaviour in relation to venereal disease

K. EKSTRØM

Copenhagen, Denmark

This study concerns a series of 302 patients, 202 girls and 100 boys aged 14 to 19 years, infected with gonorrhoea who were reported to the City Medical Officer in Copenhagen. These young people are compared from the social and psychological points of view with available normal material from the Institute for Research in Copenhagen and from Hertoft’s studies of the sexual behaviour of 18 to 19-year-old youths in Denmark (Hertoft, 1968, 1969, 1970).

As the series includes both girls and boys, the sexual knowledge, behaviour, and standards of the two sexes are compared, such background variables as age, domicile, and social conditions being almost identical in the two sexes.

Special groups included in the series are prostitutes, homosexuals, sailors, young people from broken homes, and young people brought up in institutions. These groups have been studied particularly to discover how they differ from other young people infected with gonorrhoea.

Education and social conditions
The infected girls and boys had left school at the age of 14 years, i.e. after 7 years’ schooling, more often than those not infected. More girls than boys stayed at school for 8 years, which is in accordance with the findings in the population as a whole; fewer than in the normal population passed a school-leaving examination, and fewer received some kind of professional education.

More than the normal proportion of these young people infected with gonorrhoea came from the lower social classes, i.e. their fathers had passed no school examinations, had no professional education, and earned a low income.

Half the fathers of teenagers infected with gonorrhoea were unskilled workers, whereas only one quarter of the fathers of non-infected teenagers were unskilled.

When the number of family constellations was examined, it was found that one-third of non-infected teenagers compared with two-thirds of the teenagers with gonorrhoea had two or more constellations; thus they have led a vagrant life, and this is reflected in a more frequent change of school and place of work. Young people infected with gonorrhoea more often come from broken homes, and 60 per cent. of the boys and 67 per cent. of the girls have experienced one or more breaks in the family constellation; at the time of the investigation only a third were living with their real parents.

More than a quarter of the boys and about a third of the girls have at some time been placed in an institution. In the case of the boys this was most frequently due to maladjustment or criminal conduct, and in the case of girls to promiscuity or prostitution.

The teenagers with gonorrhoea therefore follow the ordinary sociological pattern of the Danish population, but at a lower level.

In this way the poor background of the parents is transmitted to their children, who in their turn have begun to pass on this poor social inheritance to their children. The clientèle of the venereological clinics will come in 10 to 15 years’ time from these children, provided the basic conditions of life are not changed.

Information about sexual subjects and prevention of venereal disease
In the uninfected population of Copenhagen two-thirds of the young people have received some sex information at school. The same proportion of young people infected with gonorrhoea stated that they had received sex information at school, but had been less frequently able to discuss such subjects as pre-marital relations, contraceptives, and induced abortion with their parents.

Hertoft (1968, 1969, 1970) found that, if there had been frankness about sexual subjects at home, there was also generally a deeper trust between adults and children. From this it may be concluded that contact between the infected teenagers and their parents had been poor, and this was confirmed by their own statements during the interviews.

Answers to questions concerning measures to be taken to avoid contracting gonorrhoea in the future showed a great difference between the sexes. Almost all the boys infected heterosexually mentioned the condom and other measures, whereas half the girls had no idea what to do. About half the boys had been to sea and they were well informed on the subject of anti-venereal methods, some of them highly unorthodox and of doubtful efficacy.

The use of the condom is four times less frequent among the boys infected with gonorrhoea than among
those not infected, but this is not due to lack of information and knowledge, a circumstance which might well make one sceptical about the effectiveness of ordinary 'information campaigns'. In these infected youngsters we must concentrate on a specially effective and extensive programme of education, and it has been one of the purposes of this study to find out what this group of teenagers needs.

As far as the girls are concerned, about one-fifth had used a pessary, and 12 per cent. nearly always used one. This is the same proportion as that found in girls who were not infected with gonorrhoea.

Age at first menstruation

The average age at the first menstruation has fallen by one year every 30 years for the past century. Girls in poor social circumstances begin to menstruate later than those in a better environment. In the present series one would therefore have expected to find a later age at menarche, but this did not prove to be the case. The infected teenagers were exactly the same in this respect as other Copenhagen school girls.

If the mean age at first coitus is worked out in relation to the age at the menarche, it is found that the earlier the menarche, the earlier the girls have their first coitus.

The average age at the menarche is lower in this sexually active group than might be expected, and as there seems to be a connexion between early menarche and early first coitus, it might appear that young people infected with gonorrhoea are biologically more mature and have their first coitus at an earlier age.

Danish society is very permissive concerning sexual relations, premarital sexual relationships being widely accepted, and these findings may support the hypothesis that biological conditions are an important factor in a permissive society.

It is recognized that in the lower social classes the young people's sexual activity is more precocious, but our findings indicate that biological factors also play a part.

Age at first coitus

The average age was 15 years for the girls and 14.8 years for the boys.

Statistical comparisons have been made with Hertof's finding in young men in Copenhagen; these show that 18- to 19-year-old boys infected with gonorrhoea have more often begun their sexual activity before reaching the age of 17 than uninfected boys of the same age (significance level 1 : 1,000).

This age at first coitus is the earliest mean age in any series so far published.

The girls start a little later than the boys, but the mean age at the first infection in girls is lower than in boys; in other words, the interval between first coitus and first infection is shorter for the girls than for the boys. Perhaps girls are more active or less careful once the barrier has been broken.

Marriage

Of the 18- to 19-year-old girls, 13.5 per cent. are married, a percentage which is in close agreement with the findings in 18- to 19-year-old females in the normal population. In spite of the earlier start of their sexual activity, the percentage who have married is the same, but a larger number than in the normal population of girls of this age are already separated or divorced. Most of the married girls have had one or more pregnancies and their children also subsequently come from broken homes. It is obvious that the same marital pattern is passed on from the patients' parents to the girls and boys and then again to the patients' children.

Use of contraceptives

21 per cent. of the boys from the teenage gonorrhoea series stated that they used a condom at the first coitus, and even here there is a big difference, as Hertof found that 58 per cent. of his uninfected series used a condom at the first coitus.

A greater number of the girls (about half) stated that a condom was used, so that there is a marked distinction between the girls and the boys as to contraceptive precautions at the first coitus, the girls having been protected against pregnancy or gonorrhoea twice as often as the boys. This difference must be seen in relation to the age at first coitus; although the girls start almost as soon as the boys, they frequently start with older men, whereas the boys usually choose first partners of their own age.

Source of present infection

In the series of teenagers infected with gonorrhoea there is a very small difference between the sexes with regard to age. When the conditions surrounding the infection which brought these young people into the investigations are considered, there are very pronounced differences between the sexes. The girls are usually infected in the course of what they themselves describe as stable relations, only a fifth (19 per cent.) having been acquainted with the infected partner for less than a week, whereas two-thirds of the boys are infected by casual acquaintances.

Three-quarters of the girls were infected by men over 20 years old, who were thus excluded from this study. On the other hand about half the boys were infected by persons above the age of 20.

In connexion with the present infection the girls and boys interviewed had had very little sexual
contact with each other. Only 19 per cent. of the 202 girls were infected by boys under 20 years of age, and from this we may deduct the foreigners who are not included in this study, so that only about 10 per cent. of the girls in this series had been infected by Danish boys.

Scarcely half of the boys had been infected by girls under 20 years of age, but these were frequently prostitutes, and furthermore quite a number were infected by homosexuals. Danish teenagers are thus constantly threatened with infection from outside sources.

**Prostitution**
Of the girls 29 per cent. (58) were or had been prostitutes; their social background did not differ from the rest of the girls, but more frequently they were infected earlier, had more sexual relationships, changed their place of work more often, and had changed their school more often in adolescence.

**Homosexuality**
Of the boys 12 per cent. had practised homosexual relations, most of them with more than ten different partners and almost half of them for money. 3-5 per cent. of the girls considered themselves to be homosexual, and most of these were paid prostitutes.

**Pregnancy**
One-third (69) of the girls had been pregnant, and at the time of the investigation when the average age of the girls was 18, they had had almost a hundred pregnancies, 44 of which went to term. These 44 babies are threatened socially and psychologically from the very moment of birth.

**Intelligence**
This is about the same as in the normal population; one does not find—as might be expected—a larger number of feeble-minded persons even among the prostitutes, but many of these young people are acting at lower levels than their potential intelligence would permit because they are neurotic or psychotic. That we are dealing with a group under heavy stress is seen from the fact that 12-5 per cent. of the girls and 6 per cent. of the boys have been hospitalized in psychiatric departments.

**Summary**
(1) The control of venereal disease among young people in Copenhagen is not only a question of education, diagnosis, and antibiotic treatment; it is a social problem, since the teenagers infected with gonorrhoea have an unfavourable social background more often than the normal population. They have poor contact with their homes, and frequent changes of school and job, just as they have a frequent change of sexual partners.
(2) The essential need is to prevent the children of this group of teenagers inheriting their poor social environment. The 44 babies so far born to 69 of the 202 girls in this series are those we should aim to help, to prevent their becoming infected in their turn in the next 10 to 15 years.
(3) We shall continue instruction on sexual subjects and venereal diseases, with particular care for this threatened group.
(4) Unwanted extramarital pregnancies, criminal offences, abuse of alcohol, prostitution, illegal abortions, and so on, occur more often in teenagers infected with gonorrhoea than in the average population. The only long-term solution of the problem is an improvement in social conditions.

**References**

**Modalités du comportement sexuel et leur rapport avec les maladies vénériennes**

**SOMMAIRE**
(1) La lutte contre les maladies vénériennes chez les jeunes à Copenhague n’est pas seulement une question d’éducation, de diagnostic et de traitement antibiotique; c’est un problème social, car les moins de 20 ans atteints de gonococcie ont, plus souvent, un terrain social défavorable que la population normale. Ils ont de mauvais rapports avec leurs foyers, et changent fréquemment d’école et de travail, comme ils changent fréquemment de partenaires sexuels.
(2) Il est essentiel de protéger les enfants nés de ce groupe des moins de 20 ans, sur qui pèse la médiocrité de leur environnement social. Les 44 enfants, nés jusqu’ici de 69 des 202 filles de cette série, sont ceux que nous devons aider afin d’éviter qu’à leur tour, dans 10 ou 15 ans, ils ne deviennent aussi infectés.
(3) Nous devons continuer nos efforts d’instruction sur les sujets sexuels et les maladies vénériennes, avec une attention particulière vis-à-vis de ce groupe menacé.
(4) Les grossesses non désirées survenant en dehors du mariage, les actes délictueux, l’abus de l’alcool, la prostitution, les avortements illégaux, etc. . . se rencontrent plus souvent chez les moins de 20 ans atteints de gonococcie que dans la population générale. La seule solution à long terme du problème est l’amélioration des conditions sociales.