

with no form of contraception. As in other sex-surveys, the Aberdeen research team found that most of the sexually active women had stable relationships—86% of sexual partners were either fiancés or “steady partners”—so that it is all the more surprising that even in these cases no contraceptive was used by 30-40% of the couples.

About two-thirds of the women students at Aberdeen were registered with the Student Health Service and the rest with local general practitioners, and both sources provided contraceptive advice on request. Why did so many women not make use of these sources of protection against unwanted pregnancy—which could be a disaster for their academic ambitions? Several reasons emerge from the survey. Many girls believed that they had “suffered a moral interrogation when they had sought contraceptives and that this was totally out of place.” Many others said that they were reluctant to approach their own general practitioners, who were often family friends. The local Family Planning Clinics were willing to give advice to all comers, but they required a letter of introduction from a doctor, and in any case their addresses were not readily to be found in the telephone book. Shyness and ignorance of the facilities available was most marked among the younger girls, but even among the sexually experienced older women 26% thought advice was not adequately available.

Of the 684 girls who answered questions in the survey 6 were pregnant, 49 thought they might be pregnant, and 65 had been pregnant in the past (of whom at least 55 had had an abortion). If this is the incidence of unwanted pregnancy among intelligent university students aged 18-23, what must it be among their less privileged contemporaries? This is a major problem for doctors—so long as they quite rightly regard the giving of advice on contraception and sexual activity as part of their job. Many single girls thinking of approaching their doctor for contraceptive advice fear they will be given a lecture instead. Here, as the Aberdeen report stresses: “A doctor has a right to express his own attitudes and a duty to acquaint his patient with the relative risks of having intercourse, of pregnancy, and of the various methods of contraception, but if the patient, with these insights, wants a contraceptive the doctor should see that she is provided with the most appropriate form available.”

Haemophilus Influenzae Pneumonia in Adults

When in 1892 Richard Pfeiffer reported the discovery of the organism now known as *Haemophilus influenzae*, he claimed that it was the cause of influenza. This error exemplifies the difficulty of establishing a causal relationship between this ubiquitous organism and a variety of respiratory diseases.

The upper respiratory tracts of healthy people yield non-encapsulated strains of *H. influenzae* so commonly that they may be regarded as normal flora there. Capsulated strains are found much less commonly, though their presence is also compatible with normal health. Healthy people do not carry *H. influenzae* in the lower respiratory tract, but in chronic bronchial diseases the organism commonly occurs there. Thus in chronic bronchitis *H. influenzae*, usually non-encapsulated strains, multiply in the lower respiratory tract, where they may provoke additional inflammatory reactions and play a secondary part in the progression of the disease.¹

Since the significance of the presence of *H. influenzae* in the sputum is so difficult to interpret, proof of causal relation between the presence of the organism and pneumonia is best achieved by recovery of the organism from the blood, pleural fluid, or lung. Using these criteria R. Quintiliani and P. J. Hymans² confirmed seven cases of *H. influenzae* pneumonia in adults, all of whom had bacteraemia. The pneumonias were of either lobar or segmental distribution, especially involving the right lower lobe. Pleural effusions were common, and sequelae including abscess and pleural fibrosis occasionally ensued. The pathogenicity of *H. influenzae* is related mainly to the presence of a capsule of polysaccharide. In accordance with the nature of this capsular polysaccharide the organisms may be divided into six types, A to F. In reported cases of 26 patients with *H. influenzae* pneumonia on whom typing was performed, 20 were type B, three type F, one type C, one type D, and only one unencapsulated. Thus, type B accounts for the majority of serious infections.

Most adult victims of *H. influenzae* pneumonia have suffered from disorders that impaired the normal defence mechanisms, and *H. influenzae* was present as an opportunist. Chronic bronchopulmonary disease occurred in all six patients in one series³ and all but one of six patients in another series.⁴ Alcoholism, diabetes mellitus, and immunoglobulin defects are other predisposing factors. At least one of these factors has been present in about two-thirds of the reported cases.

The incidence of serious infection with *H. influenzae* is inversely related to the titre of protective anticapsular IgG antibodies in the serum. These are transferred passively to the newborn infant from the mother, so that infection is rare in the first two months of life. From the age of 2 months to 3 years antibody levels are minimal and susceptibility to infection is maximal. In this age group meningitis, acute epiglottitis, and pneumonia are the most serious infections and are usually due to type B strains. Antibodies are frequently acquired during childhood, and L. D. Fothergill and J. Wright⁵ in 1933 detected specific bactericidal antibody against type B in all their patients older than 10 years. However, it is possible that since these observations were made the modern tendency to give antibiotic therapy for any infection in childhood may have led to less frequent development of protective antibodies, leaving more people liable to reach adult life without the acquisition of immunity. This hypothesis is supported by the work of C. W. Norden and others,⁶ who found that 28% of normal adults lacked these bactericidal antibodies. These observations have been proposed as an explanation for the apparent recent increase in the incidence of type B infections in adults.⁷

The diagnosis of *H. influenzae* pneumonia by means of blood cultures and typing of haemophilus from sputum cultures is of practical importance in treatment, since haemophilus is relatively resistant to penicillin. The organism is susceptible to tetracycline, ampicillin, streptomycin, and chloramphenicol.

¹ Turk, D. C., and May, J. R., *Haemophilus Influenzae, its Clinical Importance*. London, The English Universities Press, 1967.

² Quintiliani, R., and Hymans, P. J., *American Journal of Medicine*, 1971, **50**, 781.

³ Tillotson, J. R., and Lerner, A. M., *Archives of Internal Medicine*, 1968, **121**, 428.

⁴ Goldstein, E., Daly, A. K., and Seamans, C., *Annals of Internal Medicine*, 1967, **66**, 35.

⁵ Fothergill, L. D., and Wright, J., *Journal of Immunology*, 1933, **24**, 273.

⁶ Norden, C. W., Callerame, M. L., and Baum, J., *New England Journal of Medicine*, 1970, **282**, 190.

⁷ Weinstein, L., *New England Journal of Medicine*, 1970, **282**, 221.