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Health hazards from British beaches?

Easter well past, the British public is now preparing for its summer holidays. Many will be heading for the polluted beaches of the Mediterranean, but others, hoping for a better summer than last year, will be holidaying at British coastal resorts. They, and anybody else who is planning a dip in the British briny, will be interested in two studies commissioned from a team at the University of Surrey by Greenpeace in the summer of 1987 and published in a report on *The Public Health Implications of Sewage Pollution of Bathing Water*.¹

The first part of the report is concerned with public perceptions of beach and sea pollution and with the reporting of various symptoms by swimmers and non-swimmers. The resorts investigated were chosen on the basis of pre-existing microbiological data to provide contrasting levels of sea pollution: resort 1, "on the south west coast of England," had 40 times as many faecal coliforms as resort 2, "a small town on the south coast of England." Some 1900 people were interviewed, 1402 at resort 1 and 501 at resort 2. The respondents' perceptions of the cleanliness of the sea and beach were strikingly different for the two resorts and mirrored the microbiological assessments of pollution. Only 19% thought the sea was clean at resort 1 compared with 92% at resort 2. People at resort 1 reported significantly more debris both in the water and on the beach than those at resort 2. The items listed included discarded food or wrappings, bottles, cans, paper litter, dead fish and birds, oil slicks, human or animal excrement, and discarded condoms and sanitary towels. (Interestingly, overt filth seemed to correlate with microbiological filth.)

But does swimming in such polluted water cause illness? Swimmers at resort 1 were significantly more likely to develop stomach upsets, nausea, diarrhoea, or headaches than either non-swimmers at resort 1 or all holidaymakers at resort 2. Swimmers who had immersed their heads at resort 1 were most likely of all respondents to have reported gastrointestinal symptoms. (It is not stated how many head immersions took place or whether the respondents' mouths were open at the time.) Of course, and as the authors emphasise, this was not a controlled epidemiological study

and its findings do not prove a causal link between swimming in polluted water and illness.

The second part of the report concerns the intensive monitoring of seawater in four coastal areas: Kent/Essex, Fylde, Cornwall, and Yorkshire. Twenty seven resorts were monitored twice daily for 10 days, a sampling frequency considerably above the minimum stipulated by the 1975 European Community directive on bathing water. This requires a faecal coliform standard of <2000/100 ml for 95% of samples during the entire bathing season, and member countries were expected to comply with this directive within 10 years. The European Community standard was apparently based on that of the United States Environmental Protection Agency, although it is considerably less exacting. Only 10 of the 27 British resorts investigated by Greenpeace met European Community standards over the sampling period and only 5 met American standards. The Cornish coast was the cleanest, and Fylde the most polluted: all eight of the resorts sampled on the Fylde coast failed to meet European Community standards, and Grannies Bay had the highest faecal coliform count (93 600) of all 27 resorts.

In 1959 the Public Health Laboratory Service averred that "Bathing in sewage polluted sea water carries only a negligible risk to health, even on beaches that are aesthetically very unsatisfactory."² The introduction of European Community legislation on bathing water challenges this view and rightly so. A clean up of British beaches is long overdue. Meanwhile, Cornwall might be the best bet for this year's holiday.

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Anogenital papillomavirus infection in children

Genital warts in adults are sexually transmitted and have an incubation period of up to several months.¹ Concurrent anal warts may occur in both sexes, but warts confined to the anus are commoner in men, particularly if they have anoreceptive intercourse.² Hybridisation studies show that anogenital warts in adults usually contain sequences of human papillomavirus types 6 or 11, but occasionally they contain type 16 or others.³ A few patients develop genital warts that look like common skin warts, but the viral sequences in these have not been identified.

We know much less about anogenital warts in children because only a few cases have been recorded with adequate clinical and virological data. Most of the warts are either vulval or perianal, and analogy with the adult disease suggests that the responsible virus may be sexually transmitted. Doctors in the United States believe that most cases in children result from sexual abuse.⁴ But this is not the only explanation of the warts' pathogenesis. Viruses may be

inoculated during delivery if the mother has vulval warts, and the genital warts in the infant may take as long as two years to appear.⁵ Juvenile laryngeal papillomas are also related to maternal genital warts: they do not present earlier than at 3-4 months of age, and almost half are not diagnosed before the age of 2 years.⁶ Anogenital warts may arise through innocent non-sexual contact: they have been recorded in children who have been bathed by women relatives with genital warts.⁷

The types of human papilloma virus associated with genital warts in children have been reported in only six cases. In five types 6, 11, or 16 were identified⁷; although their presence suggests that an adult's genital tract was the source of infection, in two of these five children sexual abuse was thought unlikely. In the remaining case sequences of human papilloma virus type 2 were present in both an anal wart and a wart on the hand of a 5 year old boy, which suggests that autoinoculation of a cutaneous strain of the virus was the cause of the anal lesion.⁸

There is a pressing need for more knowledge about this increasingly common disease, particularly about its relation to sexual abuse and other possible causes and about the viral types that are important. Virtually nothing is known of the subsequent history of these children, including of those infected with "high risk" viral types such as human papilloma virus 16, which are associated with cervical, vulval, and anal neoplasia in adults.

How should a doctor deal with children with genital or anal warts while we wait for this knowledge? The possibility of sexual abuse must be borne in mind, but warts are not a certain indicator of abuse. A careful history must be taken, and the child must be examined for signs of abuse.^{9,10} Laboratory tests should be performed to exclude associated sexually transmitted infections—particularly gonorrhoea, chlamydial infection, trichomoniasis, and syphilis; the presence of one of these in a child with anogenital warts makes sexual abuse a near certainty.¹¹ Whenever child abuse is suspected those without special knowledge of the problem should seek expert help. DNA hybridisation procedures are gradually becoming available, and identification of the viral types will show their probable genital or non-genital origin. Whether this will help in managing these difficult and worrying cases remains to be seen.

Treating anogenital warts is always problematical, but there is a good case for avoiding the distress of repeated and possibly ineffective topical treatment and arranging for the ablation of all the lesions under a general anaesthetic.

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Self help groups and professionals—what is the relationship?

The Alzheimer's Association is a self help group that started in only 1979 yet now has 6000 members in 120 branches. Its rapid growth has been typical of that of many self help groups, which are now numbered in thousands in Britain. The reasons for their rapid growth were discussed at a recent conference held at the King's Fund Centre, London, and were thought to include a more educated population, an increase in the prevalence of chronic illness, the trend towards community participation in health care, and the perceived failure of health workers to meet the needs of particular groups of patients.

Self help groups are usually run for and by people with a particular health problem—for example, alcohol abuse, dementia, or mental handicap. They vary enormously: they may have a handful of members or several thousand and be run by a charismatic leader or by a committee. Their function ranges from "tea and sympathy" to education, research, fundraising, and even political lobbying.

The conference concentrated on how these groups relate to professionals, and a strong statement about the relationship was made when only one doctor (and she was an invited speaker) turned up to the conference, which must have had about a hundred delegates. One woman from Croydon Cancer Concern told how she had sent 300 invitations to general practitioners for a cheese and wine evening introducing the group and got only one reply (from a doctor who did not attend). Although it is often hard to get doctors to participate in self help groups, nurses, social workers, health visitors, and others are often more enthusiastic—and, some at the conference thought, they may be the best professionals for the groups to target.

Why are health workers and particularly doctors made uneasy by these groups? One important reason seems to be that doctors do not know who these groups are and what they are trying to achieve. They are wary of referring patients to them because they are unsure about their quality and consistency. Confidentiality is another block, but perhaps doctors are failing to recognise that patients can make their own choices; they simply need to be told about the groups and how to contact them. Doctors may also fear being called to account by a vociferous group at a meeting outside the safe confines of consulting rooms or a hospital.

In their turn self help groups are anxious about their relationships with professionals: they have difficulty talking to doctors as equals, finding them at times patronising, dismissive, or ill informed. They worry about "tokenism," where doctors may justify their broadmindedness by rare and peripheral participation with a group, and about being used as "dumping grounds" for the awkward problems of an increasingly stretched health service.

Doctors and their patients may, however, have much to gain from participation with self help groups. The groups may help with support and counselling—they often have the time that doctors don't have; and patients may benefit enormously from exposure to others who have the same problems. The groups will let doctors know what patients want from them, and they may help with early detection and prevention of crises in patients. Professionals, in their turn, may provide self help groups with access to funding,

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