guilt in those who are unable to find employment. Not only do they miss out on the period of relative affluence of their young working contemporaries, but their lives on leaving school become unstructured. When no regular work has to be done the incentive to do other things decreases; work structures time. The social contacts at work and the participation in collective activity that work provides are missing.

Those who go to college—Young people going to university usually have high expectations. Getting there is an achievement towards which they have striven for a long time. The realities on arriving may not measure up to the expectations. The majority who go to university have left home for the first time. Most settle in within a few weeks. The initial desire to travel home at weekends is soon replaced by new friends and social activities. The feelings of one who failed to identify with his new surroundings, the sense of isolation and of being different, is described by the second writer. A positive rush to find new boyfriends or girlfriends occurs at university and a regular partner is almost "de rigeur." Overseas students are particularly vulnerable socially. Adaptation to a different language and culture, greater difficulty in making friends, in obtaining lodgings, and finding girlfriends of their own social standing all contribute to this. They also feel a burden of responsibility for achieving success to live up to the prestige and expectations created at home. In addition to making a social adjustment the student must adapt to different and more impersonal teaching.

The change from school to whatever follows is but one of the changes which necessitates adjustment at this time of life. Adolescence, the transition from childhood to adulthood, is characterised by physical and sexual development and has been underway for some years. Psychological adaptation during adolescence is often precarious. Periods of adult behaviour may be interspersed with regression to childishness, and a degree of uncertainty and insecurity is usual. How we feel about ourselves, our identity—up to now largely determined by what our parents think of us—is questioned. Intense preoccupation is felt concerning questions such as "Who am I?" "What sort of person do I wish to become?" "What is life about?" Answers to these questions may be found only by comparing self with others, and for this new social relationships need to be developed. The academically gifted may be at some disadvantage. The pressure to obtain adequate grades at O and A level may curtail social life and result in a certain naivety—the writer of the first personal account seems the more worldly wise.

How do general practitioners become aware of the difficulties faced by those in transition from schooldays to adult life? Consultations may be about physical symptoms, sexual difficulties and contraception, psychological symptoms, and use of drugs.

PHYSICAL SYMPTOMS

Fear of being disadvantaged in a competitive adult world by physical abnormality causes preoccupation with body structure and function. Those with a genuine handicap may need encouragement in coming to terms with the future. Illnesses which may result in sudden loss of control, such as diabetes and epilepsy, may undermine self confidence and require informed discussion. Concern in excess of actual disfigurement may be felt by sufferers from acne and other skin disorders.

An underlying fear is that ability to attract sexual partners may be impaired. Apparently trivial disfigurements should not be dismissed and considerable reassurance may be required. Concern about the size and shape of genital organs, including the female breast, may be voiced, and alarm felt on discovering what are, in fact, normal skin glands on the male scrotum and penis.

Frequent consultation about trivial medical problems may indicate underlying anxiety or depression. The young person may not at first feel safe enough to reveal the cause of the distress. On the other hand, physical symptoms may precede awareness of tension or depression.

SEXUAL DIFFICULTIES AND CONTRACEPTION

Greater sexual freedom is now enjoyed but new problems have been created. Doubt about whether to have intercourse may conflict with the wish not to be left out. The break up of a relationship made more intense by physical consummation may cause considerable trauma. Consultations about contraception enable the general practitioner to become aware of such problems. In men feelings of sexual inadequacy may be based on unrealistic expectations gained from exaggerated accounts of athleticism by contemporaries or from novels. Awareness of homosexuality and other deviation may cause distress.

PSYCHOLOGICAL SYMPTOMS

Anxiety or depression may be found in any young person however their future is taking shape. The results of a recent study has shown that the scores in the General Health Questionnaire for school leavers were appreciably affected by unemployment and it was clear that the increase was the result of unemployment rather than the cause.[1]

More favoured youngsters also have difficulties. The anxiety felt by new students probably springs from uncertainty of status in the transition from being a big fish in the school pond to being a small fish in the university sea. The initial transition has been described thus:

"In the early weeks reassurance and confirmation of identity may be sought by a number of means. Acceptance may be won from fellow students by sociability, by eccentricity, by the fluent expression of the general disillusionment, by the setting up or joining of illicit subcultures, for example around drugs, or more generally by the consolidation of ingroups and cliques. Approval may be won from tutors by the familiar means of achievement but this may be inhibited by fears or fantasies of their elevated intelligence and status. To the isolated or shy, neither fellow students nor tutors may be approachable and to these the reassurance offered by the family or by friends at home may provide the only sure refuge, so that social initiative within the university may be blunted."[2]

Difficulties in academic subjects often escape recognition until examination time. Sixth form classes are often small, and throughout school teaching is adapted to individual needs. Lectures are impersonal, and unless work during term is monitored the difficulty experienced by some students may be missed. Anxiety and depression may result from study problems.

USE OF DRUGS

Taking illegal drugs, briefly indulged in by many, becomes a habit in some. Drug abuse is commonest in the young. "Mind expanding" drugs such as marijuana and LSD may be particularly attractive to those searching for identity. Their effects include a feeling of enhanced consciousness and of being at one and merging with the universe. A sense of identity may also be given by membership of a subculture, with a language of its own, a unique sense of priority, and uncritical acceptance by other members of the group. Advice may be sought after a "bad trip" or on the discovery of the drug by a parent.

How can the general practitioner help those who are in difficulty during the transition from schooldays to adult life? The doctor's role as a source of information about normal anatomy and physiology has been mentioned and minor blemishes should be treated with an understanding of their meaning to the sufferer. Furthermore, the general practitioner has an important role as a "listening post." He or she must be able to recognise signs of distress and encourage discussion of problems

that may be revealed only reluctantly. His attitude must be sympathetic rather than judgmental. He should be aware of, and be prepared to cross, the generation barrier and barriers of education and social class. That coloured youngsters face additional difficulties should be appreciated.

Young people, though inwardly uncertain, may be outwardly aggressive. In other words, doubts about identity may be hidden by a mask of assertiveness. The doctor must see beneath the "punk" haircut, "rocker" leathers, and young men wearing earrings to the underlying difficulty. Body language, the aggressive posture, or downcast eyes often indicate the state of mind. Some problems will require continuing consultation. Adopting the counselling mode—allowing the young person to express his problem fully and formulate his own solutions—may be the most helpful approach. Maturity may be reached rapidly and sometimes little more than a "holding operation"—that is, giving support over a limited period only—is needed.

The general practitioner will often need to discuss problems with others in a patient's life, such as parents and boyfriends; their help should be sought in defining problems and giving help; college tutors should be consulted when students are in difficulty. The general practitioner may seek other professional help for some problems. Advice centres, detoxification centres, and drug addiction units exist in the major cities.

Problems of study may require the help of psychotherapist or psychologist. Ryle has divided these into the disorganised and the focal.[3] In the former a function essential for study, memory/ concentration capacity for organisation, or motivation is adversely affected by general emotional disturbance. In the latter study itself is the focus of neurotic conflict, other aspects of life being unaffected. For this second group, said to c the larger, help from an expert familiar with the problem is desirable.

Can some of the problems at this stage of life be averted? Knowledge about sex is still largely acquired from friends. Sex education in schools is treated mainly as biology. This might be complemented by discussions in which general practitioners and health visitors take part. Career guidance is available at all schools yet many begin careers about which they have little knowledge. Ideally, aptitude and personality should match chosen occupation, yet assessment by psychological testing is largely ignored. Taking a "year out" between school and university results in greater maturity at entry and this, for some, outweighs the unsettling effect and difficulty in resuming studies.

Leaving the "protected" environment of school for life in the adult world has many pitfalls. The general practitioner needs to be aware of these and to help those who get into difficulty with skill and understanding.

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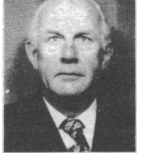
ONE HUNDRED YEARS AGO Mr. Malcolm Morris, one of the ablest and most versatile of our brilliant younger school of dermatologists, has made a decided hit by his sparkling and amusing, but very sensible and useful, lecture, under this head, at the International Health Exhibition. The lecture was a pungent criticism of some of the morbid aspects of modern aestheticism. First, it was shown physiologically how much of a man's individuality lies in the skin. Remove an arm or a leg, or both arms and legs, there is yet left an individual man. But take away the skin, as the author of *Sartor Resartus* took away the raiment, and individuality is gone. The colour of the complexion is due to the pigment-follicles, the red colour of the cheeks to the terminals of the blood-vessels, seen through the transparent skin. The colour of the skin is a test of health. But, within the last few years, we have experienced a remarkable artistic movement. The effects have been evident in the picture-galleries, they have displayed themselves in domestic life. Lastly, there has sprung up a taste that can only be postulated as a taste for disease, decrepitude, and decay. In one school, we find a bevy of woe-begone women, ill, limp, and unwholesome. The men are not more attractive in a sanitary sense. They look like convalescents, ill-fed and out of condition. This school is not very wide in its range, but its influence is felt beyond the limits of its own lines. In the paintings of the older masters are ruddy Madonnas, clear-skinned goddesses, and chubby angels. In the more recent pictures, an etherealised skin is unduly popular. Of course, this repudiation of warm tints suited unhealthy people. One cannot blame them for the master stroke of so advertising this fashion of pale faces, that eminent painters should be willing to depict this pasty complexion in illustration of beauty. But what shall be said of art that lends itself to such deception? When society sets its seal upon small bonnets, with what obedience heads began to reduce! This is harmless enough. So, though very ugly, and nothing more than a copy of the wasting in consumption, is the practice of darkening the socket to increase the apparent size of the eye. But when, in addition to these devices, a decree goes forth that powder is to be applied to the cheeks, to the utter destruction of complexion, it is time to speak out. Fashions change; and a time may come when it will be fashionable to be healthy, when normal hair will be popular, and natural skin the rage. When this sanitary millenium is reached, it is possible that the world will recognise that it is not attractive to daub the face with starch and rouge and bismuth and paint after the manner of the heathen; that the bloom upon the peach cannot be beautified by whitewash; and that no chemical process can heighten the tinting of the heather-bell. (*British Medical Journal* 1884;i:1264.)

Rethinking Established Dogma

Screening for health

I M RICHARDSON

To screen or not to screen is still in general terms an open medical question, hence the title "Rethinking established dogma" of the series to which this article contributes. The



huge number of publications on whether and how to screen people for physical and mental abnormality testifies to the duration and intensity of interest in the principles and practice of prevention, health maintenance, presymptomatic detection, reduction of risk—various terms have been coined to signify this departure from the traditional sequence in medical management of diagnosis and treatment, where the process is initiated by a patient (a person with a complaint) and the doctor responds. But over a long period the idea of the doctor initiating contact with uncomplaining people has become commonplace; children and their parents, workers in many occupations, men and women at special risk, and those seeking life insurance have come to expect to be examined in various ways, however well they think they are, and at least to accept, even though they do not fully understand, the rationale given to them. Some such examinations are compulsory, most are voluntary.

The protagonists would like to see a much wider range and uptake of screening services, even to the extent of regular "check ups" for all, as part of a national "better health" policy. Antagonists are troubled by what they see as attempts to coerce the population not only into submitting to procedures that may be of dubious value but also into accepting some vague national or international concept of fitness. Freedom of choice is very dear to democrats, all the more so when freedoms are thought to be increasingly controlled. It therefore seems unlikely that there will be any substantial new move to expand compulsory screening.

I have a growing feeling that, despite the waxing and waning of medical enthusiasms of many kinds, both the number of practising screeners and public belief in their virtue are on the increase. Does this mean that the evidence for any proposed or given specific programme—child development, cervical smear, hypertension, diabetes, prepregnancy as well as intrapregnancy care, breast cancer, obesity, and so on—has passed some critical point on the cost-benefit curve? Or does it point to demand by a public that is not prepared to wait for professionals to agree on specific answers to the question: "How sure do we have to be before taking action"? My guess is that both are always at work, each reinforcing the other through the influence of controlled enthusiasm and leadership, and each subject to setbacks such as disputation among experts—for example, on the predictive value of screening for risk of ischaemic heart disease.

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Public health

I regret the near disappearance of the term "public health," which for so long was associated with the development of social and personal responsibility for health care, including maternal and child welfare, control of infectious diseases, health education, safety at work and in the home, and other services, some of which pioneered what we now refer to as screening—for example, mass miniature radiography in the detection of pulmonary tuberculosis. I have never really understood why the designation disappeared with reorganisation—surely the old student image of drains died decades ago. Just suppose that we could revive the term and properly apply it to those preventive services that are currently offered or managed by health authorities in cooperation with clinicians in primary and secondary care. Such regional public health organisation might seek and deploy powers to evaluate, promote, and innovate various screening services by using modern information technology and management services from which might emerge far better data on the merits, costs, and public acceptability of preventive screening measures, matters on which our present knowledge is too fragmented and uncertain.

Professional attitudes

Assuming that public attitudes are slowly moving in favour of opportunities for voluntary screening in respect of several diseases and disorders and that bodies like the Health Education Council and the new College of Health will, guided by a few enthusiasts, accelerate demand, what may be expected of the medical (and related) professions? Are there any signs of generalised spread from the localised screening "hot spots"? What happens when someone suggests that small or large populations should be offered a standardised service?

There are few if any ready to hand, neat statistical answers. Given the resources to tackle a big enough one off population study of adiposity, blood pressure, urine tests, intraocular pressure, haemoglobin concentrations, skeletal or soft tissue imaging, blood chemistry, or any other feasible measurement,

there are certainly some hospital specialists who would like to know the distribution of these parameters and who would be willing to treat the treatable provided that the numbers were not excessive. But my guess is that most would be inhibited by their present workload from coping with an iceberg of unknown size. So might most general practitioners, but other inhibitions are at work in primary care; their self employed and more work sensitive contracts would probably require negotiation of special fees for routine screening activities; practice sizes and resources vary so widely that what might be feasible and useful in one location would be out of the question in another—unless, of course, contracts were renegotiated.

Community physicians, the successors to not only public health doctors but also to hospital superintendents, seem with a few exceptions to be so heavily loaded with administration that they have little time to promote let alone organise new screening facilities—or is another reason the prevailing uncertainty about what is worth while and can be afforded?

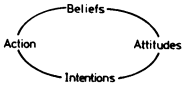
Cost

Health economists have taught us that cost is not to be reckoned only in terms of money. So how do we decide that early detection of vulnerability to ill health is worth while? Phenylketonuria is a rare disorder, yet we have had for many years virtually universal screening of neonates; surely the reasons are that this serious condition may be reliably detected, that it is treatable, that the cost of case finding in terms of materials and professional time is small, and that genetic counselling on control of recurrence is important but inexpensive because of the rarity of the disease. Examples of the other end of the cost spectrum are lung cancer and ischaemic heart disease; both are relatively common, difficult to detect reliably in their early stages, on the whole not amenable to successful treatment, and, in terms of the yield of positive cases, very expensive in equipment and skilled manpower. That most common and well established of screening activities, antenatal care, belongs to a third category; not only can it be justified (albeit on a simple, less costly, and more humane regimen than hitherto) in medical terms but also on grounds of massive public demand. Cervical screening also came into widespread use through public demand before the medical evidence for its value was as strong as it is today. With cost limits likely to grow tighter the prognosis for expanded screening services must rest on the balance between two familiar arguments; screening for pre-disease risk and its correction is cheaper than the cost of treating established disease; screening will divert resources urgently needed to save life and limb. Because neither argument is easy to substantiate the ultimate compromise policy decision will depend on value judgments by the lay and medical members of policy making health authorities who are, of course, well placed to compare competing claims on their limited resources; but they too are faced with a complex question that still defies satisfactory answers.

Levels of health

If you ask a representative range of people to define their own meaning of health the answers show how health is related to the occupational and recreational activities of daily living. Thus many people with sedentary jobs, little interest in physical pursuits, and who enjoy smoking and drinking, have a concept of fitness far removed from those who believe that muscular activity, diet control, avoidance of respiratory irritants, and temperance are essential to good functional health—in other words the question is: health for what? Perhaps in looking at the different answers to this question we may see the way forward.

Assuming that compulsory screening will remain restricted, can voluntary participation in a screening service change attitudes to health and if so how is change induced? I have long used this simple cycle:



To me, screening people for any disorder is an opportunity to explore beliefs about health, the attitudes that develop from these beliefs, and the overt behaviours that follow. Of course, some of these beliefs and attitudes may be ascertained by computer, a technical screening device that is bound to develop but must always be followed by an interpretive session with a health care professional. I have in fact seen this combination effectively and efficiently used in a private screening facility and in a research project but in both cases on non-random populations; nevertheless, I believe that a well designed screening facility, which in addition to computerised questions and a rotation of test stations, offers people the chance to discuss the results and what health means to them, and will (*a*) enhance knowledge, (*b*) correct beliefs, and (*c*) modify attitudes and health behaviour.

I am therefore in favour of the promotion of screening services staffed by professionals who have the time, training, and tools to provide not only objective detection of risk but also the skills to help people to understand how, if they so wish, to improve their health. Many people who have had this experience of screening have testified to the benefits of accurate information, of opportunity to question knowledgeable professionals, and of reassurance, and I do not doubt the potential of such experience to alter beliefs about and attitudes to health.

The future

So what is the most fruitful way forward for screening services? Looking back over 40 years I can discern an encouragingly progressive expansion in the range and scale of such services, a trend which I predict will slowly continue as a result of two forces—public demand and professional emphasis. Clinical advance in genetic, immunological, biochemical, pharmacological, biophysical, psychological, and sociological sciences will bring new proven techniques for detecting vulnerability and reducing it—if the resources to provide them are forthcoming and public interest is stimulated. Health for all by the year 2000 may be very idealistic, but ideals are like stars, essential for navigation. If by a philosophy we mean some common end that is desirable for all men then screening is an increasingly important component of the philosophy of health.

ONE HUNDRED YEARS AGO Considerable difference of opinion prevails as to the form of legislative interference that should be undertaken by the State for the prevention of intemperance in our large cities and among the working classes; but we are sure that all will be agreed in approving the action of the directors of the Glasgow Abstainers' Union, who hold the view that much good may be done in this way, by increasing in every possible manner the attractions and comforts of the homes of working men, especially in the cooking and preparation of the household meals. Accordingly, the directors instituted, three years ago, annual exhibitions and competitions in household cookery, in which substantial prizes were offered for the best prepared dishes in ordinary use in the families of working men; and we are glad to see that this year's competition has been very successful, and has brought out a large body of competitors from the very classes it was intended to benefit. (*British Medical Journal* 1884;i: 871.)