Commentary: A history of the South-East London Screening Study

Walter Holland

To be asked to write a commentary on one's own publication after 25 years is flattering. In my attempt to respond to the Editor's invitation I thought that it might be of interest to consider the background to the study and the steps required to establish it.

The concept of screening and the criteria by which it is assessed are now well established. It is, however, worth recalling the 'spirit of optimism' that prevailed in the early 1960s. The concept of early diagnosis was tempting and the idea of a number of tests being performed at one visit, rather like an MOT, even more so. The initiatives to develop this form of medicine was, of course, led by workers in the US, but rapidly permeated here.

An early example, in the UK, was the introduction of multiphasic screening in Rotherham. The Medical Officer of Health there was Dr Paddy Donaldson (father of our present Chief Medical Officer), a most imaginative Medical Officer of Health. For a number of years over a short time period (about 3 weeks) the public health department concentrated all its efforts on the basis of its demonstrable health benefits. Since these controlled trial results have failed to demonstrate any beneficial effect on either mortality or morbidity, we believe that the use of general practice based multiphasic screening in the middle aged can no longer be advocated on scientific, ethical or economic grounds as a desirable public health measure.

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References

1 Trevelyan H. A study to evaluate the effects of multiphasic screening within general practice in Britain: design and method. Preventive Medicine 1973;2:278.
heavy industry such as coal mines and steelworks. Unfortunately, the ‘evaluation’ was not positive. Although the clinic was busy, the majority of participants were women, relatively few men from the hazardous industries attended. But more worryingly, although quite a number of abnormalities were found, few led to treatment or were referred to the individual’s GP, which was part of the problem of the separation of public health from the rest of the NHS at that time.

In 1962 one of the senior medical officers at the then Ministry of Health was Dr Max Wilson. He had appreciated that the spread of screening to the UK from the US would have profound implications. I had just returned from a period in the US where I had travelled widely and knew many of the groups involved in developing screening methods including Dr Lester Breslow at the California State Health Department. I knew Dr Wilson because we had worked together on a joint paper on the influence of weather on cardiorespiratory disease and he came to me for advice on whom to visit in the US.

On his return we discussed his findings, and for those at Rotherham we rapidly concluded that if screening was to be effective in the UK it had to be done in conjunction with general practice. As a result we discussed how this might be achieved. At this time general practice was not in great shape, there were few practices interested in, or willing to do research. We thought that the new, developing Health Centres might be a good location, and both Wilson and I visited quite a number either together or individually. Unfortunately, we were unlucky in persuading them to do an experiment. However, one practice at St Paul’s Cray in Orpington had approached the Ministry to start a pilot project in multiphasic screening. The senior partners in this practice were used to research having taken part in a number of studies on acute infectious disease with the Public Health Laboratory Service and a former ‘boss’ of mine, Doctor (now Professor) Corbett McDonald. The number of patients on the list of this practice was, however, insufficient to provide a conclusive result. Doctors Woodall, Tuckman, Wilson and I then started to plan a study and we were fortunate that these local GPs were able to identify another nearby practice willing to participate. We then met our next difficulty—these GPs wished to be paid for the work as their income would probably diminish due to their efforts on our behalf. This was overcome (just about) with the ‘formula’ that the ‘paid’ practice were not co-authors of the study, in contrast to the first group. (Payment for research in general practice was also a major obstacle within the Ministry of Health at that time!)

The planning of the study was a major undertaking since we had to ensure the co-operation of the local hospital to do the necessary pathological, biochemical and radiological investigations promptly. This was so that the results were available to the GP when the individuals visited to hear the results and have any necessary additional tests. The locale for the examination, the scheduling of tests, the participation of nurses and trained housewife volunteers was a major logistic exercise, as was the collection of the ‘outcome’ data, hospital visits, general practice consultations, time off work, use of Local Authority home-help services, etc.

Allocation to screening or control was done, at random, by family. We had expected that a number of the control group would wish to be screened. We were ‘pleasantly’ surprised that less than one per cent thought they were missing something worthwhile. Furthermore, 73% of the group invited attended the examination. The problems of follow-up due to migration, etc., are described, and I will not comment further, except to emphasize that analysis of the results was complicated!

The study was innovative, for its time, in that it included an economic analysis. This certainly added to the antagonism which it generated, particularly from BUPA, who were, and continue, to promote the concept of multiphasic screening. What was particularly galling for them was that we showed that the cost of screening one person was about £12.00, while they were charging about £75.00.

The final straw was, of course, that our study did not show that multiphasic screening was of much benefit. My popularity with BUPA’s Medical Director of that time was not high and there were some particularly difficult public debates.

Looking back on this study it is interesting, in the light of current events, to see how different life was. It was possible and relatively easy to gain the co-operation of the local authorities, volunteers were happy to co-operate in an experiment and they did not expect to be given an economic recompense. Patients were co-operative—and there was no pressure on us to ‘dilute’ our control group.

The result of the study demonstrated that regular multiphasic screening offered little advantage to the individual, as measured by morbidity, disability or physiological function. The frequency with which, on average, individuals visited their GP ensured that treatable abnormalities would be detected. Of course, we were working with a group of particularly good GPs, and maybe this result would not have been obtained in other less skilled practices. This, of course, does not mean that organized cervical cytology, breast scans, etc., should not be used, but that it needs to be done through properly organized general practices who should be responsible for both the invitation to screening and action on screening findings.

The results of the study did influence health policy, for a time. Although the direct costs of the service were relatively low, if introduced nationally they would have had a measurable impact on the costs of the NHS. Since there was very little, if any, benefit in terms of reduction of illness the policy implication was clear—there was no point in introducing check-ups into the NHS. There was no pressure from the patients included in the study for the service to be continued. This lack of pressure for regular screening services, except from some middle-class groups, who were perhaps influenced by BUPA, persisted in the UK for about 10 years after the publication of our paper. It was not until the late 1980s that the government of the day considered that regular check-ups would improve the service provided by GPs. The government of the day and the Department of Health officials, medical officers and Chief Medical Officer, were unaware, or had forgotten, the study they had initiated and funded. Letters to the Chief Medical Officer and British Medical Journal remained unanswered. Policy was only influenced by the concerted opposition of the medical profession led by a rousing, forthright article by Professor David Morrell, a Professor of General Practice.²

Since we completed our study the belief in the value of check-ups or multiphasic screening by many, but especially by managers and politicians, has always amazed me. Our findings were not unique. D’Souza³ in a more complete description of the South-East London Screening Study comments and gives details of the other randomized controlled trials (RCT) of...
Commentary: GP ‘check-ups’ still of limited value

Godfrey Fowler

Around the time of publication of this paper there was growing discussion of the need for GPs to extend their role and become more proactive. Until then, the function of the GP was generally considered to be confined to treatment of the sick. Even such things as antenatal care, child health and immunization were largely the responsibility of ‘public health’; and screening was no part of the GP’s work; nor was health education (‘health promotion’ had yet to be invented). But—particularly after the landmark ‘GP Charter’ of 1965 which encouraged the development of primary care teams through reimbursement of costs of practice premises and staff—progressive practices were taking on public health roles and moving into preventive work.

This change was stimulated by a Government publication ‘Prevention and health: everybody’s business’ which emphasized methods of surveillance, advances in treatment and vaccine development, but also on further progress in diminution in poverty. For non-communicable disease prevention we referred to a number of studies which had shown the importance of habits established during the early years of life as well as disease in childhood. We considered that these indicated that it was more important to develop total educational strategies for both children and adults (parents and teachers) rather than concentrating on risk factors in adults. We emphasized the gaps that existed in evidence for prevention of the major causes of death at different ages (e.g. congenital anomalies in children) or disability (e.g. psycho-social illnesses, musculo-skeletal disorders) and suggested possible leads. Finally, we classified and described the need to differentiate between societal, governmental (public health we said) and individual measures if we were to be successful in preventing disease.

This illustrates how much more optimistic we were in 1978 on the role and acceptance of our findings and subject and how little has been achieved in actually implementing our suggestions and findings! Looking back, even if we had problems and even if many things are better now, research in our subject was easier 25 years ago!

References