Challenges for public health

Intervening in communities: challenges for public health

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There is still a long way to go in developing and implementing sound interventions at a community level

There used to be a touching belief that public health interventions were exempt from the kind of scrutiny that we might normally expect to be a pre-requisite for messing around with peoples’ bodies and their lives. Even once it became accepted that physicians and surgeons could inadvertently do more harm than good, some areas of public health and health promotion occupied a privileged place. A few leaflets here, telling parents how to do their jobs better, a bit of social engineering there, trying to iron out a little local difficulty with housing or transport. What could be the harm in that? So long as people’s hearts were in the right place, brains were not thought to need to be quite so fully engaged in changing communities as in changing lipid lowering medication.

All that is now starting to change. The public health field of the Cochrane Collaboration is producing guidelines for those working in public health; the UK Medical Research Council has produced guidelines on complex interventions, including those delivered at a population level for health promotion purposes, the Campbell Collaboration, which is a sister collaboration to Cochrane, but producing reviews in education, social welfare, and crime prevention is looking at the effectiveness of policies and practices ranging from boot camps for young offenders to mentoring.

Over the past few years, randomised controlled trials of day care, social support in pregnancy, sex education, and smoke alarms are among the studies conducted in non-clinical settings, with a public health purpose. Epidemiologists and social scientists working in tandem have ensured that as well as reporting health outcomes, issues of process and implementation are also considered. The qualitative methods group in Cochrane is leading some of the work on this at the same time as hierarchies of evidence are being challenged with a greater focus on using the right kinds of methods and design for the particular question being explored. No longer are randomised controlled trials seen to trump other methods in all circumstances, or qualitative work seen simply as a way of trying to get the patients to comply, and understand why they don’t.

No randomised controlled trial is entirely simple. However straightforward the intervention, human creativity and cunning knows no bounds in subverting random allocation. William Silverman’s wonderful story of attempts to undermine a trial of the use of oxygen in premature babies illustrates this. Different coloured marbles would be returned to the dish if they were the “wrong” colour for a baby thought to need the intervention; allocations in sealed envelopes would be held up to the light. Of course we don’t do things that way these days, but if there are problems with even relatively straightforward interventions in relatively well organised clinical settings, the problems of large scale community trials are even greater.

Archie Cochrane was there first, of course. He described the gap between the scientific measurements based on randomised controlled trials and the measurements of benefit in the community. “There is”, he wrote, “a gulf which has been much underestimated.”

The article by Penny Hawe and her colleagues in this issue is therefore a welcome addition to the relatively sparse community trials literature to which her group has already substantially contributed. Their piece,
which is based on a cluster randomised controlled trial of primary and community development intervention to promote the health of mothers and babies, describes a mixed methods study designed to explore how context may affect the uptake, success, and sustainability of interventions. Their ambitious aim is to find out more about what aspects of context seem to matter most, and the ways in which that might lead to adjusting the intervention—the community equivalent of dose titration. They rightly point out that when it looks as if a complex intervention may have “worked”, it is difficult, if not impossible, to work out which bit has worked and why.

The evaluation of Sure Start, the UK early intervention programme designed to achieve better outcomes for children through increasing the availability of childcare, improving health, educational, and emotional development for children and supporting parents, is a case in point. The outcomes are described as being to meet their needs and stretch their aspirations. Perhaps the most central outcome is that of enabling children to thrive once they enter primary school. Although the evaluators’ meticulous design will undoubtedly add to our knowledge of how some parts of the programme work, and what some of the strengths and weaknesses are for particular processes, the design and implementation of the Sure Start programme as a whole means that they will not be in a position to tell us just what the programme work, and what some of the things that can’t play safely.” (personal communication, Walter Morrison, Corkerhill). In the same community, a group of mothers suggested that the best thing that could be done with the many leaflets they were given telling children how to cross the road was to use them to make papier mache road bumps.

For us to understand more, we need to be franker about failure as well as success; about problems as well as solutions. But funding imperatives make this difficult and dangerous. To sustain funding, there are considerable pressures to present every initiative as a success and to create a fairy story. The components of the interventions described by Hawe et al all have face validity, and the potential for long term gains. The careful qualitative and quantitative methods they describe have the potential to engender good reflective practice.

We still have a long way to go in developing and implementing sound interventions at a community level. We need to know much more about using the expertise of people who live in poor communities, and who for the most part enjoy considerable success in bringing up families in conditions of adversity. We need to be more savvy about appropriate methodological triage, and develop potential interventions in a step-wise manner, with the more expensive components preceded by sound qualitative work to enable investigators to develop interventions that mean something to those on the receiving end.

Big public health problems such as the “epidemic” of obesity, social and emotional difficulties experienced by children and young people, people coming to parenthood before they are ready, smoking and alcohol use, and growing inequalities in health mean that public health is moving up the agenda. In the UK for instance, the recent Wanless report advocates the importance of moving from a position where we know a good deal about the determinants of poor health to knowing more about what we can actually do about it, and strengthening the evidence base for public health policy and practice. While there may be more focus on individual change, and less on some of the big social drivers and obstacles than some of us would like, in general, he advocates precisely the kinds of work to improve our knowledge of effective implementation described in this issue.

REFERENCES