People and Work Unit

Discussion Paper

Health Interventions, Outcomes and Evidence: The case for the Risk and Preventative Factors Paradigm

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Uned Pobl a Gwaith

Introduction

This paper outlines an idea that intrigued us as evaluators. We are not suggesting or claiming any expertise in the field of health promotion and would therefore very much welcome any comments or suggestions.

The first section of this paper briefly outlines some of the problems we have identified, that the difficulty of establishing a causal link between health promotion interventions and health outcomes has, in our judgment, caused. In order to address some of these problems, the second section of this paper introduces the Risk and Preventative Factors Paradigm and discusses the rationale for using it to assess the impact of health promotion interventions. The third and final section discusses where we feel it would be appropriate to use the RPFP to assess Health Impact and outlines some of the benefits that we feel could flow from its use.

The problem

Randomised control trials represent the gold standard for assessing the impact of medical interventions. However they are a disproportionately complex, lengthy and costly way of demonstrating the impact of many small-scale health promotion interventions. In some cases, the complexity of establishing causal relationships between interventions and health outcomes has been used as a justification to either:

- Not attempt to assess outcome at all; or
- To only focus upon measuring outputs, such as the tangible services that the intervention provides.

The problem is that without 'hard' evidence of positive health outcomes, there is an understandable reluctance to invest scarce resources in health promotion interventions or work that addresses the wider determinants of health (risk and protection factors).

One common response has been to broaden the definition of 'health' to include 'Well-being'. This in turn admits evidence, such as people's subjective and typically qualitative judgements about improvements in their well-being. These include improvements in how they *feel* such as increases in self-confidence and self-esteem. There is merit in this approach. For example:

- in some cases it is easier to generate evidence showing improvements in people's subjective assessment of their well-being, than it is to demonstrate improvements in people's physical health; and
- it represents a form of democratisation in which people are empowered to define their own indictors of positive 'health' outcomes (Cf. Chambers, 1997).

Increased use of people's subjective assessment of their well-being is important. Nevertheless, the approach still has problems. For example, rigorous assessment of 'soft outcomes', such as increases in self-esteem, is not always as straightforward as measuring more easily quantifiable 'hard' outcomes (Dewson, et al, 2000). Softer outcomes may lack credibility in some people eyes, and this approach may mean that opportunities to generate evidence of improvements in a narrower, more traditional definition of 'health' are being missed. This in turn may make weaken the case that can be made for investing in work on the broader determinants of health when competing against other types of intervention that can demonstrate evidence of hard outcomes.

The Risk and Preventative Factors Paradigm

The Risk and Preventative Factors Paradigm (RPFP) was originally developed as a way of helping understand the start, continuation and cessation of offending by young people (Farrington, 2000). The framework outlines a series of factors that evidence has demonstrated either increase or decrease the risk of offending behaviour: 'risk' and 'preventative' factors. Interventions designed to reduce offending behaviour are therefore focused upon reducing risk factors and strengthening protective factors. The RPFP is increasingly being used to help understand why some young people suffer worse life outcomes than their peers (SEU, 2005), and within Wales, it has been adopted as a way of assessing the impact of Extending Entitlement (Haines, et al, 2004).

The principles underpinning the RPFP are well established in public health. For example, campaigns to reduce smoking, a known risk factor, and increase exercise, a

known protective factor, are well established. Within Wales, the Sustainable Health Action Research Programme (SHARP) has explored how interventions can help people get onto “pathways” to better health (CHPM, 2004). This type of approach provides the possibility of focusing upon generating evidence of a change in lifestyle or behaviour, such as a reduction in risk factors and a strengthening of protective factors, rather than trying to generate evidence of the changes in health outcomes consequent upon these lifestyle or behavioural changes. As Pawson writes:

> 'theory-driven' evaluation '"if we apply programme X this unleashes process Y, which will result in Z". The task of evaluation by these lights is to gather evidence to see if the process occurs as planned and, if it should not, then to amend the theory to account for the divergent outcomes.' (Pawson 2002: 347)

This approach is not unprecedented. For example, the Department of Health and Neighbourhood Renewal Unit guidance documents on evaluating health actions in Neighbourhood Renewal programmes (2003), suggest that the need to gather evidence should be limited to identifying the development of protective behaviours, on the basis that when a health link is already proven, a local intervention should not be required to demonstrate it again:

> 'sometimes it is not possible to measure a health outcome directly. Death rates from heart disease are a poor measure of the success of a local strategy to encourage people to take exercise ….. there may be decades of delay between the intervention and the outcome …. However, it is known that lack of exercise is linked to a higher risk of heart disease. It is sufficient therefore, at a local level, to know that more people are putting themselves into a lower risk category by taking exercise, and how often. It is this change that is worth measuring as it is directly and immediately attributable to those actions taken locally which have been expressly designed to lead to health improvement.' (DH & NRU, 2003. p. 36)

Applying the RPFP to Impact Assessment

A RPFP style approach to impact assessment would only be applicable in areas where there is strong body of medical evidence, typically generated through randomised

control trials, of a casual link between the presence or absence of a particular risk or preventive factor and positive or negative health outcomes. Where this evidence exists in principle, demonstrating a reduction in risk factors or strengthening of protective factors should be enough.

This is an argument for more robust evaluation of impact, not a weakening of the standard applied. Where a causal relationship is well established, and a health intervention is designed to, for example, enhance health by increasing levels of physical activity, there is no reason why assessments of the impact of the intervention upon levels of physical activity should only focus upon outputs (e.g. numbers of project activities) and 'soft outcomes' (e.g. increases in 'well-being'); it should also be looking for evidence of changes in risk and protective factors such as changes in physical activity amongst project participants.

In addition to improving the quality of evidence of impact, this approach has the potential to support 'joined up' interventions, by facilitating the use of indicators that a number of different departments could sign up. For example, housing, health and social justice could all conceivably sign up to an intervention whose indicator of success was an improvement in the quality of the housing stock. The importance of joined up governmental responses is widely recognised, for example, the New Economics Foundation's report 'A Well-being Manifesto For A Flourishing Society' (2004) identifies the need for education, economic development, environmental services, health and community development processes to work together to promote individual and community well-being.

Using RPFP in impact assessment also allows for a more targeted analysis of interventions and their value. So, for example, a programme that has a high level of involvement of people who have good protective factors could be judged to be having a lesser impact than one that involves fewer people but has a higher proportion of people with high risk factors. In this context, Hills writes about the need to develop criteria that is not just about 'what works' (meta-analysis and narrative review approach) but 'what works, for whom and under what circumstances?' (Hills, 2004).

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