

Presumed Innocent

Why We Need Systematic Reviews of Social Policies

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The Task Force on Community Preventive Services (the Task Force) presents recommendations in this supplement to the *American Journal of Preventive Medicine* relating to interventions targeting the sociocultural environment in order to improve health.¹⁻³ While the use of systematic reviews to address clinical questions no longer attracts much criticism, the use of systematic reviews in pursuit of wider public health aims is often more contentious. Not only are there methodologic objections to the use of evidence-based approaches in public health, it has also been pointed out that much of public health decision-making and health-promotion practice is based on plausibility, politics, and timeliness, rather than on research evidence.⁴ Therefore, at least two general questions are often asked about public health systematic reviews: First, for what are they? And second, are they of relevance in this context?

In answer to the first question, two benefits are worth repeating: Systematic reviews facilitate the management of increasing amounts of information by separating redundant and irrelevant information from the rest in a critical, replicable fashion; and they may shorten the time between research discoveries and implementation of effective interventions.⁵ These are straightforward, fairly pragmatic reasons for using systematic reviews in pursuit of the public health goals.

The second question requires a rather longer answer. Systematic reviews make an important contribution to public health decision making by explicitly considering the balance of positive and negative effects of the intervention, as do the reviews in this supplement. For many preventive interventions, there is often the assumption that "if even one person is helped, then this intervention is worthwhile." Coupled with this, there is an often misplaced "presumption of innocence" that generally applies to social policies; that is, any current service is considered effective, and is therefore supported by the state, until it is shown to be effective.⁶ This is based on the misconception that social and public health interventions do not have negative effects, even though it is not difficult to find examples of

well-intentioned, plausible interventions that actually appear to be harmful.⁷ This may be easier to believe of some sorts of interventions, clinical interventions for example, than of others. One may be surprised, for example, that some forms of psychological debriefing to prevent post-traumatic stress disorder actually appear to be harmful, but on reflection one can perhaps work out how this might be so.⁸ However, the suggestion that, say, housing interventions may have adverse effects would probably be met with incredulity, although several studies suggest that improving housing may be associated with rent increases, which have subsequent adverse health impacts. For interventions such as housing improvement, the harms are likely to be outweighed by the benefits and by sheer humanitarian considerations, but adverse effects are nonetheless plausible, and may not be mitigated unless we have reliable information on their existence and magnitude.

The more general point (that is also worth repeating) is that no social intervention, not even one known to be effective, is likely to be *wholly* beneficial. Moreover, the opportunity costs of social interventions are also important but are generally not discussed. It is therefore important that the balance of benefits and harms be routinely considered when making recommendations about community interventions, and well-conducted systematic reviews are essential in this respect. In the reviews reported in this supplement, the researchers routinely sought additional information on negative health "side effects" by conducting additional literature searches. Identifying adverse effects of interventions in this way is difficult, as this information may often go unreported or may be overlooked, but it is an essential step in any review of the evidence. Journal editors should perhaps consider requiring systematic reviews of interventions to include an explicit statement on adverse effects. This could also be emphasized in any future revision of the Quality of Reporting of Meta-Analyses (QUOROM) statement, which aims to improve the quality of the reporting of meta-analyses.⁹

The systematic review of family housing interventions² illustrates the value of such reviews and also highlights some of the differences between clinical and nonclinical systematic reviews. There are high expectations of housing policies; not only are they expected to simply result in affordable housing, but it is also often hoped that they will have spill-over effects, such as

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reducing social exclusion, reducing crime, promoting community safety, stimulating area regeneration, and improving public health in the bargain.¹⁰ Unfortunately the health effects often go unreported in the primary studies. Nonetheless, the review was able to identify some definite positive effects. For example, tenant-based rental assistance programs do appear to improve neighborhood safety and reduce the risk of victimization. On the other hand, this review points up one of the main problems with looking at public health evidence in detail: There are often relatively few methodologically robust studies to review, so that in this case it was not possible, for example, to determine the effectiveness of mixed housing income developments. This information is itself valuable, as it points out where future research work could usefully be directed, but it also emphasizes a general problem with doing systematic reviews in public health, which is that most public health evidence is non-evaluative and is of limited use in informing decisions about interventions.¹¹ We therefore need rigorous systematic reviews like these, not just because they act as guides to action, but also because they can stimulate the production of new policy-relevant primary evidence.

In conclusion, the particular strengths of the Task Force's reviews lie in the explicit consideration of unintended positive and negative effects, of economic efficiency, of applicability, and of barriers to implementation. These are all issues that could easily be overlooked in the drive to categorize interventions as "effective" or "ineffective." The Task Force reviews¹⁻³ illustrate clearly how well-conducted systematic reviews can inform social policy; they are also excellent models

on which other public health, and indeed non-health, reviews could be based.

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