

Response to McKeganey

Methodologically sound rapid assessment and response: providing timely data for policy development on drug use interventions and HIV prevention

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McKeganey's commentary questions whether *Rapid Assessment and Response* (RAR) provides "really useful knowledge or is an argument for bad science?" (McKeganey, 2000). He proposes that until there is specification of the questions which can be explored using RAR, and independent evaluations of RAR-recommended interventions, the "true-worth" of RAR will remain unknown.

1. Conceptual underpinnings of the commentary

Our response challenges a number of the conceptual assumptions of McKeganey's commentary and suggests different rationales

for its methodological critiques. We believe the commentary fails to clearly distinguish between the misapplication of RAR, and the inherent strengths and limitations of well-implemented projects. The contention that misapplication leads to bad science is certainly a strong argument for carefully employing the methodology only where appropriate. Rapid assessment proponents themselves caution against misapplied science when adapting RAR for research, as well as the development, implementation and evaluation of interventions.

The commentary appears to be organized to compete rapid assessment methodologies against "traditional research in the behavioral sciences". However, the commentary acknowledges that rapid assessment methods are not new, but are part of the standard tool kit of qualitative and quantitative paradigms

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within traditional research. Since these are well-defined and standardized methods, the field might have benefited more from an examination of the combined strengths, constraints, principles and guidelines for their appropriate use, rather than a discussion of their occasional misuse or inappropriate application.

2. Rapid assessment in context: an expanded base for judging the methods

The commentary derives almost exclusively from a review of one rapid assessment manual, the World Health Organisation (1998) '*Rapid Assessment and Response Guide on Injecting Drug Use*'. The lack of coverage of other works and critiques creates a very limited base for judging the range and depth of methodological issues represented in rapid assessment projects. Rapid assessment has relied on systematic ethnographic (and other qualitative) data collection and analysis techniques complemented by survey information and direct observation studies, since its inception (cf. Scrimshaw and Hurtado, 1987; Bentley et al. 1988; Scrimshaw and Gleason, 1992). The approach has a clearly documented history of success within and outside of public health, in both international and domestic contexts (for example, Kirsch, 1994; Materia et al., 1995; Dale et al., 1996). It has been used to respond to problems such as malaria, diarrheal disease, dengue, breast and bottle feeding, other nutritional studies, and now drug abuse and AIDS. The evolution of the approach has been informed by numerous methodological discussions, leading to consistent improvement in design and analytical procedures (Manderson and Aaby, 1992; Harris and Jerome, 1997; Harris et al., 1997).

The rapid spread of HIV and explosive epidemics in drug-using populations world-

wide, combined with emerging and changing drug use patterns and distribution systems, has created enthusiasm for rapid collection of locally relevant data and time-sensitive analyses linked to public health interventions. However, McKeganey's commentary incorrectly attributes support for rapid assessment in the US to the National Institute on Drug Abuse. It is the Department of Health and Human Services, Office of HIV/AIDS Policy that is supporting the use of the Rapid Assessment, Response and Evaluation (RARE) approach as part of a comprehensive Congressional Black Caucus initiative to address the disproportionate impact of HIV/AIDS in racial and ethnic minority communities in the US. RARE is adapted for working in a context that includes strong traditions in formal surveillance methodologies, epidemiology, and the developing field of prevention science as part of the national infrastructure for prevention, treatment and care. It utilizes concepts from the RAR guides to provide communities with the philosophy of rapid assessment, to allow local leaders to decide if rapid assessment programs are appropriate for their situation (Needle et al., 1999). The RARE guide is augmented with additional information from epidemiology, ethnography, and prevention science (Trotter and Needle, 1999) to provide a framework for training, and help assure that rapid assessment will be conducted within the context of strong scientific methodological standards. The RARE adaptations include the creation of a guide for community leaders and advisory committees, a methods work book, the use of existing data sets (epidemiology, surveillance, and research), oversight by individuals with experience in the method, methodological training for local field teams, direct involvement of community leaders and health providers, accommodation of the methodological concerns raised in other ap-

plications, and an evaluation component to assess intervention implementation. Only part of these quality control processes are addressed in the RAR guide; thus, the commentary lacks the information needed for a full assessment of the approach.

3. Assumptions critique

The commentary's description of the assumptions behind the World Health Organisation RAR approach are correct, as far as they go. However, it leaves out one assumption critical to the success of RAR. Rapid assessment should always be based on a firm foundation of extensive local cultural knowledge. The approach requires the inclusion of cultural experts who have both local perspective and the methodological expertise to provide a valid and reliable assessment of data collected through rapid assessment techniques. If this 'cultural expertise' condition is not met, then labeling the approach as 'impressionistic' would be more credible.

4. Sampling comments

The commentary makes a problematic statement that "where a more traditionally-oriented research project may involve interviews with between 50 to 100 individuals, rapid assessment may seek to get by with interviewing five or ten key individuals". The sampling design for rapid assessment is based on two complementary approaches: one compatible with qualitative methods and one with quantitative analysis. For cultural expert interviews and other qualitative data gathering techniques, sampling is based on the principles found in '*Selecting Ethnographic Informants*' (Johnson, 1990), or similar methodological literature. These provide a

valid framework for both probabilistic and nonprobabilistic (or guided) sampling. Sample size and selection are determined by the conditions attached to specific methods. The statement that RAR projects seek to get by with five or ten individuals as adequate samples is incorrect. Also, the statement that 50–100 individuals are needed for traditional samples is equally misleading. Both comments ignore modern protocols of specifying the sampling design that is appropriate for specific methods, and providing the power analyses that would normally be performed to determine sample size for specific statistical tests. The procedures used in rapid assessment, from random assignment to snowball and network sampling, have been extensively explored in the literature. They deserve more sophisticated treatment than the disregard of design conditions and constraints found in the commentary.

5. Inductive enquiry

The commentary proposes that the RAR recommendations of existing interventions (such as needle exchange or bleach distribution), rather than new, untried, or more varied interventions, invalidate the logic of inductive enquiry. This view confuses innovation with induction. It assumes that an inductive approach will always create something new, rather than sometimes affirming the utility of known solutions. This assumption does not match the reality of either inductive or deductive approaches. The process is inductive, but the conclusions range from finding something unexpected, to providing evidence that what works elsewhere will also work in a specific local case. The inductive approach has proven particularly valuable for optimizing existing interventions by making them sensitive to the cultural, economic,

political realities of the local community. This is one of the strengths of RAR and why there appears to be excitement for using the methodology in diverse settings.

6. Multiple methods and triangulation

We feel that triangulation is not strongly analogous to the journalistic condition of seeking confirmation of source materials. Only one method (interviewing) is used in that case, although the ideal of gathering information from multiple independent sources is similar. This inadequate analogy is tied to a straw man argument that rapid assessment uses one ‘most suitable’ method, coupled with less appropriate methods to produce triangulation. The overall methodological mix used in rapid assessment is never a choice between good and less good or bad methods; it is a carefully constructed set of complementary methods selected to address a specific research problem. The mix varies by the question that is being explored. Single methods, such as focus groups or key informant interviews, can provide evidence of both consensual and conflicting views about a cultural domain. Adding other methods often helps explain both the consensus, and/or the conflict. For example, focus groups tend to produce ‘public’ discourse, and provide information about what people say they do, or should do. When this is matched with direct observations of the behavior explored in the focus group, it is often possible to confirm some of the things that were said, and to discover variations between what people say they should do, and their actual behavior. The differences do not cause results that “are in conflict with each other”, they help analyze complementary data and maximize their methodological strengths while dealing with methodological weaknesses. The

existing literature on validity, reliability and generalizability in qualitative research provides both a good justification for, and a thorough explanation of, multiple methods and triangulation.

7. Practical adequacy, scientific perfection, and generalizing

The commentary’s practical adequacy critique focuses on examples of drug prevalence estimation from the RAR guide, rather than the utility of the wide range of information gathered through rapid assessment. We agree that the estimation examples in the RAR guide have severe limitations. They are attempts, in the absence of surveillance infrastructure and a dearth of local resources, to model prevalence with less than the “gold-standard” approach. The commentary states mild sympathy with this condition, then discards the entire process by noting that the estimations simplify extremely complex processes. We agree that traditional estimation is complex, expensive, and time consuming. The lag-time in obtaining and using ideal data for policy and or program planning is often substantial. However, all estimation procedures are simplifications of complex realities. The commentary misses the fact that the level of scientific reliability and validity found in rapid assessment procedures has been assessed, and ranges from adequate to excellent for describing conditions where there is limited information available. Sound rapid assessment data is solidly defensible, rather than impressionistic or based on emotion and political expediency. In the absence of an alternate strategy that addresses issues of cost, time to develop the system, data collection, data management and reporting of results, it is difficult to see how the need for intervention could otherwise be served, espe-

cially where the pursuit of perfection fails to produce local adequacy of response.

8. Conclusions

There are excellent reasons to avoid poor applications of rapid assessment. These weaknesses include misapplication of the technique, redundant use where other data is available, inadequate design for a specific issue, inappropriate sampling, insufficient training and expertise to correctly analyze and interpret data, misplaced generalizations, and biased or incorrect decisions derived from the data. However, these are known limitations. The concerns raised by McKeganey in his commentary do not sufficiently take into account the ways that they have already been accommodated in rapid assessment efforts. There is an on-going need for tighter specification of the kinds of questions being asked, and a need to more fully understand both the strengths and limitations of the process being reviewed. However, the contention that the field first needs to specify all of the questions and issues that could be legitimately approached through the use of rapid assessment is analogous to stating that any scientific tool, from mathematical formulas to new assay techniques, should only be used once all of their potential uses (and occasional misuses) have been thoroughly identified. This approach would curtail innovation and greatly slow the practical application of science, to the detriment of society.

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