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## Viewpoint

# Rapid assessment, injecting drug use, and public health

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Some say there is an epidemic in the use of rapid assessment methods.<sup>1</sup> The use of such methods is widely advocated by international agencies interested in developing cost-effective and pragmatic methods of public-health research, primarily for use in developing and transitional countries.<sup>2</sup> Under various names, such as rapid anthropological procedures<sup>1,2</sup> or rapid appraisal,<sup>3</sup> rapid assessment has been applied in fields as diverse as malaria,<sup>4</sup> diarrhoea,<sup>5</sup> water sanitation,<sup>6</sup> and nutrition.<sup>7</sup> More recently, epidemics of HIV-1 have stimulated the development of rapid assessment methods specific to HIV-1 prevention.<sup>8,9</sup> In particular, there has been a dramatic increase in the use of rapid assessment methods in the fields of illicit drug use and drug injecting.<sup>10–13</sup>

We argue that the public-health potential of rapid assessment has yet to be fully realised. We begin by summarising the key methodological principles underpinning rapid assessment. We then draw on recent examples of the rapid spread of HIV-1 infection associated with injecting drug use (IDU) in the newly independent states of Eastern Europe to emphasise that rapidity, methodological pluralism, and an orientation towards multisectoral intervention are critical features of effective public-health assessment and response. We conclude by proposing that whereas rapid assessment remains largely peripheral to mainstream public-health approaches, it should be given a central role as a generic

public-health technology for both developed and developing countries.

## Origins of rapid assessment

Contemporary notions of rapid assessment represent a convergence and synthesis of different research and intervention traditions.<sup>1</sup> Among the most important of these are applied research, medical and emergency response, and community development. As applied research, the methodological origins of rapid assessment can be traced to social interactionism in sociology which emerged in the 1920s, led by the Chicago School.<sup>14</sup> These developments emphasised the socially situated nature of individual action, and showed the value of integrating multiple qualitative methods to understand the meaning and context of behaviour. This is the genesis of rapid assessment as a multimethod approach which focuses on public-health contexts in addition to individual health and health behaviours, and which encourages assessment and intervention that is compatible with local practices in different cultural settings.<sup>2,5,7–9</sup>

As a form of applied research, rapid assessment also draws on quantitative methods in epidemiology and behavioural science, and, in particular, on risk-factor prevalence estimation through surveys of knowledge-attitude-practice.<sup>15</sup> Although often quasi-rapid, the knowledge-attitude-practice survey has become a key element in public-health practice in providing a knowledge base for intervention, including HIV-1 prevention.<sup>8</sup> The integration of surveys with qualitative methods is a feature of rapid assessment.<sup>1,8,15</sup>

Rapid assessment has also featured as part of the development of medical and emergency responses to war and natural disaster by agencies such as the United Nations, Medical Emergency Relief International, Médecin du Monde, and Médecins San Frontières. The

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emergence of major health difficulties as a consequence of disaster is often extremely rapid, and commensurate speed in assessment and response is critical. Rapid assessment methods are preferable to conventional research approaches, because the latter are slow to deliver and often lack the capacity to inform policy or programme decision-making in time.<sup>1</sup>

Rapid assessment has also evolved as a mode of community development and community diagnosis.<sup>1,16,17</sup> Popularised in the 1970s, these approaches emphasise that the efficacy of assessment of welfare difficulties, and of the interventions developed in response, not only depend on knowledge of local situations and community practices, but also require the active participation of local communities in the research and intervention process. Rapid rural appraisal provides an example.<sup>3</sup> Here, rapid assessment is envisaged as a means of community organisation and change, and not merely of top-down research promoted by outside experts.

### Method of rapid assessment

The idea of rapid assessment is simple. It involves the speeding up of social-science research,<sup>1</sup> and the explicit linking of assessment to action, thereby giving priority to pragmatic rather than to scientific outcomes. Yet, given the diversity of (often competing) methodological and disciplinary perspectives from which the idea has evolved, attempts have been made to standardise better the method of rapid assessment. This has given rise to several guides and manuals for use in a range of health fields and cultural settings.<sup>1-9,13,14</sup>

Efforts to formalise rapid assessment, as distinct from conventional public-health science, highlight several methodological principles in addition to rapidity and an orientation towards intervention development. These principles include the use of multiple methods in conjunction with multiple data sources; the continuing triangulation of data; a cyclical process of inductive hypothesis formation and testing; and an investigative orientation familiar to aficionados of the detective novel. In addition, there is a focus on the social, cultural, and economic contexts in which populations, individuals, and their behaviours are situated; and an emphasis on community participation towards the design of interventions that achieve synergy in activities across different sectors. Taken together, rapid assessment offers some useful methodological lessons for generic public-health research.

First, its inductive approach allows assessments to develop in response to practical findings as they emerge, rather than on the basis of a-priori or fixed hypotheses. This enables the parameters and content of assessments to follow new lines of enquiry relevant to intervention development as they are discovered. Second, its focus on triangulation between multiple methods and data sources—for example, between existing data reports, key-informant interviews, focus groups, observations, mapping techniques, and community surveys—allows findings to be cross-checked and validated throughout. This frees assessments from a dependence on single methods of data collection with restricted sample groups, enabling an investigative approach to building up a situational picture from a variety of forms of evidence at the local level. Third, its focus on undertaking assessments in order to respond means that assessment is perceived as an integral part of the response and

intervention development process, and is best judged by the intervention outcomes it delivers. Fourth, because the aim is to develop interventions and not merely to generate knowledge, rapid assessment also gives priority to participatory initiatives in which the assessment process itself is viewed as a resource for developing multi-sector partnerships and responses.

### An example

We have argued that rapid assessment methods are well suited to the undertaking of cost-effective and pragmatic research in a range of social, cultural, and economic environments, particularly when inadequate data exist. The suitability of rapid assessment methods has been increasingly acknowledged in the fields of HIV-1 prevention and IDU.<sup>8-10,18</sup> Research into drug injecting is known for its practical and methodological difficulties, particularly regarding access to adequate data.<sup>19</sup> In many countries, epidemiological data on new drug trends are severely limited because of the illicit nature of drug use, the hidden nature of target populations, the inbuilt biases of surveillance based primarily on drug treatment rather than on community populations, and the time-lag involved before new trends in drug use are captured by reporting systems.

The rapid spread of HIV-1 associated with drug injecting demands methods of assessment and response that are not only cost-effective and pragmatic, but which are implemented with commensurate speed and encourage early intervention. Recent changes in the pattern of HIV-1 spread among IDUs in Europe emphasise this point. Before 1994, there was little evidence of HIV-1 epidemics in the newly independent states of eastern Europe, and virtually no reports of HIV-1 infection among IDUs.<sup>20</sup> Yet, between 1994 and 1998, evidence suggests the explosive spread of HIV-1 in Ukraine, the Russian Federation, Belarus, Moldova, and Kazakhstan.<sup>20,21</sup> HIV-1 cases in Ukraine, for example, have jumped from 44 in 1994, with no reports among IDUs, to 15 442 new HIV-1 cases reported in 1997, of which more than 50% (7950) were among IDUs.<sup>18,21</sup> By January, 1996, in south Ukraine, HIV-1 prevalence among IDUs had risen to 31% in Odessa and 57% in Nykolayev.<sup>18,20</sup> Of 4337 new HIV-1 cases in 1997 in the Russian Federation, at least 74% were among IDUs.<sup>21</sup> It is estimated that as many as 80% of HIV-1 cases are associated with drug injecting in Belarus and Kazakhstan.<sup>18</sup> Studies<sup>22</sup> suggest that reported increases of HIV-1 infection among IDUs are a true reflection of the diffusion of epidemic spread in the region.

Rapid spread of HIV-1 among IDUs in these countries has coincided with the diffusion of illicit and injecting drug use,<sup>18</sup> as well as with dramatic increases in the incidence of sexually transmitted infections in the general population.<sup>23</sup> In the Russian Federation, for example, current estimates of the number of IDUs are at least twenty times higher than they were in 1990,<sup>18</sup> and the incidence of syphilis increased 48 fold between 1990 and 1996.<sup>23</sup> HIV-1 epidemics associated with IDU intersect with, and are exacerbated by, epidemics of sexually transmitted diseases, and epidemiological studies in Russia are beginning to show evidence of sexual HIV-1 transmission between IDUs and heterosexuals with no history of IDU.<sup>24</sup> Rapid HIV-1 spread among IDUs in the newly independent states of eastern Europe is situated within local contexts of rapidly changing patterns of health, welfare, and economic status.<sup>25</sup>

These epidemics of HIV-1 associated with drug injecting in the newly independent states are occurring 10–15 years after the rapid spread of HIV-1 among IDUs was first documented.<sup>26</sup> Since this time, a wealth of international expertise has been gained in HIV-1 prevention, and evidence shows that it is possible to limit—as well as to prevent—such epidemics.<sup>26</sup> Effective HIV-1 prevention is associated with early intervention, accessibility and availability of services, and multi-sector interventions that balance individual with community and environmental change.<sup>18,27</sup> Practical examples have included community outreach, network and peer interventions, needle and syringe distribution and exchange, condom distribution, and agonist pharmacotherapy, including methadone.<sup>18,26,27</sup> Yet the efficacy of HIV-1 prevention responses may be strengthened by borrowing from the methods and ideology of rapid assessment. There is not the time to wait until new epidemics become apparent. Once HIV-1 prevalence among IDUs reaches 10%, it can surpass a prevalence threshold of 40% within 1 or 4 years.<sup>28</sup> Early intervention is critical. Rapid assessment methods not only provide the technology for responding quickly as new evidence emerges, but may also provide the technology for cost-effective monitoring to predict whether new epidemics are likely to occur. This potential implies a continuing role for rapid assessment, which is more proactive than reactive.

In an attempt to formalise and evaluate rapid assessment, WHO, United Nations Joint Programme on HIV/AIDS, and United Nations International Children's Fund have developed a series of *Rapid Assessment and Response* guides as a means of facilitating community participation in the development of rapid public-health responses. These guides focus on HIV-1 prevention associated with injecting drug use, sexual risk behaviour, and street children and other vulnerable young people.<sup>11–13</sup> They are indicative of recent innovations that aim to formalise rapid assessment as a method of explicitly linking assessment and response. Having been piloted in many countries including Brazil, Canada, Colombia, Kazakhstan, Nigeria, the Russian Federation, and Ukraine, the Rapid Assessment and Response Guides are to be field-tested and evaluated in at least 20 countries.<sup>18</sup>

In addition, and in direct response to rapidly emerging HIV-1 epidemics among IDUs, there is increasing use of rapid assessment in the countries of eastern Europe, including Belarus, the Czech Republic, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Macedonia, Russian Federation, Romania, Slovenia, Ukraine, and Uzbekistan.<sup>18</sup> Lasting between 3 weeks and 3 months, these rapid assessments have proved crucial in gathering data to inform local intervention and policy developments when only inadequate data existed before.<sup>10,18,29,30</sup> Their focus on context, both local and social, and their combined use of qualitative and quantitative data, have enabled the description of local risk practices, risk environments, and the situational factors influencing HIV-1 transmission. This focus has included, for example, identifying the HIV-1 risks involved in the production, distribution, and use of domestically produced opiates (known variously as 'himier', 'chornie', 'hanka') and stimulants ('vint', 'belie'), and recommendations for intervention developments in response.<sup>18,29</sup> In addition, such assessments have created

opportunities for multi-sectoral HIV-1 prevention and have generated rapid feedback of findings to key stakeholders, including those involved in policy decision-making.<sup>10,31</sup> These processes have led to the inclusion of rapid assessment as a fundamental component of capacity-building and public-health training programmes in the region.<sup>31</sup> In our view, this indicates the potential of rapid assessment to provide the public-health tools necessary to develop intervention and policy responses at the local level.

### **Public-health potential**

The speed with which public-health responses are developed can be a critical determinant of risk reduction and disease prevention, yet rapid assessment methods remain peripheral to mainstream public health. Given its emphasis on rapidity, pragmatism, and cost-effectiveness, there is a tendency to regard rapid assessment as a second-rate public-health method. This tendency is compounded by the fact that the findings and impact of rapid assessments are rarely published in scientific journals. Rapid assessment has also to a large extent become sidelined as a method specifically to be used in developing countries. These factors, we believe, have worked against formalising the method and realising its generic public-health potential.

Recent developments in the use of rapid assessment suggest its generic potential is becoming more widely appreciated. The Australian government, for example, has recently encouraged the use of rapid assessment methods in the strategic planning of cervical-cancer surveillance and services among indigenous women.<sup>32</sup> Far from being "second-rate" method, rapid assessment is complementary to conventional public-health methods and distinguished as having greater practical and methodological utility in a variety of public-health fields and social settings. Its emphasis on practical outcomes conducive to protecting public health does not detract from the basic requirements of all research to produce judgements with maximum validity and accuracy. Envisaging rapid assessment exclusively as a "developing country method" involves a particularly dubious logic. Rapid assessment may have public-health utility whenever rapid responses are required to emerging or changing health difficulties, be these Ebola in Africa, influenza A in Hong Kong, cervical cancer in Australia, new patterns of heroin use among young people in England, or HIV-1 infection in urban communities in North America.

Rapid assessment is a synthesis of research and intervention techniques, giving priority to intervention outcome over allegiance to particular theoretical or methodological perspectives. It may find recognition as a generic public technology because it has the potential to bridge rather than to entrench methodological, disciplinary, and sectoral divides in public-health research and response. Its multimethod focus has the capacity to realise a pragmatic balance between behavioural and environmental factors as units of analyses in public-health research, to develop synergistic interventions across the disciplines and sectors that shape public health, as well as to generate priorities for longer-term public-health research. Efforts to formalise the method of rapid assessment may even assist in securing new paradigms of public-health research and response based on the principles of methodological pluralism, intervention

pragmatism, and the need to understand population health in the context of the local environment. It is time for rapid assessment to be fully integrated into the battery of methodological choices available to public-health researchers and interventionists in developed as well as in developing and transitional countries.

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