

## Integrating Rapid Evidence Generation and Synthesis in the Researcher's Methods Toolkit

There is currently a predominance of an instrumental view of science, which has produced a social contract between science and society.<sup>1</sup> From this perspective, science contributes to the improvement of the human condition through the production of knowledge that can be used as basis for improving policies, programs, and practices in various spheres of life. This view has permeated different aspects of the scientific enterprise including science governance (e.g., transition of measurement of scientific impact from economic to social/societal)<sup>2</sup>, research ethics (i.e., integration of social/public benefit in the ethical criteria for assessing research involving human participants)<sup>3</sup>, and the thrust for both evidence-informed decision-making (i.e., the integration of evidence from research and other sources in the process of decision-making for various purposes)<sup>4</sup> and knowledge translation in health (i.e., the generation, synthesis, and application of knowledge to improve health, as well as health services and the health system)<sup>5</sup>.

One of the barriers to this ideal, however, is the lag time between the demand for knowledge/evidence from end-users such as policymakers, decision-makers and clinicians, and the production and synthesis of such knowledge/evidence from scientists and researchers.<sup>6</sup> This is attributed to, among others, the administrative and quality assurance procedures that a research idea has to go through before it is implemented as a study (e.g., search for funding, technical and ethics review, contract and award set-up, etc.), the actual implementation of the research itself (e.g., search for, and recruitment of, research participants, collection, and analysis of data, etc.), dissemination efforts (e.g., peer review and publication), and the post-dissemination activities (e.g., indexing, integration in evidence synthesis reports, etc.). This lag time is usually cited as being 17 years for clinical research but is actually highly variable as it depends on the research area, not to mention the identified start- and endpoints of measurement of the lag time.<sup>6,7</sup>

The chasm between evidence generation and evidence use has taken on greater significance in light of the global experience with the COVID-19 pandemic. The rapidly evolving situation of this public health emergency put to light the need for faster turnaround times in evidence production, synthesis, and dissemination so that evidence will be available in a timely manner for its intended end-users. As one observer noted, the pandemic has forced the scientific community to find ways to “speed up science”.<sup>8</sup>

A way by which the lag time can be reduced is through the use of rapid evidence generation and evidence synthesis approaches, such as the one utilized by Elepaño et al.<sup>9</sup> in this issue of *Acta Medica Philippina*. In their report, the authors undertook a quality improvement initiative, by way of a chart review, to inform a specific set of stakeholders regarding application and use of Philippine COVID-19 Living Recommendations. As mentioned by the authors in their paper, their research was facilitated through the use of 1) funding and institutional approvals facilitated by a multidisciplinary team, 2) short and adaptive study protocol, 3) simplified sampling method and data collection, and 4) rapid implementation and analysis of the project.

As the name implies, rapid evidence generation and evidence synthesis approaches refer to adaptation of research methods to allow for faster collection, processing, and analysis of research data, essentially compressing the research timeframe.<sup>10</sup> Discussion in the literature of rapid approaches to research usually point out that these have roots in Rapid Assessment Procedures (RAP) and Rapid Rural Appraisal (RRA) used in other disciplines since around the 1990s or earlier.<sup>11,12</sup> Some of these rapid research techniques include rapid surveys<sup>13</sup>, rapid qualitative interviews<sup>14</sup>, rapid ethnography<sup>15</sup>, rapid qualitative data analysis<sup>16,17</sup>, and several approaches to rapid reviews/evidence synthesis<sup>18</sup>. Given the limitations of space, readers interested in rapid research approaches may consult the references cited in this editorial for further information on these evolving methodologies.

A careful perusal of the literature will show that there is not as of yet any universally agreed definition as to what constitutes rapid research except that the research process is accelerated through omission adaptation of certain steps of current research procedures. Furthermore, the process for carrying these out, and the standards for ensuring quality of data and findings, are still being refined by methodologists.<sup>19</sup> In utilizing rapid research approaches, then, researchers will obviously face trade-offs between rigor, and time and cost considerations, a fact which should be made transparent especially to the intended end-users of the knowledge products of such research. Nonetheless, researchers in the local setting, particularly those working in fields or contexts that require short turnaround times for research evidence (e.g., emergencies and disasters, health policy), should now begin considering the integration of these rapid research approaches in their methods toolkit so that they can work “rapidly, remotely, responsively, and nimbly”<sup>20</sup> as they respond to the call to honor the social contract between science and society.

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