

Discourse

Global Health Research as Seen Through a Health-System Lens

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Background

We recently participated in a research internship at Great Lakes University of Kisumu, Kenya, that brought together colleagues from five low- and middle-income countries. The question of how to meet the Millennium Development goal for maternal health was a recurring point of discussion. Interns observed that while some progress has been made, high maternal mortality ratios, late and infrequent antenatal visits, and a substantial proportion of deliveries being assisted by unskilled birth attendants in many parts of Sub-Saharan Africa indicate that much remains to be done (Crowe, Utley, Costello, & Pagel, 2012). We reflected on the state of the evidence, successes and gaps, and efforts being made to address what at times seems an intransigent problem. We asked ourselves: How can nurses and midwives use research to make a difference, and would a health-system lens provide a different orientation to our research approach?

We begin with three brief scenarios, each highlighting a critical dimension of the gap in maternal care. We then consider the value of using a health-system lens to guide research in this field.

Reducing Financial Barriers to Maternity Care in Kenya

In an effort to reduce high maternal and neonatal mortality rates, Kenya has introduced a national policy requiring that births be attended by skilled health workers. But this entails additional costs for the family, including the cost of getting to a health facility and the cost of care. Studies conducted in Kenya indicate that many clients report financial barriers to maternity care (Borgh, Ensor, Somanathan, Lissner, & Mills, 2006; Gamble Kelley, 2010).

This fact prompted the Kenyan government to introduce the Output Based Approach (OBA) program. Clients receive an OBA voucher for a fee of two hundred Kenyan shillings (approximately \$2.50). This voucher ensures access to safe delivery at a Kenyan health facility of one's choice with no additional costs (Center for Health Market Innovations, 2012; Warren et al., 2011). It puts the decision about where to deliver in the hands of the consumer while providing an incentive system for health providers to improve the quality of maternity care.

Private and Public Partnerships for Maternity Care in Uganda

The goal of Uganda's National Health Policy on Public-Private Partnerships for Health (Ministry of Health, Government of Uganda, 2010) is to strengthen the health system by promoting collaboration between the two sectors. However, in practical terms this collaboration is characterized by service duplication in the midst of service gaps. Also, there are high rates of staff turnover in the public sector and poor coordination of services across the continuum of care. This leads to mothers seeking care from multiple health-service providers and an erosion of the public sector image.

Addressing Attitudes of Care Providers and TBA Policies in South Africa

Traditional Birth Attendants (TBAs) play a significant role in cultural competence, consolation, empathy, and psychosocial support in child-birth. Their role in caring for pregnant women and carrying out deliveries is acknowledged by the South African government, although generally TBAs are not trained to handle complications (Madhivanan, Kumar, Adamson, & Krupp, 2010). However, negative attitudes on the part of hospital staff towards TBAs and financial constraints that impede women's use of maternity services may encourage women to seek the services of these traditional providers. The knowledge and skills of the TBAs can be improved within permissible standards through sustained partnerships with skilled birth attendants. Such partnerships may lead to improved maternal and neonatal health outcomes.

Using a Health-System Lens to Guide Research

Each of these scenarios highlights an important dimension of maternity care. While studies that look at these elements in isolation offer important insights into discrete mechanisms of influence, an understanding of how the elements interrelate is also needed to inform effective programs. This

requires a system-oriented approach to research (de Savigny & Adam, 2009).

A comprehensive overview of research in this field is well beyond the focus of this article. Nonetheless, we can offer a couple of observations about this realm of research.

Systematic reviews yield disparate conclusions about the effectiveness of maternity-care interventions targeting vulnerable and poor women, such as TBA training programs, identification of high-risk pregnant women, and incentives for deliveries by skilled attendants (Wilson et al., 2011). While initiatives such as Safe Motherhood and the Ministers' Leadership Initiative (Gamble Kelley, 2010) highlight the importance of a health-system approach to the problem, it is our contention that many researchers have not kept pace with this paradigmatic shift. The literature suggests that many research studies continue to focus on discrete intervention elements (training programs, financial incentives, provision of birthing kits, transportation in obstetric emergencies, identification of high-risk pregnant women, provision of drugs to treat postpartum hemorrhage), each examining a limited number of interventions — albeit within multidimensional health-system frameworks (de Savigny & Adam, 2009).

This pattern of research is not surprising. Determining which individual interventions are effective requires focused research, but in making choices about policies, programs, and resource allocation, decision-makers also have to grapple with questions about the mix of interventions and the interactions between these interventions and their context. Synthesizing and integrating policy-relevant findings across studies requires more than a brief description of study settings. It also calls for an in-depth description of the sociopolitical context(s) for intervention research. Examples of contextually relevant characteristics include the predominant attitudes of health professionals towards TBAs; the evolution of country-level policies on maternal and child health and the current status of these policies in relation to the role, scope of practice, and accountability of maternal-health providers (professional and traditional; private and public sector) to government and to communities. Contextually rich descriptions are needed to inform a health-system orientation for both interpreting research findings and comparing better maternity-care systems across studies and settings.

Implications

So how do we bridge this gap? How do we move from an abundance of research examining discrete interventions to more research with a health-system orientation?

A shift to a health-system orientation in research is becoming more evident in requests for proposals and will help to stimulate research in this area. For instance, there have been recent funding calls for implementation research, issued by the Global Alliance on Chronic Disease and the Global Alliance for Health Policy and Systems Research (Global Health Workforce Alliance, 2012). These require the proactive and strategic involvement of decision-makers and health providers on research teams, to ensure that an intimate understanding of the day-to-day realities of implementing change in complex health systems is embedded within research plans. They also require in-depth contextual analyses and comparisons across settings. These methodological parameters will yield the types of data needed to examine system characteristics that influence outcomes. For example, how do the skill mix of private and public health providers and the involvement of non-governmental organizations in a district affect the uptake of enhanced maternity-care services, and how do local transportation services and agricultural patterns influence the cost-effectiveness of financial incentives when used in combination with TBA training and high-risk antenatal screening?

Achieving these aims requires development in a number of areas. We need knowledge-synthesis approaches that more fully take contextual influences into account. We need decision-maker input to identify key parameters for sociopolitical contextual analyses across studies. The expertise necessary to achieve depth and sophistication in the assessment of complex sociopolitical and economic realities of health-system change warrants careful consideration. Finally, funders need to support implementation science and provide mechanisms that encourage timely cross-fertilization of learning across teams working in comparative settings.

Conclusion

While the examples used in this article have been focused on maternity care in lower-income countries, the question of system-oriented research is equally applicable to other vexing issues in Canada and internationally. We must ask ourselves whether we are adequately preparing the next generation of nurse researchers for this challenging arena of inquiry and how we might contribute to the development of the integrative methods, contextual analytical approaches, and synthesis techniques that are essential for this work. Working with colleagues who are in resource-poor settings and grappling with acute and chronic service delivery challenges would yield fruitful dialogue and insights with broad applicability.

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