Issue attention in global health: the case of newborn survival

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Introduction

In many low-income countries newborn babies face difficult odds in living past the first month of life. About 3·8 million deaths occur every year in babies younger than 28 days—of which 99% are in the developing world—and deaths in the first month of life account for 42% of deaths in children younger than 5 years.[1,2] Before 2000, few organisations paid much attention to neonatal mortality. Since that year, several organisations have come to address the problem, including foundations, UN agencies, bilateral development agencies, governments of low-income countries, and non-governmental organisations (NGOs). This wave of attention is surprising: there was no sudden increase in the number of babies dying or swift spread of a virus that alarmed citizens of rich countries. The emergence of attention to newborn survival in a short period of time presents an interesting study in how global health issues attract priority. In this paper, I examine the processes and factors behind the emergence of attention. I also identify challenges that proponents of newborn survival could face in advancing priority. In doing so, I aim to contribute to inquiry concerning how and why some global health issues attract attention, and what this means for the sustainability of priority.

In 2007, Stephanie Smith and I presented a framework of four categories that sought to promote inquiry on the determinants of issue attention in global health.[3] I use this framework to organise the examination of newborn survival. First, actor power refers to the collective power of the network of individuals and organisations mobilising around an issue, such as UN agencies, donors, NGOs, and governments. Second, ideas concern how these actors portray the issue. Any issue can be framed in several ways, and some framings could be more conducive to attraction of political support than others. Third, issue characteristics pertain to inherent features of the issue. Problems that are easily measured, cause substantial harm, and have simple evidence-based solutions available are more likely to gain political support than are ones that do not have these features.[3–6] Last, political context refers to features of the environment that individuals and organisations confront as they seek to advance attention for an issue. These features include other actors who do not yet work on the issue but might be inclined to participate in support or opposition. They also include policy windows: moments in time when global conditions align favourably for an issue.[6] For instance, the Millennium Development Goals (MDGs) have helped to open policy windows for the several health problems included in the goals.

I used a case study methodology, triangulating several sources of information to keep bias to a minimum, including interviews, documents, and published reports.[7] In 2008 and 2009 I did 33 interviews, each lasting about 1·25 h, with three groups of individuals: those centrally involved in global efforts to address newborn survival; those in a position to observe and offer authoritative information about the effectiveness of these efforts; and those critical of these efforts. Interview (I) numbers are listed in parentheses throughout the text. I identified these individuals through publicly available documents, commentaries, and consultation with individuals working in global health. All interviews were recorded and transcribed. Respondents came from countries of low and high income, and all had worked with a national government, private foundation, UN agency, donor agency, university, or NGO. Rather than follow a set of structured questions, I sought through open-ended questions to elicit the unique knowledge that each informant held about global efforts to address newborn survival. Additionally, I undertook archival research on the history of global newborn survival efforts, gathering and reviewing 120 documents from the archives of several agencies that had participated in efforts to address newborn survival. Beyond this, I consulted published reports on newborn survival that I had obtained through several Medline searches.

I organised the data into the four categories—actor power, ideas, issue characteristics, and political context—which served as a heuristic device to group material, present the history of efforts to promote newborn survival, and identify themes and factors concerning determinants of issue attention in global health. Several individuals participating in global efforts for newborn survival checked the draft for factual accuracy.

National experiences are critical dimensions of the history of newborn survival, and shape and are shaped by global efforts. For instance, newborn survival efforts in India have affected and have been affected by global strategies.[8] With funding from the Saving Newborn Lives programme of Save the Children USA, case studies are being done on political attention for newborn survival in Bangladesh, Bolivia, Malawi, and Nepal. The focus of this paper, however, is confined to attention by global health actors.

Actor power

As of 2000, few organisations paid any attention to newborn survival. By 2010 more had entered the field, although the number was small by comparison with other global health issues. An informal network of health professionals and a Save the Children USA programme helped this growth to take place.

From the 1970s through the 1990s, many individuals worked on infant and child survival in low-income countries, but only a few focused on newborn survival (I18; I31). They had little interaction and faced an environment unsympathetic to the idea that very sick

newborn babies in poor countries could be saved. In 1999, a seminar at Johns Hopkins University, Baltimore, MD, USA, helped to form initial connections between these individuals.[9] The most important development at the seminar was to introduce these individuals to the work of an Indian physician, Abhay Bang, who with colleagues had shown the effectiveness of home-based neonatal care delivered by village women; this research was published in *The Lancet* later the same year.[10] One physician described his reaction to Bang's presentation (I23):

> "There was little coherence in our thinking about what was important to do in public health to save the lives of babies and Abhay showed up, and he said this is what you do…Everyone who was there left with a completely different understanding about how we should start to think about newborn survival."

Bang himself expressed awareness of the effect of this and another of his studies[10,11] published in *The Lancet*:

> "Research is the Archimedes lever…every 5 or 10 years we have been able to fire an intercontinental ballistic missile to Washington, to Geneva, to New York."

A few months after the Johns Hopkins seminar, the head of health and nutrition at Save the Children USA sat down with his colleagues to discuss health priorities for the organisation. Influenced by the seminar report and Bang's research, they hit upon newborn survival as a new area for Save the Children's work. Save the Children convinced the Bill & Melinda Gates Foundation of the importance of the issue, secured a US$50 million grant, and in June, 2000, launched its Saving Newborn Lives programme, which grew to encompass 18 countries. Later that year, Saving Newborn Lives sought to formalise an alliance of organisations with an interest in newborn survival: it helped to create and was the secretariat for the Healthy Newborn Partnership, which lasted until 2005 when it was disbanded in favour of a broader Partnership for Maternal, Newborn and Child Health. Across time, Saving Newborn Lives evolved into far more than a programme: it became an agent of diffusion of the idea that the world had a responsibility to save the lives of newborn babies (I12; I14; I18; I26). Commenting on Saving Newborn Lives's central role, one external observer remarked that the programme effectively filled a void (I18):

> "Had there not been an SNL [Saving Newborn Lives], maybe UNICEF could have taken on that role, maybe WHO might have taken on that role…but these are all mights and ifs; the track record indicated that they didn't take on that role."

Of equal importance to global promotion of newborn survival was the formation of an informal network of health professionals in the first half of the 2000s, which exercised global leadership on the issue alongside Saving Newborn Lives (I5; I10; I15; I25; I31). The network's core consisted of no more than 15 researchers and officials. These individuals were well positioned to exercise agenda-setting power in global health: most had established reputations in the specialties of child and maternal survival, and worked at prominent global health organisations, including UN agencies, bilateral donor agencies, private foundations, and major research institutions, giving them authority and access to financial and technical resources (I10; I15; I31; I18). Several were affiliated with Saving Newborn Lives or received funding from the Gates Foundation. These individuals had no formal mechanisms for coordination, and did not explicitly refer to themselves as a network. However, they functioned as one, meeting frequently at international gatherings and collaborating on projects. At least one of the core members stood behind nearly all major global initiatives for newborn survival across the decade. Unlike many other informal networks for global issues, this network was tight, and its members were reasonably well aware of one another's activities (I24; I10; I18). Several factors facilitated this cohesion: a clearly defined and shared aim to reduce neonatal mortality; the existence of the well resourced Saving Newborn Lives programme that enabled network members to work together; the small size of the group; the absence of divisive personalities; and the fact that the field of neonatal survival was in its infancy, and therefore was not hampered by previous technical conflicts around which factions could emerge.

In 2005, *The Lancet*'s Neonatal Survival Series solidified many of the ties that now exist between these individuals (I22; I28; I18).[12] The Series became a point of reference on the severity, causes, costing, and solutions to the problem of newborn mortality (I22; I6; I18; I19; I12), and had substantial influence in agenda setting. For instance, after its publication, at least 20 African governments approached WHO for technical advice on addressing the issue,[13] and the Series was a major factor behind UNICEF's decision to engage newborn survival (I17; I20).

In the second half of the 2000s, new organisations entered the field of newborn survival, and established organisations expanded their activities. UNICEF hired specialists in neonatal survival at its global headquarters, and country offices started programmes with a focus on neonates (I17; I20). The US Agency for International Development (USAID), alongside Saving Newborn Lives, was one of the first organisations to pay attention to newborn survival (I19; I23): in the mid-2000s, USAID hired a point person on newborn survival, and in 2008, renewed a global programme with a major component to reduce neonatal mortality. WHO stepped up attention to newborn survival in the second half of the decade, supporting many countries in policy development. In 2005, WHO's flagship publication, the World Health Report,[14] focused on maternal, newborn, and child health, and in a process connected to *The Lancet*'s Neonatal Survival Series, devoted a chapter specifically to newborn babies. The Partnership for Maternal, Newborn and Child Health formed in 2005, growing to link 300 organisations

in efforts to address the health problems of these vulnerable groups.[15] The Gates Foundation, whose only major grant in the first half of the decade on newborn survival was for Saving Newborn Lives, provided an additional $60 million to the programme for 2006–11 and expanded its grant-making on newborn survival (I28).[16]

Ideas

Members of the informal network and officials from Saving Newborn Lives carefully considered how to convince other actors of the issue's importance. Substantial financial resources from the Gates Foundation ($110 million to Saving Newborn Lives in the 2000s), USAID, and other donors helped advocacy and research (I16; I19; I24).

Before 2000, the problem of newborn deaths did not hold sufficient weight to merit a widely used global health letter, in the way children younger than 5 years had a C and their mothers an M. At UN meetings and other public forums, proponents championed the idea that newborn babies deserved a designator (I12; I13; I5; I14; I10; I26). They also identified the major causes of neonatal mortality so that programme managers had specific illnesses to address. The spur was their observation that in official WHO data on the causes of child mortality, neonatal deaths did not constitute a separate category, and instead were hidden across vague groupings entitled "perinatal deaths" and "other" (I22). Therefore, proponents undertook a systematic review of the causes of death and produced national estimates for 192 countries, showing that three preventable causes—infections, preterm birth complications, and birth asphyxia—were responsible for 77% of neonatal deaths.[17] These efforts went beyond epidemiology: they were attempts to establish a new category of vulnerable persons that did not exist in the minds of many global health actors.

Language in official global health communications reveals some shift toward the inclusion of the letter N and word "newborn". The WHO World Health Report 2005, whose theme was maternal and child survival, explicitly advocated for "the repositioning of MCH as M*N*CH (maternal, newborn and child health)".[14] A widely circulated public communiqué on women's and children's health in 2009 was entitled, the Consensus for Maternal, Newborn and Child Health.[18] The alliance that formed in 2005, which replaced the Healthy Newborn Partnership, was called the Partnership for Maternal, Newborn and Child Health.

Issue characteristics

Proponents of newborn survival sought to demonstrate the severity of the problem. Drawing on WHO data,[19,20] the informal network and Saving Newborn Lives identified several messages that became part of the discourse on newborn survival: about 4 million newborn babies die every year; these deaths constitute around 40% of all deaths in children younger than 5 years; this proportion is rising because of a slower decline in neonatal mortality than in mortality of children younger than 5 years; and, therefore, MDG 4 to reduce child mortality cannot be achieved without substantial reductions in neonatal mortality (I5; I15; I6). They produced or contributed to a series of publications across the decade that served as global conduits to disseminate these points, most prominently *The Lancet*'s Neonatal Survival Series.[12,14,21]

These proponents also sought to show that very sick newborn babies in low-income countries could be saved with inexpensive interventions. Abhay Bang's work in the late 1990s first suggested the tractability of the problem (I3; I21).[10] Subsequent studies, many eventually published in prominent medical journals, lent weight to this idea, and showed that substantial reductions in neonatal mortality could be achieved through use of low-technology community-based interventions and the provision of skilled care at birth.[22–24] Researchers also produced reviews of evidence that summarised successful strategies for newborn care,[25–27] and made this information widely available in forms accessible to policy makers and programme managers.[28]

These developments notwithstanding, several intervention problems have emerged. Investigators have disagreed about how much can be done in the home to save the lives of newborn babies (I7; I30; I24; I26; I22), and they point out that little evidence is available to support how to scale up interventions that do work (I24; I7; I15; I32; I9; I17; I31). Additionally, investigators are not fully certain what factors have made some programmes effective, and whether programme intensity can be replicated. Commenting on this issue, one researcher spoke of the awe inspired by Abhay Bang in the rural communities in India where he practises (I24):

> "What were the interactive variables…how do you take account of the Abhay factor, because he is kind of God for those he works with?"

Political contexts

In cultivating the attention of other organisations, network members made strategic use of the policy window created by MDG 4, emphasising the fact that neonatal mortality rates were declining at a much slower pace than were mortality rates in children younger than 5 years, and that MDG 4 could not be achieved without an acceleration in that decline (I5; I22). Several major global health organisations participating in child survival picked up these points, and identified achievement of MDG 4 as a central reason for focusing on newborn survival (I27; I12; I15; I17). Proponents also sought to build ties with their most natural allies: global networks of supporters of maternal and child survival. They achieved some success in forming linkages, gaining recognition for the concept of continuum of care that linked the welfare of all three groups,[29] and

	2000	2010
Actor power		
Network	Few individuals working on issue and doing so in isolation	Informal network provides global leadership on issue
Guiding institution	No guiding institution for issue	Effective global guiding institution in the form of the Saving Newborn Lives programme
Ideas		
Category creation	Neonates are not recognised as a global health category	Neonates are acknowledged as a vulnerable group, although some individuals are sceptical of value of category
Issue characteristics		
Severity	Few global health organisations acknowledge severity of problem	Severity of problem is recognised: about 4 million deaths every year
Tractability	Problem is largely perceived as intractable in low-income settings	Identification of cost-effective interventions shifts perceptions on tractability
Political contexts		
Other actors	Few global health organisations address issue	Dozens of organisations participating in addressing issue, although few make it a central priority
Policy window	No global political agreements address issue explicitly	Recognition that Millennium Development Goal 4 cannot be achieved without attention to newborn survival

Table: **Global attention to newborn survival in 2000 and 2010**

helping to place the acronym MNCH in the global health landscape. Ties between these constituencies are much tighter than they were 5 years ago (I30; I14; I12; I22; I26).

However, these actions were not able to eliminate all tensions (I30; I21; I13; I28; I32; I31; I26), and many global health actors continue to identify themselves primarily as proponents for maternal, newborn, or child health rather than for MNCH as a whole (I30; I14; I12; I28; I26). A proponent of maternal survival suggested a reason for slower than expected progress in establishment of links (I30):

> "In the maternal health community many people came into it because they care about women's rights. The linkage to the newborn is less a part of the reason they are working on it....The newborn in my mind does not have a privileged connection to maternal health."

This person also suggested another reason for reluctance:

> "The minute that you start talking about kids, women get pushed to the side...An extreme example of that: if you have the choice of saving the mother or the baby, generally the women lose out."

Some members of the maternal survival network suggested that proponents of newborn survival bear some responsibility for inadequate integration (I26):

> "There isn't the recognition in the newborn community of the value of the mother to the newborn or to the mothers of facility-based delivery."

There also have been some tensions with child survival proponents, several of whom question the value of a new global health category (I21; I22; I29). Noting growing funding for specific child health issues, including survival of newborn babies, malaria, and vaccines, one child health researcher said (I21):

> "I think we have too many points of light, not enough big picture, not enough integration."

This person criticised the work of proponents of newborn survival:

> "They stop at 28 days. There is a real artificiality of doing those studies without considering the delivery of services to older children...At times they have been very narrow about their focus."

Discussion

During the past decade, attention to newborn survival by global health actors has grown, although the issue has yet to gain the visibility merited by nearly 4 million deaths every year. The table summarises some of the changes that have occurred. A small, informal network of committed proponents of newborn survival from countries of low and high income, most of them well positioned in global health circles, stood at the core of the effort. They highlighted the vulnerability of newborn babies, secured resources from several donors, developed and disseminated evidence on the problem's severity and tractability, and convinced other global health actors of the issue's importance, especially for achievement of MDG 4.

There is little evidence that pressure from grassroots organisations or the governments of countries with high neonatal mortality had a major role in the emergence of global attention. Perhaps as a result, the extent to which these governments have responded with funding, policies, and programmes remains unclear, as does how much difference these global promotional efforts have made in shifting widespread grassroots fatalism surrounding newborn deaths. The fate of newborn health in the next decade depends on the extent to which this unfinished agenda reaches beyond global health actors and is successfully pursued within countries.

The case of newborn survival has several implications for understanding the determinants of attention to global health issues. These correspond to the four categories of the framework. With respect to issue characteristics, the results support previous research findings that tractability shapes attention:[3–6] the identification of cost-effective interventions for newborn survival helped to generate support from organisations participating in global health. With respect to ideas, the case suggests that proponents go beyond drawing attention to existing problems: they help to define the issues. Before 2000, few global health actors thought about the issue of newborn survival; proponents helped to create a new global health category of vulnerable persons. With respect to political contexts, the case of newborn survival underscores the power of strategic use of policy windows to shape issue attention: newborn

survival proponents made effective use of MDG 4 to advance their cause.

Perhaps the most interesting implication concerns actor power. Saving Newborn Lives, a formal programme, served as an effective guiding institution for the issue. Equally important to issue promotion was the emergence of a small and tight informal network. Much has been written on formal, issue-specific partnerships and initiatives in global health, such as the Roll Back Malaria Partnership and the Global Fund to Fight AIDS, Tuberculosis, and Malaria. Much less attention has been paid to informal networks that link actors across organisations but that lack formal coordinating mechanisms, perhaps because these networks are less visible. Yet informal networks on many global health issues exist alongside formal partnerships—eg, pneumonia,[30] malnutrition,[31] and neglected tropical diseases.[32] As we investigate how and why some global health issues come to attract attention whereas others remain neglected, the capacity of informal networks deserves research consideration as a potentially powerful determinant of these differences.

Conflicts of interest

I declare that I have no conflicts of interest.

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References

1 Lawn J, Lee A, Kinney M, et al. Two million intrapartum-related stillbirths and neonatal deaths: where, why, and what can be done? *Int J Gynaecol Obstet* 2009; **107** (suppl 1): S5–19.

2 UNICEF. The state of the world's children 2009. New York: UNICEF, 2008.

3 Shiffman J, Smith S. Generation of political priority for global health initiatives: a framework and case study of maternal mortality. *Lancet* 2007; **370:** 1370–79.

4 Keck ME, Sikkink K. Activists beyond borders: advocacy networks in international politics. Ithaca, NY: Cornell University Press, 1998.

5 Stone, DA. Causal stories and the formation of policy agendas. *Polit Sci Q* 1989; **104:** 281–300.

6 Kingdon JW. Agendas, alternatives and public policies. Boston, MA: Little, Brown and Company, 1984.

7 Yin R. Case study research: design and methods, 2nd edn. Thousand Oaks, CA: Sage, 1994.

8 Dadhich JP, Paul V. State of India's newborns. New Delhi: National Neonatology Forum and Saving Newborn Lives/Save the Children, 2004.

9 Child Health Research Project. Reducing perinatal and neonatal mortality. Baltimore, MD: Johns Hopkins University, 1999.

10 Bang AT, Bang RA, Baitule SB, Reddy MH, Deshmukh MD. Effect of home-based neonatal care and management of sepsis on neonatal mortality: field trial in rural India. *Lancet* 1999; **354**: 1955–61.

11 Bang AT, Bang RA, Tale O, et al. Reduction in pneumonia mortality and total childhood mortality by means of community-based intervention trial in Gadchiroli, India. *Lancet* 1990; **336:** 201–06.

12 Lawn JE, Cousens S, Zupan J, for The Lancet Neonatal Survival Steering Team. 4 million neonatal deaths: When? Where? Why? *Lancet* 2005; **365**: 891–900.

13 Lawn JE, Cousens SN, Darmstadt GL, et al, for The Lancet Neonatal Survival Series Steering Team. 1 year after The Lancet Neonatal Survival Series—was the call for action heard? *Lancet* 2006; **367**: 1541–47.

14 WHO. The World Health Report 2005: make every mother and child count. Geneva: World Health Organization, 2005.

15 Partnership for Maternal, Newborn and Child Health. Who we are. http://www.who.int/pmnch/about/en (accessed Feb 27, 2010).

16 Bill & Melinda Gates Foundation. Grant search. http://www.gatesfoundation.org/grants/Pages/search.aspx (accessed Feb 22, 2010).

17 Lawn JE, Wilczynska-Ketende K, Cousens SN. Estimating the causes of 4 million neonatal deaths in the year 2000. *Int J Epidemiol* 2006; **35:** 706–18.

18 International Health Partnership. The Consensus for Maternal, Newborn and Child Health. http://www.internationalhealthpartnership.net/CMS_files/documents/the_consensus_for_maternal_newborn_and_child_health_EN.pdf (accessed May 18, 2010).

19 WHO. Neonatal and perinatal mortality: country, regional and global estimates. Geneva: World Health Organization, 2006.

20 WHO. Neonatal and perinatal mortality: country, regional and global estimates 2004. Geneva: World Health Organization, 2007.

21 Save the Children. State of the world's newborns. A report from Saving Newborn Lives. Washington, DC: Save the Children, 2001.

22 Baqui AH, El-Arifeen S, Darmstadt GL, et al, for the Projahnmo Study Group. Effect of community-based newborn-care intervention package implemented through two service-delivery strategies in Sylhet district, Bangladesh: a cluster-randomised controlled trial. *Lancet* 2008; **371:** 1936–44.

23 Kumar V, Mohanty S, Kumar A, et al, for the Saksham Study Group. Effect of community-based behaviour change management on neonatal mortality in Shivgarh, Uttar Pradesh, India: a cluster-randomised, controlled trial. *Lancet* 2008; **372:** 1151–62.

24 Manandhar DS, Osrin D, Shrestha BP, et al, and members of the MIRA Makwanpur trial team. Effect of a participatory intervention with women's groups on birth outcomes in Nepal: cluster-randomised controlled trial. *Lancet* 2004; **364:** 970–79.

25 Bhutta Z, Darmstadt G, Hasan B, Haws R. Community-based interventions for improving perinatal and neonatal health outcomes in developing countries: a review of the evidence. *Pediatrics* 2005; **115:** 519–617.

26 Darmstadt GL, Bhutta ZA, Cousens S, Adam T, Walker N, de Bernis L, for *The Lancet* Neonatal Survival Steering Team. Evidence-based, cost-effective interventions: how many newborn babies can we save? *Lancet* 2005; **365:** 977–88.

27 Haws RA, Thomas AL, Bhutta ZA, Darmstadt GL. Impact of packaged interventions on neonatal health: a review of the evidence. *Health Policy Plan* 2007; **22:** 193–215.

28 Sines E, Tinker A, Ruben J. The maternal-newborn-child health continuum of care: a collective effort to save lives. Washington, DC: Population Reference Bureau, 2006.

29 Kerber KJ, de Graft-Johnson JE, Bhutta ZA, Okong P, Starrs A, Lawn JE. Continuum of care for maternal, newborn, and child health: from slogan to service delivery. *Lancet* 2007; **370:** 1358–69.

30 UNICEF, WHO. Pneumonia: the forgotten killer of children. New York, NY: United Nations Children's Fund, World Health Organization, 2006.

31 Morris SS, Cogill B, Uauy R, for the Maternal and Child Undernutrition Study Group. Effective international action against undernutrition: why has it proven so difficult and what can be done to accelerate progress? *Lancet* 2008; **371:** 608–21.

32 Hotez PJ, Molyneux DH, Fenwick A, et al. Control of neglected tropical diseases. *N Engl J Med* 2007; **357:** 1018–27.