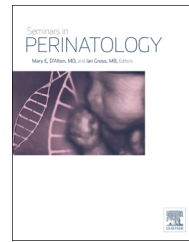


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Strategic governance: Addressing neonatal mortality in situations of political instability and weak governance

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ABSTRACT

Neonatal mortality is increasingly concentrated globally in situations of conflict and political instability. In 1991, countries with high levels of political instability accounted for approximately 10% of all neonatal deaths worldwide; in 2013, this figure had grown to 31%. This has generated a “grand divergence” between those countries showing progress in neonatal mortality reduction compared to those lagging behind. We present new analyses demonstrating associations of neonatal mortality with political instability ($r = 0.55$) and poor governance ($r = 0.70$). However, heterogeneity in these relationships suggests that progress is possible in addressing neonatal mortality even in the midst of political instability and poor governance. In order to address neonatal mortality more effectively in such situations, we must better understand how specific elements of “strategic governance”—the minimal conditions of political stability and governance required for health service implementation—can be leveraged for successful introduction of specific health services. Thus, a more strategic approach to policy and program implementation in situations of conflict and political instability could lead to major accelerations in neonatal mortality reduction globally. However, this will require new cross-disciplinary collaborations among public health professionals, political scientists, and country actors.

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Global and country trends in neonatal mortality

There can be no question that the dramatic attention that has been paid to maternal and newborn health over the past decade has resulted in historic improvements in survival and well-being.^{1–3} Indeed, a series of critical agenda-setting initiatives—such as the Every Newborn Action Plan endorsed

at the World Health Assembly in 2014 and the Every Woman Every Child movement launched in 2010—and enhanced donor support have stimulated the dissemination of a number of technical and behavioral interventions and the evaluative infrastructure to refine and assess their impact.^{1,4–6}

However, even a cursory examination of the recent epidemiology of maternal and newborn survival reveals that

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Table 1 – Numbers and rates of neonatal mortality for the top 20 countries for neonatal mortality rates in 2013.³

Country	Neonatal mortality rate (per 1000)	Neonatal deaths (1000's)
Angola	47	43
Somalia	46	21
Sierra Leone	44	9
Guinea-Bissau	44	3
Lesotho	44	9
Central African Republic	43	7
Pakistan	42	194
Mali	40	28
Chad	40	23
Zimbabwe	39	17
Congo, Dem. Rep.	38	105
Cote d'Ivoire	38	28
Nigeria	37	262
Afghanistan	36	37
Mauritania	35	4
Equatorial Guinea	33	1
Guinea	33	14
South Sudan	31	16
Sudan	30	37
Burundi	30	13

progress has not been uniform. While virtually all countries in the world have experienced some improvements in newborn survival over the past 2 decades, the relative scale and cadence of these improvements have been strikingly disparate, even among countries that remain relatively poor in material terms. Overall, the slowest progress has been seen in countries with the highest neonatal mortality rates (NMRs), in the sub-Saharan African and southern Asian regions.^{4,7}

Table 1 presents 2013 neonatal mortality data for the 20 countries in the world with the highest NMRs. These figures are derived from estimates created by the UN Inter-agency Group for Child Mortality Estimation.³ Neonatal mortality (defined as the number of deaths of live-born children at less than 28 completed days after birth divided by the number of live-births occurring to the same population over the same time period) remains a critical threat, accounting for almost 3 million deaths annually, which in turn represents nearly half (44%) of all under-5 child deaths globally. Angola and Somalia are estimated to have the highest NMRs in the world at 47 and 46 deaths per 1000 live-births, respectively. For context, Japan has an NMR of 1 and the United States of 4 deaths per 1000 live-births. The countries with the highest relative NMRs also account for a significant portion of all absolute neonatal mortality in the world, with the 20 countries listed in Table 1 accounting for almost one-third of all neonatal deaths globally in 2013.

Arguably more troubling than the relative and absolute mortality occurring in these countries are the trends in NMR and their implications for further improvements in newborn outcomes. Table 2 presents a historical picture of NMR patterns by presenting the experience of countries with the highest NMRs in 1991.³ The NMRs for base year 1991 and the most recent year for which data are available, 2013, are presented as are the relative global ranks for both the years. The percentage

decline in the NMRs and the absolute change in the respective country rank (Rank Delta) are also presented in Table 2. As can be seen, most countries in Table 2 experienced considerable reductions in their NMRs between 1991 and 2013, with Nepal, Bangladesh, and Malawi cutting their rates by more than half over the 22-year period. However, Somalia, the Central African Republic, and Angola recorded only small improvements (<15%) over this same time period. In addition, social inequities in child mortality within countries are also persistently high in countries with unstable and poor governance.⁸ Thus, despite aspirational predictions of a “great convergence” in mortality rates across the world,⁹ these data suggest that a “grand divergence” in mortality and social and political context is taking place,¹⁰ with a widening gap between a large number of countries that are progressing and some that are increasingly lagging behind.

Political instability, weak governance, and the persistence of high neonatal mortality

The disparity in NMR trends and the growing concentration of neonatal deaths into a relatively small number of persistently high-mortality countries raise important questions about the adequacy of current maternal and child health policies. Of the 20 countries with the highest NMRs in the world in 2013, all but Lesotho have been plagued by chronic civil conflict and poor governance. In 1991, countries with high levels of political instability accounted for approximately 10% of all neonatal deaths worldwide; in 2013, this figure had grown to 31%. In light of their large populations and numbers of births, India and China contribute heavily to the absolute global burden of neonatal deaths. If one excludes the contribution of China and India, more than 40% of all neonatal deaths in the world in 2013 were accounted for by countries characterized by significant civil conflict and political instability.³ Sophisticated projections of under-5 child mortality rates identified Chad, Central African Republic, Democratic Republic of Congo, Somalia, Nigeria, South Sudan, Mali, Sierra Leone, Pakistan, and Guinea as having the highest rates in the world in the year 2030.¹¹

The general relationship between neonatal mortality and political instability is presented in Figure 1. Country assessments of political stability are derived from the Worldwide Governance Indicators project that uses a variety of data sources to construct a composite measure of country political instability and/or politically motivated violence, including terrorism.¹² Each country's metric is then placed on a 0–100 scale for comparative purposes, with the least stable country, Somalia, set at 0 and the most stable, Greenland, set at 100. As can be seen from the figure, there is an inverse association between political stability and neonatal mortality ($r = -0.55$). The countries with the highest NMRs tend to congregate in the lower portion of the political stability scale. For example, 3 large contributors to global neonatal deaths—Pakistan, Democratic Republic of Congo, and Nigeria—had low political stability ranks of 0.95, 2.37, and 3.79, respectively, and high neonatal mortality rates of 42, 38, and 37, respectively. However, while this general inverse relationship between political stability and NMR is clear, it is also apparent from the figure that there is considerable variation in the strength of this relationship. For example, Lesotho had a middle-of-the-pack

Table 2 – Trends in neonatal mortality rates (MR) and ranks for the 20 countries with the highest rates in 1991

Country name	MR 1991	MR 2013	Rank 1991	Rank 2013	Neo MR %	Rank Delta ^a
South Sudan	64.8	39.9	1	9	-38.4	-8
Guinea-Bissau	60.6	44.9	2	4	-25.9	-2
Mali	58.9	41.1	3	7	-30.2	-4
Sierra Leone	57.3	45.1	4	3	-21.3	1
Mozambique	56.4	30.9	5	16	-45.2	-11
Pakistan	56.1	42.7	6	6	-23.9	0
Bangladesh	54.8	25.2	7	22	-54	-15
Ethiopia	54.6	28.4	8	19	-48	-11
Angola	54.3	47.4	9	1	-12.7	8
Nepal	53.2	23.7	10	24	-55.5	-14
Guinea	52.5	33.6	11	15	-36	-4
Liberia	52.1	26.3	12	21	-49.5	-9
Somalia	51.8	47	13	2	-9.3	11
Nigeria	51.7	38.2	14	12	-26.1	2
Afghanistan	51.4	36.9	15	13	-28.2	2
India	51.1	30.1	16	17	-41.1	-1
Malawi	50	23.5	17	25	-53	-8
Niger	49.8	28.3	18	20	-43.2	-2
Chad	48.4	40.4	19	8	-16.5	11
Central African Republic	48.3	43.5	20	5	-9.9	15
Timor-Leste	48.3	24.4	20	23	-49.5	-3
Equatorial Guinea	48.1	33.8	22	14	-29.7	8
Cote d'Ivoire	47.8	38.4	23	11	-19.7	12
Lao People's Democratic Republic	47.7	29.8	24	18	-37.5	6
Democratic Republic of the Congo	47.6	38.9	25	10	-18.3	15

^aRank Delta is the Country's change in relative rank from 1991 to 2013. Neo MR% corresponds to the country's relative change in Neonatal Mortality Rate from 1991 to 2013.

stability rank of 58, although its NMR was a relatively high 44 deaths per 1000, while Egypt had a stability rank of 7 and an NMR of 11.8. It is likely that some of this variation reflects the technical difficulty of measuring political stability and making direct comparisons across diverse national settings.¹³ However, this variation also suggests that while the relationship between political stability and neonatal mortality is real, it is

also inherently complex, a finding that may imply that there exists potential opportunities for effective intervention even in regions characterized by political instability and violence.

Additional insight into the determinants of high NMRs is provided by examining the relationship between neonatal mortality and government effectiveness. The Worldwide Governance Indicators project defines government effectiveness as

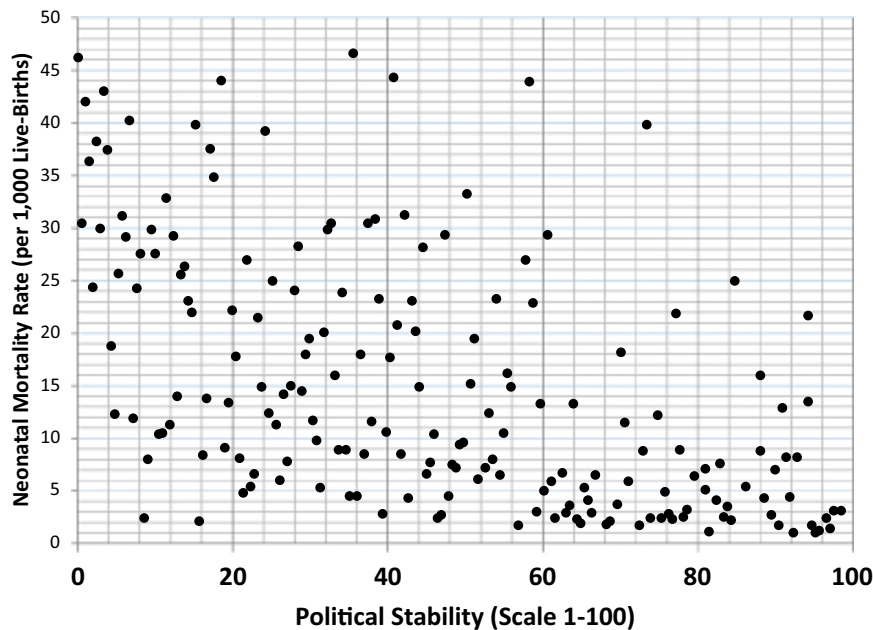


Fig. 1 – Relationship between political stability and neonatal mortality across countries in 2013 ($r = -0.55$).¹²

“capturing perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government’s commitment to such policies.” Figure 2 presents a graphical depiction of the relationship between government effectiveness and neonatal mortality. Again, a clear inverse relationship exists between government effectiveness and NMR ($r = -0.70$). However, the variation in the association is less than that observed for political instability. It should be noted that the intent of these analyses is not to attempt to isolate the specific statistical contribution of any given governance variable to neonatal mortality or to single out any particular country; rather, the presented graphs are intended to emphasize the presence of the strong general relationships that exist, yet with considerable variation in the examined associations. While the importance of political instability and poor governance in shaping global patterns of neonatal mortality is clear, the variation in these relationships suggests that the presence of political instability and poor governance does not preclude improved neonatal outcomes. The fact that political and governance attributes are increasingly defining the challenge of child mortality seems unavoidable. The lack of attention to this observation by the maternal and child health community presents an urgent challenge for directed research and field experimentation. However, investigative endeavors must seek the expertise of a variety of disciplines concerned with global security, political change, and processes of programmatic engagement in some of the neediest and most tyrannized communities on earth.

Confronting the political content of maternal and child health services

Recognizing the social determinants of health has become a central tenet of progressive health policy throughout the

world. What is less well recognized are the mechanisms by which health, and particularly health services, can determine political and social outcomes. A health service is at its core an inherently technical intervention. However, if several conditions are met, this technical endeavor can be transformed into currencies that speak directly to questions of political legitimacy. First, there needs to be a general recognition that a serious health threat can be addressed efficaciously by a single or sets of technical interventions. In other words, the citizenry must feel that health services work and can successfully combat a perceived major health threat. Second, the state must be viewed as being responsible for the provision of this technical capacity. When these 2 conditions are met, the political legitimacy of the state can be undermined by non-provision. Alternatively, when the state or its proxy, such as a sanctioned NGO, is successful in providing the health service in question, the state’s political legitimacy can be enhanced.^{14,15} This dynamic recognizes that political legitimacy can be shaped by the actual performance of the state in delivering essential health services. This kind of performance or “output” legitimacy may, in many circumstances, be more important than “input” legitimacy defined by the processes by which state actions are determined, such as fair, democratic elections.¹⁶ The People’s Republic of China and Singapore can be viewed as examples of a state in which output legitimacy has played an important legitimizing role.

Therefore, in politically contested areas, health services can be perceived as intensely political in nature. The potential political nature of health services is explicitly recognized in counterinsurgency theory in which the provision of health services is framed as an essential means of enhancing the political legitimacy of a host government.^{17,18} The inclusion of health services as part of “winning hearts and minds” is a testament to the transformation of health interventions into political currency.

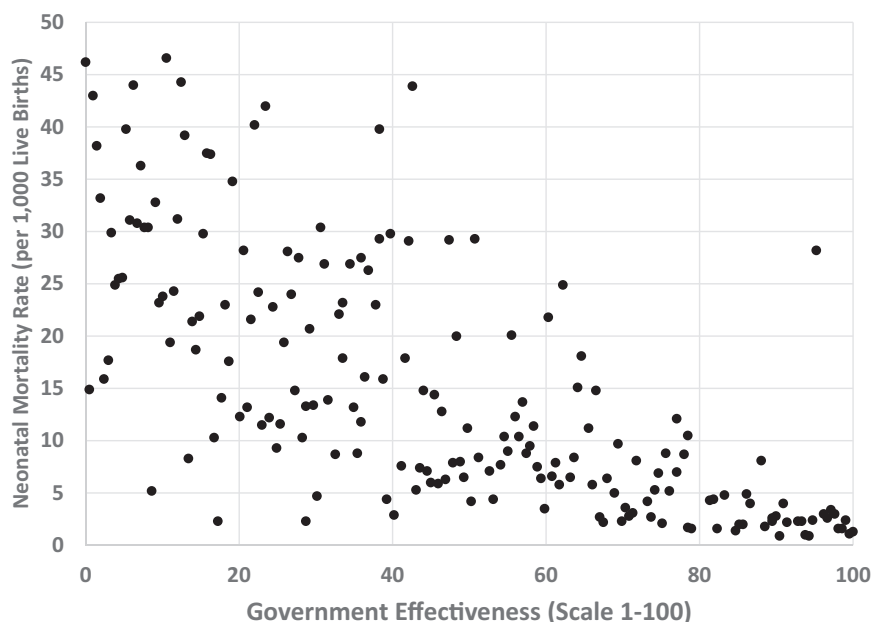


Fig. 2 – Relationship between government effectiveness (governance) and neonatal mortality rate across countries in 2013 ($r = -0.70$).¹²

The recognition that health services may have powerful political implications can appear to challenge the contention that health services must remain politically neutral. Claims of neutrality have provided a pragmatic basis for protecting health workers in areas of conflict and reflect the broad humanitarian intent of health services in areas of great need.¹⁹ However, while there is never justification for violence against health workers, claims of neutrality may not be sufficient to protect health facilities and staff. This is because provider neutrality does not mean that the services they provide are inherently apolitical. Quite to the contrary, a full understanding of local political and governance circumstances is often a precondition for adequate security and effectiveness. There are numerous examples in which the provision of health services had to navigate this complex landscape. Truces were negotiated to permit the immunization of large populations of children in El Salvador in 1991, in Angola in 1996, and in the Democratic Republic of Congo in 1999–2000.²⁰ In Afghanistan, the Taliban has been hesitant to attack health facilities even if constructed under United States auspices. However, there are also, tragically, too many examples of local health services being explicitly targeted for violent attack, including the continued plague of violent assaults on polio immunization workers in Pakistan. Neutrality is an active process. For neutrality claims to be most protective, they need to be rooted in constant political vigilance and an informed capacity to pragmatically respond to security threats and to seize opportunities for programmatic impact.

Neonatal mortality and “strategic” governance

While comprehensive political stability and good governance are important goals, it is a mistake to see them as a precondition for improved health outcomes. Clearly, the provision of neonatal health services in areas plagued by extensive, ongoing combat operations, such as currently in northern Syria, is extremely difficult, if not at times impossible. However, the areas experiencing the highest levels of neonatal mortality around the world are, for the most part, characterized by weak governance and chronic, intermittent political violence. These areas tend to be affected by the longer-term, indirect effects of civil conflict and poor governance, including the weak rule of law, degraded health infrastructure, and chronically insecure food supplies. These conditions, although complex, can still provide substrate for the provision of certain public goods. For example, polio appears close to eradication in Nigeria, large-scale anti-retroviral medication programs are operating successfully in the central plateau of Haiti, two-thirds of 1-year-old children in Somalia are immunized, and maternal-to-child transmission of HIV infection has been reduced dramatically in Zimbabwe. The message from these examples is that even in areas of poor governance and political instability—in states often labeled “failed” or “failing”—effective services can be provided.²¹

These examples suggest that while good governance would, of course, be helpful, the specific governance requirements of delivering a specified set of health interventions may not require comprehensive governance capacity. Rather, only the governance attributes that are essential to the provision of the

specified technical interventions are necessary. What may be needed for effective health service delivery is not good governance per se but “strategic governance” in which the minimal conditions of political stability and governance required for health service implementation are met.^{22,23} The challenge in improving neonatal health outcomes, therefore, lies in identifying and addressing the specific political and governance requirements that will allow the large-scale implementation of essential reproductive and neonatal services in areas that remain relatively untouched by current strategies.

Strategic governance for neonatal health first requires a recognition that each technical intervention can place distinct burdens on governance. For example, an immunization program may require different things from local governance capacities than a maternal mortality reduction initiative. The recognition that different health interventions require different governance capacities also helps explain why improvements in some health outcomes can occur while stagnation or even regression occurs in others. For example, Liberia experienced impressive declines in young child mortality over the past decade, while its neighbor, Sierra Leone, did not. However, both countries exhibited tragically inadequate responses to the Ebola outbreak in 2013–14.

Consequently, identification of the precise governance conditions required to deliver any particular intervention demands both a deep understanding of local political and governance contexts and considerable knowledge regarding the technical attributes of the intervention.¹³ Moreover, it may be that among all the potential governance attributes that contribute to a poor showing on a governance indicator metric, only certain factors—perhaps even just 1—are actually crucial to obstructing the successful implementation of a given technical intervention. Overcoming such strategic or “catastrophic” governance blockades may not require comprehensive good governance but rather a targeted focus on either rectifying or evading the governance obstacle in question. While it is clear that a variety of logistical problems such as inadequate transportation, a lack of health facilities, and poor electrical infrastructure can be critical barriers to the provision of essential health services, it must also be recognized that transiting the “last mile” of health service delivery often depends upon overcoming the barriers erected by political forces and inadequate governance capacity.

Conclusion

Initiatives to advance a concrete set of newborn health interventions, such as the Every Newborn Action Plan, can, therefore, provide a useful technical template for exploring new, strategic governance initiatives in politically complex environments. In other words, the political and governance context is a critical consideration. However, so too is the content of the intervention deemed to be essential in reducing adverse neonatal outcomes. In order to ensure that both context and content are tightly integrated, it is imperative that expertise in both health and governance are purposefully engaged in sustained, cross-disciplinary collaborations. Until now, too little attention has been given to this confluence in capabilities. However, doing so provides one of the most

important opportunities today for advancing global newborn survival, health, and well-being.

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