

Governance and India's Maternal Mortality Crisis

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ABSTRACT

What is the relationship between governance and performance? The nature of complex problems and contexts for policy, management and implementation suggests their influences are difficult to isolate and that each independently provides only partial explanation. Hence, there is a pressing need for governance scholarship to account for contextual political and social influences on public performance. This study examines these influences through an organizational culture lens to understand the ways in which critical stakeholders interact with political, management and social factors to influence maternal health policy and implementation in India. The study suggests actor power and the three categories of factors importantly shape governance processes and outcomes.

INTRODUCTION

What is the potential for lenses of governance to contribute to scholarship on the effective management and implementation of public policy? Answers to this question are still evolving, informed by a growing body of literature suggesting the need to develop analytic frameworks that account for a range of stakeholders – public and private; network, organizational and individual; domestic and transnational – as well as contextualized management, implementation and policymaking factors. Institutional political economy and representative bureaucracy have been suggested as potentially fruitful avenues for theory development (Frederickson & Smith 2003; Lynn et al. 2001; Meier et al. 2004), but the empirical record is not well developed and contextual influences are sorely neglected although considered to be important (Bingham & O’Leary 2006; Kooiman 2003; Lynn et al. 2001). This research draws on an organizational culture perspective to address gaps in the growing literature concerned with governance and to provide insights into how critical stakeholders and social forces interact to shape public health policy and practice in developing countries.

India’s maternal mortality crisis offers an important opportunity to examine the relationship between governance and public performance outcomes in a critical policy arena. According to the World Health Organization (2004), more than half a million women die every year from complications with pregnancy and childbirth – nearly all in developing countries and nearly all preventable. More than 25 percent of global maternal deaths occur in India, making maternal mortality reduction one of the country’s most pressing health crises. Although recent policy developments suggest that the issue is gaining priority at the national level (Shiffman & Ved 2007), evidence from an in-depth

case study of Tamil Nadu – a state that has made significant strides to alleviate the problem in the past 15 years – suggests the interactions between governance stakeholders and such cultural factors as values, norms and beliefs have importantly influenced policymaking and outcomes at the state level, offering an explanation for varying progress across India’s states. As such, this study suggests an organizational culture perspective might contribute insights to the relationship between governance and public performance outcomes, as well as the ways in which contextual social and political factors may shape governance processes and outcomes.

This article begins with a review of literature on governance, its links with public performance and a discussion of how an organizational culture perspective might contribute to governance studies. The safe motherhood policy arena and its status in India are introduced briefly, followed by presentation of a state-level case study. Lastly, implications of using a cultural lens to gain insights to governance and performance are discussed.

LINKING GOVERNANCE & PERFORMANCE

Concepts of governance are still evolving in the public administration literature, reflecting tensions between the field’s hierarchical and bureaucratic roots and more recent insights from scholarship on third party government, networks and collaboration. For many, ‘governance’ represents a shift away from understanding public policymaking and management as solely the domain of governments to arrangements in which private organizations and individuals may be instrumental (Agranoff & McGuire 2001; Hill & Hupe 2002; Kettl 2002; McGuire 2006; Milward & Provan 2000; O’Leary et al. 2006; Salamon 2002). Milward and Provan (2000) aptly characterize the distinction:

“In common usage, *government* refers to the formal institutions of the state ... and their monopoly of legitimate coercive power. *Governance* is a more inclusive term, concerned with creating the conditions for ordered rule and collective action, often including agents in the private and nonprofit sectors as well as within the public sector” (2000, p. 360).

This suggests three significant points for developing a framework for analyzing governance: first, it suggests that public and private stakeholders may play important roles in governance; second, and more broadly, it suggests the power of actors may shape governance processes and outcomes; third, it suggests governance takes place in a broader social context that extends beyond the public realm.

This is not to say that government does not remain a central player in governance – more than a century of scholarship attests to that. Government is essential to democratic governance (O’Toole 1997; Peters & Pierre 1998; Redford 1969) and hierarchy is far from dead (Hill & Lynn 2005; Wilson 1989). One of the most important definitional contributions centers around it – Lynn, Heinrich and Hill (2001) define governance as, “regimes of laws, rules, judicial decisions, and administrative practices that constrain, prescribe, and enable the provision of publicly supported goods and services” (p. 7). This suggests the structural features of governance that are perpetuated by government importantly influence the management and implementation of public policy. But is it only the formal and informal structures of government, the roles and norms of public agencies, which influence governance processes and outcomes? The authors suggest not, but the empirical record lacks attention to other contextual influences.

These insights help to form the foundation for this study’s approach to governance and its relationship with public performance. *Governance is process-oriented, referring to the influences of stakeholders and social forces as they interact to shape policy-*

relevant actions and outcomes. Each component of this definition is important. First, there is an assumption of change over time, recognizing the evolving nature of roles and sets of actors in addition to laws, values and accepted practices (Alter & Hage 1993; Bryson et al. 2006; Keast et al. 2004; Mandell & Steelman 2003; Provan & Kenis 2005; Thomson & Perry 2006). Second, the power of actors is recognized and open as to type and unit of analysis – governance stakeholders may encompass public and private individuals, organizations and networks as appropriate to the purpose at hand (Lynn et al. 2001; Meier et al. 2004; O’Toole 2000). Third, the power of actors affects and is affected by contextual social forces through ongoing interactions (Kooiman 2003; O’Toole 2000). Governance actors are embedded in political and administrative settings (Meier et al. 2004; Spicer 2007) as well as communities, familial networks and other social settings (Kettl 2002; Kooiman 2003; Van Hollen 2003). Lastly, there is an assumption of purpose. Governance is concerned with how the power of stakeholders and social forces interact to shape performance and policy-relevant outcomes (O’Toole 2000).

So what drives the relationship between governance and performance? Much governance scholarship has been more descriptive than explanatory. O’Toole, Meier and Nicholson-Crotty’s (2005) study examining the impact of managing upward, downward and outward in networks on performance outcomes in Texas school districts is an important exception. They found “... managerial networking outward, with those not in the principal-agent chain, is associated positively with performance” (p. 63), suggesting management of external environments may be an important component of effective management. Related literature on networks tends to emphasize more horizontal structures, but evidence suggests an important relationship between more centralized,

hierarchical governance arrangements and effectiveness (Agranoff & McGuire 2001; Provan & Milward 1995). In a recent survey of over eight hundred studies, Hill and Lynn (2005) found investigations of the relationship between more hierarchical governance and performance remain highly relevant.

Studies tend to examine a slice – as opposed to the whole – governance pie. As a result, studies attempting to link governance with performance tend to be filtered through a public management lens. Such factors as management quality (Bretschneider et al. 2007; Kettl and Milward 1996; Meier & O’Toole 2002) and management capacity (Ingraham et al. 2003) have been investigated for their impacts on performance. Although the historical evolution of interest in the subject runs much deeper, the reinvention movement has in recent years brought the attention of governments the world over to the role of management in improving public performance (Gore 1993; Kettl 2000, 2002; Osborne & Gaebler 1993; Peters & Pierre 1998). But studies tend to neglect the broader systems of connections with other governance stakeholders, social and political contexts in which the management and implementation of public policy is embedded (Justice 1986; Kettl 2002; Kooiman 2003; Lynn et al. 2001; Meier et al. 2004; O’Toole et al. 2005; Peters & Pierre 1998; Spicer 2007).

In terms of theory, efforts by Lynn and colleagues (2001) and Meier and colleagues (2004) to examine the links between governance and public performance are notable. Lynn and colleagues’ (2001) ‘logic of governance’ identifies loci of interactions between the citizenry, political actors and systems, managers and agency structures, and service delivery personnel and outputs to suggest important relationships and factors in governance. Taking a public management perspective, they suggest institutional political

economy as a framework offering insights to the ways in which broader systems of laws, rules and administrative practices influence government performance. Meier and colleagues (2004) suggest that while research on governance has been useful for understanding the ways in which public and private organizations contribute to public policy implementation, the influence of political and bureaucratic actors has been neglected. They employ the theory of representative bureaucracy to examine the effects of political and bureaucratic representation of demographic minority groups (a proxy for values) in Texas school districts on educational outcomes in a large-N study. They find a positive relationship that spans across levels of governance – from school boards to superintendents, administrators and teachers – suggesting a need for governance studies to examine influences of various governance actors.

This study suggests an alternative way of considering behavior of and in organizations, an organizational culture perspective, may provide further insights to factors driving the relationship between governance and performance (Lynn et al. 2001; Ott 1989). Smircich (1983) grounded the cultural approach firmly in classical management theory, suggesting culture – in the form of shared values and beliefs – influences the behavior of individuals and organizations. “Culture provides a conceptual bridge between micro and macro levels of analysis, as well as a bridge between organizational behavior and strategic management interests” (Smircich 1983, p. 346). In other words, a cultural lens may help to identify important influences on individual and organizational actors as they interact to shape governance processes and outcomes (Burstein 1991; Denison & Mishra 1995; Schein 1992; Smircich 1983; Trice & Beyer 1984; Wilkins & Ouchi 1983).

Three empirical contributions are relevant. In their study of 764 private sector organizations, Denison and Mishra (1995) found four traits of organizational cultures – degree of employee involvement, consistency of norms governing practice, adaptability to change and sense of mission – were associated with performance outcomes. In another study, Marcoulides and Heck (1993) found that worker attitudes, task organization and organizational values influenced performance, suggesting managers may be able to manipulate these variables through hiring, evaluations and decision processes to affect organizational performance. While these studies suggest types of variables that might be important, Lewis and colleagues (2003) observed that fragmentation of cultural meanings and practices in multi-agency rural development projects in Bangladesh, Burkina Faso and Peru negatively impacted project performance. Lewis and colleagues' study suggests it is important to examine the interactions between actors and culture that shape governance processes and outcomes.

This seems particularly important for contextualized analyses that assume influences outside the realm of management may importantly influence the actions of governance stakeholders and policy-relevant outcomes. As scholars of organizational culture have suggested, culture cannot be assumed to be homogeneous and fixed across governance stakeholders (Lewis et al. 2003; Pettigrew 1979; Sackmann 1992; Smircich 1983; Trice & Breyer 1984). Additionally, the evolving nature of culture and the need for a historical approach “to explain the emergence and transformation of organizational goals, beliefs, power relations and culture” (Pettigrew 1979, p. 571) are important considerations.

MATERNAL MORTALITY & THE CRISIS IN INDIA

Global attention was brought to the issue of maternal mortality¹ with release of the first estimates of its global burden in 1985, revealing that more than half a million women die related to pregnancy and childbirth every year (AbouZahr 2001; Starrs 2006; WHO 1990). The figure has not changed in the 20 years since (WHO 2004) despite extensive research measuring its causes and scope, a series of international and regional conferences focusing on technical training and interventions, programming and funding by international agencies, a global safe motherhood initiative designed to address the problem, and its prioritization as one of the Millennium Development Goals² at the turn of the century (Shiffman & Smith 2007). Country-level indicators help to illustrate the scope of the problem, the burden disproportionately falling to developing countries. The maternal mortality ratio (MMR), the most widely used indicator to denote the extent of the problem,³ is estimated at 540 deaths per 100,000 live births in India (WHO 2004). India's South Asian neighbors have ratios of 500 in Pakistan, 380 in Bangladesh and 92 in Sri Lanka (WHO 2004). For developed nations these figures fall in the teens and in Africa the magnitude of the problem is revealed by the ratios in Nigeria (800) and Kenya (580) (WHO 2004). India suffers the highest absolute number of maternal deaths in the world – more than 136,000 women die from complications with pregnancy and its

¹ A maternal death is defined as “the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes” (WHO 2004, p. 3).

² The Millennium Development Goals set a target date of 2015 to alleviate a number of pressing social problems, including poverty, education and health goals, that United Nations member states agreed to at the turn of the century. Goal five aims to improve maternal health by reducing the global maternal mortality ratio by 75% from 1990 levels.

³ It is important to note that maternal mortality is difficult to measure accurately due in part to its infrequent occurrence and variation in the capacities of health infrastructures to undertake this task, but figures likely reflect at least relative magnitudes of the problem. Large standard errors and corresponding wide confidence intervals make it difficult to draw conclusions about change in MMR over short time intervals in countries and at the sub-national level (Stanton et al. 2000).

management each year in India, accounting for twenty-five percent of global maternal deaths (WHO 2004).

Since 1985 researchers have identified the main causes of maternal mortality and various intervention strategies have been developed. In Asia, hemorrhage, sepsis/infection and obstructed labor account for over half of maternal deaths (Glasier et al. 2006). Intervention strategies have encompassed antenatal risk screening, training of traditional birth attendants, community-level interventions, skilled attendance of health professionals at births and access to emergency obstetric care (Campbell & Graham 2006; Costello et al. 2006; Maine & Rosenfield 1999; Shiffman & Smith 2007). In a 2006 series on safe motherhood in the prominent medical journal *Lancet*, contributors suggested bolstering of health systems might make the biggest difference for addressing the safe motherhood crisis because access to quality obstetric care is so important for treating medical emergencies. “As long as effective strategies to increase attendance of skilled personnel at birth, provide emergency obstetric care, and promote institutional deliveries are not implemented...to reduce maternal mortality and morbidity will be difficult” (Glasier et al. 2006, p. 1597). These are not only technical issues but also questions of governance – how to develop effective, efficient and equitable maternal health policy and practice in developing countries.

Only a few countries have made significant progress in generating political attention and devotion of technical, human and financial resources equal to the severity of the problem (Shiffman 2007; Shiffman & Smith 2007). Recent political and policy activity in India suggests the issue has ascended on political agendas at the national level (Shiffman & Ved 2007). In 2005, India served as launch pad for the World Health Organization’s

World Health Report “Make Every Mother and Child Count.” Soon after, the second phase of the Reproductive and Child Health Program and new National Rural Health Mission (NRHM), both featuring reduction of maternal mortality prominently, were ushered in with more resources and attention than past initiatives. But is national priority enough? In the context of India’s federal system, health policy and implementation is largely devolved to the states and their safe motherhood performance and outcomes vary widely. Maternal mortality ratios varied from 737 to 262 deaths per 100,000 live births in the late 1990s (IIPS 2000) and more recent estimates indicated variation from 517 to 110 amongst major states in 2003 (SRS 2006). On another important indicator, institutional delivery rates, major states ranged from 22 to 100 percent with an all-India average of 41 percent in 2005-6 (IIPS 2007). Why? An obvious answer is varying degrees of development across states, but this study investigates the relationship between governance and safe motherhood performance and suggests a more nuanced explanation that connects the dots between contextualized political, management and social influences.

METHODS

I collected data to inform two state-level case studies examining the relationship between governance and public performance with respect to maternal mortality reduction efforts in India in 2006 and 2007. This paper presents an in-depth case study of Tamil Nadu, a state known for its leadership on safe motherhood policy in India. Over the past 15 years, Tamil Nadu has been relatively active in its efforts to reduce maternal mortality and the state’s safe motherhood indicators have improved markedly. The case was selected for its potential to provide strong data to inform the research questions. A

comparative case of the neighboring state of Karnataka is examined in my dissertation to identify factors that may explain varying governance and performance outcomes across states.

Multiple sources of information are used in order to triangulate data, including in-depth interviews with policy and implementation actors, observations at implementation sites, insights from government reports and documents, donor agency reports, newspaper articles and published research on reproductive health, politics and culture. Interviews with key informants were critical and presentation of the evidence relies heavily on them because they reveal insights not contained in the written record. In-depth interviews with 32 state- and district-level government officials, representatives of international donor agencies, and public health experts in public, nonprofit and private sectors in the two states and at the national level lasted an average of one to two hours. These key informants spoke from their maternal health policy and program experiences with Tamil Nadu's health ministry and such donor agencies as UNICEF, Danida and the World Bank. Interviews with 34 service delivery personnel in hospitals and rural health centers lasted an average of 20 to 30 minutes. In addition, I conducted 6 focus groups with 23 nurses and nurse supervisors and held brief interviews and focus groups with 13 women visiting rural health centers for maternal health needs. In total, 102 individuals informed this case study. I took detailed notes during all interviews and documented additional data and observations from each interview and site visit within a few hours of each meeting. Site visits and nearly all interviews with service delivery personnel were conducted in Vellore, Dharmapuri and Theni Districts, including visits to 31 hospitals and rural health

centers, based on their potential to inform the research questions. These districts have been central in efforts to reduce maternal mortality in the state.

In addition to interviews with key informants, government reports and documents, donor agency reports and published research inform analysis of the case study. Such government sources as official government orders, program plans, reports and survey data, as well as donor agency reports, contribute valuable evidence of health policy activities and performance results. More specifically, the National Family Health Surveys conducted in 1992-3, 1997-8 and 2005-6 document trends in institutional delivery rates at the state and national levels; India's Sample Registration System is a respected source of data on maternal mortality ratios and institutional delivery rates; and Reproductive and Child Health Program reports provide performance data at the state and district levels on institutional delivery rates and health infrastructure. The Census of India and state and national Human Development Reports provide data on historical social and demographic trends. I also consulted published research on reproductive health policy, politics, society and culture in Tamil Nadu and surveyed the major English language newspaper in the state, *The Hindu*, to inform analysis of the case.

This study is limited in its ability to provide more generalizable insights to the relationship between governance and performance with respect to maternal mortality reduction. It is difficult to disentangle the numerous factors shaping management and implementation of safe motherhood policy and outcomes and their relative weights; however, the data are rich with 'thick description' (Geertz 1973) that reveal themes and patterns under-explored in governance scholarship. This study should be taken as an initial investigation into a potentially important avenue for theory development linking

contextualized and multi-level governance and performance. Considerably more research is needed to better understand the influences of cultural and other factors on governance and performance, particularly research comparing these phenomena across policy arenas.

MATERNAL MORTALITY REDUCTION IN TAMIL NADU

The cause of safe motherhood gained traction in Tamil Nadu in the mid-1990s when the state began to study the causes of maternal mortality in some depth and commit resources to alleviate the problem. The state has become one of the top performers in the country on key safe motherhood indicators. Institutional delivery rates increased from 64 percent to 90 percent between 1992-3 and 2005-6, largely reflecting increases in rural rates from 50 to 87 percent (IIPS 2007). Urban rates increased from 90 to 95 percent over the same time period (IIPS 2007). India's respected Sample Registration System (2003) reports more conservative figures with total institutional deliveries increasing from 57 to 65 percent in Tamil Nadu between 1991 and 2003. Either scenario puts Tamil Nadu's institutional delivery rate at more than double the country's average. Another important indicator, assistance of a skilled health professional (doctor, nurse or other) at delivery, increased from 69 to 93 percent (IIPS 2007). Lastly, Tamil Nadu's maternal mortality ratio appears to be trending downward with a decrease from 167 to 134 deaths per 100,000 live births between the 1999-2001 and 2001-2003 Sample Registration System surveys (SRS 2006). State health officials reported the figure to be closer to 100 in 2007.

Following a brief profile of the state, case evidence is presented that describes the political context for prioritization of the cause, highlights important management and implementation factors, and discusses influences of the social context on maternal mortality reduction in Tamil Nadu to link governance and safe motherhood performance.

State profile

Tamil Nadu's territory covers 130,000 square kilometers along India's southeastern coastline, neighboring Kerala to its west, Karnataka to its northwest and Andhra Pradesh to its north. With a population of over 62 million, more than half residing in rural areas, Tamil Nadu is one of India's most populous states (Census of India 2001). It is also one of India's most prosperous states with per capita net state domestic product of 19,141 Rupees (about \$470 US) in 1999-2000 compared to India's average of 15,562 Rupees (about \$382 US) (Government of India 2002). Agriculture is a significant sector, accounting for 65 percent of workforce labor and nearly 20 percent of net state domestic product (Government of Tamil Nadu 2003). Services (58 percent) and industry (24 percent) make up the remainder. The vast majority of the population is Hindu (88 percent), but the state also features significant Christian (6 percent) and Muslim (5.6 percent) populations (Census of India 2001).

Tamil Nadu's human development indicators are relatively progressive in the Indian context. Tamil Nadu leads the all-India average on the Human Development Index⁴ (0.531 to 0.302 in 2001) and Gender Development Index (0.813 to 0.676 in 1991) (Government of India 2002; Government of Tamil Nadu 2003), although it is not spared the phenomenon of India's 'missing women' (Sen 1992) as indicated by a sex ratio of 986 females per 1,000 males (Census of India 2001). The state's literacy rates lead the country's average, 73 to 65 percent (Census of India 2001), and it features relatively

⁴ The United Nations Development Programme has used the Human Development Index since 1990 as a broad measure of well being based on life expectancy, educational and economic indicators. India was ranked 126th of 177 countries in the 2006 report (UNDP 2006). The Gender Development Index, introduced in 1995, is an adjusted measure of human development that accounts for gender disparities. Scores on the indexes range from 0 to 1, with higher scores indicating relatively higher levels of human development.

favorable health indicators. At 64.1 years, life expectancy in the state is three years greater than the country's average (Government of India 2002). Fertility declined from 2.5 children per woman in the early 1990s to below the replacement rate, 1.8 children in 2005-2006 in Tamil Nadu, while it hovers at 2.7 nationally (IIPS 2007). Tamil Nadu's infant mortality rate has declined to 31 deaths per 1,000 live births, less than half the rate of fifteen years ago, and advanced compared to the all-India infant mortality rate of 57 deaths per 1,000 live births (IIPS 2007). Overall, Tamil Nadu's development indicators have improved steadily over the study period, but they do not constitute a complete explanation for the state's safe motherhood performance and outcomes.

Political context

Tamil Nadu's maternal mortality reduction efforts have been supported by a political context that supports priority for health and other social policies. Political priority – the extent to which “political leaders actively give attention to an issue, and back up that attention with the provision of financial, technical, and human resources that are commensurate with the severity of the issue” (Shiffman & Smith 2007) – is rooted in an early twentieth century social movement that promoted equality for women and a casteless society. E.V. Ramaswami 'Periyar's' broad social movement gave impetus to a responsive, populist political system and an active civil society that engage each other to promote social welfare in the state (Athreya & Chunkath 2000; Geetha & Rajadurai 1998; Katzenstein 2004; Subramanian 1999; World Bank 2006). In the wake of the movement, women have held powerful political and administrative positions in state government (Anandhi 2002; Banerjee 2004; Government of Tamil Nadu 2003) and the

state's two major political parties have given sustained political attention to health, gender and other social welfare policies (interview nos. 5a, 26, 28; World Bank 2006).

A combination of shared values and competitive multi-party politics drives political priority for health in Tamil Nadu (interview nos. 5a, 26, 28, 29a; World Bank 2006). Successive DMK and AIADMK governments have contributed to advancement of the public health system, provision of health resources and promotion of family planning policies since at least the 1970s (Athreya & Chunkath 2000; Government of Tamil Nadu 2003; interview nos. 2, 29a, 31, 32b, 33, 35, 42; Visaria & Visaria 1998). A public health expert in the state explained, "It's not a particular person or political official. It's party and they both want to show work... initiative in this area" (interview no. 29a). A recent example is the action by the DMK-led government elected into power in 2006 to fill critical health staffing vacancies (The Hindu October 24, 2006; The Hindu April 16, 2007), reversing a hiring freeze of the previous government (interview nos. 29b, 32b). Political competition results in constant pressure to advance policy agendas and to perform (interview no. 29a). A longtime public health expert in the state suggested development of Tamil Nadu's model essential drug distribution system as a relevant example (interview no. 5a). In the mid-1980s, the ruling party introduced access to essential drugs as a political issue, suggesting the public has rights to affordable and reliable access to a safe drug supply. With the opposition party monitoring its development, a corruption-proof system of essential drug distribution was created. This example demonstrates how the state's values-oriented and politically charged environment provides windows of opportunity to advance health causes.

The influence of political actors and activities spans local, state, national and international safe motherhood policy arenas. From key political actors, such as Tamil Nadu's chief minister who announced the State Population Council's support for promotion of institutional deliveries in 1993 (Padmanaban & Desikachari 2004), to the health ministers who "inaugurated everything" (interview no. 35) to local political representatives and community leaders who provided critical support linking the health system and communities (interview nos. 44, 60, 67, 72, 75; Narayan 2003), state and local political elites have consistently used the power of their offices as a force for improving health performance (interview nos. 25, 26, 35). National and international attention to maternal mortality reduction has also played a role. The 1994 International Conference on Population and Development (ICPD) sparked a shift away from family planning targets and toward a broader reproductive health agenda (Save the Children 2004; Van Hollen 2003), promoting safe motherhood on national- and state-level political agendas (interview nos. 5b, 32b). The national government has provided some resources and policy direction since then, but until recently had not signaled the political priority to make a significant difference for the cause (Shiffman & Ved 2007). Tamil Nadu, however, took initiative beyond what the Government of India prescribed (interview nos. 2, 32b, 35); suggesting internal political, management and implementation dynamics have been central to the state's progress.

Management & implementation

Conditions supportive of maternal mortality reduction in the state did not suddenly emerge, but evolved over time. In 1994, a key event set the stage for a network of governance actors, including bureaucrats, public health officials and other individuals and

organizations instrumental in policy formulation and implementation, to play important roles in alleviating the problem. The introduction of maternal death audits in 1994 highlights the important roles key governance actors have played, as well as the ways in which common understandings of the problem, a belief that learning is part of the solution, and strong public performance norms were important drivers of maternal mortality reduction policies, their management and implementation.

Auditing Maternal Deaths

A key moment for maternal mortality reduction arrived when Sheela Rani Chunkath, a bureaucrat acting as Reproductive and Child Health Director in Tamil Nadu and a strong advocate for women's health, introduced maternal death audits in 1994. Record keeping and reporting on maternal deaths had been inconsistent, but Chunkath wanted to learn about the circumstances of deaths to build an evidence base. Chunkath and the team of public health officials she worked with believed social causes of death played at least as significant a role as the biomedical causes typically recorded. They started with a series of case studies carefully documenting perspectives of medical personnel and families. They learned that nearly a third of women were dying in transit to hospitals (interview nos. 29a, 35) and came to understand that the practice of delivering at home delayed recognition and treatment of emergencies, especially in rural areas. By the time women and their families decided to go to a hospital, transportation and money for fees had to be arranged, then distances traveled, often resulting in visits to multiple health facilities due to poor health infrastructure and shortages in staffing.

The audits began to capture dynamics of the problem from social, medical and health system management perspectives and were used to 'sensitize' policy, management and

implementation stakeholders, elevate the status of the issue, and inform policymaking. Each maternal death audit was delivered up the chain of command, giving attention from stakeholders in positions of power (interview nos. 5a, 29a, 32a, 35, 39a). One informant close to this process explained that they “needed to take maternal death from a private tragedy to a public scandal, to make government responsible” (interview no. 35). They used evidence from the audits to convince people there was a problem and framed “maternal death as a disgrace” so that public officials would ‘feel shame’ and be motivated to take responsibility for alleviating the problem (interview nos. 32a, 39a). Advocates believed it was important to convince stakeholders throughout the system to identify personally with the cause and commit to it – the audits became a powerful instrument for getting other stakeholders on board.

Importantly, the maternal death audits were also used to inform policymaking (interview nos. 5b, 29a, 50). The audits helped identify shortcomings in transportation needs, blood supply, human resources, facilities and equipment. A series of projects, programs and government orders addressed these problems over the years, signaling political will and institutionalizing support and guidance to managers and service delivery personnel (interview no. 5b). For example, when officials learned that women were reluctant to seek delivery services at primary health centers because they were not staffed outside typical 9 to 5 business hours, the health secretary issued Government Order No. 396 to increase the availability of 24-hour delivery services in 1999. Based on increased use of delivery services in 24-hour facilities and the importance of providing basic emergency obstetric and newborn care in these facilities Government orders in 2005 and 2006 expanded their reach to nearly 700 more facilities. Other government

orders have addressed human resource vacancy problems, provision of basic emergency obstetric care, strengthening of outreach systems, provision of emergency transport services, establishment of blood banks and donation programs, and improvements in the maternal death audit system (Government of Tamil Nadu Government Order 1999, 2004, 2006A-G).

The nature of the problem

A close knit network of public and other health experts in the state have influenced the framework for understanding the nature of the problem and how to address it most effectively. Professional norms for public health management⁵ in Tamil Nadu facilitate common understandings of the problem through the lenses of curative and preventive medicine. On the curative front, modernization of medical knowledge and practice has led to adoption of a Western, biomedical model of medicine and an assumption that the ‘best’ obstetric care is grounded in this system (Van Hollen 2003). Those using biomedical antenatal and institutional delivery services came to be viewed as modern and those who did not were perceived as ‘backward’ – ignorant, illiterate and poor. This informed the nature of the questions public health officials asked and led to a focus on rural, poor women with low social status – those perceived as ignorant of the ‘best’ obstetric care practices and/or unable to access them. Further, interviews indicated that core maternal health advocates sought to work with others that shared their understanding of the problem, reinforcing their worldview through hiring and partnerships (interview no. 32a). One informant observed, “We have years of joint strong commitment – like-

⁵ The Department of Public Health and Preventive Medicine has been the focal point for government action on behalf of maternal mortality reduction in Tamil Nadu. The department oversees the state’s vast network of more than 1,400 primary health centers and 8,000 health sub-centers serving the state’s nearly sixty percent rural population (Census of India 2001; India Human Development Report 2001).

minded (people with the) same platform for safe motherhood. We expand our circle with every event, meeting. We are a safe motherhood movement” (interview no. 5b).

Bureaucrats and public health managers were on the same page, but believed little would change if they did not work to change attitudes and build commitment amongst implementation and community stakeholders. They developed incentives and strong monitoring mechanisms to address human resource vacancy and commitment problems in primary health centers, a primary point of contact and care for rural communities (interview no. 29a; Tamil Nadu Government Order 1999). However, the challenge of getting village health nurses on board was multifaceted. As the closest link between rural communities and the health system (interview nos. 31, 51, 68; Narayanan 2003), they have been responsible for educating women and their families about the benefits of receiving prenatal, postnatal and institutional delivery care and the potential dangers of opting out, in addition to conducting deliveries. But as little as ten years ago it was common for village health nurses to lack knowledge, skills and resources to carry out these duties effectively. It was not only a matter of commitment; gender bias and low social status affected the ability of village health nurses to effectively carry out their maternal and child health care duties (interview no. 35; Narayanan 2003). They had little voice in the health system, few resources to support them, and faced problems being accepted by communities.

Chunkath and her team partnered with Danida, Denmark’s bilateral aid agency, to address these problems with focal efforts in Dharmapuri District beginning in 1996. Chunkath helped break down power barriers, communicating directly with the nurses and helping them attain voice and a modicum of respect in the health system (interview nos.

5c, 35, 67). The nurses helped formulate plans for new and upgraded health sub-centers; their health and safety concerns were addressed with community leaders; they received access to mopeds to improve their outreach abilities; and they participated in communication and technical skills training (Narayanan 2003). Equipped with the knowledge, skills and security to carry out their duties, village health nurses have gained respect of superiors and communities for their effectiveness and commitment to supporting maternal health goals (interview nos. 5c, 31, 33, 35, 39b, 46, 51, 67, 68, 82; Visaria & Visaria 1998).

Learning is part of the solution

Tamil Nadu's maternal death audit process is one of the best examples of how an underlying assumption that learning is part of the solution to maternal mortality reduction is manifest. The audits were designed to understand the scope of the problem, to learn about the problem from perspectives of various stakeholders, and to facilitate ongoing learning and reflection on the problem. Soon after the audits were piloted, Chunkath and the team of public health experts she worked with brought together political, management and service delivery stakeholders in workshops to learn about the issue and problem-solve strategies to reduce maternal mortality. Institutional monitoring forms, maternal death audit procedures and a community component of maternal death audits resulted. Importantly, these addressed the issue at a systemic level, avoiding blame on individual service providers or the deceased (interview nos. 2, 29a, 35) and emphasizing institutionalization of learning mechanisms to inform and strengthen policy effectiveness.

The deputy director of health services and the district collector, the senior health and senior public official in each district, are powerful forces ensuring learning mechanisms

function. Health services directors conduct review meetings with service delivery personnel to learn about the circumstances of deaths and to address any training, equipment, facilities or other health system needs to prevent future problems. As supervisors of the maternal death audit process district collectors serve a monitoring function, responding to public complaints about health services and making the health system more responsive to the public's needs (interview nos. 32a, 35). For service delivery personnel, monitoring by collectors makes "everyone aware of (the issue's) importance" (interview no. 79). Interviews suggested strong monitoring contributes to learning how not to repeat the same mistakes (interview nos. 2, 32a, 34, 82). Monitoring supports the dual goals of institutionalizing learning mechanisms and promoting a performance orientation.

A drive to improve performance

A drive to improve performance, to increase institutional delivery rates and decrease maternal deaths, is at the core of Tamil Nadu's policy and implementation efforts. The drive is revealed in performance standards, motivational efforts, and institutionalization of best practices. Performance standards are an important part of the mindset of management and implementation actors. A representative example, one informant recalled declaring to another senior health official, "The day that you and I will choose government hospital care is the day we've done our jobs." At the state level, Kerala's high achievements in health and social development set a benchmark for performance (interview no. 4). At the district level, there is a competitive spirit between district officials to improve and outperform other districts from one year to the next (interview no. 5c). Service delivery personnel are not left out, recognized for outstanding

performance for prenatal care, community outreach and institutional delivery rates with recognition and cash awards (Prasad 2007), setting high standards and serving as an inspiration to others to improve maternal health performance (interview nos. 5c, 51).

Senior health officials have importantly influenced expectations and motivation for high performance on safe motherhood. They have broken down social barriers and thrown rules and regulations out the window in the interest of saving lives. Efforts to break down status-related social barriers are exemplified by empowerment of village health nurses, but there was something more – one nurse supervisor explained, “Madam (Chunkath) was a role model. She used to come every week, go into dirty houses without hesitation...” (interview no. 67), shifting to a value for effectiveness over status-related obstacles. In another example, a deputy director of health services broke protocol by giving a family money to pay for transportation and hospital fees to avoid potentially fatal delays in getting higher-level care. Following the incident, a policy was designed to address the barriers to care highlighted by the case. Institutionalization of such best practices has played an important role in improving performance. One senior official explained, “We say we need to institutionalize change so it takes care of itself – it’s not individually driven” (interview no. 31), but dealt with at a systemic level for greater effect (interview nos. 5b, 35). Reflecting on the strength of performance norms institutionalized in policy and in practice one policymaker suggested, “There’s no turning back today – whether there’s political will or not” (interview no. 35).

Social context

Interviews suggested “you can’t talk about this issue without talking about the social – the societal – influences” (interview no. 31). Maternal health performance is connected

with such influences as patriarchy, education, social class, caste, religion and social customs. The status of women in society has been a key issue. Women have gained status politically through local- and state-level roles in government and administration and women's self-help groups, with some 3 million plus members, and nongovernmental organizations have made a difference for women in terms of access to economic resources, education and health and nutrition (interview nos. 31, 32b, 33, 34, 40; Vetivel 2005). Women's status has been elevated in many circles, but patriarchal social structure, little education and few economic resources still translate to a lack of decision-making power for many women. Only 60 percent of women reported being involved in decisions about their own health care in Tamil Nadu in a 1997-98 survey (IIPS 2000), a factor affecting access to medical care during pregnancy and delivery, as well as such matters as nutrition and workload.

Education and awareness also influence women's access to maternal health care. For example, the state's strong noon meal program has been a vehicle for providing nutrition and awareness for pregnant and lactating women since the early 1980s (interview nos. 2, 33; Rajivan 2006). Health services and education are prominent subjects in the media, with regular articles in newspapers and stories on television (interview nos. 26, 32b, 33). These have contributed to strengthening norms surrounding the desirability of Western, biomedical systems of maternal health care that were spurred under colonial rule (Basu 1990; Van Hollen 2003). As a result, evolving norms surrounding maternal health practices, the status of women and education and awareness have played important roles in reducing maternal mortality, but not every woman in the state is guaranteed a safe pregnancy and delivery. Social customs still dictate that "women are considered

secondary citizens” in some areas (interview no. 68); very poor and migrating tribal populations still face difficulties in accessing health services; and discrimination on the basis of religion still presents obstacles to accessing and delivering quality care.

CONCLUSION

This investigation reveals the ways in which actor power and cultural influences have interacted to shape maternal health governance and performance in the Indian state of Tamil Nadu since the early 1990s. In the state’s political setting, shared values for gender and social equity and competitive multi-party politics fueled prioritization of public health, providing a platform for advancement of safe motherhood on the policy agenda. When a key bureaucrat and senior public health officials took up the cause in 1994, their efforts were influenced by common understandings of the problem from social and medical perspectives, an assumption that learning was part of the solution and a drive to achieve performance goals. In turn, they used these cultural lenses to assess the problem of maternal mortality and develop effective policy and implementation solutions that were responsive to the needs of a range of stakeholders, including village health nurses and communities that had been neglected but were crucial to the efforts. Socially, norms surrounding maternal health practices and improvements in the status of women contributed to improved access to maternal health care, though not for all women.

These combined influences shaped maternal health policy and implementation, affecting institutional delivery rates and maternal mortality outcomes in the state. The cultural lens used in this study points to a need for governance research that pays due attention to the roles of policy, management and implementation stakeholders and the ways in which cultural influences shape public performance and policy-relevant

outcomes. It is important to note that a cultural lens highlights certain aspects of the phenomena studied and glosses over other influences, such as advances in transportation, communications and economic development. These facilitated change, but the preponderance of the evidence suggests cultural factors and the power of key actors as the most significant factors.

This study is presented as an initial contribution to the discussion surrounding the ways in which various lenses of governance might contribute to scholarship on the effective management and implementation of public policy. Considerably more research, ideally comparative studies in different policy arenas, is needed to determine whether and the extent to which a cultural perspective might contribute to development of governance theory. In the meantime, this study provides insights to the roles of actor power and cultural influences on public health policy and performance in developing countries.

REFERENCES

- AbouZahr, C. (2001). "Cautious Champions: International Agency Efforts to Get Safe Motherhood Onto the Agenda." *Studies in HSO&P* 17: 384-411.
- Agranoff, R. and M. McGuire (2001). "Big Questions in Public Network Management Research." *Journal of Public Administration Research and Theory* 11(3): 295-326.
- Alter, C. and J. Hage (1993). *Organizations Working Together*. London, Sage Publications.
- Anandhi, S. (2002). Interlocking patriarchies and women in governance: A case study of panchayati raj institutions in Tamil Nadu. *The violence of development: The politics of identity, gender and social inequalities in India*. K. Kapadia. London, Zed Books: 425-458.
- Athreya, V. and S. R. Chunkath (2000). 'Gendering' health policy. *The Hindu*. Chennai.
- Banerjee, M. (2004). *Populist leadership in West Bengal and Tamil Nadu: Mamata and Jayalalithaa compared. Regional reflections: Comparing politics across India's states*. R. Jenkins. New York, Oxford University Press.
- Basu, A. M. (1990). "Cultural influences on health care use: Two regional groups in India." *Studies in Family Planning* 21(5): 275-86.
- Bingham, L. B. and R. O'Leary (2006). "Parallel play, not collaboration: Missing questions, missing connections." *Public Administration Review Supplement to Volume 66(Special Issue)*: 161-167.
- Bretschneider, S., S. Ballal, et al. (2007). *Measuring variation management contribution through decomposition of efficiency scores*. Public Management Research Conference. Tucson.
- Bryson, J. M., B. C. Crosby, et al. (2006). "The Design and Implementation of Cross-Sector Collaborations: Propositions from the Literature." *Public Administration Review Supplement to Volume 66(Special Issue)*: 44-55.
- Burstein, P. (1991). "Policy domains: Organization, culture, and policy outcomes." *Annual Review of Sociology* 17: 327-50.
- Campbell, O., W. Graham, et al. (2006). "Strategies for reducing maternal mortality: Getting on with what works." *Lancet* 368: 1284-99.
- Census of India. (2001). *Census of India 2001*. Registrar General and Census Commissioner.

- Costello, A., K. Azad, et al. (2006). "An alternative strategy to reduce maternal mortality." *Lancet* 368: 1477-79.
- Denison, D. R. and A. K. Mishra (1995). "Toward a theory of organizational culture and effectiveness." *Organization Science* 6(2): 204-23.
- Frederickson, H. G. and K. B. Smith (2003). *The public administration theory primer*. Boulder, Westview Press.
- Geertz, C. (1973). *The interpretation of cultures*. New York, Basic Books.
- Geetha, V. and S. V. Rajadurai (1998). *Towards a non-brahmin millennium: From Iyothee Thass to Periyar*. Calcutta, Samya.
- Glazier, A., A. M. Gulmezoglu, et al. (2006). "Sexual and Reproductive Health: A Matter of Life and Death." *Lancet* 368: 1595-607.
- Gore, A. (1993). *From red tape to results: Creating a government that works better and costs less*. Report of the National Performance Review. Washington, DC, US Government Printing Office.
- Government of India. (2002). *National human development report 2001*. New Delhi, Planning Commission.
- Government of Tamil Nadu. (1999). Government Order No. 396. Health and Family Welfare Department.
- Government of Tamil Nadu. (2002). Government Order (Rt.) No. 2143. Health and Family Welfare Department.
- Government of Tamil Nadu. (2003). *Tamil Nadu human development report*. New Delhi, Government of Tamil Nadu in association with Social Science Press.
- Government of Tamil Nadu. (2004). Government Order (Ms.) No. 211. Health and Family Welfare Department.
- Government of Tamil Nadu. (2004). Government Order (Ms.) No. 223. Health and Family Welfare Department.
- Government of Tamil Nadu. (2005). Government Order 2D No. 25. Health and Family Welfare Department.
- Government of Tamil Nadu. (2006). Government Order (Ms.) No. 33. Health and Family Welfare Department.

- Government of Tamil Nadu. (2006). Government Order No. 152. Health and Family Welfare Department.
- Government of Tamil Nadu. (2006). Government Order (2D.) No. 21. Health and Family Welfare Department.
- Government of Tamil Nadu. (2006). Government Order (2D.) No. 22. Health and Family Welfare Department.
- Government of Tamil Nadu. (2006). Government Order (D) No. 164. Health and Family Welfare Department.
- Government of Tamil Nadu. (2006). Government Order (2D.) No. 18. Health and Family Welfare Department.
- Government of Tamil Nadu. (2006). Government Order (2D.) No. 19. Health and Family Welfare Department.
- Hill, C. J. and L. E. J. Lynn (2005). "Is hierarchical governance in decline? Evidence from empirical research." *Journal of Public Administration Research and Theory* 15(2): 173-195.
- Hill, M. and P. Hupe (2002). *Implementing Public Policy*. London, Sage Publications.
- IIPS (2006). National Family Health Survey (NFHS-3), 2005-06: Key indicators, International Institute for Population Sciences. <http://www.nfhsindia.org/factsheet.html>. Accessed April 11, 2007.
- IIPS and ORC Macro (2000). National Family Health Survey (NFHS-2), 1998-99: India. Mumbai, International Institute for Population Sciences.
- Ingraham, P. W., P. G. Joyce, et al. (2003). *Government performance: Why management matters*. Baltimore, The Johns Hopkins University Press.
- Justice, J. (1986). *Policies, Plans, and People: Foreign Aid and Health Development*. Berkeley, University of California Press.
- Katzenstein, M. F. (2004). The mother and the state in India. *India and the politics of developing countries*. A. Varshney. Thousand Oaks, Sage Publications: 181-204.
- Keast, R., M. P. Mandell, et al. (2004). "Network Structures: Working Differently and Changing Expectations." *Public Administration Review* 64(3): 363-371.
- Kettl, D. F. (2000). *The global public management revolution: A report on the transformation of governance*. Washington, DC, Brookings Institution Press.

Kettl, D. F. (2002). *The transformation of governance: Public administration for twenty-first century America*. Baltimore, The Johns Hopkins University Press.

Kettl, D. F. and H. B. Milward, Eds. (1996). *The state of public management*. Baltimore, The Johns Hopkins University Press.

Kooiman, J. (2003). *Governing as Governance*. Thousand Oaks, CA, Sage Publications.

Lewis, D., A. J. Bebbington, et al. (2003). "Practice, power and meaning: Frameworks for studying organizational culture in multi-agency rural development projects." *Journal of International Development* 15: 541-57.

Lynn, L. E. J., C. J. Heinrich, et al. (2001). *Improving governance: A new logic for empirical research*. Washington, DC, Georgetown University Press.

Maine, D. and A. Rosenfield (1999). "The safe motherhood initiative: Why has it stalled?" *American Journal of Public Health* 89: 480-502.

Mandell, M. P. and T. A. Steelman (2003). "Understanding What Can Be Accomplished Through Interorganizational Innovations: The Importance of Typologies, Context and Management Strategies." *Public Management Review* 5(2): 197-224.

Marcoulides, G. A. and R. H. Heck (1993). "Organizational culture and performance: Proposing and testing a model." *Organization Science* 4(2): 209-25.

McGuire, M. (2006). "Collaborative public management: assessing what we know and how we know it." *Public Administration Review Supplement to Volume 66(Special Issue)*: 33-43.

Meier, K. J. and L. J. J. O'Toole (2002). "Public management and organizational performance: The effect of managerial quality." *Journal of Policy Analysis and Management* 21(2): 629-43.

Meier, K. J., L. J. O'Toole Jr., et al. (2004). "Multilevel governance and organizational performance: Investigating the political-bureaucratic labyrinth." *Journal of Policy Analysis and Management* 23(1): 31-47.

Milward, H. B. and K. G. Provan (2000). "Governing the Hollow State." *Journal of Public Administration Research and Theory* 10(2): 359-379.

Narayanan, G. (2003). *Best practices: Danida-assisted Tamil Nadu area health care project phase 3*. Chennai, Danida Tamil Nadu Area Health Care Project: 45.

O'Leary, R., C. Gerard, et al. (2006). "Introduction to the symposium on collaborative public management." *Public Administration Review Supplement to Volume 66(Special Issue)*: 6-9.

- O'Toole, L. J. (1997). "Treating Networks Seriously: Practical and Research-Based Agendas in Public Administration." *Public Administration Review* 57(1): 45.
- O'Toole, L. J. (2000). "Research on Policy Implementation: Assessment and Perspective." *Journal of Public Administration Research and Theory* 20: 263-288.
- O'Toole, L. J., K. J. Meier, et al. (2005). "Managing Upward, Downward and Outward." *Public Management Review* 7(1): 45-68.
- Osborne, D. and T. Gaebler (1993). *Reinventing government: How the entrepreneurial spirit is transforming the public sector*. New York, Plume.
- Ott, J. S. (1989). *The Organizational Culture Perspective*. Pacific Grove, CA, Brooks/Cole Publishing Company.
- Padmanaban, P. and B. R. Desikachari (2004). *Averting maternal deaths and disabilities: Rights based approach towards reduction of maternal mortality ratio (MMR) in Tamil Nadu*. Unpublished report.
- Peters, B. G. and J. Pierre (1998). "Governance Without Government? Rethinking Public Administration." *Journal of Public Administration Research and Theory* 8(2): 223-243.
- Pettigrew, A. M. (1979). "On studying organizational cultures." *Administrative Science Quarterly* 24(4): 570-81.
- Prasad, S. (2007). *Florence Nightingale award for Dharmapuri nurse*. The Hindu. Chennai: 7.
- Provan, K. G. and P. Kenis (2005). *Modes of Network Governance and Implications for Network Management and Effectiveness*. Public Management Research Association meeting, Los Angeles, CA.
- Provan, K. G. and H. B. Milward (1995). "A Preliminary Theory of Interorganizational Network Effectiveness: A Comparative Study of Four Community Mental Health Systems." *Administrative Science Quarterly* 40(1): 1-33.
- Rajivan, A. K. (2006). "Tamil Nadu: ICDS with a difference." *Economic and Political Weekly* 41(34): 3684-88.
- Redford, E. S. (1969). *Democracy in the administrative state*. New York, Oxford University Press.
- Sackmann, S. A. (1992). "Culture and subcultures: An analysis of organizational knowledge." *Administrative Science Quarterly* 37(1): 140-61.

Salamon, L. M., Ed. (2002). *The Tools of Government: A Guide to the New Governance*. New York, Oxford University Press.

Save the Children. (2004). *State of India's newborns*. New Delhi, Save the Children.

Schein, E. H. (1992). *Organizational culture and leadership*. San Francisco, Jossey-Bass Publishers.

Sen, A. (1992). "Missing women." *British Medical Journal* 304(6827): 587-88.

Shiffman, J. (2007). "Generating political priority for maternal mortality reduction in 5 developing countries." *American Journal of Public Health* 97: 796-803.

Shiffman, J. and S. Smith (2007). "Generation of political priority for global health initiatives: A framework and case study of maternal mortality." *Lancet* 370: 1370-79.

Shiffman, J. and R. Ved (2007). "The state of political priority for safe motherhood in India." *British Journal of Obstetrics and Gynaecology* 114: 785-90.

Smircich, L. (1983). "Concepts of culture and organizational analysis." *Administrative Science Quarterly* 28(3): 339-58.

Spicer, M. (2007). "Politics and the limits of a science of governance: Some reflections on the thought of Bernard Crick." *Public Administration Review* 67(4): 768-779.

SRS (Sample Registration System) (2006). *Maternal mortality in India: 1997-2003 trends, causes and risk factors*. New Delhi, Registrar General of India.

Stanton, C., N. Abderrahim, et al. (2000). "An assessment of DHS maternal mortality indicators." *Studies in Family Planning* 31(2): 111-123.

Starrs, A. M. (2006). "Safe motherhood initiative: 20 years and counting." *Lancet* 368: 1130-32.

Subramanian, N. (1999). *Ethnicity and Populist Mobilization: Political Parties, Citizens and Democracy in South India*. New Delhi, Oxford University Press.

The Hindu (2006). Minister initiates process of filling VHN posts. *The Hindu*. Chennai: 4.

The Hindu (2007). 6,017 vacancies in hospitals to be filled. *The Hindu*. Madurai: 3.

Thomson, A. M. and J. L. Perry (2006). "Collaboration processes: Inside the black box." *Public Administration Review Supplement to Volume 66(Special Issue)*: 20-32.

Trice, H. M. and J. M. Beyer (1984). "Studying organizational cultures through rites and ceremonials." *The Academy of Management Review* 9(4): 653-69.

UNDP (2006). *Human Development Report 2006*. New York, United Nations Development Programme.

Van Hollen, C. (2003). *Birth on the Threshold: Childbirth and Modernity in South India*. Berkeley, University of California Press.

Vetivel, S. (2005). *Economic versus social transformation in the Tamil Nadu women's self-help movement*, UNICEF.

Visaria, L. and P. Visaria (1998). *Reproductive health in policy and practice: India*. Washington, DC, Population Reference Bureau.

WHO (1990). *Maternal health and safe motherhood programme: Progress report 1987-1990*. Geneva, World Health Organization.

WHO (2004). *Maternal Mortality in 2000: Estimates Developed by WHO, UNICEF and UNFPA*. Geneva, Department of Reproductive Health and Research, World Health Organization.

Wilkins, A. L. and W. G. Ouchi (1983). "Efficient cultures: Exploring the relationship between culture and organizational performance." *Administrative Science Quarterly* 28(3): 468-81.

Wilson, J. Q. (1989). *Bureaucracy: What government agencies do and why they do it*, Basic Books.