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ORIGINAL ARTICLE

Mission hospital responses to challenges and implications for their future role in India's health system

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Abstract

Background: India's health system is currently experiencing rapid change. Achieving India's aspirations for improved population health and universal health coverage will require the contribution of all health providers; public, private-for-profit, not-for-profit, and charitable providers. Among the largest charitable providers in India are Christian mission hospitals, who have played a historic role in healthcare delivery to the poor and underserved. This study explored the main internal and external challenges facing mission hospitals, their response to those challenges, and the role they might play in the broader health system going forward.

Methods: The study employed interdisciplinary methodology to assess the top challenges and responses between 2010-2017. The theory of everyday resilience was used to categorize challenges as chronic stresses or acute shocks and to explore features of resilience in responses to challenges, along with the underlying capabilities that enable resilience responses.

Results and Discussion: Mission hospitals were impacted by social, political, and health system challenges. Most operated as "stressors," for example, strained governance structures and human resource shortages. "Shocks" included major changes in health policy and increasing competition from for-profit providers. In response, some mission hospitals exhibited features of everyday resilience, traversing between absorptive, adaptive, and transformative strategies. Among mission hospitals that appeared to be successfully navigating challenges, three core capacities were present: 1) cognitive capacity, understanding the challenge and developing appropriate response strategies; 2) behavioral capacity, having agency to deploy context-specific responses; and 3) contextual capacity, having adequate resources, including hardware (e.g., money,

people, infrastructure) and software (e.g., values, relationships, networks), to exercise the first two capacities. Building on their history and current examples of everyday resilience, mission hospitals can contribute to the larger health system by attending to health and well-being at the margins of society, encouraging innovation, developing human resources, and engaging in policy and advocacy.

Conclusion: While mission hospitals face pressing internal and external challenges, many exhibit features of everyday resilience and retain strong commitment to population health and service to the poor. These features make them potentially strong actors in their local contexts as well as potential partners in the realization of improved population health across India.

Key words: Resilience, health systems, not-for-profit, India, mission hospitals.

Introduction

In India, 70% of outpatient care and 60% of inpatient care is provided by the private sector.[1] Within the "private sector" are multiple actors, including private for-profit providers, private not-for-profit providers, and traditional health providers.[2,3] Among private, not-for-profit providers in India, a large number are Catholic and Protestant mission hospitals, which collectively provide 70,000 inpatient beds across the country.[4] India continues to rely heavily on private providers to address the country's current and unmet health needs,[1] including growing efforts to provide universal health coverage (UHC) to approximately 500 million of India's poorest citizens.[5] It is therefore important to understand the types of stresses and shocks facing different types of private providers, the unique forms of resilience that may be at play within specific sectors, and specific contributions that each sector can make towards improved health and well-being across the country. Using a theoretical framework of "everyday resilience,"[6] this project set out to explore the main challenges facing mission hospitals between 2010-2017, their response to those challenges, and the role they might play in the broader health system going forward.

Methods

Interdisciplinary methodology was employed to better understand main challenges facing mission hospitals and their contextualized role in India's broader health system. Interdisciplinary studies are those that seek to answer questions that are too broad or complex to be dealt with adequately by a single discipline or method.[7] Given the potential for findings to be relevant to public health, organizational theory, theology, sociology, and even political theory, the interdisciplinary approach created a framework to integrate insights into a more comprehensive understanding through the use of site visits, key informant interviews, and in-depth reviews of organizational material, internal reports, and external literature.[7] The study took place between 2016-2018. Site selection was guided by grounded theory methodology through cycles of iterative data collection and analysis.[8] Interview guides and participant observation protocols were also developed iteratively using qualitative, social science methodology.[9,10] As the project sought to explore the range of experiences within Indian mission hospitals, site visits and key informants were selected based on the criteria outlined in Table 1.

Table 1. Site Visit Criteria

Criteria	Categories
Institution Type	Mission Hospital
	Mission Hospital Association
	External Public Health Leadership
Religious Affiliation	Protestant
	Catholic
Location	Rural
	Semi-rural
	Semi-urban
	Urban
Perception of hospital "status"*	Strong
	Recovering
	Declining
	Weak
Governance	Church-led
	Church-influenced
	Independent of Church
Level of Care	Primary
	Secondary
	Tertiary
Geography	North**
	South
Key Informant Interview Categories	- Current mission hospital leadership
	- Hospital staff
	- Mission hospital association leadership
	- Retired mission hospital affiliates
	- External public health leadership

Notes: * This categorization was determined using feedback from a range of key informants during the initial phase of the project.

** "North" was considered anything north of South India. South Indian states included Andhra Pradesh, Telangana, Karnataka, Kerala, and Tamil Nadu.

"Hospital status" was determined during preliminary interviews with a range of key informants who knew the mission hospital network well and recommended visits to different facilities to shed light on a range of experiences and struggles. When multiple people mentioned the same hospital as an example of a "strong" or "struggling" hospital, efforts were made to visit these specific locations in order to explore issues and problems from many different angles.[8] During the analysis phase of the project, initial "status" categorizations were evaluated against interview and organizational data to test assumptions and glean insight.

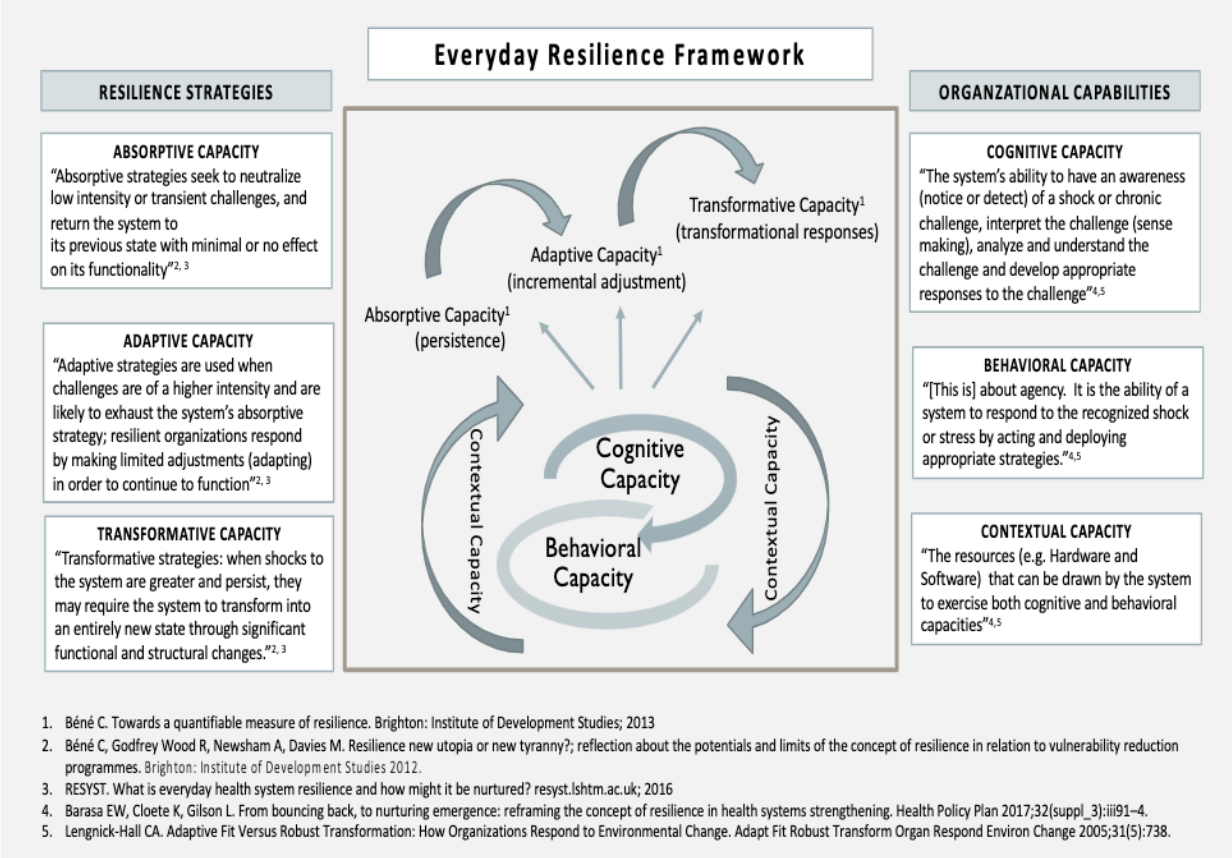
Key informant interviews were conducted by an external interviewer with extensive experience working in India and with mission hospitals. In-person interviews were conducted in English, as it was the primary language used by hospital administrators within these contexts. At each facility, efforts were made to interview mission hospital leadership and frontline staff, and if possible, retirees or hospital founders. Interview questions explored the following topics: personal professional history, hospital history, top challenges facing mission hospitals in the past and present, mission hospital responses to these challenges, personal and institutional values, and the ideal role of mission hospitals within the Indian health system. Whenever possible, key informants were interviewed more than once to help clarify certain themes and deepen understanding of particular topics. Informed consent was obtained before interviews began. In a few cases, audio recordings were made with the permission of the respondent, however most interviews were not recorded.

Interview notes and recordings were transcribed, thematically analyzed using NVivo, and triangulated with observational data, organizational material, internal reports, and comprehensive literature review. In addition to inductively highlighting commonalities and patterns in the data, variations, outliers, and disagreements were also identified and coded. To increase the validity of the coding schema initially developed by the interviewer, members of the study team independently reviewed and compared transcripts to verify the appropriateness and comprehensiveness of the coding structure. Throughout the coding and analysis phase, the study team held ongoing discussions about themes in the data and implications of the findings. While resilience-related codes were eventually included in the coding schema, it is important to note that this investigation was not designed as a "resilience" analysis, but rather, that interview themes led to the use of resilience as an analytical framework. For example, unprompted, respondents often used words like

shock or stress, adapt or transform; all words related to resilience theories. Due to the pervasive nature of challenges best understood as "chronic stressors," the everyday resilience (EDR) framework was selected as an appropriate way to analyze the challenges and responses facing mission hospitals.[6] This emerging framework is distinct from other "health system resilience" concepts used in the literature to analyze health system response to emergencies such as epidemics and natural disasters (e.g., Kruk *et al.*).[11] In contrast to focusing primarily on extraordinary events, the EDR framework builds on resilience work in health systems, development, organizational theory [6,12–16] to examine chronic challenges and unexpected events that impact healthcare providers on a day to day basis, and explores features of resilience that emerge in response to such everyday challenges (Figure 1).

To assess shocks and stressors facing mission hospitals, "top challenges" were determined using the following criteria: 1) the challenge was mentioned at all or most hospitals, 2) the challenge was mentioned by various respondents within a hospital site, 3) the challenge took place between 2010-2017 and, 4) the challenge was supported by outside literature. Top challenges were then categorized based on answers to the following questions: Is the challenge a shock, a stress, or a combination of both? Is the source of the challenge from the social or political sphere? If not, is the source of the challenge from the macro or meso (mission hospital) level of the health system? In which health system domain does the challenge best align, using the WHO health system building block[17] classification?

Figure 1. Everyday resilience framework



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Responses to top challenges were assessed for ways they exhibited particular resilience strategies; namely, the ability to absorb (persist), adapt (make incremental adjustments), or transform (make fundamental changes) in the face of challenge. Non-resilience (failure to respond) or negative resilience (persisting in a declining state) were also considered. To assess the features that gave rise to resilience, each hospital's organizational capabilities (cognitive, behavioral, and contextual) were assessed via interview transcripts, field notes, and organizational materials. Each of the three organizational capabilities were then broadly labeled as strong, moderate, or weak at the facility level. While this project was not intended to compare hospitals to each other, each hospital's pre-assigned "status" (strong, recovering, declining, or weak) was compared to the ranking of its organizational capabilities (strong, moderate, or weak) to examine relationships and patterns between these categorizations. This work was reviewed and approved by the Boston University Institutional Review Board and by hospital leadership at each facility.

Results

Interview data was gathered at eleven facilities, five mission hospital associations, and two external public health organizations in 2016 and 2017, with 76 key informant interviews (interviewed in groups on three occasions) (Tables 2 and 3).

Table 2. Hospital Demographics

Perceived hospital Status	
Strong	5
Recovering	3
Declining	1
Weak	2
Governance	
Church-led	4
Church-influenced	4
Independent	3
Level of Care	
All three	7
Secondary	4
Location	
Urban	3
Semi-urban	3
Semi-rural	1
Rural	4
Region	
North*	4
South	7

Note. *"North" was considered states north of Andhra Pradesh, Telangana, Karnataka, Kerala, and Tamil Nadu.

Table 3. Respondent Demographics

Gender	**N**
Male	52
Female	21
Female Group	2
Male/Female Group	1
Total	**76**
Age	**N**
40 or younger	11
41-60	39
61-80	19
Older than 80	4
Unassigned (group)	3
Total	**76**
Respondent Affiliation & Category	**N**
Mission Hospital Affiliates	41
Current Leadership (24)	
Hospital Staff (15)	
Mission Hospital Association Leadership	8
Retired Mission Hospital Affiliates	17
Administrators (6)	
Staff (4)	
Faculty (3)	
Founders (2)	
Association leadership (2)	
External Public Health Leadership	10
Total	**76**

Table 4: Top Challenges Between 2010-2017

SOCIAL & POLITICAL CONTEXT	CHALLENGES	Shock	Stress
Social & Political	Changing patient and employee expectations		X
	Improper use of finances or power		X
	Political and social transition	X	X
HEALTH SYSTEM	CHALLENGES	Shock	Stress
	MACRO Health System		
	MESO Health System		
Governance	Large policy changes	X	X
	Poor governance structures		X
Financing	Shifting financial flows towards for-profit healthcare	X	X
	Increasing operational costs		X
	Changes in external funding		X
Service Delivery	Expanding public & for-profit health services	X	X
	Continuing care for the poor amidst resource constraints		X
	Aging infrastructure		X
Human Resources	Growth of for-profit healthcare employment		X
	Staff shortages, esp. high-quality managers & leaders		X

1. Stresses, shocks, and the sources of challenge

Table 4 presents the top challenges facing mission hospitals between 2010-2017. One third of the top challenges were coded as emerging from social and political domains, while the remaining challenges were coded into the six classic "health system pillars"(17). Of the six pillars, information, and medicines and technology, were mentioned with less frequency and not included as "top" challenges.

Social and Political

Within the domain of social and political change, three key challenges were mentioned most frequently. The first was changing patient and employee expectations, which respondents felt were linked to societal shifts such as a growing market economy, changing professional and social norms, and increased access to technology. Changing patient and employee expectations operated as a chronic stress among all hospitals during the site visits.

> *It is increasingly difficult with competition for patients. There is an expectation from patients for instant results, [and this] leads to irrational treatment and over-prescribing. Hospital Staff, Semi-Rural Hospital*

> *It's becoming very difficult to retain people because of market forces. It's difficult to get people to commit to permanence; that means you join and have said you will retire from here. That is getting more and more difficult, because again of generational mindset change. New priorities of life, new format of life. So that's a challenge. Hospital Leader, Semi-Urban Hospital*

The second challenge within the domain of social and political contexts was improper use of finances and power from external forces as well as occasionally, internal groups, which operated as a

chronic stress. The third area of challenge, operating as both a shock and a stress, related to rapid changes in national and state political leadership and the concurrent growth of religious tension that, at times, posed challenges to healthcare facilities.

Governance

Large policy changes emanating from the macro health system were one of the two most common governance challenges impacting mission hospitals. One policy change mentioned repeatedly across interviews was the Clinical Establishment Act (CEA). The CEA was passed in 2010, requiring registration and regulation of all clinical establishments in the country. While the CEA was yet to be adopted by all states at the time of the project, the passing of the act at the central government level signaled a new era of health regulation and fundamentally shifted how health facilities across the country measured their standard of practice. For some mission hospitals and their affiliated clinic networks, CEA operated as an initial shock, leading to clinic closures when facilities were not able to meet the heightened personnel and infrastructure requirements. The second most common set of challenges were issues around meso (mission hospital) governance which operated as a chronic stress among mission hospitals.

> *At every level of society, there are successful mission hospitals; it's a question of how they are run. Small hospitals don't have enough local resources to have good boards, not enough leadership. Retired Medical Faculty, Semi-Urban Hospital*

Financing

Mission hospitals faced three prominent challenges related to financing. First, the migration of paying patients towards private, for-profit healthcare. The financial impact of private for-profit healthcare was an initial shock to many mission hospitals, especially in the early 1990s during a period of market liberalization. However, by 2010, the shock of for-profit growth had largely evolved into a chronic stress for most mission hospitals, except for those in rural areas that were just beginning to feel the effects of for-profit healthcare expansion. The second and third most frequently cited financial challenges were increasing operational costs and reductions in external funding for capital expenditures and special programs. These challenges operated as chronic stressors within the 2010-2017 period as well as historically.

> *Another challenge is with old ideas of mission hospitals, that mission hospitals are free. Patients still think that we have connections [overseas]. Hospital Staff, Healthcare Provider Meeting*

Service Delivery

Mission hospital service delivery was also challenged by three chronic stressors. First, across all interview settings (urban, rural, semi-rural, etc.), respondents referred to the ways that mission hospital service delivery volume was negatively impacted by the growth of for-profit healthcare services. Volume flows were also impacted by expanding government services and health schemes for the poor with patients going to mission hospitals for services they were not able to access elsewhere as well as for more complicated issues. The second chronic challenge was continuing to care for poor patients given increased costs of care. This challenge was compounded by the perception mentioned above that mission hospitals are expected to give predominately free care or generous reductions to the final bill. Third was aging infrastructure, that required repair and/or new construction and equipment purchase.

Human Resources

Human resource constraints were highlighted throughout the majority of interviews. Human resources were strained by hospital staff moving towards for-profit healthcare employment as well as employment outside of India ("brain drain"). Staff shortages were exacerbated by insufficient numbers

of high-quality managers and leaders, placing greater burden on existing, committed, high-quality leaders.

2. Responses: Absorbing, adapting, and transforming to meet the challenge

The use of the EDR framework allowed for analysis of responses to the challenges listed above. In particular, the identification of absorptive, adaptive, and transformative responses, and, *critically*, identification of the capabilities that underlay responses. In the following section, a subset of responses to key challenges are described (Table 5)

Table 5. Responses to Key Challenges

Challenge	Response
Social and political change	• Rigorous legal compliance (Absorptive) • Leaning on minority status (Absorptive)
Large policy changes (Macro)	• Coordination & resource sharing between hospitals (Transformative) • Re-training nurses into community health workers (Transformative) • Clinic closures (Non-resilience)
Poor governance structures (Meso)	• Creating new governance relationships between hospital & external leadership (Transformative) • Incremental adjustment (Adaptive) • Lack of response (Negative Resilience)
Growth of private for-profit providers (Financing, service delivery, and human resource)	• Direct engagement with for-profit healthcare (Adaptive) • Selective learning from for-profit healthcare (Adaptive) • Resistance to for-profit healthcare (Absorptive)
Service delivery challenges related to government health expansion	• Empanelment with government health insurance (Adaptive) • Promoting partnership with government (Absorptive) • Co-existing without direct engagement (Absorptive)

Social and Political

There were two main forms of *absorptive* resilience used to respond to political transition and the perception of increased scrutiny of minority religious institutions. The first strategy employed was continued, rigorous, legal compliance. Many respondents described legal compliance as the "right thing to do" and even more so in an environment with perceived higher scrutiny. As the regulatory environment could be difficult to navigate, many respondents spoke about sharing information across the mission hospital network, including across religious groups, to ensure that others were up to speed and fully compliant with new laws and regulations. The second absorptive strategy among mission hospitals was to occasionally lean on their status as minority religious institutions and, when necessary, call on legal protections provided in the constitution.

Policy Changes

While the closure of some clinics represented "non-resilience," two other notable responses to CEA exhibited features of transformative resilience. The first response was collaboration between Catholic and Protestant hospital organizations whereby a prominent tertiary Protestant hospital shared human resources, equipment, and infrastructure with the surrounding Catholic clinics in accordance with CEA requirements. The second transformative response was to transition Catholic Sister-nurses (also known as Nun-nurses) working in outlying clinics into "Community Health Enablers." As the CEA prevented these nurses from practicing beyond basic nursing care without advanced clinical oversight, this multi-prong strategy re-trained the Sister-nurse workforce to deliver natural therapies, conduct family and de-addiction counseling,

provide psychological first-aid for trauma, deliver holistic geriatric and palliative care, and conduct preventive health trainings on a variety of key population health issues.

Governance

Responses to governance challenges fell into three main categories. The first category was an adaptive response with incremental, often externally mandated governance changes, for example, financial reporting requirements. The second type of response was transformative reconfiguration of governance structures between hospital and church leadership, creating increased agency for hospital leaders to oversee day to day operations and financial decisions. The third type of response was "non-response." These were facilities that faced so many problems that they were unable to respond effectively to any challenge, including governance issues. Some of these hospitals found a way to continue on in the midst of challenges, revealing the capacity for negative forms of resilience with harmful consequences, such as financial losses — or what some have called "maladaptive emergence."[18,19]

Responses to for-profit expansion

Three key responses were employed to address the growth of for-profit providers. The first adaptive response was direct engagement with for-profit healthcare. Some mission hospitals participated in health industry associations at the local, state, and national level or by temporarily working for for-profit providers to learn from their methods and practice. The second, most common, adaptive response was the selective, and sometimes forced, learning from for-profit providers. In this response, mission hospitals did not have direct engagement or partnership with for-profit players but stayed abreast of changes within the for-profit healthcare world, making selective choices about when, where, and how to try and compete. For example, some pursued National Accreditation Board for Hospitals & Healthcare Providers (NABH) certification, signaling high quality levels to patients. The third absorptive response was active resistance to for-profit culture and influence. This form of resistance existed mainly in the discourse about what mission hospitals are and ought to be. Some respondents were emphatic that mission hospitals must resist focus on money-making, especially in circumstances where revenue generation placed extra burden on patients with limited means.

Responses to growth of government health initiatives

Mission hospitals also responded to expanding public health services in three key ways. The first adaptive response was to become empaneled providers of India's recent expansion of government health schemes. The results of empanelment varied greatly among mission hospitals. In some places, the use of government schemes worked well, allowing for continued or expanded service provision for the poor without increased financial burden on the hospital; while in other places, empanelment was more difficult, with slow reimbursement causing the hospital to shoulder increasing debt. The second absorptive response strategy was to engage in partnership with both state and central government on specific programs and projects. This long-standing response involved many mission hospitals. For example, an urban mission hospital created a partnership with the government to provide disability services such as prosthetic limbs and wheelchairs in a district immediately outside the city. In this project, the government provided, staffed, and funded the disability services, while the mission hospital provided administrative and managerial oversight. The third absorptive response strategy was to co-exist alongside government institutions without direct participation with publicly funded health schemes or projects.

3. The critical role of capabilities

The analysis of organizational capabilities found that mission hospitals noted for their "strong" status at the beginning of the project, had strong rankings for nearly all three capabilities: cognitive, behavioral, and contextual. Strikingly, respondents from "strong" hospitals often described their challenges in dire terms and expressed genuine concern about the future. However, concerns and honest critiques were communicated with more clarity and confidence from various levels of staff. These hospitals also had open, ongoing discussions — and even debates — about what a mission hospital is and what it ought to be in the context of modern India. These are all features that indicated higher levels of **cognitive capacity**. In strong hospitals, functional, clear governance structures between the hospital and religious leadership were complemented by high-quality leaders and managers across the hospital with authority (or "agency") to develop and deploy responses to challenges within their own departments; all features of strong **behavioral capacity**. Importantly, strong mission hospitals demonstrated high levels of **contextual capacity**. For example, deep social capital was fostered within and throughout the hospital via a variety of community-building efforts like campus housing, chapel services, shared liturgy, and open forums for discourse and debate. These hospitals were also well-connected with external resources, most notably those available through the larger mission hospital network. While it is true that strong hospitals tended to have sufficient hardware (e.g., money and people), no respondents from "strong" hospitals reported an *excess* of hardware resources; instead, they expressed the same concerns as other respondents about current and future resource scarcity. This finding indicates the important role of software (relationships, values, networks) in helping off-set hardware constraints.

It is also important to note that strong mission hospitals in this project were located across a variety of settings: urban, semi-urban, semi-rural, and rural. Some were affiliated with distinct church bodies, while others had always been independent of the church. Some were in North India; others, in South India. All provided primary and secondary care, while others also offered tertiary care. The distinguishing feature of "strong mission" hospitals in this project lay in strong contextual capacity that enabled the full use of cognitive and behavioral capacities, which in turn steered these hospitals towards context-specific forms of everyday resilience. Said another way, strong mission hospitals were those that nurtured people, relationships, and shared values, which in turn allowed better use of existing resources, clearer discussions about the nature and source of challenges facing the hospital, and more effective, context-specific, everyday responses to those challenges.

4. Faith and future directions for mission hospitals

Throughout all interviews, religious values, identity, practices, and relationships shaped the discourse around challenges and responses to challenges; as well as the future vision of what mission hospitals are and ought to be. In many instances, these features also strengthened the capacity for everyday resilience, most frequently by the way that shared faith increased contextual capacity.

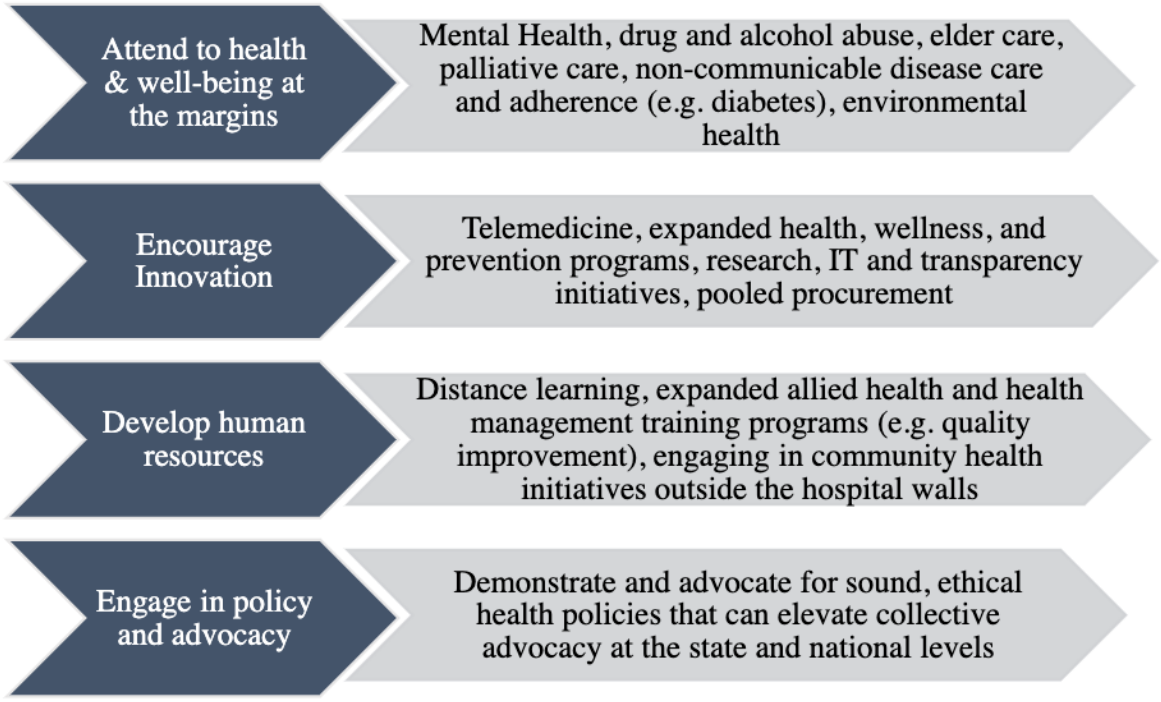
> *So broadly we can say it's that our faith, the foundation in Him, and the gospel gives us a different optic to see all things.*
> *- Retiree, Semi-Rural*

When asked about the definition of a "mission hospital," respondents most frequently defined it as a part of the healing ministry of the church, a way to demonstrate faith, as being pro-poor, and as a means of service. Looking to the future, respondents most commonly felt that mission hospitals should continue to meet the needs of society, be devoted to whole-person care, focus on

context-specific adaptations, demonstrate faith through medical work, work together with other mission hospitals, and at times, work with government.

When asked about specific ways mission hospitals should enact these goals, respondents described external and internal initiatives. With regard to working with government, many mentioned state and national health schemes sponsored by the government as one of many ways to consider partnership, including India's growing initiatives to provide UHC. Internally, respondents spoke about future possibilities for mission hospitals in four broad categories: attending to health and well-being at the margins of society, innovation, developing human resources, and engaging in policy and advocacy (Figure 2)

Figure 2. Future opportunities for mission hospitals



Discussion

Everyday resilience in mission hospitals

The EDR framework provided a useful and relevant approach to examine stresses and shocks facing mission hospitals in light of political, social, and macro and meso health system change. To our knowledge this is the first use of the EDR framework outside the African context. Drawing on resilience literature [12,16,20,21] the EDR framework posits that health systems (macro and meso) face a greater burden from chronic stressors compared to shocks. Indeed, in the present analysis, of the top challenges facing mission hospitals, only one third (4 of 13) operated as initial shocks, each of which morphed into chronic stresses over time. The remaining challenges operated as chronic stressors in the 2010-2017 period, and in many cases, for years and decades before the analysis period.

As private, not-for-profit health providers, mission hospitals faced the most prominent challenges in the domains of governance, financing, service delivery, and human resources, as well as social and political change, which supports the claim that health systems analysis is

not complete without attention to these powerful dynamics.[6,22–24] As the analysis reveals, one form of chronic stress or shock can touch on multiple domains. For example, when respondents spoke about for-profit healthcare, their comments typically included the impact on mission hospital finances, human resources, service delivery, and patient and staff expectations.

While "transformation" may seem like the most compelling resilience strategy to explore, the gold standard of everyday resilience is not transformation.[15] In this analysis, the majority of responses to challenges were either absorptive or adaptive, supporting Barasa et al.'s claim that everyday resilience is an emergent property of complex adaptive systems characterized by "a *combination* of absorptive, adaptive, and transformative strategies, underpinned by a set of cognitive, behavioral, and contextual capabilities."[6]

While transformation is not always the "ideal," two transformative responses are worth noting: coordination and resource sharing between Catholic and Protestant hospital networks and the re-training of Sister-nurses into community health enablers. Both strategies embodied the definition of transformation as moving into a new state with significant functional and structural changes.[12] Yet, they also seemed to exceed the definition of transformation and intersect with notions of "social innovation" in health. Social innovation in health starts "from the perspective of the person or community for which the solution is being created and not only engages those affected by the challenge, but equips and empowers them."[25] For example, when new policy requirements made some clinics no longer sustainable, meditation on religious vocation led the Catholic health workforce to re-imagine their health care delivery role in ways that would allow meaningful contribution to community health within the parameters of the new law. The massive undertaking to train Sister-nurses in new forms of healing did not just transform the way they practiced "healthcare;" it empowered the Sister-nurses by reinforcing the value of their vocation and equipped them with new ways to live out their commitment to provide quality health services. It also transformed social relationships by encouraging new forms of community engagement around health, prevention, and well-being. The observation that "transformation" and "social innovation" share overlapping, reinforcing properties towards strengthened health systems has been made by others[25,26] and is an important area for future study.

Nurturing everyday resilience

How might everyday resilience be nurtured among mission hospitals and other frontline providers? Recognizing the temptation to remain in "fire-fighting" mode — responding to the seemingly endless parade of daily challenges — the EDR framework encourages consideration of three domains — cognitive, behavioral, and contextual — which in turn bolster capacity for everyday resilience. While an extensive set of recommendations is beyond the scope of this paper, we briefly suggest ways frontline providers might strengthen EDR.

First, assessing cognitive capacity requires consideration of the source(s) of the challenges facing frontline providers as well as their core values and guiding ethos. Values also inform the "outcomes" worth tracking to know whether or not the facility is impacting the areas of most importance. For many, this will include maintained or improved delivery of quality care, but it also may incorporate outcomes like increased access to care and responsiveness to local needs. Without reflection on these matters, response strategies can steer mission hospitals and other frontline providers in a variety of incoherent directions, which may ultimately add greater burden and become a source of challenge in its own right. Second, assessing behavioral capacity requires reflection on a hospital's *ability to enact* their response strategies. For example, how are

power and leadership shared between the hospital and external bodies? Within the facility, what level of agency is afforded to leaders and managers at various levels to create and enact solutions in their own departments? Finally, contextual capacity considers the hardware and software elements of the facility or health system, and ways these features can be strengthened. Typically, facility or health system leaders are well aware of the financial, human, and technical resources that are or are not available. But, as the EDR framework states, software features are just as important for frontline providers to assess and nurture. These include core values, relationships, networks, management and leadership skills, ideas, and the way power is shared within a facility. In the case of strong mission hospitals in our sample, it was the relationships with the wider mission hospital network, and the shared values, practices, and relationships *within* mission hospital facilities that seemed to most bolster contextual capacity.

Given the constraints on time and energy among most frontline providers, we provide in the Appendix a series of questions that might facilitate reflection in each of these three domains, with the goal of "nurturing the soil" for everyday resilience among mission hospitals and other frontline health organizations in both public and private sectors.

Looking to the future

"Health for all" has been a part of India's vision for itself since independence. Throughout the latter half of the twentieth century and into the new millennium, numerous policies have called for an expansive public health system that would sufficiently meet the health needs of the population.[27,28] In August 2018, the Indian government rolled out its latest expansion of UHC through a program called Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (AB-PMJAY), aimed to expand access to primary care through enhanced public facilities and increase access to secondary and tertiary care for millions of India's poorest citizens through a network of empaneled hospitals, including non-profit and charitable providers.[5,29] AB-PMJAY represents one of many ways mission hospitals might consider partnership and expand care to poor patients. However, as with all external partnerships, consideration must be given to things like empanelment requirements, alignment with the needs of the local context, and reimbursement rates. Additionally, government might also work with mission hospitals to explore new forms of contractual reimbursement (beyond straight fee for service) as well as the best mode of delivery for services not currently covered by national health schemes.

While partnership with public initiatives is one approach, many caution against private not-for-profit or faith-based health services becoming a substitute for or being fully dedicated to government efforts, advocating instead for a "complementary" role to government.[3,30,31] It is therefore important to consider opportunities that will allow mission hospitals to "meet a need" and attend to the health of the whole person (body, mind, spirit) in their local contexts. Throughout interviews, respondents mentioned many promising areas for mission hospitals in the domains of attending to health and wellbeing at the margins, innovation, human resource development, and policy and advocacy (Figure 2). Many of these processes were already underway within various mission hospital or networks, indicating scope to deepen experimentation, conduct evaluations, and spread good ideas throughout the broader mission hospital network. Attending to health and wellbeing at the margins of society will require ongoing sensitivity on the part of the mission hospitals as the needs of the country continue to change. It is interesting to note that respondents did not say that mission hospitals are meant to meet health needs; they simply said "meet a need" or "meet the need." This response indicates scope for attention to move from explicit medical conditions to other issues that give rise to

poor health and well-being, including social determinants of health such as environmental degradation, substance abuse, and growing needs for elder care.[32] Mission hospitals certainly cannot meet *all* needs; however, within their specific contexts around the country, each hospital can closely consider and respond to the needs of their surrounding community, particularly the needs of most overlooked and marginalized members of the community.

Mission hospitals and mission hospital affiliates in India have a rich history of innovation, particularly in the areas of community health and medical education.[33,34] Currently, there are many areas of innovation underway within mission hospitals and mission hospital networks. For example, throughout 2018, the Catholic Health network began building an online platform for more than 30 Catholic hospitals and clinics across the country to participate in joint procurement, with early data indicating substantial cost savings and scope for scale.[35] As mission hospitals experiment and innovate, it is important that they share their learning not only with each other, but also with the broader community. This can be done in a variety of ways including formal research and publication on the outcomes of innovative programs.

To help address India's chronic human resource shortages in rural areas, mission hospitals can continue to build on existing platforms of medical education, consistent with national and state standards, to train a new generation of public health and medical professionals willing to serve in underserved areas. Several mission hospitals in this project had distance-learning programs aimed at filling human resource gaps, particularly in rural areas. The critical role of non-clinical leaders and administrators was also observed at nearly every facility included in the project. These were typically young or middle-aged professionals with training in a variety of backgrounds (e.g., human rights, management, business administration, public health) working hard to help mission hospitals keep pace with constant political, social, and health policy changes. While traditional MBBS programs are currently adapting to the new laws about medical school admission, mission hospitals and affiliated medical schools could bolster allied health and public health training, as well as training in management, health leadership, quality improvement, and information technology, important building blocks for all mission hospitals to address existing gaps. Broadening the scope of training and education could also encourage recruitment of a very different type of young person who might not have clinical interests, but who may have strong commitment to mission hospital values and aspirations. It is also important that education initiatives remain sensitive to what it means to "meet a need" within particular contexts and through the work of mission hospitals. Finally, through organizations like the Christian Coalition for Health in India[4] and other groups, mission hospitals can unite and use their collective voice to advocate for sound ethical health policies at local, state, and national levels.

In their work on health system resilience, Kruk et al. state that health systems are strengthened by a diversity of health actors. The more resilient each type of health actor (public, private, charitable, mission hospital) the more resilient is the whole system against stresses, and particularly, major shocks.[11] Thus, the continued everyday resilience of mission hospitals can contribute to the strength and resilience of the broader health system towards the goal of improved population health and well-being.

Limitations and strengths

This project originally set out to be an interdisciplinary endeavor that employed both qualitative and quantitative data, however limited time and resources precluded the possibility of gathering robust and consistent quantitative data at each site. Better quantitative data could have provided the opportunity to look more carefully at the relationship between everyday resilience and

improved or expanded delivery of quality health care services, or the ability to investigate the fiscal health of each facility. Other limitations included a limited set of hospitals, potential bias in sampling hospitals and interviewees, and the role of an external interviewee. To address these challenges, data triangulation was used to corroborate a voluminous amount of interview data with mission hospital material like annual reports, history books, pamphlets, newsletters, and journals to produce the present analysis. Despite the limitations inherent in small qualitative studies, policy makers are increasingly leaning on qualitative evidence to understand various socioeconomic contexts, health systems, and communities.[36] Qualitative research, particularly when synthesized across individual studies, is a key approach to inform the development of guidelines and address implementation considerations in diverse settings and complex health systems. As such, the potential contributions of the present study, when examined alongside similar studies (e.g., see Thekkekara in this issue), can outweigh its limitations. Finally, given the emerging nature of the EDR framework, this study contributed new insights to the theory and application in real-world settings outside of the African context,[18] which should be further tested and explored in subsequent projects in India, Africa, and beyond.

Conclusion

This study identifies approaches that can enhance the strength and service capacity of mission hospitals across the country, by identifying and describing features of everyday resilience among mission hospitals in India. Beyond strengthening their own resilience, mission hospitals can contribute to the strength and resilience of the broader health system towards the goal of improved population health, with particular attention to promoting the health of the whole person, body, mind, and spirit, and meeting the needs of their local contexts across the country

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Appendix:

Questions to help assess and strengthen capacities that underlie everyday resilience
Cognitive capacity

- **Identifying & ranking the range of current stresses and shocks**
  - What range of challenges currently face your health facility/system? Consider challenges that might fall within each of the following categories: social, political, governance, human resources, finances, service delivery, medicines & technology, and information
  - Among the listed challenges, which are the most pressing?
  - Which challenges are likely to keep expanding within the current climate and context?
- **Identifying current response strategies**
  - What strategies are currently in use to face each of these challenges?
  - Consider the strategies currently in use, and for each ask:

        - Does this response allow us to carry on or persist in more or less the same state? (Absorbing)
        - Does this response introduce incremental adjustments to our overall structure and practice? (Adapting)
        - Does this response lead to fundamental changes to our structure and practice? (Transforming)
    - Are there any challenges for which your facility/system are simply not responding (and should be), or responding in ways that lead to slow, continuous decline?
- **Assessing current response strategies**
    - Are the current strategies working? Are they "effectively" managing challenges? *It is important to note that "effective" might have different meaning for different hospitals. If there is no clear understanding of "effective", the hospital might consider asking what outcomes are most central to their values and goals as an organization, for example, more services for the poor, higher volumes of patients, financial stability, increased revenue, etc.
- **Assessing Values**
    - What values, commitments, and relationships are central to the health facility/system?
    - How have your core values operated as a lens to understand challenges? Are there any values that have been ignored or side-lined in the midst rapid response to ongoing challenges?
    - Which values and commitments are most important in guiding responses going forward?

Behavioral capacity

- **Assessing and strengthening current governance structures**
    - What is the health facility/system's current governance structure including external governance stakeholders?
    - Does the current governance structure allow sufficient agency for the health facility/system to develop and *enact* response strategies?
    - If the current governance structure does not provide sufficient agency, can it be adjusted or changed in order to facilitate mutually beneficial forms of agency?
    - Does the health facility/system have appropriate resources and leadership in place to manage changes in governance (e.g. experienced leaders and administrators, reporting mechanisms and structures for accountability, particularly fiscal accountability)?
- **Assessing agency *within* the health facility/system**
    - How much agency exists within the health facility/system? For example, do individual departments or managers have freedom to develop and deploy strategies to address challenges?
    - If internal agency is limited, how might appropriate forms of agency be expanded? Which managers might be nurtured to help strengthen their own departments?

Contextual capacity

- **Contextual capacity within the health facility/system**
    - What is the nature of personal and professional relationships within the health facility/system? For example, relationships between levels of staff?
    - Can lower-level staff ask questions or share their ideas with senior-level staff?
    - Are mid-level managers empowered to create and oversee responses to challenges impacting their departments?
    - Are there practices such as group events, celebrations, or meals where staff can connect, strengthen collective commitments, and build relationships?
- **Contextual capacity outside the health facility/system**
    - What is the nature of relationships between the health facility/system and the external community?
    - How does the health facility/system relate to other health facilities/systems in their community (both public and private)?
    - How does the health facility relate to other health facilities in their system? Are there ways to strengthen these relationships?
    - How can relationships – within and between health facilities – be protected and strengthened as health facilities continue to face ongoing stresses and strains?
- **Hardware and software**
    - What resources – hardware and software – are available to support resilience strategies going forward?
        - Software examples: values, relationships, leadership capacity, management skills, systems and processes
        - Hardware examples: infrastructure, finances, human resources in terms of number and types of healthcare positions