Public Health Leadership in Fragile States: Lessons from South Sudan's Health System

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DOI: https://doi.org/10.51244/IJRSI.2025.121500037P

Received: 03 March 2025; Accepted: 07 March 2025; Published: 06 April 2025

ABSTRACT

This paper analyses the significant role of public health leadership in developing a resilient and effective healthcare system in fragile state, historical and political factors affecting health governance. The protracted war in South Sudan has negatively affected infrastructure, institution, and logistics for health commodities as well as resources availability; hence leading to worst health outcome indicators in the world. Nevertheless, South Sudan has achieved number of millstones such as eradication of guanine worms and controlling cholera outbreak. All these are attributed to strong leadership guiding the public health policy. The paper underscores the importance of decentralization of leadership-involving local healthcare providers and communities in administration and enforces accountability mechanisms. Similarly, the paper explores strategies to strengthen health governance such as decentralization, capacity building, and community engagement. In conclusion, good governance and specific reforms of the health agenda can make positive changes and build a resilient health care system that can deliver essential health care services despite all challenges that may exist

Keywords: Public Health Leadership, Fragile States, Health Governance, Decentralization, South Sudan Health System, Humanitarian Aid, Community Engagement, Health Workforce Crisis, Health System Resilience, Disease Surveillance.

INTRODUCTION TO PUBLIC HEALTH LEADERSHIP IN FRAGILE STATES

Fragile states are countries characterized by weak government capacity or legitimacy, leaving citizens extremely vulnerable to shocks and crises (Landry, Giebel, and Cryer 2021). These conditions have dire consequences for public health. In fact, a disproportionate share of the global disease burden is concentrated in fragile settings , for example, roughly half of all under-five child deaths and one-third of maternal deaths worldwide occur in such states. Health services in fragile contexts often falter due to instability; communities frequently lack effective local health governance and the capacity to detect and respond to outbreaks (Threats et al., 2016). This gap in basic health protections contributes to persistently high rates of preventable illness and mortality.

South Sudan exemplifies the public health challenges of a fragile state. It is one of the world's newest and most fragile nations, ranking at or near the top of global fragility indices in recent years. Decades of conflict before and after independence in 2011 decimated infrastructure and hollowed out institutions, including the health system. As a result, South Sudan today suffers some of the worst health indicators globally: life expectancy is barely in the mid-50s, and the country has one of the highest maternal mortality ratios (roughly 730–789 per 100,000 births) and under-five mortality rates (over 100 per 1,000 live births) in the world. (Odhiambo et al., 2020)

In this context, strong leadership and governance in health are not just important – they are indispensable. Effective public health leadership can make the difference between a health system that collapses under

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI | Volume XII Issue XV March 2025 | Special Issue on Public Health

pressure and one that adapts and continues to deliver life-saving services. This paper examines the evolution of South Sudan's health system in the face of fragility and draws lessons on how leadership and governance can strengthen health outcomes in fragile states.

Historical and Political Context of South Sudan's Health System

The roots of South Sudan's health governance are intertwined with its turbulent history. During the Sudanese civil wars (ending with the Comprehensive Peace Agreement in 2005), formal public health services in the southern region virtually collapsed. An estimated 80% of basic health care during the war years was provided by non-governmental organizations (NGOs) and faith-based groups as the de facto health system (Government of South Sudan Ministry of Health Transforming the Health System for Improved Services and Better Coverage, n.d.)

Following the 2005 peace deal, a nascent Ministry of Health (MoH) for Southern Sudan was established under the semi-autonomous government. Health sector rebuilding efforts began, guided by a Health Policy (2007–2011) and a five-year Health Sector Development Plan. These early policies emphasized decentralization and community-based services, aiming to deliver an essential package of care to the population. In line with the interim constitution of 2005 and the Local Government Act of 2009, the health system was structured in a decentralized manner with four administrative levels – central, state, county, and community. (Gupta et al., 2011)

The national MoH was tasked with stewardship: providing policy guidance, standards, and funding, while state and county health departments were to oversee day-to-day health service delivery at hospitals, primary care centers, and community units. In theory, basic services at primary and secondary levels were to be free and accessible to all, funded by government with support from a Multi-Donor Trust Fund and NGO partners.

South Sudan's independence in 2011 brought hopes of strengthening health governance under sovereign leadership. The new government launched a National Health Policy and inherited about 1,487 health facilities across the 10 states. However, the fledgling health system faced overwhelming challenges from the start. Upon independence, South Sudan had fewer than 200 doctors and roughly 100 registered nurses to serve a population of over 12 million– a staggering gap that reflected the legacy of neglect and conflict. Just two years later, in December 2013, the country plunged back into civil war. This renewed conflict severely disrupted health services nationwide. Many facilities were looted or destroyed, health workers were displaced or even attacked, and medical supply lines were cut off in conflict zones.

By 2016, an estimated 4 million South Sudanese had been internally displaced or had fled to neighboring countries, further straining health delivery. Political instability persisted through multiple attempted peace agreements. Frequent changes to subnational administrative boundaries (expanding from 10 states to 28 and 32, then reverting to 10 states in 2020); created additional confusion for health governance, as roles and resources shifted with each re-organization. Despite these upheavals, the Ministry of Health and partners tried to maintain basic services through emergency programs. For example, a Health Pooled Fund (described later) was established in 2012 to pool donor resources and contract NGOs to keep primary clinics running. In effect, much of the health system continued to be operated by humanitarian organizations during the war, under coordination of the MoH and international agencies.

Amid crises, there have been notable efforts to reform and strengthen the health system. One key initiative was the Boma Health Initiative (BHI) launched in 2017 as a nationwide strategy to extend primary health care to rural communities. The BHI seeks to standardize community health services and reinforce the link between village-level health workers (known as Boma health workers) and formal primary care facilities .(The Boma Health Initiative - Management Sciences for Health, n.d.). By training and deploying community health workers in each village, the program aims to improve access in remote areas where 83% of the population lives and over half of families are more than an hour's walk from the nearest health facility.

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI | Volume XII Issue XV March 2025 | Special Issue on Public Health

The BHI also promotes community ownership and governance of health by involving village health committees, thereby decentralizing decision-making to the grassroots

Another reform has been the push to integrate services and strengthen the health system's resilience. For instance, the Ministry of Health developed a National Health Sector Strategic Plan and, with support from the World Bank and other partners, has worked on rebuilding infrastructure (such as renovating hospitals like Juba Teaching Hospital and regional facilities). Decentralization remains a guiding principle – the idea that empowering state and county health departments will make services more responsive – but in practice this has been challenging to implement due to limited funding and human capacity at local levels. Nevertheless, some progress has been seen where stability allowed it. In parts of the country, local health officials, with NGO support, have led successful vaccination drives and disease control programs (such as Guinea worm eradication, discussed later).

Overall, South Sudan's health governance has been shaped by a tension between centralized humanitarian support and the goal of decentralized, government-led services. Protracted conflict and political turmoil have repeatedly set back plans for systematic improvement. Yet, even in this fragile context**,** committed leaders and partners have piloted reforms like the Boma Health Initiative to bring services closer to communities. Understanding this historical context is crucial to appreciating the leadership challenges and innovations that follow.

Leadership Challenges in South Sudan's Health System

South Sudan's health system faces a confluence of leadership and governance challenges common to fragile states. These include institutional weaknesses, resource constraints, and logistical hurdles that impede effective health service delivery. The key challenges can be summarized as follows:

Despite having a formal decentralized structure, governance of the health sector is often weak and inconsistent. There is a gap between policy on paper and execution on the ground. The Ministry of Health's capacity for oversight and regulation remains limited after years of conflict. Many health facilities are managed by NGOs or ad-hoc local arrangements, leading to variable standards. Coordination is a persistent issue with numerous donors, UN agencies, and NGOs involved, it has been difficult to align efforts under national leadership. Informal and parallel systems fill critical gaps but may sidestep government stewardship. A recent study found that limited government investment and engagement have perpetuated an excessive reliance on international actors, and that barriers between government and partners have hindered effective coordination. (Qaddour et al., 2024)

In practice, decision-making authority can be fragmented: what the national policy dictates doesn't always trickle down to implementation in clinics and counties. Furthermore, oversight mechanisms like monitoring and evaluation or financial auditing are underdeveloped, which erodes accountability. Where oversight is weak, issues like misuse of funds or drug stock pilferage can proliferate unchecked. South Sudan's broader environment of political patronage and instability has also affected the health sector, sometimes resulting in appointments based on allegiance rather than merit and causing frequent turnover in key health leadership posts. All of these factors contribute to policy implementation gaps – progressive health policies have been written (for example, on maternal health or immunization), but executing these policies uniformly across the country remains a major challenge.

Perhaps the most acute challenge is the shortage of qualified health workers at all levels. South Sudan entered independence with only a handful of trained doctors and nurses for the entire country. Although the numbers have improved marginally since then, the health workforce density is still far below international standards (for context, in 2018 South Sudan had roughly 0.4 doctors, nurses, and midwives per 1,000 people, versus the World Health Organization's recommended minimum of 4.45 per 1,000).

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI | Volume XII Issue XV March 2025 | Special Issue on Public Health

South Sudan suffers from a severe deficit of health professionals, making each provider's role critical in delivering care. When South Sudan gained independence in 2011, it had only about 120 doctors and 100 nurses serving a population of 12 million. This workforce scarcity has been exacerbated by brain drain: many of the limited number of South Sudanese who complete medical or nursing education seek opportunities abroad or with international organizations due to better pay and safety. The country's prolonged conflicts have also driven health workers into exile or other fields. Those who remain often work in extremely difficult conditions – with limited supplies, huge workloads, and security risks – contributing to burnout and attrition. Skill mix and training quality are additional issues; there are critical gaps in specialized skills (for instance, very few surgeons or anesthesiologists in the entire nation). Mid-level healthcare providers and community health workers take on tasks beyond their formal training to compensate. The government and partners have made some efforts to train new health workers (for example, establishing a medical school in Juba and nursing schools in several states), but graduating sufficient numbers and retaining them in-country is a long-term challenge. In summary, the human capacity gap undermines almost every aspect of health service delivery, from clinical care to management and oversight.

Financing the health system in South Sudan is an enormous challenge marked by heavy dependence on external aid. Government budget allocations for health are meager – in recent years, health has received less than 2% of the national budget. (Strengthening primary health care in fragile settings: South Sudan, n.d.).An extremely low share that reflects the government's limited revenues and competing priorities in a post-conflict economy. This leaves most funding for healthcare to come from international donors and humanitarian organizations. It is estimated that over 60% of total health expenditure in South Sudan is financed by international partners.

One prominent mechanism is the Health Pooled Fund (HPF), a multi-donor trust fund that has supported delivery of a basic package of health services in about 80% of health facilities across most states. Through the HPF, donors contract NGOs to run clinics and county health departments, essentially substituting for direct government service provision. While this has kept facilities open, it underscores the donor dependency of the system. A serious consequence of this funding model is vulnerability to funding fluctuations: when donor grants are delayed, reduced, or shifted to other crises, local health services can quickly face shortages or closure. Indeed, recent reductions in development aid have already "complicated progress towards longer-term development objectives, including health systems strengthening," according to stakeholders, and forced humanitarian actors to fill even more gaps.

Another concern is financial accountability and corruption. South Sudan overall has struggled with corruption and mismanagement of public resources and the health sector is not immune. There have been reports of diversion of health funds and commodities, ghost workers on payrolls, and other inefficiencies that waste scant resources. The multiplicity of parallel funding channels (government, donor projects, UN programs) can also lead to duplication and high administrative costs. In sum, the financing landscape is characterized by insufficient domestic investment and heavy reliance on aid – a combination that is unstable and often inefficient.

Physical infrastructure for health in South Sudan remains grossly inadequate. Many clinics and hospitals were damaged or destroyed during conflicts and have not been fully rebuilt. Large areas of the country have no functional health facility; even where facilities exist, they may be rudimentary (e.g. run in tents or old buildings) and lacking equipment. Only about half of the population lives within 5 kilometers of a functional health facility, leaving huge gaps in coverage. For example, entire counties in remote regions have only a single ill-equipped clinic serving tens of thousands of people. The existing hospitals and clinics face chronic shortages of essential medicines, supplies, and equipment.

Supply chain management is a constant struggle due to weak logistics systems and the country's infrastructure constraints – South Sudan has few paved roads, and during the long rainy season and frequent floods, vast areas become impassable. It is common for vaccine deliveries or drug shipments to be delayed for weeks or months, leading to stockouts at clinics. In times of conflict, supply routes are even more

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI | Volume XII Issue XV March 2025 | Special Issue on Public Health

disrupted, and warehouses have been looted or destroyed. Power supply is another challenge: most facilities lack reliable electricity, impacting cold chain for vaccines and operation of medical devices (some improvements like solar power installations are underway in select sites). Human resources for infrastructure maintenance (e.g., biomedical technicians, supply chain managers) are also in short supply. Furthermore, insecurity often forces facilities to close temporarily, and outreach services are curtailed when travel is dangerous. During the civil war, there were documented incidents of ambulances being shot at and health staff being attacked.

These challenges – weak governance, critical workforce shortages, precarious financing, and frail infrastructure – are deeply interlinked. They form a vicious cycle typical of fragile states: poor governance leads to inefficient use of resources, which exacerbates shortages of staff and supplies, further undermining service delivery and public trust in the system. Breaking out of this cycle requires strategic leadership and targeted reforms, which we explore in subsequent sections.

Comparative Analysis: Leadership in Other Fragile States

South Sudan's health governance can be compared with strategies used in other fragile states:

- **Rwanda:** Post-genocide, Rwanda successfully implemented community-based health insurance and decentralized governance, leading to improved health outcomes.
- **Sierra Leone:** Following the Ebola outbreak, Sierra Leone strengthened its surveillance system and improved emergency preparedness.
- **Afghanistan:** Despite conflict, targeted health interventions in maternal and child health have yielded positive results.

Lessons from these contexts suggest that South Sudan could benefit from sustained investment in local capacity-building and integrated health financing mechanisms.

Adaptive Leadership and Resilience in Public Health

In spite of the formidable challenges outlined, there have been notable examples of adaptive leadership and resilience in South Sudan's health sector. Public health leaders – from national officials to front-line health workers and community volunteers – have often had to improvise, innovate, and collaborate to meet urgent health needs in a resource-constrained, ever-changing environment. This section highlights some case studies and strategies that demonstrate how adaptive leadership has saved lives and strengthened resilience, even in a fragile setting.

One of the most celebrated public health successes in South Sudan is the near-eradication of Guinea Worm Disease. Guinea worm (dracunculiasis) was once rampant in South Sudan's rural communities, but through persistent efforts the country has managed to interrupt its transmission. By early 2018, South Sudan reported zero human cases of Guinea worm for 15 consecutive months – effectively declaring victory over a disease that had crippled tens of thousands in previous decades.(South Sudan Stops Transmission of Guinea Worm Disease, n.d.)

This achievement is remarkable given the context of war and instability. It was made possible by strong adaptive leadership in the Guinea Worm Eradication Program: health officials and partners (notably The Carter Center and World Health Organization) mobilized thousands of village volunteers to conduct surveillance, educate communities about water filtration, and contain cases. Even during conflicts, program leaders negotiated "guinea worm ceasefires" in the 1990s to allow health workers access to endemic villages.

The Guinea worm program exemplifies how local leadership (e.g. county health officers and community chiefs) working hand-in-hand with international supporters can overcome insecurity, reach remote populations, and shift community behaviors – ultimately eliminating a debilitating disease. Another example

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI | Volume XII Issue XV March 2025 | Special Issue on Public Health

of adaptive intervention is the response to recurring cholera outbreaks. South Sudan has faced cholera epidemics in multiple years, including a severe outbreak in 2014–2017. Health authorities, with support from WHO and UNICEF, adopted innovative measures like mass oral cholera vaccination (OCV) campaigns in high-risk areas, combined with water and sanitation efforts. In 2017, South Sudan became one of the first countries to use OCV on a large scale in an active cholera outbreak, vaccinating hundreds of thousands of people which helped curb the spread of the disease. In late 2023, as cholera resurfaced, the Ministry of Health launched a new nationwide inoculation drive aiming to vaccinate over 9 million people (about 80% of the population) against cholera.

Another case illustrating resilience is the country's Ebola preparedness efforts during the 2018–2020 Ebola outbreak in neighboring D.R. Congo. Recognizing the threat of cross-border spread, South Sudan's health authorities, with guidance from WHO, quickly established screening points at borders and airports, trained rapid response teams, and set up isolation units. They also engaged local community leaders in high-risk border districts to support early reporting of any suspected Ebola cases. Though South Sudan ultimately did not experience an Ebola outbreak, these preparedness actions likely improved the country's overall outbreak response capacity and provided a model for inter-agency cooperation in a crisis. Similarly, the COVID-19 pandemic forced adaptation: the National MoH formed a high-level task force including government and partner representatives, instituted mobile testing labs (with support from Africa CDC), and innovated with risk communication by working through local radio and community networks to convey public health messages even where literacy is low. While the pandemic strained the weak health system, it also accelerated investments in areas like disease surveillance, oxygen supply, and digital reporting systems that can leave a lasting positive le

A cornerstone of building health resilience in South Sudan has been the adoption of the Integrated Disease Surveillance and Response (IDSR) framework. As early as 2006, even before independence, the MoH with WHO's support began implementing IDSR to improve detection and control of infectious disease outbreaks. This strategy involves training health workers to recognize and report priority diseases, establishing reporting channels from community level up to national level, and mounting rapid responses when signals emerge. For instance, health facilities and county health departments send weekly surveillance reports (including for diseases like measles, cholera, malaria) and alert authorities to any unusual clusters. To strengthen this system, South Sudan recently updated to IDSR "Third Edition" guidelines – in 2021 a training of trainers prepared 40 national master trainers, who are now cascading training on the new IDSR protocols to health staff in all counties

The updated guidelines emphasize event-based surveillance (capturing rumors and community reports) in addition to routine indicator reporting, and they integrate new threats like COVID-19 into the surveillance list. Thanks to these efforts, South Sudan has increasingly been able to detect outbreaks early. For example, despite regular measles outbreaks and occasional viral hemorrhagic fever scares, the IDSR system provides a framework to investigate and respond in a timely manner using resources at the community, county, state, and national levels. The Ministry's Epidemic Preparedness and Response (EPR) department now has focal points in each state and even leverages Boma health workers in some communities as informants for diseases .

Health leaders in South Sudan have also shown pragmatism in leveraging local and international partnerships. Recognizing the country's capacity gaps, the MoH often works in tandem with external partners for technical expertise and operational support. For example, the U.S. Centers for Disease Control and Prevention (CDC) has embedded advisors in the MoH to help develop laboratory and emergency response systems.

Likewise, international NGOs often partner with County Health Departments to run programs like nutrition clinics or mobile health teams, effectively acting as an extension of the public health system. What is important is that the most effective partnerships are those that involve local leadership rather than bypassing it. Successful interventions (like Guinea worm eradication or cholera vaccination) typically had strong

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI | Volume XII Issue XV March 2025 | Special Issue on Public Health

community engagement – local chiefs, volunteers, and health staff were empowered to take action with the guidance or resources from international agencies. This community-level leadership is a form of adaptive governance that builds resilience: when travel became impossible due to conflict, community volunteers carried on surveillance; when budgets were tight, village health committees pooled local resources to support a clinic. Such adaptability at the front lines can keep health services afloat when formal systems fail.

Partnerships have been both a necessity and a benefit in South Sudan's health system. International actors have provided funding and expertise, but they have also gradually shifted toward strategies that strengthen local leadership. A good example is the Health Pooled Fund (HPF). Initially, HPF simply paid NGOs to deliver services, but over time it has also emphasized mentoring local health managers and including county officials in planning services for their areas. In Warrap State, for instance, the Health Pooled Fund in 2021 worked with local authorities on a grassroots engagement campaign for COVID-19 vaccine acceptance, leveraging traditional leaders and women's groups to increase uptake.

This kind of collaboration helps develop the leadership skills of local actors. Another positive development is the reactivation of forums for health sector governance. With encouragement from the World Health Organization, South Sudan recently revitalized its Health Partners Forum, a coordination body where the MoH and all major health partners meet to align strategies

Strengthening Health Governance in Fragile Settings

Addressing the challenges of a fragile health system like South Sudan's requires deliberate efforts to strengthen governance at all levels. This section discusses approaches to improve governance – from decentralizing authority and engaging communities, to enforcing accountability and building local capacity – which are vital for turning a fragile health system onto a path of stability and improvement.

In theory, decentralization brings decision-making closer to the people and allows health services to be tailored to local needs. South Sudan's health policy has long called for decentralized management, with states and counties playing leading roles.

In practice, realizing effective decentralization has been difficult, but it remains a crucial goal. Strengthening health governance in this context means empowering state and county health departments with the skills, resources, and autonomy to manage health programs locally. This could involve giving local health offices greater control over budgets and hiring so they can respond swiftly to on-the-ground realities. Additionally, community engagement is a pillar of governance that cannot be overlooked, especially in fragile settings. When communities are actively involved in planning and overseeing health services, those services are more likely to be trusted, used, and maintained. In South Sudan, one strategy to enhance community engagement has been through village health committees and Boma health teams. These community-based structures create a formal role for community members in governing health activities – for example, they help set priorities (such as deciding to focus on immunizations or clean water in their village) and hold health workers accountable for attendance and service quality. The Boma Health Initiative explicitly aims to improve community ownership of health services. By training local volunteer health workers and establishing community health committees, the BHI empowers communities to take charge of basic health promotion and prevention activities.

At the community level, engaged local health workers and volunteers can significantly extend the reach of the health system. Evidence from other fragile states shows that involving community representatives in health facility management (through health facility management committees, for instance) can increase transparency and responsiveness. In South Sudan, community engagement has also proven critical in times of crisis – for example, during vaccination campaigns or disease outbreaks, community leaders (chiefs, religious leaders, women's groups) have been mobilized to encourage participation and compliance with public health measures. Strengthening this community governance component means regularly consulting communities, integrating their feedback into health plans, and acknowledging them as partners in health

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI | Volume XII Issue XV March 2025 | Special Issue on Public Health

system stewardship. Not only does this improve service delivery, it also builds public trust in the health system – a form of legitimacy that is especially valuable in a fragile state.(Challenges for Fragile States - Global Health Risk Framework - NCBI Bookshelf, n.d.)

Good governance hinges on accountability – the assurance that leaders and institutions are answerable for their actions and use of resources. In a fragile health system, creating accountability mechanisms can dramatically improve performance by deterring corruption and mismanagement. For South Sudan, this could involve several measures. First, establishing clear monitoring and evaluation (M&E) systems for health programs is essential. For instance, the Ministry of Health has set up a national monitoring system using household surveys to track health indicators in each state.

Regular monitoring of results (coverage rates, drug stock levels, etc.) allows for greater transparency about what is working and what is not, and it enables corrective action. These results should be shared publicly to the extent possible, to foster accountability to citizens. Second, financial transparency needs to be improved. Donors and government can work together to create pooled funding mechanisms (like the Health Pooled Fund) that include rigorous financial oversight and audits, ensuring funds reach their intended targets. Publishing health budget allocations and expenditures can also help; when communities know what resources a clinic is supposed to have, they can help flag discrepancies. There are encouraging moves in this direction: South Sudan's partners have emphasized anti-corruption clauses in funding agreements, and the government has at times committed to auditing the health sector (though implementation is inconsistent). The importance of tackling corruption is widely recognized – as one international observer noted, corruption and resource mismanagement must be "squarely addressed and decisively tackled" for South Sudan's nation-building, including its public services, to progress.

Third, accountability can be reinforced through community oversight. Community health committees can not only plan, but also monitor health staff attendance, the availability of medicines, and the quality of care at local facilities. Their reports can be funneled up to county health offices for action. This bottom-up accountability helps counter the exclusion of users from the system design, a problem which otherwise leads to system decline in fragile settings.

Strengthening accountability also means building a culture of ethical leadership in the health sector – training managers in principles of good governance, enforcing regulations against malfeasance, and rewarding transparency. Over time, these steps can build greater trust in health authorities, which in turn enhances the population's cooperation with health initiatives (for example, people are more likely to accept vaccines or treatment if they trust the system's fairness and competence).

Ultimately, a health system is only as strong as the people who run it. Building the capacity of health workers and managers is a long-term investment that is absolutely essential in fragile states. South Sudan's experience highlights the need for two levels of capacity-building: (1) clinical and technical capacity – training more doctors, nurses, midwives, pharmacists, lab technicians, etc., and upgrading the skills of those already in service; and (2) leadership and management capacity – developing the competencies of those who plan, administer, and supervise health services (from the national MoH down to county health officials and hospital directors). On the clinical side, efforts are underway (with donor support) to expand medical and nursing education inside the country, and to create incentives for diaspora health professionals to return. The number of qualified personnel, while still very low, is slowly increasing. International NGOs and UN agencies also regularly conduct in-service trainings – for example, training nurses in neonatal care or logisticians in supply management – to improve service quality. A major gap, however, is retaining talent: better working conditions, adequate salaries, and security are needed to prevent the continuous loss of trained staff. As South Sudan stabilizes, increasing public sector pay for health workers and providing clear career paths will be important to build a stable workforce. On the health leadership side, management training programs are being introduced. The MoH often pairs inexperienced local managers with external technical advisors (through initiatives like the WHO's capacity-building projects or USAID's health system strengthening programs) to mentor them in tasks such as health planning, budgeting, and data use.

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI | Volume XII Issue XV March 2025 | Special Issue on Public Health

Workshops on leadership, governance, and health policy have been organized for state health directors and hospital administrators, aiming to equip them with modern management tools. Another effective approach is south-south mentorship: neighboring countries like Uganda, Kenya, and Ethiopia have more developed health systems, and partnering South Sudan's health leaders with counterparts in these countries for exchange visits or training attachments can transfer practical knowledge on managing services in resource-poor settings. Over time, building a critical mass of competent health professionals and managers will reduce reliance on foreign experts and strengthen the system's self-sufficiency. South Sudan has recognized this need in its strategic plans – one national health policy explicitly stated that the health system "needs a major resuscitation, in addition to supporting and developing health training institutions".

Donors have been aligning with this by funding training colleges and scholarships for South Sudanese in health fields. Additionally, leadership capacity is enhanced when local officials are given real responsibility; thus, gradually increasing local control (as capacity grows) creates a virtuous cycle of more opportunities for leaders to learn and prove themselves.

In summary, strengthening health governance in a fragile context like South Sudan calls for inclusive, accountable, and capacitated leadership. Decentralizing authority to responsive local units and deeply involving communities fosters ownership and trust. Ensuring transparency and accountability helps maximize the impact of limited resources and build legitimacy. Investing in human resources – both the frontline health workers and the managers behind the system – yields long-term dividends in system performance. These governance improvements are incremental and require sustained commitment, but they form the foundation of a resilient health system that can withstand shocks. South Sudan's ongoing reforms and partnerships indicate a path forward that other fragile states can draw lessons from.

Lessons Learned and Recommendations for Public Health Leadership

South Sudan's experience offers several broader lessons for public health leadership in fragile states, as well as specific recommendations to strengthen health governance moving forward. Key takeaways include the importance of legitimacy, adaptability, and inclusive coordination, while recommendations address practical steps for South Sudan and support from the international community.

Key lessons for improving health governance in fragile contexts

- **Building legitimacy through service delivery:** In fragile states, every successful health intervention is not just a health gain but also a governance gain. Effective delivery of basic health services can enhance the credibility of authorities and foster public trust.. For example, when a health department controls a cholera outbreak or runs a reliable clinic, it gains legitimacy in the eyes of the community. This creates a positive feedback loop: improved legitimacy makes communities more likely to cooperate and comply with health measures, which in turn further improves health outcomes. Lesson: Public health leaders should prioritize visible wins (such as vaccination campaigns or disease control efforts) that save lives and demonstrate competence, as these help strengthen the social contract between citizens and the state.
- **Adaptability and resilience are critical leadership traits:** South Sudan shows that health leaders must be prepared to adapt rapidly to changing conditions – whether it's shifting resources during an armed clash or improvising delivery of supplies when roads flood. The capacity to absorb shocks, adapt, and innovate is what defines resilience in a health system. Local health managers found ways to keep services running during conflict by working with community volunteers or leveraging church networks for distribution of medicines. Lesson: In fragile settings, empower front-line decision-makers to be flexible. Rigid plans often fail under pressure, so guidelines should allow local teams to modify strategies based on real-time realities. Training for health leaders in crisis management and problem-solving can pay off when emergencies strike.
- **Community engagement and ownership make interventions more effective:** A consistent theme is that engaging communities as partners improves health outcomes. In South Sudan's Guinea worm and

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI | Volume XII Issue XV March 2025 | Special Issue on Public Health

vaccination efforts, community members weren't just beneficiaries – they were key implementers. Their involvement ensured culturally appropriate approaches and improved acceptance of interventions. Research in fragile settings underscores that excluding user from health system design leads to mistrust and poor results

- **Integrating humanitarian and development efforts:** In protracted crises, the line between emergency humanitarian aid and long-term health development blurs. South Sudan has had parallel "humanitarian" health services and "development" projects operating at the same time. This can lead to siloed efforts and inefficiency. Lesson: It is crucial to bridge the humanitarian-development divide. Health leaders and donors should coordinate to ensure that short-term humanitarian interventions (like emergency clinics or campaigns) are aligned with and gradually transition into the existing health system structures. Recent findings suggest that greater formal integration of humanitarian and development funding streams would use resources more efficiently
- **The value of coordination and partnerships:** No single entity can address all health needs in a fragile state – effective leadership is often about orchestrating the contributions of many actors. South Sudan's health sector taught the importance of having coordination platforms (like the Health Cluster or Health Partners Forum) and clear roles. When coordination was weak, gaps and overlaps in service delivery were common. When it improved, such as better mapping of who supports which county, resources were used more rationally. Lesson: Invest time in governance mechanisms that bring together government, NGOs, UN agencies, and communities. Strong coordination and communication channels build a more cohesive health response. It also helps align external support with national priorities rather than creating parallel systems. In short, collaborative leadership is essential – health leaders must be consensus-builders among stakeholders.

Recommendations for South Sudan's health leadership and governance

Drawing on these lessons, the following recommendations are proposed to strengthen public health leadership and the health system in South Sudan (many are also applicable to other fragile states):

1. **Increase domestic investment in health:** The Government of South Sudan should incrementally raise the share of the national budget allocated to health, moving beyond the current <2%. Even small increases can be directed toward critical needs like health worker salaries, which would help retain staff. A medium-term goal could be to ensure government spending accounts for a larger portion of total health expenditure (e.g. raising it from roughly 11% towards the African Union's recommended 15% of the budget). This will reduce excessive donor dependency over time and give the MoH more ownership of health priorities. In parallel, measures to improve public financial management in health (such as timely disbursement of funds to counties and robust audits) will ensure increased funding translates to better services rather than leakage.
2. **Formalize and strengthen humanitarian-development coordination:** Building on ongoing efforts, South Sudan and its partners should create more formal bridges between emergency response and health system strengthening. For instance, the Health Pooled Fund and World Bank programs could coordinate exit strategies with humanitarian projects so that there is continuity of care when one project ends. Developing a transition plan for health services in former conflict zones – where NGOs provide care now – to progressively integrate into the government system is key. Joint planning cells that include humanitarian and government representatives can help here. As one stakeholder recommended, informal silo-bridging efforts need to be made more systematic and formal. This could also involve pooled funding arrangements that combine humanitarian and development funds to be flexibly used for both immediate services and capacity-building.
3. **Enhance sub-national governance and support local health management:** South Sudan should renew its commitment to decentralization by empowering state and county health offices. This means providing them with adequate operational budgets, management training, and supervisory support. Donors can assist by funding state-level health management training programs and incentivizing skilled managers to work in rural areas. Where local governments are functional, they should

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI | Volume XII Issue XV March 2025 | Special Issue on Public Health

gradually take the lead in coordinating partners in their jurisdiction. Planning and budgeting should be done bottom-up, with counties identifying their needs and the national level aggregating and aligning resources accordingly. The national MoH can focus on setting standards, mobilizing funds, and monitoring, while trusting trained local leaders to implement. Despite the fragility, evidence suggests that coordination and health planning at sub-national levels is feasible and can improve sustainability if given political support. In practical terms, establishing a forum for state health directors to regularly share experiences and advise national policy could also give sub-national leaders a voice and incentivize performance.

4. **Tackle corruption and improve accountability in health service delivery:** A zero-tolerance stance on corruption in the health sector should be enforced. Concrete steps include instituting independent audits of major health programs and publishing the findings, strengthening procurement processes for medicines to prevent diversion, and using technology (like barcode tracking for drug shipments or electronic payrolls to eliminate ghost workers) to increase transparency. Encouraging community oversight is equally important: the MoH should formalize roles for civil society and community representatives in monitoring health projects. For example, revitalizing Health Facility Management Committees and giving them a mandate to report problems upwards can create grassroots accountability. Donors can make funding contingents on anti-corruption benchmarks to spur action. While challenging, improving accountability will free up resources and improve morale as health workers see fairness in the system. This aligns with the wider governance reforms needed in South Sudan and will reinforce efforts in other sectors as well.
5. **Scale up health workforce development and retention schemes:** Addressing the human resource crisis must be a top priority. The government, with donors, should develop a comprehensive health workforce strategy that includes accelerating training (possibly through regional training partnerships if domestic capacity is limited), as well as retention incentives. Such incentives could include hardship allowances for working in rural posts, opportunities for career advancement and further education, and improving working conditions (for instance, ensuring health facilities have staff housing, security, and essential supplies so that postings are not seen as impossible jobs). South Sudan might also explore bonding schemes where graduates who received government scholarships serve in the public sector for a number of years, or programs to bring back skilled diaspora health professionals on short-term assignments to mentor local staff. **Task-sharing** should continue, with community health workers and mid-level providers handling basic services, but they too need regular training and supervision to maintain quality. By building a pipeline of qualified health workers and supporting them, South Sudan will gradually reduce its reliance on foreign medical teams and be better prepared to manage health challenges internally.
6. **Maintain and deepen community engagement mechanisms:** The progress made with initiatives like the Boma Health Initiative should be sustained and expanded. Community health workers should be further integrated into the formal system (receiving standardized training, stipends, and supplies) because they are the bridge to populations in remote areas. Moreover, involving communities in health education and promotion can address cultural barriers and misinformation, which is crucial for things like vaccine campaigns or disease prevention efforts. Programs should support community-led health activities – for example, women's groups promoting maternal health or youth clubs involved in hygiene campaigns – as these local movements often succeed where top-down messaging does not. Grassroots engagement also has a peacebuilding effect, as communities working together on health can build social cohesion. The recommendation is to treat community-based healthcare not as a temporary fix but as an integral part of the health system structure in South Sudan. International partners can help by providing the necessary training and simplified tools (such as pictorial guides for low-literacy volunteers) and by respecting community inputs in program design.
7. **Leverage regional and global support for long-term system strengthening:** South Sudan should continue to actively engage with regional bodies like the East African Community (EAC) and the Africa Centres for Disease Control and Prevention (Africa CDC) to gain technical support and share best practices. For instance, through the EAC, South Sudan can participate in regional initiatives on disease control, benefit from pooled procurement of medicines, or send health workers for specialized

training in neighboring countries. Global partners – the UN agencies, World Bank, bilateral donors – should align their support under government-led plans such as the country's Health Sector Strategic Plan and the internationally backed SDG3 Global Action Plan for health. The SDG3 GAP, which brings together 13 major health and development agencies, is already helping to coordinate assistance toward South Sudan's primary health care goals. This kind of alignment should be reinforced so that every dollar of aid strengthens the core health system, not just temporary services. Additionally, global actors should support South Sudan in developing contingency plans for health shocks (e.g. a fund for epidemics or a reserve of medical supplies), ensuring the country can respond to new crises without derailing ongoing health programs. The international community also has a role in supporting the broader peace and state-building processes, since a stable political environment is the bedrock on which a sustainable health system must be built.

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