Role of Public Servants in Post-Epidemic Policy Implementation- Case Study of Social and Psychosocial Workers Supporting and Monitoring Post-Ebola Policies, in Liberia

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RESEARCH

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ABSTRACT

Street-level bureaucracy theory demonstrates the importance of public service in policy implementation. In emergency recovery settings in low-income countries, national frontline workers remain the key source of support to affected populations as they rebuild their communities, using discretion in service delivery and monitoring policy outcomes. They can efficaciously ensure enforcement of new national policies upholding the rights of affected persons. This paper examines survey-data collected from 160 Liberian social workers working during the 2014/15 Ebola recovery. A statistical analysis reveals key relationships between policy knowledge of these workers, their experience, and policy implementation outcomes supporting Ebola-affected populations.

Key Words: : Public policy; Policy implementation; Street-level bureaucracy; Liberia; Ebola; Quantitative analysis; Social welfare; Emergency response & recovery.

Introduction

This research presents a statistical analysis of survey data exemplifying the premise that social workers and other street-level bureaucrats, or frontline workers, can provide key insight in the implementation and monitoring of policies, particularly in emergency situations in low-income countries. Bottom-up policy implementation theory and international development literature demonstrate the importance that public service holds in supporting policy implementation and dissemination at the localised level, particularly within least developed countries (LDCs). In the phases during and after a crisis, public service agencies are crucial to monitoring and identifying those citizens most directly affected to ensure they receive key support services, using discretion in service delivery, and monitoring policy outcomes.

Often after a crisis when international relief organizations leave, these national and local agencies remain the key source of support to affected populations as they rebuild their communities. They offer one of the best means of ensuring the enforcement of new national policies upholding the rights of affected persons. Yet often, civil systems in LDCs cannot adequately respond due to lack of systematic support, and the increase of needed financial and human resourcing. This paper examines survey data collected from 160 Liberian social welfare professionals working after the 2014/15 Ebola outbreak. The survey was

provided by a non-profit organization, Renewed Energy Serving Humanity (RESH), conducting training for participants who are Liberian social workers or psychosocial (PSS) workers who have formal training or university degrees mainly in social welfare, disaggregated as registered government public servants or private-sector/non-profit workers. This data provides insight into progress made to help those affected by the disease, as well as the remaining inherent challenges two years after the epidemic. A statistical analysis of the data reveals key relationships between policy knowledge of these workers and dissemination and implementation of policies supporting Ebola-affected populations. These results of this quantitative analysis can be used by national and international actors to assess to what extent their policies and programs currently utilize social workers, as well as how they can extend the potential of this often-untapped human resource at local level in combatting future emergencies and ensuring quality care of those affected in post-emergency settings in the region.

This paper first analyses the theoretical literature informing policy and international development research and programming. Firstly, this analysis covers the importance that frontline workers like social workers offer through discretion in their daily jobs interacting with citizens and beneficiaries of public policies. Next, it covers issues of human social capital in emergency response and recovery in developing nations, in which international non-governmental organisations (INGOs) and international donors often interact with host-national actors including national non-profit organisations and public service systems at the national and ground operation levels. Thirdly, it provides a summary of the role that social workers and psychosocial (PSS) workers played in Liberia during the Ebola crisis and recovery, including details of their daily work, constraints, and best practices. The paper additionally provides the research methodology, results from the quantitative analysis of survey data, and conclusions focused on policy-relevant and theoretical implications.

Theoretical Framework- Discretion in Public Services in Emergencies

This research focuses on the theory of discretion within public policy literature focused on policy implementation. This theory arises primarily from Lipsky (1980)'s Street-level Bureaucracy: Dilemmas of the individual in public services, which examines the important roles that 'street-level bureaucrats" or frontline workers have in implementing and providing services stated in policy. These street-level bureaucrats are often public servants or workers whose job it is to interact at the local level (one-on-one) with public citizens. Unlike policy makers who set the policies, these public employees interact on a frequent or daily basis with target policy beneficiaries, and they regularly must handle problem-solving work challenges and needs that likely were unpredicted at the policy planning phase. Lipsky states that it is for this reason that these frontline employees have significant discretion in deciding how best to do their job requirements to serve the public (1).

Street level bureaucrats include police, social workers, nurses, civil servants, and teachers. For instance, if the national government in a developing nation passes a policy mandating compulsory education for all children, including girls, social workers will be the frontline workers who both raise awareness on the policy at the community-level, as well as acting as enforcement agents ensuring that families of children comply with this new law. These street-level bureaucrats are key implementers of established and new public policies, particularly targeting citizens. These frontline workers' roles are often constrained by limited time or information in their decision-making process. They often must require coping mechanisms to address these limitations. For instance, if a social worker finds a family that cannot afford to send all their children to school, while policy regulations may specify that Child Protection Officers be sent to the home, the social worker may instead find another temporary solution like asking the local school to provide a scholarship to the family, before resorting to following protocols set by policy makers. By taking this step, the social worker may slightly bend norms in order to work

with this specific family case. Their position requires that they often communicate with citizens with only a limited amount of information or time to decide. This coping mechanism for the real-world challenges of policy implementation demonstrates that these workers have some level of discretion and autonomy, in their job. They are not simply pencil pushers or robotic workers who do as told by policy makers from the top level downward. Instead, they are central to finding flexible ways to meet daily challenges to policy implementation on the ground and their discretion should be respected by policy makers. This role allows them to also be some of the best stakeholders to know when policies are working well (1).

Top-down policy implementation approach models, such as by (2) Mazmanian and Sabatier (1983), emphasize that decision makers can set explicit policy objects and should act as the controllers of implementation. Comparatively, bottom-up approaches, like those of Lipsky and Hjern and Hull (1982), set local bureaucrats at the centre of policy delivery, while coming at policy implementation as a process of communication and negotiation with other key stakeholders operating at local level. Hybrid theories (third generation approaches such as by Goggin, Elmore (1985), and later work of Wildavsky) approach implementation considering both top-down and bottom-up mechanisms operating at some level both the same timeframe (Pulz & Treib, 2006). Top-down approaches tend to view that discretion may be harmful to policies if frontline employees do not follow specific hierarchical regulations and control mechanisms or procedures as established by policy makers. Yet bottom-up approach theorists urge that discretion is not only inevitable, but decentralised decision making is necessary to ensure better efficacy of service delivery with the citizen approached almost the same as a client (Tummers & Bekkers, 2014).

Moreover, some top-down modelling concerns whether implementation outcomes align with the original planned objects developed in the policy decision and planning phases, including the work by Van Meter & Van Horn (3,4). To assess policy outcomes, decision makers need to evaluate their work. Monitoring and evaluation of policies can happen at multiple phases in the policy cycle (5). Bottom-up research demonstrates the positive role that discretion offers in the success and democratic legitimacy of how policy programs are being received and utilised by citizens. They can assess policy indicators and identifying risks to implementation in a time-efficient manner. Yet frontline employees must be allotted some level of power and stature to be successful at monitoring, enforcing, and providing policy and related services. These benefits relate to another concept that arose later out of Lipsky's theory of client meaningfulness, or the perception of the street level bureaucrat/worker related to whether the effects of policy implementation on their clients (those whom they serve) are positive, useful, and even desired by the beneficiaries. One example is if the frontline workers perceive that their work implementing this policy is truly of support to their clients and their needs (Tummers & Bekkers).

Based on the bottom-up approach views, one may conclude that street level bureaucrats can serve not only as policy delivers with discretion, but through their work and frequent interaction with citizens, can serve as key monitors and even evaluators of the outcomes of a policy. This paper argues that street level bureaucrats should be volitionally included in the monitoring and (at times) evaluation of new policies on the ground, and that their feedback is respected and incorporated by decision makers into policy evaluation, implementation modifications, later drafted procedures and definitions, and solutions to failing policy outcomes. They can also provide relevant information of whether they believe the policies are having the intended outcomes on clients and are 'actually' useful, or a waste of resources not bettering people's lives, through their capacity to employ client meaningfulness. This solution is particularly crucial in emergency situations like disease outbreaks in low-income countries where human resourcing and financial resourcing may be limited.

Human Social Capital in Recovery

In recent decades, there has been growing focus on best practices for recovery after a disaster. Literature varies on the practices. Yet there is a large body of literature that

explores the importance of social capital, including community and professional networks which can be activated in the recovery phase of an emergency. Aldich (6) presents a theoretical framework that demonstrates the links between social networks and connections in building the main impetus during a recovery phase in a variety of disasters. There are six main variables that articulate the effectiveness and efficiency of recovery: quality of governance, external aid, damage level, population density, demographic conditions, and social capital. Aldich shows that literature often examines the first five, particularly aid. Government disaster relief and recovery work often hinge on the availability of aid assistance (6).

In the case of international emergencies, including epidemics, this aid often is foreign assistance tied to international regulations imposed by the international donor body. For instance, the United States government funnelled millions of dollars through U.S. Agency for International Development (USAID)'s Office of Foreign Disaster Assistance (OFDA) grant funding during the Ebola crisis. The US Government offered $2,594,884,810 USD, of which USAID-OFDA received about $804 million and USAID/Liberia received $16 million (USAID, (7). While offering much needed funding for programming and infrastructure during Liberia's 2015 recovery phase in post-Ebola, this funding was more frequently provided to international non-profit organisations (INGOs) (like Plan International, Save the Children, and IRC) instead of national non-profit organisations (NGOs), decentralised government agencies, or community-based organisations (CBOs). This use of INGOs hinders the effectiveness and discretionary power of host-national frontline workers. INGOs tend to also enforce top-down hierarchical approaches when working in developing countries. INGOs often champion principles of letting beneficiaries and national staff participates and be empowered in program management and operations. Yet evidence of INGOs operating in Kenya demonstrates that beneficiaries and staff are limited in their participation, discrediting INGO rhetoric (8). This research exhibits the hierarchical structure that INGOs often enforce, often allowing for a constrained discretionary environment for national-level and area-level staff.

NGOs and CBOs may be contracted by the INGOs as implementation partners. "Contracts with NGOs are seen as an effective way to expand services quickly. This is important to reach many of the poorest people living in these countries and thus to make progress towards the millennium development goals for health, but many questions about contracting remain" (9). Despite the benefits, there are major issues that happen when national or local actors are not given equal voice or power at the project management table as INGO leadership. One key issue is NGOs have less decision-making power or feedback into the grant implementation and reporting processes. During Ebola, this problem led frequently to errors in decision making on project implementation, such as westernised awareness and prevention messaging during the response that proved contextually confusing and at times caused public outrage. INGO project management was often burdened by slow bureaucratic decision-making. This issue repeatedly restrained programming on the ground, limiting its flexibility to adequately respond to the Liberian population's ever-changing needs during the emergency phase and recovery phase. Multiple INGOs that received OFDA grants had little experience on the ground with disaster response, including staff who were mostly used to implementing peace-time, non-emergency programs like education and health projects, and were inadequately trained to respond to the Ebola epidemic programming. Partners additionally noted that OFDA awards were not flexible enough to be modified in a timely manner in order to respond the evolution of the outbreak (9,10).

Many international disaster responders and trained medical staff from CDC/WHO were contracted to support management of the implementation of these projects. However, these foreign experts had limited training or knowledge about Ebola and Liberian culture, history, and society, which caused massive decision-making errors that undermined their credibility, and for a time Liberian government, in the eyes of the Liberian population (Ministry

of Health/Information Management System (11,12). One example includes the push in 2014 by foreign medical advisers and responders to impose body burning of infected corpses. Protests were raised by Liberian experts who insisted such a decision would terrify the population, as cremation is taboo amongst many ethnic tribal groups in the country. The decision to burn bodies is one of the key reasons why in the peak of the 2014 crisis, many sick persons hid in their homes rather than go to an Ebola Treatment Unit (ETU) or a quarantine centre for medical help. Distrust and fear grew among many Liberian communities that ETUs would violate their burial rituals or led to their demise (13). In the wake of the Ebola crisis, many experts learned the importance of including local leadership networks and national professional circles into disaster mitigation and recovery efforts during an epidemic. This instance serves as a critical reminder that national frontline workers including local civil society and tribal leadership are likely more in tune with client meaningfulness (whether implementation of a policy is supported by the people and of actual benefit to their lives) more than top-level decision makers who may be less in touch with conditions on the ground, or foreign decision makers who also lack cultural knowledge and insight that can affect how policies are perceived and thus affecting implementation.

A 2018 audit report by USAID's Office of the Inspector General (OIG) acknowledges many of these aforementioned issues. The report concludes that the international response to Ebola was cumbersome and often ineffective. "Despite some early efforts by USAID operating units, significant international response efforts were late, technical expertise was not leveraged appropriately, and recovery efforts were delayed and not well coordinated with response activities" (14). One of the key activities in the pillars guiding the USAID strategy in the response is social mobilisation and communications to control the outbreak. Yet this strategy is given less importance during the recovery phase, as USAID's strategy plan to combat Ebola during the crisis is to build national systems, with apparently less consideration or reliance on localised systems.

Studies demonstrate that the provision of more aid and government expenditure is associated with little to no evidence of improved recovery in a post-disaster. Its effects at best have a limited immediate effect, such as providing needed food and medicines to affected areas. Further into recovery, aid demonstrates diminishing effects, and diminished long-term recovery. Comparatively, social resourcing, including institutionalised social capital like community leaders or professionals, can offer an informal investment and back-up system that can be activated during post-disaster, helping in knowing how to work within the culture and history, solving issues of collective action at the micro-level, and better channelling local citizen and leadership voice to identifying and targeting more strategically the needs of communities and neighbourhoods. Social capital does not solely work as a public good and at times may fail, but if resourced correctly, it can make a large impact (6).

One of the main recommendations by the USAID audit report includes, "Direct the creation and maintenance of an inventory, by country, of nongovernmental organisations and local actors who are involved in response, development, and other humanitarian activities; and determine which of these could potentially be called upon as implementing partners in an emergency…this process was found insufficient in the Ebola response. USAID needs to describe how it will enhance the capabilities of the Operational Plan process—specifically, how the Agency plans to use the process to determine which of the NGOs and local actors could potentially be called upon as implementation partners in an emergency. This should include documenting and maintaining an up-to-date inventory of organisations and local actors that is readily available to USAID staff and implementers," (14). This recommendation, made several years after the crisis recovery, shows the lack of effort given to understanding the potential use of social capital within country that may be potentially harnessed during and after an emergency response.

Collective narratives shaped by social capital networks in country at the ground-level can help guide recovery strategies that reflect the voices and collective identities at the community level. Community members can incorporate their social capital as a means to help coordinate recovery management efforts and rebuild from an emergency. This social capital is vital for post-disaster community recovery. Social capital can be made up of pre-disaster community leadership networks, survivor networks, and kinship/neighbourhood ties, as well as with local governmental bodies working within or in partnership with those networks. The most important aspect of this social capital is to ensure it is adequately bonded together cohesively (15). Many experts agree that disasters often cripple a state institution's capacity to operate. Research on the 2011 Japanese earthquake and tsunami reflects how disasters may expose a governmental system's vulnerabilities, and thus, immediate steps may offer solutions to socio-political networks, mitigate further decline of affected areas, as well as propagate community recovery. This recovery can utilise community social capital and community networks, in coordination with functional governmental systems, filling in the gaps of non-functional elements (Cho, 2014).

Social Workers in Post-Disaster Settings

It is crucial to note that much literature on social capital and community network potential in post-disaster tends to focus on natural disasters often in developed nations, like Japan and the United States. However, this literature may still provide relevant insight into the social capital potential and challenges that civil servant particularly in social work offer. Research like Pyles (16) that explores both social welfare recovery supports in both developed and developing national contexts further demonstrates similarities and shared lessons learnt in disaster management and recovery. Marginalised and impoverished communities usually suffer greater deterioration and low survival rates after a crisis than areas that are better resourced, both financially and in terms of human capital (16).

Social workers historically have offered psychosocial support during disasters with success, often taping their training. Yet, this profession has given less attention to social development during the recovery and post-recovery period. Research supports the importance of citizen populations to work together with on-the-ground, decentralised government agencies and public servants, like social workers, to more strategically implement long-term sustainable solutions at the local level. Social workers can play a crucial role in community organizing, including with neighbourhood organisation, ensuring social justice, supporting local power structures and policies, and helping neighbourhoods to rebuild and readjust to their setting (17,16). In the field of international development, agencies often reach out to affected populations to assess potential social capital to help during and after an emergency. In refugee and internally displaced peoples (IDP) camps, one practice by INGOs is to offer paid or volunteer positions, educating and monitoring children and adult victims, to any hyphen between interned and persons with formal training or previous experience in social welfare and education. Child-friendly spaces and temporary schools are run by teachers or social workers who are also living in the camp (Inter-Agency Network for Education in Emergencies (INEE), (18). These persons are a good resource as they often are already professionally trained, speak the same language(s), are familiar with the culture, and have shared experiences as those with whom they are helping, thus providing a supportive and professional empathic relationship.

There are critical obstacles to the social capital of public servants. As stated earlier, street level bureaucrats like social workers can assess policy indicators and identify risks to implementation in an efficient and responsive manner. Yet frontline employees must be allotted some level of power and stature to be successful at monitoring, enforcing, and providing policy and related services (Tummers & Bekkers,). This requires proper preparedness and empowerment to operate with discretion.

Social workers or professionals working in social welfare and education are often formally educated in social

welfare, psychology, education, and human rights and protection. Knowledge and experience acquisition typically exclude disaster preparedness and response training. When faced with working in a response phase, there in cumbered training and lack of disaster and recovery experience can diminish their ability and willingness to take on post-disaster work. In a new and unfamiliar post-disaster setting, their knowledge and experience will also likely become out-dated as new policies and regulations are put in place to respond to survivors and their needs. There would likely need to be a large change in social work education to ensure that social workers and other public servants are amply equipped for disaster response and recovery work. This educational need includes improved training post-disaster community organisation and development work. Yet social workers may not be adequately positioned to diagnose and treat post-traumatic stress disorder (PTSD), which are tasks better suited to trained clinicians (16). However, social workers in any disaster will face the need to identify and support psychosocial stress symptoms (PSS). While best diagnosed by a clinician, in regions where there are not enough clinicians, PSS support work can be done through supplemental non-clinical professionals like social workers, especially when trained and supervised clinicians. Such strategies were successfully done in Liberia during the civil war and later during Ebola response and recovery (19).

Liberian Social Welfare System During and After Ebola

Social workers in Liberia and many countries are frontline employees who work not at the national level, but instead at the community level in the decentralised system of governmental agencies in charge of public social welfare and protection. Before the Liberian outbreak, child protection services typically fell under the Liberian Ministry of Gender Development (MoGD), while social work was mostly managed by the Ministry of Health and Social Welfare (MoHSW). As the epidemic grew, the Government of Liberia (GoL) restructured ministries, eventually shifted social welfare and most of its departments under the Ministry of Gender. The ministries were retitled, the Liberian Ministry of Gender, Children and Social Protection (MoGCSP) and Ministry of Health (MoH). During the Liberian Ebola crisis, millions of US dollars in funding, such as provided by UNICEF, were provided for training community responders and medical teams on psychosocial programming. After the 2014 outbreak peak, the MoGCSP and MoH joined efforts to develop a psychosocial pillar team, which further developed a standardised training manual for workers who would engage with affected community and households. The training was carefully explained that while social workers and psychosocial (PSS) workers were able to offer emotional and recreational support and programs, only licensed clinicians could make mental health diagnoses and professional counselling (19).

Yet even before the emergency, there were only a handful of trained clinicians in country and they often held high level government and non-governmental agency positions, such as directing national hospital mental health services. Likewise, there was a low ratio of trained government and non-profit contracted social workers (over 300 total registered nationwide) per number of child Ebola cases. The issue of having enough social workers to track, monitor, and support Ebola affected households was particularly difficult in more rural regions. For instance, in January 2015 in Lofa County, there were only a reported 6 government social workers and 8 NGO social workers available to handle a caseload of hundreds of cases of affected children (UN Children's Fund & Government of Liberia's Protection Cluster, (20).

Social workers often worked overtime and in dangerous conditions (including hot zone communities) to support Ebola patients, survivors, and disease-affected households. Yet the human resourcing was not enough to meet the huge challenges. Additionally, most social workers were not adequately trained in safety procedures or what unique socio-economic and psychosocial challenges arose as a result of the crisis. One challenge included significantly lower standards of wellbeing and increased discipline/violence among Ebola-affected households (21). Funding during the recovery phase that lasted approximately six months after the country was declared

Ebola free increased. The national and non-profit sectors invested in PSS training to supplement the need for psychosocial support services as well as monitoring and tracking of affected persons, particularly Ebola survivors and their families who suffered health issues, stigmatisation and discrimination after returning to their communities. These programs were mostly temporary, ranging from six months to a year, and often limited to directly affected persons. Additionally, many trained social workers and PSS workers had limited university education (1-2 years on average) and restricted professional development training opportunities.

GoL partnered closely with international non-profit organisations (INGOs) and national non-profits (NGOs) in decision-making on policies and programs to address the challenges facing Ebola-affected populations, represented by the GoL's EVD Survivors Care and Support Strategic Plan: 2016-2020. The international development sector provided supplemental training and program management related to social welfare and human rights policies, psychosocial training, and victim and survivor tracking and monitoring. Furthermore, the GoL formally created a MoH division specifically managing support and advocacy for Ebola survivors and their families, the Ebola Survivors' Network-Liberia, with decentralised division branches throughout the country. In early 2016, the GoL additionally passed a series of new policies to support Ebola survivors, their families, and communities. Targeting care and support, the MoH policy adoption focused on key areas of action: clinical care, stigma reduction, education, legal support, protection, and psychosocial support (22). These policies included protecting affected persons from illegal housing eviction by landlords, unlawful employment termination, and unlawful physical and emotional abuse and discrimination. These policies also promoted improved access to medical and mental health service, positive reintegration into their communities through awareness and advocacy programs, as well as specialised education amenities for child survivors (10).

However, as the literature demonstrates, often social workers and public servants tapped for emergency and post-emergency work have little to no previous formal training suitable for disaster settings. This issue repeats back to the emphasis by bottom-up policy implementation approaches that frontline workers often operate with limited information and/or time. Many social workers and PSS workers who volunteered or worked on psychosocial, Ebola survivor support & advocacy, and child protection in year during and after Ebola faced notable challenges as a result. Many were not sufficiently trained and familiar with the new policies and programs for citizens affected by the disease. Their training and experience, which prepared them for working in pre-disaster contexts, was of less use in this new chaotic environment. They often worked off information from old training that was outdated and sometimes irrelevant to the post-disaster setting.

This paper will explore a survey completed by 160 number of government and non-profit social workers providing self-reported information on their knowledge and work experience in field, nearly two years after Liberia was impacted by Ebola. The information provided reveals the progress and challenges that these workers face on the ground. Their information also provides a picture of conditions for Ebola-affected households. The social workers' survey data demonstrates that even though the emergency recovery phase ended and while the survivors are rebuilding their lives, some negative effects from this traumatic event hauntingly continue. This paper will identify policy dissemination and implementation issues and try to provide a better understand post-disaster conditions through the lens of Liberian social welfare professionals. This analysis may offer a clearer perspective into the longer-term policy and programming needs to support community networks' resiliency and collaborative efforts with social welfare systems at the local level.

Methodology

This is a quantitative statistical analysis of a paper-based survey conducted by a third entity on the awareness and implementation outcomes of policies set by the Government of Liberia (GoL) in response to the 2014-15 Ebola outbreak and recovery based on feedback from social workers. In 2016, a national Liberian social welfare NGO,

Renewed Energy Serving Humanity (RESH), conducted a paper-based survey with 160 participants of training on psychosocial support. Participants included 34 government social workers and 136 non-profit social/PSS workers, working in six Liberian counties: Montserrado, Margibi, Bong, Nimba, Bomi, and Grand Bassa. Some of these frontline workers were also directly affected by Ebola. The paper-based survey included questions related to the participants' policy knowledge and recent work/volunteer experience of interacting, monitoring, and supporting persons affected by Ebola within their assigned sites. The survey results were later provided by the non-profit organisation to this paper's author for further research and robust data analysis.

The author has over 5 years of experience in Liberia, mostly working as a technical consultant and project manager on education, child protection, and Ebola-response programming. She also consulted for the several Liberian governmental agencies and lectured on research design at a national university. She partnered with the non-profit to complete dissertation research in country and has voluntarily consulted for the organisation since the Ebola outbreak. A statistical analysis using Stata is conducted of the provided survey results, including developing correlation matrixes, t-tests tables, multi-variate regression, and logit regression models. This analysis presents results of the frontline workers' knowledge and experiences of Ebola-based policies established by the Liberian Governmental Ministries during the outbreak response and recovery phases. Their feedback is of nearly 30 statements (with agreement/ disagreement scaling) that test their personal knowledge of these key policies, their feedback of monitoring policy implementation outcomes in their daily work interacting with local communities affected by the disease, and their opinions on policy implementation issues such as public awareness and support for policies. This analysis presents the average results and disaggregated by social worker/PSS backgrounds including government position, Ebola-status, and years of experience.

The non-profit, RESH, states that this study was conducted after pilot testing the survey. This survey was contextualised including use of colloquial Liberian English, which made the tool more relevant for participants' understanding. Furthermore, it was developed and implemented by Liberian mental health professionals. A statistical analysis of the inter-rater reliability for the policy knowledge scale was performed (Cronbach's alpha=0.78), indicating satisfactory internal consistency among the number of items used in calculating total perceived policy knowledge.

Results

Survey participants completed agreement scales (fully agree, agree somewhat, do not agree, and do not know) on nearly 30 questions pertaining to their professional opinion, knowledge, and experience in their recent work in site. All social/PSS worker participants were actively working in assigned sites, often in and around their home residence, in areas still trying to recover from Ebola at the time of the 2016 survey by RESH. This survey was anonymous, and no personal identifying data was collected such as name, identification card information, phone numbers, or addresses.

The participants' training, work experience, and backgrounds may influence their policy knowledge and experience insight to Ebola-response and recovery policy implementation. At the time of the survey, the 160 participants were nearly all social workers with formal accreditation or in certified university programs, yet only about 1 in 5 were government workers at the time likely due to the lack of funded positions in 2016. Two-thirds were female. 64 percent were social workers, 20 percent were PSS-trained workers (without social worker licenses), and 15 were other care professional like nurses who were training in social welfare or child protection. They ranged in age from 19 to 55 years old, with most middle career professional in their late 20s to early 40s. 83 percent of the participants either had family or personally tested positive for Ebola during the outbreak, indicating that they were directly affected by the disease. The average worker had about 3 years of experience, yet there were those who had worked in social work and public service for nearly 2

decades. For the purpose of this analysis, all participants will be referred to generally as social/PSS workers.

Public Servants' Policy Knowledge & Implementation on Ebola

For policies to be adequately transmitted to the public and implemented, street level bureaucrats must first be well-versed in their details and purpose. Without proper knowledge of the policies that they are responsible for helping work, frontline employees may feel less empowered, more confused, or simply remain unaware about their roles and responsibilities related to policies. This lack of knowledge can also affect discretion, or how these workers approach problem solving around daily policy needs. The survey inquired into how well the participants felt they were informed and knew well key government policies related to ensuring the protection, rights, and services specified for Ebola-affected populations. Participants were scored (3-fully agree, 2-agree somewhat, 1-do not agree, 0-don't know) on how much they felt that they were aware of 6 key policies. These policies included governmental policies: support children affected by EVD to attend school and receive education support services; forbidding home or residential evictions of families or persons who had Ebola by landlords or property owners; mandate and procedure to identify and place in secure housing all children who are abandoned or orphaned by Ebola; mandating the informing of Child Protection or County Health Team officers of vulnerable children affected by EVD; provision of free medical benefits that Ebola survivors and their families should receive as insured by the government and National Institute of Health (NIH) programming and research; encouraging all survivors to actively register with the Liberian Ebola Survivors' Network as members to ensure they are documented and receive support services.

A contingency analysis shows that social/PSS workers in more urbanised locations like the Liberian capital county of Montserrado demonstrated more perceived knowledge and familiarity with Ebola-response and recovery policies than their professional peers in semi-urban and rural counties like Nimba, located farther in the interior. All these counties were highly affected by the outbreak. This analysis disaggregates policy knowledge total score as low (0-6 pts.), medium (6-12 pts.), and high (12-18 pts.). It further disaggregates the counties that the workers operate in by urban (Montserrado), semi-urban (Margibi, Gbanga) or rural (Grand Bassa, Bomi, Nimba), based on typical categorisation of these counties by GoL.

Table 1. Social/PSS Workers' Ebola Policy Knowledge Score Levels by District Type.

	County Type		
	Urban	**Semi-urban**	**Rural**
Policy Knowledge	(N=97)	(N=35)	(N=19)
Level	**Frequency (Expected)**	**Frequency (Expected)**	**Frequency (Expected)**
Low	32 (39)	18 (14)	10 (8)
Medium	39 (35)	10 (13)	6 (7)
High	26 (23)	7 (8)	3 (5)

When examining the percentage between policy knowledge levels specifically among urban and rural social/PSS worker participants, there is a significant difference ($\chi 2=9.60$, $p=0.008$). This finding demonstrates that whether a frontline worker in social welfare's knowledge and awareness of new governmental policies may be affected by whether they work in a rural or urban setting.

Surprisingly, the factor of a worker having a history of being directly affected by Ebola does not result in more awareness or perceived knowledge of Ebola-focused policies. It would be natural to assume a person who was directly affected by the disease would know more about disease-related policies benefiting them and others who are survivors or disease-affected. However, compared to their non-affected worker peers, those social/PSS workers who were directly affected demonstrated a slightly lower average total score of about 2 points less of out the highest score of 18 ($t=2.66$, $p<0.00$). Yet for the two groups, there is only a slight difference between average years of working in social welfare and health ($t=1.49$, $p=0.07$), with Ebola-

affected workers having just under one year less experience.

Additionally, being a government worker with full employment and benefits does not ensure better policy knowledge. On average, government workers felt significantly less confident about their knowledge and awareness about these Ebola-focused policies than their peers (t=3.00, p<0.00). Assumedly a government licensed worker should be more aware of policies than social/PSS workers who likely are working on a voluntary basis or working in the private sector such as contracted with non-profit organizations.

Table 2. OLS Regression Analysis of Total Perceived Knowledge on Ebola-focused Policies by Social/PSS Workers.

	(1)	(2)	(3)	(4)
VARIABLES	Total Pts. of 18 possible			
Professional level	0.59	0.58	1.15**	1.55**
(3 SW, 2 PSS, 1 other care provider)	(0.61)	(0.61)	(0.58)	(0.65)
County Type			-1.62**	-0.16
(3 urban, 2 semi, 1 rural)			(0.62)	(0.61)
EVD-affected		-1.97**	-1.85**	-1.25
(1 yes, 0 no)		(0.86)	(0.92)	(0.94)
Govt. Worker		-2.79**	-2.85**	-3.94***
(1 yes, 0 no)		(1.14)	(1.15)	(1.18)
Total Yrs. Worked			0.34	0.31*
in Profession			(0.26)	(0.17)
Fixed Effects				2.16
(age)				(3.23)
Constant	5.69***	7.00***	6.95***	6.72***
	(1.64)	(1.71)	(2.15)	(2.45)
Observations	144	130	123	123
R-squared	0.01	0.12	0.20	0.56
r2_a	0.000340	0.0942	0.167	0.387

However, during Ebola, many government positions were temporarily-suspended, work was infrequent as was pay, and these conditions may have affected how much government workers were able to learn about new policies. Comparatively, private sector workers were receiving more regular work as international donors contracted large INGOs to hire free-lance agents for community awareness, psychosocial support, disease case tracking, and quarantine/health centre staffing. Often these workers received rapid training on updated policies transmitted to INGO partners through emergency partnership meetings and the Information Management System (IMS) pillars, with messaging passed top-down to field staff with little input back up the communication or program management chain (10-12).

However, the regression table above demonstrates two consistent factors on how workers feel about their knowledge of policies: their professional level and if they are a government worker (see Models 3 and 4). A worker self-reported if they qualified as a licensed social worker (ranked as the highest level of this profession), a PSS worker (who has not officially completed a social welfare degree or licensure, but has some professional training by government sanctioned entities like non-profits), and other care providers (who work in health care such as nurses, have some PSS training, but only work in social work on a temporary basis, thus qualifying as the lowest level in this profession). The higher their professional training level equals higher average professional knowledge on Ebola-based policies. However, as discussed earlier, being a government worker equivocates in less policy familiarity. These OLS regressions provide some insight into a frontline workers' comfort or perception of their own policy knowledge.

Policy Outcomes

Of the assessed Ebola-focused policies, social/PSS workers felt the most knowledgeable and familiar with the policy on supporting EVD-affected children with education, as well as the policy encouraging EVD survivors and their families to register with the Ebola Survivors Network. The policy that was least familiar on average was the policy and procedures of identifying and placing in housing all children who are abandoned or orphaned due to Ebola. This latter policy was continually changing throughout the response phase. Average statements by frontline workers in social welfare on different policies and their outcomes provide insight into policies that are working more successfully than others, one year after the Ebola response ended and recovery began (see Table- Policy Outcomes Measured by Experience of Social/PSS Workers 1 Year after Ebola Response in Liberia).

The policy outcome table shows that social/PSS workers mostly agree that they witness in their work that many of policy outcomes supporting EVD-affected citizens are positively working at some level. Yet their perspective also serves as an indicator for policies and programming initiatives that are failing. For instance, there are child protection issues that arise from Policies of External Agency Adherence to Government Mandates. As shown earlier, workers were less familiar with the policy and protocol for reporting orphaned and abandoned children, and most workers somewhat agreed that there were non-profit agencies operating without proper reporting or permissions from the Government. These policy implementation and policy knowledge issues demonstrate how important frontline workers are to both ensuring policies are implemented properly and monitoring how well they are doing. An important example is in the case of reporting orphaned children, there were issues of children going missing out of facilities, left by communities to homeless due to fear and stigma that they may be disease-carriers, and inaccurate record keeping of children admitted to Ebola Treatment Units (ETUs). The government ministries worked hard with limited human resourcing to establish identification and reporting protocols, yet it was here that compliance by non-profit organisations and civil society groups like churches was a large issue. Some groups took in children without properly reporting to the Child Protection Division, which while likely was done with good intentions, was against the law, allowing for concerns of human trafficking (23; MOH/IMS; Wells). Social workers are an effective and efficient way to spread policy awareness to issues like registering abandoned and orphaned children, and if properly supported by decision makers, they can better serve as catch-nets for identifying vulnerable citizens failing through policy implementation cracks.

The above example exhibits one type of policy problem indicating a need for the government to be able to manage key protocols related to policies involving children and other vulnerable citizens. By encouraging frontline workers with some level of discretion/autonomy that empowers them to act not only as policy implementers but agents who can assess policy outcomes based on their interaction with citizens, and provide timely feedback and suggestions bottom-up, top level officials may be better equipped to know the magnitude of policy best practices and areas of concern, and provide solutions contextualised at the decentralised level. Social workers could have played a key role in improving awareness raising and tracking of orphaned and vulnerable children at the beginning of the outbreak and during its peak, if government systems had been better prepared and resourced to activate and enforce compliance. During the response phase of the outbreak, the Liberian Ministries were highly understaffed and limited in budgets as most international funding sources were still in negotiation. Many Child Protection Division staff were working overtime without consistent pay into 2015, while many frontline social workers stopped working due to the danger of infection and lack of coordination/pay (9). Yet, social/PSS workers' importance in supporting implementation and monitoring of policy outcomes increased into the later recovery phases after Ebola was eliminated from the country.

Table 3. Policy Outcomes Measured by Experience of Social/PSS Workers 1 Year after Ebola Response in Liberia.

Actor of Interest Policy Outcome	N	Mean, (SD)	Monitoring statement (don't, somewhat, fully agree)
Education Policy for EVD-affected Children Affected children enrolled & attending school frequently	159	1.75 (0.92)	Somewhat agree
EVD children welcomed, not stigmatized	160	1.74 (0.91)	Somewhat agree
EVD HHs can afford school fees	159	1.14 (0.65)	Don't agree
EVD survivors received scholarship or not charged for entry	160	1.17 (0.82)	Don't agree
EVD Survivor & Affected HH Rights Policy County Health Team & Ministry reps still promote survivors' reintegration	159	2.17 (1.01)	Somewhat agree
EVD-affected persons being illegally evicted from home due to status	160	2.12 (1.19)	Somewhat agree
EVD survivors received basic support like food or supplies after ETU discharge	159	1.32 (1.20)	Don't agree
Most survivors in area getting free mental health support	158	1.51 (1.21)	Somewhat agree/Don't agree
Community treats survivors kindly Policy for External Agencies to Adhere to Government Mandates	159	1.99 (0.72)	Somewhat agree
All survivors in area are registered w/ESN	157	1.29 (1.01)	Don't agree
NGOs working with EVD-affected HHs compliant with regulations	159	1.51 (1.22)	Somewhat/ Don't agree
Are NGOs working w/o proper permission	159	1.99 (0.72)	Somewhat Agree

3 in 5 social/PSS worker participant on average strongly agreed that they knew of children affected by Ebola who were living in dangerous or harmful situations, needing help. Still their lack of knowledge about policy procedures for orphaned and homeless children likely impeded their ability to act. Surveys like this can identify crucial policy implementation gaps not highlighted through an insular evaluation by policy makers, but instead by frontline policy implementers who know the issues in their communities and can offer important contextual perceptive and solution options (24).

Using Social/PSS Workers' Policy Implementation Monitoring in Modelling

Furthermore, we can use the data that social/PSS workers provide perception statements measuring policy implementation indicators based on what observe through their daily work in creating statistical modelling. This research runs logistical regression models based on data that the 160 participants provided to assess standards of living and wellbeing for children who were directly affected by EVD. The multivariate regression analysis below provides different models of two separate child wellbeing outcomes observed by social/PSS workers in their community of work about a year after the outbreak: all EVD children being in school in a community and if there are children in an area living in harmful or dangerous conditions.

This analysis demonstrates how social/PSS workers' ratings on how well specific factors related to policy outcomes can be useful in assessing how well specific Ebola-focused policies are working. For example, Models 1-3 demonstrate factors that affect if a social worker agree that the policy that all EVD-affected children (either survivors of the disease or children from HHs with EVD cases) in their community area of work are guaranteed schooling during the recovery phase. Key significant variables include 1) how well these workers note that these families can afford schooling for all their children, and 2) if they are successfully rebuilding their lives. Another influencing factor is if the students affected by EVD received a scholarship by the school (some schools charged no school fees to HHs that had EVD cases) or stipend from a development entity like UNICEF. Likewise, Models 4-5 show how social/PSS workers' statements relate to assessing if there are children affected by EVD in the area living in dangerous or harmful situations.

Table 4. Regression Analysis of EVD-Affected Children's Wellbeing on EVD Policy Outcome Monitoring by Social/ PSS Workers.

	(1)	(2)	(3)	(4)	(5)
VARIABLES	Child in School	Child Living in Harm			
HH afford school	0.45***	0.35***	0.41***		
for all children	-0.09	-0.11	-0.11		
HH rebuilding	0.28***		0.33***		-0.28**
life what lost	-0.09		-0.09		-0.14
EVD child welcomed		0.13			
in school		-0.09			
EVD child received		0.20*			
scholarship after outbreak		-0.1			
Orphaned/homeless child				0.56***	0.57***
waiting for HH placement				-0.08	-0.08
CHT still awareness raising					0.21**
EVD acceptance in comm.					-0.09
Fixed effects			-0.08	-0.25	-0.21
(county)			-0.2	-0.21	-0.21
Constant	0.60**	0.89***	0.56**	1.06***	1.25***
	-0.23	-0.2	-0.27	-0.2	-0.42
Observations	157	158	148	148	146
R-squared	0.16	0.14	0.21	0.33	0.37
r2_a	0.147	0.12	0.18	0.316	0.341

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.

If most EVD-affected HHs are rebuilding their lives, this lowers the chances that there are affected children in vulnerable situations. Yet the more strongly a worker agrees that there are children in the community who are homeless or orphaned still awaiting to be placed by a family is related to worker concerns that there are children living in unsafe conditions. Naturally a more thorough statistical analysis including logistical analysis or models including interaction variables can offer more precise modelling. However, the table above is provided for the purpose of showing how scaled agreement statements can be one form of data that is useful for statistical analysis on assessing key factors that frontline workers can monitor in their work on policy outcomes.

Client Meaningfulness & Monitoring Policy Outcomes

Again, this paper asserts that frontline workers like social workers may play a more useful role in monitoring policy implementation than in the evaluation process. They can provide timely feedback upward so that policy decisions can be more informed, policy utilisation can improve with more robust data gathered in the implementation process and when evaluating the overall policy outcomes, and all the while having decision makers respecting the need for these frontline workers in their discretion as they interact with the citizen clients who they serve. As presented earlier, according to bottom-up approaches and even third-generation hybrid models, client meaningfulness can be a means of motivating frontline workers in their job performance. Research by Tummers & Bekkers (2014) examines "[w]hen street-level bureaucrats experience more discretion, this positively influences their experienced client meaningfulness of the policy" (8). This research provides a good clarification of client meaningfulness that this analysis will next explore:

"Client meaningfulness can be defined as the perception of street-level bureaucrats that their implementing a policy has value for their own clients. Client meaningfulness is therefore about the perception of the street-level bureaucrat that a policy is valuable for client (a client may not feel the same way). For instance, a social worker might

feel that when he/she implements a policy focused on getting clients back to work, this indeed helps the client to get employed and improves the quality of life for this client" (5).

In the survey, social/PSS workers are asked to state how much they agree (fully, a little, or no agreement) on several statements related to client meaningfulness related to working with Ebola-focused policies, one year after the end of the outbreak.

Table 5. Statements on Client Meaningfulness on Ebola-based Policies Implemented by Social/PSS Workers 1 Year after Ebola Response in Liberia

Actor of Interest **Statement**	**N**	**Mean, (SD)**	**Monitoring statement (don't, somewhat, fully agree)**
Self-Focused Perception on Position			
Enough social workers & gov't employees to visit/support EVD-affected HHs	159	1.53 (0.99)	Somewhat/ don't
As professional helping EVD-affected persons, I feel happy w/ work & make difference	159	2.57 (0.71)	Fully agree
Perception of Policy Outcomes on Clients			
Survivors & HHs are getting on w/lives, slowly rebuilding what was lost	159	2.34 (0.76)	Somewhat agree
Survivors are happy with support received from gov't & non-profits	159	1.54 (0.94)	Somewhat/ don't

This feedback by social/PSS workers interacting with Ebola-affected populations, including survivors and their families, shows their opinion of the usefulness and truth in the benefits of the policy implementation process. The first two statements reflect client meaningfulness of the social workers. While they perceive insufficient human resourcing support in their field to help all those clients who are affected by EVD, the social/PSS workers on average view their work with the clients as beneficial to the client. Further, it makes them feel happy to be doing this work supporting persons affected by the disease as they rebuild their lives. For the most part, the frontline workers mostly agree that survivors of Ebola and their families are getting on with their lives and slowly rebuilding what was lost. Many survivors lost family, friends, jobs, and even personal possessions and homes (25,26,10).

Indicators of cliental meaningfulness are related to policy knowledge and monitoring of policy outcomes. One example is social/PSS workers' satisfaction in their job and experiencing the feeling that their job implementing these policies is useful to their clients being strongly correlated to their perceived knowledge of these policies (r=0.37). This association indicates that when a frontline worker feels more informed about the policies, this knowledge is closely linked to job motivation and feels of making a difference. There is also a correlation between social/PSS worker's job satisfaction and perceiving Ebola survivors and their families are getting on with their lives and rebuilding (r=0.29). Yet the factor of directly affected by Ebola (either survivors or had infected family) is negatively associated statement on client meaningfulness. This relationship shows that social/PSS workers who were directly affected by the disease may feel warier, more dissatisfied, or even jaded in their work implementing Ebola-focused policies. It is important to note that these workers may need extra mental health support in working with policies supporting affected populations of which they also belong due to their personal disease status and history. For some workers, this work may simply be too traumatic and could cause more psychological stress than peers who were not directly affected by the outbreak. Yet for some affected workers, there may be a sense of relief and meaning in helping the recovery process in their communities, so this may require superiors to consider each case individually.

Conclusion

This research explores the imperative role that street-level bureaucrats can play in policy implementation

through their discretion and perceptions related to client meaningfulness. Bottom-up policy approaches demonstrate how often policies are implemented at the localised or decentralised level through the interaction of the frontline worker and their clients. International development support for emergency response and recovery do have incredible benefits to low-income nations, including increased human and financial resourcing. Yet too often in development, particularly in emergency response, policy and programming is driven in the early phases of agenda setting and policy planning by decision makers who have less understanding of the context and ever-changing needs of the situation on the ground.

When driven by hierarchical organisations structures/standards, insular top-down decision-making processes, and overtly-westernised work culture approaches, international donor agencies and INGOs too frequently take the reins of response efforts in countries like Liberia, with less consideration for national stakeholders' voices. Response funding and program management are often heavily controlled by these international actors that frequently say they are partnering with and providing active engagement of national staff and organisations, like decentralised government agencies and national NGOs. However, the Ebola response demonstrates that often this is rhetoric by international partners that is sung but not done. In fact, during the Ebola response and recovery, nearly all programming funded by external donors like USAID and CDC had management teams that were foreign hires with little to no national staff holding executive positions. National staff working in INGOs were frequently made to change job positions at threat of losing their job, made to work overtime without compensation, and given contracts that provided little job security or benefits compared to management, logistic, and consultant team members flown in from oversees and paid up to ten-times more in salary and benefits. In a systems environment like this where national entities and workers are treated with less consideration and hold less decision-making power and access to negotiation, policy implementation to help citizens most affected by the emergency will be more likely to fail. The consequences often include weakened policy setting and implementation, resourcing waste, and unintended consequences that have to be solved up by host-national frontline workers.

Many INGOs funded by international donors like USAID provided sub-contracts to national entities like CSOs and NGOs, often to perform some of the most dangerous work such as disease case tracking, policy awareness raising in former hot-zone communities, and providing physical and psychological support to citizens directly affected by the disease. Yet these sub-contracted entities were repeatedly required to agree to Memorandum of Understandings (MOU) constraints that allowed for little negotiation or decision making sharing up the chain of command. Bottom-up policy theory demonstrates that despite top-down hierarchical policy and procedures, frontline workers will inevitably have discretion in their work, even in development response settings. The frontline workers during the Ebola response and recovery were most at risk than decision makers and program leadership, yet their familiarity of the cultural context and changing events on the ground provided key insight into how to do their jobs day to day to maximise the best outcomes for their beneficiaries.

As the outbreak response came to a close in 2015 and funding dried up, roles and responsibilities of the longer-term recovery phase fell more and more on Liberian actors' shoulders. By 2016, public and private social/PSS workers became a staple in recovery efforts, working to spread awareness about new policies supporting EVD-affected citizens' rights, as well as incorporate new work tasks related to these new policies into their daily routines. These new tasks included adding supporting people affected by EVD to the list of vulnerable citizens who they served: monitoring, coordinating, and responding to issues of ensuring this new EVD-affected population received adequate support services (food, mental and physical health services, registered benefits), children of EVD-affected homes were in school; orphans and abandoned children were identified and cared for; and that EVD survivors and their families were not being harmed or discriminated

against by landlords, employers, or community members. All this on top of the daily work that they performed before the disease struck the region.

Yet policy knowledge is vital for frontline public servants, like the social/PSS workers who served EVD-affected citizens. Most of the surveyed workers felt they had adequate policy knowledge but felt more familiar with some Ebola-focused policies than others. A contingency analysis shows that social/PSS workers in more urbanised locations like the Liberian capital county of Montserrado demonstrated more perceived knowledge and familiarity with Ebola-response and recovery policies than worker peers in semi-urban and rural counties. The data analysis shows that the frontline worker in an urban setting may have significantly more policy knowledge than a worker in a rural area. Furthermore, being directly affected by EVD does not appear to have policy knowledge gains but instead is associated with lower knowledge scores. Additionally, government contracted workers were less familiar with these new policies than their worker peers. However, the higher the worker's professional grade level (the highest being a licensed social worker, being a PSS worker with some social welfare education, or lowest being only a care worker with some PSS training and responsibilities) has a significant impact in perceived policy knowledge. Thus, in cases when programming and policy implementation resourcing allows, priority should be given to utilizing social workers over other workers like those who are PSS workers or other types of care workers like nurses.

Based on the bottom-up approach views, one may conclude that street level bureaucrats can serve not only as policy delivers with discretion, but through their work and frequent interaction with citizens, can serve as key monitors of the outcomes of a policy. This paper concludes that the data analysis proves that street level bureaucrats can offer key information that helps in frequent monitoring and (at times) evaluation of new policies on the ground. Their feedback can help policy makers know which outcomes are successful and to what magnitude. Due to frontline workers' frequent interaction with clients, they also may know policies that are failing which policy makers at the top may mistakenly perceive as being successful. For instance, the feedback provided on policy outcomes shows that in 2016 not all survivors were registered with ENS, despite the government's issuance that they should. Likewise, most survivors in area were not getting free medical care in the 5 hospitals identified by the Government and NIH for a large-scale research program. Around this time, most government officials and NIH leadership believed most survivors were aware of the free medical treatment and found it useful. However, many survivors were not aware of this benefit, suffering long-term physical ailments as a result of the disease, and a number of those survivors who did seek treatment faced unforeseen consequences, such as heavy travel costs to get to the hospitals, lack of medical supplies within the facilities at times, and discriminatory treatment by medical staff. This mistreatment included one EVD survivor who died on the hospital bed while giving birth because hospital staff refused to treat her due to her disease status. These issues likely led to lower willingness of EVD survivors attending these hospitals (27,28,10)

Client meaningfulness is also an important mechanism to the theory of street-level bureaucrats and their work in emergency recovery efforts in low-income countries. This research demonstrates that social/PSS workers believed there was not enough human resourcing in social work to cover EVD-recovery needs. However, they wholeheartedly believed that their work was important which made them happy. They also provided perspective on the EVD-affected beneficiaries' satisfaction with policy programming and how they were coming along a year after the outbreak.

This statistical analysis further contributes to literature advocating that frontline workers can be highly useful in providing more robust data on policy outcomes. There are key lessons learnt for health systems like hospitals and health organizations to reach to these frontline workers in social welfare to help with tracing discharged Ebola survivors and quarantined patients on follow-up health needs like mental health support or medical care. Likewise, they can be trained to identify citizens who may need to be referred to medical professionals for proper care or mental

health services if experiencing potential trauma that needs to be properly diagnosed. Likewise, these results can be used by governmental and private sector management teams to assess the potential use of social workers more frequently in standard programming.

The discretion and feedback of frontline employees like social workers should be respected and incorporated by decision makers into policy evaluation, implementation modifications, later drafted procedures and definitions, and identifying solutions. These workers provide relevant information of whether they believe the policies are having the intended outcomes on clients and are 'actually' useful, or a waste of resources not bettering people's lives, through their capacity to employ client meaningfulness. This solution is particularly crucial in emergency situations like disease outbreaks in low-income countries where human resourcing and financial resourcing may be limited. Research on policy implementation focused on assessing client meaningfulness of frontline workers can inform and improve policy utilization, as it uncovers how to inspire meaning into frontline positions that often can be taxing due to daily bureaucratic challenges at the decentralized level. These results can be used by Liberian and international actors to assess to what extent they utilize social workers and how they can extend the potential of this often-untapped human resource in future emergencies like another epidemic in the region.

Limitations

This study was conducted at a workshop with voluntary participants of three tiers of the social welfare and psychosocial care sectors. The survey was done as part of the training. Participants were told that the findings would be used later for data analysis and possible publication and sharing with stakeholders with GoL permission. There are limitations to the statistical findings as the sampling was not randomised among the full Liberian social/PSS worker populations. While there is a good distribution of workers from different demographic and professional backgrounds (such as gender, age, training, years working experience, and disease-status), these findings' generalizability are limited due to the lack of randomisation. This survey analysis can provide some useful insight into patterns among measured variables of policy knowledge, perception of policy outcomes, and client meaningfulness. Likewise, the smaller N of 160 surveys may have lowered the statistical power of the quantitative analysis. All participants were sampled at the training, yet the total number of people to be sampled was not previously calculated based on the population of workers at the time. A lower N can also lead to inflated effect size estimates as well as lower reproducibility. It would be beneficial to replicate this study using a modified research design that includes a higher number of participants as well as randomisation.

This study was conducted after pilot testing the survey. However, it may have been beneficial to more thoroughly design and test the survey to higher academic standards. This survey was contextualised including use of colloquial Liberian English, which made the tool more relevant for participants' understanding. Furthermore, it was developed and implemented by Liberian mental health professionals. The high Cronbach's alpha of the policy knowledge scale indicates that there was internal consistency among itemised statements. There are no conflicts of interest on this research. The author completed this analysis and research voluntarily to help promote key strategies to help those affected by disease outbreaks in developing countries based on the expertise and resourcing management of national professionals who are public servants.

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