From the Field to Headquarters: What is Learned from Nursing Insight on Quality of Care in Humanitarian Settings?

by

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Abstract

Quality of care in humanitarian healthcare is a challenge requiring a partnership between the project and the operational center, necessitating a way to bridge the divide between “on the ground” knowledge and the understandings in headquarters (HQ). Médecins Sans Frontières’ (MSF) data collection from internationally recruited nurses (IRN) leaving humanitarian healthcare projects is meant to addresses this challenge. The objectives of this study are to appraise if MSF’s “End of Mission” (EoM) survey is an effective means of harvesting knowledge about the quality of care in projects and analyze the disjuncture or congruence between MSF field and HQ perceptions. This study uses a mixed methods approach combining survey analysis and interviews with key informants, including nurses and MSF HQ coordinators. Findings indicate that the EoM survey data is effective at transferring some knowledge but lacks the breadth of nurses’ experience-based knowledge that can be found in stories which create context.

Keywords: humanitarian healthcare; internationally recruited nurses; quality of care; knowledge transfer; knowledge harvesting; knowledge sharing

Dedication

I dedicate this thesis to the MSF nurses who have become like family through shared experiences, both beautiful and difficult.

I want you to know that I hear you and I see you.

Acknowledgements

I would like to acknowledge Médecins Sans Frontières' contribution of data that made this study possible. This organization's commitment to supporting research and knowledge management is admirable and I am grateful for the privilege of being part of that ongoing process.

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List of Acronyms

CoP	Community of Practice
EoM	End of Mission
HQ	Headquarters
IPC	Infection Prevention and Control
IRN	Internationally Recruited Nurse
JD	Job Description
KM	Knowledge Management
LRN	Locally Recruited Nurse or Staff
MedCo	Medical Coordinator (national level)
MTL	Medical Team Leader (national level)
MSF	Médecins Sans Frontières' or Doctors Without Borders
NAM	Nurse Activity Manager
NGO	Non-governmental Organization
OC	Operational Center
OCA	Operational Center in Amsterdam
QI	Quality Improvement
QoC	Quality of Care
WHO	World Health Organization

Preface

Recalling my time working as a nurse in an international humanitarian setting brings up complex feelings. I had spent nearly seven years building up my clinical skills in Vancouver, Canada, before applying to work with Médecins Sans Frontiers (MSF) but with feet on the ground, first in Pakistan and then in South Sudan over a two-year span, I quickly realized the additional challenges that humanitarian healthcare presented. The inward struggle of being torn between upholding familiar standards of care in a complex and foreign situation was intensive. How does one maintain a measure of cleanliness in a tent hospital in the desert? How does one train a constantly changing staff of "nurses" without any schooling, especially when it had taken me years to hone my own skills? How was I to become a supervisor in a place where I would only exist temporarily and in some circumstances, was just one IRN in a long line of IRNs that entered and exited projects through a figurative revolving door? Where is the place of the IRN in a situation where we are not doctors, therefore we cannot prescribe and diagnose, but are still directly responsible for patient safety? Why was the operational center (OC) sending good intentioned but inappropriate responses to our concerns? What if IRNs could be the ones that pushed for improved standards of care in places where it had become a last priority, not out of choice, but out of contextual constraint?

MSF has been piloting a "knowledge harvesting" tool meant to download IRN insights as they left the field in order to inform on quality of care. This tool became a fitting focus of my thesis as it had the ambitious task of transferring knowledge across the space between the field and headquarters (HQ) which is something I could distinctly visualize. IRNs are in an integral role to provide insight on many intersecting processes within the project. Though doctors are obviously always present, they have their own task– they assess and treat patients. Nurses are uniquely capable of seeing where all the elements of the project either conjoin or divide.

Harnessing this type of knowledge from IRNs could prove to be invaluable if captured correctly.

Chapter 1.

Introduction

1.1. Justification

The complexities of humanitarian healthcare are extensive, yet what is palpable is the need for a continuous shift towards a higher calibre of care, despite the intricacies of the settings. Catalyzing improvements in healthcare delivery involves evidence-based research, identifying gaps in knowledge and application, and widespread establishment of improved standards for care (Swanson & Pearlman, 2006). However, the literature claims that though quality of care (QoC) is widely integrated in western-style health care, very little research has been conducted on how this translates in "low-income countries" which typically, are the places where humanitarian aid projects are established (Kersten, Bosse, Dörner, Slavuckij, Fernandez, & Marx, 2013). A major challenge includes the hierarchical organizational structure that many aid organizations have where the operational centers (OCs) exist outside of the countries of the established field projects[1]. This makes transferring 'on the ground' knowledge, to the centralized decision-makers, a challenge to say the least. A very tangible divide between the field and the institution exists as a result, contributing to important valuable knowledge being lost or lost in translation.

At the same time, the value of nurses' insight is becoming more prominently understood. Evidenced through initiatives like the International Council of Nurses' (ICN) campaign, "Nursing Now", with the goal of globally acknowledging and promoting the role of nurses, and actions like the World Health Organization (WHO) appointing its first Chief Nursing Officer in 2017, the commitment to supporting and elevating these perspectives is growing (Crisp & Iro, 2018, p. 921). Nurses are considered the healthcare practitioners with the closest relationships with patients, and nursing

[1] From here on the terms "field", "mission" and "project" will be used interchangeably to describe the location where humanitarian healthcare is implemented.

leadership is meant to represent nurses. The value-added in gleaning their insight into healthcare activities is substantive.

In this study, I investigate how humanitarian healthcare practitioners' experience-based knowledge can be collected and applied to inform operational QoC planning and implementation. I focus on internationally recruited nurses (IRN) as key resources for relaying project information by analyzing the results of MSF's knowledge harvesting survey. This "End of Mission" (EoM) survey is a method of collecting IRNs' experience-based knowledge from working in humanitarian healthcare services. The survey assesses multiple factors impacting QoC. However, the IRN role, though focussed on nursing care, is interconnected with many additional parts of project function. For example, IRNs can speak to explanations on ruptures of certain antibiotics that could occur if a new doctor entered the project and treated patients according to his own protocols and not MSF guidelines which help to forecast pharmacy consumption. IRNs can also speak to infection control issues which are largely contextual and cultural but impact necessary interventions when norms like close living and sharing of possessions allow for contagious diseases to spread rampantly. They can also speak to ill-fitting equipment such as IV cannulas that are too large for premature babies, resulting in multiple pokes and wasted cannulas. The survey assesses pertinent aspects of a project's function ranging from human resources to aseptic technique. This proves that the IRNs' role frequently involves interactions with many field-level processes, all of which contribute to providing QoC for the beneficiaries.

This study addresses the challenge of providing QoC in humanitarian settings by analyzing the use of IRNs' insights as a knowledge source to bridge the divide between the field and headquarters (HQ)[2]. This will be achieved through answering two questions: 1) What can be learned about humanitarian healthcare from IRNs' experience-based knowledge as collected by MSF's knowledge harvesting tool (i.e. EoM survey); and 2) How does this collected knowledge reflect congruence or disjuncture between "on the ground" realities in humanitarian projects and institutions perceptions? To accomplish this, I analyze the EoM survey data provided by MSF and I conduct

[2] From here on, headquarters (HQ) and operational center (OC) will be used interchangeably to describe the centralized location of governance.

interviews with key informants who are IRNs (n=15), HQ personnel (n=3) and project-level coordination personnel (n=2) (see figure 2.5). Findings suggest that though the EoM survey serves a beneficial purpose of providing statistics that can support new interventions, an abundance of contextual complexity is disguised behind the ambiguity of numerical scores. Therefore, in order to completely benefit from the valuable information that IRNs can provide, a combination of gathering knowledge through storytelling and codification of facts is required.

1.2. Knowledge & Organizational Value

In the attempts to define knowledge, it has been written that:

> "Knowledge originates in the head of an individual and builds on information that is transformed and enriched by personal experience, beliefs and values with decision and action-relevant meaning….Knowledge is the mental state of ideas, facts, concepts, data and techniques, recorded in an individual's memory" (Bender & Fish, 2000, p. 126).

This conceptualization considers knowledge as something created, individualized and internally located. Globalization has led many organizations to function transnationally, bolstering the need to invest in ways to manage knowledge. Whether it be skills, languages, mindsets, experiences, or cultural and context-specific understanding, the need to preserve knowledge is critical and requires strategically extracting and collecting pertinent knowledge (Bender & Fish, 2000). For organizations, this requires viewing knowledge as indispensable to the global economy, but also viewing knowledge as something that resides in its most valuable asset: its employees (Lank, 1997; Bender & Fish, 2000). According to Prusak:

> "The only thing that gives an organization a competitive edge – the only thing that is sustainable – is what it knows, how it uses what it knows and how fast it can know something new" (1996, p. 6).

It is largely accepted that knowledge is an integral resource in high functioning organizations and consequently, that preserving knowledge should be a top priority (Liyanage, Elhag, Ballal, & Li, 2009). Knowledge Management (KM) is a growing field involving the capture, sharing, transfer, creation and application of knowledge as a part of organizational learning and innovation (Liyanage et al., 2009). Knowledge is a mosaic assembled with expertise, contextual information, personal values and experiences. It

also provides the fabric through which one filters and absorbs new information (Davenport & Prusak, 1998; Liyanage et al., 2009). Knowledge can be embedded in one's mind (tacit knowledge) or be concrete and codifiable (explicit knowledge). A third type of knowledge that shares the intangibility of tacit knowledge, is the knowledge that is gained through experiences (implicit knowledge).

KM characterises knowledge as being understandable, shareable, collectable and regenerative (Davenport & Prusak, 1998). It empowers employees, evolving the organization as the knowledge creation process perpetuates through learning, collaborating, networking, critical thinking and innovating (Liyange et al., 2009). Efficient KM mechanisms require strategic intention in seeking out knowledge sources and implementing measures to amass that knowledge (Liyange et al., 2009). Knowledge harvesting identifies knowledge gaps and facilitates knowledge creation to drive organizational learning which is essential for ensuring a competitive advantage through fueling organizational evolution and strategy (Tolsby, 2018).

1.2.1. Organizational Value & Knowledge Transfer

Organizations need to promote a culture where knowledge is revered. The term "knowledge reservoirs" was conceived to refer to the archived knowledge embedded in "people, tools and tasks"(McGrath & Argote, 2001; Argote & Ingram, 2000, p.150). These reservoirs are vital storage spaces of knowledge that an organization can draw upon. In this study, the knowledge is being tapped from IRNs as "knowledge reservoirs" as they are believed to be "effective knowledge conduits" for the transferring of knowledge, particularly of the implicit variety (Argote & Ingram, 2000, p. 159-160). Maximizing the potential of these reservoirs of knowledge needs to be an organization's cultural norm (Nonaka & Takeuchi, 1995).

Transferring knowledge is the process of communicating knowledge from one unit to another, involving translating the knowledge to reorganize it for usefulness (Liyange et al., 2009). Knowledge sharing requires creating cultures and subcultures within the work environment that are conducive to sharing (Ipe, 2016). Barriers to these processes include knowledge hoarding, indifference to the input of others and disregard for collaboration due to perceived expertise (Greengard, 1998). Ultimately, knowledge

transfer and sharing seek the outcome of making new information meaningful to the organizational strategy.

Much research has investigated the pros and cons of different methods of knowledge transfer. Informal methods are associated with innovation and increased creativity while formal, codified methods may be preferred as concrete and systematic in documentation (Liyange et al., 2009). Knowledge transfer can also occur through "personnel transfer" where team members immerse themselves in each other's task with the goal of extracting tacit knowledge (Liyange et al., 2009). Despite the mechanism, the transfer requires receiving the knowledge, integration and application of the acquired knowledge and externalizing the knowledge through closing the feed-back loop (Liyange et al., 2009).

Organizational value is achieved when knowledge, through evidence, is able to alter the strategy of the enterprise through identifying cyclical mistakes and improving quality (Liyange et al., 2009). This occurs when knowledge is continuously transferred and shared, leading to the creation of new knowledge involving multiple organizational dynamics (Bender & Fish, 2000). The organization responds through implementing effective performance changes that become standard practice and catalyzing the ongoing process of replacing old knowledge with new knowledge (Argote & Ingram, 2000; Bender & Fish, 2000).

1.2.2. Internationally Recruited Staff as Knowledge Reservoirs

Employees as knowledge reservoirs are priceless commodities in organizations as the impact of sharing knowledge does not stop with the first interaction (Argote & Ingram, 2000). If an employee gains new insight from a fellow colleague which improves his organizational contribution, then this improvement can then be used in another part of the enterprise, improving processes in that area. In other words, sharing knowledge can have exponential benefits in an organization as new knowledge, stimulates the production of more new knowledge.

This suggests that retaining employees given their valuable knowledge is integral to providing an organization with competitive strategic advantage (Bender and Fish, 2000). Within this study, this is specifically relevant to the IRNs returning from

international assignments with exclusive project-level knowledge and expertise that needs to be captured (Bender & Fish, 2000). Failure to do so, which is often done upon repatriation of the employee, is considered an organizational loss.

Organizational cultures may require readjustment to see the value in employees' experiential knowledge (Bender & Fish, 2000). Black and Gergersen conducted a study of 750 American, European, and Japanese companies and found that post-international assignment, one quarter of employees left the organization they returned to within a year (Black & Gregersen, 1999). This was largely attributed to the organization overlooking the unique experience-based knowledge the expatriates held, and as a result, the expatriates moved on to a place where they could integrate their cross-cultural experiences in a meaningful way (Black & Gregersen, 1999). Often the space between the enterprise and the international project is filled with ambiguity. In this case, not seeking to acquire the knowledge meant that the knowledge left with the expatriates.

1.2.3. Lessons Learned and Project Amnesia

'Project amnesia' occurs when an organization fails to retain knowledge, experience and insights gained from the employees project-level experiences (Schindler & Eppler, 2003). This is an organization loss through neglecting to systematically collect and incorporate this valuable knowledge into future project strategic planning, particularly, when this implicit information disappears if the employee moves on (Schindler & Eppler, 2003). Project amnesia results from problems of time, skill, motivation, discipline, and inability to translate the collected knowledge into a formidable package to be integrated into an organization (Schindler & Eppler, 2003). Technical reports can capture knowledge from one angle, but contextual perceptions and impressions are essential for proper understanding. Therefore, the "end of a project is consequently the end of collective learning" without harvesting experience-based knowledge (Schindler & Eppler, 2003, p. 220). This is unfortunate and often costly for organizations that need to evolve to stay relevant and seek to prevent repetitive mistakes and avoid superfluous actions (Schindler & Eppler, 2003).

"Lessons learned" are collaborative insights identifying what not to do next time (Schindler & Eppler, 2003, p.220). Lessons learned require expressions of contextual complexities that might not be possible in formal codification processes (Schindler &

Eppler, 2003). Through comparing project objectives with problems and attempted solutions, organizations can compile lessons learned to ensure the knowledge is available so that subsequent projects can avoid similar mistakes (Schindler & Eppler, 2003). Sharing lessons learned can also build connection between the project-level employees and HQ.

Harvesting project knowledge should be incorporated into organizations' standard practice. This involves mandatory and systematic debriefing of employees, ensuring management prioritizes the process, and educating the staff on the importance of the debriefing process for harvesting knowledge (Schindler & Eppler, 2003). Ineffective knowledge harvesting is demonstrated in the reoccurrence of preventable project problems, providing evidence to the employees that their shared knowledge was not valued. Ultimately, this requires a shift in perspective:

> "One has to view the project's outcome not only in terms of its physical or tangible results, but also as a contribution to the company's knowledge base" (Schindler & Eppler, 2003, p. 227).

1.3. Nursing Insight: As a Source of Knowledge

The art of measuring and improving QoC is fundamental to provide effective and efficient healthcare. It is also embedded within the nursing role. Florence Nightingale is an example of a historical figure who changed the way that nurses were involved in improving QoC. While providing care for the ill and wounded soldiers during the Crimean War, she noted that contagious diseases such as typhus and cholera were adding to the casualties of the war. In response, she implemented a series of measures to improve sanitation and provided evidence in improved mortality rates through her own active data collection (Pulse Uniform, 2016). Despite the low resource setting she was serving within, her instincts identified a problem and responded with solutions.

Nursing requires consistently pursuing the provision of high QoC for patients. The reality is that assessing QoC requires measuring things that are often unmeasurable. Scores can be assigned in audits or in visibly assessing a task done well or poorly, but much of the other 'knowing' for a complete understanding, comes from contextual experiences. To illustrate this, imagine asking a nurse, "How was infection control on your ward?" The nurse could answer 'poor', but without further explanation,

solutions are difficult to develop. Instead, a nurse could answer “In South Sudan at night it is really cold, and all of the patients and their siblings huddle on the beds together, which means that if one of them gets dysentery, everyone gets dysentery. In the daytime, the children are running all over the place, further spreading dysentery”. This could indicate that more blankets are needed, more education is needed, and more beds are needed. A picture has been painted and with it, reasonable, context-specific solutions. Nurses not only provide scale but also insight.

With the globalization of healthcare, nursing has become a major contributor to global health business (Jones & Sherwood, 2013). Given the magnitude of the nursing role in healthcare systems, a revamped perspective on the place that nurses have to inform policy makers in order to improve global health is essential (Wong, Liu, Wang, Anderson, Seib, & Molasiotis, 2015). The “absence of a nursing voice” is attributed to the lack of research supporting its value and must be remedied in order to optimize on nursing competence and insight (Wong et al., p. 577). Research gives way to new knowledge and new knowledge can chip away the hierarchical systems that ignore the important voices from the ground (Wong et al., 2015). Leveraging nursing knowledge is important not only for national healthcare system growth but for health systems globally (Thompson & Hyrkas, 2014).

1.3.1. Nursing Within Humanitarian Settings

In particular there is limited data regarding nursing care in humanitarian settings (Dawson, Elliott, & Jackson, 2017). Globally, nurses are the largest contributors to the provision of healthcare making the nursing role indispensable in humanitarian crisis initiatives (Dawson et al., 2017). This includes both locally recruited and internationally recruited nurses who despite the challenges, continue to pour what they have into their projects.

Patient safety, called a “global crisis”, it is largely managed by nurses and is at the forefront of providing QoC (Sherwood, 2015, p.738). Improving patient safety requires forging new or refined norms creating healthcare cultures centered on promoting patient-centered care through system changes (Ammouri, Tailakh, Muliira, Geethakrishnan, & Kindi, 2014). Often quality is measured through rational measurement, but it could be argued that in healthcare, a more accurate representation

of standards of care could be found in the invisible, personal, and unarticulated dimensions of caring for patients, such as staff-patient interactions (Farr & Cressey, 2015). This culture should be driven by nurse knowledge, who as the providers of direct patient care have insight and intuition necessary for evaluating risk and seeking to improve on QoC indicators (Ammouri et al., 2014).

1.3.2. Globalization and QoC

Healthcare organizations need to create cultures where quality is part of "the main agenda" (Zakaria & Lasrado, 2020, p.6). When an organization values quality in product delivery or service, it becomes engrained in the employees and consequently quality standards become the only acceptable way of doing things (Zakaria & Lasrado, 2020; Limato et al., 2019). Humanitarian organizations need to adopt a quality culture so that the norm is always to reach for delivering a higher level of care. This is already done in many organizations, but it needs to become more visible and the knowledge needs to be shared externally.

QoC implementation requires further investigation in complex settings. NGOs have identified this as deserving attention, but progress remains minimal (Kersten et al., 2013). However, though there is little published data on QoC evaluation in humanitarian settings, it does not mean that it is not being done (Kersten et al., 2013). Approaches may have been initiated, but lack consistency which is understandable given the variable contexts (Leatherman et al., 2010). QoC evaluation requires transparency and accountability in leadership and can be used to direct the use of limited resources through considering evidence-based practice to achieve improved health outcomes (Leatherman, Ferris, Berwick, Omaswa & Crisp, 2010). However, this requires openness, financing and faces the struggle of competing priorities (Leatherman et al., 2010).

QoC evaluation is integral in robust healthcare systems despite the paucity of research attributed towards it (Heiby, 2014; Walman & Toole, 2017). Humanitarian healthcare workers seeking to uphold human rights and dignity have the mandate to produce a high level of healthcare despite the challenges (Waldman & Toole, 2017). The limited belief that any care provided is better than nothing does not have a place in this mandate (Chapin & Doocy, 2010). Investing in research on QoC implementation

and measurement in limited resource settings could catalyze change in surrounding healthcare systems by providing the framework of how this daunting task could be accomplished (Heiby, 2014).

1.4. Applying the Literature

Humanitarian aid organizations are global businesses and therefore need to capitalize on the wealth of knowledge residing in their employees. In pursuit of high calibre services for patients and remaining accountable to their donors regarding resources, harvesting knowledge from the employees, particularly those working in the field, is essential. This knowledge is essential to catalyze improvements and avoid repeating mistakes.

Providing quality healthcare is a pre-requisite for improving global health (Leatherman et al., 2010). Humanitarian healthcare providers like MSF, hold this as their main objective. Though MSF – "Doctors Without Borders" - is defined by its deployment of doctors, nurses make up a larger portion of the MSF roster (see figure 2.3). It is only logical that nurses, in light of their inter-connected role with patients and project activities, should be considered when seeking to improve QoC in the field. Nurses as 'reservoirs of knowledge' could be the bridge connecting the realities of the field with the institutional understanding that wants to get it right.

Chapter 2.

Methods

2.1. Research Question

This study concerns how humanitarian healthcare practitioners' experience-based knowledge can be collected and applied to inform operational QoC planning and implementation. Médecins Sans Frontières' (MSF) data collection from internationally recruited nurses (IRN) leaving humanitarian healthcare projects is meant to address this challenge. The objectives of this study are to address two questions: 1) What can be learned about humanitarian healthcare from IRNs' experience-based knowledge as collected by MSF's "End of Mission" (EoM) survey; and 2) How does this collected knowledge reflect congruence or disjuncture between "on the ground" realities in humanitarian projects and HQ perceptions?

2.2. Research Design

This study employed mixed methods research which allows one to "combine the rich, subjective insights of complex realities from qualitative inquiry, with the standardized, generalizable data generated through quantitative research" (Regnault, Willgoss & Barbic, 2018, p.2). This type of research design has gained momentum within healthcare studies where contextualizing is required to make numbers meaningful (Regnault et al., 2018). In this study, I employed a mixed methods design as one research method was not sufficient to provide the complete and comprehensive picture of the research questions posed (Morse & Niehaus, 2009). The quantitative data acquired from the surveys produced numerical values, which lacked comprehensive explanation, while the qualitative data from the interviews alone could not answer the research questions on the use of the survey as a means of codifying implicit knowledge. Therefore, this study required multiple perspectives to provide richer findings then a single method would have allowed, ensuring each method's strengths balance out each method's weaknesses and in doing so, producing results that stakeholders can have confidence in (Morse & Niehaus, 2009; Centers for Disease Control and Prevention,

2019). This was accomplished sequentially, taking into consideration the findings of step one, and using those findings to enrich step two.

For the purposes of this thesis, the OCA Nursing Advisor and the OCA Quality Assurance Advisor in Amsterdam granted me access to the data systematically collected through MSF's EoM survey for IRNs. The agreement was that I would also analyze the data and compile the IRNs' insights so that the two advisors could create action points based upon the harvested knowledge.

First, the data from the EoM surveys that were collected between March 2019 and September 2020 was quantitatively analyzed. Following this step, I conducted qualitative research in the form of semi-structured, open-ended interviews with key informants including fifteen IRNs who had finished field missions within a variety of MSF projects within the last eighteen months. At the time of the interviews, nine IRNs were at home post-mission, four IRNs were in a new mission and two IRNs were en route to a new assignment. These interviews were followed with five interviews with key informants who were members of higher-level positions within the MSF operational team. At the time of the interviews, three of the HQ personnel were working in the medical operations branch and two were working in the project-level coordination team. The goal of these interviews was to elicit further detail about the themes that had emerged from the survey data as well as to gather insights and perspectives from individual experiences about the tool and its overall efficacy.

2.3. The Case Study: MSF's EoM Survey & IRNs.

This section describes the case study selected to answer the research question. It is divided into a description of MSF, the IRN role and the EoM survey.

2.3.1. MSF

MSF is an independent organization founded in 1971 by a team of journalists and doctors who witnessed a global need for neutral, impartial and accountable healthcare services midst humanitarian crises. Mandated to provide care through multi-faceted medical assistance, MSF sends teams to places where healthcare is inaccessible as a result of conflict, natural disaster or system overwhelm. Though it is nearly impossible to

estimate how many patients come into contact with MSF each year, according to the yearly international report, a few numbers can help to give a general idea. In 2019, MSF admitted approximately 76,400 severely malnourished children into their therapeutic feeding programs; 112,100 surgical interventions were performed; and 10, 384,000 outpatient consultations were held (*International Activity Report*, 2019). Additionally, MSF treats infectious diseases, delivers babies and provides refugee support (*International Activity Report*, 2019). MSF's contact with populations in turbulent conditions is extensive to say the least. Figure 2.1 illustrates the dispersion of MSF projects as of 2019. Figure 2.2 illustrates the types of contexts that MSF projects functioned in as of 2019. Figures 2.3 and 2.4 illustrate the breakdown of staff employed by MSF.

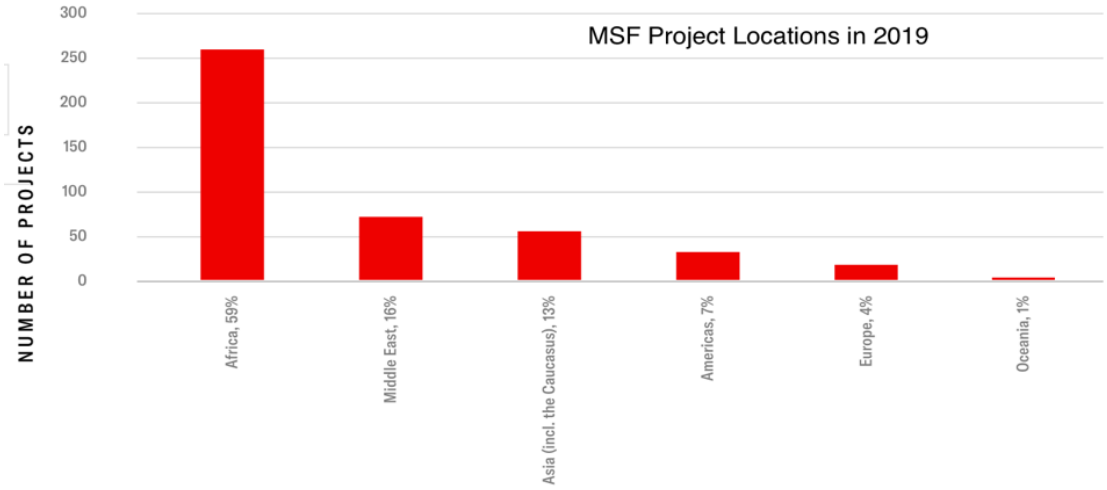

Figure 2.1. MSF Project Locations in 2019
© MSF (*International Activity Report*, 2019)

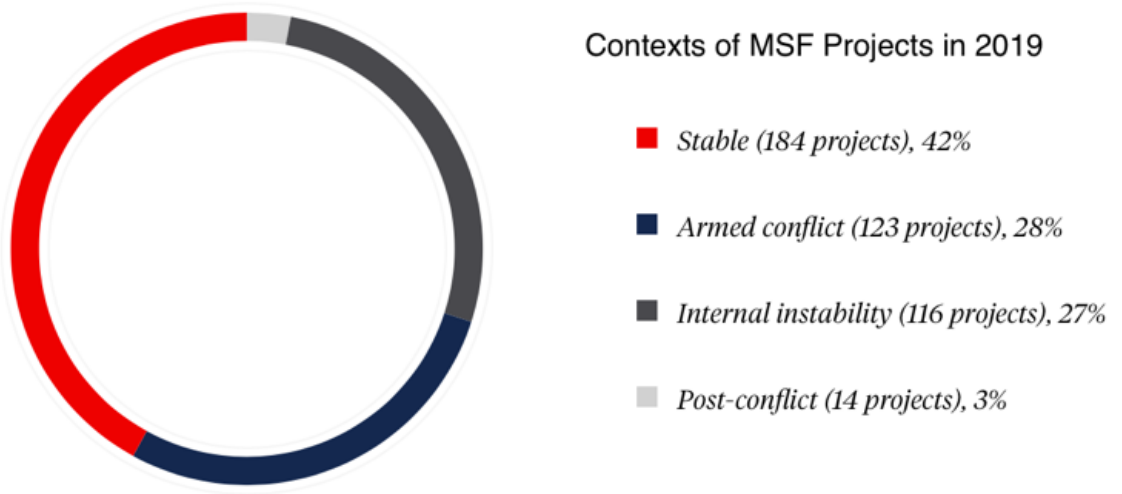

Figure 2.2. The Context of MSF Projects in 2019
© MSF (*International Activity Report*, 2019)

Now an organization of over 67,000 people internationally, MSF not only deploys doctors to the field, but also logisticians, pharmacists, counsellors, human rights advocates and nurses as well as seen in figure 2.C.

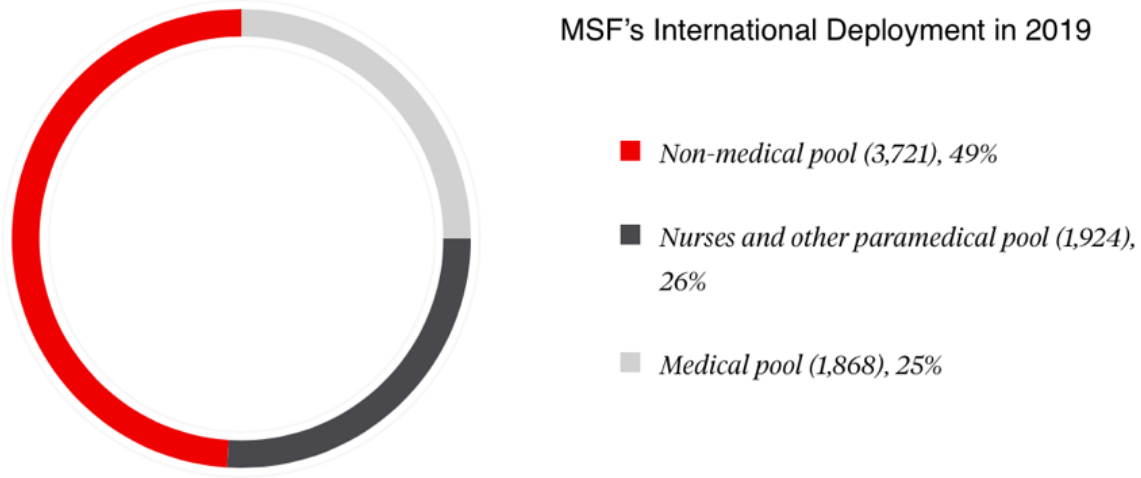

Figure 2.3. MSF's International Deployment in 2019
© MSF (*International Activity Report*, 2019)

Important to understand is that the majority of MSF staff are made up locally recruited staff. These staff work in a variety of positions at the project level. Figure 2.2 shows a break-down of MSF staff from 2019.

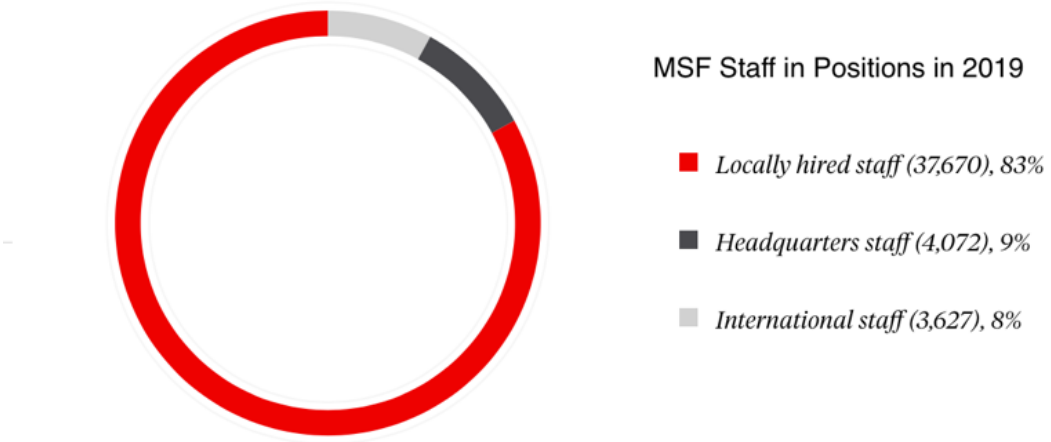

Figure 2.4. MSF Staff in Positions in 2019
© MSF (*International Activity Report*, 2019).

This case study focuses on the operational center (OC) located in Amsterdam, Holland (OCA). MSF is divided into 24 "Associations" around the world that recruit staff and raise funds. Each association is attached to one of the five OCs located in Belgium, France, Holland, Spain and Switzerland. All OCs act independently, yet are bound by the MSF charter and principles and share the common purpose:

> "to deliver medical humanitarian care in situations of crisis and conflict, and to speak out on critical issues affecting the people we assist" (OCA strategic plan, 2020, p. 2)

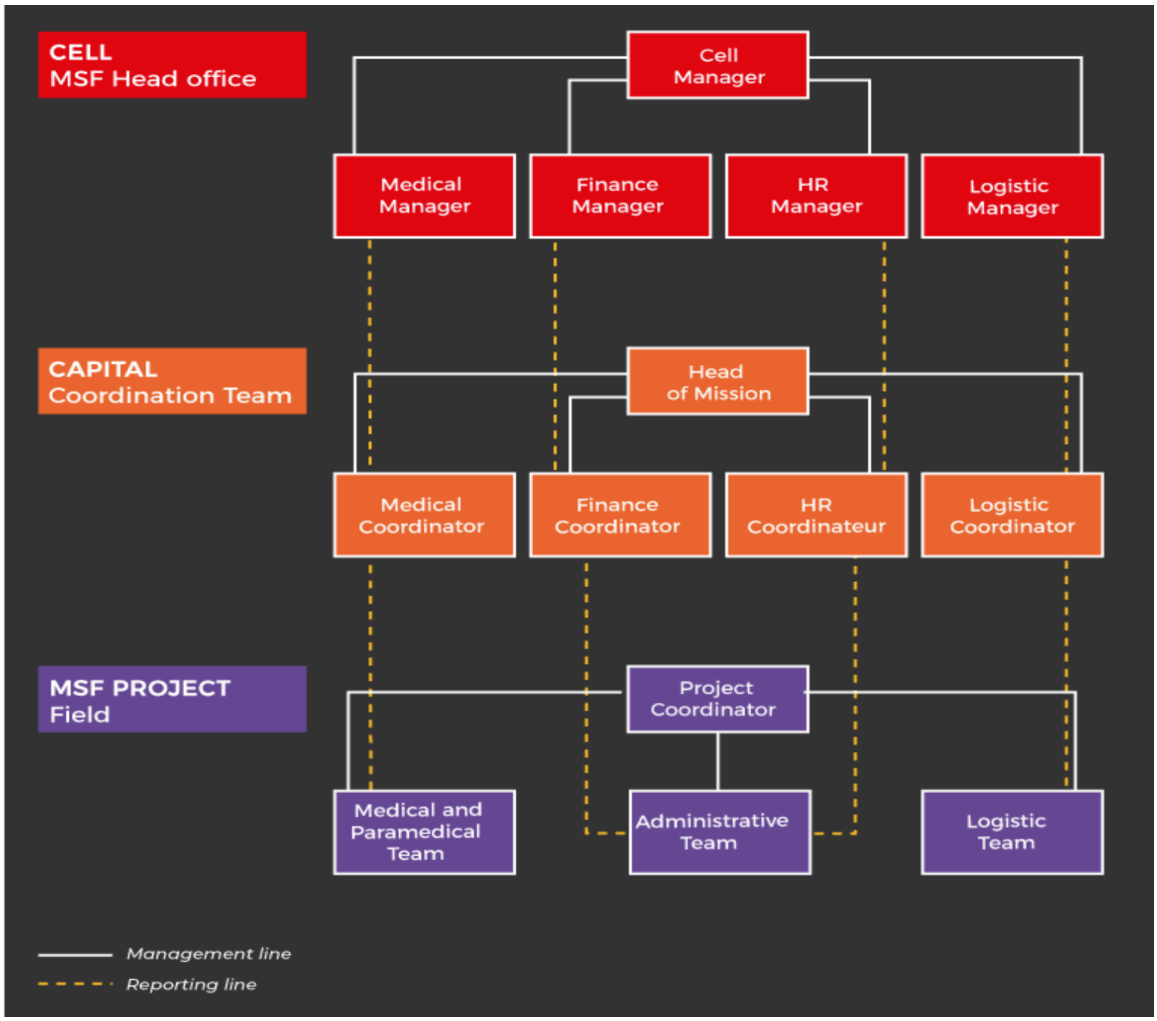

Figure 2.5. MSF organizational structure
(© MSF 2020)

MSF has a high commitment to organizational learning as demonstrated in public statements, like the strategic plan, which commits the organization to develop in terms of research and innovation, alongside knowledge management (MSF Strategic Plan, 2020). This was illustrated in the development of a research ethics board in 2003 to encourage research in the field (Schopper, Dawson, Upshur, Ahman, Jesani, Ravinetto, Segelid, Sheel & Singh, 2015).

2.3.2. MSF OCA IRNs

In 2020 OCA had 2,265 IRNs and locally recruited nurses (LRN) from 48 nationalities in their HR pool (Treacy-Wong, 2020). In MSF, entry level IRN positions are located in what figure 2.5 calls the “medical and paramedical team”. Their position is

referred to as “NAM” or “nurse activity manager”, with sometimes vague, but also diverse job descriptions dependent on the setting of the project (e.g. outreach, emergency, inpatient facility). It can include being involved in mentoring/training staff, ward rounds and nursing care, monitoring pharmacy/supply issues, infection control, managing the staff roster and even human resource functions like hiring new LRNs. All have the potential to advance to higher career levels outside of nursing care, with accumulated experience. Some of these positions include medical team leader (MTL) or medical coordinator (MedCo) or even diverge outside of medical activities to be involved in the operational side of MSF. The difference between these positions is related to responsibilities, lines of communication and position on the MSF hierarchical structure.

The focus of this study is primarily on the NAMs who completed a mission in the last 18 months who had completed the EoM survey. However, in the interviews it was found that only 9 of the IRNs (60%) had a distinct recollection of the details of filling out the survey. Additionally, members of HQ were incorporated in the interview portion (on Figure 2.5 noted as “MSF Head Office”) as well as two members of the project-level coordination team (on Figure 2.5 noted as “Coordination Team”), indicating they had recently graduated up the hierarchy from NAM to MTL or MedCo.

Table 2.1. The IRN Sample by MSF Experience

	1-2 missions	3-5 missions	6-10 missions	>10 missions
IRN EoM Survey Respondents (n=74)	38	24	3	9
IRN interviews (n=15)	3	10	0	2

2.3.3. EoM Survey

The “End of Mission” (EoM) survey was developed with the objective of harvesting knowledge from IRNs leaving the field and complement the debriefing process that is not always possible due to various constraints. Different types of surveys are used in MSF to collect different kind of data, but the format of this nurse-based experience EoM survey is specific for IRNs. This style of survey is now being adopted by other departments and OCs.

This mechanism for knowledge transfer was designed to provide support for advocating for specifics in QoC and prioritizing finite resources. According to an interview with the OCA Nursing Advisor, conceptually, the EoM survey was organized as a means of systematically gathering IRNs' voices together to be one more powerful. The intent being to collect nurses' insights, analyze this information, and assemble it to be impactful. The information is shared with the medical director, the inter-section nursing care working group and the clinical governance committee in MSF. It also feeds into annual and strategic planning. For example, if according to the EoM survey results, 40% of IRNs describe aseptic technique as being done poorly across MSF projects, it drives the urgency for an intervention such as increased training. There is an accountability that attaches itself to quantified concerns. Additionally, through the allotted space for "free-text comments", the survey provides explanations for the numerical scores assigned to each outcome. For example, issues with supply due to repurposing of specific equipment for alternative means. It is unrealistic for those in HQ to have that kind of knowledge, unless it is gathered from IRNs who had witnessed it first-hand.

The EoM survey has been reworked since its conception in 2016 as questions evolved dependent on issues that were consistently voiced by IRNs and the focus of the organization's strategic plan. Projects within MSF vary considerably, and it is acknowledged that not every IRN who completes the survey will be able to provide input on all of the topics. For example, an IRN working in an outreach setting may not be able to comment on how well ward rounds are conducted.

Ideally, the survey is systematically sent out by the MSF human resources, via email, to all OCA IRNs leaving their assignments. Perhaps related to the fact that completion of the EoM survey is not compulsory, only 74 out of 174 IRNs responded to the survey (≈43% response rate) . The survey data was collected over an eighteen-month period (March 2019-September 2020). Figure 2.6 shows the dispersion of countries with MSF OCA projects in them that were represented by the data (73% representation as of September 2020).

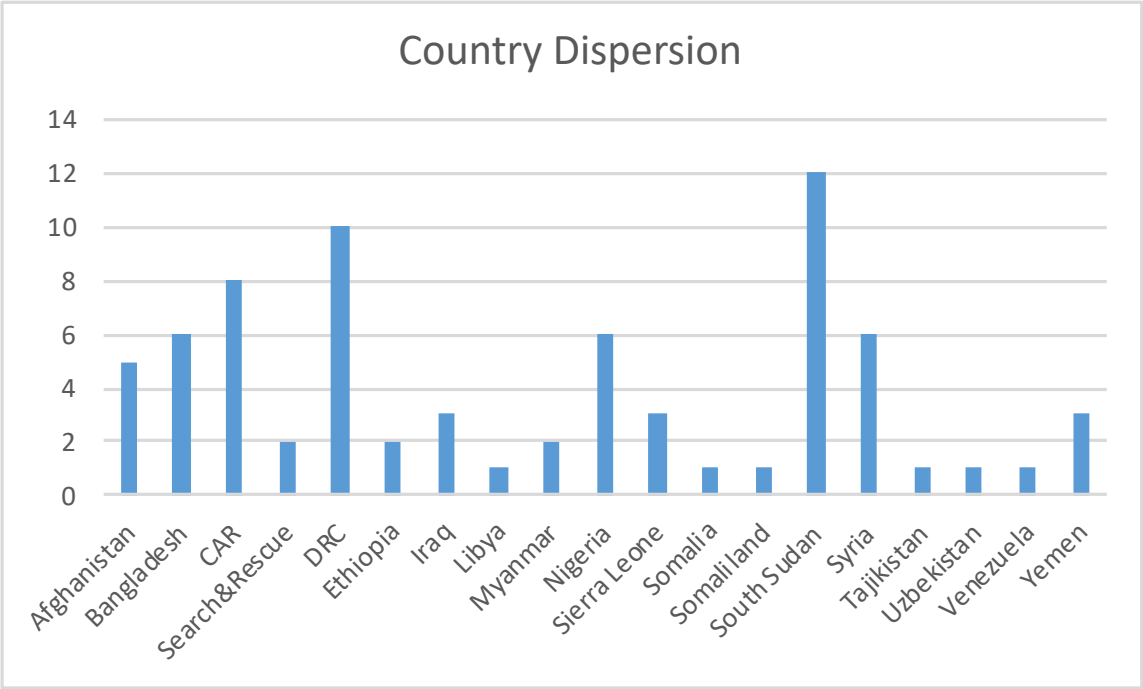

Figure 2.6. Dispersion of MSF OCA countries with projects as represented in EoM surveys (n=74)

Basic profiles of the respondents were developed in order to shed light on contextual and experiential patterns while interpreting data. These details included:

- project and country
- number of prior missions
- span of control (ie. departments)
- number of staff to oversee

Section one asked generalized questions about project function. IRNs were asked to grade each point on a scale of 0-10[3] (this section also included space for comments):

- How well was handover done?
- Was there a current and agreed upon improvement plan for nursing care within their project?

[3] The rationale for this scale came from the "Net Promoter" metric. "0" indicates the outcome was demonstrated poorly and "10" indicates the outcome was demonstrated effectively.

- Was the job description accurate to the situation they were working in?
- Did they have supply issues?
- How was the quality and fit of the equipment available to them?
- How well was the pharmacy managed in the project?
- How well was patient privacy, dignity and confidentiality managed in the project?
- How well was pain managed in the project?
- How well was aseptic technique performed during invasive procedures?
- How well was infection prevention and control (IPC) managed in the project?
- How well was sterilization done in the project?
- How well did the MSF nursing guidelines meet their needs?
- Please assess the general competence of staff.
- Please assess the general attitude of the staff.
- How were nursing/medical incidents and/or adverse events reported in the project?

Section two included awarding scores to nursing care factors asking the question "How well was this done in their project?". Options for answers included: very good, good, acceptable, poor, very poor or not applicable (this section also included space for comments). The outcomes included:

- Patient administration, discharge and transfer
- Use and management of patient files
- Medical rounds
- Patient observations
- Personal care (hygiene)
- Medication administration
- Patient feeding
- Injection practices
- IV catheter insertion

- Pressure Ulcer Prevention
- NG/enteral tube insertion
- Urinary catheter management
- Perioperative care
- Wound care
- Emergency & Critical Care
- HR management
- Planning/Schedule of activities
- Learning and competence
- QoC data collection

Section three closed with prompting written answers for these questions:

- Any recommendations?
- Of all the challenges they had faced, which would they prioritize to be solved?

For the purposes of this study, a sample within the case study was selected to address the research questions. This involved examining information from section one and three only. All information was translated from Microsoft Forms, a software used to format the survey, to an excel spreadsheet via a password protected shared folder. The data was anonymized within the excel spreadsheet with profile details linking the shared information to a project.

2.4. Data Collection

2.4.1. Qualitative Research Interviews

The second data collection step was the conduct of interviews with IRNs who had completed a mission in the last eighteen months as well as members of the OCA HQ coordination team. The intent was to gain additional insights concerning how the EoM survey was perceived to have worked or not to capture IRNs' insights to inform system-level quality of care (QoC) planning and implementation.

IRN Interviews

The method of sampling was initially random and accomplished in conjunction with the OCA Nursing Advisor. From my side, I used my past working relationships to connect with IRNs who would be interested in participating. The criteria included completion of a mission within the scope of EoM analysis (the last 18 months). However, I realized the need to incorporate IRNs from a range of nationalities and so the process became more purposive as the initial sample was primarily recruited from the "Global North[4]". This created a more diverse sample of MSF IRNs.

Emails were sent to the sample of IRNs by both the OCA Nursing Advisor and myself, explaining the intent of the study including the relationship I had with MSF in using their data but working as an independent researcher. I explained that though I have previously been employed as an IRN by MSF, at this time I was working on my thesis. Also included, were the guidelines in place to maintain confidentiality. Respondents then scheduled an interview via Zoom at their convenience. Interviews ranged from twenty to sixty minutes depending on the interviewees preference. Interviews were conducted and recorded via Zoom and transcribed. The final sample of interviewees were at different stages of their MSF career, with some in various stages of returning home, others were preparing for their next mission and others were moving in new directions in their nursing career.

[4] Understanding that this is an imperfect term, I will use the terms "Global North" and "Global South" to refer to the countries the IRNs interviewed lived in.

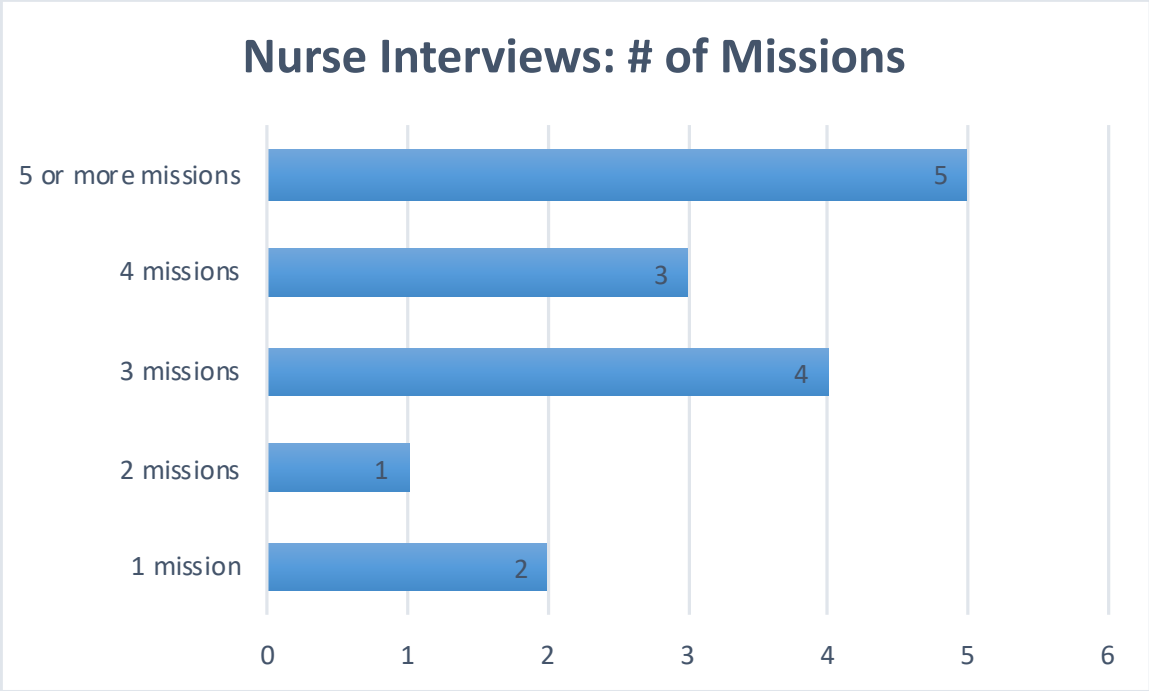

Figure 2.7. The IRN sample (n=15) in terms of experience with MSF.

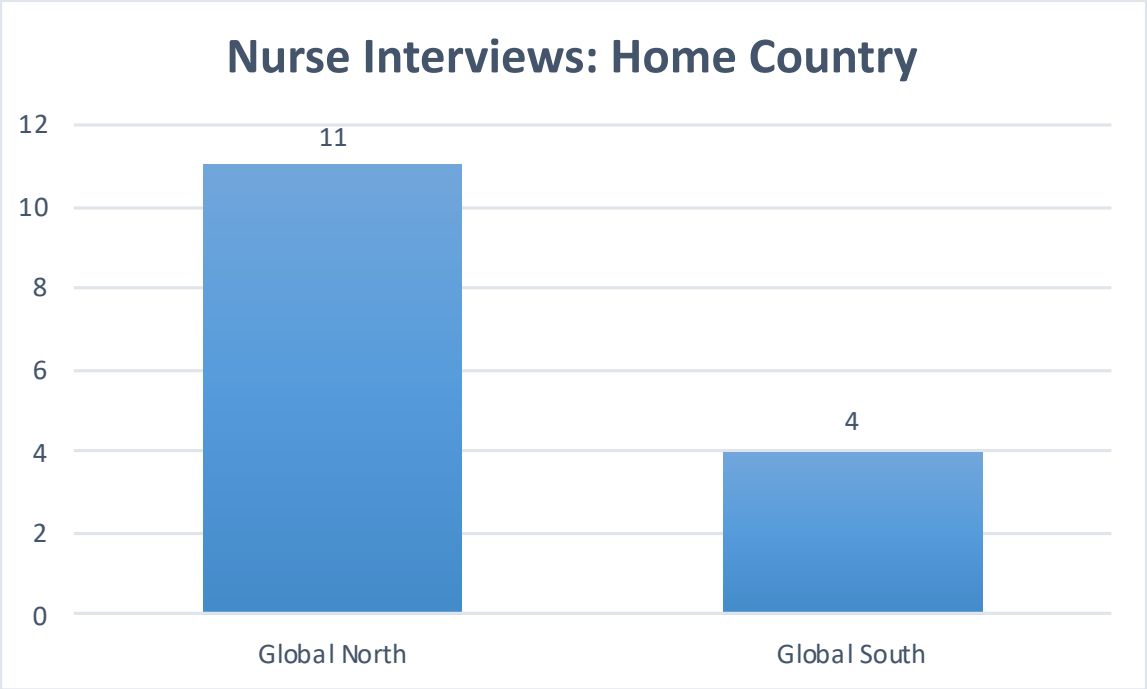

Figure 2.8. The IRN sample (n=15) in terms of global location of home country.

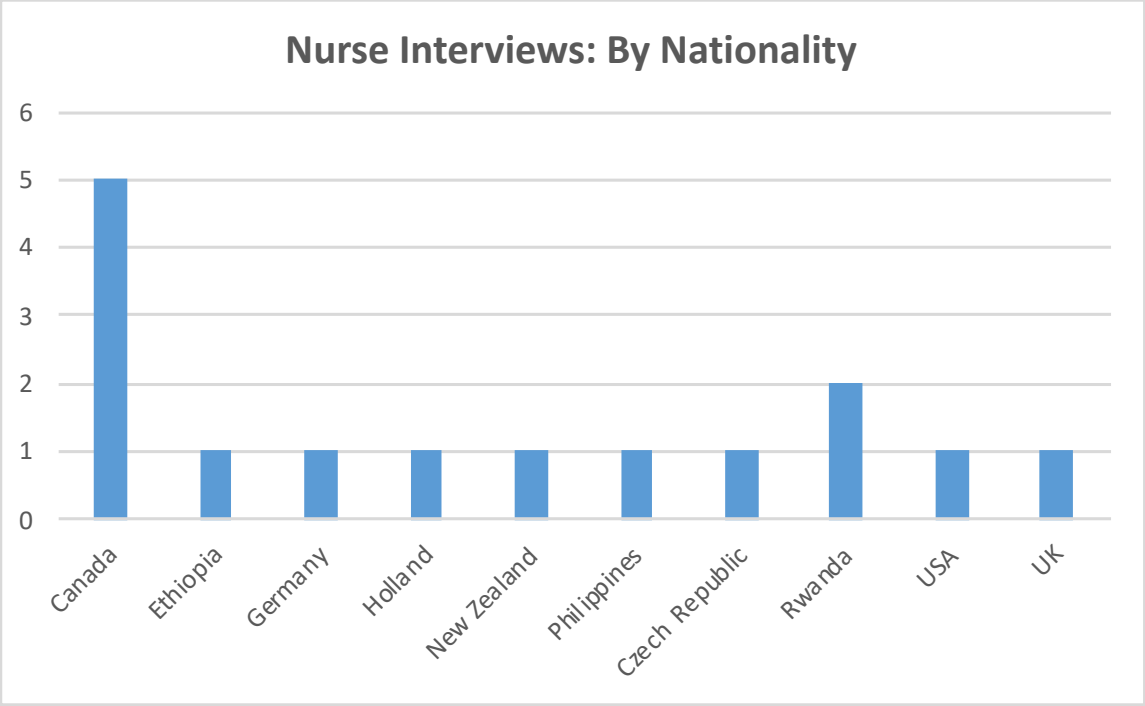

Figure 2.9. The IRN sample (n=15) in terms of nationality.

The interviews were semi-structured and conversational in nature. They were conducted in English and began with gaining verbal consent after a review of the 'SFU ethics board certified' consent script. A basic profile was established with these details:

- Last mission
- Home country
- Number of missions completed

The interview questions consisted of:

Introduction:

- What do you think about assessing QoC or moving towards QoC in humanitarian settings? Is it possible? Is it impossible?

The EoM Survey:

- What was your motivation in filling out the EoM survey?
- Do you have confidence that filling out the EoM survey is an effective form of communicating your "nursing knowledge" about QoC in the project?

- If you could add one (or more) thing (s) to the survey, what would it/they be? In other words, what additional information would you want to document in the survey if you knew that it was going to be communicated to HQ?

- How timely was the survey? Was it done at the right time, or would you have liked to have other opportunities for feedback (during your mission, or after more reflection upon leaving)?

- Would you have wanted to know of any outcomes or changes that occurred based upon your report?

QoC in the Field:

- As a nurse in the field, how do you measure QoC? What were the standards that you were trying to use and monitor against?

- In your experience, what would you identify as being the biggest obstacle to improving QoC in the projects?

Communication (Documentation and Accountability):

- If you had witnessed, or come across a major problem in the project, what mechanisms were available to communicate that properly? What mechanisms didn't work well?

- Is there something you wish you could have effectively communicated to HQ that you think would have impacted QoC? If so, what was it and what were the barriers to communication?

- Do you feel MSF is giving space for nurses to raise concerns and effect change when they feel they should?

At the conclusion of the interview, I asked if they wished for any follow up following the conclusion of the study. I documented this alongside their consent in the field notes.

HQ and Project-level Coordination

The HQ key informant interviewees were selected purposefully by the OCA Nursing Advisor supervising my participation in the project. The criteria included holding a position linked with the medical department, but not necessarily connected with nursing. Given that the timing of this study coincided with the ongoing COVID-19 pandemic in 2020, and the role MSF plays in supporting health emergencies, it was understandably challenging to secure participants. Email invitations were sent out explaining my prior connection with the organization in addition to the relationship that I

had with the nursing department. The intent of the study, indication of research board approval and request for an interview was included in the email. If accepted, an interview was scheduled via Zoom at the participants convenience. In the end, three HQ and two project-level coordination personnel were interviewed.

The interviews began with gaining verbal informed consent as per this study's ethical protocol. The interviews were also semi-structured and conducted in English, audio-recorded and transcribed by me.

The interview used these questions as a template for discussion:

Opening Question:

- What do you think about assessing QoC or moving towards QoC in humanitarian settings?
- Is it possible? Is it impossible?

Position Specific:

- Could you explain for me, about what your position in MSF entails?
- How do you plan and prioritize your tasks? Can you speak to certain projects that you are presently working on?

On the EoM Survey:

- Are you aware of the EoM nursing survey? If yes, how does your position come into contact with?
- How is the information acquired from it, translated to you?
- Is this survey an effective method of translating knowledge from the field to you?
- How have you (or have you) witnessed the information gathered from nurses being used in 'strategic planning' in MSF? If yes, in what ways? If no, why do you think that is?

QoC in the Field:

- In your experience, what would you identify as being the biggest obstacle to improving QoC in the projects?
- How do you define measurable improvements?

Nurses:

- Do you feel MSF is giving space for nurses to raise concerns and effect change when they feel they should?

2.4.2. Confidentiality

Identities of all interview participants were protected through alphanumerical codes (n=nurses and hq= HQ to keep separate). This code was used to link interviews with profiles, but all participant's names were left anonymous from interviews and transcripts. Interviews were recorded, transcribed and uploaded to NVivo 12. All identifying data linked to respondents was kept by myself. All audio files, email correspondence and handwritten notes with identifying features were digitalized and coded and kept in a separate location different to maintain confidentiality.

2.5. Data Analysis

The goal of analysis was 1) to assess the effectiveness of the EoM Survey to inform on QoC and to investigate what this IRN feedback could tell us about humanitarian healthcare services; 2) to interview IRNs to gain their insight on the EoM survey analysis; and 3) to interview HQ personnel to gain their perspectives on the EoM survey analysis and assess how this aligned with the perceptions of those at the operational level.

2.5.1. EoM Survey

Analyzing the EoM survey involved averaging the scores and calculating the standard deviations for each of the survey outcomes from the data collected from March 2019-September 2020. Additionally, the 'free-text' comments that allowed the respondent to explain the score they gave an outcome were consolidated and analyzed. The comments were extracted to a single word document and uploaded to NVivo12[5] to be coded for themes. For this step, I stayed open to emerging themes.

[5] NVivo 12 is a software designed for analyzing qualitative data.

2.5.2. IRN Interviews

The interview data was anonymized, transcribed and uploaded to NVivo 12 to code for themes. It was systematically reviewed multiple times and emerging themes were then grouped together into larger themes that spoke to answering the posed research question.

2.5.3. HQ Interviews

The interview data was anonymized, transcribed and uploaded to NVivo 12 to code for themes. I stayed open to emerging themes as I systematically reviewed the transcripts assigning codes and categorizing ideas to see if any trends or theories emerged. The themes were triangulated with the themes from the EoM survey qualitative analysis.

Chapter 3.

Findings

3.1. Introduction

Two steps were taken to answer the research questions. The first step included quantitative and qualitative analysis of the EoM survey answers made by internationally recruited nurses (IRN) leaving their field-based assignment. The survey findings from the data collected from 2019 to 2020 were compared with data from fifteen semi-structured interviews with IRNs to illuminate any additional insights about how well the survey reflected nurses' perspectives.

Step two investigated the congruence or disjuncture between "on the ground" knowledge and HQ perceptions. This was done through triangulating the IRN data from step one and with interviews conducted with personnel at HQ and project-level coordination (see figure 2.5).

The findings indicate that MSF's EoM survey can capture IRN knowledge and that this knowledge is useful for prioritizing and advocating at the HQ level. Providing numerical scores to identified outcomes of humanitarian healthcare projects is beneficial and additional useful information is revealed in the survey's optional free-text comments. However, the EoM survey has limitations in that it fails to capture the depth and diversity of an IRN's experiences. This was conveyed through the overarching themes of "veiled complexity of numbers", "avoiding deeper issues" and "hints of important topics" that emerged in the IRN interviews. When these insights from the qualitative interviews were revealed by me to the HQ interviewees, they were not surprised and indicated they had some awareness of such field-based complexities, albeit from sources other than the EoM survey. Knowledge of this kind seems to accrue more informally, outside of the formal data collection methodologies MSF currently uses. It seems many insights from nurses' firsthand experiences are not yet widely appreciated and used by the organization.

In this chapter I review the key findings relevant to the two research questions by describing first the survey data finding and then the findings from the qualitative interviews I conducted with IRNs and HQ personnel.

3.2. Findings for RQ1: What can be learned about humanitarian healthcare from IRNs' experience-based knowledge as collected by MSF's "End of Mission" (EoM) survey?

3.2.1. Survey Data Findings

The EoM survey is generalized to all projects and asks IRNs to score topics related to the IRN role on a scale of 0-10. The survey also allows IRNs to provide a 'free-text comment' or explanation of the score given, if desired. Additionally, the survey requests IRNs to identify one challenge they wished could be solved and one recommendation.

The survey data can be filtered to extract specific information as needed. The data is formatted into an excel spreadsheet that is capable of presenting data by country, project, timeframe etc. The free-text comments can flag major issues and provide a brief qualification for the score given (e.g. A score of 3/10 for pharmacy management because a project was constantly rupturing on key antibiotics). The survey free-text comments can also indicate knowledge gaps where the IRN's score did not line up with the explanation (e.g. A score of 10/10 for proper systems of incident reporting explained as "there were no incidents in the project" instead of "the system for reporting incidents worked efficiently").

EoM Survey Data on Fifteen Quality of Care (QoC) Outcomes

Between March 2019 and September 2020, seventy-four IRNs completed the EoM survey upon completion of their field assignment in nineteen countries. The scores were averaged for each outcome to reflect an overall score across all MSF projects. The following tables summarize how the IRNs responses. Below each table are findings concerning the insights that emerged from my thematic analysis of the optional free-text comments included in the 2019-2020 survey. All categorization was done independently and are focused to the kinds of data the survey is able or not to collect and analyze.

Table 3.1. Outcome 1: Quality of Handover Period – How well did your handover period with your predecessor prepare you for your mission?

	OCA Nurses EoM Reports (March 2019 - September 2020)
N	73
Mean	4.6
SD	3.4

The 'handover' free-text comments indicated that approximately 30% of the IRNs felt that the handover was completed satisfactorily indicated through a sufficient length of overlap with predecessor or written handover. However, I categorized 41% of the comments as indicating the handover as insufficient reflected in the sub-par score of 4.6/10. The survey has no other place to capture the impact of that the perceived lack of preparation had on the IRN or their functionality within the project. According to the comments, deficient handovers left many IRNs feeling lost in their first few months of the project.

Table 3.2. Outcome 2: Improvement Plan for Nursing Care – Was there a current and agreed improvement plan for nursing care within your project?

	OCA Nurses EoM Reports (March 2019 - September 2020)	
N	74	
Yes	33	45%
No	41	55%

The 'improvement plan' free-text comments revealed some IRNs' perceptions and nuanced frustration concerning limits on who collaborated (or if collaboration was permitted) in developing the plan. However, the survey did not capture any detailed information about the process for developing or measuring an improvement plan.

Table 3.3. Outcome 3: Accuracy of Job Description – A job description (JD) describes what you are supposed to do in a specific project. Was your JD accurate?

	OCA Nurses EoM Reports (March 2019 - September 2020)
N	74
Mean	6.1
SD	3.0

Repeatedly, the 'JD' free-text comments illustrated frustration toward inaccurate JDs that led to conflicting expectations within the project. The following two comments captured such frustration:

> "The JD had a high focus on mentorship and coaching within clinical pediatrics which is a large part of why I accepted the role. When I arrived, I was told 90% of my job was on the computer"

Also, in this comment:

> "They changed my JD after a while. I should be only working as a coach and no longer as a manager. And I felt useless and had nothing to do".

Inaccurate JDs caused confusion amongst team members, lack of clarity in objectives and disillusionment in IRNs. As such, understanding how inaccurate JDs were experienced seems an important issue for the organization to understand. However, the EoM survey does not systematically collect data on how JDs were deemed inaccurate and the implications of these inaccuracies for nurses.

Table 3.4. Outcome 4: Supply Issues – How well was supply managed in the project?

	OCA Nurses EoM Reports (March 2019 - September 2020)
N	74
Mean	5.3
SD	2.6

The 'supply' free-text comments detailed the kinds of delays IRNs' projects experienced and how this affected overall efficacy of their healthcare.

Table 3.5. Quality of Equipment – How was the quality of the equipment available to you? Was it fit for purpose?

	OCA Nurses EoM Reports (March 2019 - September 2020)
N	73
Mean	7.2
SD	2.0

Approximately 60% of the 'equipment quality' free-text comments cited issues with quality and quantity of equipment, as well as contextual (environmental) and safety issues (related to inappropriate fit of equipment). "Context" was mentioned as a challenge in regard to delayed maintenance of some equipment and dusty environments and extreme temperatures. The challenge of replacing broken equipment was also stated.

Table 3.6. Outcome 6: Pharmacy Management – How well was the pharmacy managed in the project?

	OCA Nurses EoM Reports (March 2019 - September 2020)
N	73
Mean	5.8
SD	2.8

'Pharmacy management' free-text comments largely suggested that lack of standardized pharmacy processes in the project effected healthcare services through rupturing of important medications (and also increased wastage).

Table 3.7. Pain Management – How well was pain managed in the project?

	OCA Nurses EoM Reports (March 2019 - September 2020)
N	64

Mean	6.3
SD	2.8

The ‘pain management’ free-text comments indicated that pain is inadequately managed in most projects. Though an improvement in scores was noted, many gaps in pain assessment and treatment were highlighted. The IRNs specified where these gaps were insufficient for alleviating suffering particularly in palliative care, pre-procedural medication, and pediatric and neonatal pain management.

Table 3.8. Privacy/Dignity/Confidentiality Management – How well was patient, privacy, dignity and confidentiality managed in the project?

	OCA Nurses EoM Reports (March 2019 - September 2020)
N	74
Mean	6.7
SD	2.9

From the ‘privacy, dignity and confidentiality’ free-text comments identified key factors compromising privacy, dignity and confidentiality to include culture and/or community factors (e.g. “gossip was rampant”), structural issues (e.g. lack of space), and knowledge gaps on the purpose of maintaining privacy, dignity and confidentiality in healthcare.

One IRN commented:

> “They did not have a room/space that they were able to undertake any counselling despite trying to fight to give them an area to maintain confidentiality. This meant that bereaved families were counseled in the corridors and pre and post HIV counselling was done at the bedside”

Table 3.9. Outcome 9: Infection Prevention and Control (IPC) – How well was IPC managed in the project?

	OCA Nurses EoM Reports (March 2019 - September 2020)
N	69
Mean	6.2

SD	2.2

The ‘IPC’ free-text comments primarily involved obstacles to IPC such as structural issues (e.g. lack of handwashing points, no waste zone, lack of running water, staff shortages), overcrowding due to patient influx (e.g. multiple patients per bed, increased workload, lack of bed spacing), and supply gaps (e.g. hand sanitizer, soap, gloves). Clearly, these are important insights for guiding interventions to improve IPC.

Table 3.10. Quality of Aseptic Technique – How well were invasive procedures performed (eg. Urinary catheter insertion) in the project?

	OCA Nurses EoM Reports (March 2019 - September 2020)
N	60
Mean	6.3
SD	2.1

According to the ‘aseptic’ free-text comments aseptic techniques were not done well due to “inadequate structure and supplies” and “lack of or limited knowledge”. IRNs identified concerns about the reuse of one-time use materials (e.g. catheters), for example. Similarly, successful aseptic techniques were attributed to adequate training, ongoing evaluation and availability of materials.

Table 3.11. Outcome 11: Sterilization Management – How well was sterilization managed in the project?

	OCA Nurses EoM Reports (March 2019 - September 2020)
N	49
Mean	7.0
SD	3.1

41% of the ‘sterilization management’ free-text comments indicated that sterilization was not considered within their scope. 31% of the comments stated that it

was done well, 16% said that it was improving, and only 8% indicated that it was being done badly or not according to the protocol. Trainings were indicated to be needed.

Table 3.12. Outcome 12: Incident Reporting – How well were nursing/medical incidents reported in the project?

	OCA Nurses EoM Reports (March 2019 - September 2020)
N	68
Mean	5.8
SD	3.3

29% of 'incident reporting' free-text comments reported that the system was functioning well or improving, 14% reported that it was not being done well and 3% reported that it was sometimes done well. The rest of the comments indicated that they were not sure or that there were no medical incidents. Through my analysis, the IRNs' comments revealed "blame culture", difficulties with working with MOH, knowledge gaps, and lack of reinforcement or follow up as the reasons the low score of 5.8/10.

Table 3.13 . Outcome 13: Nursing Resources – How well did the MSF Nursing Guidelines meet your needs?

	OCA Nurses EoM Reports (March 2019 - September 2020)
N	67
Mean	6.9
SD	3.0

Free-text comments related to the 'nursing guidelines' were divided into positivity towards the guidelines (50%), comments stating that the guidelines were not up to date (15%), comments that guidelines were not used (6%) and comments that guidelines were not available (8%).

Table 3.14. Outcome 14: Knowledge and Skills of Locally-Recruited Nurses (LRNs) – Please assess the general competence of staff (i.e. did they have the knowledge and the skills to fulfill their role?)

	OCA Nurses EoM Reports (March 2019 - September 2020)
N	73
Mean	6.4
SD	2.0

'LRNs Knowledge' received scores in the EoM survey that ranged between 2/10 and 10/10. Many of the comments were challenging for me to categorize. However, it seems they identified three 'needs' in the healthcare setting: continuous training/reinforcement of skills, building foundational skills like critical thinking, and re-focussing on MSF guidelines and protocols to guide training (to promote continuity).

Table 3.15. Outcome 15: Attitude and Motivation of LRNs – Please assess the general attitude and motivation amongst the staff?

	OCA Nurses EoM Reports (March 2019 - September 2020)
N	73
Mean	7.3
SD	2.1

Despite an overall consistent and relatively satisfactory averaged score, 'LRNs' motivation' received scores ranging from 0/10 and 10/10. As I describe further below, IRNs' perspectives on staff motivation were, in fact, elaborate and complex. However, such complexity was not conveyed in the relatively quite high and consistent ranking of staff motivation.

Additional Data in EoM Survey

Also included in the EoM survey was a section asking the IRNs to indicate their recommendations for improvement and their top challenge to be solved. A summary of the recommendations according to IRNs who completed the EoM survey is found in figure 3.1. I devised the four categories based on thematic coding of the responses.

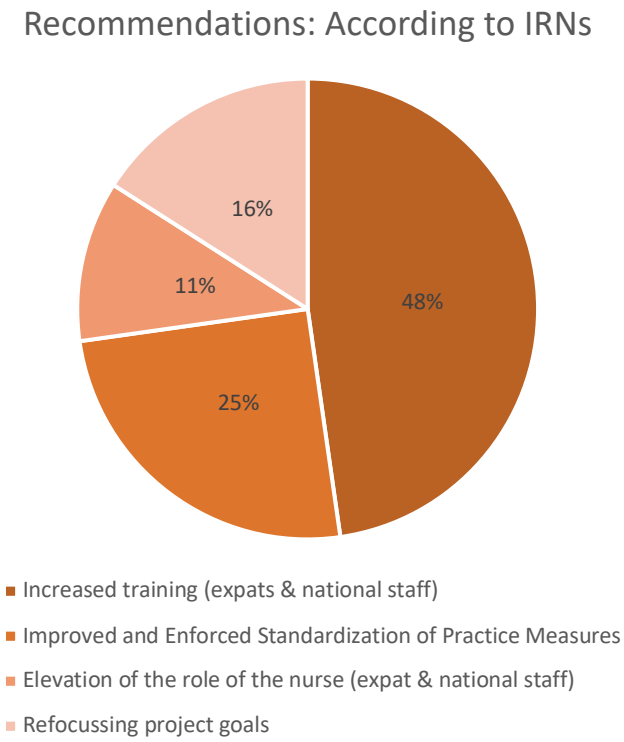

Figure 3.1. Recommendations - Do you have any recommendations for the development of nursing care in MSF and in turn the improvement of the services to our beneficiaries?

These are broad categories encompassing many related issues. The category of "elevation of the role of the nurse" might seem abstract, but responses under this grouping reflected a perspective among respondents that nurses have been under-appreciated. As one nurse articulated their recommendation for improvement:

> "Firstly, I think supporting nurses to feel valued and to recognize that their contribution to compassionate, high quality nursing care is important in the wider team and overall goal to save lives and ease suffering. If we can empower nurses to believe they are important, this would be my starting point."

A summary of the top priorities to be solved according to IRNs who completed the EoM survey are found in figure 3.2. Again, these are categories I identified based on thematic coding of all responses. Project specific issues (15%) pertain to specific issues such as improving access to the population.

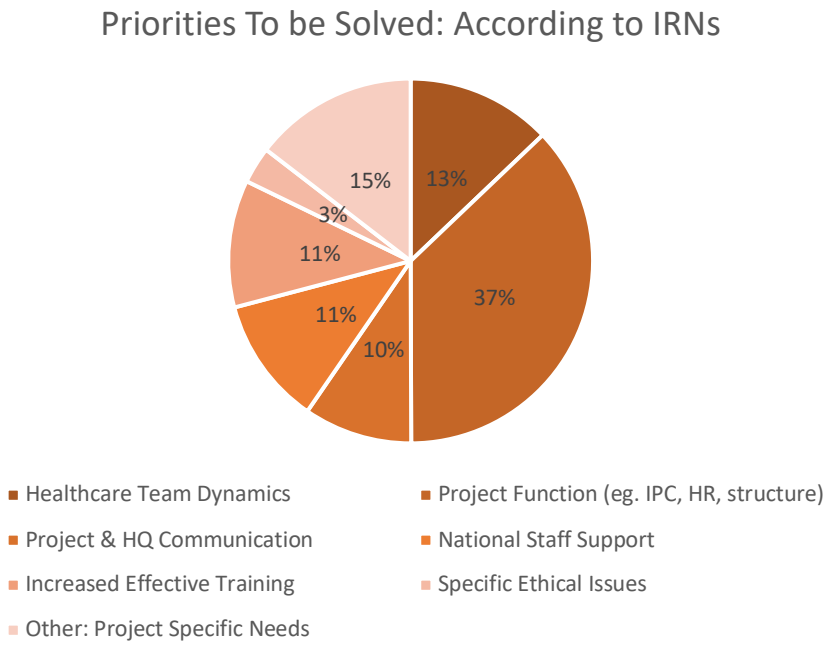

Figure 3.2. Priorities to be Solved: Of all the challenges you faced, if you could prioritize one to be solved today, which one would it be?

It is important to note that the survey does not explicitly collect data about the IRNs' prioritized recommendations or identified top challenges (aside from elements of 'project function'). Without these extra open-ended questions in the survey, these kinds of priorities and challenges, and weighting between all priorities, would not be known.

3.2.2. Interview Data Findings

The open-ended interviews with fifteen IRNs included questions focussing on their perceptions of the EoM survey as a data collection instrument, obstacles to improving QoC, and communication within MSF. The following themes emerged in relation to the EoM survey as a method of data collection: 'veiled complexity of number scores', 'avoiding the deeper issues' and 'hints of important topics'.

The Veiled Complexity of Number Scores

This theme concerns the understandings that the EoM survey cannot reveal due to its format. It refers to issues that may have not been illustrated clearly in the survey, but which proved important in the discussions with the IRNs. To illustrate this, I will give

three specific examples of how the EoM survey fails to capture what the interview could. These include the arbitrariness of number scores; predisposition factors affecting scores; and larger issues at play, but not captured.

Arbitrariness of Number Scores

The number scores tended toward ambiguity. On the subject of "LRN knowledge", one free-text comment in the survey stated:

> "All of them have no education in nursing. Some of them are very good and some of them not, so I would say altogether is average".

This was scored a 5/10. However, is averaging out LRN knowledge a credible way to score this outcome? It is understandably scored this way, but it does not effectively represent that half the staff excel, while half the staff are incompetent. The impact on QoC could be drastic and requires more explanation as to the contextual reasons why this is being permitted and how it could be improved.

It was also noted that the number scores did not always align with the free-text comment. An example is in the category of infection and prevention control (IPC) where four times a score of 4/10 was provided. These four comments accompanied the score of 4/10:

Country of Project	Score	Free-text Comment
Iraq	4/10	"Good theoretical knowledge but even after some training and reminders fall back to old behaviors and not too much respect for basics"
Nigeria	4/10	"Improved a lot during my mission. Supervision has to be stronger. Supervisor for IPC would be useful"
Syria	4/10	"IPC was not taught before"
Venezuela	4/10	"We tried our best, but in the PHCC I did not have soap and running water for example."

This illustrates a range of responses that could indicate a "4/10". The score might have been a result of a complete lack of training in this area, or a lack of basic resources to implement it. Without contextual understanding of the project and without

understanding the perspectives driving a particular score, the survey does not enable healthcare planners to make targeted interventions to improve outcomes.

Even within the same project in Central African Republic (CAR), these two scores for how well privacy, dignity and confidentiality were managed shows variability:

Country of Project	Score	Free-Text Comment
CAR	7/10	"The majority of our patients are children who are sometimes put two per bed and their mothers, the rooms being too small and the capacity of reception being insufficient, adults with different surgical problems are mixed in the rooms where there are beds too close together.
CAR	4/10	Difficult for patients to have privacy when there are 2 or 3 patients in 1 bed."

Both commented on the issue of inadequate space as affecting their score, however, the scores were drastically differently. These examples show that each IRN's perception is uniquely defined by factors outside of what the EoM survey can measure. This could be related to personal standards, experiences and expectations. It could also be related to their mood (ie. upset with the mission, eagerness to go home).

Predisposition Factors Affecting Scores

In the IRN interviews, what was revealed were strong feelings towards each nurse's mission(s). These ranged from feelings of frustration or disillusionment to feelings of accomplishment or satisfaction. When asked about the IRNs' motivations for completing the survey (or other reporting mechanisms like this), responses varied considerably as seen in these comments:

An IRN mentioned that she did not understand where the information was going, but if it was going to help, she was happy to contribute:

> "I think there must be a reason why they're sending them out and MSF tries to always do better and to improve what they're doing…I do believe in research and I want to contribute to that…I would definitely fill them out honestly."

Another IRN mentioned that she would fill it out in the hopes of seeing results and as a way of connecting with HQ:

> "I think the motivation is …you kind of want to tell someone about what's happening, or you want them to know, because it's not always feeling super connected to headquarters in the field. So, I think that's the motivation. I think especially after you do it once, and then you see the results at the end of every year. You're kind of like, okay, someone's looking at this, like this is turning into a thing."

Another IRN, when asked if she had confidence that the information that was being recorded in the survey was being acknowledged by HQ, she said:

> "Not necessarily, no. I think that a lot of things that are communicated we don't really know if people are just seeing it as data and then moving on or if anything will actually be done. Because a lot of stuff, you just feel like you're talking and you share things, and then you don't see any way that it may be changed. "

An IRN mentioned he had to fill out the survey three times because it failed to upload stated by the time he had completed it, he was annoyed:

> "Yeah, I did have the right intentions at the beginning."

Motivation and confidence in the process likely affected how thoroughly and thoughtfully the IRNs completed the survey.

Larger Issues at Play, But Not Captured

Deeply engrained in the themes extracted from the interviews, but not completely clear in the EoM survey is the issue of frequently revolving internationally recruited staff and the effect that has on the locally recruited staff in the projects. The EoM survey did include comments regarding LRN knowledge and motivation but failed to capture a compelling body of analysis that might inform an actual change. The survey comments were often nuanced with frustration at issues like the perception of staff lacking compliance, difficulty working with MOH staff or low skill levels requiring more training. Additionally, there were a lot of positive comments regarding locally recruited staff.

LRNs vary in terms of formal education and exist as the constant amidst the rotation of internationally recruited staff entering and exiting projects. They are central to the project functioning. As noted above, LRN competence received scores in the EoM survey that ranged between 2/10 and 10/10 and LRN motivation received scores ranging

from 0/10 and 10/10. Failure to probe into the specifics underlying the range of scores across the organization is a knowledge opportunity lost in terms of understanding how to correct issues. One IRN explained how context was so important to this measure:

> "I've been to in South Sudan, I mean, you have maybe one nurse on shift and the rest nurse assistants who are super skilled from a technical perspective, they can put an IV in from across the room in a baby that's 700 grams like I could never do, but they also can't read or write and they also have a different understanding of what is a priority"

On the other hand, in the interviews, IRNs revealed the larger issue affecting LRNs. Described multiple times in the IRN interviews as the largest obstacle to improving QoC in the projects is the issue of the revolving medical internationally recruited staff entering the projects with their own agendas and ways of doing things. It is not shocking that though many internationally recruited staff view LRNs as being a challenge to manage (seen in many EoM comments pleading for more training), the feeling is likely mutual. Amplifying the contradiction of internationally recruited staff imparting their personal priorities and education on the LRN, one IRN said:

> "When you're working with the guys, they are brilliant, I'm not saying anything bad about them, but some of their training is limited. Some of the training they get is from different people. And I know it's confusing for them, because we always emphasize on different things."

IRNs attributed this to lack of standardization and active enforcement of protocols in the projects. Many IRNs had stories supporting this. One example was when an internationally recruited doctor wanted to implement his own protocols from his home country in the project. This confused the locally recruited medical staff and also cascaded into supply and pharmacy ruptures as certain antibiotics were used more than had been forecasted. Not only did this create larger scale problems, but as one IRN mentioned, it alienated the locally recruited medical staff because it made their treatment plans wrong or inferior, even though it was part of the MSF guidelines. As mentioned previously, they are the constant in the project. It was accurately stated that:

> "…everybody does everything different. I think there should be standardized training, not just for us, but also for the local staff, so we're all singing off the same sheet and we all understand where we're coming from."

IRNs observed the need for LRNs to have ownership over any improvement implementations instead of having an agenda pushed on them. Many IRNs noted that in

the presence of authentic collaboration within the healthcare team as a whole, lasting improvements occurred. This was done well in some accounts. In implementing a LRN-driven goal setting strategy for each ward in the hospital, one IRN said:

> "It was awesome. It stuck. And it was not run by international. It was all national run. And they ran it so well. And I would just check in every once in a while to see how things are going. And they said that was the best thing that they did that year. They loved it and appreciated it."

IRNs reiterated the need to empower LRNs. In reference to a LRN supervisor, one IRN stated,

> "He's the staying power, he's the institutional memory. So, if I can inculcate him with those values, then that is better than me trying to push my own agenda".

Multiple times IRNs mentioned the need to promote LRN autonomy in practice, healthcare team collaboration and platforms for voicing concerns, especially in cultures where nurses are viewed as inferior parts of the healthcare team. IRNs cited times when MSF management's arrogant reactions to ward level activities negatively impacted LRNs.

In the interviews, multiple IRNs reported sensing the 'fresh start' that LRNs embraced during the changing of the medical internationally recruited staff. It was stated multiple times that if the LRNs did not like the IRN's plan, focus, or attitudes, they would complacently wait for their end of mission to arrive, understanding that there would be no continuity or follow-up on what was previously implemented. Factors springing from the inconsistency of medical internationally recruited staff, dramatically affects QoC in the projects. Though historically, "trail blazing" was often revered in humanitarian healthcare, building on the foundational knowledge of LRNs is much more innovative.

Avoiding the deeper issues

The EoM survey also fails to capture the internal dilemmas that many IRNs face in delivering on QoC. One IRN described this as a struggle to find balance between: "the duty of care to provide a service versus the duty of care to provide a high-quality service". The IRNs commented that this type of deliberation was outside of their normal scope of practice in their home countries and was a challenge to navigate. Another IRN recounted numerous times in which she struggled because the resources available fell

short for the population in need of those services. Barely managing to care for the people that had already been admitted, she struggled with the push from the project-level coordination team to continue to admit more people. A recognized problem noted in the interviews was the difficulty of implementing unrealistic standards given the context. This is a contentious issue as noted through the spectrum of responses from the IRNs. These are clearly moral dilemmas as well as practical dilemmas for the nurses who are trying to respond to them.

Many other personal stories were shared during the interviews that would benefit the organizational learning and help to prepare future IRNs being deployed to the field. However, these stories were not captured on the EoM survey. The free-text comments sometimes alluded to something important, but lacked context and depth needed for understanding. For instance, the survey did not ask about 'disconnect between the project and HQ', however, it was a noted issue that emerged from some free-text comments. Most IRNs could not reference any time in which strategic planning or overall project objectives was incorporated into their orientation or briefings (if those occurred). This subsequently led to misunderstandings largely surrounding the belief that HQ was out of touch with project activities. When asked if there was something they would want to communicate to HQ to improve QoC, one IRN stated:

> "Maybe you're [HQ] not even focusing on what needs to be focused on because you're out of the field. And I would get like that, too, if I were out of the field for a while, just its normal".

She further indicated the importance of field visits and personal relationship development between HQ and the projects.

The disconnect created confusion for many IRNs. The IRNs are managing the healthcare services in their department, but operational strategy is important to understand because it helps to explain priorities. It makes the difference between a unified knowing of what is hoped to be accomplished and the frustration that many IRNs reported in terms of not feeling heard due to blockages in the "lines of communication" in the hierarchical structure of MSF.

One IRN stated that when she did get a response from HQ over an issue that she and her team were confused and deeply concerned with, the response was: "We can't just change it because you think we should change it". This was in response to

suggesting that a "top-down" priority be implemented a different way because it lacked the 'buy in' of the LRNs. She felt misunderstood and felt that her experience-based knowledge of the project was dismissed. Another IRN reconfirmed this sentiment, stating: "It's just top-down telling people, and then not listening, not responding, not engaging, not receiving feedback".

Another struggle occurred when IRNs witnessed a healthcare need and subsequently wanted to meet that need but were instructed that they could not due to MSF decisions. For example, one IRN mentioned that repeatedly she raised the need for medication to treat high blood pressure, but the request for the medication was denied because the care for non-communicable diseases was long-term and outside MSF's mandate. She spoke of how she understood this from a rational point of view, but she struggled with what she saw happening before her as people were suffering as result. Another IRN who experienced a similar situation stated: "MSF is not just about saving lives, as many lives as possible. It's about alleviating suffering". She gave the example of inadequate pain medication in the project leading to uncomfortable deaths for many people. She felt there was a disconnect between what was a need on the ground versus what she had to fight for in order to provide care the best way possible. Though on the EoM survey there is room for top recommendations and priorities for change, there isn't the space to grasp the depth of the issue through lived stories. These experiences have implications for IRNs' overall perspectives on the efficacy of the organization, the projects, and their contributions.

Hints of important topics

A major benefit of the EoM survey that was confirmed through the interviews was that the EoM survey can reveal non-specific, inter-categorical information. This requires "reading between the lines" noted in highlighting themes that emerge in different outcomes on the survey. For example, the theme of "the need to standardize processes" within the projects was noted in nearly every outcome's free-text comments from handover, to nursing guidelines, to national staff motivation to pharmacy management. Reaffirmed in the IRN interviews, the need was based on two intentions: 1) moving from project to project would not require time wasted learning a new project's specific systems; 2) the LRNs would benefit from consistency.

The interviews made it clear that many IRNs are 'recreating the wheel' with each deployment. When IRNs were asked "How do you assess QoC in the field?", the answers were numerous. At the same time, IRNs noted that it did not contribute to continuity of care when each incoming international staff had a new plan and different ways of assessing QoC. IRNs also noted that this exacerbates challenges for LRNs, who are the institutional memory, and yet are being expected to learn "new ways" with each changing internationally recruited medical staff.

3.3. Findings for RQ2: How does this collected knowledge reflect congruence or disjuncture between "on the ground" realities in humanitarian projects and HQ perceptions?

To answer the second research question, the data assembled were presented to the HQ key informants. Additionally, MSF's strategic plan was examined as a representation of operational strategy. The following conclusions were made about the congruency and disjuncture existing between levels of implementation (the field) and management (HQ).

3.3.1. The Strategic Plan

MSF OCA's Strategic Plan for 2020-2023 is a document describing the MSF OCA vision evolving in relation to present conditions. This 22-page document illustrates a cohesive purpose and shared drive between the field and HQ to do the best that can be done to ease peoples' suffering globally. Issues raised by the IRNs were specifically mentioned in the strategic plan though it seems unlikely that this knowledge was sourced from the IRN EoM survey. It does however indicate congruency between field perspectives and HQ operational strategy. Some of those topics included the need to address antimicrobial resistance (AMR) which was a topic mentioned twice in the EoM survey free-text comments, the need to remedy supply chain issues as indicated in the decline in score in the EoM survey, the need for improved "incident reporting" processes as evidenced in the free-text comments illustrating confusion on the topic, and the need to utilize captured knowledge efficiently as evidenced in IRNs' optimistic view of the EoM survey potential (MSF OCA Strategic Plan, 2020).

However, more specifically linked to the direct healthcare provided in the projects, the strategic plan stated that:

> "Several factors can influence the quality of healthcare we provide. In order to achieve sustained improvements, our approach needs to be systematic, field driven and supported by an organization-wide commitment. "(MSF OCA Strategic Plan, 2020, p. 12).

The term "field driven" is ambiguous but seems to imply a move from 'top-down' priority setting to a more local-led version of MSF. This aligns with the IRNs' perspectives on locally recruited staff ownership of healthcare activities and the noted struggle with 'top-down' priorities. At the same time, it is unclear if this strategic plan was developed with field participation.

3.3.2. The HQ Interviews

The three individuals interviewed at the HQ level and the two individuals at the coordination level were cognizant of field challenges as expressed by the IRNs. These individuals all had a history of field experience as is common with the medical representation at the OC level. No one was surprised by noted supply chain issues, pharmaceutical ruptures, challenges with aseptic technique or proper handovers as indicated by the EoM survey data. These were ongoing issues that were not forgotten, but largely contextual, difficult to solve and involve incremental training to fill knowledge gaps.

EoM Survey Perspective

The EoM survey was largely regarded as very useful. As one HQ key informant explained when asked about how the information collected through the survey was used:

> "I cannot emphasize by just having sheer numbers the impact that has for me. To be able to say that 75% of the nursing population think the sterilizing processes are unsafe has clout…and then for me to be able to say, across all countries."

She stated that the nursing insight harvested from the EoM surveys was shared at the medical and operation levels of OCA and was effective not only because of the numbers but because of the associated explanations found in the free-text comments.

She felt that she was able to use it as evidence, emphasizing it as a tool not only for directing care initiatives but holding those in HQ accountable to the knowledge captured.

The survey was discussed as a systematic method of collecting data to drive priorities in OCA, feeding into strategic planning and used to “push certain topics” of importance. When asked how specifically this would change the next strategic plan, the HQ interviewee mentioned the focus on pain management, of patient dignity, and palliative care which were all issues demonstrated repeatedly in the EoM survey feedback and the IRN interviews.

The interviewees were asked how they perceived the numerical scores made available on the EoM survey. In other words, I asked for their interpretations. These were the responses:

> “We don't have clear standards as much as you can try and write what is zero or what is 10 in the question, it's still very subjective. We have such diversity of nationalities and countries of training in the nursing pool and we came through all these health systems, and so what might be expected by you is perhaps not expected by another nurse.”
>
> “You know, I mean, I guess holding steady is obviously better than getting worse. I don't consider going from 5.7 to 5.9 to really be improvement.”
>
> “From my perspective, I would need to see where they’re [the scores] coming from, because I need to see, are they the same project? …Or are we actually comparing five projects over here and five different ones over there? Or a mixture? And then have there been any interventions?”

(It is important to note that the EoM survey is not presently used to break down data according to project.)

An additional concern about the survey, as expressed in the HQ interviews, was that the results were not available in a timely manner. For example, this data set included information from an 18-month period meaning that an issue could have been flagged 16 months ago in the survey and had been persisting since then. The OCA Nursing Advisor did look at each survey upon completion, but from the findings discussed above, there is a lot of valuable knowledge that is found ‘between the lines’ when looking at the data as a whole.

Felt Separation from the Field

The challenge of the HQ/field separation was fully acknowledged by the interviewees from HQ. A question that was expressed by one interviewee illustrated the challenge of grappling with what the EoM survey produces amidst other competing influences, asking:

> "How do we take this information, sort of within the larger picture of feedback and reporting and our own impressions of how things are going in the field?"

On the other hand, in another interview, regarding her role within OCA HQ and receiving the feedback from the EoM survey, she stated:

> "I think they [other HQ departments] can really see how things that they work on translate into action in the field or are effecting change in the field. Whereas a topic like mine it's so vast that it's really hard to see efforts at my level being trickled down to where it actually needs to go. So yeah, getting information from an End of Mission survey is really interesting, but it also kind of highlights to me that gap even more actually."

Overall, the value and priority of capturing knowledge and translating it into actionable points was noted repeatedly. Those from a medical background demonstrated understanding towards the struggles in the field and were actively trying to initiate ways to fill the divide between HQ and the projects. One interviewee stated:

> "Because in headquarters in my experience, I often field far away from the field and it's hard to see how the things that you work on impact an actual field project or have any effect on what's happening on the ground"

Specific to a theme that emerged from the IRN interviews, it was expressed that the biggest barrier to QoC was perceived to be empowering the locally recruited staff to "own" quality improvement (QI). One interviewee also acknowledged her frustration in maintaining project QI plans when combatted with the issue of constantly changing internationally recruited staff. This disrupted the continuity necessary for successful intervention implementation from HQ to the field and was compounded by poor handovers and individual agendas.

The Value of Nurses

According to the HQ interviews understanding the value of nurses within MSF is changing, but still requires work. However, those interviewed had this to say about the role of nurses:

> "…nurses have really unparalleled perspectives as care providers into quality of care. Now, whether or not nurses have the capacity to communicate that [perspective], I think is a very different question. I think it [nursing] is, in MSF, an element of the healthcare workforce that has been undervalued and unseen for a long time. I think it is still undervalued and unseen."

> "I can't imagine a healthcare organization in North America…and other developed countries, in also many developing countries, who would write a strategic plan and not have an entire section devoted to nursing, acknowledging that that is our biggest workforce and that not a single patient comes into our care who doesn't interact with a nurse. MSF has not gotten that far to acknowledge and recognize nursing to that extent. I think that's a shame. I think our care would be safer and our care would be more person-centered if we included nursing at that level."

> "MSF somehow needs to figure out how to get all those nursing leadership voices heard which includes the managers and the supervisors in the projects, but, yeah, one step at a time."

> "I think there is a broader ambition for everybody to give feedback and raise their concerns. I think there is a broader ambition to do that with all of our locally recruited staff and our internationally recruited staff. I think there is that understanding that these feedback loops and these mechanisms do ensure safer care."

Calling nurses "an untapped resource", an HQ interviewee stated that if the right systems were implemented to give nurses a chance to use their collective voice it would benefit the organization. Though it was acknowledged that progress has been made, it was also stated that if nursing was a larger focus, care would be safer and more person-centered which ultimately is the main goal of the MSF strategic vision.

Chapter 4.

Discussion

Having worked with MSF created an instant bond with anyone I subsequently met who had also done so. Stories fused this bond which seems to speak to some unidentified predilection that comes from being in the company of someone who can understand. These stories revealed some of the greatest learning lessons I could have received about working in the field. The internationally recruited nurse (IRN) interviews I conducted had the same effect. The nature of MSF is that IRNs rotate positions frequently and the duration of career paths within MSF are variable. Unfortunately, as a result, many learning lessons are lost if not captured properly and the danger (and likelihood) of repeatedly encountering the same problems is high. Ultimately, I found that I gained a lot from listening to these firsthand experiences. They seemed to breathe life into what were once just statistics on a paper.

The intent of this research project was to examine the capability of IRNs to transfer knowledge regarding quality of care (QoC) in the field. This was investigated through analyzing the data captured by a mechanism called the EoM survey that IRNs complete when their field assignment ends. I conducted semi-structured interviews with a sampling of IRNs regarding the survey and related QoC topics. These interviews revealed that the nurses had other types of insights to offer for improving QoC in humanitarian settings. At present, these insights seem tangential rather than systematically incorporated into MSF learning. I also conducted semi-structured interviews with a sampling of HQ personnel to elicit responses to the data to see if HQ perceptions aligned with the field realities as represented by the IRNs.

4.1. Main Findings

4.1.1. Valuable But Incomplete Nature of Survey Data

The value of quantitative research is its ability to collect data from a large sample and produce a quick analysis of a certain outcome (Rahman, 2016). On the other hand,

it lacks a comprehensive perspective as it fails to capture individual experiences (Rahman, 2016). Survey methods of quantitative data collection have the purpose of producing knowledge that is broadly applicable (Starr, 2012). However, the literature notes that more research should be directed towards the challenges of this method in producing quality data (Engel, Jann, Lynn, Scherpenzeel & Surgis, 2016). The advantages of survey instruments to gather data include maintained anonymity, low cost and minimal selection bias (Centers for Disease Control and Prevention, 2019). Alternatively, the disadvantages include the time commitment required to complete the survey, the potential for low response rate and misunderstanding of the questions, as well as minimal control over data quality (Centers for Disease Control and Prevention, 2019).

In using surveys as a means of data collection, three elements to consider include: 1) relevancy and interest of survey questions, 2) generalizability of answers related to the possibility of sample bias, and 3) production of non-ambiguous data with adequate information (Starr, 2012). Although the EoM survey included questions which should be of interest to IRNs, there is such diversity in projects that the EoM survey cannot be relevant to every IRN's experience possibly decreasing the motivation to fill it out thoughtfully. In addition, the survey did include demographics to try and avoid sample bias and ensure the answers came from a representative portion of projects (though this was a challenge). Finally, the EoM survey attempted to collect adequate information through the addition of the free-text comments, however, it was noted from the IRN interviews that this was not sufficient.

Though undoubtedly, a survey can produce valuable information, data collecting methods need to be effectively conducted in order to ensure the highest level of accuracy and reliability as possible (Engel et al., 2016). This is reflected in the following analysis and discussion of MSF's EoM survey's advantages and disadvantages.

This study revealed that the EoM survey serves the purpose of systematically collecting IRNs' experience-based knowledge from the field to inform on specific indicators of QoC. In triangulating the data from the EoM survey, the IRN interviews and the HQ interviews, it can be concluded that advantageously, the survey is capable of collecting a vast amount of IRNs' experience-based judgments across the organization's projects. This knowledge can provide statistics that can be used to plan for resource

allocation or to push for certain interventions. Though challenging at this point to monitor data trends overtime in this way, it is a starting point that can flag major concerns and help support of evolution of the EoM survey towards a tool that is more effective. However, this method of knowledge transfer was not without limits.

EoM survey falls short in four main ways. First, it fails to grasp the contextual intricacies that allow for meaningful understanding. Many projects have unique characteristics, and so applying one survey with set indicators has its challenges. Considerations for elemental factors such as duration of project existence, project objectives, and national context are impossible to gather from the data without an intensive deep dive. Secondly, it is difficult to identify deeper issues of concerns to IRNs that should be dialogued to extract veritable lessons from one another's experience. Thirdly, though the survey can point towards additional relevant issues outside of the scope of the survey, these require more focused analysis, potentially over time, which is something unfeasible on a regular basis in a busy organization. Lastly, the importance of completing the survey or access to the survey is lacking given the low return rate of completed surveys.

As noted in chapter three, the HQ representatives were not surprised by the data trends provided by the EoM survey. The QoC outcomes with measured declines in scores as well as outcomes with continuously low scores were concerning but were not unexpected. These field realities matched the perceptions of those in HQ. There was also congruence in HQ perspectives on the power of quantitative data for advocating and advancing certain initiatives, as well as the limitations of a survey for assessing QoC in projects considering the arbitrariness of numbers and unknown pre-dispositions of IRNs completing the survey. How to gauge a score remains inconclusive when interpreting the data. What constituted a satisfactory rating? What increase in score constituted an improvement? Is it enough to say that there were not any dramatic declines in scores?

The HQ interviews reflected a unified view that there was value in elevating the voices of IRNs. However, there was perceived inconsistency in how the organization, as a whole, expressed this sentiment. This was attributed largely to lingering 'old school' views of the nursing profession, but the HQ personnel were hopeful that MSF was slowly

evolving towards increasingly involving nurses in the larger conversation. This included IRNs, but also the locally recruited nurses (LRN) as well.

4.2. Program Evaluation and Organizational Learning

Humanitarian organizations cannot overlook the importance of implementing mechanisms to communicate important information from the field to HQ. Though the EoM survey is one method, it is not all-encompassing. As mentioned in chapter one, an organization's greatest assets are the knowledge reservoirs found within its employees which, if untapped are considered a loss to the organization. Also noted in chapter one was the case for a global shift towards a higher calibre of care even in low-resource settings. Regardless of the context, whether it is a long-term or short-term project, providing high QoC should be a top priority. Operationalizing QoC is complex and multi-faceted at the field level which is further complicated when the organization's strategic operations are designed in HQ, located in a different country. Effectively transferring knowledge within project-based organizations is a commonly faced challenge and this is only extenuated when contending with the variability of humanitarian crises (Boh, 2007).

Spreading regenerated knowledge can creatively transform existing ideas (Hargadon & Sutton, 1997). If organizations thrive off of new knowledge, methods supporting knowledge flow need to be systematically incorporated into the structure and routines of an organization (Boh, 2007). Whether formally (in an organized, systematized fashion) or informally (through casual, personal interaction), it is essential to encourage employees to contribute their expertise (Boh, 2007). Successful integration of expressed knowledge can lead to discovering cross-project solutions and transferrable lessons, based on the insight and lived experiences (Schindler & Eppler, 2003).

Humanitarian healthcare organizations necessitate a combination of program evaluation and organizational learning to pursue the goal of alleviating the suffering of the populations they seek to serve. These processes need to be continuous in order to match the constantly evolving environments of humanitarian healthcare. Learning through evaluation is required to remain relevant and effective while providing high-calibre care for diverse population needs.

4.2.1. Program Evaluation Framework

This study is aligned with the program evaluation literature which is designed to improve health related interventions or activities through comprehensive data collection. The intention is to maximize effectiveness through identifying necessary improvements and in doing so, make a difference in peoples' healthcare experiences (Centers for Disease Control and Prevention, 2019). When implemented with mixed methods, such as in this study, it can build a meaningful guide to improving care as it can determine the barriers to improving a particular outcome.

Program evaluation differs from research in that it accounts for the uncontrollable elements that are characteristic of field settings (Centers for Disease Control and Prevention, 2019). The veracity of the findings acquired from this type of evaluation determine effectiveness and should consider obstacles that regularly define the realities of the field (Centers for Disease Control and Prevention, 2019). In this study, I found that the EoM survey required contextual understanding. This is aligned with program evaluation which seeks to understand context in order to answer the "why" of why identified improvements are needed (Centers for Disease Control and Prevention, 2019; Fraser Health Authority, 2009). This framework requires the consideration of the utility, the feasibility, the propriety and the accuracy of this type of evaluation (Centers for Disease Control and Prevention, 2019). In other words, it needs to be intentional, realistic, ethical and hold worth.

Program evaluation functions well with set indicators to help measure change and builds reliability for the knowledge that is being acquired through evidence collection (Centers for Disease Control and Prevention, 2019). Indicators help to make the numerical scores on the survey more consistent through directing what a 1/10 means versus a 6/10. An example for the topic of aseptic technique could be: "Twice a year, proper wound care technique is demonstrated by each locally recruited nurse as observed by the IRN". This indicator serves the purpose of ensuring proper technique but also works to identify knowledge gaps.

4.2.2. Organizational Learning

Organizational learning from implicit knowledge is essential but challenging as the intuitive expertise amalgamated through lived experience is difficult to precisely explain and therefore difficult to codify. In learning organizations, sharing experiences as well as converting implicit knowledge to explicit knowledge is important to capture key intangible knowledge (see figure 4.1). This is particularly true in project-based organizations like humanitarian organizations, where staff frequently move around and the operations level is centralized. The EoM survey does contribute to facilitating this process, however, as mentioned, there are limitations to this method of knowledge harvesting. As seen in the findings of this study, the EoM survey is not suited to transfer all kinds of knowledge relevant to QoC. The IRN interviews, through informal methods of storytelling and conversation, revealed some complex issues behind the numbers.

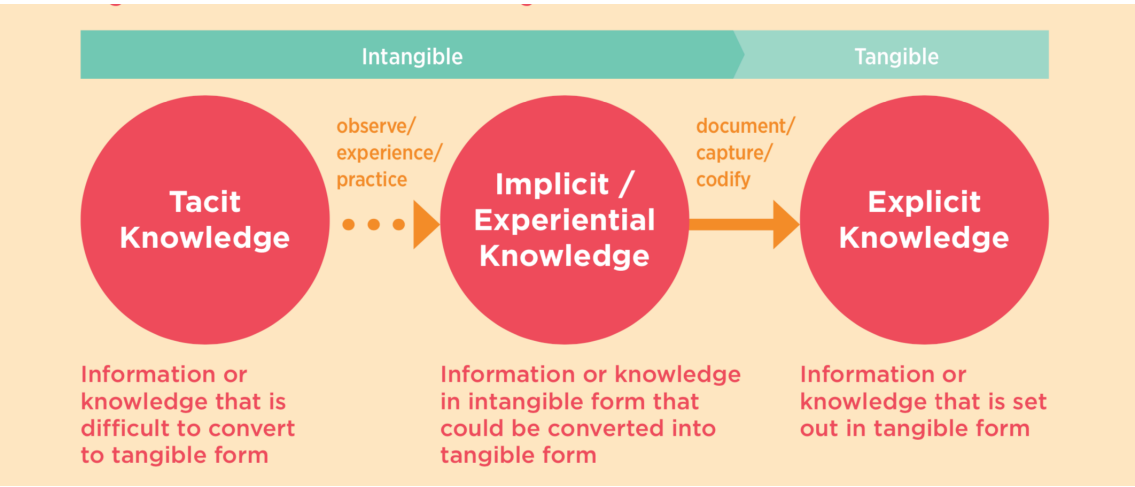

Figure 4.1. Forms of Knowledge
(From Janus, 2016, p.5)

The pre-requisite for knowledge transfer is absorptive capacity, a term coined for the intangible potential of an organization to "recognize the value of new, external information, assimilate it, and apply it to commercial ends" (Cohen & Levinthal, 1990, p. 128). The operational center is the brain of an organization and must evoke absorptive capacity in order to capitalize on the innovation capability that knowledge acquisition can cultivate (Cohen & Levinthal, 1990). In humanitarian organizations this looks different than in a business. Rather than trying to deliver a new and improved product, absorptive capacity allows the organization to be adaptive and provide high quality services. It involves two steps: 1) recognizing the value of certain information, which I contend

directly links to recognizing the value in the sources of the information (in this case the nurses) and 2) applying the new knowledge received (in actionable plans). If the OC lacks absorptive capacity, knowledge is either lost, or if captured, not utilized effectively.

Studies have shown the positive effect that knowledge sharing has on absorptive capacity (Ali, Musawir & Ali, 2018). The challenge of distinguishing knowledge sharing from knowledge transfer is widely understood. For the purposes of this discussion, knowledge sharing is the social or collaborative exchange of tacit knowledge within an organization ('horizontally' between fellow colleagues) (Nonaka, 1994), whereas knowledge transfer involves communicating knowledge to a higher level within the organization ('vertically' between the field and HQ) (Argote and Ingram, 2000). Together, these two concepts produce what I will refer to as 'knowledge flow'.

As mentioned before, humanitarian organizations share similar learning interests to businesses, and capitalizing on innovation capabilities should be at the forefront of their objectives. According to the research, effective absorptive capacity and efficient project performance are interconnected (Ali et al., 2018). If knowledge is transferred not only in statistics but in stories, then this indicates that absorptive capacity involves mastering the art of listening.

Organizations require cultivating an "architecture of listening" as opposed to maintaining an "architecture of speaking" (Macnamara, 2016, p. 47). Located within the organizational literature, this involves being open and responsive to the 'voices' of the employees. Effective listening necessitates closing "'the listening loop' by communicating (1) what was done as a result of listening, and/or (2) why some things that are requested cannot be done." (Macnamara, 2016, p.10). This elucidates that organizations need to be responsive to received knowledge whether actionable or not, as a fundamental reaction for nurturing knowledge flows.

4.3. Experience-Based Knowledge Flows Within a Humanitarian Organization

In this study, I examined experience-based knowledge transfers from IRNs to HQ in the form of the EoM survey. However, the broader implication of this study is

appreciation for implicit knowledge flows (both transferring and sharing knowledge) that can inform on QoC in humanitarian settings.

4.3.1. Creating an Organizational Culture for Knowledge Sharing

Knowledge sharing mechanisms need to be specific to the characteristics of the organization. Humanitarian organizations, being heterogenous in nature, require methods that are personalized, codifiable and institutionalized (Boh, 2007). In other words, humanitarian organizations that seek to promote effective knowledge sharing require mechanisms of concrete documentation, interpersonal interactions and an organizational culture that endorses it.

Experiential knowledge sharing needs personal interaction to add breadth of understanding to the information. Interpersonal similarity has been found to be a key driver for effective knowledge sharing in multinational organizations like a humanitarian organization (Makela, Kalla & Piekkari, 2012). Knowledge sharing can be nurtured through the development of social capital within organizations by breaking down inhibiting factors like individual-level biases based upon nationality and function (Makela et al, 2012). In other words, the ability to "overcome the liability of foreignness" inside a large organization comes from promoting networking, sharing organizational vision and encouraging understanding of each unit's specific function (Makela et al, 2012, p. 449). This builds an element of 'trust' which has been associated with effective knowledge sharing flow between peers, and between employees and management (Janus, 2016).

Organizations can promote a culture conducive to sharing through the establishment of "Communities of Practice" (CoPs), defined as "groups of people informally bound together by shared expertise and passion for a joint enterprise" (Wenger & Snyder, 2014, p. 139). Not specific to any profession, CoPs can be a group of musicians trying to create a new sound or a gathering of scientists who are exploring new frontiers (Wenger-Trayner & Wenger-Trayner, 2015). Given that humanitarian organizations employ people across the globe, this type of networking would be effective in an online platform. Connection can lead to creativity and allows for the discussion of difficult situations, storytelling, and collaboration on strategy for producing a higher impact in their particular contexts (Wenger & Snyder, 2014). The value of CoPs is widely

accepted in organizations that see the value of knowledge transfer and sharing (Wenger & Snyder, 2014).

Organizational culture dramatically influences the knowledge flows within an organization (Wei & Miraglia, 2017, p. 578). As such, leadership needs to be at the forefront of ensuring knowledge sharing is “a standard institutional practice” (Janus, 2016, p. 14). Through incorporating “knowledge sharing behaviour” into an employee’s performance review or enforcing it as part of a job profile, it can secure participation in the process (Janus, 2016, p.19). As an organizational expectation, inhibiting factors, such as knowledge hoarding, can be eliminated (Wei et al, 2017). However, this has also been contradicted in a study that suggested the most effective knowledge sharing came when the employees saw value in the process, not by means of coercion (Gagne, Tian, Soo, Zhang, Ho & Hosszu, 2019).

Organizations around the world have used creative strategies for sharing knowledge. In China, the Asia-Pacific Finance and Development Institute supported their staff engaging in extra-curricular activities together such as a sports or crafts. They found that this improved knowledge sharing between colleagues through fostering relationships and providing settings where the employees were naturally inclined to informally discuss work (Janus, 2016, p. 97). Another example is in Uganda where the Ministry of Agriculture, Animal Industries and Fisheries, encourages their soon-to-be retired employees to document their experiences and lessons learned through videos and notes to be kept in an online library for other employees to access (Janus, 2016, p. 96). In Colombia, an organization called DANE seeks to support knowledge sharing through large organized events upon an employee’s retirement. The intention is that the remaining employees make a presentation based on the expertise of retiring employee. This is done in front of an audience of their peers, but also in front of the retiree who can validate what is being iterated (Janus, 2016, p. 91). This is a coveted event for employees to be part of and was summarized as “repurposing” the retirees knowledge to enhance institutional memory and illustrate to the company the value of knowledge sharing (Janus, 2016, p. 91). As well, in Indonesia, the National Disaster Management Authority created “capturing” teams designed to systematically conduct interviews with key informants post-disaster in order to document their knowledge in ‘knowledge assets’ with videos to supplement the shared experiences (Janus, 2016, p. 59).

4.3.2. Transferring Knowledge Through Stories

Conveying knowledge through stories is powerful and is gaining traction in knowledge-seeking organizations (Morris & Oldroyd, 2009; Russin & Their, 2018). As mentioned before, MSF employees are full of stories. This shared trait can be capitalized on to capture knowledge if it is encouraged more intentionally by the organization. Stories stick with the listener no matter who they are (ie. the OC, a co-worker) through bringing context, added drama, providing learning lessons and ultimately painting a picture inside one's mind. This is a long-used tactic in fundraising campaigns where stories conjure images that pull on heart strings and remind a donor of why they are writing a cheque. Stories also allow important details to emerge outside of factual accounts conveyed by non-verbal cues such as facial expressions, voice inflections and body language (Wijetunge, 2012). Stories elicit responses and provide explanations. They enrich the knowledge being presented and allow the information to be more expansive in its impact. Stories have the capability of capturing experiences that explicit knowledge transfer mechanisms alone cannot.

The value of documenting knowledge should not be overlooked in place of storytelling. Stories can be used for knowledge either as 'raw' data or through systematically documenting the story as a knowledge asset which improves its availability and usefulness as a resource for fast decision-making (Janus, 2016). However, the personal interaction provided with storytelling carries weight. A combined approach is required involving the capture and validation of stories, followed by formatting the extracted knowledge into a meaningful package for the organization to understand (Janus, 2016). This quote sums it up:

> "Storytelling provides us with the essential context and other important environmental or sociological conditions at the time, which are often lost in the stark and emotionless world of the written word" (Marsh, 2015, p. 57).

4.3.3. Locating the Stories in Humanitarian Healthcare

Within organizations, if employees are reservoirs of knowledge, then in healthcare organizations, providing patient care is what fills up the reservoirs. There is growing awareness in healthcare that power resides in the stories from patients indicating that these stories can effectively alter the route of clinical practice (Haigh &

Hardy, 2010). For the purposes of this discussion, the term “narrative” and “stories” will be used interchangeably and refer to the age-old method of communicating on real life experiences in writing or speech with the intention of imparting wisdom or improving understanding (Dohan, Garrett, Rendle, Halley & Abramson, 2016, p.720).

Stories provide “context, ‘heart’ and specifics” to quantitative data (Browne & Shaller, 2018, p.4). This aligns with chapter three’s findings that suggest there are important elements missing in the EoM survey. The survey lacks the key narratives that elicit emotional responses and make the listener pay attention. Unlike what was noted in the interviews, the survey could not capture elements of context such as the physical and emotional environment and the experiences of caring for patients which in humanitarian settings, both directly impact health and healing (Laundry, 2015). In healthcare, storytelling has been described as a “lost art” within a profession that is laden with stories (Smeltzer & Vlasses, 2004). If valued and acknowledged, these stories hold the potential to direct and mould what healthcare looks like.

Healthcare organizations have a long history of spreading experience-based knowledge through storytelling. These stories can be between coworkers or the healthcare team, but also come from patients (Russin & Their, 2018). Storytelling can unravel and simplify topics to make comprehension more adhesive (Russin & Their, 2018). This was demonstrated clearly in the IRN interviews which illustrated that a topic captured in the EoM survey was much more complex than what the survey showed. Clarity and depth of understanding was gained through the narratives.

There are many reasons for supporting narratives as a type of knowledge collection. Brown and Shaller, for example, state that knowledge transferred as narratives is untainted by the specifics of a survey question and has the ability to stir up important emotions that create empathy toward a patient’s (or potentially, as in this case, a practitioner’s) experience (2018). Additionally, it is argued that patient generated stories carry truths that are difficult to forget and are able to illustrate many tangible and intangible aspects of care that the recipient may not be familiar with (Browne & Shaller, 2018). Stories can speak volumes to leadership through providing deep explanation and can be extra effective when used in conjunction with quantitative data (Browne & Shaller, 2018).

Personal experiences that are shared in stories can transcend individual organizations through illuminating shared healthcare experiences (Browne & Shaller, 2018). They can identify problems that are unique, but also generalizable and can catalyze system-level changes through bringing awareness and building a case for a strong intervention (Browne & Shaller, 2018, p. 8). Interestingly enough, though some scholars might struggle conceptually with the idea of collecting data through stories, the power of storytelling is competing with evidence-based frameworks as a new source of healthcare knowledge (Haigh & Hardy, 2011). In light of this study, it is clear that synthesizing concrete and implicit elements of knowledge is necessary for quality improvement (QI) in humanitarian settings.

Much inventiveness has gone into how narratives can be incorporated into knowledge sharing systematically within organizations. One demonstrated way that stories are integrated into organizational learning is through "storytelling workshops" which facilitate sharing stories and dialogue, thereby allowing individuals to connect through shared experiences, reflection and learning from alternative points of view (Abma, 2003). However, workshops require formalizing a typically informal process which may be counterintuitive and inhibit the natural flow of knowledge sharing in this way. The potential to hear stories that are contrary to the majority's experiences or opinions may also be stifled if their stories are not in line with organizational cultural trends (Abma, 2003).

In humanitarian healthcare organizations, due to the divide between the field and the OC, the volatile contexts where the projects are based, and the diverse needs of the populations requiring support, it becomes challenging and yet exceedingly essential to continuously promote knowledge flows. IRNs are an ideal conduit to transfer knowledge between field realities (which should be largely dictated by patient-centered care needs), and the operational center that can facilitate adjustments. IRNs see, hear and feel those stories; they are the ones that connect those stories with numbers. Through the EoM survey, IRNs have demonstrated their ability to assess and transfer valuable knowledge. As such, their stories are essential to improving QoC in humanitarian field projects as they are a collection of both what has been witnessed and what critical thinking has taught them. However, stories are futile if no one with the capacity to change things is listening. In this case the knowledge would be lost.

4.4. Implications from the study for practice

This study illustrates some important information that may benefit humanitarian healthcare organizations. Considering the study's findings against insights from existing scholarship about the ways to nurture organizational knowledge flows to improve QoC, I can identify several key implications for practice:

1) The EoM survey could be further adjusted to ask different questions to address elements of quality of care from different angles. For example: "How would you rate your job satisfaction?" or "How well was the principle of upholding continuity of care accomplished in the project?" or "How would you rate the support you received when encountering difficult (i.e. moral/ethical) issues within the project?" The numbers could indicate how widespread certain issues are and the free-text comments could provide directives as to practical interventions to consider. As well, the EoM survey could benefit from set indicators to bolster the reliability of the numerical values.

2) There is a need to increase or improve pre-departure training for medical internationally recruited staff including emphasizing the value of knowledge sharing via documentation and personal connection (e.g. proper handovers and improvement plans). Additionally, there is the need for pre-departure enforcement of the expectation to promote continuity in the projects over independently 'recreating the wheel'.

3) IRNs would benefit from the initiation of a nurse mentorship program designed as an outlet to share experiences and gain knowledge from someone with a larger reservoir of experience-based knowledge.

4) All humanitarian nurses would benefit from establishment of "Communities of Practice" (CoPs) either in person or through an online platform. Facilitating the unification of nurses based internationally would assist in addressing many of the issues that were revealed in the interviews with IRNs such as the lack of continuity in the projects, the issues of 'recreating the wheel' and the lack of discussion related to deeper issues. As well, CoPs would act as a support to nurses, but also help produce a collective voice in pursuing a higher global health calibre.

5) Leadership needs to enable an organizational culture that emphasizes the capturing of transferrable lessons from the project level. This could look like enforcing proper handovers between internationally recruited staff or group debriefings for entire teams biannually. It could also mean creating a database to document the transferrable lessons as a resource to be consulted prior to initiating the next project. Equally, this means promoting an organizational culture that values nurses' experiences as expressions of voices from the field.

6) Implementing systems to codify implicit knowledge (experience-based to explicit knowledge) is important to create databases of knowledge for all humanitarian staff to access. This could in turn be externalized to support other humanitarian organizations, specifically local initiatives.

7) "Closing the listening loop" through delivering evidence and explanation that knowledge acquired from the employees has been acknowledged (Macnamara, 2016, p. 47). This involves nurturing an organizational culture where employees feel heard. This could be done through compilation reports or general newsletters citing the knowledge received and the plan to act or the reasons for inaction.

MSF is an organization dedicated to learning and consistently seeks to invest in ways to improve the organizational culture not only for the benefit of their staff, but because an organization that manages knowledge well, delivers the best QoC for the patients. These suggestions would help to build into that culture and encourage the constant flow of knowledge necessary to be relevant and effective in the changing contexts MSF serves.

Chapter 5.

Conclusion

In this mixed-methods study I investigated IRN's insights as sources of important experience-based knowledge to inform headquarters (HQ) on quality of care (QoC) in humanitarian healthcare projects. This was accomplished through answering two questions: 1) What can be learned about humanitarian healthcare from the IRNs' knowledge as collected through MSF's EoM survey; and 2) How does this harvested knowledge reflect congruence or disjuncture between "on the ground" realities in humanitarian projects and HQ perceptions?

I received data from MSF OCA's EoM survey for IRNs leaving the field which included IRN-assigned numerical scores collected from March 2019-September 2020 on topics pertinent to QoC (see section 2.3.3.). The quantitative portion of this study involved averaging the scores for each outcome to calculate an overall value that represented that outcome across all MSF projects (see section 3.2.1.)

The qualitative portion of this study involved thematic analysis of the survey's free-text comments. These comments allowed the IRNs to explain the scores they assigned to each outcome. This was followed by 15 semi-structured interviews with IRNs that revealed that though the EoM survey did provide a lot of insight, there were limitations in what the survey could capture (see section 3.2.2). Following these interviews, 5 semi-structured interviews were conducted with 3 members of MSF HQ staff and 2 with coordination level staff (between HQ and the field). These interviews largely illustrated that there was congruence in HQ perceptions of field related QoC issues, but also disjuncture in the complete realization of the nurse potential (see section 3.3.2).

It is clear that knowledge transferring mechanisms such as the EoM survey can produce valuable statistics and monitor trends in QoC in humanitarian healthcare. However, contextual complexity and depth of experience are unwittingly disguised in

numerical scores and pertinent issues are not addressed. Codifying knowledge in this way cannot capture the emotion or provide mental images that aid in understanding.

In chapter four, I discussed the overarching theme of this study: knowledge transferring and sharing mechanisms to capture implicit or experience-based knowledge. This involves cultivating an organizational culture that encourages knowledge flows through knowledge transfers (from the field to HQ) but also through knowledge sharing (between employees as well as with other humanitarian organizations).

5.1. Limitations

A limitation of this study is its focus on gathering information from IRNs only. It should not be overlooked that locally recruited nurses (LRN) are equally if not more capable of imparting experience-based knowledge as they are part of the context. To my knowledge, MSF does not have a way of collecting the experience-based knowledge of the LRNs, however, if projects are going to take into consideration how firsthand experiences of healthcare practitioners provide relevant knowledge, it seems only natural that they too would be viewed as reservoirs of knowledge.

Additionally, I am confident that the OC in MSF comprises more opinions and experiences than what was reflected in the HQ interviews. This study particularly focussed on individuals from the medical side of OCA and was a small sample. However, they did their best to not only share their opinions, but what they had experienced or witnessed during their time with the organization.

5.2. Further Research

Further research should investigate the knowledge of LRNs as they are the institutional memory and the constant amidst the revolving international healthcare workers. Additionally, they are the ones that will help to rebuild or continue to develop the broken healthcare systems that humanitarian aid is seeking to support.

Another topic deserving further study could examine how patient stories in humanitarian settings can be used to inform the need for healthcare improvements. Much literature exists surrounding patient stories from western-style healthcare, but I

have found none representing patient stories on QoC where humanitarian projects reside.

Research should also be investigated into how changes in the structure of these organizations could help to improve knowledge sharing within humanitarian organizations and develop platforms for reciprocal learning with communities and other humanitarian organizations.

5.3. Final Words

Experience-based knowledge is essential for humanitarian healthcare settings to consider. Though harvesting knowledge through methods like the EoM survey is beneficial, the IRN interviews created deeper understanding where codification lost context and where stories made statistics come alive. This revealed the expansive experience-based knowledge residing in the minds of the nurses who as witnesses to project function, should be considered a source of knowledge to inform on healthcare in humanitarian settings. However, this requires cultivating an organizational culture that embraces knowledge exchange as the norm, where nurses are viewed as valuable knowledge reservoirs and where the operational levels demonstrate responsive listening. Without embracing these knowledge flows, accomplishing the difficult task of elevating QoC in complex settings may not be realized.

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