

Cholera in the Time of MINUSTAH: Experiences of Community Members Affected by Cholera in Haiti

Susan Bartels (✉ susanabartels@gmail.com)

Queen's University <https://orcid.org/0000-0003-2782-3480>

Georgia Fraulin

Queen's University

Sabine Lee

University of Birmingham

Research Article

Keywords: cholera, diarrhea, Haiti, MINUSTAH, peacekeeping, United Nations

Posted Date: July 9th, 2020

DOI: <https://doi.org/10.21203/rs.3.rs-40674/v1>

License: © ⓘ This work is licensed under a Creative Commons Attribution 4.0 International License.

[Read Full License](#)

Abstract

Background: In October 2010, 10 months after a catastrophic earthquake, Haiti experienced the largest and most deadly cholera outbreak of the 21st century with 820,000 reported cases and up to 10,000 deaths. Nepalese United Nations (UN) peacekeepers are widely believed to have introduced cholera, and the UN formally accepted responsibility for the outbreak in 2016. The current analysis examines how Haitian community members experienced the cholera epidemic and documents their attitudes around accountability and delayed reparations from the UN.

Methods: Using a narrative capture tool, 12 Haitian research assistants collected micronarratives in 2017 from participants surrounding 10 UN bases in Haiti. Seventy-seven micronarratives focused on cholera were selected for thematic analysis, which was conducted by two independent coders. Relevant stories were chosen to present a diverse selection of experiences and attitudes related to cholera.

Results: Five major themes were identified: 1) Cholera cases and deaths; 2) Accessing care and services; 3) Protests and riots against the UN; 4) Reparations; and 5) Anti-colonialism. Findings highlight the fear and frustration caused by the cholera outbreak and the devastating impact it had on affected families and communities, which was compounded in some cases by an inability to access life-saving medical care. Widespread anger against the UN was also evident and led to protests and riots against the peacekeepers. Most participants believed that the UN should compensate cholera victims but there was significant misinformation about the reparation process. The UN's culpability in the cholera epidemic provoked anti-colonial sentiments and a call to end the UN's 'occupation' of Haiti.

Conclusions: Haiti's cholera victims and their families deserve clear and transparent updates from the UN and the committed material compensation for cholera must be delivered to affected families. Focused investments to improve access to safe water and adequate sanitation must be instituted to eradicate cholera in Haiti. To rebuild trust in the UN and foreign aid, the committed material compensation must be provided in partnership with local Haitians organizations who consult with community members throughout each step of the process.

Introduction

Haiti Background

The French colony of Saint-Domingue gained independence in 1804 to become the nation of Haiti, the first and only independent state in the western hemisphere founded by former enslaved people.(1) Having experienced decades of political instability, weak governance, foreign exploitation and repeated natural disasters (2), Haiti has been labelled the "poorest country in the western hemisphere" with a 2018 Human Development Index of 0.503 - ranking 169 out of 189 countries and territories.(3) With a population of 9.8 million (4), Haiti's latest official estimates in 2012 suggested that over 6 million people lived below the poverty line of USD \$2.41 per day, and over 2.5 million fell below the extreme poverty line of USD \$1.12 per day.(5) Haiti has experienced high levels of civil and political unrest, organized crime, coups d'état,

political leader assassinations, and rapid political turnovers (6), leading to the sanction of the United Nations Stabilization Mission in Haiti, known by its French acronym, MINUSTAH (7), which was operational between 2004 and 2017. As a peace-support operation (PSO), MINUSTAH's initial purpose was to complement the actions of the state by protecting civilians from the threat of armed gangs and it was originally approved for a force of 6700 military personnel and 1622 police (8), primarily from the following troop and police contributing countries (TPCC): Latin America (Brazil, Uruguay, Argentina, and Chile) as well as Sri Lanka and Nepal.(9)

A 7.3 magnitude earthquake struck Haiti on January 12, 2010 with the epicentre near Léogâns, southwest of the densely populated capital, Port-au-Prince. The earthquake caused massive destruction due to poor residential, commercial and public infrastructure and poorly enforced building codes. It claimed approximately 300,000 lives, caused about 8 billion USD in damage, and left 1.3 million people living in temporary tented shelters in the greater Port-au-Prince area alone.(10) Haiti's already weak health care and public health infrastructure were also devastated, with more than 50 hospitals or health centres either collapsed or rendered unusable due to damage.(10)

Cholera in Haiti

In October 2010, nine months after the catastrophic earthquake, the government of Haiti declared a cholera epidemic. The first cases were reported in the Haitian Central Plateau and were thought to have originated from a tributary of the Artibonite River, which flows from Dominican Republic to the Gulf of La Gonâve. Cases spread quickly to affect all departments across the country and by 2018, over 820,000 cholera cases have been reported and an estimated 9,000 (11) – 10,000 (12) people had died. However, these figures may actually be underestimates due to limited diagnostic testing in certain parts of Haiti. (13) Cholera had not been documented in Haiti previously (14), and the epidemic occurred at a particularly vulnerable time for an impoverished country in the midst of trying to deal with a major earthquake. To date, the number of cholera cases in Haiti has been reduced by nearly 99% (11) and the Haiti cholera epidemic is no longer receiving widespread public attention. However, sporadic cholera cases continued to arise through to the end of 2019 (15), and many communities continue to be at risk of contracting the disease due to the lack of safe water and poor sanitation infrastructure.(11)

Vibrio cholerae causes an acute diarrheal illness that can rapidly produce severe dehydration and death if not treated promptly and appropriately. However, the necessary medical care is actually quite simple when it is available – oral rehydration salt solutions or intravenous fluids depending on severity.(16) Spread through the faecal-oral route, *V. cholerae* is extremely infectious and the strain identified in Haiti, serogroup O1, serotype Ogawa, biotype El Tor, was known for its particularly severe symptoms (17). Initially, there was significant debate about how *V. cholerae* was introduced into Haiti, with some supporting the environmental theory (18–21) and others supporting the human activity theory.(22) The debate was resolved, however, when genomic sequencing showed an identical match between the Haitian and Nepalese cholera strains.(23,24)

UN Response to the Cholera Epidemic

After years of denial and silence, the UN formally apologized for its role in the cholera epidemic in December 2016 and declared a two-track approach to assistance in Haiti called the United Nations Haiti Cholera Response Multi-Partner Trust Fund (MPTF).(25) Track one included an ongoing effort to reduce the incidence of cholera by improving access to healthcare and addressing sanitation and water issues in Haiti, while track two included a promise of “material assistance and support to those Haitians most directly affected by cholera”.(25) Calling on their “moral responsibility,” United Nations Secretary-General Ban Ki-moon encouraged voluntary funding from UN member states through the UN Haiti Cholera Response MPTF.(26) However, there were no specific planned “reparations” or concrete plans to raise the funds. In 2017, when the voluntary contributions had not been realized, the General Assembly of the UN asked member states to reallocate \$40 million of unspent funds from MINUSTAH to address cholera in Haiti (27), with 31 countries having approved reallocation of the balance.(28)

Haitian-based Bureau des Avocats Internationaux (BAI) and its American partner, the Institute for Justice & Democracy in Haiti (IJDH), have been actively advocating for UN accountability regarding the cholera epidemic. Between 2011 and 2016, IJDH and BAI helped build a global movement for cholera justice, mobilizing awareness-building and peaceful demonstrations in addition to supporting 5,000 victims to file cholera claims with the UN.(29) Additionally, IJDH and BAI launched a lawsuit against the UN in 2013 based on the notion that immunity, which the UN receives in countries where it works in, does not equate to impunity.(30) The lawsuit was denied on jurisdictional grounds, but it had some success in bringing the issue to international view.(31) BAI and IJDH have also urged current UN Secretary-General Antonio Guterres to keep the UN’s unfulfilled promises with regards to cholera.(32) In June 2020, approximately \$20.7 of the requested \$400 million had been raised the UN Haiti Cholera Response MPTF (5.2%) and the total use of these funds was only 50.4%.(28)

Purpose

Only five academic studies with empirical research on the perceptions of local Haitians about the cholera epidemic have been published. Grimaud and Legagneur (2011) published their work at the peak of the epidemic in early 2011 before the UN’s role in introducing the bacterium had been established. The second article was published in 2019 but the data was collected in 2011 as part of planning a public health initiative.(33) The other three articles all focused on knowledge, attitudes and practices (KAP) related to water, sanitation and hygiene (WASH) in the midst of the cholera outbreak.(34–36) Thus, the existing body of research about the cholera outbreak lacks empirical documentation of the experiences and perceptions of Haitian community members themselves. Much has happened since the majority of existing articles were published – undeniable genetic proof that the cholera strain was from Nepal, a formal apology by the UN for its role in introducing cholera to Haiti, a UN plan for assistance in Haiti, and lack of progress towards realizing that plan. In light of all that has transpired, we conducted the current analysis to understand how local Haitian community members experienced the cholera epidemic and to document their attitudes around accountability and delayed reparations from the UN.

Methods

Aim, Design, and Setting

Our aim in the current analysis was to understand how community members experienced the Haiti cholera epidemic between 2010 and 2017 with the goal of guiding future humanitarian responses and informing how to better meet the needs of affected Haitian community members.

We conducted a cross-sectional study using SenseMaker as a narrative capture tool. The original study was designed to examine local perceptions about interactions between MINUSTAH personnel and local women and girls. Separately published analyses from the same dataset have focused on sexual exploitation and abuse (SEA) by MINUSTAH personnel (37) as well as peacekeeper-fathered children in Haiti.(38) SenseMaker uses open-ended story prompts which allowed our participants to share narratives on a variety of topics, including cholera. From the larger dataset, the current analysis focused exclusively on those micronarratives that were about the Haiti cholera outbreak (n=77).

Ten UN bases across seven locations were purposively selected for this research based on years of operation, base size, troop contributing countries staffing the base, geographic variation within Haiti as well as rural/urban designation.

Participants

A convenience sample of participants was approached in naturalistic locations including market areas, public transportation stops/depots, shops, etc. within a 30 km radius of each chosen base. A diverse range of participant subgroups were targeted for inclusion to capture a variety of perspectives. Individuals had to be at least 11 years old to participate.

Data Collection

Cognitive Edge's SenseMaker is a mixed methods research tool that extracts meaning from micro-narratives shared by participants on a topic of interest (in this case interactions between Haitian community members and MINUSTAH personnel). Three prompting questions were presented (shown in Appendix 1) and participants were asked to share a micronarrative in response to the story prompt of their choosing. All micronarratives were audio recorded on a tablet. Participants then responded to a series of pre-defined questions which contextualized the recorded micronarrative (e.g. how often do the events in story happen) and provided demographic data.

Researchers with collective expertise on humanitarian crises, public health and SenseMaker methodology wrote the SenseMaker survey in English. It was translated to Haitian Kreyòl, independently back-translated and then checked for accuracy, with discrepancies resolved by consensus. A pilot test of the survey with 54 participants in Haiti improved clarity, ease of response, participant comfort and translation inaccuracies.

We partnered with two local institutions, Komisyon Fanm Viktim pou Viktim (KOFIV) and the former Enstiti Travay Sosyal ak Syans Sosyal (ETS), to purposively select 12 research assistants (eight female

and four male). The KOFAVIV research assistants were volunteers with the organization who had experience working with survivors of gender-based violence and the ETS research assistants were undergraduate social work students. Immediately before data collection, research assistants completed a four-day training on SenseMaker methodology, informed consent, research ethics, a detailed question-by-question review of the survey, data upload, as well as management of adverse events and program referrals. Research assistants used a standard script to explain the study design and intent to potential participants. Single, face-to-face interviews were conducted privately in Haitian Kreyòl and the shared stories were audio recorded on iPad Mini 4s. While the implementing study partner organizations may have been known to some participants, there was no prior established relationship between the authors and participants. Micronarratives were transcribed and translated from Haitian Kreyòl to English by native Kreyòl speakers.

Analysis

At the end of the survey, we asked research assistants to identify whether pre-determined topics were discussed in the shared micronarrative (e.g. cholera). In the first level of analysis, micronarratives identified as being about cholera were selected for thematic analysis according to Braun and Clark (n = 77).(39) Working independently in Microsoft Excel spreadsheets, two authors (SB and GF) reviewed the entire transcript closely and then conducted open coding of each narrative. Using Saldaña's proposed methodology, each researcher initially coded the data line-by-line to identify diverse feelings, ideas, and experiences from each participant's shared story.(40) These first level codes were generated directly from the text. Both researchers then reviewed the entire transcript again agreeing on first level codes, each representing a singular experience, idea, or feeling. In the second level of analysis, we organized initial codes into five categories concerning experiences of cholera in Haiti. The categories were not mutually exclusive and stories could be placed into more than one. Researchers then selected pertinent stories from each category to ensure that a diverse selection of cholera-related experiences were included.

The researchers engaged in critical dialogue around all aspects of story selection, coding, and analysis, and triangulation between researchers was key. Using constant comparison, each code or micronarrative was considered in relation to previous and subsequent data, and each micronarrative was considered as a whole. We kept an audit trail of all levels of coding as well as relevant memos.

Ethical Considerations

No identifying information was recorded and all interviews were conducted in private. Informed consent was reviewed in Haitian Kreyòl and indicated on the tablet. Since the study involved minimal risk, written consent was waived. The interviews were brief (approximately 15 – 20 minutes each) and participants did not travel to take part. As such, no compensation was offered. The Queen's University Health Sciences and Affiliated Teaching Hospitals Research Ethics Board approved this study (protocol # 6025181). Local community partners provided important guidance on cultural sensitivity and ethical considerations.

Results

The highest number of stories about cholera were shared from Hinche (20.8%) and Port-au-Prince communes (Cité Soleil with 16.9% and Tabarre with 9.1%). A majority of participants were male (64.9%), had some/completed secondary education (45.45%) and reported that their households had average income (58.44%). Table 1 provides demographic details of study participants.

Table 1. Participant Demographic Characteristics (n = 77)

Demographic		n (%)
Sex	Female	27 (35.1)
	Male	50 (64.9)
Age	11-17	7 (9.1)
	18-24	12 (15.6)
	25-34	23 (29.9)
	35-44	18 (23.4)
	45-54	8 (10.4)
	> 55	7 (9.1)
	Prefer not to say	2 (2.6)
Location	Hinche	16 (20.8)
	Cité Soleil	13 (16.9)
	Saint Marc	12 (15.6)
	Léogâns	12 (15.6)
	Cap-Haïtien	10 (13.0)
	Charlie Log Base/Tabarre	7 (9.1)
	Port Salut	6 (7.8)
	Morne Casse/Fort Liberté	1 (1.3)
Education	Some primary school	14 (18.2)
	Completed primary school	8 (10.4)
	Some secondary school	22 (28.6)
	Completed secondary school	13 (16.9)
	Some post-secondary school	9 (11.7)
	Completed post-secondary school	4 (5.2)
No formal education	7 (9.1)	
Income Level	Poor	29 (37.7)
	Average	45 (58.4)
	Well-off	3 (3.9)

Building on an earlier thematic analysis that examined local perceptions about how cholera was introduced to Haiti in October 2010, the current qualitative analysis explored how community members experienced the cholera epidemic under the following five major themes: 1) Cholera Cases and Deaths; 2) Accessing Care and Services; 3) Protests and Riots Against MINUSTAH; 4) Reparations; and 5) Anti-colonialism. Each of these themes are explored in depth below and presented along with a series of illustrative quotes.

1. Cholera Cases and Deaths

A number of participants had themselves been infected with cholera and almost everyone who shared a narrative about cholera knew either a family member, friend or neighbour who had experienced the

disease. Here, themes centred around having cholera and almost dying, loss of family and friends due to cholera, as well as feelings such as fear and frustration associated with the cholera epidemic.

I Had Cholera and Almost Died

Some participants shared how they had contracted cholera and also the treatment they received. For example, referring to the treatment she was offered, one woman who became infected with cholera in Port Salut reported the following.

When I realized that I was going to die for real, I resigned myself and swallowed it [serum]. This thing almost killed me, this cholera thing.

ID1592 Female participant in Port Salut who referenced Brazilian peacekeepers

A female participant in Cité Soleil became ill with cholera while she was pregnant and reflected on how she, along with her two children, almost died from the disease.

I had cholera, I was 8 months pregnant and was about to die from it. I had two children at home, they were also about to die from cholera, because I was severely ill...

ID330 Female participant in Cité Soleil who did not reference a particular TPCC

Loss of Family and Friends to Cholera

Some participants had numerous family members who had become infected with cholera. For example, the following participant's family experienced multiple deaths as a result of cholera, leading him to say that his neighbourhood was devastated by the disease.

My neighbourhood was devastated by cholera... Many people died in their houses, they were all my family: wife, son, as well as daughter and her husband. All of these people are dead. I heard this thing [cholera] is MINUSTAH's fault but I don't know.

ID799 Male participant in Léogâns who referenced Bolivian peacekeepers

Painful experiences around watching people die from cholera were also shared as illustrated by the following man in Saint Marc.

Two of my neighbours died in my presence and I lived through it. It was painful to us. Any Haitian whether or not they lost a family of friends, they were hurt.

ID1284 Male participant in Saint Marc who referenced Nepalese peacekeepers

There were also several narratives about children becoming orphaned after losing their parents to cholera. The following woman in Port-au-Prince [ID661] had adopted one such child after his mother and

father died in the epidemic, saying “this child that you see here... He has neither a mother nor father. I adopted him as my son.”

Associated Feelings

A variety of emotions were expressed around the cholera epidemic. The most predominant feelings were suffering, frustration, and fear. For instance, the following man in Hinche talked about how he and his children suffered as a result of cholera and also referred to suffering more generally.

That [cholera] has caused a lot of suffering. My children and I suffered from cholera. We had no cholera before. They had brought it here.

ID1763 Male participant in Hinche who referenced Nepalese peacekeepers

Several participants spoke of feeling frustrated by the epidemic, some speaking more personally while others, like the following participant, spoke more broadly about frustration in their communities.

I lived through the time of cholera, and it was dramatic. Every day I saw the cars going by, the ambulances going by... The frustration was boiling daily in the neighbourhoods.

ID1284 Male participant in Saint Marc who referenced Nepalese peacekeepers

Finally, some participants talked about being afraid or about others being fearful of becoming infected with/dying as a result of cholera. For example, this participant shared a narrative about his friend who left the hospital's cholera ward after everyone else in his hospital room died overnight.

... the next morning, he came home with an IV in his arm. I told him he should've stayed in the hospital, but he replied, "No way I could stay there because out of four of us in the room, three died, all except me. So I decided to leave."

ID1959 Male participant in Hinche who referenced Nepalese peacekeepers

2. Accessing Care and Services

The narratives revealed perspectives on how local Haitian community members experienced health services during the cholera epidemic. In most areas of Haiti, health care infrastructure and resources are limited at baseline and this was particularly true in the aftermath of the January 2010 earthquake. The widespread cholera epidemic further stretched those resources and in some cases it was very difficult to access care. Three themes are discussed below including barriers to accessing cholera care, reflections on care received during the epidemic, and burial practices.

Barriers to Accessing Care

Several participants discussed obstacles to accessing medical care. For instance, the following man described how difficult it was to find transportation to hospital because drivers were fearful of contracting

cholera.

Well this older person had cholera, so I ran to try to get him to the hospital... When I realized he couldn't walk I had to carry him on my back because I couldn't find a ride nor a motorcycle to transport him. Everyone was concerned and avoided contact with people with cholera for fear of becoming a victim.

ID1959 Male participant in Hinche who referenced Nepalese peacekeepers

In the narrative that follows, a man in Saint Marc stated explicitly that a lot of people were infected with cholera and some died because they were unable to access medical care. This is consistent with what is known about cholera – it can lead to dehydration and death within a few hours if left untreated.

In our neighbourhood, a lot of people were infected with this illness, cholera. Some people even ended up dying from this disease because they could not get medical care, they ended up dying.

ID1228 Male participant in Saint Marc who referenced Argentinian peacekeepers

Others described a lack of medical personnel to care for cholera patients who did successfully make it to a cholera treatment centre or hospital. One man in Port-au-Port reflected on the cholera epidemic and reported “there were not enough doctors in the country.” Another participant described there not being any staff to assist his aunt when he got her to hospital.

It was an aunt that was a victim of cholera. Well, when we ran to the hospital with her, it wasn't easy to find help. Because there were too many cases at the hospital so in order to get help quickly, that just didn't happen.

ID 230 Male participant in Port-au-Port who referenced Brazilian peacekeepers

Reflections on Quality of Care

A number of participants acknowledged that health care providers had saved their lives or their family members' lives. Several, like this mother who almost lost her young son to cholera, specifically mentioned the role that an international aid organization (in this case, Médecins Sans Frontières, or MSF) had played in providing care.

The MINUSTAH were not very good for us because they brought us cholera. I was on the verge of losing my little boy to cholera if there were not for MSF, I could have lost him.

ID581 Female participant in Port-au-Prince who referenced Brazilian peacekeepers

Additionally, several participants acknowledged the role that MINUSTAH played in helping Haitian community members access care during the cholera epidemic. For instance, the following participant described how peacekeepers helped to transport patients to hospital and concluded that the UN was always watching over the local population.

I had a child that had cholera. I went to the hospital with him... MINUSTAH were in the neighbourhood and I didn't see them do anything bad. They would run and grab and take a sick person to the hospital. They are always watching over us.

ID911 Female participant in Léogâns speaking who did not reference a particular TPCC

Burial Practices

Among participants who lost family members or friends as a result of cholera, a few talked about burial practices. The following woman in Port-au-Prince described being given a certificate (presumably a death certificate) after her uncle died in hospital. She stated that following his death, he was zipped in (likely a body bag) and sent him out, possibly referring to having limited access to the corpse, as is often the case given the extremely infectious nature of *V. cholerae*.

My uncle was dead - he had passed 22 days after which he was out of excrement and he bled. They gave us a certificate in the hospital of Sainte Catherine... They zipped him and sent him out.

ID578 Female participant in Port-au-Prince who referenced Nepalese peacekeepers

The following male participant in Hinche discussed how the government took responsibility for burying cholera victims in a field near the hospital. He also shared his awareness that from an infection control perspective, it was important to prevent bodily fluids escaping from the corpse. Given the highly infectious nature of *V. cholerae*, burial practices are often modified to limit transmission and in mass casualty situations, the authorities often step in to assist with burying the dead.

When the person dies, you must rush to get their body out, if he is in a hospital or something... when people died at the hospital, they dumped them in the field over there. This means that everyone was afraid of them, so that it's the government who took care of their burial. And they say you have to hide all the holes in the human body, wherever water can enter. It's a poison.

ID1857 Male participant in Hinche who referenced Nepalese peacekeepers

3. Protests and Riots against MINUSTAH

A number of participants discussed outrage against MINUSTAH once it became known that UN peacekeepers were responsible for introducing the cholera bacterium in Haiti. A variety of reactions against MINUSTAH were expressed and participants spoke of accountability. Our analysis identified the following themes including raising voices for justice and pulling down the MINUSTAH flag, protests against MINUSTAH, and riots against MINUSTAH.

Raising Voices for Justice and Pulling Down the MINUSTAH Flag

One participant discussed calls on the radio for those who had experienced cholera to join organized protests. The following woman, with six family members who had experienced cholera, was highly

motivated to protest for justice.

All I know is that I had six people in my family who were victims of it: one adult and five children. This morning I heard on the radio that everyone who was a victim of MINUSTAH is going to protest on the streets... They must protest for justice... I would love to follow and participate to do just like everyone else who was a victim to show how deep it hurt...

ID391 Female participant in Port-au-Prince who did not reference a particular TPCC

In another instance, a participant described how people raised their voices against MINUSTAH and the MINUSTAH flag was lowered in Cap-Haïtien.

There were some areas where people raised their voices against this when the MINUSTAH was spreading cholera. Well, the department of Cap went into battle [mumble] against the cholera. [inaudible] of the struggle to fight those who came to take down the flag of the MINUSTAH.

ID2067 Male participant in Hinche who referenced Nepalese peacekeepers

Protests Against MINUSTAH

Other participants used stronger language but were more aspirational in tone like the following woman in Cap-Haïtien who indicated that she wanted to revolt against MINUSTAH so that they would leave Haiti.

A lot of Haitians lost their family, their mothers, their fathers, etc., but if I could revolt against them I would, so they can leave the country.

ID2518 Female participant in Cap-Haïtien who referenced Chilean peacekeepers

The protests seemed to be centred in Cap-Haïtien where according to the following participant, residents were upset and very angry. This man specifically mentioned how people came together to protest because they had a shared understanding about what it was like to have lost loved ones to cholera.

The population was upset and very angry, they throw bottles and stone at the agents. A lot of protest in the streets, barrels and tires burning, and people from everywhere, every part of the society... They understood what it means to have a relative catch cholera and die.

ID1827 Male participant in Hinche who did not reference a particular TPCC

Riots Against MINUSTAH

Other narratives went further and described riots. In the following example, community members became fearful that peacekeepers would retaliate against them after some MINUSTAH members were struck with rocks during a riot. Although the riot ended in some arrests, no one was injured. However, the Nepalese contingent was replaced.

... people rose up against the MINUSTAH, the Nepalese.. they started a riot against the MINUSTAH, threw rocks at them and things started getting bad. Some MINUSTAH got hit and people were concerned about revenge. They put some people under arrest as I was observing, and the MINUSTAH did not react against them. Not a single shot was heard. Then they moved the current soldiers and they sent new MINUSTAH...

ID1959 Male participant in Cite Hinche who referenced Nepalese peacekeepers

However, not all riots were without injuries or loss of life. The following participant described how two men were shot during a riot against MINUSTAH, with one of them dying on scene.

A group of young men in the area said that MINUSTAH should go. These guys dug a deep hole in the streets' intersection, and a MINUSTAH tank fell into it. But without hesitation when the tank crashed into the hole, the MINUSTAH kneeled down and shot two young men, one of them named [], he did not die, but broke his feet, and the other one died on the scene.

ID2334 Male participant in Cap Haitian who referenced Nepalese peacekeepers

4) Reparation for the Cholera Epidemic

Many participants mentioned reparation in one way or another in their narratives, which were collected approximately seven months after the UN outlined its two track UN Haiti Cholera Response MPTF, including provision of material assistance to individuals and families most affected by cholera. Three key themes were identified including beliefs that the UN should compensate cholera victims, thoughts on documentation to access reparation, and beliefs that some compensation had already been provided to cholera victims in Haiti.

Cholera Victims Should be Compensated

Participants more confident in their assertion that MINUSTAH was responsible for the cholera epidemic in Haiti were more likely to talk about compensation. The following victim concluded that people would not be as sorry that the UN came to Haiti if reparations were made.

... according to research, they [MINUSTAH]are responsible for the cholera outbreak that was a tort that caused us to lose some family members. A lot of people were lost to it...It's a really rough, unforgiving disease. I think that if they compensate us, the nation, it would be good, and we would not be so sorry that they came to Haiti.

ID1311 Male participant in Saint Marc who did not reference a particular peacekeeper nationality

Similarly, the following participant in Saint Marc speaks of the fact that there have been no reparations despite many Haitians having lost their lives to cholera. He clearly states that this aspect of MINUSTAH will never be forgotten in Haiti.

Everyone knows the problems brought by the disease that the Nepalese forces brought here with them, where many Haitians died because of the disease that the Nepalese forces brought with them. In spite of that, we see that there was no reparation [given] to compensate these people... this negative aspect is something Haitians will always remember, they'll never forget that negative aspect of MINUSTAH...

ID1056 Male participant in Saint Marc who referenced Nepalese peacekeepers

Documents to Access Reparation

Some participants discussed having documentation to prove eligibility for reparation related to the cholera epidemic. A few individuals, like the man in the following narrative, indicated that his documents were ready, and he directly asked the UN to compensate cholera victims. In his request for reparation, he also made note of children who were orphaned by the epidemic.

I am still waiting for compensation for my wife who had cholera. I have a paper that is my "record" so that if there is compensation, I will be able to collect my benefit... I am asking that the United Nation finds a way to compensate us because right now there are multiple children that are orphans. They are left without a mother or father because of the cholera outbreak in Haiti.

ID1725 Male participant in Port Salut who referenced Nepalese peacekeepers

In contrast, the following participant recounted how community members affected by cholera had been asked to make copies of their birth certificates in anticipation of being paid damages. He concluded by speaking of the hardship experienced by Haitians and how no reparation had been received to date.

Yes, I caught cholera... They had sent everyone to make a copy of their birth certificates, especially those who had been hit by cholera in order to get indemnity. Nothing had been done. It is not only me, so many people experienced that hardship... We haven't seen any reparation, any compensation.

ID1782 Male participant in Hinche who referenced Nepalese peacekeepers

Some Compensation Provided

A few individuals mentioned hearing that reparation had already been paid by the UN following the cholera epidemic. No participants had themselves received compensation and the idea that compensation had already been provided was presented more as a rumour than factual. Although the UN initially planned to hold consultations with those affected by cholera, these consultations were not mentioned in our 2017 interviews. The following participant in Léogâns, for instance, had heard that money was being shared in other areas of the country.

I heard this thing [cholera] is MINUSTAH's fault but I don't know. In spite of that I heard there is a grant to compensate those people... Then I heard people say that the money is being shared in the lower areas. I don't know.

ID799 Male participant in Léogâns who referenced Bolivian peacekeepers

Another participant talked about a radio program that had announced the UN's intention to compensate cholera victims. He shared his belief that some funds had already arrived but indicated that additional compensation was expected. He concluded by saying he did not know what the president would do with the money although it was unclear if this was speculation about how funds would be distributed, or due to corruption, concern that the funds would not reach cholera victims.

...I heard it on the radio, now it's Radio (Telezene) on 3 Martinal. I heard several countries in the United Nations were planning to send money for people who were victims of cholera. After that, they said there was money they had already sent. Well, there's money also they're going to send. I don't know what the president is going to do with that.

ID1284 Male participant in Port-au-Prince who referenced Brazilian peacekeepers

There were also a small number of participants who stated that although reparation for cholera had been provided, they had not been able to access those funds as a result of not having the proper documentation: "I could not go because I did not have the card to go and get the money." [ID330]

5) Anti-colonialism

Given the outrage felt by many Haitians over the introduction of cholera by MINUSTAH peacekeepers, and in the context of Haiti's colonial history, as well as US occupation from 1915 to 1934, a number of shared narratives included sentiments of anti-colonialism and patriotism. Our analysis raised three related themes: perceptions about the harms caused by MINUSTAH, comments about Haiti as a sovereign nation, and lack of confidence in the Haitian authorities. Statements that MINUSTAH should leave Haiti were common across all three themes.

Perceptions About the Harms Caused by MINUSTAH

Many participants commented on the damage done by MINUSTAH as a result of having introduced cholera to Haiti. Some individuals talked about how MINUSTAH made Haiti less safe, and the following participant stated that if Haiti had its own armed forces, things would have been different.

Instead of getting better security, we became less safe in the country. I think that if it was the armed forces of the republic that were present, none of these things would not have occurred.

ID2445 Male participant in Cap-Haïtien who referenced Nepalese peacekeepers

Other participants believed that MINUSTAH peacekeepers intended to stay in Haiti and that the spreading of cholera was intentional. In the following narrative, MINUSTAH personnel were referred to as tigers.

It's when the MINUSTAH showed up that they showed up with it [cholera]. It seems that they just want to sit here, take over the area, country... Central Plateau. They showed up here, they look like tigers. They do

not want to leave, they don't want to go... So that's why they are spreading diseases among us like that.

ID2074 Male participant in Hinche who referenced Nepalese peacekeepers

The disrespect perceived by many participants also included lack of respect for humanity and dignity. In the following story, a male participant referred to MINUSTAH dumping human waste directly in front of community members and filming as well as sharing videos of Haitian children eating discarded food.

... Sometimes they show outright disrespect. Sometimes when they're dumping their toilets, they come right by you and do it... Our children are eating rubbish because of the bad situation they are in. MINUSTAH officers take out their phone or cameras to film these children and show how they live in abject poverty. Our government must get rid of MINUSTAH because the nation can take charge of its own responsibilities. We demand that MINUSTAH leave the country.

ID1793 Male participant in Hinche who referenced Nepalese peacekeepers

Haiti as a Sovereign Nation

In reference to the UN, a number of participants more explicated talked about the invasion of Haiti. In this narrative, the participant described Haitians has being under occupation by MINUSTAH.

They're the ones who dropped poop in the waters - that's why we have what they call cholera...in Haiti they came to provide us backup in terms of security... We can't work together, we're under occupation.

ID1025 Male participant in Léogâns who referenced Sri Lankan peacekeepers

Similarly, the following individual makes note of the fact that Haiti is under Haitian authority rather than that of white foreigners. He also references UN personnel wanting to take over the land but clearly states that there will be no Haiti without Haitians.

They are the one who brought it [cholera] here... We are Haitian, we are under Haitian administration. We are not in the country of the white people. We cannot be under their administration. The Haitian government has to talk to MINUSTAH in order to know whether they will let them kill us all... Because there is no Haiti without Haitians. But if they end up killing us all, they will take over the land.

ID1818 Male participant in Hinche who did not reference a particular TPCC

Lack of Confidence in the Haitian Authorities

A number of participants detailed how they believed the Haitian government was failing them in the midst of the cholera epidemic. For instance, this man in Cité Soleil expressed his frustration that accountability for the cholera outbreak was lacking partially because the Haitian government lacked the political will to take a stance.

After giving us the sickness the Haitian government just sat and watched, they never said anything but they know very well that the MINUSTAH gave it... The UN is waiting for the state get involved in the matter, they see that the state says nothing so they also deny everything too because if our own people are unable to say something, they do not have to raise their voice for us.

ID511 Male participant in Cité Soleil who referenced Brazilian peacekeepers

The following participant discussed how Haiti was the first black independent nation and then went on to state his perception that if Haiti had a functioning and stable government, misconduct by MINUSTAH would not be occurring.

I've always heard since I was a kid that MINUSTAH brought cholera... if ever we had a state or a government that is stable and knew its value, I do not believe that MINUSTAH from Brazil would come to give disease.

ID518 Male participant in Cité Soleil who did not reference a particular TPCC

Discussion

As we approach the tenth-year anniversary of Haiti's cholera epidemic, the voices of Haitians who experienced the outbreak have been largely overlooked. To address this, we analysed 77 narratives to document local experiences with and perspectives about cholera. Our findings demonstrate the fear, devastation and frustration that resulted from becoming ill with cholera and/or from cholera-related cases and deaths in the family and community. Feelings of fear and frustration were sometimes compounded by barriers to accessing medical care. The results also demonstrate widespread anger against MINUSTAH, manifested by protests and riots against the PSO. While most participants believed that the UN should compensate cholera victims, there was confusion around required documentation and misperceptions that reparations had been provided in some areas of the country but not others. Finally, MINUSTAH's culpability in the cholera epidemic provoked anti-colonial sentiments as well as calls for an end to the UN's 'occupation' of Haiti, while acknowledging the failings and shortcomings of the Haitian authorities to provide for, and protect the rights of, its citizens.

Mental Health

Multiple participants expressed fear and loss, similar to that described in 2011 by Grimaud and Legagneur.(41) However, Grimaud and Legagneur also described feelings of shame and reported experiences of cholera-related stigmatization, which did not arise in our data outside of moto drivers not wanting to drive symptomatic patients to the hospital out of fear that they would become infected. Instead, our narratives suggested more community cohesiveness around the cholera outbreak with community members helping others, taking ill neighbours to hospital, etc., including MINUSTAH who was described as "*always watching over us.*"

In the years following the earthquake and cholera epidemic, several research teams identified high rates of depression in Haiti's Central Plateau, ranging from 33.2% (42) to 41.7%.⁽⁴³⁾ In the early months of the epidemic, the Haitian Red Cross provided interventions aimed at tackling the psychological and social dimensions of cholera (41); whether there is still a need to address mental health and psychological wellbeing remains unclear. Since ongoing feelings of loss, sadness and frustration can lead to stress and affect overall wellbeing, further research to identify ongoing cholera and indeed earthquake-related distress is warranted.

Cholera-Related Reactions to MINUSTAH

In our analysis, anger and frustration towards MINUSTAH were more prominent than feelings of fear and loss. Participants were angry that Nepalese forces had brought the bacterium to Haiti, resulting in backlash against MINUSTAH personnel. While an earlier study in Haiti had reported a perception that cholera was a foreign disease deliberately spread for political reasons, those perceptions were more general and did not implicate MINUSTAH and the UN directly.⁽⁴¹⁾ Given that our research was designed to understand interactions between community members and PSO personnel and was conducted after the UN's formal apology for its role in the cholera outbreak, it was expected that MINUSTAH and the UN would feature more significantly in the results. Many participants were also frustrated by the UN's lack of response and its failure to deliver the promised compensation.

In our data, protests and riots against MINUSTAH arose most commonly in Cap-Haïtien, likely related to the death of a local adolescent just prior to the cholera outbreak, which had already sparked anti-UN protests.⁽⁴⁴⁾ Protests against MINUSTAH were also reported in Hinche where community members threw stones at Nepalese infantry (44), and in Mirebalais where protesters reportedly shouted, "We have no water to drink. We have no choice but to drink the water from the river! Like it or not, the UN must go."⁽²⁾

Legacy of Colonialism

It is also important to remember that over the years, MINUSTAH was accused of sexual misconduct against local community members including sex with minors, human trafficking, and sexual exploitation.^(45,46) Recent empirical research has highlighted this sexual exploitation and abuse and shed light on children born as a result.^(37,38,47) Finally, it is important to note that over the years, several humanitarian and foreign aid debacles have been documented in Haiti, both pre-earthquake⁽⁴⁸⁾ and post-earthquake.⁽²⁾ These have included corruption within the aid sector, foreign meddling in Haitian politics, and malicious interventions motivated by self-interest, which have usually been at the expense of Haitian citizens. From this perspective, it is not at all surprising that Haitian community members were quick to condemn the UN, perceive them as an "*armed forced occupation*," and call for their departure from Haiti.

UN Response

There were frequent calls for reparation as a result of the UN's inadvertent introduction of cholera to Haiti, which is to be expected given the UN's promise in late 2016 to provide material compensation to victims

and their families. The reality is that the UN has foreclosed compensation through its internal claims settlement process as well as through an independent claims commission and independent courts, despite recognition that compensation is pivotal to an effective remedy.(29) Furthermore, participants indicated that there has not been any further communication with the Haitian people about progress with regards to fundraising, what can be expected, etc. It was clear from our data that myths and misunderstandings around compensation to cholera victims continued, with some participants believing that they had missed out on the compensation because they did not have the proper documentation. Indeed figuring out who was affected by cholera and which deaths were cholera deaths is challenging 10 years on. However, a 2019 report provided recommendations for an appropriate response based the needs, expectations and priorities expressed by the victims.(49) Others participants believed that compensation had been received by community members living in other parts of Haiti. Although the UN Haiti Cholera Response MPTF 2019 Annual Report indicated that local consultations with cholera victims had been completed in 25 communities to identify forms of material assistance, including whether individual compensation would be feasible and desirable (50), the UN subsequently unilaterally dropped the individual approach in lieu of community projects in select communities.(51) Sharing of the consultation results was intentionally delayed while fundraising efforts continued, and there was no indication whether raising the funds would result in direct compensation to the cholera victims.(28) While consultations are a start, they are being held nearly a decade after the cholera outbreak began, and their results seem inconclusive thus far. The UN must move beyond a tokenistic approach of community consultations and transparently fulfil its promise of compensation to affected families.

Although it took considerable time after the start of the Haiti cholera epidemic, the UN did update its peacekeeping medical manual to acknowledge the health risks peacekeepers pose to the host communities, in addition to outlining guidelines for educating about and vaccinating against cholera prior to troop deployment.(52) It remains to be seen how effectively these changes will be implemented. Furthermore, because these updates were quite cholera-specific, in the midst of the current severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) global pandemic (53), there are ongoing concerns that deploying UN peacekeepers may carry SARS-CoV-2 and introduce the virus into host communities, as was the case in South Sudan where the first three confirmed cases of SARS-CoV-2 were among foreign UN personnel.(54)

Water and Sanitation

Ten years after the start of the 21st century's deadliest cholera outbreak, many Haitians continue to lack access to improved water sources and adequate sanitation. At the beginning of the outbreak in 2010, only 69% of the Haitian population had access to an improved water source and 17% had access to an improved sanitation facility.(55) These statistics are significantly lower than the averages for Latin America and the Caribbean at 90% and 80% respectively (55). At the time of the most recent Demographic and Health Survey in Haiti (2016-2017), 73.4% of the population had access to an improved water source and 51.8% had access to improved sanitation.(56) While these figures have improved, particularly around sanitation, reports indicate that in the Central Plateau, open defecation is still widely

practiced.(33,44) When one considers the millions of dollars in aid, development and re-building that has been pledged to Haiti since the January 2010 earthquake and the start of cholera epidemic, it is perplexing that so many Haitians are still without clean water and sanitation. By increasing focused efforts to strengthen water and sanitation infrastructure in Haiti, the UN would not only be keeping its prior commitment to the Haitian people, but it would also be a taking tremendous step towards meeting Sustainable Development Goal (SDG) 6 – clean water and sanitation for all, as well as SDG 3 - good health and wellbeing for all.(57) The UN has previously identified water and sanitation as the best long-term defence against cholera (29) and the importance of this public health intervention is again highlighted in the current SARS-CoV-2 pandemic.(53) Without access to clean water and soap, is it particularly challenging to protect oneself from such highly infectious agents.

Strengths and Limitations

There are a number of important study limitations. The findings are generated from a relatively small convenience sample of 77 participants and we did not collect data about non-responders. Therefore, the results are not representative of the Haitian population overall and cannot be generalized. Additionally, SenseMaker narratives tend to be shorter and less detailed than those derived from more traditional qualitative research. As a result, our findings may not have fully captured all the nuances of cholera experiences among Haitian community members and data saturation may not have been reached. Because the narrative prompts were open, some participants talked about sexual misconduct, other wrongdoings, or indeed about the positive aspects of MINUSTAH. In answering the subsequent multiple-choice question about the nationality of the troops involved in the story's events, participants may not have responded specifically about cholera. Furthermore, the data was collected in Haitian Kreyol and subtleties may have been lost in the process of translation. Travel restrictions related to insecurity prohibited us from returning to Haiti to share the results with local community members. Finally, we recognise our positionality and are cognizant that as non-Haitians female academics, the results are interpreted with our own inherent biases.

The research also has several noteworthy strengths. First, open story prompts allowed micronarratives about cholera to emerge more naturally from the overall lived experiences of participants. Since no participants were asked about cholera during the interview, the shared perspectives emerged naturally, highlighting that cholera continues to be an important issue in the minds of local Haitians. Second, diverse participant subgroups were included within the Haitian Central Plateau and elsewhere in the country to include a variety of experiences and perceptions. Third, to the best of our knowledge there has been only a single publication examining the experiences of Haitian community members with cholera since the UN accepted responsibility in late 2016 and very few overall publications on Haitian perspectives regarding cholera. Given that cholera has lingered in Haiti and the UN's slowly evolving response, our empirical data serves an important role in bringing forth the voices of affected Haitian community members in an effort to identify their ongoing needs and concerns.

Conclusions

It was originally predicted that cholera would never be eliminated from Haiti. However, in January 2020, the country reached an important milestone – a year without any new cases.(58) To be declared cholera-free, however, would require no additional cholera transmission for two more years, until January 2022. With this is the goal, there must be renewed commitment to working with Haitian community members and authorities to improve access to clean water and adequate sanitation.

Furthermore, cholera victims and their families should be updated with clear and transparent communication from the UN. They should know where they stand, why the promised compensation has not been delivered, and what they might expect in the future. To not provide this basic communication to the Haitian population is disrespectful and fuels animosity. Additionally, the UN must follow through on its promise of material compensation to the most affected families. Finally, to re-build trust in the UN and foreign aid more broadly, local Haitian community members and organizations need to be consulted, and future interventions must be sensitive to Haiti's history of colonialism as well as foreign occupation and intervention.

Abbreviations

BAI	Bureau des Avocats Internationaux
BINUH	United Nations Integrated Office in Haiti
ETS	Enstiti Travay Sosyal ak Syans Sosyal
IJDH	Institute for Justice & Democracy in Haiti
KOFAVIV	Komisyon Fanm Viktim pou Viktim
MINUSTAH	The United Nations Stabilization Mission in Haiti
MPTF	Multi-Partner Trust Fund
PSO	Peace support Operation
SDG	Sustainable Development Goal
SEA	Sexual exploitation and abuse
TPCC	Troop and police contributing countries
UN	United Nations
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund

Declarations

Ethics Approval and Consent to Participate

Informed consent was obtained in Haitian Kreyòl and indicated on the tablet. The Queen's University Health Sciences and Affiliated Teaching Hospitals Research Ethics Board approved this study (protocol # 6025181).

Availability of data and materials

Data are available on Figshare: [10.6084/m9.figshare.12388775](https://doi.org/10.6084/m9.figshare.12388775)

Competing interests

None of the authors have a conflict of interest to report.

Funding

Research was funded by the Arts and Humanities Research Council (Principal Investigator, Dr. Sabine Lee) and the Social Sciences and Humanities Research Council (Principal Investigator, Dr. Susan Bartels).

Authors' contributions

SB and SL conceptualized the study and oversaw data collection in Haiti. GF and SB conducted the qualitative coding and analysis. SB drafted the initial manuscript. All three co-authors contributed to writing and all reviewed and approved the final manuscript prior to submission.

Acknowledgements

We are thankful to all the participants who shared their experiences and perspectives regarding cholera in Haiti. We are also very grateful to the research assistants for their commitment and hard work, and to BAI, KOFVIV and the former ETS for their support and guidance in conducting this research. The project would not have been possible without the financial support of the Social Sciences and Humanities Research Council and the Arts and Humanities Research Council of the U.K. We are also grateful to our Haitian colleague who collaborated on the research design and data collection but did not wish to be identified as a co-author out concern that it might impact future employment opportunities.

Authors' Information

Susan Bartels – Dr. Bartels is a Clinician Scientist and Associate Professor in the Departments of Emergency Medicine and Public Health Sciences at Queen's University. In addition to practicing emergency medicine, she conducts global public health research focused on how women and children

are impacted by humanitarian crises. While much of her work has been in Sub-Saharan Africa, she has also worked in the Middle East as well as in Asia and Haiti. Dr. Bartels is interested in using innovative methods to improve understanding of health-related topics in complex environments such as armed conflict and natural disasters.

Georgia Fraulin – Georgia is an Honours Bachelor of Science student at Queen’s University studying Life Sciences and Global Development Studies. She is interested in global health equity-focused research that incorporates and highlights the voices of those most effected by various global issues. She is also interested in humanitarian work and leads a student-run registered charity called Queen’s Health Outreach that promotes youth empowerment through health education in Kingston, Ontario, numerous locations in Northern Canada and internationally in Guyana and Belize.

Sabine Lee – Dr. Lee is a historian with expertise in the field of historical and anthropological research around consequences of war and conflict. She has published on the social consequences of war and children conceived as a result of sexual and gender-based violence. She is a Professor of Modern History at the University of Birmingham and has led a funded international, interdisciplinary research network on children born of war and co-ordinated a European Commission Horizon 2020-funded Innovative Doctoral Training Network consisting of 15 interdisciplinary doctoral projects in Europe.

References

1. Ferrer A. Haiti, Free Soil, and Antislavery in the Revolutionary Atlantic. *Am Hist Rev* [Internet]. 2012 [cited 2020 Jun 7];117(1):40–66. Available from: <https://academic.oup.com/ahr/article-abstract/117/1/40/46487>
2. Katz JM. *The Big Truck That Went By: How the World Came to Save Haiti and Left Behind a Disaster* [Internet]. New York: St. Martin’s Publishing Group; 2014. Available from: <https://us.macmillan.com/books/9781137278975>
3. United Nations Development Program (UNDP). *Inequalities in Human Development in the 21 st Century Haiti* [Internet]. 2019 [cited 2020 May 28]. Available from: <http://hdr.undp.org/en/data>
4. Embassy of the Republic of Haiti in Washington D. *Haiti at a glance – Embassy of Haiti* [Internet]. 2012 [cited 2020 Jun 23]. Available from: <https://www.haiti.org/haiti-at-a-glance/>
5. World Bank. *The World Bank in Haiti - Overview* [Internet]. 2020 [cited 2020 May 28]. Available from: <https://www.worldbank.org/en/country/haiti/overview>
6. Baranyi S. *Canada and the Travail of Partnership in Haiti*. In: Heine J, Thompson A, editors. *Fixing Haiti: MINUSTAH and Beyond*. New York: Ox; 2011. p. 209–28.
7. United Nations. *United Nations Stabilization Mission in Haiti (MINUSTAH)* [Internet]. Vol. 2015. 2015 [cited 2020 May 28]. Available from: <https://peacekeeping.un.org/en/mission/minustah>
8. United Nations Security Council. *Security Council Resolution 1542 (2004)* [Internet]. Vol. 1542. 2004 [cited 2020 Jun 21]. p. S/RES/1542. Available from: <http://unscr.com/files/2004/01542.pdf>

9. Fernández Moreno M, Chagas Vianna Braga C, Siman Gomes M. Trapped Between Many Worlds: A Post-colonial Perspective on the UN Mission in Haiti (MINUSTAH). *Int Peacekeeping* [Internet]. 2012 [cited 2020 Jun 7];19(3):377–92. Available from: <http://dx.doi.org/10.1080/13533312.2012.696389>
10. Government of the Republic of Haiti. Action Plan for National Recovery and Development of Haiti [Internet]. 2010 [cited 2020 May 28]. Available from: https://www.recoveryplatform.org/outfile.php?id=680&href=https://www.recoveryplatform.org/assets/publication/Action_Plan_12April_haiti.pdf
11. Centers for Disease Control and Prevention (CDC). CDC in Haiti: Factsheet [Internet]. CDC. 2019 [cited 2019 Nov 16]. Available from: <https://www.cdc.gov/globalhealth/countries/haiti/default.htm>
12. Houghton F, Norris A. Credibility, integrity, transparency & courage: The Haitian Cholera outbreak and the United Nations (UN). Vol. 11, *Journal of Infection and Public Health*. Elsevier Ltd; 2018. p. 140–1.
13. Katz JM. UN Admits Role in Cholera Epidemic in Haiti [Internet]. *New York Times*. New York City; 2016 [cited 2019 Nov 16]. Available from: <https://www.nytimes.com/2016/08/18/world/americas/united-nations-haiti-cholera.html>
14. Jenson D, Szabo V. Cholera in Haiti and other Caribbean regions, 19th century. Vol. 17, *Emerging Infectious Diseases*. Centers for Disease Control and Prevention (CDC); 2011. p. 2130–5.
15. Rebaudet S, Moore S, Rossignol E, Bogueau H, Gaudart J, Normand A-C, et al. Epidemiological and molecular forensics of cholera recurrence in Haiti. *Nat Sci Reports* [Internet]. 2019 [cited 2020 May 29];9(1164):1–11. Available from: www.nature.com/scientificreports
16. Clemens JD, Nair B, Ahmed T, Qadri F, Holmgren J. Cholera. *www.thelancet.com* [Internet]. 2017 [cited 2018 Jan 4];390(23). Available from: https://journals-scholarsportal-info.proxy.queensu.ca/pdf/01406736/v390i10101/1539_c.xml
17. Piarroux R, Barraïis R, Faucher B, Haus R, Piarroux M, Gaudart J, et al. Understanding the Cholera Epidemic, Haiti. *Emerg Infect Dis*. 2011;17(7):1161–7.
18. Colwell RR. Cholera Outbreaks and Ocean Climate. *Soc Res (New York)*. 2006;73(3):753–60.
19. Parker AA. Cholera in Haiti - The Climate Connection [Internet]. *Circle of Blue*. 2010 [cited 2020 Jun 10]. Available from: <https://www.circleofblue.org/2010/world/hold-cholera-in-haiti-the-climate-connection/>
20. Knox R. Quake Not To Blame For Haiti Cholera Outbreak [Internet]. *National Public Radio*. 2010 [cited 2020 Apr 29]. Available from: <https://www.npr.org/sections/health-shots/2010/10/26/130832317/earthquake-had-nothing-to-do-with-cholera-outbreak-haiti>
21. Jutla A, Whitcombe E, Hasan N, Haley B, Akanda A, Huq A, et al. Environmental factors influencing epidemic cholera. *Am J Trop Med Hyg*. 2013 Sep 4;89(3):597–607.
22. Katz JM. UN probes Haiti base for cholera source [Internet]. *Associated Press*. 2010 [cited 2020 Apr 29]. Available from: <https://www.cbc.ca/news/world/un-probes-haiti-base-for-cholera-source-1.927010>
23. Hendriksen CS. Population genetics of *Vibrio cholerae* from Nepal in 2010: Evidence on the Origin of the Haitian Outbreak. 2011 [cited 2020 May 28];2(4):157–68. Available from: <http://www.irinnews.org/Report.aspx?ReportID90231>

24. Eppinger M, Pearson T, Koenig SS, Pearson O, Hicks N, Agrawal S, et al. Genomic Epidemiology of the Haitian Cholera Outbreak: a Single Introduction Followed by Rapid, Extensive, and Continued Spread Characterized the Onset of the Epidemic. 2014 [cited 2020 May 29]; Available from: <http://mbio.asm.org/>
25. UN News. UN's Ban apologizes to people of Haiti, outlines new plan to fight cholera epidemic and help communities [Internet]. United Nations. [cited 2020 May 26]. Available from: <https://news.un.org/en/story/2016/12/546732-uns-ban-apologizes-people-haiti-outlines-new-plan-fight-cholera-epidemic-and>
26. United Nations. United Nations Haiti Cholera Response Multi-Partner Trust Fund Launched to Help Country Overcome Epidemic, Build Sound Systems, Strengthen Resilience | Meetings Coverage and Press Releases [Internet]. UN. 2016 [cited 2020 Jun 15]. Available from: <https://www.un.org/press/en/2016/dev3248.doc.htm>
27. Ivers LC, Guillaume Y. The price of peace? Peacekeeping with impunity harms public health in Haiti. Vol. 97, *American Journal of Tropical Medicine and Hygiene*. American Society of Tropical Medicine and Hygiene; 2017. p. 639–40.
28. United Nations Development Group. Trust Fund Factsheet - UN Haiti Cholera Response Multi-Partner Trust Fund [Internet]. United Nations. 2020 [cited 2020 Jun 14]. Available from: <http://mptf.undp.org/factsheet/fund/CLH00>
29. International Human Rights Clinic Harvard Law School, Bureau des Avocats Internationaux, Institute for Justice & Democracy in Haiti. VIOLATIONS OF THE RIGHT TO EFFECTIVE REMEDY: THE UN'S RESPONSIBILITY FOR CHOLERA IN HAITI Joint Submission to the UN Special Rapporteur on the promotion of truth, justice, reparation and guarantees of non-recurrence [Internet]. 2020 [cited 2020 Jun 28]. Available from: <https://reliefweb.int/sites/reliefweb.int/files/resources/ocha-hti->
30. Houston A. UNstoppable: How advocates persevered in the fight for justice for Haitian cholera victims. *Heal Hum Rights J*. 2017;19(1):299–303.
31. United Nations. Noting Court Decision Upholding United Nations Immunity in Haiti Cholera Case, Secretary-General Urges Member States to Boost Support for Overcoming Epidemic | Meetings Coverage and Press Releases [Internet]. United Nations. 2016 [cited 2020 May 28]. Available from: <https://www.un.org/press/en/2016/sgsm17991.doc.htm>
32. Armand A. FOR IMMEDIATE RELEASE: Over 60 Human Rights Organizations Demand UN Stop Its Retreat from Accountability [Internet]. Institute for Justice and Democracy in Haiti. 2018 [cited 2020 Mar 31]. Available from: <http://www.ijdh.org/2018/07/projects/for-immediate-release-over-60-human-rights-organizations-demand-un-stop-its-retreat-from-accountability/>
33. Guillaume Y, Raymond M, Jerome GJ, Ternier R, Ivers LC. It was a ravage!': Lived experiences of epidemic cholera in rural Haiti. *BMJ Glob Heal*. 2019 Nov 1;4:e001834.
34. Beau de Rochars VEM, Tipret J, Patrick M, Jacobson L, Barbour KE, Berendes D, et al. Knowledge, attitudes, and practices related to treatment and prevention of cholera, Haiti, 2010. *Emerg Infect Dis*. 2011;17(11):2158–61.

35. Childs L, François J, Choudhury A, Wannemuehler K, Dismar A, Hyde TB, et al. Evaluation of knowledge and practices regarding cholera, water treatment, hygiene, and sanitation before and after an oral cholera vaccination campaign-Haiti, 2013-2014. *Am J Trop Med Hyg*. 2016 Dec 1;95(6):1305–13.
36. Williams HA, Gaines J, Patrick M, Berendes D, Fitter D, Handzel T. Perceptions of health communication, water treatment and sanitation in Artibonite Department, Haiti, March-April 2012. *PLoS One*. 2015 Nov 1;10(11):e0142778.
37. King C, Lee S, Bartels SA. ‘ They Were Going to the Beach , Acting like Tourists , Drinking , Chasing Girls ’: A Mixed-Methods Study on Community Perceptions of Sexual Exploitation and Abuse by UN Peacekeepers in Haiti. *Stab Int J Secur Dev* [Internet]. 2020 May 21;9(1):1–22. Available from: <https://www.stabilityjournal.org/article/10.5334/sta.766/>
38. Lee S, Bartels SA. ‘They put a few coins in your hand to drop a baby in you’: A study of peacekeeper-fathered children in Haiti. *Int Peacekeeping* [Internet]. 2019 [cited 2019 Dec 11];27(2). Available from: <https://doi.org/10.1080/13533312.2019.1698297>
39. Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol* [Internet]. 2006 [cited 2019 Feb 25];3:77–101. Available from: www.QualResearchPsych.com
40. Saldaña J. *The Coding Manual for Qualitative Researchers*. London: SAGE Publications Ltd; 2012.
41. Grimaud J, Legagneur F. Community beliefs and fears during a cholera outbreak in Haiti. *Intervention*. 2011;9(1):16–34.
42. Reginald Fils-Aimé J, Grelotti DJ, Thérosmé T, Kaiser BN, Raviola G, Alcindor Y, et al. A mobile clinic approach to the delivery of community-based mental health services in rural Haiti. 2018 [cited 2020 May 28]; Available from: <https://doi.org/10.1371/journal.pone.0199313>
43. Wagenaar BH, Hagaman AK, Kaiser BN, Mclean KE, Kohrt BA. Depression, suicidal ideation, and associated factors: a cross-sectional study in rural Haiti [Internet]. 2012 [cited 2020 May 28]. Available from: <http://www.biomedcentral.com/1471-244X/12/149>
44. Frerichs RR. *DEADLY RIVER: Cholera and Cover-up in Post-earthquake Haiti* [Internet]. 1st ed. Ithaca, New York: ILR Press; 2016. Available from: <http://www.deadlyriver.com/index.html>
45. Snyder M. UN SEA: Sexual Exploitation and Abuse at the Hands of the United Nation’s Stabilization Mission in Haiti [Internet]. 2017 [cited 2017 Jul 26]. Available from: http://cepr.net/images/documents/UNSEA_11JAN17_FINAL.pdf
46. Dodds P. UN peacekeepers in Haiti implicated in child sex ring | The Independent [Internet]. The Indep. [cited 2020 May 26]. Available from: <https://www.independent.co.uk/news/world/americas/un-haiti-peacekeepers-child-sex-ring-sri-lankan-underage-girls-boys-teenage-a7681966.html>
47. Vahedi L, Bartels S, Lee S. “Even peacekeepers expect something in return”: A qualitative analysis of sexual interactions between UN peacekeepers and female Haitians. *Glob Public Heal An Int J Res Policy Pract* [Internet]. 2019 [cited 2019 Dec 30]; Available from: <https://doi.org/10.1080/17441692.2019.1706758>

48. Schwartz TT. TRAVESTY IN HAITI: A True Account of Christian Missions, Orphanages, Fraud, Food Aid and Drug Trafficking [Internet]. BookSurge Publishing; 2008. Available from: <https://timothyschwartzhaiti.com/travesty-in-haiti/>
49. Lawyers Without Borders. MEETING THE NEEDS OF VICTIMS OF CHOLERA IN HAITI FEASIBILITY OF AN INDIVIDUAL ASSISTANCE APPROACH FOR PEOPLE MOST AFFECTED BY THE DISEASE SUMMARY Project: “Access to Justice and Fight against Impunity in Haiti” [Internet]. Quebec City; 2019 Jun [cited 2020 Jun 30]. Available from: www.asfcanada.ca
50. UN Secretary-General’s Special Envoy for Haiti, UN Multi-Partner Trust Fund Office. UN Haiti Cholera Response Multi-Partner Trust Fund 2019 Annual Report [Internet]. 2019. Available from: <http://mptf.undp.org/factsheet/fund/CLH00>
51. United Nations General Assembly. New Approach to Cholera in Haiti [Internet]. 2017 [cited 2020 Jun 30]. Available from: <https://reliefweb.int/sites/reliefweb.int/files/resources/N1712356.pdf>
52. Houston AR. Applying Lessons from the Past in Haiti: Cholera, Scientific Knowledge, and the Longest-Standing Principle of International Health Law. In: Eccleston-Turner M, Brassington I, editors. Infectious Diseases in the New Millennium, International Library of Ethics, Law, and the New Medicine. Springer Nature; 2020. p. 13–41.
53. World Health Organization. Coronavirus disease (COVID-19) outbreak - WHO announces COVID-19 outbreak a pandemic [Internet]. [cited 2020 May 26]. Available from: <http://www.euro.who.int/en/health-topics/health-emergencies/coronavirus-covid-19/news/news/2020/3/who-announces-covid-19-outbreak-a-pandemic>
54. United Nations. South Sudan: Coronavirus cases confirmed inside UN civilian protection site [Internet]. 2020. [cited 2020 May 28]. Available from: <https://news.un.org/en/story/2020/05/1064012>
55. Gelting R, Bliss K, Patrick M, Lockhart G, Handzel T. Water, sanitation and hygiene in Haiti: Past, present, and future. *Am J Trop Med Hyg.* 2013;89(4):665–70.
56. Institut Haïtien de l’Enfance Pétiion-Ville Haïti, DHS Program Rockville USA. Haiti Enquête Mortalité, Morbidité et Utilisation des Services (EMMUS- VI) 2016-17 [Internet]. 2018 [cited 2020 Apr 5]. Available from: <https://dhsprogram.com/pubs/pdf/FR326/FR326.pdf>
57. UNDP. Sustainable Development Goals [Internet]. United Nations. 2015 [cited 2018 Mar 14]. Available from: http://www.undp.org/content/dam/undp/library/corporate/brochure/SDGs_Booklet_Web_En.pdf
58. Pan American Health Organization, World Health Organization. Haiti reaches one-year free of Cholera [Internet]. WHO. 2020 [cited 2020 May 29]. Available from: https://www.paho.org/hq/index.php?option=com_content&view=article&id=15684:haiti-reaches-one-year-free-of-cholera&Itemid=1926&lang=en

Appendix

Appendix 1

Micro-narrative prompts
Describe the best or worst experience of a particular woman or girl in your community who has interacted with foreign UN or MINUSTAH personnel. What happened?
Describe how living in a community with a UN or MINUSTAH presence has provided either a particular opportunity or a danger to a particular woman or girl in the community. What happened?
Describe the negative or positive experience of a particular women or girl who requested support or assistance after interacting with foreign UN or MINUSTAH personnel. What happened?