

The Distribution and Consequences of Sexual Misconduct by Peacekeepers in Haiti: A Cross-Sectional Epidemiological Analysis

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Abstract

Background

From 2004 to 2017, the UN sanctioned *The United Nations Stabilization Mission in Haiti* (MINUSTAH) to address Haiti's political instability. Reports of sexual misconduct perpetrated by peacekeeping personnel, including children fathered by peacekeepers, were made during the course of MINUSTAH. To date no epidemiological studies have analyzed the distribution and consequences of sexual misconduct perpetrated by MINUSTAH peacekeepers. This research will: (1) Explore the association between location (rural, semi-urban, urban) and the sharing of narratives about sexual misconduct perpetrated by MINUSTAH peacekeepers; (2) Investigate the relationship between sharing narratives about sexual misconduct and the desire to engage with the UN/MINUSTAH.

Methods

In 2017, a cross-sectional survey was administered by Haitian research assistants using SenseMaker®, a rapid mixed-methods data collection tool that allows participants to share a narrative on a topic of interest. In total, 2541 self-interpreted narratives pertaining to the experiences of women/girls in relation to the UN were collected across Haiti. Secondary data analysis using log-binomial regression modeled the relationships of interest. Statistical analysis was performed using SAS 9.4.

Results

(1) After adjustment, Haitians living in rural areas were more likely (RR_{rural} : 1.19; 95% CI: 1.03, 1.38) to share a narrative about sexual misconduct, compared to Haitians living in urban areas. (2) The association between sharing narratives of sexual misconduct and willingness to engage with the UN was modified by who the narrative was about. Haitians who expressed personal experiences of sexual misconduct were more likely (RR_{sex} : 4.52; 95% CI: 3.34, 6.12) to reject the UN/MINUSTAH, compared to Haitians who shared personal positive/neutral narratives of MINUSTAH.

Conclusions

Narratives of civilian-peacekeeper sexual misconduct are geographically distributed and associated with rejecting the UN/MINUSTAH. This epidemiological analysis is an empirical steppingstone to understanding the distribution and consequences of peacekeeper perpetrated sexual misconduct.

Introduction

Peace operations (PO) play a critical role in the containment of conflict and advancement of democratization. However, unintended consequences often arise from the deployment of predominantly male peacekeepers into fragile states. Notably, sexual abuse and exploitation (SEA), perpetrated by peacekeepers, including transactional sex, sex trafficking, rape, and child sexual abuse, have been documented (1–3). Using the United Nations Stabilization Mission in Haiti (MINUSTAH) as a case study, we present empirical research aimed at understanding the distribution of peacekeeper-perpetrated SEA and the impact of SEA on Haitian engagement with the UN.

MINUSTAH

Over the years, Haiti has experienced civil and political unrest including natural disasters, coups, political leader assassinations, and organized crime (4). Through *Resolution 1542* the United Nations Security Council (UNSC) sanctioned MINUSTAH in 2004. Ending officially in 2017, MINUSTAH was the longest PO in Haiti (5). The mission was authorized to include 6,700 military personnel, 1,622 police, 550 international civilian personnel, and 1,000 local civilian staff (6). MINUSTAH was initially mandated to protect civilians from the threat of armed gangs (dos Santos Parra, 2019). However, in light of earthquake-related losses in 2010 and the inadequacy of legitimate governance structures in the absence of organized crime, the mission's scope and number of personnel expanded to also include humanitarian relief, support of democratic elections, and the protection of human rights (6,7). Following the January 2010 earthquake that resulted in 300,000 deaths and the internal displacement of over one million Haitians (8), the UNSC increased deployment to a peak of 13,000 military and police peacekeepers (9,10).

Peacekeeper Sexual Misconduct

Peacekeeper-perpetrated sexual misconduct first gained attention during the UN Transitional Authority in Cambodia (UNTAC) in 1992-1993, when UN peacekeepers magnified the existing sex work industry (Alexandra, 2011). Since then, SEA by peacekeepers has been reported in a number of PO including those in Haiti, Liberia, Central Africa Republic and the Democratic Republic of Congo (1,11). To address SEA by its personnel, in 2003 the UN introduced the Zero Tolerance Policy, which recognized and defined two forms of sexual violence within peacekeeping contexts: sexual exploitation and sexual abuse (SEA) [1]. The UN considers SEA a category one offense– the most serious type of misconduct (K. M. Jennings, 2008). Since 2007, 117 allegations of SEA against MINUSTAH peacekeepers have been formally reported to the UN (12). In addition between 2010 and 2020, 34 SEA-related paternity claims have been formally laid against MINUSTAH peacekeeping personnel, with 8 of those having been positively confirmed (13).

Peacekeeper Immunity

According to the *Status-of-Forces Agreement* (SOFA), military members of national contingents are given immunity from host state jurisdictions for criminal acts undertaken during their official capacity (14–17). Instead, as outlined by the Memorandum of Understanding (MoU) between troop and police contributing countries (TPCC), disciplinary authority over national military contingents is the responsibility of TPCC (15,18,19). However, it is common for member states to fall short of implementing the MoU, thereby leading to criminal immunity without prosecution in the TPCC (20).

Quantitative Literature

Prevalence of transactional sex

A 2011 cross-sectional study in Liberia estimated that 72% (95% CI: 68% to 76%) of women aged 15-25 had engaged in transactional sex (21). Risk factors positively associated with transactional sex included: low educational

attainment, low income, increased duration of the relationship, early sexual debut, multiple sexual partners, and previous exposure to sexual violence. A second cross-sectional study in Liberia, this time in 2012, analyzed transactional sex specifically between Liberian women aged 18 to 30 and foreign military personnel deployed to the *United Nations Mission in Liberia* (UNMIL) (22). In this sample, 56% of Liberian women had engaged in transactional sex and 44% of these did so with peacekeepers. For every additional 1,000 peacekeepers deployed, the probability of a Liberian woman engaging in her first transactional sexual encounter increased by 3%.

Risk factors for reported sexual abuse and exploitation

Using data made publicly available by the UN, Nordas and Rustard (23) examined the variation in reported SEA allegations across different PO between 1999 and 2010. Risk factors positively associated with reported SEA included mission-level factors (type of mandate – i.e. humanitarian assistance and focus on gender equality, high levels of violence during conflict, and large mission size) as well as host-country factors (high level of sexual violence preceding conflict, low GDP per capita, and absence of spousal rape law). Similarly, Moncrief (24) analyzed PO data from 2007 to 2014 from a variety of publicly available sources and concluded that increasing mission size was significantly associated with greater SEA allegations. Furthermore, increasing host-country GDP per capita was significantly related to reduced SEA allegations (Moncrief, 2017). In addition, the disciplinary erosion of the contingent, measured by contingents with reports of misconduct unrelated to SEA, was found to be positively associated with SEA allegations.

Protective factors against sexual abuse and exploitation

Using UN PO data (2006-2011), Karim and Beardsley (25) examined the effectiveness of deploying female peacekeepers with respect to reducing SEA allegations. Results indicated negative correlations between the deployment of female peacekeepers and: (i) the number of deaths during PO and (ii) GDP per capita of the host county, suggesting that female peacekeepers were more likely to be deployed to safer areas with that are more economically secure. Karim and Beardsley (26) also investigated the effectiveness of female peacekeepers and gender equality on the number of SEA allegations between 2009 and 2013. The authors demonstrated that an increased proportion of female peacekeepers was negatively correlated with SEA allegations. Gender equality measures of TCPP (measured by primary school and labour force gender ratios) were also negatively correlated with SEA allegations. Lastly, Karim (27) assessed Liberian perceptions of female peacekeepers using micro-data, concluding that civilian contact with female peacekeepers was positively associated with favourable perceptions of them. However, there were no significant associations with perceptions of improved security with respect to SEA, and female peacekeepers faced barriers accessing local civilians, especially women and girls.

Geographic distribution of peacekeeping economies and reports of SEA

Peacekeeping economies have been well studied (28–32) and refer to “Economic activity that either would not occur or would occur at a much lower scale and rate of pay, without the international presence, of which a UN peacekeeping mission is a central component”. (K. M. Jennings, 2014, p. 315) In Haiti, socio-economic vulnerability and ubiquitous gender inequality result in a range of gendered survival strategies that disproportionately affect

women and girls, such as trading sex for money, food, or security (i.e. transactional sex) (33). In this context, the influx of foreign, well-paid, and predominantly male peacekeepers magnifies the gendered economies of sex work, transactional sex, and domestic labour. Through their employment in peacekeeping economies, women and girls face an increased risk of SEA; they work in unregulated, informal, precarious, and/or illicit sectors that have no legal protection; face unequal power relations vis-à-vis the peacekeeper employer; and are financially dependent on transactions with peacekeepers to sustain their livelihoods (34). In this analysis we consider the differential effect of urban, semi-urban, and rural peacekeeping bases in relation to peacekeeping economies and risk of SEA. Given that women and girls in rural Haiti face greater socio-economic disparities compared to their urban counterparts, *we hypothesize their participation in peacekeeping economies will be greater, and the occurrence of SEA will be higher, in rural locations, compared to urban and semi-urban locations.*

Exposure to sexual misconduct and future engagement with the UN

Gathering contextual information from civilians is often essential for the success of PO, and yet it can be challenging for peacekeepers to gather this information when they are not cohesively integrated into the host community. The cooperation and engagement of local civilians has been shown to depend on the degree to which local communities positively perceive peacekeepers (35). Local civilians may not have access to reliable information about peacekeepers (36) and instead, may rely on personal, vicarious, and community-level experiences regarding peacekeepers' day-to-day activities. In fact, civilian knowledge of SEA has been shown to negatively affect perceptions of peacekeepers and the UN, thereby reducing cooperation and engagement with PO (35,37,38). Thus, *we hypothesize that Haitians exposed to sexual misconduct by MINUSTAH peacekeepers will be less likely to engage with the UN, compared to Haitians who are not exposed to sexual misconduct by peacekeepers.*

Contribution of Research

This research provides an in-depth and contextualized understanding of SEA in Haiti. Based on community perceptions (as opposed to formal UN allegations), the analysis allows a grounded understanding of personal, vicarious, and community-level exposure to SEA in urban, semi-urban and rural regions, while also highlighting how these experiences impact Haitians' willingness to engage with the UN. The results have implications for how/where the UN focuses its SEA prevention interventions and resources and provide further evidence regarding how perceptions of SEA impact host-community cooperation and engagement with the UN and future PO.

[1]The "zero-tolerance policy" defines *sexual exploitation* as: "the actual or attempted abuse of a position of vulnerability, differential power, or trust for sexual purposes" and *sexual abuse* as: "actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions" (46). Transactional sex, which is also prohibited, is defined as "the exchange of money, employment, goods, or services for sexual activity between beneficiaries of assistance and peacekeeping personnel" (46).

Methods

SenseMaker Survey

SenseMaker is a mixed-methods data collection tool and research methodology (39). After collecting micro-narratives related to a phenomenon of interest, SenseMaker requires participants to share their related feelings, attitudes, and perspectives by responding to a series of analytical questions. (40). We used three prompting questions to elicit narratives about how women and girls interact with MINUSTAH peacekeepers; no questions explicitly mentioned sexual misconduct perpetrated by peacekeepers.

After recording a narrative, participants self-interpreted the shared experiences by plotting their perspectives spatially using dichotomous sliders (*dyads*) or between three possible options (*triads*) (Figure 1 and Figure 2 in Appendix B). SenseMaker then assigns quantitative values to the plotted self-interpretations. Participants also answered six multiple choice questions pertaining to demographic characteristics (age, gender, education level, etc.) and narrative characteristics (emotional tone, protagonist, frequency of occurrence, etc.). This study design has also been described in other publications (41,42)

The SenseMaker survey was originally drafted in English, then translated to Kreyol and independently back-translated to English. Translation discrepancies were resolved by agreement between the two translators. We pilot tested the survey in Haiti among 54 participants who provided feedback, which was used to refine the survey prior to implementation. Haitian community partners from the Institute of Social Work and Social Science (ETS), the Commission of Women Victims for Victims (KOFIVIV), and Bureau des Avocats Internationaux (BAI) contributed to the survey formation process. To support qualitative analysis, the narratives were audio recorded and transcribed and translated from Kreyol to English. The survey is presented in Appendix A.

Sampling

Twelve Haitian research assistants recruited participants in cities, towns, and villages within a 30km radius of the 11 selected MINUSTAH bases (Cité Soleil, Charlie Log Base, Tabarre, Léogâne, Cap Haïtien, Saint Marc, Gonaïves, More Casse, Fort Liberté, Hinche, and Port Salut). When the 30km radiuses for two bases overlapped, the research assistants alternated between the two bases. Accordingly, survey collection was grouped for: Charlie Log Base and Tabbare, Saint. Marc and Gonaïves, Morne Casse and Fort Liberté. To purposefully select MINUSTAH bases we used a combination of community partner knowledge, published peacekeeping data, geographical location (north, south, central plateau, metropolitan areas), base staffing characteristics, and dates of operation. The number of participant narratives sampled per site are depicted in *Table 2*.

At each location, the research assistants recruited a convenience sample of individual participants, aged 11 and older, from community settings including, markets, post offices, commercial settings, and bus stops. The survey was administered in Kreyol using the SenseMaker application on iPad Mini 4s between June and August of 2017. The research assistants were members of two community partner organizations: ETS and KOFIVIV. The last two authors facilitated a four-day research assistant training on the study design, research protocol, SenseMaker, research ethics, iPad use, data upload, management of adverse events, service referral, and role-play activities for survey delivery.

Survey measures

Geographical distribution of sexual misconduct narratives

Each narrative was coded into a binary outcome according to whether the narrative mentioned or described sexual misconduct. Narratives that mentioned any sexual interaction with peacekeepers including SEA, long-term sexual relationships perceived as consensual, children fathered by peacekeepers, sexual harassment, and sexual assault—were identified as being about sexual misconduct. First-hand experiences of sexual interactions with peacekeepers as well as narratives about the experiences of family/friends, and experiences of other community members were included in the sexual misconduct category. Lastly, sexual interactions between MINUSTAH peacekeepers and Haitian men and boys were also included in the outcome.

The exposure variable was the geographical location where the event in the narrative took place, classified as rural, urban, and semi-urban. The location where the cross-sectional survey was conducted was a proxy for the location where the event in the narrative took place. The designations of urban, rural, and semi-urban categories were proposed by the community partners and cross-referenced with the Demographics and Health Survey (DHS). The urban category was comprised of Cité Soleil, Charlie Log Base and Tabarre, all of which form metropolitan Port-au Prince; Léogâne and Cap Haïtien were grouped as semi-urban; the rural category was comprised from St. Marc and Gonaïves, Morne Casse and Fort Liberté, Hinche, and Port Salut.

Consequences of experiencing sexual misconduct

The outcome was derived from the dyad question asking about willingness to engage with the UN: “Events in the story led the community to have an: (i) Overwhelming desire to engage with the UN or MINUSTAH (0) or (ii) Absolute rejection of the UN or MINUSTAH (100)”. The dyad’s quantitative scale across the x-axis ranged from 0 to 100. The dyad scale was binned into 12 equal intervals from 0 to 100 in the direction of “Absolute rejection of the UN or MINUSTAH”, creating a histogram with the frequency of responses on the y-axis, as depicted in the supplementary document.

The frequency of responses fell within three distinct response patterns across increasing tertile increments of the dyad scale. The bottom tertile of the dyad scale ranging from 0 up to 33.3 was in the direction of “Overwhelming desire to engage with the UN and MINUSTAH”; the middle tertile of the dyad scale ranging from 33.3 up to 66.7 was in the middle of the two response options; the highest tertile of the dyad scale ranging from 66.7 to 100 was in the direction of “Absolute rejection of the UN and MINUSTAH”. Therefore, the outcome was included in the regression model as a binary variable. Perceptions ranging from 66.67 to 100 on the dyad scale expressed a desire to reject the UN and MINUSTAH (coded as 1) whereas perceptions ranging from 0 up to (but not including) 66.67 expressed a desire to engage with the UN (coded as 0). The distribution of responses for the dyad question used to form the outcome is presented in Appendix C.

The primary exposure variable for the second regression model was the subject-matter of the narratives. In addition to the narrative subject-matter, the emotional tone of the narrative (identified by the participant) was used to create the exposure levels. Narratives were grouped into three exposure groups, based on the predominant subject-matter and emotional tone: (i) Positive and neutral narratives of the UN/ MINUSTAH that did not address wrongdoings perpetrated by peacekeepers (referent group; examples include: employment offered by peacekeepers, safety improvement, public service, humanitarian assistance, friendships); (ii) Narratives addressing sexual misconduct and MINUSTAH peacekeepers; or (iii) Narratives about other UN wrongdoings and negative perceptions of the UN unrelated to sexual misconduct (examples include: cholera outbreak, use of tear gas, violence against civilians, water supply contamination, littering, kidnapping, goat stealing, motor-vehicle collisions, improper waste disposal).

Data Analysis

The unit of observation for the two models was the narrative. Multivariate log-binomial regression modeled the relationships of interest. In the first model, a multi-variate log-binomial regression investigated the relationship between geographical locations in Haiti (rural, urban, semi-urban), and the presence of community-level narratives about sexual misconduct perpetrated by MINUSTAH peacekeepers. A multivariate log-binomial regression model also analyzed the relationship between the narrative subject-matter (sexual misconduct, other UN wrongdoings, positive/neutral experiences with the UN) and desire to reject the UN/MINUSTAH. To create the most parsimonious model and identify any potential confounders, a backwards elimination method was used with a liberal cut-off criterion of $p < 0.15$ during the model building. The data were analyzed using SAS 9.4.

Confounders

Five categorical variables pertaining to participant demographics and two categorical variables pertaining to the narrative characteristics were considered either as potential covariates, confounders, or effect modifiers. Chi-Squared tests assessed the relationship of each variable with the exposure and outcome variables using a 0.05 level of significance. Parameter estimates corresponding to the exposure variable were compared between crude and adjusted models. Confounding was considered to be present when the percent difference between the parameter estimates was $\geq 10\%$. For the model examining the geographical distribution of SEA, identified potential confounders included gender, who the narrative is about, emotional tone, income, and age group. Statistically significant relationships existed between each of the confounders and (i) geographical location (exposure) as well as (ii) whether a narrative about sexual misconduct was shared (outcome). For the model examining the desire to engage with the UN/MINUSTAH, the potential confounders identified a-priori were: gender, who the narrative was about, emotional tone, age group, and location. Statistically significant relationships existed between each of the confounders and (i) Narrative subject-matter (exposure) as well as (ii) Rejection of the UN/MINUSTAH (outcome).

Effect modification

In both models, we measured effect modification for two variables: gender and who the narrative was about. Emotional tone of the narrative was also assessed for effect modification for the first objective but not the second objective since emotional tone was used to create the referent category of the exposure variable (positive/neutral stories unrelated to wrongdoings). Effect modification was tested by including interaction terms in both models with a standard cut-off of $p < 0.05$.

Covariates

For the model examining geographical distribution of SEA, we included relationship status, education, and number of narratives told as covariates associated with sexual misconduct (outcome), without being associated with geographical location (exposure). Location (the eight individual cities, towns, and villages categorized into urban, rural, and semi-urban), education, income, and the number of narratives told were included as covariates associated

with the subject-matter of the narrative (exposure) in the model examining the desire to engage with the UN/MINUSTAH. Furthermore, relationship status predicted the desire to engage with the MINUSTAH/UN (outcome) in the second model.

A-priori power

Detectable difference calculations at 80% power and an alpha level of 0.05 were performed prior to data inspection and analysis. At 80% power and an alpha level of 0.05, the smallest detectable difference ranged from 1.685 (most conservative) to 1.170 (most liberal).

Ethics

Research ethics approval for the cross-sectional survey and the present secondary analysis was obtained by Queen's University Health Sciences and Affiliated Teaching Hospitals Research Ethics Board (#6020398). Trained Haitian research assistants introduced the study to participants in Kreole using a standard script and informed consent was obtained prior to the start of the survey. No compensation, financial or otherwise, was provided. To mitigate the risk of psychological distress, the survey intentionally did not ask participants to share experiences of sexual violence. As a community partner, KOFIVIV was able to offer psychological support and counselling when necessary, and referral information for legal advice was provided. No identifying information was collected, and participants were requested to not use the names of real people when reciting their experiences. To ensure data security, all completed surveys were uploaded from the tablets to a secure server and then were subsequently permanently deleted from the iPads.

Results

In total, 2541 self-interpreted narratives were collected from 2191 unique participants. After completing the cross-sectional questionnaire, participants were given the option to share and self-interpret an additional narrative (up to a maximum of four). Of the 2541 self-interpreted micro-narratives n=276 (10.9%) were second stories, n=37 (1.46%) were third stories, and n=10 (0.39%) were fourth stories shared by participants.

Characteristics of the narrators (participants)

The majority of participants were male (69.6%), single/never married (60.5%), below the age of 35 years (66.1%) and attained an income that was considered "average" (63.3%), meaning they had access to two to three household items. Additional participant demographic characteristics are presented in Table 1. [Insert Table 1]

Characteristics of the narratives shared

Of the 2541 self-interpreted stories, 680 (27%) addressed sexual misconduct perpetrated by MINUSTAH peacekeepers. As demonstrated in *Table 2*, 74% of narratives about sexual misconduct were shared by Haitian men, this mirrors the general sex distribution noted among the participants (Table 1). Compared to narratives that did not address sexual misconduct by MINUSTAH peacekeepers, narratives addressing sexual misconduct were more likely to be collected in Port Salut and Cité Soleil, more likely to be “about someone else in my community”, and less likely to be reported as first-hand experiences experienced directly by the participant (Table 2). Moreover, narratives addressing sexual misconduct were more likely to have a “negative” and “very negative” emotional tone, as identified by the participant. Participants were also more likely to respond that “others must hear this story and take action” if they shared a narrative addressing sexual misconduct. Lastly, Uruguayan peacekeepers were more likely to be identified in narratives about sexual misconduct. [Insert Table 2]

Geographical distribution of narratives about sexual misconduct

As illustrated in Table 3, compared to urban locations, narratives shared in rural locations had a 19% (1.19 [95% CI:1.03,1.38]) increased probability of addressing sexual misconduct. Compared to urban locations, narratives shared in semi-urban locations had a 30% (0.70 [95% CI: 0.57, 0.86]) decreased probability of addressing sexual misconduct. Therefore, after adjustment the probability of expressing a micro-narrative about sexual misconduct was greatest in rural locations, followed by urban locations, and semi-urban locations had the least probability of mentioning sexual misconduct.

Table 3. Association between geographical location and narratives addressing sexual misconduct

Exposure	RR	95% CI	p-value
Location			<.0001
Urban	1.00	Ref	Ref
Rural	1.19	(1.03, 1.38)	0.0195
Semi-Urban	0.70	(0.57, 0.86)	0.0007

126 narratives were excluded due to missing covariates ($N_{total}=2415$)

Model adjusted for: emotional tone, who is this narrative about, and age (Refer to Table 4)

Effect of covariates on the sharing of sexual misconduct among narratives

The most parsimonious model controlled for emotional tone, who the narrative was about, and age. Table 4 presents the effect of these covariates on the probability of a narrative mentioning sexual misconduct.

Table 4. Effect of covariates on probability of narrative mentioning sexual misconduct

Covariates	RR	95% CI	p-value
Emotional Tone			<.0001
Neutral	1.00	Ref	Ref
Positive	0.74	(0.58, 0.94)	0.0153
Negative	1.42	(1.15, 1.75)	0.0011
Who is this story about?			<.0001
Personal	1.00	Ref	Ref
Family/ Friends	3.95	(3.07, 5.07)	<.0001
Community members	3.25	(2.61, 4.04)	<.0001
Age			0.1214
>45 years	1.00	Ref	Ref
11 to 24 years	1.20	(0.97, 1.47)	0.0861
25 to 44 years	1.21	(1.00, 1.47)	0.0554

Consequence of experiencing sexual misconduct on the willingness to engage with the UN

In general, after adjustment, we found a positive association between experiences of sexual misconduct and the desire to reject the UN/MINUSTAH. A similar positive association was also noted between experiences of sexual misconduct unrelated to sexual misconduct and the desire to reject the UN/MINUSTAH. Interestingly, the association between subject-matter of the narrative and desire to reject the UN was modified by who the narrative was about (p-value=0.0113 for interaction term). This statistically-significant interaction reveals that while general positive associations are noted, the magnitude of the association differs by who experienced the misconduct.

The heterogeneity of effect was identified between the personal stratum and community stratum. Regarding personal narratives, narrators of stories about experiences of sexual misconduct had 4.52 (95% CI: 3.34, 6.12) times the probability of rejecting the UN/MINUSTAH compared to narrators who shared positive/neutral experiences. Regarding narratives about community members, narrators of experiences about sexual misconduct had 2.51 (95% CI: 2.00, 3.14) times the probability of rejecting the UN/MINUSTAH compared to narrators who shared positive/neutral experiences. These results suggest that first-hand experiences of sexual misconduct perpetrated by peacekeepers had the most extreme effect on the probability of rejecting the UN/MINUSTAH.

Table 5. Association between narrative subject and the probability of rejecting the UN/MINUSTAH stratified by who the narrative is about.

Narrative subject matter	Who is this story about?					
	Community Members (N=1388)		Family & Friends (N=215)		Personal (N=890)	
	RR (95% CI)	p-value	RR (95% CI)	p-value	RR (95% CI)	p-value
Positive/ Neutral	Ref		Ref		Ref	
Other wrongdoings	2.64 (2.11, 3.31)	<0.0001	3.84 (1.69, 8.74)	0.0013	4.28 (3.22, 5.67)	<0.0001
Sexual Interactions	2.51 (2.00, 3.14)	<0.0001	3.12 (1.35, 7.11)	0.0072	4.52 (3.34, 6.12)	<0.0001

310 narratives were removed from this analysis due to incomplete covariate information ($N_{total}=2231$)

Interaction term (narrative*who is the story about) p-value=0.0113

Log-binomial model is adjusted for: narrator income, narrator gender, narrator relationship status and the narrative's emotional tone

Effect of adjustment variables on probability of rejecting the UN/MINUSTAH is depicted in Table 7.

Table 6. Comparison between narratives addressing peacekeeper misconduct or not and the probability of rejecting the UN/MINUSTAH stratified by who the narrative is about

Narrative subject matter	Who is this story about?					
	Community Members N=1388		Family & Friends N=215		Personal N=890	
	RR (95% CI)	p-value	RR (95% CI)	p-value	RR (95% CI)	p-value
Sexual Misconduct	Ref		Ref		Ref	
Other wrongdoings	1.05 (0.97, 1.14)	0.1946	1.24 (1.01, 1.52)	0.0481	0.95 (0.80, 1.13)	0.5313

310 narratives were removed from this analysis due to incomplete covariate information ($N_{total}=2231$)

Interaction term (narrative*who is the story about) p-value=0.0113

Log-binomial model is adjusted for narrator income, narrator gender, narrator relationship status and the narrative's emotional tone

Effect of covariates on consequences of experiencing sexual misconduct

The most parsimonious model described above also controlled for: narrator income, narrator gender, emotional tone of the narrative, and narrator relationship status. The effect of these covariates on the probability of rejecting the UN/MINUSTAH is presented in Table 7. One interesting finding is that narratives told by females were 13% less likely to report

rejecting the UN compared to male participants (RR=0.87 [95% CI: 0.80, 0.95]). Secondly, narratives with a negative emotional tone were 16% more likely to reject the UN compared to narratives with a neutral emotional tone (RR=1.16 [95% CI: 1.02, 1.31]).

Table 7. Effect of covariates on the desire to reject the UN/MINUSTAH

Covariates	RR	95% CI	p-value
Narrator Income			0.0208
Poor	1.00	Ref	Ref
Average	0.96	(0.89, 1.03)	0.2269
Well-off	0.82	(0.71, 0.96)	0.012
Narrator Gender			0.0009
Male	1.00	Ref	Ref
Female	0.87	(0.80, 0.95)	0.002
Emotional Tone of Narrative			<.0001
Neutral	1.00	Ref	Ref
Negative	1.16	(1.02, 1.31)	0.02
Positive	0.89	(0.75, 1.05)	0.1653
Narrator Relationship Status			0.0014
No partner	1.00	Ref	Ref
In a relationship	1.12	(1.04, 1.19)	0.0011

Discussion

The purpose of this research was to generate empirical understandings of peacekeeper-perpetrated sexual misconduct through secondary analysis of 2541 self-interpreted narratives obtained from Haitian community members who lived in proximity to MINUSTAH peacekeeping bases.

Geographic distribution of sexual misconduct perpetrated by peacekeepers

Multi-variate log-binomial regression was used to model the probability of participants sharing a narrative that addressed sexual misconduct perpetrated by MINUSTAH peacekeepers as a function of location. After adjusting for narrator age, emotional tone of the narrative, and who the narrative was about, the probability of sharing a narrative about sexual misconduct was greatest in rural locations, followed by urban locations. Narratives shared in semi-urban locations had the least probability of mentioning sexual misconduct.

Peacekeeping economies may explain why narratives shared in rural locations had a greater probability of mentioning sexual misconduct compared to urban locations. Given women and girls in rural Haiti face greater socio-economic disparities compared to their urban counterparts (43), their participation in peacekeeping economies was hypothesized to be greater, potentially leading to a variety of sexual interactions with peacekeepers: transactional sex, commercial sex work, long-term relationships, and SEA. Thus, we expected the occurrence of sexual misconduct to be greater in rural locations, compared to urban locations.

However, the mechanism of peacekeeping economies does not consider the conduct and discipline of peacekeepers within each base. The rural-effect may also be explained by the differential implementation of sexual misconduct

deterrence measures such as: the zero-tolerance policy, SEA reporting mechanisms, surveillance, and peacekeeper discipline. The certainty of punishment has been identified as an important factor in deterring potential SEA perpetrators during PO (44).

The model included narratives of children fathered by peacekeepers within the sexual misconduct outcome. The mechanism of peacekeeping economies does not fully address the existence of children fathered by MINUSTAH peacekeepers. The rural-effect may be more fully explained by considering differential access to resources and information between urban and rural locations, such as contraception needs and access to abortion. Narratives that mention children fathered by peacekeeper might be shared to a greater extent in rural locations because women and girls in rural Haiti could be more at risk of conceiving children with peacekeepers on account of unmet contraception needs or inability to access abortion.

Lastly, the current sample is not exclusively comprised of first-person narratives. The inclusion of narratives about family/friends or community members may speak to differing social dynamics such as comfort speaking about the experiences of other people and the ease with which information travels through a community. In conclusion, the rural-effect identified is likely a multi-causal phenomenon that is partially explained by the participation of women and girls in peacekeeping economies. Future research should aim to further elucidate the variability of SEA attributable to geographical location. The geographical distribution of SEA could have implications for how the UN allocates conduct and discipline resources and where it focuses its SEA prevention training.

The findings presented in the current analysis indicate that narratives collected from rural locations in Haiti have a greater probability of mentioning sexual misconduct, compared to urban locations. No other studies have examined the distribution of peacekeeper-perpetrated sexual misconduct by urban, rural, and semi-urban locations. However, research that applies regression modelling to peacekeeping data over multiple mission years exists. Some parallels can also be drawn to the work of Nordas and Rustard (23) who identified host-country risk factors of reported SEA. Low GDP per capita, high level of pre-conflict sexual violence, and absence of spousal rape law were positively associated with reported SEA. Similarly, Moncrief (24) found increasing host-country GDP per capita was significantly related to reduced SEA allegations. Finally, Neudorfer (44) investigated whether the presence of conduct and discipline units (CDUs) were associated with reduced SEA allegations. The author concluded the introduction of a conduct and discipline unit in PO was negatively and significantly correlated with the number of SEA allegations. Given the distribution of sexual misconduct narratives, it might be prudent to decentralize the CDU within a given PO such that CDUs are also placed in at-risk locations.

Elucidating the geographical distribution of SEA in Haiti will advance the understanding of regions that are most at-risk. While the UN no longer has an active peacekeeping presence in Haiti since the 2019 termination of the *United Nations Mission for Justice Support in Haiti*, the country continues to face prolonged and consistent insecurity. Currently, it is unknown whether the UN plans to reinstate future PO in Haiti. However, it is clear that the UN has a 25 year history of deploying PO in Haiti (5), resulting in a deeply entrenched economic dependence on international actors and humanitarian organizations. Diligence in understanding regions within Haiti most affected and at risk of sexual misconduct perpetrated by peacekeepers is a prudent first step in rebuilding community partnerships.

Not only could deterrence measures such as CDUs be implemented, but also interventions that address the social and economic factors that increase the vulnerability of experiencing SEA. Approaches to preventing and responding to SEA exist on a spectrum, from targeting peacekeepers to targeting local women and girls (45). By recognizing the geographical distribution of SEA, actionable intervention areas can be identified. In the absence of an evidence-based

approach with respect to the allocation of deterrence and prevention policies and programs, sexual misconduct perpetrated by MINUSTAH peacekeepers has the potential to further tarnish the UN's legitimacy in host countries.

Impact of sexual misconduct on the desire to engage with the UN

Multi-variate log-binomial regression modeled the probability of reporting a desire to reject the UN/MINUSTAH as a function of distinct experiences with MINUSTAH peacekeepers. After adjusting for income, gender, emotional tone, and relationship status, we found positive associations between experiences of peacekeeper misconduct (both related to sexual misconduct and not) and the desire to reject the UN/MINUSTAH. The association between subject-matter of the narrative and desire to reject the UN was modified by who the narrative was about. This statistically-significant interaction revealed that while general positive associations are noted, the strength of the association differed by who experienced the misconduct.

The non-overlapping 95% confidence intervals demonstrate that the RR point estimates comparing sexual misconduct to positive/neutral experiences were statistically different between the personal and community strata. Regarding personal narratives, narrators of stories about experiences of sexual misconduct had 4.52 (95% CI: 3.34, 6.12) times the probability of rejecting the UN/MINUSTAH compared to narrators who shared positive/neutral experiences. Among narratives about community members, narrators of experiences about sexual misconduct had 2.51 (95% CI: 2.00, 3.14) times the probability of rejecting the UN/MINUSTAH compared to narrators who shared positive/neutral experiences. These results suggest that first-hand experiences of sexual misconduct perpetrated by peacekeepers had the most extreme effect on the probability of rejecting the UN/MINUSTAH. Due to a lower sample size in the family/friends stratum (N=215), the imprecise CI (95% CI: 1.35, 7.11) surrounding the point estimates for the family/friends stratum prevented meaningful inferences regarding the heterogeneity of effect.

Exposure to everyday experiences with peacekeepers will shape civilian perceptions of peacekeepers, which in turn affects the desire to engage with peacekeepers (35). Local civilians may not have access to reliable information about peacekeepers (36); they rely on personal, vicarious, and community-level experiences regarding the day-to-day activities of peacekeepers. Thus, experiences with peacekeepers influence perceptions, thereby impacting decisions related to engaging with the UN/MINUSTAH.

Gordon and Young found that exposure to abuse perpetrated by peacekeepers negatively affected perceptions related to the effectiveness, abusiveness, and benevolence of peacekeepers (35). Negative perceptions of peacekeepers were found to reduce cooperation with peacekeepers, measured through information sharing. The earlier work of Gordon and Young suggested perceptions of peacekeepers mediate the relationship between narratives of sexual misconduct and the probability of rejecting the UN/MINUSTAH. Furthermore, exposure to abuses perpetrated by peacekeepers were negatively associated to cooperation with peacekeepers, in terms of information sharing and crime reporting. Likewise, the current results indicate that exposure to misconduct perpetrated by peacekeepers increased the probability of rejecting the UN/MINUSTAH, compared to positive/neutral experiences with peacekeepers.

Gordon and Young aggregated a variety of abuses perpetrated by MINUSTAH peacekeepers into one category: excessive use of force, theft, sexual exploitation, and domestic abuse (35). Unlike Gordon and Young, the present analysis disaggregated misconduct perpetrated by peacekeepers into two categories: sexual misconduct and other wrongdoings. This allowed for the separation of effect between sexual misconduct and other wrongdoings perpetrated by peacekeepers on the probability of rejecting the UN/MINUSTAH. In addition, results expand the

mechanism proposed by Gordon and Young by considering effect modification according to whether experiences with peacekeepers were first-hand or vicarious (about family/friends or community members). The results suggested that first-hand experiences of sexual misconduct perpetrated by peacekeepers had a more extreme effect on the probability of rejecting the UN/MINUSTAH. Therefore, the closer in proximity experiences to sexual misconduct are, the greater the probability of rejecting the UN/MINUSTAH. In other words, first-hand and vicarious experiences of sexual misconduct are distinct lived experiences that have differential effects on the desire to engage with the UN/MINUSTAH.

The UN's continued presence in Haiti, either through PO or other humanitarian organizations, is negatively affected by MINUSTAH's legacy of sexual misconduct. The present analysis makes the case that sexual misconduct perpetrated by peacekeepers not only affects the individuals who experience abuse and exploitation but also the individuals' social networks and communities. MINUSTAH's legacy in Haiti is interconnected with narratives of SEA and negative sentiments related to the willingness to engage with the UN. Future PO and humanitarian actors deployed to Haiti will live and work in regions where local community members have deeply entrenched perceptions, sentiments, and attitudes that diminish cooperation and trust. This is likely to affect the legitimacy of future UN operations in Haiti, thereby destabilizing long-term peace-building and democratization agendas.

Limitations

The results must be interpreted with several limitations in mind. First, convenience sampling has the potential to introduce selection bias and the gender imbalance noted in the sample (70% males, 30% females) is the result of participants' self-selection out of the study. Based on consultations with the Haitian community partners who implemented the study, Haitian women and girls maybe more likely to refuse participation due to culture of shame around sex and sexual violence, fear of being arrested or identified, distrust of research, avoidance of secondary trauma, research fatigue, fear of the peacekeeper being repatriated, and frustration due to peacekeeper immunity. Research assistants recruited participants in public and community settings during the day: markets, post offices, and bus stops. This may have reduced the probability of recruiting certain members of the population: women responsible for domestic duties, persons living with disabilities, and older adults.

Second, in the first regression model, the location where the cross-sectional survey was administered was used as a proxy for the location where the event in the narrative occurred. This may be problematic because location at the point of interview may not represent the location where the events in the narrative occurred. Third, narratives shared by the participants sometimes addressed more than one distinct experience with MINUSTAH peacekeepers. Consequently, the classification of single narratives that addressed multiple experiences into distinct subject-matter categories was challenging. Narratives that contained descriptions of sexual interactions in addition to other experiences were classified as being about sexual misconduct. This misclassification may be related to the outcome because experiences of sexual misconduct alongside other wrongdoings may have a more profound and extreme effect on the desire to reject the UN/MINUSTAH. Finally, a number of potential confounders were missing: earthquake-related losses, exposure to gang-related violence, level of sexual violence preceding the PO, number of internally displaced persons, composition and size of peacekeeping contingent peacekeeper gender and SEA training, TPCC laws against marital rape, etc.

In light of the limitations, the analyses presented should be seen as exploratory, as there is little causal research to date examining the distribution and consequences of sexual misconduct perpetrated by peacekeepers. The results

from both models explain associations rather than causal mechanisms. To further support the implementation of evidence-based policies and programs, more rigorous population-based studies examining target intervention areas in Haiti and the effect of experiencing sexual misconduct on the willingness to engage with the UN should be conducted.

Strengths and contributions

This research contributes to the growing field of scholarship at the intersection of epidemiology and peacekeeping. In contrast to traditional cross-sectional questionnaires implemented in host countries, this research utilizes SenseMaker to capture the complex, nuanced, multi-faceted phenomenon of sexual relations between Haitian females and UN peacekeepers. SenseMaker allowed for the rapid collection of mixed-methods data, between June to August of 2017, which included 2541 narratives about the experiences of women and girls in relation to MINUSTAH from a variety of community members.

The nature of SEA during MINUSTAH merits specific analysis given sexual violence perpetrated by UN peacekeepers in Haiti exists within the context of intra-state violence and earthquake-related losses. Therefore, this work provides in-depth and contextualized analysis of how sexual relations with peacekeepers operated in Haiti as an alternative to the analysis of SEA count data aggregated over multiple peacekeeping missions and host countries. Similar to sexual violence more broadly, sexual misconduct perpetrated by peacekeepers is a widely unreported crime; accounts of SEA that are formally reported to the UN represent a small proportion of all cases. While our research does not analyze substantiated reports of SEA, we include experiences of sexual misconduct that might never enter the UN's formalized system of reporting. Accordingly, this research captures a wider variety of sexual misconduct perpetrated in Haiti compared to counts of SEA formally reported and/or substantiated by the UN or TPCC. Consequently, a more community-driven and grounded understanding of personal, vicarious, and community level experiences related to sexual relations with peacekeepers is possible.

In addition, within existing literature, SEA has been largely framed as a women's issue as demonstrated through predominantly female-only samples. This analysis integrates the voices of Haitian men *and* women. The results illustrate Haitian men and boys are directly and indirectly affected by civilian-peacekeeper-perpetrated sexual misconduct and their perspectives are important to establish a holistic understanding of how sexual relations with peacekeepers affect communities that host PO.

Conclusion

This research presented an exploratory step to analyzing the geographical distribution of peacekeeper-perpetrated sexual misconduct during PO and the effect of sexual misconduct on the willingness to engage with the UN. Narratives of sexual misconduct perpetrated by MINUSTAH peacekeepers are geographically distributed and positively associated with rejecting the UN/MINUSTAH. This epidemiological analysis is an empirical steppingstone to understanding the distribution and consequences of peacekeeper perpetrated sexual misconduct. The UN's efforts to prevent and address SEA in Haiti could be strengthened by considering actionable target areas with respect to regions most at-risk and most affected by sexual misconduct. The allocation of policies and programs to actionable areas is one step toward rebuilding the UN's legacy of peacekeeping in Haiti.

Declarations

Ethics approval and consent to participate

Research ethics approval for the cross-sectional survey and the present secondary analysis was obtained by Queen's University Health Sciences and Affiliated Teaching Hospitals Research Ethics Board (#6020398). Trained Haitian research assistants introduced the study to participants in Kreole using a standard script and informed consent was obtained prior to the start of the survey.

Consent for Publication

All authors provide their consent for publication. No identifying participant information was obtained or published in this research.

Availability of data and material

The dataset(s) supporting the conclusions of this article is available in Figshare, [<https://figshare.com/s/896ed7d25a1fa1a4a09b>].

Competing Interests

The authors declare no competing interests.

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Authors' Contribution

LV analyzed the data and interpreted the results in consultation with HS and SB. LV also drafted the manuscript, which was edited by HS, SB, and SL. SB and SL were involved in data collection in Haiti, training the Haitian research assistants, and liaising with the Haitian research assistants and community partners (KOFIVIV, ETS, BAI).

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List Of Abbreviations

BAI	Bureau des Avocats Internationaux
CI	Confidence interval
CDU	Conduct and Discipline Unit
ETS	Enstiti Travay Sosyal ak Syans Sosyal
KOFAVIV	Komisyon Fanm Viktim pou Viktim

MINUSTAH	United Nations Stabilization Mission in Haiti
MoU	Memorandum of Understanding
PO	Peace operations
RR	Relative risk
SEA	Sexual abuse and exploitation
TPCC	Troop and police contributing country
UN	United Nations

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Tables 1 And 2

Table 1. Demographic characteristics for total number of participants

Characteristic	Respondents (n)	%
Age		
11– 17 years old	216	9.9
18 – 24 years old	508	23.2
25 – 34 years old	724	33.0
35 – 44 years old	360	16.4
45 – 54 years old	206	9.4
≥ 55 years old	127	5.8
Prefer not to say	48	2.2
Missing	2	0.9
Gender		
Male	1526	69.6
Female	664	30.3
Prefer not to say	1	0.05
Education		
No formal education	118	5.4
Some primary school	269	12.3
Completed primary school	250	11.4
Some secondary school	831	37.9
Completed secondary school	416	19.0
Some post-secondary school	217	9.9
Completed post-secondary school	90	4.1
Income		
Poor	670	30.6
Average	1386	63.3
Well-off	135	6.2
Location^a		
Cité Soleil	341	15.6
Port Salut	313	14.3
Saint Marc and Gonaives	314	14.3
Leogane	314	14.3
Hinche	303	13.8
Cap Haitien	246	11.2
Morne Casse and Fort Liberté	192	8.8
Charlie Log Base and Tabarre	168	7.7
Marital Status		
Single never married	1326	60.5
Married or living together as if married	796	36.3
Divorced/Separated from spouse	18	0.8
Widowed	15	0.7
Prefer not to say	36	1.6

Note: N total=2191 unique participants

Table 2. Characteristics of the narratives shared

Characteristic	All narratives n n(%)	Sexual Misconduct	No Sexual Misconduct	P-value*
Location	N=2541	N=682	N=1859	<0.0001
Cité Soleil	399 (15.7)	129 (18.9)	270 (14.5)	
Port Salut	364 (14.3)	180 (26.4)	184 (9.9)	
Saint Marc and Gonaïves	361 (14.2)	102 (15)	259 (13.9)	
Hinche	359 (14.1)	91 (13.3)	268 (14.4)	
Léogâne	355 (14.0)	62 (9.1)	293 (15.8)	
	287 (11.3)	54 (7.9)	233 (12.5)	
Morne Casse and Fort Liberté	220 (8.7)	25 (3.7)	195 (10.5)	
Charlie Log Base and Tabarre	196 (7.7)	39 (5.7)	157 (8.4)	
Gender of narrator	N=2539	N=680	N=1859	0.0370
Male	1803 (71.0)	504 (74.1)	1299 (69.9)	
Female	736 (29)	176 (25.8)	560 (30.1)	
Location by sub-group	N=2541	N=682	N=1859	<0.0001
Urban ^f	595 (23.4)	168 (24.6)	427 (23.0)	
Semi-urban ⁱ	642 (25.2)	116 (17.0)	526 (28.3)	
Rural [^]	1304 (51.3)	398 (58.4)	906 (48.7)	
Willingness to Engage with UN	N=2314	N=652	N=1662	<0.0001
Engage with the UN/MINUSTAH	1132 (48.9)	219 (33.6)	963 (57.4)	
Reject UN/ MINUSTAH	1182 (51.1)	433 (66.4)	699 (42.0)	
Did not respond	227 (9.8)	30 (4.6)	197 (11.8)	
Who is this story about?	N=2493	N=682	N=1859	<0.0001
Friend	109 (4.3)	62 (9.1)	47 (2.5)	
Me	890 (35.0)	83 (12.2)	807 (43.4)	
Someone else in my community	1000 (39.4)	395 (57.9)	605 (32.5)	
Someone in my family who does not live in my household	51 (2.0)	19 (2.8)	32 (1.7)	
Someone in my household	55 (2.2)	19 (2.8)	36 (1.9)	
Something I heard or read	388 (15.3)	93 (13.6)	295 (15.9)	
Prefer not to say	48 (1.9)	11 (1.6)	37 (2.0)	
Emotional Tone	N=2541	N=682	N=1859	<0.0001
Very negative	257 (10.1)	133 (19.5)	124 (6.7)	
Negative	909 (35.8)	313 (45.9)	596 (32.1)	
Neutral	278 (10.9)	68 (10.0)	210 (11.3)	
Not sure	44 (1.7)	7 (1.0)	37 (2.0)	
Positive	826 (32.5)	108 (15.8)	718 (38.6)	
Strongly positive	227 (8.93)	53 (7.8)	174 (9.4)	
How often does this situation occur?	N=2541	N=682	N=1859	<0.0001
All the time	408 (16.1)	95 (13.9)	313 (16.8)	
Very frequently	943 (37.1)	265 (38.9)	678 (36.5)	
Regularly	469 (18.5)	137 (20.1)	332 (17.9)	
Occasionally	258 (10.2)	95 (13.9)	163 (8.8)	
Very rarely	300 (11.8)	75 (11)	225 (12.1)	
Not sure	163 (6.4)	15 (2.2)	148 (8.0)	
How important is it for others to hear your story?	N=2541	N=682	N=1859	<0.0001
Must hear this story and take action	1522 (59.9)	515 (75.5)	1007 (54.2)	
Should definitely hear this story and pay attention	689 (27.1)	137 (20.1)	552 (29.7)	
Can learn some things but not much	268 (10.6)	22 (3.2)	246 (13.2)	
Nothing to learn from this story	15 (0.59)	3 (0.4)	12 (0.6)	
Not sure	47 (1.85)	5 (0.7)	42 (2.3)	
What country was the foreigner in the story from?	N=2541	N=682	N=1859	<0.0001
Uruguay	395 (15.6)	167 (24.5)	228 (12.3)	
Brazil	522 (20.5)	150 (22.0)	372 (20.0)	

Chile	257 (10.1)	50 (7.3)	207 (11.1)
Argentina	182 (7.2)	51 (7.5)	131 (7.0)
Nepal	227 (8.9)	49 (7.2)	178 (9.6)
Sri Lanka	142 (5.5)	28 (4.1)	114 (6.1)
United States	26 (1.0)	2 (0.3)	24 (1.3)
Canada	12 (0.5)	4 (0.6)	8 (0.4)
Bolivia	9 (0.4)	2 (0.3)	7 (0.4)
Don't know	517 (20.4)	120 (17.6)	397 (21.4)
Other §	252 (9.91)	59 (8.65)	193 (10.38)

Note:

* p-value for Pearson Chi-square test for categorical variables comparing narratives about sexual misconduct to narratives unrelated to sexual misconduct

f Urban category included: Cité Soleil, Charlie Log Base, and Tabarre

i Semi-urban category: Léogâne and Cap Haïtien

^ Rural category: St. Marc, Gonaives, Morne Casse, Fort Liberté, Hinche and Port Salut

- Other: China, France, Indonesia, Japan, Jordan, Nigeria, Other, Pakistan, Peru, Senegal

Supplementary Files

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- [Appendix.docx](#)