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Abstract

Combined with traditional qualitative data and testimonies, population-based studies may assist investigators and prosecutors of international judicial institutions in the identification of perpetrator groups and in defining the types of international crimes committed by active perpetrator groups during conflict. This research—based on a secondary analysis of data from a cross-sectional study of the North Kivu and South Kivu provinces and the Ituri district in Democratic Republic of Congo—provides a case study to demonstrate how population-based surveys might have value to International Criminal Court (ICC) prosecutions. These data reveal crimes committed during the conflicts constitute crimes against humanity and war crimes and identify the perpetrator groups most responsible for these crimes. Compared to current prosecutions at the ICC, this research finds that leaders of the Mai-Mai and Interahamwe among other groups not charged by the ICC, were most active in North Kivu and South Kivu provinces for perpetrating sexual and physical violence. Population-based surveys, in addition to traditional qualitative data and testimonies, may aid ICC investigators and prosecutors, particularly in the identification of perpetrator groups and in defining the types of international crimes committed by active perpetrator groups during conflict.

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Democratic Republic of Congo, conflict, human rights violations, sexual violence, crimes against humanity, transitional justice

Introduction

The conflict in Democratic Republic of Congo (DRC) is generally considered as one of the most violent conflicts in the world, which has led to mass victimization (Hawkins, 2008; United Nations Office of the High Commissioner for Human Rights, 2010), tremendous suffering, and the endangering of international peace and security (UN SC Res. 1291). The protracted conflict, in which many different militarized units and groups were active, consists of distinct periods: March 1993 to March 2000, April 2000 to March 2007, and April 2008 to March 2010. These periods are marked by egregious human rights abuses and unprecedented violence against civilian populations, with millions dying of direct or indirect causes of the conflict. Furthermore, the conflict is interlinked with other regional conflicts, including the 1994 Rwandan Genocide (Coghlan, 2006; Prunier, 2009).

Many different armed groups were active in these conflicts (Congo Civil War, 2012). Those include politically aligned groups such as *Forces Armées de la République Démocratique du Congo* (FARDC, or government forces), *Rassemblement Congolais pour la Démocratie-Goma* (RDCG), and ethnic aligned groups such as the Patriotic Union of Congolese (UPC), *Forces Patriotiques pour la Libération du Congo* (FPLC), the Front for National Integration (FNI), the Patriotic Force of Resistance in Ituri (FRPI), the People's Armed Forces of Congo (FAPC), and the Mai-Mai (Human Rights Watch, 2005a; Human Rights Watch, 2010). Other groups involved include nationals allegedly backed by other countries such as the Democratic Forces for the Liberation of Rwanda (FDLR), the Interahamwe, the Movement for the Liberation of Congo (MLC), the Allied Democratic Forces/National Army for the Liberation of Uganda (ADF-NALU), Ugandan People's Defense Force (UPDF: Ugandan national armed forces), and finally the Ugandan Lord's Resistance Army (LRA).

The government of DRC referred the situation to the ICC on March 3, 2003, and investigations started on June 21, 2004. Currently, six suspects have been indicted for a number of war crimes and crimes against humanity, including Thomas Lubanga Dyilo, a UPC/FPLC leader. Thus far, Lubanga is the only suspect to be convicted by the ICC, on March 14, 2012 (*Prosecutor v. Thomas Lubanga Dyilo*, 2012).

Current understanding of conflict-related human rights violations in DRC is based largely on anecdotal, advocacy-driven, and/or qualitative data (Bartels, Kelly, Leaning, Scott, & Van Rooyen, 2008; Eriksson Baaz, & Stern, 2008; Human Rights Watch, 2002; Kelly, Van Rooyen, Leaning, & Cragin, 2009; Murray, Bass, Bolton, 2006; Wakabi, 2008) and previous analysis of population-based data potentially useful in prosecutions are limited in scope with regard to human rights violations and focused on the health consequences of human rights abuses (Johnson et al., 2010; Vinck, Pham, Baldo, & Shigekane, 2008). This secondary analysis of previously collected data drew upon three distinct time periods of DRC's conflict to reveal the prevalence of human rights violations from 1993 to 2010 in eastern DRC territories and to present patterns of reported physical, movement, and sexual violations by province, distinct time periods, and combatant perpetrator groups. The data resulting from the population-based survey reveal the nature and extent of crimes committed in eastern DRC (Ituri, North, and South Kivu) and perpetrator groups most often reported by the victims as responsible for the crimes committed in each conflict time period. In several instances, this secondary analysis reveals patterns in more detail than case reports and/or qualitative and quantitative data reported previously. We use DRC as a case study to show how population-based surveys might have value and significant policy implications for current and future ICC prosecutions by evaluating these data against current ICC prosecutions on DRC.

Methods

Survey Sites and Sample Selection

This secondary analysis is based on data from a cross-sectional study conducted in North and South Kivu provinces and Ituri district (formerly Ituri province; now within Orientale province) in DRC in March 2010 (Johnson et al., 2010). This analysis focuses on the perpetrators of international crimes subgrouped by time, area, and violation type. The populations of North Kivu, South Kivu, and Ituri were obtained using 2006 voter registration records (Electoral Institute for Sustainable Democracy in Africa, 2012). The final sample consisted of 67 villages (10–15 households per village) and 1,005 households (98.9% response rate) and included stratification by province according to population size. Of the 1,005 households surveyed, 998 respondents completed the survey. Of the 7 nonrespondents, 4 refused to participate, 1 was ineligible due to age (<18 years), and 2 did not complete the survey. Respondents who reported household violations reported higher literacy than overall respondents. No ethnic groups were more common among respondents with reported abuses than among overall respondents (Johnson et al., 2010).

Data Collection

Trained Congolese interviewers conducted the survey in their respective provinces. A modified EPI Coverage Survey methodology was used to determine the start of the survey within villages (World Health Organization, 1991). Within the larger health survey, questions were administered that collected in-depth human rights violations data from randomly chosen respondents who reported on violations to self or to household members. One randomly selected male or female adult (≥ 18 years of age) was interviewed per household in the sample. If that person was unavailable, the next adult was approached. If only one adult or one sex was present when a household was visited, that person was interviewed regardless of sex. Refusals, ineligible households, and lack of availability after two attempts were recorded. One-on-one interviews were conducted anonymously in a setting that offered privacy and confidentiality. Due to concern for anonymity and due to high illiteracy rates, verbal rather than written consent was obtained.

Human Rights Abuses

To assess human rights violations, respondents were asked whether they or their household members had been beaten, shot, stabbed, had violent amputations or other physical abuses, had been sexually assaulted, raped, abducted, captured, or had been subjected to forced labor or forced displacement since the start of the conflict. Consequences of the violations were recorded, including deaths. For each violation, study respondents reported the sex of the victim, the type of violation, and the perpetrator information, if known (Amowitz, 2002). Although a 10-year recall of events is generally considered reliable (Burt, Kemp, & Conway, 2001), we asked about events since 1993 because the first civil war in the DRC was a major traumatic event in Congolese history and can therefore be reliably recalled (Thompson, Morton, & Fraser, 1997).

Definitions

A household was defined as a group of people eating from the same pot. Children were defined as age <18 years and elderly as age ≥ 60 years. Conflict-related sexual violence included any physical or psychological violence carried out through sexual means or by targeting sexuality and perpetrated by a combatant. Sexual violence included rape and attempted rape, molestation, sexual servitude, being forced to undress or being stripped of clothing, forced marriage, and insertion of foreign

objects into the genital opening or anus, forcing two victims to perform sexual acts upon or harm one another in a sexual manner, or genital mutilation perpetrated by a combatant (McDougall, 1998). For sexual servitude, abduction, or capture, respondents were asked whether in their lifetime they were forced to be a sexual servant or sexual slave, abducted or captured by a government or nongovernment military or militia group, followed by the identity of the perpetrator if known. Physical violations included beatings, gunshot wounds, stabbings, amputations, or physical assaults not sexual in nature. A perpetrator included any person or group who directly inflicted violence or a reported violation (Lehtonen & Pahkinen, 1994). Crimes against humanity and war crimes consisted of murder, extermination, enslavement, deportation or forcible transfer of population, torture, rape or other sexual abuse, political, racial, national, ethnic, cultural, or religious persecution, enforced disappearance of persons, or other inhumane acts causing injury to body or to mental or physical health, detention, imprisonment, or deprivation of liberty in violation of international law (Art. 7 Rome Statute, 1998).

Instrument

The survey was translated into Kiswahili from English by a certified translation service and back translated to account for culturally sensitive wording. Fluent in English, French, and Kiswahili, trained Congolese interviewers verbally administered the survey in Kiswahili. The survey was pilot tested to establish clarity of questions and for cultural appropriateness among public health experts in eastern DRC.

Human Subject Protections

Ethics approval was obtained from the Uniformed Services University Health Sciences, McGill University, and Kinshasa School of Public Health Institutional Review Boards. All respondents provided verbal informed consent. Every effort was made to ensure protection and confidentiality and to reduce potential adverse consequence to respondents (U.S. Department of Health and Human Services, 2012; World Health Organization, 2007). Data were kept anonymous at all times. Survey respondents did not receive material compensation and were informed that participation/lack thereof would not affect access to or the quality of the care they receive and were explicitly given the right to refuse participation.

Statistical Analysis

Data analysis was performed using the “survey” package within the statistical software platform R (Lumley, 2004). Analysis involved estimation of weighted population and subpopulation totals, means, and percentages. Confidence intervals (CIs; the precision of the measurement denoted as CI; 95%) for household- and person-level estimates were calculated using jackknife variance estimation to account for the complex sample design, and p values for bivariate comparisons were calculated using the adjusted Wald test of association. Each estimate used household-level weights or adult-person-level weights, depending on which prevalence was being reported.

Data were weighted to account for the sampling scheme, response rates, and excluded villages; population size estimates for individual territories (subsections of districts) were used. Village-level weights were developed by taking the inverse of the village selection probability and calibrating by the territory population size. To develop household-level and individual-level weights, village-level weights were multiplied by the average village size for the territory (by dividing the territory population size by the number of villages in the territory) and divided by the sample size for the village. The final estimates represent all but two territories of Ituri, North Kivu, and South Kivu.

Respondents experiencing any form of violence were asked to report a relative time frame of the occurrences. Responses were placed into nine categories covering “within the past month” to “10 or more years” from administration of the survey. To investigate the human rights violations represented in the data, categories relating to time were aggregated to create new variables identifying distinct periods: up to 2 years before survey administration (April 2008–March 2010); 3 to 10 years before the survey (April 2000–March 2007); and over 10 years (March 1993–March 2000) before the survey but coincident with the history of conflict in DRC.

International Criminal Court Case Analysis

Cases relevant to DRC were searched using the terms “DRC” and “Democratic Republic of Congo” available on the ICC website and relevant databases (http://www.icc-cpi.int/en_menus/icc/situations%20and%20cases/situations/situation%20icc%200104/Pages/situation%20index.aspx). The ICC and its cases were analyzed by studying the ICC Statute, ICC document such as the rules of procedure, and evidence of the ICC and comments thereon easily found on the ICC site; the case law was studied by analyzing the legal reasoning within the cases and comments on these cases within academic literature as well as the comments by civil society organizations. Legal doctrine was analyzed using case law and academic literature and legal debate. Positions relevant to DRC were assessed by analyzing policy papers and public statements of the Chief Prosecutor at the ICC.

Results

Overall Human Rights Violations

Between 1993 and 2010, 46.3% of households experienced some form of physical, movement, or sexual violations (as noted in Table 1) with Ituri district and South Kivu province comprising the greatest numbers of households reporting violations. Children also suffered violations; however, adults were the main targets of violations. Over the course of this protracted conflict an estimated 2,041,633 adults have suffered conflict-related violence, mostly in South Kivu, and over 1.5 million adults reported sexual violations in South Kivu. One fifth of all households reported violations ending in death—an estimated 226,608 adult deaths with the vast majority of these deaths in Ituri district. Overall, three quarters of violations reported were committed by Mai-Mai, FDLR, UPC, FNI, and Congolese government forces (as noted in Table 1).

Violations by Province

Ituri. Between 1993 and 2010 and among adult household members, over half (56.3%) of the respondents reported physical, movement, and sexual violations. Nine percent of the households reported violations against children during this same time period as noted in Table 1. Close to two-thirds of the reported violations were considered physical violations with an estimated 114,397 persons killed by conflict-related human rights violations. The UPC (39.8%), FNI (38.3%), and UPDF (18.4%) were the most common combatant group perpetrators of violations in Ituri for all time periods combined, as noted in Table 2. Close to half of all surveyed adults in Ituri suffered sexual violence—an estimated 392,397 persons (as noted in Table 1). Perpetrators of human rights violations vary by time periods in the conflicts. When violations were limited by time periods subject to ICC jurisdiction, the FNI, UPC, and LRA were the most commonly reported perpetrators of physical violations in both 2000–2007 and 2008–2010 (as noted in Figures 1 and 2) and the FNI and UPC were reported as the most common perpetrators of sexual violence during the same time period.

Table 1. Overall Weighted Human Rights Violations by Geographic Area During 1993–2010.

Characteristic(<i>n</i> = characteristic/total respondents)	Weighted Percentage ^a			
	All Provinces	Ituri	North Kivu Province	South Kivu Province
Households experiencing at least one abuse (<i>n</i> = 440/939, 155/250, 119/385, 166/304)	46.3	56.3	33.2	55.8
Households experiencing at least one abuse against an adult(<i>n</i> = 336/889, 115/223, 91/377, 130/289)	38.5	45.7	27.1	49.3
Households experiencing at least one abuse against a child(<i>n</i> = 53/888, 23/218, 14/390, 16/280)	6.5	9.4	3.3	9.0
Households experiencing at least one abuse that ended in death(<i>n</i> = 82/440, 34/155, 18/119, 30/166)	19.9	24.2	17.3	17.7
Violation types				
Physical violations(<i>n</i> = 272/440, 115/155, 52/119, 105/166)	62.1	69.0	43.8	71.5
Movement violations(109/440, 40/155, 21/119, 48/166)	24.9	28.4	14.7	30.3
Sexual violations(270/440, 71/155, 82/119, 117/166)	60.2	42.8	70.7	69.1
Number of adults who suffered sexual violations (<i>n</i> = 237/268, 63/66, 67/81, 107/121)	1,534,022	392,397	490,431	651,194
Number of people killed from conflict-related human rights violations(<i>n</i> = 82/440, 34/155, 18/119, 30/166)	226,608	114,397	44,504	67,707
Most active perpetrators				
Mai-Mai(84/415; 2/152; 41/111; 41/152)	18.5	0.6	40.3	18.6
FDLR(63/415; 0/152; 28/111; 35/152)	15.3	–	22.5	25.5
UPC(51/415; 50/152; 1/111; 0/152)	14.5	38.2	1.9	–
FNI(36/415; 36/152; 0/111; 0/152)	14.0	38.3	–	–
Government forces(42/415; 9/152; 9/111; 24/152)	11.0	7.6	7.7	17.5
Interahamwe(32/415; 0/152; 1/111; 31/152)	8.8	–	0.9	25.4

^a All statistics are weighted percentages unless otherwise noted. Denominators are the sum of the survey weights for the respondents in the subpopulation. FDLR = Democratic Forces for the Liberation of Rwanda; UPC = Patriotic Union of Congolese; FNI = Front for National Integration government forces = Les Forces Armées de la République Démocratique du Congo

North Kivu. Between 1993 and 2010, over one third (33.2%) of households reported physical, movement, and sexual violations committed against an adult (27.1%). Additionally, and during the same time period, 3.3% of households also reported violations against children. Per Table 1 and unlike Ituri, sexual violations were far more prevalent in North Kivu, with two-thirds of households reporting sexual violence compared to 43.8% of households reporting physical violations; an estimated half a million (490,431) persons reporting sexual violence, and 44,504 estimated persons killed by conflict-related human rights violations. The Mai-Mai (40.3%) and FDLR (22.5%) were the most commonly reported perpetrators of violence as noted in Table 1. The UPC and government forces were also reported but by less than 10% (combined) of households surveyed. Noted in Table 2, the Mai-Mai and FDLR, from 1993 to 2010, are the most commonly named perpetrators of both physical and sexual violence. Government forces are also named as perpetrators, albeit less commonly than in South Kivu. Violations categorized by specific time periods subject to ICC jurisdiction reveal that the Mai-Mai and government forces were the most common perpetrators of physical violations in both 2000–2007 and 2008–2010, with the FDLR also adding to the violence in 2008–2010 (as noted in Figures 1 and 2). The Mai-Mai was reported as the most common perpetrator of sexual violence during 2000–2007. In more recent years (2008–2010), the Mai-Mai, FDLR, and government forces all committed sexual violations in North Kivu.

Table 2. Violence by Combatant Group and Province During 1993–2010.

Province	Type of violence	Combatant Group	Weighted Percentage ^a
Ituri	Sexual violence	UPC	40.1
		FNI	35.3
		UPDF	19.6
	Physical violence	UPC	39.8
		FNI	38.3
		FAPC	18.4
North Kivu	Sexual violence	Mai-Mai	42.2
		FDLR	25.8
		Government forces	7.9
	Physical violence	Mai-Mai	33.7
		FDLR	13.8
		Government forces	8.5
South Kivu	Sexual violence	Interahamwe	29.2
		Government forces	19.9
		FDLR	18.6
	Physical violence	Interahamwe	25.9
		FDLR	22.1
		Mai-Mai	15.2

Note. ^a All statistics are weighted percentages unless otherwise noted. UPC = Patriotic Union of Congolese; FNI = Front for National Integration; UPDF = Uganda People's Defence Force; Physical Violence = does not include any sexual or movement violations; FAPC = People's Armed Forces of Congo; FDLR = Democratic Forces for the Liberation of Rwanda; government forces = Les Forces Armées de la République Démocratique du Congo.

South Kivu. Table 1 reveals that, like Ituri, over half of the households reported an abuse. Additionally, over half of all adult respondents reported abuses. Of all territories studied in eastern DRC, South Kivu had the highest rate (71.5%) of physical nonsexual violations reported among all time periods of the conflicts, in addition to high rates of sexual violence. An estimated 650,000 adults were subject to sexual violence and 67,000 persons killed during conflict. Four main perpetrator groups were reported by households with over half of all violations perpetrated by the FDLR and Interahamwe combined. Of all of the provinces, South Kivu had the highest number of reports of government forces abuses, which accounted for 17% of all violations reported (as noted in Table 1). As noted in Table 2, which reports violence by province, type, and combatant group between 1993 and 2010, the Interahamwe were responsible for the most physical and sexual violations in South Kivu and remain as the most commonly reported sexual violence perpetrators even as recently as 2010 (as noted in Figure 1). Violations categorized by time periods subject to ICC jurisdiction reveal that the Mai-Mai were most active between 2000 and 2007 and that several perpetrator groups share responsibility for sexual violence, with the Mai-Mai most responsible in 2000–2007 and the Interahamwe most responsible in 2008–2010 (as noted in Figures 1 and 2).

Analysis of International Criminal Court of DRC Proceedings

Background of the Court is presented below in addition to the DRC situation with regard to the Court. A summary of the cases of individual perpetrators from DRC conflicts currently on trial or awaiting trial at the Court is also presented.

The ICC was established by the Rome Statute signed on July 17, 1998. The goals of the ICC and international criminal justice in general, as referred to in the preamble and Article 1 Rome Statute, include facilitating justice, deterring future crimes, contributing to the restoration, and maintenance of international peace and security, establishing the facts and ensuring fair trials; bringing justice for

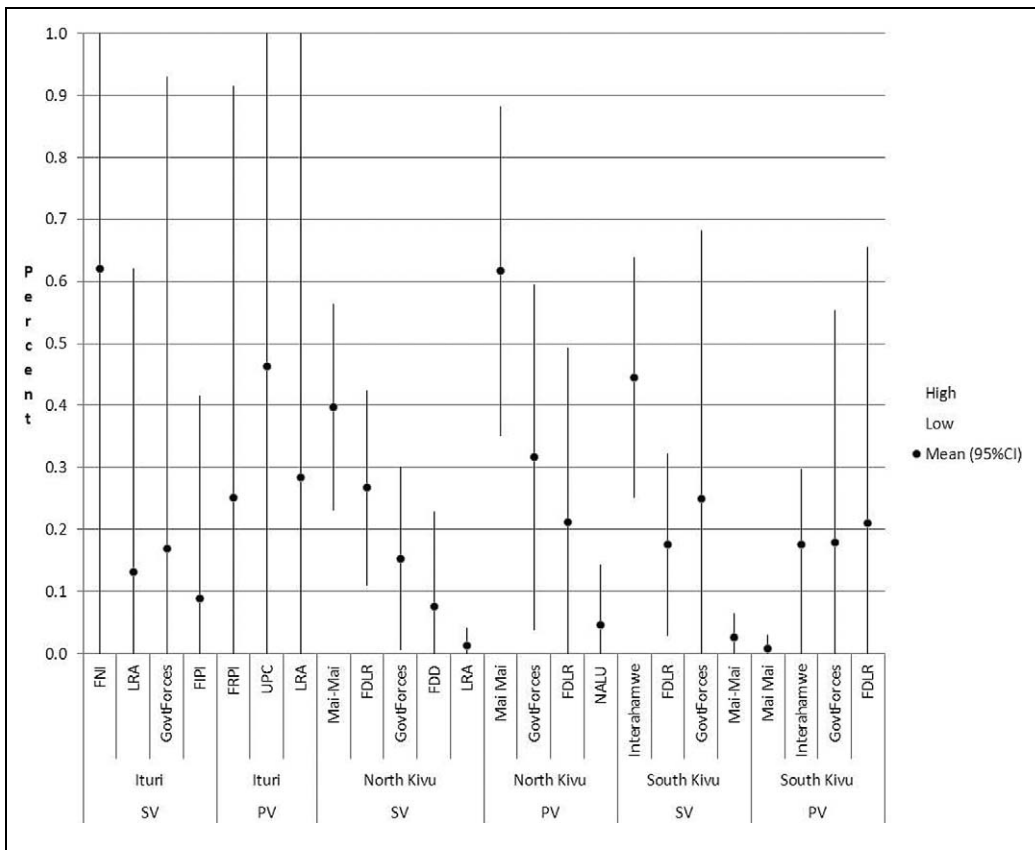


Figure 1. Percentage of adult person violence by type: Most active combatant group by province, April 2008–March 2010. Note. SV = sexual violence; PV = physical violence other than sexual violence; FNI = Front for National Integration; LRA = Lord’s Resistance Army; government forces = Les Forces Armées de la République Démocratique du Congo; FIPI = Front for Integration and Peace in Ituri; FRPI = Front for Patriotic Resistance in Ituri; UPC = Patriotic Union of Congolese; FDLR = Democratic Forces for the Liberation of Rwanda; FDD = Front for the Defense of Democracy (Burundi); NALU = National Liberation Army of Uganda.

victims has furthermore been advanced as an independent goal (Brouwer & Heikkilä, 2013; Ohlin, 2013). The ICC focuses on (1) the most serious crimes of international concern (i.e., genocide, crimes against humanity, and war crimes) and (2) the leaders who bear most responsibility for these crimes (ICC-OTP, 2003). The ICC was established to pursue the central leaders of international crimes where states are unwilling or unable to do so (Article 17 Rome Statute); whereas nation states would preferably prosecute other (lower level) perpetrators in order to prevent an impunity gap. Situations can be referred to the prosecutor by a State Party or by the United Nations Security Council, or the Prosecutor can initiate an investigation *proprio motu* (Article 13 of the Rome Statute).

On September 8, 2003, the ICC Public Prosecutor in his report to the State Parties considered the situation in DRC as one of the gravest admissible situations and decided to adopt “a policy of inviting voluntary referrals from states to increase the likelihood of important cooperation and support on the ground” while simultaneously noting “his willingness to seek authorization to use his *proprio motu* powers to initiate an investigation in the DRC if necessary” (Human Rights Watch, 2006; International Criminal Court-OTP, 2006a). Successfully, the Government of DRC formally referred the situation to the ICC on March 2, 2004 (ICC-OTP, 2006a). Since the DRC ratified the Rome

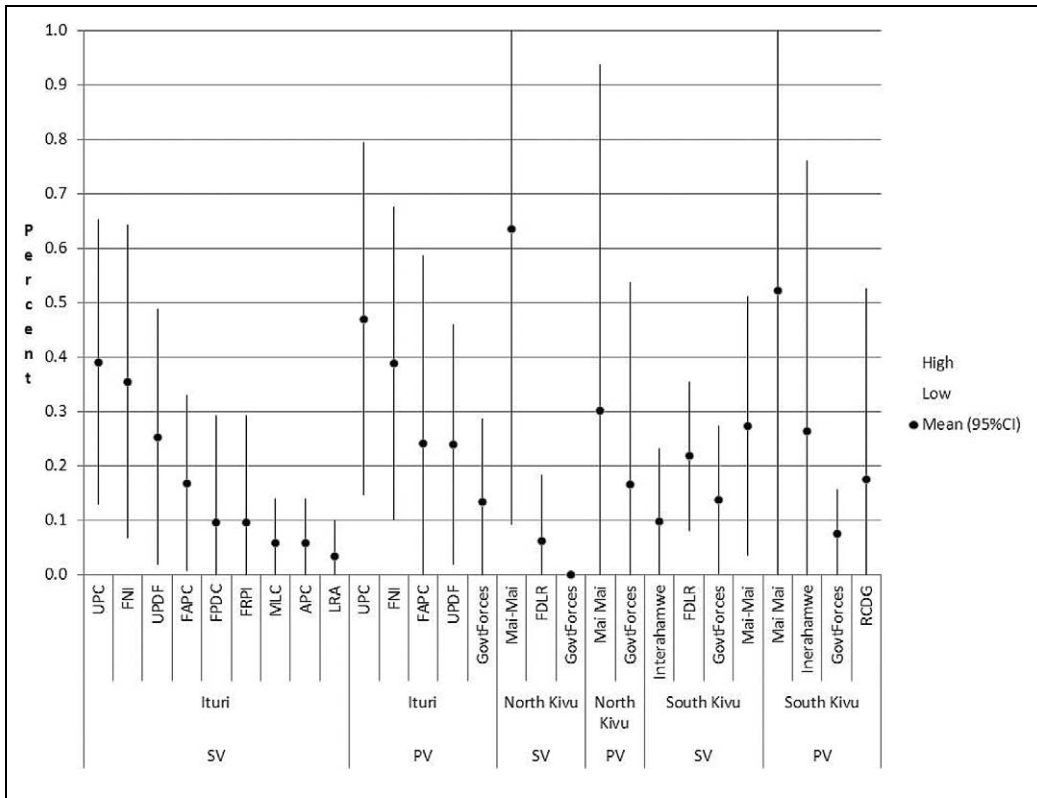


Figure 2. Percentage of adult person violence by type: Most active combatant group by province, April 2000–March 2007. Note. SV = sexual violence; PV = physical violence other than sexual violence; UPC = Patriotic Union of Congolese; FNI = Front for National Integration; UPDF = Uganda People’s Defense Force; FAPC = People’s Armed Forces of Congo; FRPI = Front for Patriotic Resistance in Ituri; MLC = Movement for the Liberation of Congo; APC = Congolese Popular Army; LRA = Lord’s Resistance Army; government forces = Les Forces Armées de la République Démocratique du Congo; FDLR = Democratic Forces for the Liberation of Rwanda; RCDG = Rassemblement Congolais pour la Démocratie-Goma.

Statute on April 11, 2002, the ICC had jurisdiction for the crimes committed in the DRC as of July 1, 2002 (Article 11 Rome Statute).

Current DRC Defendants and Prosecutions

To date, the ICC has brought cases against six individuals representing four different perpetrator groups in the DRC, namely, the UPC/FPLC (Lubanga and Ntaganda), the FNI (Chui), the FDLR (Mbarushimana and Mudacumura), and the FRPI (Katanga). (*Prosecutor v. Chui*, 2012; *Prosecutor v. Katanga*, 2007; *Prosecutor v. Lubanga Dyilo*, 2012; *Prosecutor v. Ntaganda*, 2013)

UPC/FLPC. In the case of Lubanga (alleged leader of the UPC), the Chamber concluded that the UPC/FPLC was responsible for the widespread recruitment of young people, including children under the age of 15, on an enforced as well as a “voluntary” basis. The Chamber also concluded that “girl soldiers were subjected to sexual violence and rape,” but since “sexual violence does not form part of the charges against the accused and the Chamber has not made any findings of fact on the issue,

particularly as to whether responsibility is to be attributed to the accused,” Lubanga was not convicted for sexual violence (*Prosecutor v. Thomas Lubanga Dyilo*, 2012). In the second UPC case (against Ntaganda, the alleged deputy commander and commander of operations and right hand of Lubanga), the focus of the investigation was broader and focused on crimes against humanity and war crimes, including rape and sexual slavery. (*Prosecutor v. Lubanga Dyilo*, 2012; *Prosecutor v. Ntaganda*, 2013). Although the suspect is in custody, the trial is still in the pretrial phase: the opening of the confirmation of charges hearing is scheduled for February 14, 2014.

FNI. ICC prosecutions also focused on the FNI and indicted the alleged leader of this group (Chui). Focused on a single attack, this prosecution ended on December 18, 2012, with the acquittal of Chui as it had not been proven beyond reasonable doubt that he was indeed the commander of the FNI combatants responsible for the attack under investigation (*Prosecutor v. Mathieu Ngudjolo Chui*, 2012).

FDLR. The two FDLR leaders indicted included Mbarushimana (charged with crimes against humanity and war crimes) and Mudacumura (charged with war crimes). In Mbarushimana’s case, the Pre-Trial Chamber, however, found the suspect “did not provide any contribution to the commission of the alleged crimes, even less a ‘significant’ role” (*Prosecutor v. Callixte Mbarushimana*, 2011) and he was released. Mudacumura is still at large.¹

FRPI. The alleged leader of the FRPI (Katanga) is charged with war crimes and crimes against humanity. His trial is currently ongoing.

Discussion

Comparing the Survey Data with ICC Prosecutions

The arrest warrants issued by the ICC in relation to the DRC only partially coincide with the study data. Furthermore, the outcome of our survey leaves little doubt that many international crimes have been committed in DRC that fall within the mandate and jurisdiction of the ICC. From the survey, we can conclude that for two decades, millions of people in North Kivu, South Kivu, and Ituri have been affected by the violations committed primarily by the Mai-Mai, FDLR, UPC, FNI, Interahamwe, and government forces. Given the mandate of the Court, we would expect the ICC to focus on these groups and issue arrest warrants related to war crimes and crimes against humanity, including sexual violence, given the large-scale criminality and victimization that took (and takes) place in the DRC.

The ICC prosecutions of three rebel groups correlate to data. The fact that the UPC/FPLC is one of the first targeted perpetrator groups to be prosecuted seems to be justified as it is one of the main perpetrator groups, especially active in the Ituri region and responsible for numerous violations, including sexual violence based on data. The focus of the indictment in the first UPC case (against Lubanga, the alleged leader of the UPC) was, however, on child soldiering rather than on sexual violence and the many other crimes committed by this group. This is remarkable, as the data presented in this study clearly indicate that many other war crimes and crimes against humanity were committed by the UPC, including widespread sexual violence. Several international, national, and local non-governmental organizations (NGOs), as well as United Nations agencies, also concluded that widespread sexual violence was committed by the UPC, and several NGOs heavily critiqued the Office of the Prosecutor for failing to include sexual violence among the charges facing Lubanga (Amnesty International, 2004; Beni Declaration, 2006; Human Rights Watch, 2005b, 2011;

Women's Initiative for Gender Justice, 2006). Based on the data presented in this study, this may have been a missed opportunity to prosecute the full extent of crimes committed by the UPC.

During the armed conflict in Ituri, the FNI was fighting the UPC; based on the data presented herein, these groups were among the most culpable perpetrator groups. Although the FNI was responsible for many crimes, the focus of the prosecution against Chui was limited to one single attack and did not encompass the full extent of abuses committed by the FNI and reported in these data. Unless new charges are filed, the FNI will remain at large and unaccountable for their crimes.

The FDLR, according to survey respondents, committed many war crimes and crimes against humanity particularly in North and South Kivu and are the second most commonly named perpetrators after the Mai-Mai. With Mbarushimana released and Mudacumura at large, in addition to the FNI, accountability for this group's crimes may not be in the near term.

Not all of the prosecutions at the ICC, however, can be supported by data. For example, the investigation into the FRPI (Katanga) does not correlate with the patterns and perpetration of violence reported with data from our study. These data indicate that the FRPI were active in Ituri in the period April 2000–March 2007, responsible for just under 10% of sexual violence, and from April 2008–March 2010, responsible for 25% of physical violence. During these same time periods, violence was more commonly perpetrated by the UPC forces, LRA forces, and Mai-Mai. Thus far, the ICC has not issued any arrest warrants against members of the Mai-Mai, Interahamwe, LRA, or government forces, all listed as perpetrators of human rights abuses and potentially war crimes and crimes against humanity. One of the positive outcomes of using population-based data is its ability to provide data to support criteria for “widespread or systematic attack directed against any civilian population, with knowledge of the attack” as required for crimes against humanity (Article 7 Rome Statute). The term “widespread” refers to the “large-scale nature of the attack and the number of targeted persons” whereas the term “systematic” refers to the “organized nature of the acts of violence and the improbability of their random occurrence.” In addition, the crimes committed could possibly also qualify as war crimes “in particular when committed as part of a plan or policy or as part of a large-scale commission of such crimes” (Article 8 (1) Rome Statute). Furthermore, the physical violence (e.g., killings, torture) and sexual violence (including rape, sexual slavery, enforced prostitution, forced pregnancy, enforced sterilization, or any other form of sexual violence) identified in the survey are listed among the crimes/acts that could be prosecuted as crimes against humanity and war crimes. We believe that population-based surveys can indeed establish that crimes have been committed, where the crimes have been committed, whether or not these crimes were widespread and/or systematic, and identify the main perpetrator groups. We tried to substantiate this point by presenting the study data on the DRC and comparing them with the ICC investigation into the DRC.

We are fully aware and have taken into account that these data, based on the focus of the study, show which crimes were committed and by which perpetrator groups but do not state anything about any individuals within these groups as many of the victims were unable to identify individuals but could name the responsible groups. This obviously is a limitation, as the ICC can only indict and prosecute individual perpetrators and cannot indict perpetrator groups. We nevertheless believe these data can be used to assess whether the ICC—by indicting individuals—has indeed focused its investigations on the main crimes and the leaders of the main perpetrator groups. Furthermore, these data seem to provide at least a *prima facie* case against the leaders of the perpetrator groups responsible for the most extreme, widespread, and systematic violations such as—in this case—the Mai-Mai, FDLR, UPC, and FNI but also—albeit to a lesser extent—the Interahamwe and government forces. As the ICC is currently only prosecuting leaders of the UPC, FNI, and FDLR, it seems fair to highlight the discrepancies between prosecutions and our data. Indeed, advocacy groups have argued that not prosecuting all of the main perpetrator groups might lead to the perception of selective justice and an increase in ethnic violence (Human Rights Watch, 2006, 2011).

Policy Implications

Population-based data could serve as a useful addition to the other anecdotal, advocacy-driven, qualitative studies and testimony data upon which the ICC relies. This study clearly indicates that international crimes have been committed; it indicates when and where they were committed and which perpetrator groups can be held responsible for them. In retrospect, many of the current defendants reflect the data collected, but there are a few rebel groups that were not selected for indictments by the ICC prosecutorial team, and some of the prosecutions (based on data) raise questions. When using quantitative data, the ICC is in a position to identify and start to prosecute the main perpetrator groups in the eastern region of DRC (Lambourne, 2004, Pham, Weinstein, & Longamn, 2004; Rojas, 1995; Rugge & Scott, 2013).² Although the ICC prosecutions have begun for cases from DRC, the ICC prosecutor can still investigate, issue arrest warrants, and better refine testimony needed for other perpetrator groups that have and have not yet been implicated by the ICC, such as the Mai-Mai and Interahamwe. As not all perpetrators and perpetrator groups can be prosecuted, and the most important cases have to be selected, the ICC could use these data to make an objective selection, fulfill its promise as to focus on the most extreme situations, and select those cases that most merit prosecution.

Adjunct Use of Social Science

We believe that interventions of social scientists push forward the frontiers of international criminal justice. The former ICC prosecutor Luis Moreno Ocampo (Moreno Ocampo, 2009) welcomed this role and said, “one of our goals is a case with no witnesses, no victims. We want to use methods that you are developing, such as statistical analysis. We must refine how to use your tools.” Although these methods adapted from epidemiology are becoming “more rigorous, more complex and less disputable over the years” (Lawry, Johnson, & Asher, 2013, p. 274; Hagan, Brooks, & Haugh, 2013), predicting that cases can be entirely based on statistical evidence might be a bit too far-fetched; however, we believe that social scientists—and especially those who conduct population-based surveys—can play an important role in directing and supporting ICC prosecution policy. In combination with other evidence that links the individuals to the crimes, these data may help focus investigations and build cases against the members and leaders of identified perpetrator groups. As previously noted, “qualitative interviews provide insight into the individual’s experience of human rights abuses and thereby offer the human face and voice to the statistical numbers that are obtained from quantitative work” (Lawry et al., 2013, p. 257). Qualitative and quantitative data together therefore play essential and complementary roles in providing evidence of international crimes and have done so successfully in recent criminal prosecutions at the Special Court of Sierra Leone (*Prosecutor v. Charles Ghankay Taylor*, 2012). However, for those intending to use statistical evidence in a legal proceeding, such evidence must follow methodologies accepted by the scientific community, be subject to peer review, and be properly sourced and justified. For use at the ICC, impartiality of the findings will be important. Furthermore, data gathered must meet evidentiary rules and fulfill the elements of the crime (International Criminal Court, 2000). Population-based quantitative surveys can be tailored to prove systematic and widespread attacks against a civilian population, ask for perpetrator names, and identify and distinguish between politically motivated, ethnic-based and general crimes.

Working Together

Finally, it is important for lawyers, investigators, prosecutors, and judges to understand how to use these data and statistics as evidence in their cases; what the data mean, what the data can and

cannot allow them to state, and finally—for social scientists—how to strengthen instruments for gathering data so that the legal requirements of the Court in order to prove crimes, identify perpetrator groups, and possibly individual perpetrators are also included. It is therefore important to ensure that lawyers and social scientists understand each other's needs and language and continue dialogue (Jarvis & Martin-Salgado, 2013; Lawry et al., 2013; Marcus, 2013).³ If these conditions are fulfilled, population-based surveys might play an important role not only in the DRC cases but also in other situations investigated by the ICC in the future.

Limitations

This study's findings represent the adult household-based population of Ituri district, and North and South Kivu provinces less the territories of Walikale and Mwenga. The results cannot be generalized to the entire population (e.g., children) of those provinces or the entire eastern region of DRC. Although interviewers carefully explained that there would be no material or other gain by participation, respondents might have exaggerated or underestimated responses if they believed doing so would be in their interest, especially given the political and ethnic nature of human rights reporting. Ethnicity, sex, unfamiliarity of the interviewers, and other characteristics might have limited disclosure of respondents to questions. Some extrapolated population estimates likely underestimate the total number of people suffering violations (e.g., violations ending in death) since we could only interview surviving household members. However, for violations regarded as crimes against humanity and/or war crimes, the absolute number is less important than the determination of magnitude, which in the case of DRC is in the hundreds of thousands. Finally, this study—a multi-stage clustered random sample survey—permits determination of association of population characteristics but not causality.

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Notes

1. In a press release of May 14, 2012, the Prosecutor refers to Mbarushimana, Mudacumura, and Ignace Murwanashyaka as the three main leaders of the Democratic Forces for the Liberation of Rwanda (FDLR)-FOCA alliance. The latter is not charged, as he is currently on trial in Germany.
2. Since the ICC is focused on those highest responsible, the bulk of the prosecutions will therefore always remain with the national and local courts in the DRC itself, where arguably a bigger role could be allocated to restorative justice mechanisms as they have proven to be more beneficial to victims than ordinary court proceedings.
3. According to Maxine Marcus and Linda Bianchi, there is furthermore, already at the level of the international tribunals, a lack of understanding, know-how, and training at times by the investigators who need to elicit the necessary evidence that would support a conviction for sexual violence. Also, a better coordination between the investigators and the prosecutors on the evidence required to fulfill the legal requirements is needed.

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