

Original  
Article

Public Health

# Sexual Violence at the Eastern Region of the Democratic Republic of Congo and its Public Health Implications

Aurelie K KASANGYE \*, Patrick M AVEVOR, Yu YU, Shuiyuan XIAO

## ABSTRACT [ENGLISH/ANGLAIS]

Sexual violence has been used as a weapon of war in a lot of countries including the Democratic Republic of Congo (DRC). Women and girls are the worst victims of this calamity. It is estimated that more than 1.80 million women have been raped in DRC. In eastern Congo, the prevalence and intensity of rape and other acts of sexual violence are described as the worst in the world. Considered as a public health problem, sexual violence in this region has a lot of impact on the population: Physical issues include rectal and vaginal fistula, sexually transmitted diseases and HIV/AIDS, and unplanned pregnancy; mental issues include Post Traumatic Stress Disorder (PTSD), Major Depression Disorder (MDD), and other mental disorders; and social issues include social rejection such as rejection by family, high illiteracy rate due to school dropout, and children resulting from rape. Strategies for better health care of women who are victims of sexual violence in the eastern of DRC are important to enable them to cope with all these issues (physical, mental and social).

**Keywords:** Sexual violence, Congo, women, PTSD, MDD

## RÉSUMÉ [FRANÇAIS/FRENCH]

La violence sexuelle a été utilisée comme une arme de guerre dans beaucoup de pays, y compris la République démocratique du Congo (RDC). Les femmes et les filles sont les plus grandes victimes de cette calamité. On estime que plus de 1,80 million de femmes ont été violées en RDC. Dans l'est du Congo, la prévalence et l'intensité de viols et d'autres actes de violence sexuelle sont décrits comme le pire dans le monde. Considéré comme un problème de santé publique, la violence sexuelle dans cette région a beaucoup d'impact sur la population: problèmes physiques incluent fistule rectale et vaginale, les maladies sexuellement transmissibles et le VIH / SIDA, et les grossesses non planifiées; problèmes mentaux comprennent post-traumatique (SSPT), dépression majeure (MDD) et d'autres troubles mentaux; et les questions sociales comprennent le rejet social telles que le refus par la famille, le taux élevé d'analphabétisme en raison de l'abandon scolaire, et les enfants issus de viol. Stratégies pour améliorer les soins de santé des femmes qui sont victimes de violence sexuelle dans l'est de la RDC sont importants pour leur permettre de faire face à tous ces problèmes (physiques, mentaux et sociaux).

**Mots-clés:** La violence sexuelle, le Congo, les femmes, le SSPT, MDD

### Affiliations:

Department of Social  
Medicine, School of  
Public Health, Central  
South University,  
Changsha Hunan 410078,  
CHINA

Email Address for  
Correspondence/ Adresse  
de courriel pour la  
correspondance:  
aureliekasangye@yahoo.fr

Accepted/Accepté: May,  
2014

Full Citation: Kasangye  
AK, Awevor PM, Yu Y,  
Xiao S. Sexual Violence at  
the Eastern Region of the  
Democratic Republic of  
Congo and its Public  
Health Implications.  
World Journal of Public  
Health Sciences  
2014;3(1):11-8.

## INTRODUCTION

Sexual violence is a major public health problem and its impacts on both physical and mental health of survivors has been recognized fully [1]. International studies have shown that sexual offenses cost billions of dollars, making them among the most costly interpersonal crimes in the world, especially considering their high prevalence and the trauma imposed on the victims [2]. Sexual violence is defined as any sexual act, attempt to obtain a sexual act, unwanted sexual comments or advances, or acts to traffic, or otherwise directed, against a person's sexuality using coercion, by any person regardless of their relationship to the victim, in any setting, including

but not limited to home and work. As the main form of sexual violence, rape is, defined as physically forced or otherwise coerced penetration, even if slight, of the vulva or anus, using a penis, other body parts or an object. The attempt to do so is known as attempted rape. Rape of a person by two or more perpetrators is known as gang rape [3].

## BACKGROUND

Mass rape during armed conflict now occurs so frequently that it has been recognized, and legally defined, by the United Nations as a weapon of war. The highest number of armed conflicts occurs in Sub-Saharan

Africa [4-8]. Since 1990, more than half of the continent has been in a state of conflict and war costing the lives of about 10 million people. The presence of conflict very obviously increases the incidence of sexual offenses [9]. Sexual atrocities have been a feature of many African conflicts over the past two decades, including the active conflicts in Central African Republic (CAR), Chad, Democratic Republic of Congo (DRC), Ethiopia, Nigeria, Somalia, and Sudan. And in recent conflicts in Burundi, Congo-Brazzaville (Republic of Congo), Côte d'Ivoire, Liberia, Rwanda, Sierra Leone, and northern Uganda[10]. Since mid-1990s, a brutal civil war has ravaged the Democratic Republic of Congo (DRC) and escalated the rate of crimes. Men, women and children have been target for sexual violence crimes. A five year conflict placed government forces and their allies (Angola, Namibia, and Zimbabwe) against rebels supported by Uganda and Rwanda. A peace agreement was signed in 2002 and a transitional government was established in 2003, raising hopes that the conflict was coming to an end. Although the war is now generally contained, the conflict has re-emerged in the eastern part of the country. This has led to Eastern DRC being called the rape capital of the world [11].

Rape and associated violence against civilians (women, men, and children) have been widely employed as weapons in the multiple regional and civil wars that have plagued the Eastern provinces of the DRC. Perceived as a particularly effective weapon of war and used to subdue, punish, or take revenge upon entire communities, acts of sexual and gender based violence increased concomitantly. Attacks have comprised individual rapes, sexual abuse, gang rapes, mutilation of genitalia, at times undertaken after family members have been tied up and forced to watch. The perpetrators have come from virtually all the armies, militias and gangs implicated in the conflicts, including local bands that attacked their own communities and local police forces. Victims of Sexual violence range in age from 4 months to 84 years [12].

### EPIDEMIOLOGY OF SEXUAL VIOLENCE

Surveys of victims of crime have been undertaken in many cities and countries using a common methodology to aid comparability, and have generally included questions on sexual violence. The United Nations has conducted extensive surveys to determine the level of sexual violence in different societies. According to these studies, the percentage of women reporting having been

a victim of sexual assault ranges from less than 2% in places such as Manila, Philippines (0.3%), Gaborone, Botswana (0.8%), La Paz, Bolivia (1.4%), and Beijing, China (1.6%), to more than 5% in Bogota, Colombia (5.0%), Buenos Aires, Argentina (5.8%), Istanbul, Turkey(6.0%), and Rio de Janeiro, Brazil (8.0%) [13,14].

For Africa, there are almost no reliable statistics readily available on rape within the entire continent but just for some countries [9]. Considering some countries like: Rwanda where in 1996, the United Nations special reporter estimated that between 250,000 and 500,000 Rwandese women and girls had been raped, almost as many had been killed, and Liberia, where it is estimated that about 80% of Liberian women experienced some form of sexual violation during the conflict [15]. In The Democratic Republic of Congo, some 5 million people have died as a result of the war, and hundreds of thousands of women and girls have been raped [16-18].

In eastern Congo, the prevalence and intensity of rape and other acts of sexual violence is described as the worst in the world. It is estimated that there are as many as 200,000 surviving rape victims living in the DRC today [17-19]. In 2009, more than 15,000 cases of sexual violence were officially reported and in 2010, there were no signs that the trend was decreasing [20].

A study done in 2009 involving 225 respondents-180 women in Panzi hospital and 75 in two rural fields sites (eastern region of the DRC), showed that the mean age of the victims was 36 years with a range of 18 to 76 years. Almost half of the women were married (47.5%) and nearly a quarter (23.9%) reported that they had been married, but that their husband had abandoned them. The large majority of women reported receiving no education (72.2%) or only primary education (21.2%). Women who reported experiencing rape in the survey (75.7%) were assaulted by 2.83 attackers on average, with a range of one to 10 attackers. The majority of women reported they were assaulted by a stranger (87.6%), as opposed to an acquaintance, friend or family member. 68.9% of women reported gang rape (rape by more than one person), while 83% women reported that their attacker was wearing some kind of military uniform[21].

A survey conducted in 2010, showed that 15,457 cases of sexual violence haven been reported for the entire country, with 54% of the cases occurring in the eastern region. From this, 99% of victims of sexual violence are women. This study revealed that 60.4% of offenders are civilians, 35.7% are military and 4% are unknown person. According to the DRC's Minister for Gender, Family and

Children, more than 1 million of country's women and girls are victims of sexual violence (in a country with an estimated population approaching 70 million)[22]. In 2011, nation-wide survey found that approximately 1.69 to 1.80 million women reported having been raped in their lifetime in DRC [23].

This work seeks to explore the devastating effects of sexual violence especially rape being used as a weapon of war on the health of the people in Eastern DRC. This entails the critical consideration of the bearing of rape on physical issues which involve rectal and vaginal fistula, sexually transmitted disease and HIV/AIDS, and unplanned pregnancy; mental issues involving Post Traumatic Stress Disorder (PTSD), depression, and other mental disorders, as well as social issues encompassing social rejection, increased illiteracy rate due to school dropout, and children resulting from rape.

## PUBLIC HEALTH CONSEQUENCES OF SEXUAL VIOLENCE

### 1. Physical Issues

#### A. Rectal and Vaginal Fistulas

Every community in the DRC has been touched by sexual violence, physically documented evidence of sexual violence includes lesions and scars on the body, tears in the vagina and anus, rectal and vaginal fistulas, which is the most serious physical damage and will lead to chronic incontinence.

Traumatic fistula is an abnormal opening between the reproductive tract of a female and one or more body cavities or surfaces, caused by sexual violence, usually but not always in conflict and post-conflict settings. It is a result of direct gynecological trauma, usually from violent rape, mass rape and /or forced insertion of objects into a woman's vagina. Brutal rape can result in genital injury and the formation of a rupture, or fistula, between a woman's vagina, and her bladder, rectum or both. Women with fistula are unable to control the constant flow of urine and /or feces that result from the tear [24]. The prevalence of brutal sexual violence in the eastern part of the country has led to an epidemic of traumatic fistula [25]. Though clinical workers have identified traumatic fistula in eastern DRC, it is difficult to gather precise figures on the magnitude of the problem, because the only data available are facility-based clinical statistics [26]. The Doctors on Call for Services (DOCS) fistula program began on April 2003. At the outset, only traumatic fistula was repaired because time and resources were limited and because treating survivors of

sexual violence was made a priority. In the first year, 95 % of the fistula cases treated was traumatic in origin. By 2004, the rate of traumatic fistula cases decreased to 55 %. In the two years, DOCS hospital in Goma received over 3,550 rape survivors and performed 600 fistula repair operations. Approximately 68% of these operations were for traumatic fistula [27]. USAID-supported fistula services began in July 2005. The program sought to reduce the number of new fistula cases and to rehabilitate women who have been disabled by obstetric or gynecologic trauma in the provinces of North and South Kivu, Maniema (eastern region of DRC) and Kinshasa. As of December 2012, 5987 fistula repairs were supported by USAID [25].

#### B. Sexually Transmitted Diseases (STDs) and HIV/AIDS

Half or more of the 40 million people infected with HIV in the world are women [28]. This high rate of HIV infection in women has brought into sharp focus the problem of violence against women. There is a growing recognition that women and girls' risk of and vulnerability to HIV infection is shaped by deep-rooted and pervasive gender inequalities-violence against them in particular. Studies from Rwanda, Tanzania, and South Africa show up to three fold increases in risk of HIV infection among women who have experienced violence compared to those who have not [29-31].

The Biological risk of transmission in a violent sexual encounter is determined by type of sexual exposure (vaginal, anal, or oral), the degree of trauma, vaginal laceration, and abrasions that occur when force is used. So when sexual violence occurs in girls and young women, risk of transmission is also likely to be higher because their vaginal tracts are immature and tear easily during sexual intercourse [32, 33]. It has been shown for example that at Panzi Hospital (North Kivu) an estimated 10% of women survivors of sexual violence are living with HIV [34]. Another study in South Kivu (eastern region of DRC) showed that around 20% of people tested are HIV positive, and this seroprevalence is 40% among women who have been raped [35].

Whereas the national HIV prevalence is estimated at around 5 % [36], regional records indicate that the prevalence may be much higher, particularly in eastern DRC, where prevalence is 32 % among adult men, 54 % among adult women and 26.5 % among children[37]. The increased prevalence in the eastern region is attributed to prevailing levels of sexual violence in the region.

### C. Unplanned Pregnancy

Pregnancy is a potential result of rape. Rape has been studied in the context of war, particularly when it is used as a tool for genocide, as well as in contexts unrelated to war, such as rape by a stranger, statutory rape, incest, and underage pregnancy. Current scientific consensus is that rape is as likely to lead to pregnancy as is consensual sexual intercourse [38, 39].

Physician Felicia H. Stewart and economist James Trusell estimate that 333,000 assaults and rapes reported in the US in 1998 caused about 25,000 pregnancies and that up to 22,000 of those pregnancies could have been prevented by prompt medical treatment, such as emergency contraception [40]. A study of Ethiopian adolescents who reported being raped found that 17% subsequently became pregnant [41], and rape crisis centers in Mexico reported the figure at 15 to 18% [42].

In the eastern region of DRC, using a non-systematic convenience sample, Panzi Hospital nurses conducted interviews on sexual violence survivors as they presented to hospital in 2006: 26% of women reported that they became pregnant as a result of rape [43]. These studies demonstrate the increased risk pregnancy among rape victims in the eastern region of DRC as in other parts of the world.

## 2. Mental Issues

The psychological consequence of rape is grave and multi-dimensional; rape has been identified by psychologists as the most intrusive traumatic events [44]. Stigmatization is the most often experienced response to rape and is based on the belief that the victim is disgraced, dishonored or otherwise ruined by the violation [45].

Rape can lead to PTSD displayed in the form of depression, heightened fear, anxiety, anger, and feeling of isolation, phobia, withdrawal, flashback, substance abuse disorder, panic disorder, and substance abuse [45, 46]. The physical manifestation of PTSD includes suicide, self-injury, sleep disorders, headaches, and gastrointestinal disorders [47, 48].

The psychological effect and subsequent adjustment of rape is associated with the victim's age at the time of sexual assault. Older women have been found to have more difficulty adjusting to the trauma most likely due to fear of stigma [49, 50]. Children suffer from long-term and greater symptoms of PTSD, including depression associated with sexual assault [51, 52]. The age of mass rape victims from conflict range widely from infants to

the elderly in the community [53]. Dividing the sexual trauma into two: childhood sexual trauma and adulthood sexual trauma, P-Yuan, et al asserted that with respect to psychological consequences, childhood sexual trauma survivors are at higher risk of traumatic stress disorder [54].

### A. Childhood Sexual Trauma

In a recent study, women who reported childhood sexual abuse were five times more likely to be diagnosed with PTSD compared to non victims [55]. Another study showed that the lifetime prevalence of PTSD diagnosis was over three times greater among women who were raped in childhood compared to non victimized women [56].

Childhood sexual trauma is also associated with other personality disorders, including those that are distinguished by enduring patterns of distrust and suspiciousness (i.e. Paranoid personality disorder), grandiosity and need for admiration (i.e. Narcissistic Personality Disorder), or submissive and clinging behavior[57].

### B. Adulthood Sexual Trauma

Women who are victimized in adulthood are vulnerable to short and long-term psychological consequences. Immediate distress may include shock, fear, anxiety, confusion, and social withdrawal [58]. Survivors may also experience some PTSD symptoms shortly after a violent act has occurred, such as emotional detachment, flashbacks, and sleeping problems [59]. Research on adulthood sexual trauma and depression has produced mixed findings. Some researchers have found no association between depression and adulthood sexual victimization [55], whereas others have found high rates of depression disorders among rape survivors [60]. One investigation indicated associations between sexual victimization and par suicidal behaviors and alcohol and illicit drug use: however, these consequences varied by specific type of sexual assault (i.e. rape versus other sexual assault) [55]. All these psychological consequences have been observed in the eastern region of DRC, among victims of rape as in all conflict regions in the world. Johnson et al. (2010) conducted a cross-sectional population based cluster survey of 998 adults aged 18 years and older in eastern Democratic Republic of Congo using structured interviews and questionnaires over a 4 week period in March 2010. The study was intended to assess the prevalence of sexual and associated depression

and PTSD. The study found that 39.7 % (224/586) of women and 23.6 % (107/399) of men experienced sexual violence, including being stripped of clothing, molestation and rape. Of those who reported being subject to sexual violence, 74.3% of women said it happened during conflict-setting. Of those sexually violated 51.1 % (105/202) of women stated they were raped and 33.4 % (67/202) said they were gang raped. For women subjected to sexual violence during conflict, 67.7% met symptom criteria for Major Depressive Disorder (MDD) and 75.9% for PTSD [61].

### 3. Social Issues

#### A. Children Born From Rape

Children born from rape were mocked by their families, relatives and communities including other children. They were stigmatized along with their mothers, considered outcasts, and were harassed, beaten and rejected. Survivors themselves have very conflicting emotions towards their children, understanding their innocence, giving hope and comfort and helping them with their suicidal feelings. Survivors described their children as depressed, not at peace, angry outcasts who were unable to attend schools and frequently became street children lacking any skills or employment [62]. For example, in Shabunda territory, 350 kilometers south-west of Bukavu, the local population threatened to kill all raped children if they were not sent back to Rwanda where they belonged [63].

#### B. Social Rejection

Generally, women who are raped are viewed as not having any value in the Congolese society, because local traditions encourage the belief that women who are raped have lost all value in the community. Social rejection included being mocked and bullied by families and communities, and extended to the children born from rape. A girl that is pregnant is no longer viewed as a child that needs the care and affection from their parents [62].

A study in the Eastern region of Congo has shown that among the 225 women enrolled for the study, 29 % were rejected by their families and 6.2% by their communities. Family rejection means that a woman can no longer stay in the home of her husband or parents. In the case of community rejection, women are ostracized by peers to such a degree that they are forced to leave the community. From the same study, women abandoned by their husbands were almost three times as likely to report

feelings of general isolation compared to non-abandoned married women, Gang-raped women were roughly three times more likely to experience rejection from their family compared to women who were not gang-raped. And women in each focus group talked specially about being rejected by their husbands; one of the most commonly cited reasons for this was a husband's fear of disease and contamination from his wife [64].

#### C. School Dropout

Women and girls who have been raped reported extreme poverty, being unable to continue with school, a lack of means to earn a living and pay fees, and being unable to work due to a lack of education as well as physical pain, pregnancy and injuries as a result of their experience[62]. There is consistent evidence showing that the school dropout rate of girls is higher than boys. It is possible that school safety and teenage pregnancy are factors that could explain the higher risk of school dropouts for girls [65, 66]. Many girls also drop out of school after rape due to ill-health, trauma, displacement or stigma [67].

### CONCLUSIONS

The wars in the eastern Democratic Republic of Congo have devastated the population at all levels. They destroyed many families and dehumanized several societies. The health of the population has been affected in physical, mental and social dimensions/domains. Local NGOs and international organizations continue to help the poor population; however, the access to health care remains a major challenge.

Healthcare must remain focused on taking full care of women who are victims of sexual violence (because health is a state of complete physical, mental and social wellbeing) by formulating and implementing strategies to:

1. Establish agencies and institutions specialized in the treatment of rape victims.
2. Improve medical care for rape victims, covering fistula correction/repair and other forms of physical trauma resulting from the ordeal.
3. Increase awareness for voluntary testing and support for raped women living with HIV.
4. Follow up and support raped women who become pregnant, in order to ensure good health during the pregnancy, delivery and after delivery.
5. Expand and intensify training of qualified people for better psycho social management of

these raped women (counselors, clinical psychologists, social workers).

6. Take care of children resulting from sexual violence, with reintegration of raped mothers into society, organize awareness campaigns in the communities to reduce denunciation, alienation, and discrimination against victims of sexual violence and then severely punish all perpetrators of the act.

The most important measure to be taken by the DRC government is to do everything possible to end the war and let peace prevail in the region.

**REFERENCES**

[1] Garcia MC and Watts C. Violence against women: an urgent public health priority. Bull World Health Organization 2011; 89:2.

[2] Morrison Z, Quadara A, Boyd C. Ripple effects of sexual assault. ACSSA 2007.

[3] Etienne GK, Linda LD, James AM, et al. World report on violence and health 2002. Geneva : World Health Organization 2002; 149.

[4] Card C. Rape as a weapon of war. Hypatia 1996; 11:5–18.

[5] Hagan J, Rymond RW, Palloni A. Racial targeting of sexual violence in Darfur. Am J Public Health 2009; 99: 1386–92.

[6] Omba JC. Sexual violence in the Democratic Republic of Congo: impact on public health. Med Trop 2008;68:576–8.

[7] The United Nations Security Council. Women, peace and security. 2008. Available at: [http://www.un.org/Docs/sc/unsc\\_resolutions08.htm](http://www.un.org/Docs/sc/unsc_resolutions08.htm).

[8] Uppsala University. Uppsala Conflict Data Program, UCDP Database.17 April 2010, Available at: [www.ucdp.uu.se/database](http://www.ucdp.uu.se/database).

[9] Sean Callaghan. Violence against Women in Sub-Saharan Africa: a research report. March 2010.

[10] Alexis A. Sexual violence in African conflict. November 2010.

[11] Nicole PY, Mary PK, Mirto S .The psychological consequences of Sexual trauma. National Resource Center on Domestic Violence 2011.

[12] Marion P, Leah W, et al. Sexual Terrorism: rape as a weapon of war in the eastern Democratic Republic of Congo. USAID/ DCHA assessment report 2004.

[13] United Nations Interregional Crime and Justice Research Institute, The international crime victim

survey in countries in transition: national reports. Rome 1998.

[14] United Nations Interregional Crime and Justice Research Institute. Victims of crime in the developing world. Rome 1998.

[15] Anu P. Evaluating Women’s Participation in Transitional Justice and Governance: a community dialogue process in Liberia. Conflict Trends 2009.

[16] Coghlan B,Ngoy , Mulumba F, et al. Mortality in the Democratic Republic of Congo: An ongoing crisis. Full report200; p 26.

[17] Kira C. Kira Cochrane talks to filmmaker Lisa F Jackson on her documentary about rape in the Congo. London 2008: Film.guardian.co.uk. Retrieved 2010.

[18] Kort M. A Conversation with Eve Ensler: Femicide in the Congo. Pbs.org. Retrieved 2010.

[19] McCrummen S. Prevalence of Rape in E. Congo Described as Worst in World.2007; Washingtonpost.com. Retrieved 2010.

[20] Human Rights Watch. Country summary: Democratic Republic of Congo .2011, New York: Human Right Watch, 2011[[https://www.hrw.org/sites/default/files/related material/drc-0.pdf](https://www.hrw.org/sites/default/files/related_material/drc-0.pdf)]

[21] Harvard Humanitarian Initiative Final Report for the Open Society Institute. Characterizing Sexual Violence in the Democratic Republic of the Congo: Profiles of Violence, Community Responses, and Implications for the Protection of Women. 2009,

[22] Antoine BN, Ngoy K, DackamNR. Ampleur des violences sexuelles en République Démocratique du Congo :analyse à partir des données rapportées par les acteurs de terrain. 2011.

[23] Peterman A, Palermo T, Bredenkamp C. Estimated and determinant of sexual violence against women in the DRC. American journal of public health 2011; 1016:1060-1067.

[24] Arletty Pinel ,Lydia Kemunto Bosire. Traumatic Fistula the Case for Reparations.Force Migration Review 2007; p. 18–9.

[25] DR Congo the Fistula Care /USAID. Engender Health December 2012. [www.fistulacare.org/pages/sites/congo.php](http://www.fistulacare.org/pages/sites/congo.php)

[26] Engender Health / the Acquire project. Traumatic gynecologic fistula as a consequence of Sexual Violence in conflicts settings: A literature review. New York 2005.

- [27] Acquire report. Traumatic Gynecologic Fistula: A consequence of Sexual Violence in conflict settings. 2006
- [28] UNAIDS. Report on the global AIDS Epidemic: 4th global report. June 2004. Geneva, Switzerland: UNAIDS.
- [29] Maman S, Mbwapo J K, Hogan N M et al. HIV-positive women report more lifetime partner violence: Findings from a voluntary counseling and testing clinician Dares Salaam, Tanzania. *American Journal of Public Health* 2002;92:1331-1337.
- [30] Van der Straten A, King R, Grinstead O et al. Sexual Coercion, physical violence, and HIV infection among women in steady relationships in Kigali, Rwanda. *AIDS and Behavior* 1998; 2:61-73.
- [31] Dunkle K L, Jewkes R K, Brown H C et al. Gender based violence, relationship power, and risk of HIV infection in women attending antenatal clinics in South Africa. *The Lancet* 2004;363:1415-21.
- [32] Glaser J B, Schachter J, Benes S, et al. Sexually transmitted Diseases in post-pubertal female rape victims. *Journal of Infectious Diseases* 1991; 164: 726-30.
- [33] Jenny C, Hooton T, Bowers A et al. Sexually transmitted Diseases in victims of rape. *New England Journal of Medicine* 1990; 322: 713-716.
- [34] Panzi Hospital Project Report Submitted to the Stephen Lewis Foundation Nov. 2007–Jan. 2008.
- [35] Kataliko actions for Africa (KAF) et Sida Information Suisse (SIS). Rapport semestriel conjoint sur le programme de dépistage volontaire du VIH/SIDA dans la province du sud Kivu, République Démocratique du Congo. 2005.
- [36] DRC country Emergency profile. 09/08/2002. [www.who.int/disasters/repo/7942.doc](http://www.who.int/disasters/repo/7942.doc). Last accessed/ 2004.
- [37] DRC: conditions ripe for HIV/AIDS. Explosion, (Nairobi; IRIN,15. Aug. 2001) <http://www.globalhealth.org/news/Article/1188>. Last accessed 2005.
- [38] Dellorto D. Experts: Rape does not lower odds of pregnancy. *CNN Health* 2012.
- [39] Begley S, Heavey S. Rape trauma as barrier to pregnancy has no scientific basis. *Reuters* 2012.
- [40] Stewart FH, Trussell J. Prevention of pregnancy resulting from rape A neglected preventive health measure. *American Journal of Preventive Medicine* 2000; 19: 228
- [41] Mulugeta E, Kassaye M, Berhane Y. Prevalence and outcomes of sexual violence among high school students. *Ethiopian medical journal* 1998; 36: 167–74.
- [42] Krug E, Dalhberg L, James M, et al. *World Report on Violence and Health*. Geneva: WHO Eds 2002; p162.
- [43] Bartels S, Scott J, Leaning J, et al. Surviving Sexual violence in eastern democratic republic of Congo. *Journal of International Women's Studies* 2010;11: 37-49.
- [44] UNICEF *The State of the World's Children. Sexual Violence as a Weapon of War*. 1996 <http://www.unicef.org/sowc96pk/sexviol.htm>
- [45] WHO 2007. Rape: How women, the community and the health sector respond. *Sexual Violence Research Initiative*. <http://www.svri.org/rape.pdf>
- [46] Ellsberg M, Heise L. *Researching violence against women: A practical Guide for researchers and activists*. PATH, World Health Organization 2005.
- [47] Jewkes R, Sen P, Garcia MC. *Sexual violence: World Report on violence and health*. Geneva, World Health Organization 2002;149-81.
- [48] Cohen LJ, Roth S. The psychological aftermath of rape: Long-term Effects and individual differences in recovery. *Journal of Social and Clinical Psychology* 1987;5:525-34.
- [49] Ruch LO, Chandler S. Sexual assault trauma during the acute phase: An Exploratory model and multivariate analysis. *Journal of Health and Social Behavior* 1983;24:174-85.
- [50] Sales E, Baum M, Shore B. Victim readjustment following assault. *Journal of Social Issues* 1984, 40:117-136.
- [51] Bahali K, Akçan R, Tahiroglu AY, et al. Child sexual abuse: seven Years in practice. *Journal of Forensic Science* 2010;55:633-6.
- [52] Filipas HH, Ullman SE. Child sexual abuse, coping responses, self-blame, Posttraumatic stress disorder and adult sexual revictimization. *Journal of Interpersonal Violence* 2006; 21:652-72.
- [53] Missale A. *Public health implications of mass rape as a weapon of war*. Georgia State University, Digital Archive 2006.
- [54] Nicole PY, Mary PK, Mirto S. *the psychological consequences of Sexual trauma*. National Resource Center on Domestic Violence 2011.
- [55] Coid J, Petruckevitch A, Chung WS, et al. Abusive experiences and psychiatric morbidity in women primary care attenders. *British Journal of Psychiatry* 2003;183: 332-339.

- [56] Saunders BE, Kilpatrick DG, Hanson RF, et al. Prevalence, case characteristics, and long-term psychological correlates of child rape among women: A national survey. *Child Maltreatment* 1999;4:187-200.
- [57] American Psychiatric Association. Diagnostic and statistical manual of mental disorders, 4th edition. Washington DC. American Psychological Association 1994.
- [58] Herman JL. Trauma and recovery. New York: Basic Books 1992.
- [59] Rothbaum, BO, Foa, EB, Riggs DS. A prospective examination of posttraumatic stress disorder in rape victims. *Journal of Traumatic Stress* 1992;5:455-75.
- [60] Dickinson LM, Gruy FV, Dickinson WP, et al. Health-related quality of life and symptom profiles of female survivors of sexual abuse in primary care. *Archives of Family Medicine* 1999;8:35-43.
- [61] Johnson K, Scott J, Rughita B, et al. Association of Sexual Violence and Human Rights Violations with Physical and Mental Health in Territories of the Eastern Democratic Republic of the Congo. *JAMA* 2010;5:553-56
- [62] Liebling and sleigh. Bearing Children through Rape in Eastern Congo: community and state responses .Coventry University, UK and Institute of Mental Health, Goma 2012.
- [63] Ms Milen Kidane (Personal interview of the author), in Bukavu 05 May 2005, UNICEF Protection Officer.
- [64] JT Kelly, TS Betancourt, D Mukwege, et al. Experiences of females survivors of sexual violence in eastern Democratic of Congo: a mixed- methods study. *Conflict and Health* 2011;5:25
- [65] Colclough C, Rose P. and Tembon M. Gender inequalities in primary Schooling: the roles of poverty and adverse cultural practice. *International Journal of Educational Development* 2000; 20: 5–27.
- [66] Leach F, Fiscian V, Kadzamira E, et al. An Investigative Study into the Abuse of Girls in African Schools. Education Research Report No. 54. London 2003.
- [67] UNICEF Democratic Republic of Congo. Martin Bell reports on children caught in war. July 2006 Human Rights Watch.

#### ACKNOWLEDGEMENT / SOURCE OF SUPPORT

Nil.

#### CONFLICT OF INTEREST

No conflicts of interests were declared by authors.

## How to Submit Manuscripts

Manuscript must be submitted online. The URL for manuscript submission is <http://rrpjournals.org/submit>

Manuscript submissions are often acknowledged within five to 10 minutes of submission by emailing manuscript ID to the corresponding author.

Review process normally starts within six to 24 hours of manuscript submission. Manuscripts are hardly rejected without first sending them for review, except in the cases where the manuscripts are poorly formatted and the author(s) have not followed the guidelines for manuscript preparation, <http://rrpjournals.org/guidelines>

Research | Reviews | Publications and its journals ( <http://rrpjournals.org/journals> ) have many unique features such as rapid and quality publication of excellent articles, bilingual publication, and so on.