Evaluation of Sexual Transmitted Infections among Gender based Violence Cases: Retrospective Cross Sectional Study, Kigali-Rwanda

Fabrice Uwumuremyi^{1,2*}; Evergiste Bisanukuri^{2,3}; Angelique Usengimana^{1,2}; Jean Berchmas Mutijima² Enias Hitimana^{1,6}; Patrick Nemeyimana^{2,5}; Jeanette Nyirakwezi¹; Aprinal Arinaitwe¹ ¹Department of Biomedical Laboratory Science, INES-Ruhengeri, Rwanda ²Department of Legacy Pathology Laboratory, Legacy Clinics and Diagnostic Ltd, Kigali-Rwanda.

³School of health Sciences. Master of Hospital and healthcare administration, University of Rwanda-CMHS.

⁵Center of Excellence Biomedical Engineering and eHealth, University of Rwanda-CMHS.

⁶Department of Pathology Laboratory, NDERA Neuropsychiatric Teaching Hospital.

Corresponding Author:- Fabrice Uwumuremyi^{1,2*}

Abstract:-

> Background:

STIs are infections that are passed from one person to another through sexual contact. The causes of STIs are bacteria, parasites, yeast, and viruses. There are more than 20 types of STIs, including Chlamydia, genital herpes, gonorrhea, HIV/AIDS, HPV, Syphilis and Trichomonas¹. According to WHO (2013), Amin and Garcia presented the evidence of the increased risk of STIs and HIV associated with GBV; and looks at potential pathways by which gender-based violence and STI and HIV are linked². GBV is defined by the UN in the CEDAW as any act that is likely to or results in physical, sexual or psychological harm or suffering to women including threats or acts of coercion, arbitrary deprivation of liberty, private or public, in the family or community^{2,15}. The aim of this study was to determine the prevalence of STIs among GBV cases attending Isange one stop center in Kibagabaga District Hospital.

> Method:

This study was retrospective conducted from January 2017 to September 2019 among GBV cases attending Isange one stop center in Kibagabaga District Hospital. Request forms describing the GBV case and indicating the demographic parameters and laboratory findings of the victim was evaluated. Data was analyzed using Microsoft Excel and SPSS version 16.0.

> Result:

In total 320 cases for GBV cases was reported from 2017 up to November, 2019 at Isange One Stop Center in Kibagabaga District Hospital. 100% of study population was female, majority of them 96.25% (308) were young female adolescent in the range of 10 to 19 years old. Considering laboratory findings, this study showed that Only 5% of all GBV cases within period of 3 years reported STIs negative, Majority GBV cases reported pregnancy at high level 72% and the overall Prevalence of STIs was 23% all GBV cases. 7.2% of these had HIV and 6.8% had Hepatitis B virus. The prevalence of trichomonas and Syphilis was 4% and 5% of all GBV cases respectively and this study showed no HPV and Gonorrhea cases has been reported.

> Conclusion:

Although the proven steps that have been taken by government of Rwanda to against GBV, but not understood as desired because GBV cases continue to increase periodical, so more Strength and focus are needed to reduce this rate GBV among young female adolescents. According to this study finding which suggested that GBV STIs cases promote and unwanted pregnancy.

Keywords:- Sexual Violence, Intimate Partner Violence, Sexual Transmitted Infections, Pregnancy.

I. **INTRODUCTION**

Violence against women and girls continues unbated in every continent, country and culture" said by Ban Ki-Moon in the board of parliament, 16 May 2009. Amin and Garcia present the evidence of the increased risk of STIs and HIV associated with GBV; and looks at potential pathways by which GBV cases and STIs and HIV are linked². In our days, the advanced technology leads people to use computers and smart phones to watch pornography that can lead them into sexual violence that is not protected after they can get STIs. Improved estimation methods are needed to allow use of more varied data and generation of estimates at the national level³.

Globally, it is estimated $\sim 35\%$ of women have experienced one or more encounters of SGBV in their lifetime most often perpetrated by an intimate partner and, 7% of women have been sexually assaulted by someone other than a partner, Female adolescents are among the most vulnerable populations affected by SGBV with one in four

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participants experiencing sexual violence before the age of 18 years⁴. The highest rates of STIs have been observed in less industrialized settings of Ethiopia (71%), Peru (69%), and Bangladesh (62%); regions where imbalances in economic opportunities, educational attainment, health, and political empowerment are more pronounced⁵.

GBV is still a widespread problem in Rwanda, with women remaining the primary people affected. However, the country is known to be a pace setter in the fight against this epidemic. Innovative national strategies and policies have been initiated by the government to eliminate GBV and promote gender equality at all levels⁶. Numbers of rape cases in 2005 as were revealed by the national police records showed that on average eight women/girl-children were raped every day in Rwanda with approximately 80% of the victims under 18 years old⁷.

Many previous studies emphasized on prevalence of GBV cases within community, so there is no previous study on prevalence of STIs among GBV cases in Rwanda. This study was intended to study prevalence of STIs among GBV cases attending Isange one stop centre in Kibagabaga District Hospital.

II. METHODOLOGY

Study Design

This study was a retrospective where required data were collected from log book and hospital open clinic system of Isange One Stop Centre, a specialized (and free) referral Centre where survivors of gender based violence are rehabilitated in Kibagabaga District Hospital that has been established in 2017 data collected were 2017 up to November 2019.

Study Population

The present study was carried out at Kibagabaga District Hospital (Gasabo district,Kigali city, Rwanda). The target population was GBV patients under follow-up of ISANGE one stop center both male and female are rehabilitated,100 GBV cases 'data were recorded and available from 2017.

> Data Collection

Data collection forms were used to collect recorded data via GBV cases log book and hospital open clinic system. The data collected were used to determine prevalence of STIs among GBV cases attending Kibagabaga District Hospital.

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> Ethical Consideration

In order to have access on patients, ethical approval was obtained from Kibagabaga District Hospital Ethics Committee. The participants were given written informed consent. In addition, to ensure confidentiality of results of STIs among GBV patients included in the study, data were collected nameless using anonymous method.

Statistical Analysis

To compare GBV cases or patients with and without sexual transmitted infections, Student's t-test was used. Categorical variables were presented as frequency and percentage, and chi-square test was used for nominal categorical variables comparison. The prevalence of STIs among GBV cases or patients was calculated and presented as percentage. All the results were statistically analyzed using Ms excel and Statistical Package for Social Sciences (SPSS), version 16.

III. RESULTS

Socio-Demographic Characteristics of the Study Population

In total 320 cases for GBV were reported from 2017 up to November, 2019 at Isange One Stop Center in Kibagabaga District Hospital. According to sociodemographic characteristics of this study indicated 100% of victims of GBV cases were female, no male victim was reported. Most of the GBV cases were among young female adolescent in range of 10-19 years old at high proportion of 96.25% (308) of cases and 0.625 % (2) of cases were in range of 0-9 years old. Among adult females, in the of 20-29 years old, there were 2.5 % (8) of the cases and 0.625 % (2) of the cases were thirty years old and above, this study indicated that young female adolescents are most likely to be victims of GBV. A half (50%) of the GBV cases were reported in this year (2019) while in 2018, 44.1 % (141) of the cases were reported and only 5.9% (19) were reported in 2017, this study indicated that there were increase of GBV cases.

Table 1 Socio-Demog	graphic Chara	cteristics and	the Freq	uencies of	GBV Cases

Variables	Frequency (N=320)	Percentage (%)	
Age			
0-9	2	0.625	
10-19	308	96.25	
20-29	8	2.5	
30+	2	0.625	
Sex			
Female	320	100	
Male	0	0	
Period			
2017	19	5.9	

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2018	141	44.1
2019	160	50

Prevalence of Sexually Transmitted Infections among GBV Cases Attending Isange One Stop Center in Kibagabaga District Hospital.

STIs are infections that are transmitted by sexual contacts. It is a broad term which includes infections by

bacteria, virus, protozoa that result in clinical manifestations involving genitalia and other parts of the body in sexual interaction. The table below shows the prevalence of STIs among GBV cases.

Table 2 Prevalence of S	Sexually Transmitte	ed Infections among	GBV Cases
	,	a mileetions among	02 / 04000

Variables	Frequency	Frequency	Frequency	Total Frequency	Percentage
	2017 N=19(5.9%)	2018 N=141(44.1%)	2019 N=160 (50%)	N=320 (100)	
HIV	2	9	12	23	7.2
Hep B	0	6	15	21	6.8
Syphilis	4	1	8	13	4
Trichomonas	2	3	12	17	5
Pregnancy	9	120	111	230	72
STIs Negative	1	2	13	16	5

In total, 320 females had assaulted with GBV and reported to Isange one stop center for health follow up and legal aid, according to laboratory findings, only 5% of all GBV cases within period of 3 years showed STIs negative, Majority GBV cases reported pregnancy at high level 72% and the overall Prevalence of STIs was 23% all GBV cases (Table 2). 7.2% of these had HIV and 6.8% had Hepatitis B virus, the prevalence of trichomonas and Syphilis was 4% and 5% of all GBV cases respectively.

Table 3 Prevalence of STIs among GBV Cases based on their Age

	HIV	Hep B	Syphilis	HPV	Gonorrhea	Trichomonas	Pregnancy	STIs Neg
AGE	0	0	0	0	0	0	0	0
0-9	0	0	0	0	0	0	0	2
10-19	22	21	12	0	0	16	235	15
20-29	1	0	1	0	0	1	5	1
30+	0	0	0	0	0	0	1	1

In total, 320 females had assaulted with GBV and reported to Isange one stop center for health follow up and legal aid, according to cross tabulation of prevalence of STIs among GBV cases and the age of the victims, this study showed that the first predisposed age were female young adolescent between 10 to 19 years old, 235 had got pregnancies, and the least had got STIs including 22 of HIV, 21 of Hep B, 12 of syphilis, 16 of trichomonas and only 15 showed neither STIs nor pregnancy. These findings also indicated that the second predisposed age were between 20 to 29 years old, 5 had got pregnancies, 1 of HIV, 1 of syphilis, 1 of trichomonas and only 1 showed STIs negative.

IV. DISCUSSION

This study examined the prevalence STIs among GBV cases attending Isange One center in Kibagabaga District Hospital of Gasabo, All GBV cases reported were female (100%), who generally identify sexual violence and as a phenomenon distinct from rape and/or sexual violence by men. This study showed continual increase of GBV cases at high rate 5.9 % (19) in 2017, 44.1% in 2018 (141) and this year from January to September was 50 % (160). These findings are similar to the Baseline Survey conducted on sexual and GBV in Uganda, Pallisa and Kisoro Districts where they showed periodical increase of GBV cases, 105 women in 2016, 330 women in 2017 and 517 women in

2018. The probable reasons were due to neighboring, over use of alcohol and no specific laws on sexual violence, there are some provisions that can be applied to address the injustices arising out of sexual violence. Some are the provisions in the Penal code on assault or grievous bodily harm, indecent assault, defilement, rape, and attempted rape⁸.

Sexual assaults are more likely to be repeated when financial and/or emotional abuse occurs simultaneously confirm that assaults are most often part of a broader pattern of controlling behavior. GBV is widely recognized as an important public health problem, both because of the acute morbidity and mortality associated with assault on women's health, including GBV⁹.

Since the World Bank report on health highlighted GBV as a priority public health concern, information on the prevalence of GBV has increased dramatically¹⁰. Later, in 2003, the World Bank again has engaged with countries and partners to support GBV operations and the integration of GBV interventions into development projects across key sectors. The World Bank approved millions in financial grants to many countries including Rwanda to provide integrated health and counseling services, legal aid, and economic opportunities to those affected by SGBV¹¹. After Rwanda has established Isange One Stop Centre, a

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specialized (and free) referral Centre where survivors of gender-based violence are rehabilitated in District Hospitals, and has been critical in this drive¹². Of the 87 countries covered by the Organization for Economic Cooperation and Development's 2012 Social Institutions and Gender Index, South Africa was ranked fourth (the highest in Africa) in making progress in terms of gender equality and women's rights. Rwanda was the first in terms of female representatives in parliament, at 45% and it continue to increase up to approximately 60%¹³.

These study findings showed that young Female adolescents 10 to 19-year-old are among the most vulnerable populations affected by Sexual GBV at very high proportion of 96.25% as well as 0.625% for children of 0 to 9 years old and the adult women were at 2.5% and 0.625% for women of 20 to 29 and 30+ respectively. Similar to the report of RMRC (2010) that showed the numbers of rape cases in 2005 as were revealed by the national police records showed that on average eight women or girl children were raped everyday in Rwanda with approximately 80% of the victims under 18 years old⁷. Comparing those study findings with similar study conducted by Hong et al. (2013) reporting that female adolescents are among the most vulnerable populations affected by Sexual GBV with one in four participants experiencing sexual violence before the age of 18 years. This may be to the fact that there were lack financial support among adolescents female so It can be easy to be triched toward sexual assault⁴.

Amin and Garcia under WHO (2013) presented the evidence of the increased risk of STI and HIV associated with GBV cases; and looks at potential pathways by which GBV and STIs and HIV are linked. These study findings showed that 7.2 of cases were infected by HIV, 6.8% cases were infected by Hep B. Those are viral infections that are incurable, but can be mitigated or modulated through treatment. Among curable infections, this study finding showed that 4% cases infected by Syphilis, 5 % were infected by Trichomonas. No case has reported for HPV and Gonorrhea. Comparing to the global health burden of STIs including HIV is large and ever increasing^{2,15}.

The WHO estimates that there are around 498 million people aged 15-49 years who are infected each year with chlamydia, hepatitis B, gonorrhea, syphilis and high rate of Pregnancy¹⁴. Another study conducted by Garcia *et al.* (2006) showed that the highest rates of STIs among GBV cases have been observed in less industrialized settings of Ethiopia were 71%, Peru were 69%, and Bangladesh were $62\%^5$. The probable reasons for increases of STIs in these regions include imbalances in economic opportunities; educational attainment, health, and political empowerment are more pronounced. Also similar study conducted by Hong *et al.* (2013) on among female adolescent in china showed that self-reported STI symptoms 84% in participants who were exposed to sexual GBV. The probable reasons, study population were sex workers⁴. https://doi.org/10.38124/ijisrt/IJISRT24JUN1668 Additionaly, this study revealed a high number of

pregnacies 72% resulting from GBV. Similar findings have reported by Hong et al. (2013) that confirm the high prevalence of sexual GBV against adolescent in China, with high rates of unwanted pregnancy 52% and abortion 53%. The probable reasons include study population who were sex workers as well as study conducted in a period of one year⁴. Another similar study conducted by Chacham et al. (2016) in poor neighbourhoods of three middle-sized cities in Minas Gerais, Brazil. Showed that almost half 47% of the female respondents had become pregnant at least once, 25.5% of them before they were 19 years old, and 44% had at least one child. The prevalence of teenage pregnancy was very similar among respondents in all three cities¹⁶. The probable reasons include imbalances in economic opportunities; educational attainment, health, and political empowerment as well as location of both countries¹⁶.

V. CONCLUSION

The study highlights the link between gender-based violence and increased risk of STIs and HIV. Despite Rwanda's efforts, the state's failure to implement GBV-related policies contributes to the problem. The study recommends life skills training, male action groups, mass sensitization, anti-sexual violence structures, and increased capacity of anti-violence advocates. It also recommends strengthening existing institutions, coordinating interventions, networking, and focusing on girl child education. The study emphasizes the need for more focus and strength in addressing GBV.

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- Author Contributions All authors contributed equally for this study.
- Conflict of Interest Authors declare no conflict of interest
- Fundings N/A
- ➤ Ethical Consideration

Prior to this study, official approval to conduct this study was obtained from Kibagabaga District Hospital by the Director of the Hospital. The principle of confidentiality and respect of patient privacy are the rule as the research was carried out in health sector and the results were only used for academic purpose. Laboratory numbers was used as unique identifiers in order to maintain confidentiality which was corresponding to the visit numbers of the Hospital Information System (HIS).

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