

Trauma Cases during the Commemoration Period of the Genocide against the Tutsi in Rwanda

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ABSTRACT

Introduction: Trauma-related crises are still a national public health concern due to Genocide against the Tutsi in 1994. Thus, this research aimed to assess the emotional crisis and trauma cases in the commemoration period, contributing factors among study participants, coping strategies, and existing provided interventions during Kwibuka 24 (2018).

Methods: The study was conducted countrywide across all hospitals reporting mental health interventions provided to people experiencing an emotional crisis and trauma cases during Kwibuka 24. A total of 611 respondents were included in this study, and we used a semi-structured questionnaire for data collection.

Results: Of all respondents, 92% were female, and 8% were male. 65% of the respondents indicated that they experienced trauma symptoms after the commemoration period. From 1994 during the genocide against the Tutsi, most respondents (47%) got traumatized 24 times, while it was 18 times for the past 5 years during the commemoration period.

The majority (67%) of respondents indicated that they got all the symptoms, namely; excessive anxiety, excessive crying and sadness, unconsciousness/not knowing what is happening to them, hypervigilance, loneliness, flashbacks, numbing, being agitated, reviviscence and headache during the commemoration period. Most respondents (59.1%) indicated that poor living conditions contributed to trauma.

Conclusion: The findings showed that trauma cases were more prevalent among female genocide survivors, with poverty as the leading contributing factor and commemoration events as triggers.

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INTRODUCTION

Rwanda commemorates the 1994 genocide against Tutsi every year from April 7th to July 13th, over a period of 100 days. During this period, some survivors and relatives suffer from mental health traumas and emotional crises [1]. To tackle challenges they face, Rwanda established organization and coordination of mental healthcare each year during commemoration of the 1994 Genocide against the Tutsi, all over the country [2]. This response framework has led to the creation and operationalization by the Rwanda Biomedical Centre (RBC), of a decentralized network of well-trained mental health responders throughout the country [2,3].

This Mental Health Care Delivery Model engages a diverse workforce with multidisciplinary expertise from different stakeholders to assist the population during the commemoration of the Genocide against the Tutsi [1]. These comprise community health workers, Red Cross volunteers, students who are survivors of the genocide (AERG), ambulance service providers known as Service d 'Aide Médicale d'Urgence (Pre-hospital care) (SAMU), general nurses working in health centers, mental health nurses, psychologists and medical doctors [2].

In addition, the model has led to the development of many strategic interventions to offer psychosocial support for those affected during this period. That kind of intervention continued to be implemented nationwide at different levels [3,4]. Depending on the severity of the conditions, individuals affected are referred from commemoration sites to health centers, district or referral hospitals for proper management [1]. This model supports the country in terms of ascertaining the mental health problems related to the 1994 Genocide against the Tutsi commemoration period and delivering mental health care interventions [1,5]. However, some challenges still need to be addressed to improve the long-term management of trauma cases identified during that period.

Evidence of mental health consequences of the genocide is consistently observed throughout the year, but the manifestation of traumatic memories appears to be particularly acute during periods of genocide commemoration [4], leading to repetitive traumatic crises among victims. Studies have consistently recommended continuous evaluation of these crises and research that can inform the

effectiveness of the intervention developed [1]. This study assessed the burden of emotional crises and trauma cases identified during the 2018 commemoration period of the genocide against the Tutsi. It could contribute to developing an effective approach, incorporating both the reactive and proactive approaches for the long-term management of emotional crisis and trauma cases identified during the commemoration period of the genocide against the Tutsi.

STUDY METHODS

Study Design: This study used a cross-sectional design using questionnaires. The study population included all individuals who presented emotional crisis and/or trauma (new cases or recurrent cases) during the 2018 commemoration period of the genocide against the Tutsi and who have been managed or treated at commemoration sites, Health Centers, District or Referral hospitals. Only individuals who are able to communicate are involved. Mental health care providers who have provided an intervention at least once during the commemoration period, relatives, and/or friends of people experiencing emotional crisis and trauma cases during the commemoration of the 1994 Genocide against the Tutsi in Rwanda are involved in this study.

Study sites: The study was conducted countrywide across all hospitals that report on mental health interventions provided to people experiencing an emotional crisis and trauma cases during Kwibuka 24.

Sample size and sampling techniques: For quantitative data, random sampling was used to select respondents from a list of individuals provided by the hospitals. In addition, a replacement list was also generated randomly to serve in case a respondent was not available for the study.

Daniel's 1999 formula was used to calculate the sample size during the quantitative data collection. Whereby;

 $n=z^2xp(1-p)$

n is the sample size, z is the statistic for a level of confidence (for a level of confidence of 95%, which is conventional, the z value is 1.96), p is

the expected prevalence or proportion (considered as 0.5), d is the precision (considered as 0.05 to produce good precision and smaller error of the estimate. With a Continuous Interval at 95%, the non-response rate of 3% and design effect of 1.5 was considered using Daniel's formula.

Therefore, from the formula above; n=1.962 * (0.5(1-0.5))= 384.16Sample size when the response rate was considered: =384/(1-0.03) none response rate =384/(0.97=395.87=396)Sample size when design effect (Deff) was

Therefore, the final sample size was 594, and 611 participants were included to compensate for the non-response possibility.

considered = 396*1.5=594

Questionnare: Semi-structured questionnaire was used for data collection. The questionnaire collected information such as sociodemographic data: age, level of studies, occupation, religion, "Ubudehe" category, health insurance, marital status, and information about one's household, for example, whether one lives with other people, the relationship one has with the people he/she lives with, a number of people one lives with, and household role.

Information about trauma included: comorbidities (chronic diseases), distance to the nearest health center, symptoms during the Kwibuka 24 commemoration period and in the previous 5 years, trauma symptoms, triggers of trauma crisis, contributing factors to trauma crisis, coping strategies to overcome emotional crisis/trauma crisis, services offered during and after the commemoration period and the support that should be strengthened and introduced in order to improve the services offered to people experiencing trauma crises.

Data collection and analysis: For quantitative data, data collectors were trained and provided with a list of respondents from records of trauma crisis cases during the Kwibuka 24 commemoration period. These records are kept at various hospitals across the country. The data collectors made contact with respondents via telephone, and appointments were made. We then collected data using a tablet with questionnaires designed using ODK in Kinyarwanda.

Data were extracted, cleaned, and stored in Excel. This data was analyzed using SPSS for descriptive statistics and the generation of graphs, tables, and pie charts.

Ethical consideration: Ethical approval from the Rwanda National Ethics Committee (RNEC) was obtained prior to the conduct of the study. Informed consent was obtained from the participants by signing consent forms. Participation in the survey was voluntary, and all necessary logistics to facilitate the study were provided. The transcripts and quantitative datasets were kept in a password-protected computer to ensure the confidentiality and anonymity of respondents.

RESULTS

The results indicated that; 92% of respondents were female and 8% were male. Most (31%) were between 26 to 34 years, followed by 22% who were between 35 to 44 years, and 20% between 45 to 54 years. The majority (47%) had a primary school education level, followed by 30% who had a secondary school education, and 20% illiterate. Over half (55%) of respondents were farmers, and 29% were self-employed. The vast majority (91%), while only 9% were Muslims. Most (41%) belonged to Ubudehe II, and Ubudehe III (35%). The vast majority (93%) of the respondents had health insurance, and community-based health insurance (CBHI) was the most popular (89.5%). Most lived with other people (92%), were household heads (63%), and were married (37%). Table 1 shows sociodemographic information of the respondents.

As seen in Table 2, 64% had comorbidities with chronic diseases, and 36% had no comorbidity with chronic diseases. Most had single chronic diseases (59%), while 32% of the respondents had a combination of chronic diseases.

As seen in Figure 1, two-thirds (65%) of the respondents reported having experienced trauma symptoms after the commemoration period and from the 1994 Genocide against the Tutsi.

In the past 5 years and after the 2018 commemoration period, most participants who were traumatized were women, in the age group between 26 to 34 years, with primary education

 Table 1: Sociodemographic characteristics of the respondents

		Frequency	%
	Female	561	92
Gender	Male	50	8
	25 and below	68	11
	26-34	187	31
	35-44	134	22
	45-54	123	20
age	55 and above	99	16
evel of Education	Illiterate and primary not completed Primary	120 285	20 47
ever of Education	Secondary School/TVET	182	30
	University	24	4
	Salaried employee	12	2
	Self-employed	177	29
	Unemployed	31	5
	Farmers	336	55
ccupation	Cleaners	36	6
	Artisans	18	3
	Missionaries	1	0.2
1' '	Christian	558	91
eligion	Muslim	53	9
T. 11 mg	"Ubudehe" I	127	21
Ubudehe" Category	"Ubudehe" II	251	41
	"Ubudehe" III	213	35
	"Ubudehe" IV	20 547	3 89.5
	CBHI		
	RSSB	15	2.5
Lt. Y	MMI	4	0.7
ealth Insurance	No insurance	43 1	7 0.2
	Private insurance		
	Refugees card	1	0.2
	Yes	564	92
o you live with other people?	No	47	8
	Alone	47	8
umber of people one lives with	1 to 3	281	46
	4 to 6	217	36
	above 7	66	11
	Children	271	48
	Siblings	38	7
	Parents	231	41
elationship with the people one lives	Friend	6	1
	Relatives	15	3
ith	House help	3	1
	Head of Household	354	63
	Dependents	127	23
	Housewife	74	13
ousehold role	House help Married	9 226	2 37
	Single	226 177	29
	Widow/widower	128	21
	Separated	67	11
farital status	Divorced	12	2

level, married, farmers by occupation, and in Ubudehe 2 (appendix). Most respondents reported that they got traumatized 24 times, while for the past 5 years during the commemoration period, most reported being traumatized 18 times. During the period the non-commemoration period, the majority of the respondents reported that they got traumatized 9 times (Figure 2).

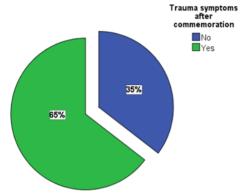


Figure 1: Trauma symptoms after the commemoration

- Since 1994 genocide
- Past 5 years during commemoration
- During a period that is not commemoration

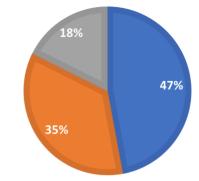


Figure 2: Occurrence of trauma

As seen in Table 3, most (67%) participants got all the symptoms, namely, excessive anxiety, excessive crying and sadness, unconsciousness/not knowing

Table 2: Comorbidities reported by participants

Chronic diseases	Frequency	Percentage	Percentage
Yes	390	64	
No	221	36	

Categories	Chronic diseases	Frequency	Percentage
	HIV	67	17
	Diabetes	79	20
Single chronic diseases	Hypertension	84	22
	HIV and Hypertension	62	16
	HIV, Diabetes	28	7
Combination of chronic diseases	Hypertension, Diabetes	36	9
	Chronic headache	10	3
	mental illness	8	2
	history of stroke	2	0.5
	Kidney disease	2	0.5
	Stomachache	2	0.5
	Asthma	6	2
Other chronic diseases	Hepatitis	4	0.5
Total	Total	390	100

Table 3: Trauma symptoms manifested during the commemoration period and triggers

Trauma symptoms	Frequency	Percentage
No response to the question	51	8
Flashback, numbing, reviviscence	55	9
Flashbacks, loneliness	30	5
Excessive anxiety, headache, Unconsciousness, crying, and sadness	65	11
All symptoms	410	67
Total	611	100
Triggers	Frequency	Percentage
Genocide memorial	35	6
Commemoration period	148	25
Genocide denial and ideology	35	6
Traumatic memories	70	11
Poor living conditions	107	18
Burials	15	2
Disabilities	12	2
Diseases contracted during the genocide	25	4
Family conflicts	15	2
Insults	13	2
Loneliness	40	7
Contact with perpetrators	32	5
Photographs of the deceased	10	2
No response	54	9
Total	611	100

what is happening to them, hypervigilance, loneliness, flashbacks, numbing, being agitated, reviviscence and headache. A quarter (25%) of the respondents reported that they are triggered by the commemoration period (date itself, movies, songs, and testimonies during that period); followed by 18% triggered by poverty and 11% triggered by bad memories of what happened to them and their loved ones during the genocide against Tutsi.

The findings revealed that most (59.1%) respondents considered poor living conditions (lack of income, shelter, school fees, and unemployment) as predisposing/perpetuating factors, followed by 13.6% of the respondents who did not respond to the question, while 5.7% indicated that family conflicts, for example, conflicts in marriages and with members within the communities as factors, and 5.6% mentioned

insults from the community members as factors. To cope with the crisis, 23% of respondents reported approaching health service providers to help them overcome the trauma; 19% preferred a quiet place; 13% joined support groups formed by fellow survivors within the communities; 13% cried, making them feel better (Table 4).

It was observed that 51% of participants took less than 30 minutes, 36% took between 31 to 60 minutes, and 13% took longer than 61 minutes on average to walk to the nearest health center (Figure 3). The majority (87%) indicated that they received professional services, whereas 13% of respondents did not receive any professional services during the 2018 commemoration period of the genocide against the Tutsi, as shown in Figure 4.

Most (42%) indicated that they met health advisors

Table 4: Contributing factors to trauma and coping strategies

Contributing factors to trauma	Frequency	Percentage
Commemoration period	6	1.0
Genocide ideology	4	0.7
Traumatic memories	3	0.5
Poor living conditions	361	59.1
Disabilities	14	2.3
Diseases	32	5.2
Family conflicts	35	5.7
Insults	34	5.6
Loneliness	27	4.4
Contact with perpetrators	4	0.7
Bad service	8	1.3
No response	83	13.6
Total	611	100
Coping strategies	Frequency	Percent
No response to the question	51	8
Solitude	119	19
Acceptance of their situation	55	9
Approach health service providers	142	23
Support groups	82	13
Engaging in different activities (sports, music,		
praying, writing)	54	9
Crying	80	13
Family support	28	5
Total	611	100

and had access to treatment and medication from different health centers, such as sleeping pills; 28% had access to counseling services from different service providers; 18% sought aid from different support groups. During crises, a third (36%) go to health centers, 35% go to district hospitals 9% go to villages, 7% get help from their homes, 6% go to their friends, 5% seek help from organizations like The Association of the Genocide Widows Agahozo (AVEGA-Agahozo and the University Teaching Hospital of Kigali (CHUK), 4% sought services from the church and 1% received services from their schools (Table 5).

Over three-quarters (76%) said that they did not

continue to get services after the commemoration period, while 24% indicated that they continued to get services like; medical insurance, cows, food, basic needs, shelter, iron sheets, counseling, financial aid like school fees allowance and house rent from the Genocide Survivors Assistance Fund (FARG), Vision 2020 Umurenge Programme (VUP), CARITAS, and AVEGA Agahozo after the commemoration period (Figure 5).

The findings revealed that 39% needed easy access to more counseling services after the commemoration period to help people heal from the trauma they are suffering from, including monitoring the trauma victims by the counselors and making home visits.

Table 5: Services respondents accessed during the 2018 Commemoration period of the genocide against the Tutsi

Services	Frequency	Percentage
Health advice, treatment, and medication	205	42
Financial aid from a support organization	44	9
Follow up programs	15	3
Counseling	136	28
Support groups	87	18
Total	487	100

Service points	Frequency	Percent
Health center	175	36
District Hospital	166	34
Villages	43	9
Home	32	7
Organizations like CHUK, AVEGA-Agahozo, etc.	22	5
Schools	3	1
Friends	28	6
Church	18	4
Total	487	100

AVEGA: The Association of the Genocide Widows Agahozo; CHUK: University Teaching Hospital of Kigali

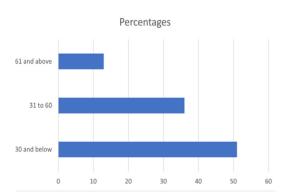


Figure 3: Use of services to overcome trauma crisis during the 2018 commemoration period of the genocide against Tutsi

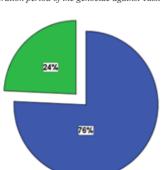


Figure 5: Access to services after the 2018 commemoration period

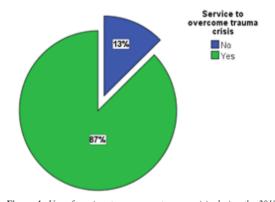


Figure 4: Use of services to overcome trauma crisis during the 2018 commemoration period of the genocide against Tutsi

Twenty three percent indicated the need for more financial support (shelter, allowance, food, and funds to start businesses). However, 13% said nothing should be strengthened since they were satisfied with the services offered (Table 6). When asked what needs to be introduced, 48% of the respondents requested more counseling and follow-up sessions, most especially for people experiencing trauma even after the commemoration period, 12% said that there was a need to train trauma counselors and also family

Table 6: Support that needs to be strengthened or introduced

Support that needs to be strengthened	Frequency	Percentage
No response to the question	52	9
Easy access to more counseling	239	39
Training counselors	15	2
Increase in the number of counselors	47	8
Financial support	143	23
Satisfied	82	13
Support groups	17	3
Trauma sensitization to stop stigmatization	16	3
Total	611	100

What needs to be introduced	Frequency	Percentage
No answer	51	8
Need for support groups	55	9
Counseling and follow up	293	48
Training counselors	72	12
Advocacy	23	4
Financial support	71	12
Increase in the number of counselors	35	6
Satisfied	11	2
Total	611	100

members with children who are experiencing trauma, 12% also indicated that there was a need for financial support to the people experiencing trauma.

DISCUSSION

Following the 1994 Genocide against the Tutsi, Rwandan society was severely impaired and could not function optimally [2], with a large burden of mental health disorders, which can be linked to the genocide against the Tutsi [5,7].

This study's findings revealed that 92% of respondents are female, indicating a higher trauma prevalence in women than men since women were 51.8% of the Rwandan population [8]. This might be due to the fact that women are more prone to PTSD than men, as evidenced by previous studies [9,10]. Research has also shown that women are more likely than males to experience PTSD even when subjected to similar stress [10]. Women have been found to be 2-3 times more prone to PTSD than men [11]. One of the suggested reasons is women's higher risk of sexual assault,

which is itself associated with the highest rates of PTSD [10]. In addition, it is hypothesized that women may experience additional role strain when their ability to perform gendered social roles (such as wife, mother, or caregiver) is hampered by traumatic experiences or stress reactions, aggravating the detrimental effects of trauma exposure and leading to more likelihood of experiencing trauma related crisis [9,12].

We found a downward trend of traumatic events from 24 events since the 1994 Genocide against the Tutsi, to 18 events for the past 5 years during the commemoration period to 9 events in non-commemoration period. This may be attributed to the continuous government support rendered to several victims, increasing service providers like counselors, and health practitioners who care for victims, and providing trauma awareness, enabling them to easily seek help from different hospitals and organizations [13].

The majority of respondents got all the trauma symptoms, mostly triggered by the commemoration period due to coinciding dates

of the month they experienced trauma in 1994, movies, poems, songs, and testimonies, reflecting what happened during the 1994 Genocide against Tutsis. Our findings align with previous research that showed that the most common triggers are stimuli similar to the traumatic event's stimuli, such as sights, sounds, smells, or reminding thoughts of the traumatic event [14].

Research has also shown that those in poverty, who are discriminated against, disabled, and homeless, are more vulnerable to trauma and develop PTSD [15,16]. This may be worsened by familial and societal conflicts [17]. This aligns with our study's findings that poverty, family conflicts, and insults from the community as perpetuating factors for most respondents, but also disability and diseases acquired from genocide traumatic events. More than two-thirds of respondents mentioned poverty as a contributing factor, which is consistent with previous studies showing that poverty is associated with more risk of PTSD and other mental illnesses. especially among women and others with a history of traumatic experience [18,19], the similar respondents (92% female genocide survivors) in our study. Moreover, research has indicated that youth and interpersonal violence increase the risks of PTSD [19], supporting our findings and indicating that our respondents, mostly young, are at higher risk.

The most common approach to get help for our study respondents was to visit service providers, such as counselors and medical professionals, to help them overcome the trauma crisis [20]. In countries that are recovering from war or genocide, individual counseling, group counseling, and support groups have been reported to curb the symptoms and crisis [20,21]. A study on a supportive-expressive group therapy model by mental health nurses for traumatic crisis victims during genocide commemoration in Rwanda found that it significantly reduces loneliness feelings and some negative emotions [1]. At each commemoration site, there are support groups made of service providers to help victims in crises, and they are free of charge [5]. This is why the majority of the respondents indicated that they received professional services during the 2018 commemoration period of the Genocide against Tutsi directly at genocide commemoration sites. However, most reported that they did not continue to get services after the commemoration period.

This might be because the service providers have no follow-up program, especially after offering services to these victims during the commemoration period.

CONCLUSION

The majority of the sampled population experienced trauma symptoms after the commemoration period; however, trauma symptoms keep dropping due to care services established by the government and the increased help rendered by the service providers during the commemoration period.

Most respondents indicated that they received professional services during the commemoration period of the Genocide against Tutsi. These people indicated that there are support groups that the service providers at the sites make, and these have helped them access these services more freely and easily. However, they indicated that they don't continue to get services after the commemoration period. Most factors leading to crises are socio-economic, with poverty being the most commonly reported factor. Therefore, the government should empower the genocide survivors and their families through financial support by providing them with basic needs like shelter, allowance, food, and funds to start businesses. Government should help them have access to health insurance to get access to care. Efforts should be put into eradicating genocide ideology and enhancing unit.

The Ministry of National Unit and Civic Engagement should collaborate with the Ministry of Health and other partners to establish an effective approach to build and implement a tailored intervention model for the long-term management of emotional crisis and trauma cases identified during the commemoration period of the genocide against the Tutsi.

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