

Global Cultural and Public Health Challenges: The Impact of Conflict on Healthcare in the Rhino Camp Refugee Settlements in Uganda

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Abstract

The African continent has experienced much political instability for the last few decades. The instabilities have led to unending wars. These wars cause huge numbers in a population to flee for their safety, thus creating an ever increasing number of displaced persons and refugees.

This research was conducted in the refugee camps in the West Nile region of Uganda in the Rhino Camp Refugee Settlements. The objective was a pilot mixed methods assessment of the challenges that refugee and host communities face, and the challenges placed on the healthcare systems of the host country of Uganda.

The findings reveal many factors that are interconnected at different levels to influence the health outcomes of the refugee population in refugee camps. These factors include individual refugee factors, environmental or communal factors. These factors interact across different levels of influence to impact both the general refugee health and the healthcare system of the host country of Uganda. Of particular concern are the healthcare providers who report a burning out. Interventions that include self-help guides, and professional development for providers to address their burnout issues may produce better outcomes for the entire healthcare system.

Introduction

In many parts of the world a number of political instabilities exist and unfortunately lead to wars in such countries. Many times these wars cause huge numbers in a population to flee for their safety, thus creating an ever increasing number of displaced persons in the world. As these populations flee for their safety and become internally displaced persons and or refugees, they many times end up in neighboring countries and are placed in refugee camps. In the camps they receive emergency help from host countries, and at times non-government foreign aid organizations. The majority of the time of the host countries or the non-government foreign aid organizations is dedicated to taking care of the emergencies of these refugees in the camps. Less time and research is given to understanding the general wellbeing, and public health challenges in these newly created communities. There is also little time dedicated to understanding the challenges that the host countries face as they attempt to meet basic public health needs, because resources are dedicated to managing emergencies in ensuring shelter, food, and water are available [1]. This research was conducted in the refugee camps in the West Nile region of Uganda, especially in the Rhino Camp Refugee Settlements, to explore the challenges that these communities face and the challenges placed on the healthcare systems of the host country of Uganda.

Background

The African continent has experienced much political instability for the last few decades especially in the North, East, and Central regions. One of the most known of such instabilities is one that led to the genocide in Rwanda in the early 1990s. These instabilities have continued in countries like the Democratic Republic of Congo and the Sudan. One result in the Sudan was the formation of the new country of South

Sudan in the year 2011, with the majority of the tribes of the Dinka and Nuer moving to and now living in South Sudan [2]. Before July 9, 2011, the Sudan was known to be a big country of approximately one million square miles, and was the only country in Africa to extend to the Arab North and the black heartland. The Sudan has had the longest running ethnic and political conflicts on the African continent [3]. Many unwanted outcomes, such as inability for the citizens to grow food, lack of children's school attendance, forced migration, internal displacement of people, and lack of access to healthcare, have occurred. Unfortunately, formation of a new country of South Sudan did not solve the Sudan's problems. Civil war continues and there has been an increase in conflicts between the Dinka and Nuer tribes. As a result, many people have fled the country to resettle in Uganda, which has accepted many of these refugees. Most of the refugees have gone to the camps in the West Nile region of Uganda, in the Arua District, specifically the Rhino Camp Refugee Settlements. The recent break out of war in South Sudan resulted in an influx of refugees starting heavily in the months of July and August 2016. Many of these refugees have gone to the Rhino camp, and a newly created camp of Bidi Bidi in Yumbe District, in the West Nile Region, which camp is known to be the largest refugee camp in the world at present. As of October, 2016, there were 63,370 registered refugees in the Rhino Camp alone with a majority of them from South Sudan, as well as 300,000 in Bidi Bidi camp. Resettlement agencies have noted receiving no less than 1,000 refugees per day as of June, 2017 [4-6].

Uganda is reported to have been a host country for refugees for many years with the first known refugees as the Polish nationals and Jews who were fleeing the Nazis. These Polish and Jews were repatriated after the end of the war in 1945, but Uganda continued to host refugees. As reported in June 2017, Uganda was host to 1.277 million refugees, and although the majority are from neighboring South Sudan, there are refugees from 13 other countries including, Somalia, Eritrea, Ethiopia, Pakistan, Chad, Central African Republic, Burundi, Rwanda, and the Democratic Republic of Congo [7]. In comparison, in the year 2012 the United States was reported as host to only nearly 300,000 refugees and only 67,000 in 2016 [8]. The European Commission in June 2017 issued a press release and indicated that due to the influx of refugees from South Sudan, Uganda has the fastest growing refugee crisis in the world, and there is a need for other countries to assist [9].

Mental Health, Social Problems, and Social Environment

Refugees live in highly stressful situations due to trauma they experienced both pre- and post-migration and are therefore highly vulnerable to mental health problems. Some researchers recognized that some research has been done to explore the burden of mental illness among refugees but little is done in Africa and there are almost none in refugee communities specifically. In a study to compare the health

differences between the refugees in refugee camps and non-refugees, a study was done in Nigeria to measure the quality of life and mental health status of refugees and compare to that of non-refugees. Investigators administered World Health Organization approved questionnaires and the response rate was 98.9% with 444(45.7%) refugees and 527(54.3%) non-refugees. The refugees had been in the camps between four and twelve years and were predominantly from Liberia. Compared to the non-refugee population, refugees were found to significantly live in poorer types of accommodation and to have no formal education ($p < 0.001$). The commonly reported disorders among the refugees were depression (45.3%, $p < 0.05$), obsession (34%, $p < 0.05$), post-traumatic stress disorder (34%, $p < 0.05$), and mania (25.9%). Study results showed that refugees were three times more likely to have poor mental health compared to non-refugees. The likelihood of poor mental health was found to decrease by 0.9 for every rise in quality of life score. Some of the predictors of poor mental health based on a quality of life score included being an unskilled worker, and unemployment. These same factors that predicted poor mental health status were found to have less impact on the non-refugee population [10].

There is some research suggesting that refugees face prolonged mental health problems and some targeted interventions can address these problems, such as PTSD. The truth that is usually not recognized is that when there is violence, communities and social environments are affected as well. The drive therefore to address the mental health problems of refugees as a result of conflicts alone and not consider the social environments within which the conflicts happen may not be the sole intervention to help refugees regain wellbeing. Psychosocial interventions that focus on things such as divisions within communities, destruction of social networks and loss of social and or material support are vital in the rehabilitation of refugees and they should be implemented at the population level and directed at groups. The goals of such psychosocial interventions differ and an example may be a goal to restore social connectedness and support. One of such interventions was carried out in Rwanda after a 1994 genocide which left 800,000 people killed in a 3 months period, about 2 million people leaving the country as refugees and about a million internally displaced [11,12]. This psychosocial intervention was in the form of a study controlled to assess the effect on mental health of psychosocial intervention using a therapeutic group approach called sociotherapy. The investigators had their primary objective of improving the social bonding and the secondary objective of improving the overall mental health of the participants. The Self-Reporting Questionnaire (SRQ-20) was used to get the pre- and post-measurements. Sociotherapy technique used is a therapeutic approach where individuals interact within the social environment and get a chance to redefine values and norms which are vital in their social environment. The study was done between October 2007 and September 2008 with post intervention measures taken at eight months. The study results showed improvements in SRQ-20 scores of those individuals

who participated in the sociotherapy intervention compared to those who did not. This psychosocial intervention was found to improve the mental health outcomes of the participants [12].

Torture and especially torture of children, has been described as the worst available weapon of abuse of basic human rights. Those children who are the highest risk of torture victims are those who are refugees, unaccompanied minors, and in trouble with the law. Research has shown that when children are tortured they go through a lot of behavioral changes and sometimes become destructive, violent, withdrawn, and develop learning problems. Refugee children are those under 18 years of age. Some of these children leave their country of origin without their parents either because their parents have been killed in war or have disappeared in some other way due to the conflicts and unstable political or religious environment in their country. Unaccompanied minors have been increasing for a few years now coming from many countries that are unstable such as Sudan. These children are subject to torture and many times denied basic human rights, legal counsel, and education. The children have many times been used as child soldiers and denied the proper ways that children grow up. There are many of these children in the refugee camps and many are internally displaced. The tool that has been suggested to be the most effective in dealing with and preventing torture among child refugees and children elsewhere is to improve social change and find ways to reduce extreme poverty [13].

Study Objective

While some research has been done about mental health and the social problems connected to it, much needs to be done to understand refugee health issues. What is not well understood or documented is the health challenges that present in these refugees in camps, and the burden placed on the host country's healthcare providers, as well as the healthcare system in general. With such an influx of South Sudanese refugees, this paper focuses on Uganda as a host country to explore these ideas. There is a need for (1) better surveillance, assessment, and research to understand the health complications for those refugees, and (2) intervention measures based on assessment findings. For this study, the objective was to assess the health challenges of the refugees in the Rhino Camps and the burden placed on Ugandan healthcare providers, as well as the Ugandan healthcare system in general with such an influx of South Sudanese Refugees. In this research, we also explored how past and ongoing conflicts together with the global culture and education affect the general health of the people especially the newly arrived refugees in the Rhino Camp.

Methods

The study was approved by the University of Utah Institutional Review Board and the investigators travelled to Rhino Camp Refugee Settlements in the West Nile Region of Uganda for the month June of 2017. Investigators used a pilot questionnaire which was completed by a convenience sample of

52 healthcare workers within Rhino Camp Refugee Settlements. Of the convenience sample, six did not report whether they were refugees or non-refugees and were eliminated during the data analysis process. The investigators also interviewed two charge nurses at two different clinics within the Rhino Camp settlements. At the time that this research was going on, Uganda was hosting the UN Secretary General and several foreign dignitaries for a conference on refugee issues. The UN Secretary General and other foreign dignitaries visited the refugee camps in Arua District. This conference brought out a lot of reporting from government officials, journalists, and health care providers. The research team paid specific attention to the reports and compared those data with the data the research team obtained in the camps since there had only been minimal research of the challenges to the health care system.

In a large part this was a mixed methods research with both quantitative and qualitative features. One portion of the pilot questionnaire was quantitative and the other was qualitative. The qualitative part of the research also involved the study teams interactions and informal interviews with key informants among the local leaders, health care providers, education officers, and refugee community members. These were refugee leaders within the camps and leaders from the host communities of Arua who delivered services in the camps. The study team always made their introductions to the leaders and informed the leaders that they were doing an assessment of health challenges of refugees and the burden on the healthcare system. The study team then told the leaders that they appreciated any information given to understand the challenges. Upon such introductions, the leaders were willing and excited to share their views and experiences. The study team then went on to compare these data from informal interviews with the data formally collected.

The problems noticed in this research appear to have different causal factors which are interconnected and may cut across each other to exert different levels of influence. Some of these problems appear to be behavioral in nature and therefore this paper uses some constructs from models of human behavior to explain the different interactions. Specifically, the ecological models of behavior suit this situation as was stated by Bronfenbrenner that an understanding of human development requires an understanding of the entire ecological system. Bronfenbrenner explained further that human development takes place in a complex and active interaction between the organism and the persons, objects, or symbols in its immediate environment [14]. These ecological models are not one model but a series of models, and because the issues above are public health related in nature, we also use constructs from models like the Social Cognitive theory to guide the explanation of the existing challenges. Social Cognitive theory is built strongly on reciprocal determinism in the interaction between organism or people and their environment [14].

Findings

In this pilot study to assess the health challenges of the refugees in Rhino Camp and the impact of the influx of refugees on the Ugandan healthcare system, a pilot survey was given to a convenient sample of 46 participants. The sample included 16 refugees contributing to 34.78% of the total with nine of them female, and 30 non-refugees contributing to 65.22% of the total with 16 them female. Among the refugees, the mean number of months they had been in the camps was approximately 132 months with a minimum of six months and maximum of 276 months (Table 1). The female refugees had been in the camps slightly longer, and we found that this was the general pattern in the camps in our interactions with the people in the camps. Non-refugee participants had worked in the Rhino Camps for varying lengths with a maximum number of 84 months and minimum of one month. The mean number of months working in the camps for these non-refugees was 16.81 for females and 24.46 for males. The majority of the participants reported that they were between a 6-10 satisfaction rate on a scale of 0 to 10 with 0 meaning not satisfied at all and 10 very satisfied with the services that they were giving to refugees in the camps.

The samples of participants were in four broad categories in terms of professions. Social workers represented 32.60% of the total, and nursing staff were 43.48% of the total. Clinical officers who are equivalent to physician assistants in the United States were 4.35% of the total sample, and community health personnel which group also included community health educators and social change agents were 19.57% of the sample. There were slightly more social change agents or community health educators in the refugee group than the non-refugee group (Table 1).

In the pilot questionnaire used, the qualitative part included questions such as:

- What health challenges do you see that refugee present with?
- What challenges do you face in doing your job?
- In your opinion what has been the impact of the recent influx of refugees into the camps upon healthcare providers in the camps?

- In your opinion what has been the impact of the recent influx of refugees into the camps upon the Ugandan healthcare system in general?

These were open ended questions structured to explore an open discussion of the issue of challenges within the refugee camps. The major themes of the responses to these questions were pulled out and some of them are shown in table 2. The themes cover a variety of topics, and include issues such as shortage of food, housing, and water, and children mental health issues. The themes are interconnected and cut across different levels to affect or influence the general health of refugees (Table 2). The healthcare providers reported that although they are grateful to have jobs, issues like poor housing, food shortage, bad roads, and difficult transportation affect them personally and influence the care they give to the refugees within the camps. This finding confirms the theory in the ecological models of behavior that there are different factors of influence that cut across the different levels.

Among the challenges identified are problems of food shortage trauma and sexually transmitted infections which are interconnected and cut across different levels to impact refugee health within the camps (Table 2). As shown by other research, refugees come to host countries with a wide range of complex problems [8], but unfortunately because of the large numbers of arrivals reported to be no fewer than 1,000 a day, problems such as trauma and sexually transmitted diseases receive little attention and other basics take priority. Food rations per month were reported to have been reduced so everyone can have a little bit. The many refugees arriving have led to issues of over-population and increased workload for everyone working on refugee issues.

Data showing teenage pregnancies were obtained from Ocea health center which is one of the three health centers in Rhino camp refugee settlements. These data were for new pregnancies of under age 18 refugee girls between January 2016, and May 2017 (Table 3 and Figure 1). The data in table 3 shows under age 18 new pregnancy comparison for the months of January to May of both years 2016 and 2017. These data show that there was an increase in number of under age 18 pregnant girls with

Table 1: Summary of time lived and or worked in Rhino Camp Refugee Settlements for Healthcare Providers (2017).

N = 46	Refugees, n = 16				Non-Refugees, n = 30			
	Male	Female	Total	% of total	Male	Female	Total	% of total
Number of Participants	7	9	16	34.78	14	16	30	65.22
Mean Number of months worked in camps	21.71	32.22			24.46	16.81		
Maximum	72	84			84	84		
Minimum	4	2			4	1		
Mean number of months as a refugee in camps	49	131.83						
Maximum	144	276						
Minimum	6	11						
Social Workers	2	2	4		1	10	11	32.6
Nursing Staff	0	5	5		10	5	15	43.48
Clinical Officers	0	0	0		2	0	2	4.35
Community Health Personnel	5	2	7		1	1	2	19.57

Table 2: Health Challenges of Refugees and Impact of Refugee Influx on the Healthcare System in Rhino Camp Refugee Settlements in Arua Uganda (2017).

Healthcare System and Government (Level III)		
Over strained system Shortage of health providers Shortage of medicine Shortage of food and water Over population leading to depletion of resources Over strained budget	Increase in government spending Children mental health issues least dealt with Shortage of beds and admission wards in facilities	Inadequate services due to over-population Facilities under-staffed with equipment, staff, medicine At risk for a number of unknown diseases
Healthcare Providers (Level II)		
Transport problems in camps Bad roads in camps Poor staff housing facilities Food shortage in camps Too few healthcare facilities Camps too big to cover Loss to follow up of patients	Lack of protective gear Over-worked providers Increased work load Distant health facilities Shortage of providers Shortage of medicine	Under-compensated providers Language barrier Over-crowded health facilities Over-stressed dealing with stressed individuals
Refugee Status (Level I)		
Psychological stress due to war Shortage of Medicine Distant health facilities Poor healthcare seeking behaviors Psychosocial problems Transport problems in camps Constant worry of loved ones	Food shortage Water shortage Mental health problems Over population in camps Chronic illnesses Hepatitis B Malaria Poor sanitation Worry of loss property	Belief in traditional healing Waterborne diseases Post-traumatic stress Sexually transmitted Infections Poor housing Language barrier Bad roads Loss of privacy
Refugee Health		

Table 3: New Pregnancy Cases for under age 18 girls for Jan-May of 2016 and 2017 in Ocea Zone in Rhino Camp.

Months	New Pregnancy Cases		Difference	Percent Increase
	2016	2017		
January	12	29	17	141.67
February	10	18	8	80.00
March	9	15	6	66.67
April	10	16	6	60.00
May	31	20	-11	-35.48

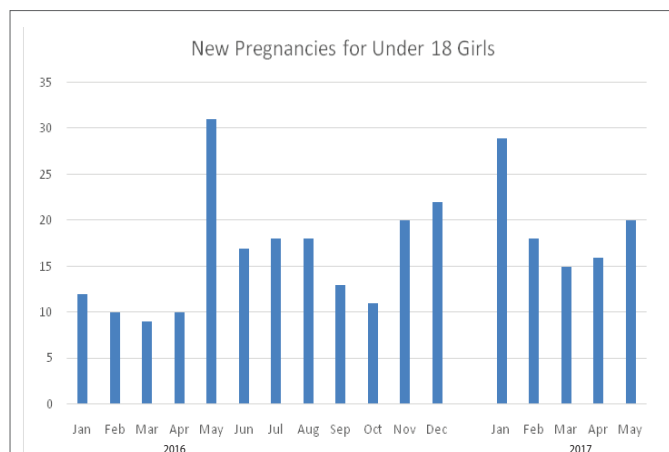


Figure 1: New Pregnancies for girls under 18 years old in Ocea Zone in Rhino Camp (2016-2017).

the January months showing a percent increase of 141.67% in 2017 compared to 2016. When looking at figure 1, the high percent increases started in the month of November 2016. There however was a percent decrease of 35.48% for the month of May 2017 compared to May 2016 (Table 3).

Discussion

In the results, 19.57% of the participants were in the category of Community Health Personnel and as indicated before, these include social change agents and community health workers. Only 2 out of the nine in this category were non-refugees leaving the 7 majority as refugees. We were not sure whether this was the planned way but it seems a perfect idea to have those people who speak the language and know the community to work as the community workers. Research has shown that models that use community health workers or social agents do well at improving communities' social services, health, and get products to final users in the communities [8,15,16]. The under compensation and shortages of basics including poor housing keeps the healthcare providers functioning in economies that are not good and keeps them unhappy. The attitudes and employee satisfaction of these providers might improve if working conditions and their economies improve. Research shows that employees who are better compensated have good attitudes, and within refugee camps, if the economy improves the general wellbeing of refugees and those who serve them improve [17,18].

The Social Cognitive theory comes into play here. Social cognitive theory stresses the fact that human behavior is the result of interactions between personal, behavioral and environment influences. Social cognitive theory recognizes and stresses the idea that even though environments can change people, people have the ability to change the environment to suit their circumstances. Most important is that through collective action, individuals can change the environment to bring about the greater good to the group or community. Some

of the concepts of the social cognitive theory include: outcome expectations, which is a belief about the likelihood or value consequences as a result of a good choice; collective efficacy which is a belief that the group have the ability to bring or enact choices that can bring the greater good to the group; incentive motivation which is the use or sometimes misuse of rewards and punishments to change behavior [14].

The issues of trauma, shortage of food, and sexually transmitted diseases pose greater challenges which may be difficult to recognize. One reporter said that a refugee woman from South Sudan who was interviewed during the UN Secretary General's visit said that her and her eleven children are still traumatized by the bloodshed they saw in South Sudan. The refugee woman called Ms. Joyce Nampesa was also quoted as saying "women and girls were raped and many of us are now carrying unwanted pregnancies while others have contracted HIV. We're in a hopeless state, traumatized and in need of psycho-social counselling" [19]. Due to the strains on the budgets, the food rations were reduced to half which is "six kilogrammes of posho, six kilos of beans and just a few grams of vegetable oil and salt per person, per month" [6]. Posho is what is known as corn flour or maize flour in other countries of the western hemisphere. An HIV counsellor working at one of the health centers in the camps reported that the reduction of food ratios presents a problem as they work with HIV positive patients since the patients are expected to have good nutritious food. The same counsellor reported that when refugees arrive at the borders they are not tested for HIV, and such presents a problem because these refugees mix freely sexually with other refugees and non-refugees within and close to the refugee camps [6]. A number of settlements have been created to house refugees but due to the high number coming in each day, the newly created settlements are very congested and stretched beyond the normal [9]. The overwhelming numbers of new arrivals in the camps have created congestion problems in healthcare centers and in all places where services can be accessed. The congestion issues are also contributing to the fatigue or burn out of healthcare providers.

Using the data from Ocea health center in Rhino Camp settlements, a percent increase of number of under age 18 pregnant girls was observed to be as high as 141.67% comparing the months of January. It is unclear whether the cause of such high percent increase is simply due to the increase in population or some other factor. It is also unclear whether these new pregnancies happened in Rhino Camp or whether these were under age 18 new arrivals from Sudan. Further investigation is needed to understand these issues. Research however has shown that teenage pregnancy is a big public health problem and among refugees complicates challenges of settlement such as education and employment [20]. Some research in 2013 showed that as many as 16 million teenage girls get pregnant and that the highest percent as high as 40% was found in sub-Saharan Africa. The same research reported

that teenage pregnancy is some of the leading cause of death among teenage girl [21]. Research has also shown that in the poorer countries teenage pregnancy is accompanied by stigmatization, and therefore the teen mothers develop poor healthcare seeking behavior leading to poor health outcomes of the mothers and their children [22]. The observed percent increase of teenage pregnancies in Ocea zone are troubling yet, when asked whether there were any birth control interventions the healthcare provider responded that the girls had to be older than age 18 to receive birth control measures.

Conclusion

The findings reveal many factors that are interconnected at different levels to impact or influence the health outcomes of the refugee population in refugee camps. These factors include individual refugee factors, environmental or communal factors, and factors at the host government level or the entire healthcare system. These factors interact across different levels of influence to impact both the general refugee health and the healthcare system of host countries like Uganda. For a complete understanding of refugee health, researchers and practitioners may benefit in deeper investigations and interventions of each of these factors and see their connection to the large healthcare system of the host country such as Uganda. One group of particular concern is the healthcare providers who report a burning out. Interventions that include self-help guides, and professional development for providers to address their burnout issues may produce better outcomes for the entire healthcare system. The problems of teenage pregnancy also call for combined effort at the different levels, and where possible introduce culturally appropriate birth control measures.

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