OUTLOOK
2016

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Review of the effects of insurgency on sustainable healthcare development in North-east Nigeria

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ABSTRACT

Purpose: To analyse and highlight the effect of insurgency on healthcare outcomes in the developing world and its implications for future migratory patterns using Borno state, Nigeria as a case study.

Design/methodology/Approach: A review of available information and publications on the above subject was carried out. Information was sourced from online databases, journals, websites and reports.

Findings: Nigeria is the most populous country in Africa with a population of about 170 million. Over the last decade it has attempted to make gains in improving the healthcare of its citizens sustainably in line with its commitment to the Millennium Development Goals (MDGs). In recent times however much of the progress made has been reversed in the North-East of the country due to a home grown insurgency by

Boko-Haram militants. This region had some of the worst health indices in the country prior to this insurgency. In that region since 2009 more than 13,000 civilians have been killed and as many as 1.5 million displaced, with the highest number of attacks taking place in Borno, Yobe and Adamawa States. In the State of Borno; the epicenter of the insurgency, 537 primary health centres, 38 secondary health centres and 2 tertiary centres existed of which about a half have been destroyed by insurgents also killing an unspecified number of health workers. Migration from that region has been mainly internal and across borders to Niger, Chad and Cameroun with some affected persons joining the steady flow of migrants to Europe from other conflict ridden zones in the middle-East and Africa. While Nigerian troops and a West African multinational coalition force are making large gains in retaking territory from the insurgents, the rebuilding of critical infrastructure across the region is a long way from beginning.

Without a concerted international effort at stabilising this region and rebuilding the socio-economic and healthcare infrastructure there will be a continuous flow of displaced persons turning up in the country's neighbours and ending up in other continents, further increasing the resources required to provide social services for these individuals and added security checks for immigrants.

Originality and Value: The results highlight the need for the international community to assist in the rebuilding of infrastructure and systems in the insurgency affected regions and stem the tide of displaced people and migrants from the source. Reports from the healthcare angle have not been highlighted internationally and will require increased attention and funding.

Keywords: insurgency; migration; Boko-Haram; healthcare; developing countries; Africa; Millennium Development Goals; MDGs; Nigeria.

INTRODUCTION: BACKGROUND

Nigeria is Africa's most populous country with a population of 170 million people and recently has been named as Africa's largest economy and the worlds 20th largest due to a recent economic rebasing. It is located in West Africa and its main economic product is crude oil being the home of the world's 6th largest crude oil deposits and 7th largest natural gas deposits. Greater than half of the Nigerian population belongs to the three dominant ethnic groups – the Hausa in the North, Igbo in the East and Yoruba in the West. The remainder is divided into nearly 400 other groups (Mustapha, 2006). There are 36 states in Nigeria and Abuja, the Federal Capital, with huge territorial, population and economic disparities between the states. Over 70% of the population live in rural areas (UNFPA, Global Health Workforce Alliance, 2008). Deeply entrenched corruption, political instability and absence of good governance and stewardship since independence, have resulted in rising inequalities, poverty, decaying infrastructure and social frustra-

tion. More than 70% of the population is classified as living in poverty or absolute poverty, with a higher concentration of both groups in the north-east (Africa Confidential, 2014; ICG, 2014). Nigeria received a substantial debt relief in 2005 and paid off its Paris Club debt in 2006 freeing up sizeable amounts with which to embark on poverty reduction and social programmes under the Millennium Development Goal (MDG) office of the presidency. Successive governments however have failed to adequately address growing insecurity in the country since Nigeria's return to civilian rule in 1999 eventually resulting in the rise of an insurgency in 2009 in the state of Borno in the North eastern region, incidentally which has some worst healthcare and socio-economic indicators in the country. Borno state shares international borders with the countries of Cameroun, Chad and Niger to the north and east. To the south it is bordered by the state of Adamawa and to the west it is bordered by Yobe state, both in Nigeria. Its capital is Maiduguri, the initial dwelling place of the nascent insurgency. The population of Borno state was 4,171,104 in 2015 (Nigerian Population Commission, 2016). It is approximately 70,898 km^2 in size (Figure 1). The predominant occupation was farming on a subsistence scale and the majority of the population resided in rural areas.

The sect known as Jama'atu Ahlis Sunna Lidda'awati wal-Jihad or commonly called Boko Haram (which loosely translates to Western

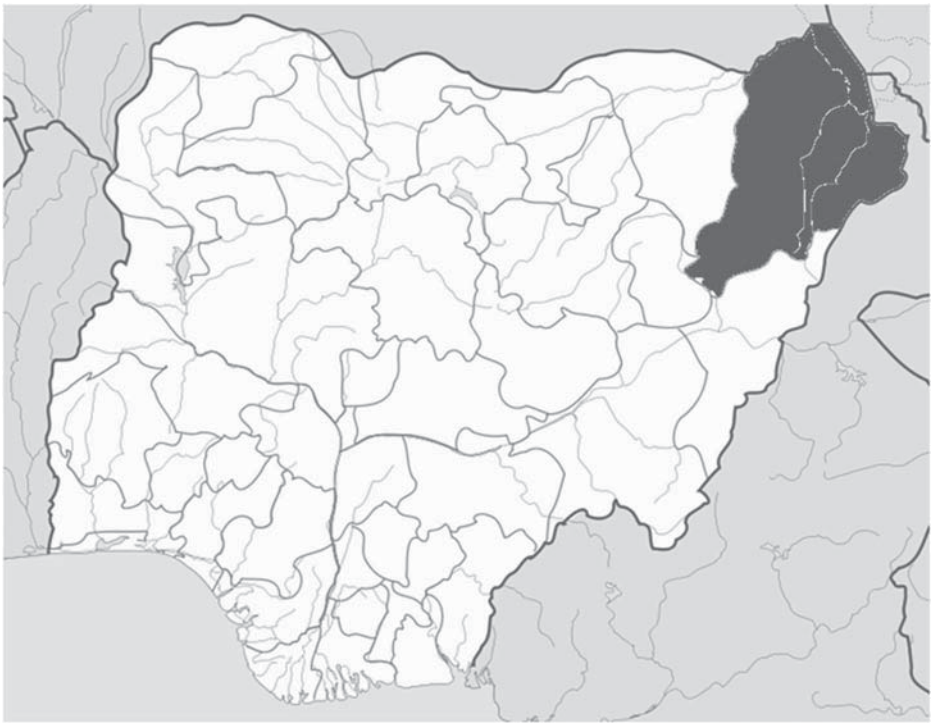

Figure 1 Map showing the geography of Borno state and neigbouring states and countries

Source: Courtesy of Himalayan Explorer (2011).

Education is Forbidden in the common West African language Hausa) are waging a war against the Nigerian government, western culture and modernity and commenced a campaign of terror using bombings, shootings and arson in its early stages but quickly grew to military and guerilla warfare and occupation of territory through violence.

This quickly spread to neighbouring states of Adamawa, Yobe, Bauchi and Gombe in the region and several sporadic violent attacks in states in other regions as far as the federal capital-Abuja with an attack on the United Nations' headquarters in 2011. This insurgency has led to deaths, displacement, bombing and destruction of government structures, abductions, rapes, forces marriages and conversions in the region (Watchlist, 2014). One of the most well publicised attacks was the abduction in April 2014 of about 276 teenage girls from a secondary school in Chibok village, Borno state which generated global attention and outrage. The sect in late 2014 declared a caliphate in the state and at a stage controlled 22 out of 27 Local Government Areas (LGAs) in Borno state (an area approximately twice the size of Belgium) and also had influence in three North eastern states of Borno, Adamawa and Yobe (HRW, 2014).

METHODOLOGY

The Borno state ministry of health in the capital Maiduguri was visited to obtain records of the status of the government run health centres and any available information on the private and faith based health centres in the state. Information was available on the government run facilities however information was not readily available for the other facilities due to a lack of records. Available reports were reviewed and relevant data extracted. Online searches were conducted for papers, report and articles relevant to the topic.

RESULTS

Effect on health facilities

In Borno state, there were 577 health centres that are government owned and run: 537 Primary Health Centres (PHCs), 38 Secondary Health Centres (SHCs) and 2 Tertiary Health Centres (THCs). These centres provide healthcare services to the majority of the population free or at a subsidised price to patients. Out of the above a total of 266 health centres were affected by the insurgency in the state; 248 (46%) PHCs and 18 (47%) SHCs. The majority of the health centres destroyed are in the central zone of the state 136/248 (55%), followed by the northern zone 75/248 (30%) and lastly in southern zone 57/248 (23%). Of this number of PHCs 190/248 (76%), 11/18 (61%) SHCs were burnt

down by the insurgency. Of the PHCs 56/248 (23%) and 7/18 (39%) have been destroyed by weather due to lack of maintenance. 1/248 (0.04%) PHC and 5/18 (27%) of the PHCs were vandalised (Table 1). Both THCs being located in the states capital were unaffected by the insurgency. Also most of the unaffected centres outside the state capital are not operational due to lack of security for health workers. There have been cases of health worker abduction to insurgent camps and an unspecified number of workers have been killed. A large proportion of health workers that survived have migrated to other parts of the country to work.

This has largely affected the availability of basic health services like antenatal clinics, emergency care and outpatient care to the majority of the population in the state.

Table 1 Description of Health facilities affected by the insurgency in Borno state, *N*=268 health centres

Type of facility	*Number (N)*	*(%)*	*Burnt*	*Affected by weather*	*Vandalised*
PHCs					
Total	537				
Affected by insurgency	248	46	190	56	1
SHCs					
Total	38				
Affected by insurgency	18	47	6	7	5
THCs					
Total	2				
Affected by insurgency	—	—	—	—	—

Effect on population migration

Since the full scale insurgency started in 2009 there has been an extremely large number of refugees and Internally Displaced People (IDPs). According to the African Union Convention for Protection and Assistance of IDPs in Africa (African Union Convention, 2009), the term 'IDPs is defined as

> "persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-made disasters, and who have not crossed an internationally recognized State border" [Article1 (k)].

The UNHCR website statistical snapshot shows that as at June 2015 there were 1,358,298 IDPs, 120,303 refugees from Nigeria in the neighbouring countries of Cameroun, Chad and Niger, 1279 refugees residing in Nigeria, 40,640 asylum seekers and 122,719 returned refugees (unhcr.org). This number has since increased however and in a more recent interview the country representative of UNHCR stated that there were up to 2.2 million IDPs and 175,000 people have fled their homes to the neighbouring countries (UNHCR, 2014). About 13,000 people have been estimated to have been killed so far in the insurgency.

Effects on HIV, Tuberculosis and Malaria rates

The North east of Nigeria has HIV prevalence rates ranging from the highest prevalence of 10.5% in Taraba state to Bauchi state with the lowest prevalence of 2.0%. As at December 2012, Borno state has a prevalence of 5.6% with 107,026 People Living with HIV (PLHIV). Out of which 52,254 PLHIV are eligible for life saving Anti-Retroviral Therapy (ART) and 10,149 already placed on these drugs (treatment coverage of 19.4%) (PCRP, NACA, 2013). This intervention was mainly administered under the HIV program funded by the US government's President's Emergency Plan For AIDS Relief (PEPFAR) and the Global Fund. ART was delivered to patients mainly through the government run health centres which with the coming of the insurgency have mostly closed down. Also due to insecurity on roads, patients are unable to easily travel to centres that still exist and are in operation.

Tuberculosis (TB) rates have raised with the spread of the HIV epidemic in the past 3 decades (WHO report, 2010a,b). The treatment for TB requires a Directly Observed Therapy (DOTS) administration of a cocktail of TB medications for several months. In Borno state as in other parts of the country, the network for diagnosis of the disease and distribution of the medications were domiciled in the government health centres with 75 DOTS centres, 33 microscopy centres in 23 LGAs of the state (Otu, 2013). These have largely been destroyed or rendered non-functional.

Reduced malaria control is another serious effect of insurgency on the health system in the state. The malaria related annual deaths in children under 5 nationwide was estimated at 300,000 (285,000–381,000) and 11% of maternal mortality, it is thus the infectious disease with the highest mortality in the country (National Malaria Control Program [NMCP], Strategic Plan, 2008). Malaria prevalence in Borno state ranges from zones with 10–20% to regions of higher than 50–60%. The state lies in 2 malaria transmission zones; the northern part of the state lies in the 1–3 months suitable climate (epidemic and seasonal transmission zone) while the rest of the state is in the 4–5 months suitable climate (endemic and seasonal transmission zone [UNFCCC, MARA/ARMA project, 2002]). This means that most of the state will

have malaria transmission for at least a third of the year. The mainstay of malaria prevention strategy and treatment are Insecticide Treated Nets (ITNs), Artemesinin based Combination Therapy (ACT) and vector (mosquito) control. The distribution of the above interventions outside the state capital has greatly reduced. Borno state even prior to the insurgency had some of the least estimated %ITN coverage of households with atleast 1 ITN per household with most of the state having 0–1 per household (NMCP, 2008). Distribution of these nets have effectively stopped in most of the rural areas of state. Rapid impact assessment in the state shows up to 151 deaths from malaria in 15 health facilities in selected LGAs in the state.

Mental health services

At present there is only one mental health hospital in Borno state; the federal neuropsychiatric hospital, Maiduguri which is not adequately staffed to deal with the large number of potential patients which inevitably will come from such large scale trauma.

DISCUSSION/CONCLUSION

The effect of the loss of massive healthcare infrastructure to the region cannot be overemphasised. The effect on maternal and under-five mortality, which were quite poor to begin with remains to be seen. The Northeastern region of Nigeria had the worst of these indices in the country before the insurgency began. The insurgency will only serve to exacerbate an already dire situation.

The IDPs are usually kept in formal or informal camps with little or no access to regular health clinics and live in unsanitary conditions. There is massive potential for epidemics to break out in camps and the rapid spread of several diseases like HIV, STIs, cholera, meningitis and others is quite possible and there have been a few outbreaks. Mass starvation/malnutrition is also a serious impeding disaster looming because very few relief agencies have access to IDPs outside the state capital's IDP camps. Several people from newly freed villages and towns are moving to camps they deem to be more secure than their home villages. This has stretched the capacity of the camps and further dimishes the ability of the state emergency management agency to cope. There has also not been seasonal farming in the state for several years in this largely agrarian population due to fear of safety in the farms. This has led to both the loss of food sources and family income to most in the state. Repeated raids on villages have been reported and theft of stored food by the insurgents have become common.

The health and humanitarian systems of the neighbouring countries were also not equipped to deal with such a large population of refugees

and meager resources have become stretched and soon may be exhausted. The massive human movement out of the country also means that several persons may have taken the risk of travelling the illegal routes across the Sahara to Northern Africa and joined the large stream of refugees, economic migrants and asylum seekers from other conflict zones crossing the Mediterranean sea into Europe and on to other continents. This will cause large concerns for the European countries' health and social services systems. In addition, the insurgents have repeatedly deployed the tactic of embedding disguised male and female combatants and suicide bombers among IDPs thus raising the concern that refugees and migrants reaching other continents may have the intention of planning or joining home grown terror cells to attack the recipient country. Due to a severe lack of records and documentation in the country, thorough background checks on these refugees will be extremely difficult.

The insurgency threatens to reverse all the gains in reduction of HIV prevalence made by the HIV/AIDS program and the implications for the spread of HIV drug resistance is grave as the HIV medications are meant to be taken regularly for life with minimal breaks in adherence. The mass movement of HIV positive IDPs and refugees to neighbouring states and countries after breaking from treatment will also have an impact on resistance patterns and prevalence rates in the recipient communities. The knock on effect will also be upsurges in TB cases both in the originating country and the recipient country. Nigeria is the 4th highest TB burdened country globally (WHO, 2010a,b). Each adult infectious TB case has the potential to infect 20 individuals, out of which 2 (10%) will become diseased and 1 (5%) will in turn become infectious. Since the WHO has stated that 5% of all new TB cases will be MultiDrug Resistant TB (MDR-TB), there is a very large potential of these strains spreading from persons whose therapy were interrupted by the insurgency. These resistant strains of both above conditions could easily spread in recipient communities both in the African continent and other continents receiving refugees (Ibrahim, 2013).

Regarding malaria control programmes, the distribution of ITNs is the most important integrated vector management strategy but distribution of these nets have almost completely stopped to locations outside the capital city of the state while the rest of the country moves on rapidly with ITN distribution. This means that exposure to malaria is a major concern in the state and those infected will find it very difficult to obtain effective treatment leading to numerous unnecessary deaths especially among pregnant women and children under five years.

Mental health services in Nigeria are not well established and are ill equipped to deal with the large number of disorders that can arise from the traumatic effects of large scale violence like Post Traumatic Stress Disorder (PTSD), anxiety and depressive disorders among others.

In the post MDG era, it is quite unfortunate that progress made from the huge investments from the government from the year 2000 up till 2009 have largely been reversed in the twilight of the MDG period. It is safe to say that the Sustainable Development Goals (SDG) era will not actually be about sustaining achieved targets but rather will be about attaining the MDG goals within the region while the rest of the country and world moves on.

The government of Nigeria's armed forces and a West African multinational coalition of troops have recently made large gains in recapturing large expanses of territory from the sect and have massively degraded its ability to hold territory or carry out organised attacks. However the destruction of government and social structures has had a profound effect on healthcare provision in the region and must be rebuilt.

Limitations

There is a large dearth of records and data on healthcare indicators and statistics within the region. Publications from the region were also very scarce. The authors largely depended on second hand information from reports and estimations. Visits to areas within the state to perform assessments were near impossible as at time of writing due to the prevailing unstable security situation in the state.

Recommendations

More research needs to be done to produce more accurate and reliable data on this subject. The data on prevalence of the major diseases highlighted above needs to be urgently reassessed. A massive and urgent intervention is needed to stabilise and rebuild the zone. This is the only way to reverse the flow of people out of the region and country. This however is dependent on the speedy and complete wipe out of the insurgents and restoration of peace to an extremely troubled area of the world. The onus is not only on Nigeria's government but on all international stakeholders to see that this is done.

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BIOGRAPHICAL NOTES

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