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Assessment of Selected Health Determinants among *Almajiri* Students in Gwadabawa Local Government, Sokoto State, Nigeria

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ABSTRACT: Health determinants are factors that can influence our health either positively or negatively. This paper determined the factors that affect the health of *Almajiri* in their system of study in Gwadabawa local government of Sokoto state, Nigeria. Interview and visual observation were used to collect data, which was analyzed by thematic networks method. The result of this study was shown. Most (50.0%) of the *Almajiri* live in buildings own by school,whereas, 33.5% of them in donated buildings. There were three types of houses / classes where *Almajiri* live. Most (50.0%) were made of cement/modern style, then (33.3%) the mud houses / classes, and (16.7%) were the ones from zinc. There were toilets for urination only ,no one was slated for defecation. In 75% of the schools there was no water, whereas 33.3% have water source from unprotected wells. In 33.3% of the schools there was refuse dumps. In 33.3% there were no any source of risk. Whereas, in 16.7% there were gutters, and in 16.7% there were roads nearby. Personal hygiene was observed. 75.0% of *Almajiri* wore dirty garments.25.0% wore cleaned garments, 12.5% wore torn garments, and 87.5% wore untorn garments. 62.5% wore shoes and 37.5% have no shoes. 62.5% take bath weekly, 37.7% take bath daily. Interms of livelihood, most of them relied on begging for food; 25.0% do domestic work to get food and other needs. 70.0% of them eat twice in a day, 25.0% thrice, whereas, 5.0% once; in most cases. The result revealed many health determinants which can negatively affect the health of *Almajiri*.

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Almajiri system of education is an old norm widely known in northern Nigeria and other neighbouring countries, that is still under practice (Khalid, 2001; Nigeria Research Network, 2013). It is a system whereby there is a school headed by *Malam* (teacher) ,who teaches students (Almajirai) on Islamic knowledge (Quran and relations) . These students (Almajirai) leave their parents and stay at schools (Almajiri school / Makarantar Allo or Zaure) away from their towns or villages and without enough resources to endure their needs (Amzat, 2015). The Almajiri migrant Islamic pupil or student is usually a male (sometimes female) who leave home and go to another destination in search for Islamic knowledge (Mohammed et al, 2015). They can be seen in the streets of cities and rural areas. But some of them stays at schools for several years without going home or been visited by wards or parents (Abari and Audi, 2013; NRN, 2013). Before the inception of colonial forces , Almajiri schools and students were shoulded by the system of Zakat and Government treasury, and

other endowments or charities .Consequently,they were in good condition then ,but after colonization the government halted the funding and the system suffers (Gomment and Esomchi, 2017). Instead the Almajiri students are sent to schools without or with little resources to live with ,even the teachers have little or no support .That is why, they are in deplorable conditions suffering numerous problems, despite been highly populated and congested with children of age 5-19 in most cases (Yunusa .1994; NRN, 2013; Amzat ,2015). In most cases in *Almajiri* schools reading is performed in the morning, or afternoon or night, this allow them to go and wander about for their activities. Classes are usually under trees or in zaure (mud houses), in open air or relations and blazing fire is used as source of lighting and warming in some schools .Pupils or students sit on bare floor or mats .Some of the classes are also serving as sleeping hostels, but they are overcrowded and mostly untidy . While the predominant method of teaching is coercive ,with Malam or superior student beating them or punishing

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them when need arise or during recitation. These are some of the features unique to Almajiri in most of the places where it is done (Aghedo and Eke, 2013; NRN ,2013). Determinants of health are a range of personal ,social, and environmental factors that influence health .Social determinants of health (SOD) are social physical and environmental factors in which people are born ,live ,learn ,play, work and age (North Carolina Department of Health and Human Services, 2018). The determinants of health refers to the conditions in which people are born, grow, live, work and age and related politics therein. They are crucial in the lives of all, especially the children and youngsters (Every Women Every Child, 2015). Clearly, social determinants are fundamental elements of the causal pathways to ill health or disease .They influence present and future health (Jianghong et al., 2009).70% of person's health is driven by social determinants of health (National Association of State Offices of Rural Health ,2017). Social determinants shows strong association with health .They are fundamental elements in the causal pathways to ill health and disease. Thus, they indirectly affect our current and future wealth ,health ,and development through impacting on children and youngsters (Jianghong et al., 2009). Children are happier if they live in decent houses, in safe neigbourhoods, are not bullied, enjoy in schools achieve their goals educationally and not deprived materially (Bonnefoy, 2007.). Education ,income ,status/power ,nutrition, environmental factors ,rights etc are examples of determinants of health .Being them good or bad spin the health of a kid or youngster either positively or negatively (National Childrens Buraeu, 2016; Lovell and Bibby, 2018)). The need to focus on infancy, childhood and youngness time is very important, because evidence reveals early years of life play vital role in the future life, let alone the health inequalities distribution (Jianghong et al., 2009; Ministry of Health and Policy of Spain, 2010). Of recent, World Health Organization (WHO) Comission on Social Determinants of Health Final Report stated the three principles for curbing health inequalities. These are: improve daily living conditions, tackle the inequitable distribution of power, money, and resources, measure and understand the problem and assess the impact of action .It further highlighted the need for investments on early childhood development and interventions (Jianghong et al., 2009). Almajiri system has now turned to an adverse child experience (ACE) .ACE affects children's cognitive, behavioural and physical development which in turn predicts present and future health. Biological changes which take place at tender ages because of social and related determinants become embedded in children's body .But the effects of ACE can be relieve using high quality interventions

(Bharmal *et al.*,2015). The main aim of this paper is to determine some of the cultural, ecological, environmental and social factors that positively or negatively influence the health of *Almajiri* in Gwadabawa local government area, Sokoto state, Nigeria

MATERIALS AND METHODS

Study area: The study was conducted in Gwadabawa local government, Sokoto state, Nigeria. It has a total area of 991km² (383sqm), and a total population of 231,358 according to 2006 census data. Most of the inhabitants are Muslims and Hausa-Fulani that usually practiced farming, trading, livestock keeping, civil servicing and relations. The Gwadabawa local government is blessed with one higher institution Sultan Abdurrahman College of Health Technology Gwadabawa. This school provides middlemen health manpower to the region (Sankingobir et al., 2019).

Study design: The type of study design used in this work was descriptive survey. Therein, an interview of participants was carried out. The participants were Malams (teachers) and Almajiri (students). The other method used was visual inspection of school environments.

Sampling technique: In this study, the sampling method used was purposive. Subjects where the data is concentrated were chosen .The visited schools were 40 in number and the respondents were 30 .This was because ,the result for purposive events produced the same range of minimum sample size below 50 information sources (Rijnsoever,n.d.; Sarkingobir, 2017).

Data instrument and management: The collected data was obtained with the aid of semi-structured questionnaire. Then, treated using thematic network analysis and descriptive parameters of frequency and percentage were produced.

RESULTS AND DISCUSSION

The result of this study was shown in tables 1 and 2, respectively. With regards to the environment where the *Almajiri* live an inspection and interview were conducted. The buildings were mostly (50.0%) own by "self", that is the school is the sole owner of it .Whereas, 33.5% of the places they stay were donations they got from philanthropists from their various respective communities. This is a good omen ,other wealthy individuals, groups ,agencies and relations should team up to help salvage the system by donating their own quotas to abate the sufferings and neglects of *Almajiri*. The last source of places where

Almajiri live was through renting from philanthropists free of charge .Usually, these buildings from philanthropists ,where Almajiri live were more convenient, and worthy compared to the ones owned by the "self" of schools. They were usually built in modern fashion and at least with windows and doors .In a nutshell, they are more advanced and protective to the Almajiri child compared to the mud houses, where there were no doors, fans, windows, floor etc. There were three types of houses / classes where Almajiri live based on the findings of this study. Most (50.0%) were made of cement/modern style . They are more organized and advanced. Then (33.3%) the mud houses / classes .Whereas, the comparatively less dominant (16.7%) type were the ones created from zinc .50% of the places they live had light, 50.0% have

Table 1: The environmental health determinants among *Almajiri* in Gwadabawa local government, Sokoto state, Nigeria

Source of school building	centage
Self 15 50.0)
Donation by Philanthropist 10 33.3	3
Rented by philanthropist 5 16.7	7
31 1	
Type of building	
Made from cement /modern 15 50.0)
type	
Made from mud / olden 10 33.3	3
type	
Zinc house 5 16.7	7
Presence of light	
Yes 15 50.0)
No 15 50.0)
Presence of urinals	
Yes 30 100	.0
No 0	
Presence of water source	
around the vicinity	
Yes 10 33.3	3
No 20 75.0	
Overcrowding	
Yes 30 100	.0
Nature of sleeping /	
reading materials	
Sack / mat 30 100	.0
Presence of windows /	
doors	
Yes 15 50.0)
No 15 50.0)
Source of risk around the	
school	
Refuse dumpsites 5 16.7	7
Gutters with flowing waste 10 33.3	
water	
Road 5 16.7	7
None 10 33.3	3

Table 2: Result of an interview with *Almajirai* students/ pupils in Gwadabawa local government

	Frequency	Percentage
Age		
7years	20	50.0
10 years	10	25.0
14	5	12.5
17	5	12.0
Religion		
Islam	40	100
Nationality		
Nigerian	30	75.0
Nigerien	10	25.0
Longetivity of stay before		
returning home		
4months	5	12.0
6months	30	75.0
9months	5	12.0
Do you with food or money from home?		
Yes	10	25.0
No	30	75.0
Personal hygiene		
Nature of garment		
Neat	10	25.0
Dirty	30	75.0
Torn	5	12.5
Intact	35	87.5
I have shoes		
Yes	25	62.5
No	15	37.5
I take bath		
Daily	15	62.5
Weekly	25	37.5
Source of livelihood		
Begging	35	75.0
Domestic work	10	25.0
Domestic work	10	23.0
Form of violence	40	100.0
Flogging	40	100.0
Nutrition		
I eat daily		
Thrice	2	5.0
Twice	28	70.0
Once	10	25.0

Toilet is essential in any place where humans live .In the observed schools, there were toilets ,but unfortunately they were meant for urination only ,no one was slated for defecation .Thus, the kids have no option than open defecation (OD) .The philanthropists who built classes/ houses for the schools failed to provide toilets. OD is a threat to public health and sustainable development goals (SDGs) (Sarkingobir and Sarkingobir , 2017).There is need for portable water around the school. The *Almajiri* need it for domestic purposes, but in 75% of the schools there were no water source around the vicinity. Whereas, 33.3% have water sources from unprotected wells.

By inspection of the rooms where *Almajiri* live or study, there was overcrowding, according to the number of heads sitting. In terms of sleeping or sitting they use mats or sacks .Half of the visited schools were having doors and windows ,whereas, the other half were without them. Unstable and unsafe settlement for children is associated with worse health outputs ,increased use of medical care and cost .Children who experiences homelessness are more likely to be hospitalized (Bonnefoy, 2007; Centre for Disease Control and Prevention ,2011; Canadian Council on Social Determinants of Health , 2015)

Dumpsites are global problems .There are many threats emanating from dumpsites .Some of them are: a.Leachate – a liquid produced when water pass through the refuse dump ,that can lead to contamination of soil or nearby water b.Soil can be contaminated by various chemicals of the refuse c.It also serve as source of odour ,dust and litter d. Open burning of waste lead to release of toxic substances like nitrogen oxides ,sulfur oxides ,heavy metals, dioxins, furan and particulate matter (Senterfeit et al., 2013; International Solid Waste Association, 2015).In 33.3 % of the schools there were refuse dumps around the premises. This is a risk to the health of the residents .In 33.3% there was no any source of risk. Whereas, in 16.7% there were gutters that waste water passes, and in 16.7% there were roads nearby. The Almajiris may have a risky encounter with the traffic, the children and young ones are very impulsive, they may have no proper mastering of crossing the road, and their smaller size can add up to increase their risk of being hit by the vehicles passing by.

The range of social ,cultural ,ecological and other factors that influence health status are dubbed as determinants of health .They are usually non-medical ,they includes food, social support, work, social exclusion, early life ,stress,built environment, home environment, water, oxygen, freedom discrimination, traditional roles and responsibilities and traditional knowledge among others (Brennan-Ramirez et al.,2008; Public Health Australia, 2018). Whereas, childhood is the most precious time during the lifecourse, a time known of rapid development and a shape of adulthood. Some of the effects of bad housing includes: a.Increase asthma, meminigitis, slow growth b.Increase risk of mental problems c.Lower educational attainment, then increased unemployment and poverty d.Increse risk of accidents (Harker, 2006). To fish out some of the determinants of health among the Almajirai an interview was conducted with the Almajiri .Their demography revealed that, they were all Muslims Hausa and males. Most of them (50%)were 7 years old

then (25.0%)10 years old, and (12.5%)17 years, 14 years old have 12.5%. Interms of nationality, 75.0% were Nigerians, and the rest (25.0%) were from Niger republic. It takes most (75.0%) of them 9 months before they visit home each year, whereas, 12.5% stay 6 months before going home. 25.0% came with money or food from home to the school, whereas, 75.0% came with barehands.

Personal hygiene is important to all, let alone the children and young ones .For example ,bathing clean the skin and decongest microbial load. It is an exercise that stimulates circulation, creates sense of relaxation, and promotes physical and emotional health (Hegell et al.; 2018). Walking barefooted is problematic because of sun, and possibility of injury, microbes and toxins that may be present in the surface (Poratt and Rome, 2008). On the other hand it was reported to be of advantage. The earth contains numerous biopositive free electrons which are immune-boosters .The electrons when collected by the body through barefoots help to neutralize reactive oxygen species and ultimately reducing inflammation (Staff, 2013; Hegde, 2014). Personal hygiene was observed. 75.0% of Almajiri wore dirty garments.25.0% wore cleaned garments, 12.5% wore torn garments, and 87.5% wore untorn garments. 62.5% said they wore shoes and 37.5% admitted that they have no shoes. Out of the all respondents, 62.5% take bath weekly, 37.7% take bath daily.

Diet is vital to the health, and children need it more for their present and future health (Food Research and Action Centre, 2011). Interms of livelihood, most of them submitted that ,they relied on begging for food, on the other hand 25.0% submitted that they do domestic work to get food and other needs. Generally, a staggering 15 million children under the age of 14 are working across the country . Many of them are exposed to long working hours labour in dangerous environments and too much responsibility. This is a child violation and has many consequences (UNICEF, 2005). Begging and domestic work which Almajiri does are categoric parables of child labour . They are likely to expose children to physical, psychological or sexual abuse .The Child' Rights Act prohibits the use of child for the purposes of begging or domestic work (Nwazuoke and Igwe, 2016). Domestic work need not necessarily to be very dangerous ,but sometimes it does. They can receive harsh treatment, physical injury , and all sorts of abuse ,including the sexual one (Luiz et al., 1999). Street workers are vulnerable to street violence .Many are lured to drugs ,sex ,and crimes (UNICEF ,2005).70.0% of the respondents get food to eat twice in a day ,25.0% get food thrice ,whereas, 5.0% get food once in a day in most of the cases. Young

children who are at risk of having food insecurity are 17% more likely to be hospitalized, and 60% risk of development delay. Violence is of great concern anywhere, let alone in schools .The respondents reported corporal punishment as the violence they faced. Violence in schools undermines child's security and safety, and expose them to physical, psychological and emotional consequences (The Republic of Uganda Ministry of Education and Sports , 2017). Violence against children is never reasonable or acceptable .States are mandated to protect children against all forms of violence (UNICEF, 2007). It can result in risky behaviours such as substance abuse ,sexual activity, anxiety, depression aggressiveness etc .Violence exposure for a long time can cause damage to the brain ,then cognitive disorders and relations (UNICEF, 2007). Corporal punishment has many consequences, viz: physical and psychological harm, violation of children's right, teaches violence as a way of resolving conflict or forcing people to do what they are instructed (Council of Europe Publishing, 2007). From this study, there are determinants that are threat to health .Government, donors ,rich individuals, activists, public health workers and educators should join hands to help and extract the *Almajiri* system from the current menace .The system should be well educated on the consequences of the current system and the need to imbibe community participation should be stressed.

Conclusion: Accordingly ,the study has found a range of health determinants in the Almajirai system in Gwadabawa local government, Sokoto state Nigeria. These health determinants can affect the Almajirai pupils ,the nearby environment and the overall progress of the whole area. Also, those determinants are either environmental, social ,or ecological in nature. There is need for overhauling the health determinants through proper participation of community and governments in the running of Almajiri system.

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