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THE GROWITH OF PHARMACEUTICAL BUSINESS IN BORNO STATE, NIGERIA,

1976-1999

BY

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ABSTRACT

Pharmaceuticals, especially drug distribution, are priceless that no nation can survive without them. The business has virtually touched the lives of people in so many ways. This work focuses on pharmaceutical business in Maiduguri, Borno State of Nigeria from 1976 to 1999. Primary and secondary sources generated from interviews and documentary data from libraries and other centers formed the bedrock of the data used in producing the paper. The primary sources included: interviews with present pharmaceutical operators, random sample interviews with wholesalers, retailers, peddlers, pharmacists and individuals of the Borno State Ministry of Health, NAFDAC officials as well as some of the oldest operators of pharmaceutical stores in Borno State. The secondary sources included: publications from regulatory agencies such as Pharmacists' Board of Nigeria (PBN); Pharmacists' Council of Nigeria (PCN); National Agency for Food, Drug Administration and Control (NAFDAC); and the Borno State Ministry of Health. Historical-cum-analytical method of presentation was used in the course of the write-up. The research discovered that the operation of pharmaceutical stores - through wholesaling and retailing - in Maiduguri Township during the period under review, 1976-1999, blossomed, because of the phenomenal expansion of the Township, awareness among the populace as well as the incidence of diseases. Similarly, Furthermore, the scale of drug distribution in both hospitals (public and private) and pharmaceutical stores in both volume and value accounts for a substantial part of the commerce of Maiduguri Township in particular and Nigeria in general.

Introduction

Pharmacy is one of oldest professions in the history of mankind. There is a historical evidence to suggest that, the preparation of medicaments for the cure or alleviation of disease was carried on early in human history. However, the emergence of pharmacy as an art has been considered to date from the Greco-Roman era. The word "pharmacy" is derived from the Greek word "pharmator" meaning "Drug" and the practice of curative medicine is intimately connected with Claudius Galen (AD 130-200) whose name was derived from the modern world "galenical." Galen was a Greco-Roman and physician to the emperor Marcus Aurelus. It has been established that the development of pharmacy as a science depended upon a more exact knowledge of plant constituents and a deeper understanding of the biological sciences. It is not surprising, therefore that pharmacy was not established on a scientific basis until the middle of the 19th century, when the developing chemical industry was placing new materials at the disposal of physicians and increasing knowledge of biology was stimulating the demand for more rational medication.

In Nigeria, the practice of pharmacy started with the advent of the missionaries and early European traders. Records have it that Portuguese who came to the coastal town in early days came with medicines in form of mixture, lotions, and tablets. European doctors and nurses, some of whom were their wives, were employed to work in shops which traded along with the west coast of Africa in the 17th century. Pharmaceutical practice had been in existence long before the creation of Borno state in 1976. The practice of pharmacy in Borno could be traced to the then north-eastern region in the 1940s and Borno province where all the pharmacists in the region were employed by the government and worked in government hospitals because the numbers of pharmacists in 1940s were few. In other words, Pharmaceutical business especially drugs in Borno State had its origin from the establishment of pharmaceutical departments in government

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¹ History of Pharmacy Regulation in Nigeria (2010): Pharmacists Council of Nigeria, Lagos

hospitals during the colonial period where government provided everything and were able to meet the demands of the people through the general hospitals across the state.

THE STUDY AREA²

Borno State was created on 13th February 1976, from the defunct North-eastern State. The 1999 population census indicates that Borno State has the estimated population of six hundred and twenty nine thousand four hundred and eighty six (629,486) people. Base on the five percent annual increment the population of Borno in 1999 said to be (885,750)³.

Located within latitude 10 N and 14 N and longitude 11 30 E and 14 45 E Borno State which has an area of 61, 435sq. km is the largest state in the Federation in terms of land mass. Located in the North Eastern corner of Nigeria, the State occupies the greatest part of the Chad Basin and shares borders with the Republics of Niger to the North, Chad to the North - East and Cameron to the East. It is the only State in the entire Federation sharing border with three countries. Borno State has a climate which is hot and dry for a greater part of the year.

The period of wet season varies from place due to the influence of the various climatic factors such as the direction of the rain- bearing Winds and topography but generally the rainy season is normally from June to September in the North and May to October in the South with relative humidity of about 49% and evaporation of 203mm per year. The State has two major vegetation zones viz Sahel in the North and Sudan Savannah in the south.⁴

³ 1999 Population census

² See appendix for the map

⁴ File Borno State ministry of information

The Growth of Pharmaceutical Business in Maiduguri

Pharmaceutical business has been a powerful and dynamic enterprise in the past ten years in not only in Borno state but worldwide, growing even faster than any other business in the state. The rapid growth and expansion of pharmaceutical business in Borno state was not unconnected with a number of factors.⁵ The prime factor behind establishing pharmaceutical store and patent medicine business is the pharmacist who in the community performs laudable service for patients and their communities by avoiding medication-related problems with the use of a drug utilization review and patent counseling, the pharmacist ensures self-medication, These services are essential.

The gross number of pharmaceuticals and patent medicine stores in Borno state from 1976 has increased more than tenfold from about five pharmaceutical and patent medicine stores to over seventy in 1999. Pharmaceutical stores increased in the initial stage to about seventy

⁵ Fred A:(2000) Pharmacy in Nigeria.

registered pharmaceutical stores owned by pharmacists, non-pharmacists, indigenes and non-indigenes. Most of the pharmaceutical stores in Borno state today are owned by non-indigenous pharmacists⁶. From 1961 to 1980 only six pharmaceutical chemists existed, while patent medicine stores were found in the whole of the northeastern region, but today in Maiduguri alone there are more than seventy pharmaceutical stores and about three thousand patent medicine stores in the state.

The patent medicine is chemist/druggist that has diploma in pharmacy from Ahmadu Bello University, Zaria and granted requisite to operate by the Pharmacist Board of Nigeria (PBN). Patent medicine is a store that was approved by government for sale of on the counter drugs, i.e. simple drugs needed by the people. This license was given because there was serious gap between the northern and southern parts of the country in provision of drugs to people.

The number of pharmacists increased, as a lot of graduates of Pharmacy were produced including that of University of Maiduguri which graduated a reasonable number of pharmacists and other universities across the country.

Also, the number of universities offering Pharmacy in northern Nigeria has increased from one to four. Initially only Ahmadu Bello University, Zaria was offering degree in Pharmacy, but currently University of Jos, Usmanu Danfodio University, Sokoto and University of Maiduguri are also offering Pharmacy, thereby increasing number of graduates of pharmacy and pharmaceutical stores and pharmacist.

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⁶ Interview with PharmasistZannahBulama in Maiduguiri on 22/05/2011

The expansion of primary, secondary and tertiary healthcare centers as well as private clinics had close bearing on the increase in the number of pharmaceutical stores as almost all the Hospitals (both government and private) relay on the pharmaceutical stores for the supply of drugs. Borno state has more than forty healthcare centres and hundreds of private clinics across the state. As the number of healthcare centres in the state increase, the number of pharmaceutical providers also goes high up in such a way that it will be able to cater for the needs of the healthcare centres. The strategic location of pharmaceutical stores in the state contributed immensely to the accessibility of the services in Maiduguri and its environs.⁷

As a result of the Location of Borno state, having international frontiers with Chad, Cameroon and Niger, there was expansion of pharmaceutical stores during the period under review in the state in order to cater for these international frontiers, Pharmaceutical stores like NOBEL Pharmacy located at Gamboru ward of the Metropolis, and SIMPLE Pharmacy at Dandal way are examples of stores that supply drugs to some communities across the international boundary⁸.

There was rise in pharmaceutical business in Maiduguri because Towns like Baga, Mafa, and Konduga rely for their supply of drugs on pharmaceutical stores in Maiduguri Township.

Furthermore, another factor that led to the growth of the Pharmaceutical Business was increase in patronage by more people. This patronage was due mainly to the increase in awareness and acceptability of medical treatment by the generality of people in Maiduguri.

⁸ Interview with AlhajiGarbaDaya in DayaYobe State on 28/12/2010

⁷ interview with Pharmacist Umar Awana

In addition to this, was the fact that there was increase in the personal income and earnings of people in Maiduguri, these people can therefore afford to drugs from the Pharmaceutical stores.

Personal income of individuals kept on increasing many people can afford to buy drugs, people have money to buy drugs and business is linked with profit volume of customers keep on increasing thereby making the business of pharmacy grow.

Patent medicine stores provided essential services to the immediate communities whose major duties is to provide counter drugs and mostly located in rural areas than the urban center, as some people patronize only patent medicine shops⁹.

Table 1.2 below shows a sample of the role played by pharmaceutical stores in Borno in drug distribution both in government hospitals and counter drugs ¹⁰

LIST OF HEALTH CENTRES IN MAIDUGURI TOWNSHIP THAT PROVIDE DRUGS
TO THE PUBLIC

Ward	No of HF Offering	Name of HF	HF Monthly Target population
Bolori I	1	HF 1 Bolori CHC	221
		HF 1 Zangeri Clinic	79
Bolori II	2	HF 2 B/Ngarannam CHC	88
Bulabulin	1	HF 1 Bulabulin DISP	65

⁹ Interview with Pharmacist Umar Awana at University of Maiduguri Clinic on 23/06/2011

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¹⁰ Interview with AlhajiGarbaDaya in DayaYobe State on 28/12/2010

Limanti	1	HF 1 Gamboru HC	215
Gwange 3	1	HF 1 Gwange HC	250
Gwange 1	1	HF 1 Gwange DISP	59
		HF 1 Fatima A. Sherif	202
		HF 2 Police Clinic	43
		HF 3 Nursing Home	189
Maisandari	4	HF 4 EPID	129
		HF 1 Sunni Hospital	77
Lamisula	2	HF 2 Kanem Hospital	65
Shehuri South	1	HF 1 Yelwa MCH	720
Shehuri North	1	HF 1 Abbaganaram	86
	Gwange 3 Gwange 1 Maisandari Lamisula Shehuri South	Gwange 3 1 Gwange 1 1 Maisandari 4 Lamisula 2 Shehuri South 1	Gwange 3 1 HF 1 Gwange HC Gwange 1 1 HF 1 Gwange DISP HF 1 Fatima A. Sherif HF 2 Police Clinic HF 3 Nursing Home Maisandari 4 HF 4 EPID HF 1 Sunni Hospital Lamisula 2 HF 2 Kanem Hospital Shehuri South 1 HF 1 Yelwa MCH

KEY

HF: Health Facilator

RI: Retroviral Infection

Source: File Document form Borno State Ministry of Health.

Before setting up a Pharmaceutical Business/ store, one must be a Qualified Pharmacists and member of the Pharmacist Council of Nigeria (PCN) and he/she most register his Pharmaceutical Business with Council, in addition to renewal of linces every year by the Pharmacist. A Pharmaceutical Business can be started with the minimum of Ten thousand and Maximum of ten million.¹¹

Table 1.3 below shows the list of some pharmaceutical stores Maiduguri¹².

 11 Interview with Pharmacist Mohammed Yahya in Maiduguri 0n 29/06/2012

¹² File document from Borno State Ministry of Health

LIST OF PHARMACIES IN MAIDUGURI AND ITS ENVIRONS AS AT 30/10/95

S/No	Name of Premises	Ownership	Name of Pharmacist/Proprietors	Location	
1.	ABM Pharmacy, M/guri	Pharmacist	Abu, M. (Mr)	Sir Kashim Ibrahim Road M/g	
2.	Alhaya Pharmacy M/guri	Pharmacist	Mohammed, G.T. (Maiduguri) 1987	GamboruNgala road M/g	
3.	Alkawari Pharmacy M/guri	Non Pharmacist	Giwa A. (Mr.)	N/A	
4.	Amen Pharmacy M/guri	Non Pharmacist	Udoh, A. Elisha (Mr)	N/A	
5.	Halimahsadiya pharmacy	Non Pharmacist	Pharm. Yusuf Nguldes	Opp.UmaruShehuUltra ModernHospital,M/g	
6.	Ayamsu Pharmacy M/guri	Non Pharmacist	Onoja, 1.1. (Mr)	Kumshe wardM/g	
7.	Couple Pharmacy	Non Pharmacist	Mohammed Ali Burda (Mr)	Bama Road M/g	
8.	Daya Pharmacy M/guri	Pharmacist ¹³	Alh. G. Daya FPSN- 1980	Galadima RoadM/g	
9.	De-Descon Pharmacy M/guri	Pharmacist	Egwim, C.T. (Mr)	Ahmadu Bello way M/g	
10.	Degu-Sabo Pharmacy M/guri	Non Pharmacist	OkoliChijioke (Mr)	Sir Kashim Ibrahim M/g	
11.	Dike Pharmacy M/guri	Non Pharmacist	Napoleon Egbuonu (Mr)	Gamboru ward M/g	
12.	Dollar Pharmacy M/guri	Pharmacist	Enemaria, PA. (Mr)	N/A	
13.	Dumeco Pharmacy M/guri	Pharmacist	Duru, E.C. (Mr)	GamboruNgala Road M/g	
14.	Edu Pharmacy M/guri	Pharmacist	Okonkwo, C.G. (Mr.)	Sir Kashim Ibrahim way M/g	
15.	El-fattah Pharmacy M/guri	Pharmacist	Yakubu S.I. (Alh)	Bama Road opposite UMTH M/g	
16.	El-Kanemi Pharmacy M/guri	Pharmacist	Umaru, A. (Alh)	Ahmadu Bello way M/g	

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¹³ File Document from Borno State Ministry of Health.

17.	Elicol Pharmacy M/guri	Non Pharmacist	Adekunle, A.A. (Mr)-	Bama Road M/g	
			1985		
18.	Francotive Pharmacy M/guri	Pharmacist	Igbuzor, M.O. (Mr)	N/A	
19.	Hab-kiki Pharmacy M/guri	Non Pharmacist	Suleiman Bada (Mr)	Sir Kashim Ibrahim Road M/g	
20.	Hawis Pharmacy M/guri	Non Pharmacist	Sunday O. Otimenyin (Mr)	Lagos street Road M/g	
21.	Health Armour Pharmacy	Non Pharmacist	Ezemefuna, E. (Mr)	Hausariward M/guri	
22.	Hetah Pharmacy, M/guri	Non Pharmacist	Deborah Golen (Mrs)	Post Office M/g	
23.	Ikwusons Pharmacy M/guri	Non Pharmacist	Paul Enemuo (Mr)	Gamboru ward M/g	
24.	New Inland Pharmacy, M/g	Non Pharmacist	Tor, A. (Alh)	Abbaganaram ward M/g	
25.	Jeks Pharmacy M/guri	Non Pharmacist	Ajekwuenu, P. (Mr)	Sir Kashim Ibrahim Road M/g	
26.	Juci Pharmacy M/guri	Non Pharmacist	Iwegbunz, J.C (Mr)	Ruwanzafi ,Gamboru Ngala Road M/g	
27.	Kris Pharmacy M/guri	Non Pharmacist	Chinaka, C. (Miss)	Gamboru ward M/g	
28.	Lamusawa Pharmacy M/guri	Pharmacist	Adamu, I.S. (Mr)	ShehuSanda Kura Road M/g	
29.	Mai Nasara Pharmacy M/guri	Pharmacist	Ogeh, S.E. (Mr)	GamboruNgala Road M/g	
30.	Neem Pharmacy Maiduguri	Pharmacist	Uchegbu A. (Mr)	N/A	
31.	Nobel Pharmacy Maiduguri	Pharmacist	Okereke, N.O. (Mr)	Gamboru ward M/g	
32.	Paraku Pharmacy Maiduguri	Pharmacist	Ijai D. Mamza (Mr)	GamboruNgala Road M/g	
33.	PTL Pharmacy, Maiduguri	Pharmacist	Ajemigbitse A. (Mrs)	N/A	
34.	Rana Pharmacy Maiduguri	Pharmacist	Aruwa, I.Y. (Mr)	Bama Road M/g	
35.	Rata Pharmacy Maiduguri	Pharmacist	Tahir R. (Mrs)	Bama Road opposite UMTH	
36.	Ssoya Pharmacy Maiduguri	Non Pharmacist	Sodipo, O.A. (Mrs)	Bolumkutu road M/g	

37.	Sexton Pharmacy Maiduguri	Pharmacist	Etaturie, S.O. (Mr)	N/A
38.	Sazon Pharmacy Maiduguri	Non Pharmacist	Uzoeghelu S. (Mr)	N/A
39.	Shams Pharmacy Maiduguri	Non Pharmacist	Ibrahim Doma (Mr)	N/A
40.	Shanka Pharmacy Maiduguri	Non Pharmacist	Solomon Omede (Mr)	N/A
41.	Yerwa Pharmacy Maiduguri	Non Pharmacist	BitrusBurbur (Mr)	Sir Kashim Ibrahim Road M/g
42.	Simple Pharmacy Maiduguri	Non Pharmacist	Eze, S.U. (Mr)	Dandal way M/g
43.	Jato Pharmacy Maiduguri	Non Pharmacist	Martin Udoje (Mr)	GamboruNgala Road M/g
44.	Devis Pharmacy Maiduguri	Non Pharmacist	WakilMbudiye (Mr)	Gamboru ward M/g
45.	Saviour Pharmacy Maiduguri	Non Pharmacist	Ibrahim Haruna (Mr)	N/A
46.	Fimbah Pharmacy Maiduguri	Non Pharmacist	ChimaEsiobunwa (Mr)	Gamboru ward M/g
47.	Flg Franco Pharmacy Maiduguri	Non Pharmacist	Ogbeche Raphael (Mr)	N/A
48.	Heritage Pharmacy Maiduguri	Pharmacist	Lokwot Y. (Mr)	BamaRaod M/g
49.	AHVI Pharmacy Maiduguri	Pharmacist	Akpoguma H.I. (Mr)	Sir Kashim Ibrahim Road M/g
50.	Triumph Pharmacy Maiduguri	Pharmacist	Illiya P.N. (Mr)	N/A
51.	Redeemer Pharmacy Maiduguri	Pharmacist	Ugwu C. (Mr)	Opposite Agip filling Station bolumkutu M/g
52.	Hyelda Pharmacy Maiduguri	Pharmacist	Wazis H. (Mr)	Rwanzafi Road M/g
53.	Sarash Pharmacy Maiduguri	Pharmacist	Salau R. (Mr)	Kumshe ward M/g
54.	Osel Pharmacy Maiduguri	Pharmacist	Suday O. Nwakor (Mr)	N/A
55.	West African Drugs (WAD)	Multinational	Sule J. Abah (Mr)	N/A

56.	Health Armour Pharmacy Gamboru Ward, Maiduguri	Non Pharmacist	AdamuAbdulkadir (Mr)	Hausari ward M/g
57.	Hyaco Pharmacy Maiduguri	Non Pharmacist	C.C. Igbuna (Mrs)	BamaRaod M/g
	Spinco Pharmacy			
58.	Maiduguri	Non Pharmacist	Ishidi Mohamed (Mr)	N/A
59.	Jireh Pharmacy Maiduguri	Pharmacist	E.S. Oguns (Mr)	N/A

KEY

NA: Not available

Source: File document from Borno State Ministry of Health

Summary

Pharmacies owned by Pharmacists - 32

Pharmacies owned by Non Pharmacists - 31

Pharmacies and Depots own by multinational - Total

- 64

An analysis of the above Pharmaceutical stores and Patent stores indicates that about thirty percent of the Pharmaceutical stores and patent medicine stores are owned by non-pharmacist who used the licensed of Pharmacist to get their stores registered and ventured in to the Business.

Another analysis of the table is that, as a result of prevalence of high incidence of diseases in Maiduguri Township and its environs. There was the need to supply more commonly needed drugs like antibiotics, anti-malaria, and analgesics among others to cater for the need of very often diseases like malaria, headache, cholera etc, hence the rapid increase and expansion of Pharmaceutical stores in Maiduguri Township.

In addition to the above factor, there was also the increase in the establishment of new private's clinics in 1980s and 1990s which led to rise of Pharmaceutical stores like RATA, NOBEL, ZAIMAH, and ELHAYA Pharmacy and BETTER Drugs patent medicine.

RATA pharmacy operated both wholesale and retail initially when it took off but suspended wholesale later and concentrated as a retail outlet. However, during the wholesale it has supplied drugs to other smaller pharmaceutical chemist and the university of Maiduguri teaching hospital among others.

Rata pharmacy reached at its highest peak in the late 1990s as it dealt in high profile drugs that are hardly found or seen in Maiduguri as a result of its location very close to the University of Maiduguri Teaching Hospital.¹⁴

NOBEL Pharmacy is located at Gamboru Ward of Maiduguri it was registered in 19988 by Okereke N .O as a Retail outlet initially but later ventured in to whole sale and Retail Pharmacy. Nobel Pharmacy rise to its peak in the early 1990s where it supplied drugs to Simple Pharmacy, Dike Pharmacy, Sekoh and University of Maiduguri Teaching Hospital for four years between 1990 to 1994.¹⁵

ZAIMAH Pharmacy is another Pharmaceutical outlet in Maiduguri that came up during the period under review. Registered in January 2008 by Pharmacist Mohammed Yahya whose is a hospital and community Pharmacist. ZAIMAH Pharmacy is located along Lagos Street of the Metropolics, it is both a retail and whole Pharmacy. ¹⁶

Elhaya Pharmacy is one of the Pharmaceutical stores in Maiduguri that came up during the period under review. It is owned and registered by Pharmacist Garba Tom Mohammed in 1987, located at GamboruNgala.¹⁷

 $^{^{14}}$ Interview with pharmacist Rabi Tahir in Rata Pharmacy Maiduguri on $\,4$ February 2011

¹⁵ Interview with Okereke in Maiduguri on 14/4/2011

¹⁶ Interview with Pharmacist Mohammed Yahya in Maiduguri On 29/6/2012

¹⁷ Interview with Pharmacist Garba Tom in Maiduguri on 9/07/2012

It was registered as both Retail and wholesale Pharmaceutical outlet. On the retail outlet, Elhaya Pharmacy has catered for the counter drugs need of her immediate community, while on the wholesale outlet, to ensure efficiency of the business, Elhaya Pharmacy is attached with buses that are manly used for drug distribution of the store, it supplied drugs to Bama, Banki, Gaidam, Gashua and Nguru among others. Elhaya Pharmacy rose to its peak between 1987 to 1994. Elhaya Pharmacy since 1995 has remained a retail outlet to date.

Better Drugs patent medicine is one, patent medicine store in Maiduguri located along Bolumkutu ward that has provided simple counter drugs or controlled drugs to the immediate community since 1986, during the period under review. ¹⁸

Better Drugs patent Medicine is owned and registered by AlhajiLawanHaruna in 1986 as a retail outlet. The retail outlet rose to its highest peak between 1990 to 1996.

Conclusion

Pharmaceutical, especially drugs distribution, is indeed a great factor in the economic development of any country. Therefore, pharmaceutical business, particularly drugs distribution in Borno State, is not an exception. Pharmaceutical stores in Borno are the main source of drugs to all the primary, secondary and tertiary health centres in the State and the neighbouring countries of Chad, Niger and Cameron as a result of its proximity to the border. Drugs distribution has been one major source of revenue generation in Borno that has impacted greatly of the economy of the State.

18 Interview with AlhajiLawanHarunamakaho in Maiduguri on 9/07/2012

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Pharmaceutical business, apart from revenue generation, has contributed in bringing drugs to the door steps of the people thereby impacting on their lives. Neighbouring countries of Chad, Cameron and Niger relayed on Borno for the supply of drugs. Pharmaceutical stores impacted the community by way of rendering essential services to the community such as giving immunization, counseling of patients on purchase of counter drugs and compounding where applicable.

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No.	Name of Informant	Age	Place of Interview	Date
1.	AlhajiGarbaDaya	77 yrs	Daya in Yobe State, Nigeria	28/12/2010
2.	Tijjani Musa Tumsah	48 yrs	Maiduguri, Borno State, Nigeria	12/06/2010 - 4/2/2012
3.	Pharmacist ZannahBulama	59 yrs	Maiduguri, Borno State, Nigeria	26/04/2011
4.	Pharmacist (Mrs) Rabi Tahir	52 yrs	Maiduguri, Borno State, Nigeria	4/02/2011
5.	Pharmacist JusufNgude	65 yrs	Maiduguri, Borno State, Nigeria	14/01/2011
6.	Pharmacist Umar Awana	50 yrs	Maiduguri, Borno State, Nigeria Zaimah pharmacy Lagos Street.	15/06/2011 - 09/01/2012
7.	Pharmacist Mohammed Yahya	39 yrs	Maiduguri, Borno State, Nigeria	9/07/2011 - 6/07/2012
8.	Pharmacist Steven Jasani	51 yrs	Borno State Ministry of Health Borno State, Nigeria.	9/04/2011
9.	LawanHaruna	50 yrs	Better Drugs, along Damboa Road, Maiduguri Borno State, Nigeria	8/07/2011 - 6/07/2012
10.	BabaganaAbiso	50 yrs	Borno State Ministry of Health, Nigeria	13/11/2010 - 10/09/2011
11.	Pharmacist Ibrahim Abba Masta	48 yrs	Maiduguri, Borno State, Nigeria	12/08/2011
12.	Pharmacist JoshauaShara	43 yrs	Maiduguri, Borno State, Nigeria	12/08/2011
13.	Habib Mustapha Kachalla	63 yrs	Maiduguri, Borno State, Nigeria	13/02/2011
14.	DaubaIshaku	17 yrs	Maiduguri, Borno State, Nigeria	17/05/2011
15.	AbubakarZakari	20 yrs	Maiduguri, Borno State, Nigeria	13/12/2010
16.	Emmanuel Dibal	19 yrs	Maiduguri, Borno State, Nigeria	19/06/2011
17.	BalaHussani	21 yrs	Maiduguri, Borno State, Nigeria	17/06/2011
18.	MosuMaigare	19 yrs	Maiduguri, Borno State, Nigeria	18/06/2011
19.	NAFDAC Officials	-	Maiduguri, Borno State, Nigeria	14/12/2010 - 10/01/2011

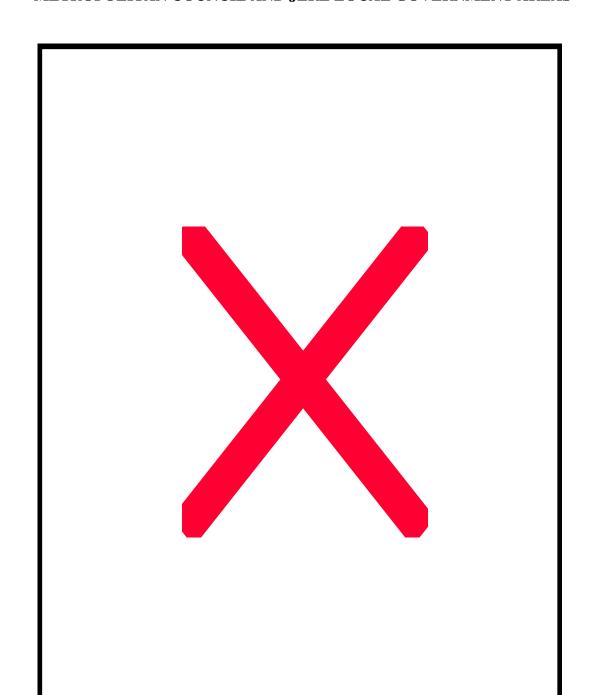
20.	Pharmacist Garba Tom Mocie	54 yrs	Maiduguri, Borno State, Nigeria	9/01/2012
21.	Prof. Isa Hussani	52 yrs	Maiduguri, Borno State, Nigeria	9/01/2012
22.	Pharmacist Buba Umar	50 yrs	Maiduguri, Borno State, Nigeria	9/01/2012

APPENDIX II

				HF
		No of HF		monthly
		Offering		Target
LGA	Ward	RI	Name of HF	Pop.
	BOLORI I	1	HF 1 BOLORI CHC	221
			HF 1 ZAGERI	
	BOLORI II	2	CLINC	79
			HF 2	
			B/NGARANNAM	
			СНС	88
MMC			HF 1 BULABULIN	
	BULABULIN	1	DISP	65
			HF 1 GAMBORU	
	LIMANTI	1	НС	215

GWANGE 3	1	HF 1 GWANGE HC	250
		HF 1 GWANGE	
GWANGE 1	1	DISP	59
		HF 1 FATIMA A,	
MAISANDARI	4	SHERIF	202
		HF 2 POLICE	
		CLINIC	43
		HF 3 NURSING	
		HOME	189
		HF 4 EPID	129
LAMISULA	2	HF 1 SUNNI HOSP	77
		HF 2 KANEM HOSP	65
SHEHURI			
SOUTH	1	HF 1 YELWA MCH	720
SHEHURI		HF 1	
NORTH	1	ABBAGANARAM	86

MAP OF BORNO STATE SHOWING THE LOCATIONS OF MAIDUGURI METROPOLITAN COUNCIL AND JERE LOCAL GOVERNMENT AREAS



SOURCE: File document from Borno State Ministry of Health.