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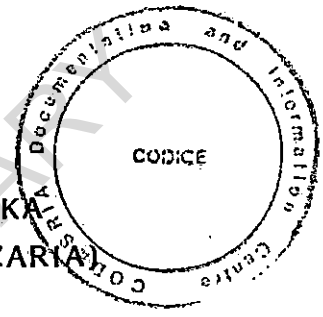
A critical appraisal of the factors responsible for law community participation in immunization programmes in Katsina local government area, Katsina state

JUNE 1997

A CRITICAL APPRAISAL OF THE FACTORS RESPONSIBLE FOR LOW COMMUNITY PARTICIPATION IN IMMUNIZATION PROGRAMMES IN KATSINA LOCAL GOVERNMENT AREA, KATSINA STATE



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A THESIS IN THE DEPARTMENT OF SOCIOLOGY
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ABSTRACT

The investigator carried out this study to find out the factors militating against effective community participation in immunization programmes in Katsina Local Government of Katsina State. The study anchored on demographic transition model.

In undertaking the research, six working hypotheses were formulated. Two communities of Katsina metropolis and Shinkafi were sampled out for study through the use of simple random sampling. A sample size of 500 mothers were selected from both communities. 3oo of the women were chosen from Katsina metropolis which is a semi urban area while 2oo were picked from Shinkafi which is a rural community. These were the group of people who supplied my data.

In order to obtain the desired information a 47 - item questionnaire was constructed and administered to the mothers in the form of interview. Five female field assistants were recruited and trained for the excercise. It was based on the responses that analysis was made. Finally special test statistics such as the

chi square and pearsons product moment Correlation Coefficient were used to test the hypotheses.

Based on the data analysed, the following findings were made :

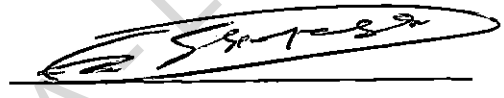
1. There is a positive relationship between some cultural beliefs posessed by the people and their participation in immunization programmes.
2. Level of education affects participation in immunization programmes positively.
3. The more the distance between the place of residence by the mothers and the site of the health/immunization centre, the less the rate of participation.
4. Economic freedom in the form of women empowerment acts as a stimulus to participation in immunization programmes.
5. Husbands' support naturally encourages women to participate more, even when they (the women) would not have done so ordinarily.
6. The rapport or social distance created by immunization team positively or negatively influence the willingness on the part of the citizenry to participate in immunization programmes.

As a result of the findings, some recommendations

were put forward on how to improve participation rate in immunization programmes specifically and to boost the health care delivery systems generally.

CERTIFICATION

I certify that this work was carried out by ROMANUS CHUKWUEMEKA ODO in the Department of Sociology, University of Ibadan, under my supervision.



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DEDICATION

This work is dedicated in its entirety to my mother - Mrs. Caroline Odo whose unwavering love and care right from my early stages in life imbued me with a lot of confidence in my potentialities and whose continuious prayers have shielded me away from most obstacles and evil machinations of my detractors, even till this day.

ACKNOWLEDGEMENT

I would like to acknowledge a number of people who contributed immensely to see that this work is completed and on schedule.

Firstly, to God Almighty, I thank him for giving me the strenght and courage to go through this research work successfully.

I fully recognise that carrying out a study of this nature requires sustained interest, illuminating comments, penetrating criticisms,generative suggestions, unwavering support and encouragement. In this regard, I would like to thank my supervisor in the person of Dr. Olufemi Omololu. His competence, friendly but firm method of superivision helped shape this work up to its present form.

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Special mention must be made of Mr. Rasheed Okunola for his invaluable contribution towards not only my academic work but to my total adjustment to the new environment which I found myself.

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I owe a special debt of gratitude to the people who rendered me the much needed financial assistance that enabled me execute this study. In this regard, I whole heartedly thank the Council for the development of Social Science research in Africa (CODESRIA) for providing me with funds. I am indeed deeply grateful.

I also wish to sieze this opportunity to thank my numerous respondents and field assistants for their cooperation.

Lastly I am grateful to my Typist Mr. Francis Ayogu who is also a brother to me. His numerous help is invaluable.

Odo, R.C.
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CHAPTER ONE

INTRODUCTION

One of the achievements of the 20th century has been a remarkable progress that has been made in death control. This progress has been most keenly reflected in a profound reduction in the risk of dying during infancy and childhood stages, a reduction that is still taking place in most countries.
At the same time however, it is aboundantly clear that the fruits of this progress are not being shared equally by all segments of the population and this has a far reaching disastrous health and economic consequences (Stockwell and Wicks 1984:28).

In the words of a former British Prime Minister B. Disreali, "The health of the people is really the foundation upon which all their happiness and all their power as a state depends". The most efficient way of combating illness is to prevent its occurence in the first instance. Fortunately the medical sciences have discovered means of promoting sound health and preventing specific disabilities as could be achieved through health programmes such as immunization.

By mid 1970's, a number of communicable and infectious diseases which had hitherto been controlled by vaccines resurfaced and new diseases which were previously not known came into existence world wide. The Bulletin of Pan American Health Organisation (1992: 375) reports that it was in response to this situation that the world health organisation launched Expanded Programmes on Immunization (EPI) in 1978.

The aim of EPI was to provide immunization services for all children in the world by 1990. Six diseases were targetted by the programme requiring application of four different vaccines - DPT against Diphtheria, pertussis against whooping cough and tetanus, BCG against Tuberculosis, measles vaccines and oral polio vaccines (OPU) for poliomyelitis. The programme was directed towards infants and pregnant mothers and this involves intergrating immunization activities with the general health service of all nations of the world.

This need to control diseases was further echoed by the third African Population Conference organised by the Economic Commission for Africa in conjuction with OAU as reported in Population Bulletin

of United Nations (1994 : 37). Recommendation 12 was that "priority should be given to combating child and maternal morbidity and mortality by giving special attention to Primary Health Care Programmes ....".

EPI, together with oral dehydration therapy have sought to enhance the quantity, quality and accessibility of maternal and child health educational and service programmes.

In Nigeria today, EPI has been renamed National Programmes on Immunization (NPI) and is currently being re-launched in all states of the Federation. Nigerias First Lady - Mrs. Mariam Abacha who chairs the Family Support Programme (FSP) even set aside some days every year to be observed as National Immunization days throughout the Federation. The FSP which has as its main project - maternal and child care and upliftement has since been vigorously activating immunization campaigns.

Indeed this is a healthy development because there is the need to maintain existing programmes in order to hold on to the gains that has already been made. At the same time, there is an equally obvious need for stepped up effort to see that these programmes reach those economically disadvantaged members of the society that are mostly in need of them.

STATEMENT OF PROBLEM

It has been rightly observed by Ebrahim (1978:72) that "many diseases responsible for infant mortality in developing countries are infact preventable". Indeed, that was the very essence of EPI. Since the introduction of Expanded Programmes on Immunization, it has been acclaimed to have achieved a world wide success as 80% of infants were reportedly immunized by 1990, thus saving about three million young lives.

However inspite of this positive development, World Health Statistics Quarterly (1995: 213) has it that since 1990, reported global immunization coverage has levelled off and may have even declined slightly. It further alleged that there is evidence to prove that immunization coverage has indeed declined in some countries. Furthermore, it stated that the global coverage figure often masks wide range of disparities in coverage among countries, states,districts and localities.

To address this problem, in 1993, the Global Advisory Group of the WHO's Expanded Programmes on Immunization met and discussed two problems.

Firstly, they deliberated upon the declining coverage in some countries of the world that hitherto recorded success with their immunization campaigns.
Secondly, they noted with dismay that twenty (20) countries, 14 of which are in African sub region had not attained 60% coverage level.

Infact they took particular note of two countries where the campaign failed to achieve 30% coverage.
The group then put forward a number of proposals to ameliorate the situation so that those nations would partake in gains brought about by immunization.

To buttress the fact of low coverage in some African countries, Desgrees and Pison (1994 : 751) conducted a study on barriers to universal child immunization in rural Senegal. They found out that even through EPI can be said to be widely successful, there are still areas in Africa who are far behind as far as successful immunization is concerned.
For instance, their statistics showed that immunization coverage was 60% in 1990.

Also using a rural area - Bandafassi as a case study, they found out that out of 6078 inhabitants that

lived there, only 41% of the children aged 1 - 10 years were completely immunized by 1992. They observed variations in participation by the different villages in that area. This was because 71% of the children vaccinated came from villages not more than 10km from health centre whereas those from remote areas of Bandafassi recorded only 10% immunization.

Jong Lee, in an article titled "Ending Polio, now or never, published in the Progress of Nations Report (1995 : 3) is however of the view that at a global level, the incidence of polio is declining under a 20 years planned and conscientious efforts towards its eradication. He pointed out that the estimated number of cases has dropped from 400,000 in 1980 to just over, 100,000 in 1993. Continuing,he said that out of the 213 countries under surveillance, 145 of them reported zero cases in 1993.

However he sounded a note of caution - ie that despite this seeming success, 68 countries of the world has Wild Polio virus still circulating. He specifically mentioned Nigeria and Ethiopia as having a very weak health infrastructure.

Other countries like Uzbekistan and AZ erbaijan are witnessing new out-breaks as their health system deteriorate. In Rwanda and Liberia for instance, the efforts are being sabotaged by conflicts and their aftermath. Adding to these problems, some of the donor countries are now unwilling to release enough funds for the disease eradication excercise in view of the success earlier recorded.

Unfortunately it is sad to observe that Nigeria is ranked 5th in the League Table of action on polio meaning that eradication will be especially difficult because our health sector is most often affected by civil strife.

Measles as a disease is not left out. Infact in sub-Saharan Africa, only two nations, Malawi and Mauritius have reached 90% immunization coverage. According to a table provided in the Progress of Nations Report (1995 : 7), measles immunization coverage fell from 54% in 1990 to 34% in 1993 representing a percentage point fall of -20%.

In the same vein, according to The State of the Worlds Children (1994 : 63), a United Nations Childrens Fund publication index to countries, Nigeria was ranked

19th in a 145 placement of countries in a descending order according to their under -5 mortality rate in 1992. Detailed result in the table shows that Nigerias under -5 mortality rate declined from 204 per 1000 in 1960 to 191 per 1000 in 1992, Infant mortality (under 1) from 122 per 1000 in 1960 to 114 in 1992. Nigeria, the report showed had a total population estimate of 115.7 million in 1992.

Annual number of births (in thousands) in 1992 stood at 5259 while annual number of under -5 deaths (in thousands) in 1992 was 1004. In addition, Nigeria has a life expectancy at birth as 52 years. This clearly shows that Nigeria is not a healthy nation as forces of mortality have not been controlled effectively yet.

Table 3 in the state of Worlds children (1994:68) dealt specifically with the health sector in Nigeria. The table has it that the total percentage of Nigerians with access to safe water is only 36%. Out of this 81% are from the urban areas while 30 are from the rural dwellings.

Also the total percentage of the population with access to adequate sanitation was put at 35% in the year 1988 - 1991.

The percentage of the population with access to health services by 1985 - 1992 was 66.

Continuing, the table has it that the number of children in Nigeria aged 0 - 1 fully immunized as at 1990 - 1992 against Tuberculosis was 50%, DPT (Diphtheria) was 31%, polio was 30% measles was 36%, pregnant mothers vaccinated against tetanus was put at 25% and oral rehydration therapy (ORT) use rate from 1987 to 1992 stood at 80%.

Just as in the case of Senegal (earlier cited) Nigeria has marked variation as you travel from state to state and from one locality to another. Ukwuoma (1996 : 23) reports that though Nigeria, generally speaking achieved up to 80% immunization coverage by 1990, immunization has reportedly nose dived from 80% to abou 26% in 1995. Also in Katsina local Government area (area of researchers interest) turn out of mothers to immunization designed for their children is generally low.

Any critical observer will therefore want to know the major cause(s) of this set back (in the first instance) and why the lukewarm attitude of some mothers towards participation (in the second case).

The problem specifically is - what are the factors responsible for the low level of participation in immunization programmes. This question becomes pertinent because as pointed out earlier, theWHO reports show that as at 1994, 14 countries out of the 108 that had hitherto reached 80% immujization has fallen back.

From the foregoing analysis, what all those statistical figures indicate is that Nigeria still has a long way to go before full immunization coverage can be effected; especially with the number of our registered medical practitioners as 21,325 in 1992 as against a population of 115.7 million citizens (Federal Office of Statistics, Lagos).

As earlier noted, most of the diseases that cause death among children both in Nigeria and else where are preventable. Also stressing the importance of immunization Badoo (1975 : 1) asserted "although anti-biotics had done much to prevent serious complication, nothing could replace prevention by vaccination in reducing infant mortality".

Since a target population is involved in any health scheme, this researcher believes that a common denuminator in ensuring the success of any immunization programme is the imperative need to obtain the understanding

and cooperation of the people who are involved directly in such programmes. Some scholars are even of the view that no health information can be imposed on a population from a distance and command effective participation, especially from ignorant peasants.

OBJECTIVES OF STUDY

In view of the preceeding statements, this investigator wants to look at the following :

(a) To examine and highlight the cultural and other socio-economic factors that influence the level of utilization of immunization programmes.

(b) To examine the extent to which the traditional social structure and practices are intergrated into service delivery mechanisms for immunization programmes.

(c) To examine and highlight the degree of awareness on accessibility of immunization programmes

(d) To offer suggestions to improve the level of coverage of immunization services in Katsina State.

GENESIS OF IMMUNIZATION AS A MORTALITY CONTROL MECHANISM

According to Encyclopedia Britannica (1943 : 247) "the concept of immunity first evolved in medicine to describe the ability of man and other animals either to resist or to recover from the invasion of microbes like protozoans, bacteria, virus etc".

Thus a person who is said to be immuned to a particular disease would not contract it although others might do so. The term immunization, otherwise called sensitization or vaccination describes basically the process of stimulating an immunological response in an animal (man inclusive) by the administration of an antigen through an artificial means.

The development of vaccines was therefore one of the gratest advances in the field of medicine. It was found out in the latter part of 19th century. Among the key founding fathers were Louis Pasteur, a french man who established the germ theory of diseases; Adolf Behring the German who discovered that resistance to disease organism is confered by specific molecules which he labelled anti bodies, and Edward Jenner, an

English physician who was accredited to have discovered vaccine almost two hundred years ago. Today, reports show that vaccination/immunization which Jenner discovered is believed to be saving approximately 9 million lives annually world wide.

There are two forms of immunity - viz :

(a) Natural Immunity - which is acquired by birth and consequently does not last long. Natural immunity also depends on earlier exosure of an individual to a particular disease, after which the body of that individual develops his own antibodies.

(b) Induced or acquired immunity - which refers to the type of immunity got from vaccination since the one inherited does not last long.

Immunization can also be either active or passive. Active immunity, provided by vaccination stimulate the bodys defensive mechanism to provide precautionary measures against specific desases. The innoculation could be done through the application of the following methods as postulated by Shina (1982:21)

(a) By introducing a weakened live virus through a scratch in the skin (as against small pox)

(b) By injecting a weakened live organism of the disease (as against measles, Tuberculosis)

(c) By injecting a dead virus or bacteria of the disease (as against whooping cough, Diphtheria).

One should however note that the "modus operandi" of vaccines is purely medical and therefore does not concern this particular study. Passive immunity or "following immunity" is only temporary and it helps the body to fight the disease already contracted. Such immunity is usually provided by a particle known as gammaglobulin which contain anti-bodies.

In sum, immunity implies resistance, not only to infectious disease agents but to all foreign particles - particles not related to the bodys normal structure.

Immunologic competence develops in an orderly manner progressively in a very young animal and it gradually improves and reaches its peak of responsiveness at about the age of puberty or adolescence. With increasing ageing however, immunologic competence begins to fade.

This study is going to deal with the active acquired type of immunity provided by the administration of vaccines to children of pre-primary school age (0 - 5 years).

SIGNIFICANCE OF STUDY

"In Africa, the average life expectancy is 47 years ..... Infant mortality is 50 - 100% higher than in developed states as a whole". Mongu (1986:38).

The present deteriorating condition of health in Africa generally constitutes a threat to the continents future. According to a write up published in the early part of this century by Newsholme (1910) and Woodbury (1925) "The infant mortality rate has historically been regarded as a very sensitive index of differences in the level of social and economic well being among various sub groups".

Continuing Newsholme stated that "infant mortality is the most sensitive index we posess of social welfare and of sanitary administration especially under urban conditions". He also stated that economic and social conditions prevailing in a population are inversely related to the mortality levels in general but especially to child mortality.

Mongu cited strom, a medical expert and Canadian director of United Nations Office for emergency aid to Africa as having said ;

> "Three quaters of two million Africans who die from hunger are children under the age of five,many of the children who survive have a hard life ahead. Because of malnutrition,their bones will be fragile and deformed, their eyesight will worsen and they will be more frequent and easy victims of such diseases as cholera, measles pneumonia and whooping cough".

Both the WHO and UNICEF have strongly indicated to the governments of developing countries the need to use vaccination to protect children against most of these deadly diseases. This justifies the study on participation in immunization programmes. The health conditions and progress, experts say, go pari-pasu because a healthy man gives in his best at his place of work all things being equal.

It is only by proper health care for our children that we can raise a healthy working population for the future. This could be achieved by immunizing the children against diseases which could impair their physical and mental development.

Interestingly enough, it is the goal of the World Health Organisation and all countries under it to achieve health for all by the year 2000 AD. This will be an illusion if mothers do not participate actively in

immunization programmes designed for their children. For communitys participation to be effective, the plan must include the community's conception of diseases and how effective vaccination could be in controlling those diseases.

The result of this study will help the Federal, State and Local government, the Family Support Programme and other non-governmental humanitarian agencies concerned with the upliftment of health of mother and child to re-analyse, reevaluate and if possible modify their techniques of reaching out to people.

The fruits of this research will also include mothers being able to see for themselves the merits of early immunization of their children. For instance a case of Tuberculosis or poliomy elitis which costs little or nothing during immunization might gulp whooping sums of money in a case of full blown disease. As a popular saying goes - a stitch in time saves nine.

Children on their own part will ever remain grateful to their parents who have taken so much pain and effort to see that they grow up with "a healthy mind in a sound body". This is because UNICEF have consistently reminded developing countries that the damage done to

children of today may permanently undermine the potentialities of parents tomorrow.

THEORETICAL FRAMEWORK

This work will rely mainly on the theory of demographic transition normally associated with Warren Thomson et.al. According to Weeks (1986:30), the theory holds that there is a tendency for the population of unindustrialised countries to grow slowly - high fertility and high mortality which cancels itself.

As the country modernises, especially with the introduction of medicare and health systems, death rate falls while birth rate still remains high resulting to high population growth. Our country Nigeria and most of the third World countries are victims of this.

As industrialisation countinues and gathers momentum, birth rate starts to fall where as death rate continues to fall even faster becauseof improved medicare, hyegiene and better diets. This trend continues till the country becomes fully industrialised. Then birth rate will be low while death rate remains low resulting to low population growth.

This theory is believed to be universal as a country advances from a non industrialised to a modern one.

However Shin (1975:315) criticised the demographic transition model, accusing it for not being a detailed and refined Law that explains population growth. Inspite of this criticism, Shin admitted that the theory still provide a useful framework for the analysis of interrelations between demographic processes and socio-economic development. Continuing, Shin asserted that infant mortality phenomena have been analysed from two different perspectives both of which are largely based on the general framework of demographic transition model. Attension has been given either to the identification of demographic, economic and social determinants of the levels and trends of infant mortality or to the investigation of the demographic, economic and social consequences of the level and trends of infant mortality.

The stage II out of the IV stages of the demographic transition in which our country Nigeria finds herself gives room for population explosion, a situation in which ORT, and improved medicare has been introduced to check mortality rate without any conscious effort on the part of the citizenry to regulate fertility.

RESEARCH HYPOTHESES

In the course of carrying out this study, the following will act as my working hypotheses:

1. The greater the degree of social distance between service providers and service consumers, the lower the degree of participation in immunization programmes.
2. There is a positive relationship between the level of education of mothers and their participation in immunization programmes.
3. The greater the distance to health centres from the place of domicile by the mothers, the less likelyhood of their participating in immunication programmes.
4. The higher the degree of economic freedom a woman posesses, the higher her level of participation in immunization programmes.
5. The higher the level of co-operation a woman enjoys from her husband, the higher her participation in immunization programmes.

DEFINITION OF TERMS

1. DISEASE: This is considered to be a departure from the normal physiological state of living organism sufficient to produce overt signs or symptoms. The abnormality could be due to an external agent affecting only the individuals contracting the disease in which case it is said to be non communicable. On the other hand, the agent may be living within the individual, multiplying and consequently affecting other organisms.

   A disease long prevailing in an area is classified as an endermic disease while if the disease prevalence is subject to wide fluctuations, it is said to be epidermic in periods of high prevalence.

2. HEALTH: This is defined by the World Health Organisation as a state of complete physical, mental and social well being of an individual and not merely the absence of disease infirmity.

3. IMMUNITY: This may be defined as the ability of man or other animals to resist or overcome disease infection.

It may either be natural (inherited) or acquired (induced).

4. IMMUNIZATION: This is the process of stimulating immunological responce in an animal by administration of an antigen through artificial means like vaccination. Immunization therefore produces immunity to various diseases and disorders.

5. ANTIGEN: This term is used to describe any material usually of a complex nature that stimulate a specific body immunity because the body recognises it (the foreign material) as being foreign to the body.

6. ANTIBODY: An antibody is a specialised protein otherwise called immunoglobulin which is able to combine with an antigen to produce the desired effect.

7. COMMUNITY: A community is viewed as a localised group or aggregate of people living within the same geographical area,ensuring a high degree of interaction and sharing the same values, norms, pattern of service, control of human conduct etc. A community is often refered to as a town.

8. PARTICIPATION: This means taking part or involving oneself in an activity. As used in this study, ensuring community participation means the mobilisation and harnessing of the community's resources towards achievement of specific goal.

9. CAMPAIGN: A campaign is a connected set of actions intended to obtain a particular result in an event or business, through advertisement or mass education.

10. INVESTIGATOR: In this case, the investigator refers to the student carrying out this research. It is used interchangeably with the word-researcher.

CHAPTER TWO

LITERATURE REVIEW

An investigation into various medical, sociological and health books and journals convinced this researcher that there has been no published work on Immunization in Katsina State. However several studies had been done in the area of health services (of which immunization is one) and other health related concepts both within and outside our continent Africa. This potrays the growing governments concern for the health problems of her citizens all over the World.

The result of a research carried out by Houser (1959:98) during the post world war II indicated that infant mortality rate was so extremely sensitive to socio-economic differences on an international level (ie the more developed country, the lower its infant mortality rate). For the purpose of orderliness, we shall first discuss some studies carried out outside our continent Africa.

INDIA'S EXPERIENCE

As stated earlier, achieving a sound health has been a primary objective of different countries of the world, be it developing or advanced. It is basic to life and therefore attracts the attention of every government

According to Bhore (1946), western medicine was introduced to India in the latter half of 18 century. India is among the 3rd world countries classified as developing. As at the time of Indias independence in 1947, medical services were available to a very small segment of the native population. Only the well to do could get adequate health service from hospitals and dispensaries established in major cities and towns. Public health services such as Immunization was provided only when there was a massive outbreak of epidermic diseases like plagues, cholera and smallpox.

Because of the inadequate or uneven distribution of health services, there was a wide spread prevalance of such easily preventable diseases as measles, malaria etc. India was said to be among the countries of the world with the highest infant mortality rate. In addition, there was the enermous problem of malnutrition and undernutrition.

With independence in 1947 however, basic health care services took a new shape. India enshrined in their constitution that "the state shall try to promote the welfare of the people by securing and protecting as effectively as possible a social order ..... and in addition ensure that the health of the workers, men, women and tender children are not abused.

Bhore reported that a health survey and development Committee was set up by the government to ensure the upliftment of health conditions. The Committee introduced new concepts in health care provision by suggesting that services such as immunization should,of necessity reach the grass root level through the provision of comprehensive health care.

By comprehensive health care, the Committee maant that:

(a) The health care should provide adequate preventive curative and promotive services.

(b) The health service should be as close to the beneficiaries as possible.

(c) There should be intensive co-operation between the people and the medical personnel.

(d) Health care services should be made available to all citizens irrespective of their ability to pay.

(e) The health service should look after all especially the weaker sex of the community (women) and tender children.

In relation to immunization or vaccination in India, it was observed by Griffith (1963) in the final report of republic health programme that although routine small pox vaccination was carried out in all centres, 80% of the health centres had no doctor or experienced medical personnel supervising the work.

Also analysis done by Ram and Datta in 1976 to assertain why some households did not visit primary health care centres, some of the reasons given were as follows:

TABLE 2:1 REASONS FOR NOT VISITING HEALTH CLINICS

	REASONS	PERCENTAGE
a)	Health Centre too far from home	41.4
b)	Transport not available	11.6
c)	Medicine not available	9.4
d)	Health staff not giving sufficient advice	9.2
e)	Medical Officers not available	4.5
f)	Ignorance of health centre	5.6
g)	Other reasons	18.3
		100%

SOURCE: Ram and Datta "a study of utilization of primary health centre in Maharashtra". Indian Journal of Public Health No.20 P.134

The above study, even though carried out some decades ago, helped to bring out a very important fact - that health care centres are available to only a limited section of the community and consequently it has not reached the desired level of coverage. This problem still persists today, although to a lesser proportion.

Still on Indian experience, Unusere (1986:2) describing disease as a way of life among the Navajo Indians asserted that infant mortality in India remained high. The major contributing factor to this trend (high disease occurence) are malnutrition and poor sanitation. In other words the disease, in some sense is a function of the way the Navajo lived and raised their infants.

Unusere concluded by saying that the pattern of occurence of diseases could not be changed until basic changes take place in the peoples way of life. This seems to confirm the statment that in any social setting conducive to a particular type of disease, medical care alone, no matter how technically complete or well delivered cannot be expected to lift the burden of sickness. Buttressing this point is a quotation from Eric Cassel who said "Without a clear understanding of what causes the disease patterns of a society and how those patterns are affected, even the best intentioned health planning

will go 'awry'. This problem abound in all developing nations, Nigeria inclusive.

Having discussed a developing country's experience, it is worthwhile to cite a developed country's experience.

UNITED STATES OF AMERICA

Our guide here is an extensive research carried out by Apple (1960:2) in U.S.A. on salk polio vaccine trial carried out in 1954 to investigate reasons why some parents allowed their children to take part in the vaccination trial while other mothers refused.

The research was actually carried out on a Cross section of mothers whose children were on a second grade (elementary two). The mothers for study was selected through a random sampling by Apple. Their families were subsequently divided into three soicio-economic level viz.

(a) The professionals where both husband and wife were College graduates.

(b) Where husband and wife were just skilled or semi skilled workers (went to high school)

(c) Couples who did not attend any high school and unskilled workers.

Apple interveiewed the mothers on whether they allowed their children to take part in vaccination trial. He found out that a high proportion of mothers from lowest socio-economic status refused to take their children to the vaccination trial. Furthermore he found out that a markedly greater proportion of mothers in the two higher socio-economic status reported having known about diseases and have taken various precautionary measures for their children against those disease, especially polio.

Also revealed was the very fact that mothers in the three socio-economic status differed in the sources and amount of information they gathered about the vaccination trial.

Dorrian Apple (op.cit:3) therefore asserted that "these differences in what people do and which sources they relied on for information and ways of presenting it may be necessary to secure cooperation from different sections of the population".

He cited Professor Koos and Dr. Deasy's report which demonstrated the difference between social levels and their acceptance of health care when they said "peoples path through life, the things they value, the choice they make, the opportunities and hazards which

confronts them are far from being the same in all classes". For instance Broom et.al (1958:190) found out that higher social position is associated with lower rate of psychosis. Conversely, more participation in clubs and other social organisation or more conservative political views are related to longer life expectancy. The above statement agree very much with Emile Durkheim, a great French sociologist's view that attachment to society reduces suicidal trendency.

Drawing from Apple's study finally, he asserts that the difference between soicio-economic level in the receptivity of health care cannot in all cases be ascribed to lack of money. This is because the polio vaccine in question was offered free of charge, yet there was poor turn out among the lower class. Their low turnout could not as well be attributed to ignorance of the vaccination because the media gave it a very wide publicity - grass root advertisement. He therefore postulated that the first step towards increasing participation by recipients is to become acquainted with the point of view of the community so that the people will first of all trust you and your ability to cure them. He also stated that for families that have reached a certain educational or occupational level, information diseminated through the media tend to reach them more

quickly than others.

Subsequently, those with high SES attach positive values to preventive health practices. People with low SES according to the study lack the knowledge of the motivation to, the ability to participate in health programmes.

In summary, Apples study cannot be strictly applied to Nigerian situation because of the following reasons:

1. It is very hard, if not impossible to "pigin hole" families into classes in Nigeria because we must consider many factors during such classification which Apple did not take into account. For instance, the possession of plenty of farmland is also a big asset in Nigerian context and not necessarily one's occupation.
2. In Nigeria, information can never reach the grass root level completely as did in Apples case.
3. Other factors related to Nigeria's developmental stage such as low literacy rate, bad roads etc. certainly will make a distinction between the U.S. of America and Nigeria.

Talking about infant mortality generally, many demographers are of the view that an understanding of the determinants of infant mortality is of critical importance to the underdeveloped countries. Quite apart from the need to reduce human suffering implied by high infant mortality, such an understanding may act to reduce fertility since it is widely accepted that a fall in mortality will ultimately lead to lower fertility (Preston 1978, Flegg 1982:441).

Many demographers also believed that mortality decline in the industrial revolution was related to improvement in nutrition and other aspects of social and economic development (Jayachandran 1986:301)

Stolnitz (1955:26) in an analysis of international mortality trends argued that increase in life expectancy may almost always be explained by two broad categories of causes.

(a) Rising levels of living (income, nutririon, housing, literacy)

(b) Technological advances (public health, medical science. sanitation etc).

He further emphasised that the introduction of new disease control techniques such as immunization programmes in

latin America, Africa and Asia has led to mortality decline in a few years prior to his analysis.

More recent studies such as those carried out by Cleland (1992:1) shows that even though the last three decades has withnessed a drastic reduction in infant mortality rate, extensive analysis by the world fertility survey shows that the survival chances of children vary widely between economic strata and also with educational attainment of mothers.

Buttressing the above statement, Elo (1992:49) established a nearly universal positive association between maternal education and child survival. Elo, citing Caldwell (1983) put forward that education modifies womens beliefs about disease causation and cure and this influences both domestic child care practices and the use of health care services continuing, he said.

> "It enhances a womans knowledge of modern health care facilities, improves her ability to communicate with modern health care providers and by increasing the value she places on good health, result in hightened demand for modern health care services (Caldwell 1979:33).

This statement is especially true in developing countries such as Nigeria and Katsina State (study area)

specifically where a bulk of the citizens are illiterates who might not often appreciate the value of modern medi-care.

Stressing the same fact Becker et.al - (1993:77) posited that family planning parental services and child health programmes such as immunization improve the survival and quality of life of mothers and children but are often underutilised by those children and mothers who are in greatest need. He pointed out that one of the challenges in public health is to identify high risk groups and to provide them with needed preventive (and curative) health services.

Commenting specifically on Thailand's experience Lyttleton (1996:25) said that the government endorsed the Primary Health Care (which includes immunization) with enthusiaism and signed it into policy immediately it was launched in 1978 by the WHO. In integrating health care with wider level of rural development, Thai government vigorously promoted essential elements of primary health care in villages like health education, nutrition, family planning, safe water supply and sanitation, immunization, prevention and control of locally endermic diseases and provision of essential drugs.

At the core of their primary health care philosophy was the encouragement of self management through the recruitment of village health workers called volunteers (VHS) and Communicators (VHC) to supervise these projects. These resource persons then collaborate with ministry of health workers.

A critical examination of what the health ministry do in Nigeria is a negation of this principle based foundamentally on effective communication and rapport between health workers and the villagers; to the extent that some villagers feel alienated and subsequently shy away from programmes designed for their upliftment. The health workers in Nigeria most often do not seek the assistance of the villagers as they often "impose" people and instructions from outside them.

Another factor which might constute impedments to health care services was identified by Frankenberg (1995: 144). She pointed out that there is an association between distance to health centres and mortality especially of children under five. She cited Alkabir (1984:78) who studied the effect of distance to hospitals, qualified doctors etc on neonatal, post natal and childhood mortality

in Bangladesh. His study showed that mortality rate for children living further than 10 miles (8 km) from a hospital are 40% higher than those living within 3 mills (2.4 km). Also children, he said fare poorly when they live far from a qualified medical doctor. For instance his data showed that mortality rates are 54% higher when children live further than 5 miles (4 km) from a doctor than when a doctor lives in their village.

This implies that in Nigeria and most developing countries, efforts should be geared towards establishing more hospitals and health centres in all nooks and crannies of the village and also provide more qualified medical personnel. This should be done if we are to reduce infant and child mortality drastically.

In view of the fact that in African countries, inspite of all efforts by the government to bring primary health care to the reach of most people, it is still grossly inadequate and inassessible, Ebrahim (1978:59) advocated that "in all localities, child health and maternal health team have to launch immunization campaign periodically where children in many remote areas can be visited an immunization carried out to as many as possible".

The success of such campaign, according to Ebrahim, rests heavily on the amount of prior planning He therefore suggested the following as guidelines.

A. STUDY OF GEOGRAPHY AND COMMUNITY

1. Study of road, type of transport required.
2. Existing health stations, their staff, facilities of sterilization, storage, vaccines etc.
3. Type of Community - whether living in villages or scattered home steads, whether pastorialist or nomadic farmers. This is to assertain when a particular population is likely to be at home or away for work.
4. Media for information - whether adequate.
5. A study of the political and social structure of the community and the chains of command inorder to determine who listens to who.
6. Estimates on the quantity of different vaccines required so as not to run short of vaccines during field operation.

B PLAN OF OPERATION

1. Communicating and identifying with the leaders and community members in general so as to create a certain degree of rapport.

2. Administrative and financial details of the receipt and distribution of vaccines to clear cut duties of who does what,when and how.
3. Details of deployment of the team.
4. Technique of storage, transport and administration of vaccines.

C PUBLICITY

Too long or too short a notice may lead to failure to comply. One week notice through the local social or political leader, with a reminder two days prior to the day of the field operation - the administration of vaccines.

D IMMUNIZATION

This could be carried out in a health centre, place of social gathering or school. It include the following:

1. Controlling the parents and their children to ensure a rapid movement of the queue.
2. Registration of all the reciepients of the vaccine
3. Announcement of dates for Booster shots" (revisits for completion of immunization schedule)
4. Treatment of minor ailment and distribution of drugs to counteract the side effects of vaccination.

Ebrahim therefore suggested "the following scheme for areas where childhood infectous disease are prevalent ..... and where because of superstition or ignorance, people do not readily aceept immunization".

TABLE 2:2 IMMUNIZATION SCHEDULE

AGE	VACCINE
ANTE NATAL PERIOD	TETANUS TOXOID TO MOTHER
Birth	Bacille calmette guemin (BCG)
One month	Small pox, Triple Antigen (DPT)
Second month	Triple Antigen (DPT), oral polio
Third month	Triple Antigen, oral polio, small pox vacc:
After nine months	Measles vaccine
Eighteen months (1½ years)	Triple Antigen & oral polio
Entry to school	Small pox, BCG, Oral polio, Triple Antigen

Source: Practical Mother and Child Guide: By Ebrahim (197857).

Another scholar who has written extensively on the subject of immunization in Nigeria in Ewoigboikhan (1985:3) of the Federal epidemiological unit, Lagos.

He said that generally, parents value their children above monetary or material posession and so one would not imagine any sum of money would adequately pay for one's child. The in-exchangability of money for ones child is expressed by such names as "Nwakego" in Igbo language, "Omo si ego in Edo",Omoboriowo" in Yoruba.

Ewoigboikhan estimated that over 216,000 children die annually in Nigeria from the six childhood diseases. Also an equal number of people suffer from various disabilities resulting from those diseases. The big sum spent on the treatment or rehabilitation of the victims could have been used in preventive strategies. Consequently less money will be spent on curative drugs, surgical equipment and rehabilitation facilities.

He then asserted that immunization is an insurance scheme taken to prevent the occurence of a mishap - death or disability. He adequately compared immunization to an insurance policy which,when a man takes it will be required to pay some amount periodically and any default in payment will prevent such a man from enjoying the full benefit of-his policy. In the same vein, immunization programmes demand certain vaccines like BCG, oral polio etc at certain specific ages. Partial completion of series of multi dose will not help the child produce the desired effect.

Ewoigboikhan lamented that despite the merits of immunization, participation in the programme designed for children remained low. He suggested ignorance, illiteracy as hinderance to full participation. He cited an example of where a sufferer of measles is batted with palmwine or kerosin rubbed in his eyes as a cure of the ailment.

Several other studies has also been carried out by Nigerian scholars vis-a -vis the implementation of immunization in specific gegoraphical areas. For example Babayi (1993:220) carried out a comprehensive review of EPI sentinel surveillance in Kwara State (1982-87). His area of concern was specifically measles vaccines which he said moved up in coverage from 26% in 1984 to between 54% and 58% in Ilorin, Kwara State, Nigeria from between 1986 - 88. He also presented the total number of measles cases, Age distribution, specific incident rates and result of previous vaccination surveys from Ilorin.

Fabule and Orinfunmishe (1988:181) also studied 269 children at Unilorin Teaching Hospital and presented us with their immunization status in a Tabular form.

On the other hand, Odujinrin et.al (1993:185) carried out an ethmographic study of childhood diarrhoel dieseases in a Nigeria rural community (Ajara in Badagry,

Lagos State). He pointed out that diarrhoeal diseases constitute a major scourge in children in developing countries, claiming many lives and retarding the growth of those who survive. He cited starton and Clemens (1987) whose studies revealed poor environmental sanitation, inadequate safe water supply, low level of literacy, poverty, lack of good personal hyegiene as contributing factors in diarrhoeal diseases in developing countries. Inspite of these pockets of studies, records of studies on immunization in Nigeria, as most records, are not harmonised and are therefore disjointed.

From the literature reviewed so far one can deduct the following :

1. Achieving a better health care for citizens of any country, state, or locality is a combined responsibility of both the government, and the generality of the population.
2. Every government tries to make her health care services such as immunization to reach the grass root level but this has not been totally successful, even in developed nations such as U.S.A.
3. Similar health problems abound in most third world countries of which Nigeria is one.

4. Proper and careful planning of health services is needed before field operation to ensure a high probability of success.

BOUNDARIES/GEOGRAPHICAL AREA OF STUDY

Katsina is the headquaters of old Katsina Province With the creation of Katsina State on the 23rd September 1987 by ex-President Babangida out of the defunct Kaduna State, Katsina was retained as its capital. Katsina state is boardered by Kaduna State on the South, Kano on the East, Sokoto on the West and shares international boarder with Niger republic on the North. It occupies an area of about 23,938 sq km with a 1991 census figure of 3.878 million people consisting of 1.944 males and 1.934 females.

According to a publication by the state ministry of information, the states geographical locations is lat between 11^{o} o7' 49"N and 13^{o} 22' 57"N long between 6^{o} 52' 03^{E} and 9^{o} 02' $40"^{E}$.
Katsina is a mono ethnic, mono lingua state and the people are of Housa and fulani stock. However, there are few non indigens such as Igbo as yoruba, Igala who are mainly

traders and civil servant. The weather varies according to seasons but generally it lies between two extremes - either extremely hot or cold; with the hottest months running through March to May while harmattan which makes the wind dry and cold is experienced between December and AprilKatsina state indigens are mostly farmers and major crops include millet, wheat, Groundnut, Guinea corn, cotton etc. especially in the southern parts of malunfashi, Funtua, Bakori etc.

Katsina can boast of twenty six local government areas of which Katsina is one. Others include Daura, Dutsima, malumfashi, Funtua, Mani, Mashi, Kankiya, Rimi, Zango, Batsari, Bakori, Jibya, Safana, Kankara, Ingawa, musawa, Faskari, Bindawa, Batagarawa, Danja, mai-aduwa Kurfi, Kfur and matazu.

Katsina city is an ancient town with many historical records. It hosts the first post primary institution in the whole of northern Nigeria -the Katsina Teachers College, many prominent Nigerians including a former head of state, service chiefs, retired chief Justice and other top government officer are known to be old boys of that College.

Katsina is also famous for its role in the transahara trade which dates back to the pre-colonial times. Islam is the religion practised by 96% of Katsina people and this was as a result of the Jihad waged by Uthman Dan Fodio in 1904.

The social and political life of Katsina indignes cannot be separated from Islamic injunctions and not even the western education have succeeded in doing this. However as no society is static but dynamic some very few traditional conservative practices are now undergoing reformation as a result of modernization for instance the Katsina were not used to sending their female children to school as they get them married away as early in life as Twelve. Even most of the educated females were not allowed to take up paid employment by their husbands for fear that other men might make overtures to them. Although some of these views are changing, others hold on to them steadfastly.

Nothwithstanding that Katsina has one of the earliest centres of learning in the old Northern Province, the state continues to attract the unenviable title of "educationally disadvantaged state" because of the high

rate of illiteracy. Their youths rarely fill up any of their quota with regard to admission in tertiary institutions in theccountry or as regards job placement if the so called Federal character is to be adhered to.

CHAPTER THREE

METHODOLOGY

In the words of a prominent sociologist R.K. Merton (1957) in his essay titled "The bearing of sociological theory on Emperical research", social scientists especially sociologist who engage in scientific work must be methodologically wise, they must be aware of the design of investigation, the nature of inference and the requirements of the theoritical system. This is to say that anyone who is keen in understanding society (through research) must give special attension to the way in which social facts are gathered.

In view of the preceeding statement, this chapter is on the 'hows' and 'whys' of the method used in executing thisstudy. The areas explained, include an exposition of the study population, sampling strategies employed, instruments of data collection, methods of data collection, and method of data analysis.

1. THE STUDY POPULATION: OPERATIONAL DEFINITION

The population involved in this study are mothers within Katsina Local Government Area.

Specifically, only women in their reproductive ages of 15 - 49 who have had at least one child (whether presently nursing or not) qualified as my research subject. Mothers only constituted the study population because of the child rearing practices in most parts of Africa where the mothers assume the major responsibility for their children's upbringing and maintenance.

Katsina Local Government Area itself has a population of about 130,000 inhabitants and is divided into five areas namely the Katsina metropolis (city) where the Emir of Katsina resides and other sorrounding communities/villages each headed by a village head called Wakili. Thus we have wakili yamma, wakili kudu, wakili Arewa, and wakili Gabas. This represents the four cardinal points of Eastern, Western, Northern and Southern parts of the Local Government. Another village Shinkafi was later added to bring the total number of villages to six. With the exception of Katsina metropolis which is semi-urban, all other communities are predominantly rural.

Considering the size of the Local Government, the time frame within which to complete the study and the resources available to the researcher, this investigator selected two out of the six communities that makes up

the local Government (see sampling technique employed). The researcher considers the two an adequate represenation of other communities because of the social, economic, cultural and political similarities in the life styles and behavioural patterns of people throughout the local Government, the state and Northern Nigeria as a whole.

RESEARCH METHOD/SAMPLING STRATEGIES

Generally the study population was divided into two broad categories. The two divide was the urban and rural areas. The urban area consisted of mothers within Katsina metropolis while the rural area consisted of the other five communities. For effective representation, the only semi-urban community - the Katsina metropolis was picked. This was because of the heterogeneous nature of the population found within it (immigrants, indigens and a combination of both) and the need to present the views of poeople of diverse ethnic, socio-political and religious background. Due to the homogeneous nature of the other five communities, a simple random sampling was applied. In the final analysis Shinkafi was chosen.

In other words, mothers from Katsina metropolis and Shinkafi communities constituted my research subjects.

SAMPLING TECHNIQUE

In most studies, it is not always possible to study the entire population. This implies that some members of the population has to be selected to represent the rest. Care must however be taken to ensure that those selected consituted a genuine representation of the rest of the population.

In view of this 500 mothers were selected for the administration of my instrument of data collection. The sampling frame used by the National Population Commission during the 1991 Census was adopted.

Using the census list of localities, the different enumeration areas used during the census in the two communities acted as our guide. An enumeration area is a statistically delineated geographical area, carved out of a locality or a combination of localities, mutually exclusive with clearly defined boundary. It normally has a population distribution of between 400 and 500 inhabitants.

A random selection of 10 enumeration areas was undertaken by the researcher using the table of random numbers. But since we realised that the population size and density of the enumeration areas are not the same, we selected appropriate number of respondents from the enumeration areas.

Understandably Katsina metropolis which had a higher population density and more heterogeneity were allocated 6 enumeration areas from where 50 respondents each were chosen making a total of 300 respondents where as Shinkafi had 4 enumeration areas from where 200 respondents were selected.

To choose our respondents in each of the enumeration areas, a table of random numbers was employed to choose the household where the instrument was administered. If in a chosen house, no qualified respondent was found, the next house was substituted for it. In polygamous homes where more than one person qualified, a lottery procedure was used to select one of them. It was also the belief of this investigator that under a man's roof (same husband) the health care practices of women are mostly interdependent.

In other words, what one does directly influences the others. This is to say that under the same household, it is not likely that one mother will be participating in immunization programmes where as the other will shun it. As was stated before, only women in their reproductive ages of 15 - 49 qualifed for interview.

INSTRUMENT OF DATA COLLECTION

The questionnaire: This was my principal tool of data collection. The questionnaire has the advantages of enhancing accuracy in the responses and simplifying analysis of data. A 47 - item questionnaire, divided into six sections was our major research tool. It covers such areas as the respondents background, socio-economic and demographic characteristics such as the respondents age, occupation, level of education, religious affilation as well as other information on maternity and marriage history, knowledge, attitudes and use of immunization facilities, husbands support and counselling, availability of hospitals/immunization centres, distance to such centres, normal means of medicare,mode of transport to such centres, peoples beliefs and coping strategies.

The questionnaire consisted of both closed and open ended questions. It is worthy to note that close ended questions are usually efficient in areas where the possible alternative responses are known to the investigator, limited in number and clear cut. On the other hand, open ended questions are appropriate when the issue under investigation is complex or relevant dimensions unknown. In this direction, open ended questions are designed to elicit a free response from the subjects and ensure that the respondents answer in their own frame.

In some close ended questions, allowance was however given for added information where necessary. In all 500 copies of the questionnaire were printed and administered to mothers who constituted my research subjects.

ADMINISTRATION OF INSTRUMENT

The questionnaire was self-administered to the mothers in the form of interview. The interview was conducted by five female trained field assistants who are holders of Nigerian Certificate in Education.

These are teachers in Secondary Schools in Katsina who are vast in Housa language and who had social science background, having studied social studies at Federal Collge of Education in Katsina. Being housas, they are also used to the environment generally. Care was taken to conduct the field work when schools were on vacation. The field assistants were given an item by item explanation of all the variables contained in the instrument as well as how to locate their respondents. This was a three days excercise.

The use of the female field assistants was basically because of the customs and traditions in Northern parts of Nigeria and indeed most Islamic states of the world where for religious reasons, men do not take kindly to other men getting close to their wives, no matter the reason. For effective monitoring of the interviewers however, the researcher personally co-ordinated the activities of the field workers. This also entailed monitoring their daily returns.

The survey was conducted within a period of about 4 weeks. The researcher made sure that he edited the questionnaire as returns were made. This was to ensure that all items were filled and according to specifications.

Checking out for consistency of information was also carried out.

METHOD OF DATA ANALYSIS

After the field work, the data were processed. Appropriate recording instruction was written for variables such as distance to immunization/health centres. This variable was entered exactly in the number of kilometers but this was further collapsed into three groups only to make for more meaningful analysis. Being quantitative data, the "SPSS 4" software package was used for the analysis. Statistical techniques used ranged from frequency distribution, simple per - centaging, to bivarate distribution (cross tabulation).

To be specific, preliminary analysis to derive frequency tables was done manually and this was utilised for bivarate and multi varate analysis. The variables were grouped into two categories namely the dependent and the independent variables.

The dependent variable in this research work is participation of mothers in immunization programmes.

The Independent variables consisted the socio-economic and demographic variables like age, occupation, level of education, ethinic group, religion and such other variables such as distance to immunization centres, husbands support, economic freedom and cultural beliefs.

The purpose is to find out the extent to which respondents vary with respect to these independent variables and to assertain the degree of relationship if any between these independent variables and participation in immunization programmes.

This was done with the use of specialised inferential statistics such as the chi square, and pearsons product moment correlation coefficient.

With these statistical tools, inferences were drawn concerning the significance or otherwise of the relationship between the variables of the study. The hypotheses were also subjected to our test statistic after which we reached conclusions.

CHAPTER FOUR

THE SETTING: TRADITIONAL SOCIAL STRUCTURE OF KATSINA AND THE HOUSA SPEAKING PEOPLES

Traditional social structures are indigenous institutions that were established as a matter of tradition for the accomplishment of specific tasks and roles. This is because parts of the society are interdependent and for it to continue to exist, certain complimentary functions had to be performed. As such there were traditional political institutions, economic institutions, social institutions, medical institutions etc. We will discuss them here before concentrating on social cum medical institutions.

TRADITIONAL POLITICAL SYSTEM

The Emirate of Northern Nigeria owed its origin to the Holy wars of Uthman Dan Fodio. Formerly the fulanis were under the control of the housas but in an attempt to spread and purify Islamic religion, the fulanis, under Fodios leadership conquered the Housas and established their hegemony.

The traditional political history of the Katsina was shows that the town itself emerged around 13th to 14th century. It reached its peak and became well known by the 15th to 18th century. It was at that time that Katsina became known as a great centre for trade and Education (Islamic Education). It was also for this reason that during Usman Dan Fodio's Jihad at the begining of the 19th century most of the well learned Islamic scholars residing in Katsina pledged their alliance to him and helped him immensely in waging the religious war.

According to Adegbola (1986), the traditional housa society was stratified into four groups -

(a) The Aristocrats and the merchants (sarakuna)

(b) The mallams (Islamic teachers)

(c) The traders and artisans

(d) Labourers and peasants consisted the talakawas.

To be a member of any group would be determined by the class to which one is born into. In Katsina Emirate, The selection of an Emir is done by king makers. This formal body is made up of Galadiman Katsina, Kauran Katsina (village head of Rimi) the Durbi Katsina (District head of mani) and the Yandakan Katsina (District head of Dutsin-ma).

After the preliminary and final selection, turbanning is usually done by Kauran Katsina.

The Emir, as the highest authority in the land excercised his powers through a hierarchy of officers. These people can be categorised into three :

(a) The Senior district heads drawn from among their Princes and members of the dynasty.

(b) Officials of the Emir or central government appointed by the Sarki and deriving their authority entirely from their offices.

(c) Village heads ruling in their individual towns appointed by the Sarkin Katsina. These people are known as Wakilis or Hakimis.

Among officials in the second category who helped the Emir in administering the wards were the Waziri, Madaki, Galadima, Magaji, Chief Alkali. Each of these people had duties to perform. For instance, the Madaki was the commander of cavalry, while Alkali was vested with judicial powers. Among the duties of district heads include collection of taxes and maintenance of law and order within their dormains. Since the Emir weilded both political and religious powers together, his wishes are always obeyed for he was seen as the representative

of Allah . Traditionally Sharia Courts were presided over by Alkalis who are learned in Islamic laws.

SOCIAL CUM RELIGIOUS ORGANISATION

Religion in Katsina as in all Housa states provides a bond that held all adherants together like brothers. Islam is the dorminant religion practised by about 95% of its citizens. Islam conditions people to respect the traditional authority. The Emir is expected to lead the Fridays congregational prayers. The peoples culture is inseparable from Islamic injunctions. As a result of serious indoctination of the religion of Islam for instance, death at infancy and indeed all deaths were associated with "Gods will" even where adequate health care which might have guarded against such death was lacking. Religion as a whole shaped the peoples belief in fate.

SOCIAL LIFE

An understanding of the social situation in traditional setting will be incomplete without an insight into the role of women. Women's role were limited in all matters in Katsina and other parts of Northern Nigeria.

They were considered minor. Most married women were not allowed outside the house of their husbands. Infact most were secluded out of public view in a system known as purdah. In some cases, it was the husband who was expected to carry out shopping, selling of craft work produced by wife, and the procurement of all items outside the house. Women were also denied western education since they would be given out to prospective husbands early in life and were not expected to engage in any formal type of occupation. Women had no social position outside the home and they were indeed relegated to second class position.

Indeed in some housa states such as Katsina, Islam reduces urban womens opportunities when compared to rural women or christians. Peil (1975:75) reports that muslims prefer to keep their wives within the compound, out of contact with other men. This, she said is usually not possible in rural areas where women are needed to help with the farming. In towns and villages that are predominantly moslems, seclusion increases male status. While this might rule out wage employment. It does not, at least among the housas prevent them from a form of home trading. Hill (1969) describes a system of house

trade whereby grain is brought to the house by the husband and sold by the wife through a network of child messengers. Cohen (1969:65) also reports the same use of children by Housa women in Ibadan. Migrant or "liberated" women in big Housa cities such as Kaduna or Kano make such home trading unnecessary since they are free to move about. The participation rate for economic activities the surburb of Kaduna studies was four times as high as the more Islamised city proper. Participation in trade is not necessarily a womans choice. It depends on alternative opportunities and is thus related to the woman's education, age, marital status, lenght of residence in the town etc.

Most Housa women marry early and through may have several husbands in turn, remain married during most of their reproductive years. Hence age and marital status are closely related. Marital status indeed affect labour force participation because of the husbands attitude and because economic activities is seen as more important and necessary at certain times in the life cycle. Women think of their occupational role as complimentary to and not necessarily distinguishable from their role as wife and mother but sometimes these roles take turns.

Young

Young women may therefore be required by their husbands to leave wage employment on marriage because they resent the control of other men over their wives.

MARITAL/RESIDENTIAL PATTERNS

In the main, African societies including Katsina and most housa states are patrilineal and patrilocal. In order words, lineage is traced through the fathers line an a man resides with his wife in his place. When a man marries however, his wife does not detach completely from her own family. Although a variety of exogamous rules apply in different areas, the wife's family is seldom geographically remote and maintains an interest in her affairs, giving her all the emotional and financial support especially if she quarrels with her husband. She in turn complies with certain obligation to her parents. She might keep one of her younger relatives with her and she is expected to see to his upkeep, maintenance and proper upbringing.

In rural communities, the married women often has her plot of land or conducts some trading on her own and in general terms maintains some degree of economic independence. In most Islamic states, polygamy is a rule rather than an exception so if the husband marries again, the same circumstances applies to the new wife

and ultimately each child has relationship not only with his father and the laters relations but also with his mother and her relations and with the families of his father's other wives.

Grades of seniority among the housas is recognised and modes of addresses varied appropriately. For instance, while most senior wife assumes the title of "uwarigida", that of the youngest wife is normally enviably addressed as "amariya". While the eldest of the wives has authority over all other wives and coordinates all domestic activities, the youngest is normally seen as the one who occupies the "soft spot" in their husbands heart. Therefore each of the wives(depending on the positions) has their own privillages and duties.

When a man dies, his wives have three options

(a) to remarry outside the home

(b) to stay by herself (in case she is old)

(c) to be taken over by one of the deceased relations.

In Housaland, because of Islamic injunctions which permitted marriage to not more than four women at a time, the first wife is not usually jealous of the procurement of new wives by her husband. She usually welcomes them and often even helps in choosing them.

Jealousy is only likely to arise in a woman who is barren for barrenness is the ultimate calamity that can befall an African woman. Also the inability to give birth to a male child can lead to enviousness.

With regard to sexual intercourse, the husband is expected to pay attention to each wife equally. In most cases, the days of the week are shared to the wives. The days a wife will cook for the family determines the day she will sleep with the husband. More literate husbands however pay special attention to each wife on certain days relating to her monthly period. There could be whooly or partly abstainance during pregrnancy and until weaning. Because of polygamy and high rate of remarriage prostitution is not very common among the housa's. Adultery especially by a women is regarded as a very serious taboo and under no circumstances are wives permitted for extra-marital dealing.

BIRTH AND CHILD REARING PRACTICES

In Housaland just like in parts of Africa children are much desired. A mother is deeply attached to her baby and is more likely to err at first in the direction

of excessive affection and indulgence. From birth onward, breast feeding is universal. It is always "on demand" and time schedule does not exist.

Carothers (1970:42) reports that whatever the mothers' other duties, the infant almost from the start is carried and pampered sometimes on the hip and later on the back of his mother. No attempt is made in the early months to control excretary activities. The mother is however quick to notice or encourage her baby's developing faculties. By experience, the child gradually comes to realise that the bush or outside the house and not inside is the right place to excercise these functions. Similarly with regard to crawiling, walking and talking, his developing powers are recognised and encouraged as time passes on. Discipline and punishment are hardly administered at this stage of life.

There is however an ugly side of the picture. Supplementary feeding is commonly begun within some few weeks of birth and the child is often forced to take a variety of unstable foods like 'kamu' that have no nutritional value. These food items are usually given to the kid against his will and sometimes this presents a serious

disastrous health consequences. Moreover when the child gets a little older, he may be left at home in charge of little sister or aged grand mother who may not understand the nutritional requirement of a growing child and this could make the child prone to protein calorie defficiency and other associated illnesses.

Traditionally the time of weaning is governed by local custom but may be modified by the development of the child or by recurrence of pregnancy. It is seldom accomplished within 18 months of birth and in commonly delayed to 36 months or more.

Weaning, Ritchie (1943) pointed out must be a rudder shock for an African child than for children who are fed on a time schedule and for whom weaning in some sense may be said to begin at birth (as in developed nations).

Sexual intercourse between the parents during the period of pregnancy and lactation is in theory debarred but in practise, especially in monogamous homes, some form of intercourse is common in the early months of pregnancy and again during the later period of breast feeding provided that pregnancy does not reoccur within some locally stipulated time.

As soon as a wife is obviously pregnant again, most housa tradition demands that she returns to her parents home until such a time when the next baby is born or even longer. Her attention will now be diverted to the upcoming event and largely withdrawn from the toddler.

TRADITIONAL HEALTH SEEKING BEHAVIOUR

Africans, right from ages had some ways of curing specific ailments and managing some disabilities even before colonial contact. This view was upheld by Ndeti (1976) who observed that the knowledge of medicine is known in all human societies. In his view, it would seem inconcievable for any group of people, no matter what level of cultural development they may have attained not to have knowledge of medical science. Continuing he said that the mere fact that human beings are mortals and they, as a people have occupied a particular environment for a prolonged period of time is an indication that they must have developed some reistance to th dangers and diseases posed by environmental and biological factors.

As exposited by Agbonalor (1985), even the World Health Organisation gave recognition to African traditional medicine when she defined it as ".... the sum total of practices, measures, ingredients and procedures of all kinds, whether natural or not which from time immemorial had enabled the Africans to guard against disease, to alleviate his sufferings and to cure himself" ..... (WHO 1978).

Contributing to this discussion, Unshuld (1976) put forward that "wherever western medicine was introduced and no matter how urgent the need for its immediate application was felt to be, it was never a question of it filling a vaccum. In any culture where western medicine was brought, there already existed some form of medical practise."

Today in Africa, traditional medicine co-exist side by side with orthodox medicne. Infact in most rural areas traditional medicine is prevalent while modern medicne is prefered to in cities. There are no rigid divide between the two systems since people are known to patronise both depending on the type of illness that one suspects.

Erinosho (1981) in his study showed vividly that evidence abound to prove that modern medicine are insufficient to cater for the health needs of Africans. Subsequently Oyebola (1981) made bold to say that 80% of Africans rely on traditional healers to meet their health needs.

Chilirumbo (1976) while analysing the importance of world view in the diognosis, treatment and prognosis of diseases in human societies, noted that what was important to the Africans was not just the 'real' cause but rather what was defined to be the cause of an ailment. In other words what is important in this case is how people perceive reality (illness in this case) rather than an objective assessment of the illness. Since Africans naturally do not posess the same world view as those of the Europeans, one naturally expects remarkable differences in terms of patterns of health service utilisation such as that of immunization programmes. This especially so since modern medicine was whooly introduced to Africa without any modification at all.

In his own studies, Oke (1982) outlined the Yoruba concept of diseases which can be said to hold water for all Africans including the housas. He identified three major causes of diseases namely the natural, preternatural and mystical forces.

The natural causes falls under the category of what orthodox medicine calls scientific explanation of disease causation while preter natural and mystical causes are taken to be as a result of the supernatural forces - witch craft, evil machinationbby some enermies or the intervention of some ancestral spirits.

The effect of cultural belief on Africans is most noticable in illness behaviour. Mechanic (1968) defined illness behaviour as the way in which an illness is perceived, evaluated and acted upon. Agbonalor (1985) reports, that when a typical African man falls ill, he is torn between traditional service and modern service. In some cases he uses both because cases are abound when while in a hospital, the relative of the sick brings him doses of herbal treatment from native medicine men. The health behaviour of Africans can therefore be positively related to whatever cause they identify. The general tendency however is to attribute to natural cause illness that are easily cured by herbalists and to supernatural explanations for more prolonged ailments.

All African societies have traditional healers. Indeed the World Health Organisation (1977) defined the

traditional healer as ".... a person recognised by the community in which he lives as competent to provide health care using vegetable,animal,plants, mineral resources and other methods based on the social cultural and religious background as well as on the knowledge, attitudes and beliefs that are prevalent in the community regarding physical, mental and social well being and the causation of disease and disability".

However since the attitude of the government towards traditional medical institution has been one of aparthy and isolation, there had never been any attempt to integrate it into the mainstream of modern health care delivery programmes at all; especially in the Northern parts of Nigeria where this study is being conducted. This could be regarded as one of the reasons for low patronage of some modern health service delivery systems since those who hold stead fastly to some superstition views about disease causation are not likely to go to western medicare system for diognosis and treatment.

For the patrons of western medicine and talking specifically on immunization programmes, it was noticed that the major means of carying out campaigns for immunization in Katsina was through anti-natal advise to

mothers by medical personnels. In other words those mothers who visit hospitals for medical treatment constitutes the bulk of individuals who are also likely to immunize their children.

However lately, with the intensification of immunization campaigns, there is a degree of involvement of the Hakimisa and Wakili being local leaders. Also those who have access to modern electronic media such as Television and Radio also witnessed occasional advertisement of the programme. Efforts are now made to involve religious leaders in spreading the good news of mothers always immunizaing their children.

CHAPTER FIVE

PRESENTATION AND ANALYSIS OF DATA

This chapter presents the result of our field work in a tabular form. It starts with the identification of some important demographic characteritics of my respondents. Other independent variables which influenced participation in immunization programmes such as husbands support, distance to immunization centres, economic freedom and cultural beliefs were also identified and potrayed. In addition some important factors which affects the people health seeking behaviour which may directly or indirectly influence participation in immunization was exposited.

All our five hypotheses were tested to see to their validity or otherwise.

A: DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS

As previously indicated, a total of 500 mothers were interviewed. Respondents were asked a range of questions relating to their social characteristics. For instance, they were asked to state their age.

Below are the responses obtained.

TABLE 5:1 RESPONDENTS AGE

AGE	FREQUENCY	PERCENTAGE	VALID PERCENT	CUM PERCENT
15-20	39	7.8	7.8	7.8
21-25	76	15.2	15.2	23.0
26-30	116	23.2	23.2	46.2
31-35	111	22.2	22.2	68.4
36-40	86	17.2	17.2	85.6
41 +	72	14.4	14.4	100.0
TOTAL	500	100.0	100.0	

At a glance, the above table (5.1) shows that the age category 26 - 30 represents the modal class with 23.2% of the respondents. This is closely followed by the age limit 31-35. Here a total of 11 respondents constituting 22.2% of my respondents. Next is the age category 36 - 40 in which 17.2% of the respondent fell. The next category is the 21 - 25 age group with a total of 15.2 percent of the interviewed population. Those above 41 years of age constituted 14.4 percent while the youngest age cohort of 15 - 20 had 7.8 percent as their representation.

The table clearly shows the fertility or reproductive behaviour of most women which rises gradually from ages 15 - 20 years reaches peak at about 30 years and then begins to decline. This is shown by the relatively low level of representation by the youngest age cohort, followed by the oldest age category of above 41 years while majority of the respondents lie in between these groups.

TABLE 5:2 RESPONDENTS EDUCATIONAL ATTAINMENT

LEVEL OF EDUCATIONAL	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
No formal Ed.	49	9.8	9.8	9.8
Koranic Ed.only	144	28.8	28.8	38.6
Primary Ed.	120	24.0	24.0	62.6
Secondary Ed.	104	20.8	20.8	83.4
OND/NCE	49	9.8	9.8	93.2
HND/Degree	28	5.6	5.6	98.8
Higher Degree	6	1.2	1.2	100.0
	500	100.0		

Table 5.2 presents the Educational attainment of the mothers interviewed. As emphasised earlier Katsina is among the states of this country classified as

educationally disadvantaged. This is because a vast majority of its citizenry are not educated in the western sense of the word. Also because it is an Islamic cit it is not surprising that most people are grounded in Arabic/Koranic education only. This probably accounts for the fact that the highest percentage of the respondents belong to that category (28.8 percent). 9.8% of the mothers had no formal education at all while 24.0 percent attended primary school.

Secondary education/Teachers College interestingly attracted a large number of women (20.8%). This could be because of the availability of many teachers colleges in Katsina coupled with the fact that most parents will only tolorate their wards/daughters to reach upto that standard before marrying them out. As a result, the chances of their going further educationally is reduced.

It is important however to point out that not all those who enrol in Secondary schools complete their studies as many parents of Katsina origin were known to be withdrawing their daughters from school for marriage. Infact the trend got to such alarming proportions

prompting the state government to promulgate an edict against withdrawal of female children from schools.

NCE/OND in the research subjects accounted for 9.8 percent. This is probably because of the availability of two Colleges of Education. One is Federally owned while the other belongs to the State Government. There is also a state polytechnic in Katsina. This is emphasised because most parents are reluctant to allow their daughters travel far outside the state just to acquire education.

Most importantly the impressive rate of literacy level in the table in spurious in describing Katsina women (citizens) because of the availability of non indigens among the respondents as will be potrayed in the next table.

TABLE 5:3 RESPONDENTS ETHNIC ORIGIN

ETHNIC GROUP	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
Yoruba	56	112	11.2	11.2
Housa	290	58.0	58.0	69.2
Ibo	83	16.6	16.6	85.8
Efik	6	1.2	1.2	87.0
Nupe	28	5.6	5.6	92.6
Kanuri	17	3.4	3.4	96.0
Tiv	20	4.0	4.0	100.0
TOTAL	500	100.0	100.0	

Table 5:3 shows that Katsina just like many other capital cities throughout the Federation attracts heterogeneous population from various socio-political background, who settle there either for paid employment or for business. A look at the table shows that apart from the housas or indigens who had a "lion share" of representation (58.0 percent) the next group are the Ibos who had 16.6%. This is not suprising because Ibos are known throughout the country and beyond as very migrant, adventurous, profit oriented and risk taking. The Yorubas were also fairly represented by 11.2 percent. Other "minority" ethnic groups such as Efik (1.2 percent), Nupe (5.6 percent) Kanuri (3.4 percent) and Tive were also represented.

A cross tabulation of ethnic group and educational level shows that among the Housa population 12.1 percent of them had no form of education at all, 44.8% received Koranic/Arabic education only while 20.3 percent reported that they had primary education. The percentage of those with secondary education was 9.0 while those with national diploma constituted 10.7 percent. Those who attained University education were 3.1 percent of the population.

This clearly shows that 56.9 percent of the Housa population had no form of western education at all while 77.2 percent had primary education or less.

TABLE 5:4:

RESPONDENTS BY RELIGIOUS AFFILIATION

RELIGION	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
Islam	232	64.6	64.6	64.6
Christanity	173	34.6	34.6	99.2
African Trad. Religion	4	.8	.8	100.0
TOTAL	500	100.0	100.0	

The above table (5:4) depicts the religious Affiliation of my respondents. From the table, it is discernible that majority of my respondents are housas of Islamic faith. These people constituted 64.6%. The christians are also fairly represented, having 34.6% of the sampled population. The christians are mainly non indigens (Southern migrants) and women from the minority housa states such as Southern Zaria, Jos, Biu, Malunfashi etc. The presence of just 4 people (.8%) out of a population of 500 who belong to African traditional

religion potrays the fact that western and Arabic (external) influence is fast overpowering the forces of tradition as far as the practise of religion is concerned.

TABLE 5:5: RESPONDENTS OCCUPATION

OCCUPATION	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
Civil/Public Servant	77	15.4	15.4	15.4
Farming	61	12.2	12.2	27.6
Trading	72	14.4	14.4	42.0
Teaching	102	20.4	20.4	62.4
Artisan	19	3.8	3.8	66.4
Full Time House Wife	169	33.8	33.8	100.0
TOTAL	500	100.0	100.0	

Evidence such as magret peil's study earlier cited in this work clearly shows that African women are among the most economically active in the world. However they are always "humble" as not to bring whatever achievements or contributions they must have made for the upkeep of the family to the fore, especially to a complete outsider.

This must have been the reason why majority of the women prefered to go by the name "House wife" thereby demeaning whatever serious economic contribution she makes to both the family and the nations production process generally. These set of women accounted for 33.8%.

The above fact notwithstanding, it is also a known fact that some housamen do not allow their wives to work outside the home, no matter the educational attainment they must have made.

Teachers constitute the next category of mothers, occuping 20.4 percent of the respondents. This is probably because teaching is considered a decent job for women because they are always home on time to attend to their family obligations. This could be the reason why majority of Katsina women are sent either to the various teachers colleges in the State or the Federal College of Education also available in Katsina.

Next in the category are civil/Public servants which constitutes 15.4% of the population. This is also a white collar job refered to as fitting to mothers/ women. Most of them however belong to the Clerical or Secretarial rank.

The mere fact that 12.2% of the women reported farming as their occupation does not imply that they are the only set of people that farm. Indeed studies have shown that most women, whether in paid employment or not, also keep and maintain some portions of land for farm work. In a case where their husbands are farmers, they almost always partake in planting and harvesting of crops, weeding, processing the farm proceeds and marketing of the products themselves.

Traders, who constitutes mainly of non indigens were 14.4 percent of the respondents. The mothers mostly trade on food items, provisions and other household items. The last category are people engaged in arts and crafts. This constitutes only about 3.8%. This is so because artwork such as weaving, pottery or dyeing requires special talent and not every one is gifted in that direction.

TABLE 5:6 (a) NUMBER OF CHILDREN BY RESPONDENTS

Respondents were asked to state the number of surviving children. Below are the response obtained.

No of Children	Frequency	Total No Children	Percent	Cum Percent
1	36	36	7.2	7.2
2	106	212	21.2	28.4
3	82	246	16.4	44.8
4	77	308	15.4	60.2
5	66	330	13.2	73.4
6	49	294	9.8	83.2
7	38	266	7.6	90.8
8	30	240	6.0	96.8
9	6	54	1.2	98.0
10	7	70	1.4	99.4
11	3	33	.6	100.0
TOTAL	500	2,089	100.0	100.0

AVERAGE NO CHILDREN = 4.2

After recoding the number of children to fall into only three categories, the table concerning the number of children now looks thus:

No of children (Value)	Frequency	Total no of Children	Percent	Cum Percent
1 - 3	224	494	23.7	23.7
4 - 6	192	932	44.6	68.3
6	84	663	31.7	100.0
TOTAL	500	2,089	100.0	100.0

B: OTHER CHARACTERISTICS OF THE RESPONDENTS

Respondents were asked whether they are aware or have heard about the existence of Immunization in their dormain. Below are the answers got.

TABLE 5:7 DEGREE OF AWARENESS BY THE RESPONDENTS OF IMMUNIZATION

AWARENESS	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
YES	417	83.4	83.4	83.4
NO	83	16.6	16.6	100.0
TOTAL	500	100.0	100.0	

The table above (5:7) shows that a vast majority of the mothers have heard about the existence of Immunization as a means of controlling mortality (83.4 percent).

However the rate of participation in immunization and other related health programmes is not as encouraging. Infact the Nigerian Demographic and Health Survey (1992:XVI) has it that "women and children living in rural areas in Northern Nigeria are much less likely than others to benefit from health services". Continuing, the document has it that "almost four times as many births in the North (of which Katsina is one) are unassisted as in the South and only about one third (33.3 percent) as many children complete their polio and DPT (Diphtheria) vaccinations". It further recommends that programmes to educate women about the need for ante natal care, immunization and proper treatment for sick children should perhaps be aimed at mother in these areas.

TABLE 5:8 RATE OF PARTICIPATION OF THE RESPONDENTS IN IMMUNIZATION PROGRAMMES

To elicit answers from my respondents in this direction the five deadly diseases that immunization is targetted against such as BCG against tuberculosis, polio, Diphtheria, measles and neonatal tetanus and

the recommended doses of vaccines for those diseases were listed. The mothers were then asked to state whether they fully completed the immunization doses, partially completed it or did not immunize their children at all.

Below are the reactions got .

RATE OF PARTICIPATION	FREQUENCY	PERCENT	VALID PERCENT	CUM. PERCENT
Full Participation	261	52.2	52.2	52.2
Partial Participation	13	2.6	2.6	54.8
No Participation	226	45.2	45.2	100.0

The table above describes the turnout of the mothers to immunization centres. As can be seen 54.8 percent of the respondents do react positively to immunization campaigns and therefore make efforts to immunize their children while 45. 2 percent do not partronize immunization centres. The figure of those who fully participate (52.2 percent) shows an improvement over the 33.3 percent as reported in 1992.

This could be as a result of intensive campaigns mounted by the Federal Ministry of Health Nationwide in conjunction with the Family Support Programme of the wife of the Head of State on the benefits of immunization even at the time of field work by this researcher. This improvement notwithstanding 54.8 percent is a far cry from the 80 percent immunization coverage recommended by the World Health Organisation.

It was also found out that part of the reasons given by those who do not partake at all or partke fully in the programmes is because of the avaiability and prevalence of some form of cultural belief. Below are some of them.

TABLE 5:9 CULTURAL BELIEFS HELD BY RESPONDENTS

Cultural Belief	Frequency	Percent	Valid Percent	Cum Percent
None at all	254	50.8	50.8	50.8
Vaccination sucks peoples blood for a purpose	5	1.0	1.0	51.8
Traditional medicine better than immunization	98	19.6	19.6	71.4
Vaccination, a tool to enforce family planning	83	16.6	16.6	88.0
Illness has spiritual undertone	41	8.2	8.2	91.8
* Immunization makes children ill instead of preventing sickness	19	3.8	3.8	100.0
	246	100	100	

* not rigidly speaking a cultural belief

Table 5:9 above shows vividly that about half of the respondents (50.8%) had none of these beliefs. This is corroborated by the fact that just about the same number of people (54.8 percent) were reported to be participating in immunization programmes in the previous table. On the other hand, most people who stayed away from the programme (about 49.2 percent) still haboured one kind of superstitutions/cultural belief, or the other.

Top on the table (19.6 percent) of the respondent are the conservatives who still believed in the efficacy of traditional medicine and prefered it to modern or orthodox medicine.

Closely following the above category are the mothers who still have the notion that any form of vaccination on them (such as tetanus toxiod on mothers) is a ploy to enforce family planning which obviously Islam as a religion is vehemently opposed to. Christian religion especially catholics do not also support the use of contraceptives. The vaccination of mother was brought into focus here because it is regarded as a part and parcel of

immunization schedule for expectant mothers and their children. This implies that there is only a slim possibility that a mother who is opposed to vaccination herself will bring her child forwardfor immunization. This misconception of what vaccination on mothers is all about is a deed an unfortunate development and these people need to be properly tutored especially by their learned elites (mallams). This is important because any advise by an outsider may be completely misconstrued as an act of deceit. Therefore there is a dire need to involve the local populace in the health care delivery system in the rural communites.

Some others constituting 8.2 percent of the respondents believed that illness is caused by the intervention of some supernatural powers and therefore do not see any need patronising the western medicine which obviously can not "cope" with such forces.
3.2 percent of the mothers believed that rather than preventing illness, immunization makes children sick. Even through this does not sound as a cultural belief, it is grouped as such because of their lack of faith in the efficacy of immunization. Scientists themselves have

admitted that immunization has certain side effects which includes high fever, abcess on buttocks, occasionally crying on the part of the baby etc.

TABLE 5:10

DISTANCE TO IMMUNIZATION CENTRES FROM THE PLACE OF DOMICILE OF MOTHERS

DISTANCE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
0 - 4 km	217	43.4	43.4	43.4
5 - 8 km	189	37.8	37.8	81.2
8 km	94	18.8	18.8	100.0
TOTAL	500	100.0	100.0	

Respondents were asked to state/estimate the distance between where they live and where they usually receive immunization/other health facilities. The figures got ranged from less than 1 km to 16 km. This distance was cross-checked by the interviewer who is conversant with those areas.

During the editing and analysis stage, these distance were later recorded by the researcher and value labelled to fall just into three categories.

A look at the above table shows that 43.4 percent of the respondents have the health facility within 0 - 4 km from the place they live. A significant proportion of the mothers (37.8 percent) have the health centre 5 - 8 kilometers from where they live while 18.8 percent of them have an immunization/health centre more than 8 kilometers from where they reside.

Considering the level of rural poverty and the inadequate means of transport to health centres, long distance from the medical/immunization centres can consitute a cog in the wheel of participation in immunization and other related health programmes.

The Researcher, suspecting a degree of relationship between ecnomic viability of mother and participation in immunization programmes asked the respondents whether they are economically dependent on their husband and the rate of such dependency. That is whether it is fully, partially or no dependency at all. Full dependency in this case implies that the woman cannot satisfy any basic need on her own without the husbands contrubution while partial dependency means that she exists with or without the husbands help. No dependence implies that the woman takes care of herself.

TABLE 5:11 ECONOMIC FREEDOM POSESSED BY THE RESPONDENTS

Rate of Dependency	Frequency	percent	Valid Percent	Cum Percent
No Dep (No)	65	13.0	13.0	13.0
Full Dep (Yes)	337	67.4	67.4	80.4
Partial Dep (partial)	98	19.6	19.6	100.0
	500	100.0	100.0	

Culturally speaking, women in the African context are supposed to be catered for by their husbands. This probably accounts for why 67.4 percent of the respondents reported being economically dependent on their husbands for their upkeep and maintenance both medically and otherwise. This fact is obvious inspite of the evidence that it was only about 33.8% of them that reported being full time housewives in table 5.5.

This means that even though an African woman might be engaged in an economic activity, she still expects funds from her husband for maintenance. Failure in this direction on the part of the husband often brings marital instability and stress.

In some cases, some mothers do not take their kids for medical treatment unless their husbands permits or directs. The true nature of relationship that exists between economic freedom and participation in immunization programmes will be further elucidated during our test of hypothesis.

Table 5:11 also shows that the percentage of those who are partially dependent on their husbands economically constitutes next in the hierachy with 19.6. These implies that they do not necessarily depend on their husbands even through they expect the man to carry the primary burden of their upkeep.

The third category of women who reported not being dependent on their husbands were 13.0%.

TABLE 5:12 HUSBANDS SUPPORT AND PARTICIPATION IN IMMUNIZATION/HEALTH CARE

The respondents were asked whether their husbands are usually in support or opposed to their going to hospitals for medical treatment. This question is important because the researcher suspects a link between the two variables (husbands support and participation in immunization programmes) as would be observed during our test of hypothesis where both variables were cross tabulated.

Below is a table showing their response

Husband Support	Frequency	Percent	Valid Percent	Cum Percent
No Respons	1	.2	.2	.2
Yes	265	53.0	53.0	53.2
No	148	29.6	29.6	82.8
Don't Care	86	17.2	17.2	100.0
TOTAL	500	100.0	100.0	

As can be observed from the above table, the percentage of those whose husbands support or encourage their going to hospitals (53.0 percent) is very much close to the percentage of women that participate in immunization programmes in table 5.8 (54.8 percent) This could mean that husband's support is a stimulus to womens participation in the programme, if all other factors are held constant. This will however be proved in the next section - Test of hypothesis.

29.6% of the women reported that their husbands have a negative view on the subject while about 17.2 percent

of the respondents are of the view that their husbands has a laissez - a - faire attitude on the matter. In other words, it doesn't matter to them much where the woman goes for treatment. Such decision then lies squarely on the woman.

The researcher suspects that even the best intentioned medical programme may not be patronised very well if the service delivery system is not sound enough. In other words how do the health providers relate with the rest of the citizenry where they have been posted to attend to the patients. To get the feelings of the respondents, a question was framed to assertain from them the kind of good working relationship or social distance existing between them as this may make or mar peoples willigness to participate in programmes organised by them (medical personnels).

TABLE 5:13

RELATIONSHIP WITH IMMUNIZATION/ HEALTH CARE PROVIDERS

Relationship	Frequency	Percent	Valid Percent	Cum Percent
Very Cordial	241	48.2	48.2	48.2
Neutral	166	33.2	33.2	81.4
Cold/Reserved	82	16.4	16.4	97.8
Conflictual	11	2.2	2.2	100.0
TOTAL	500	100.0	100.0	

The result shows that majority of the respondents (48.2 percent) are of the opinion that the relationship is very cordial. People who chose neturality for answer constituted 33.2 percent of my research subjects. Neutrality implies that the relationship is neither too cordial nor distanced.

16.4% of the people characterised the relationship as being not cordial (reserved). These people probably must have been ignored one time or the other by health facilitators.

Respondents who reported conflictual relationship for answer were 2.2 percent of the population. These people of course constituted an insignificant proportion of the sampled population meaning that the strain between them and the health care providers were not the order of the day but were probably prompted by situational factors at that particular time.

HYPOTHESIS TESTING

In this section, we used cross tabulation to know how some specific variables affect participation in immunization programmes. Such variables are social distance, level of education, distance to health centres, economic freedom and lastly husbands support. In addition, we used some statistical test such as chi square and students t-test to ascertain the nature of the relationship.

HYPOTHESIS ONE

H1 : Relationship with immunization team (social distance) affects participation in immunization programmes.

Ho: Relationship with immunization team does not.

TABLE 5:15 PARTICIPATION IN IMMUNIZATION PROGRAMMES BY RELATIONSHIP WITH IMMUNIZATION TEAM

Practise Immuniz:	Very Cordial	Neutral	Cold/ Reserved	Conflictual	Row Total
Yes	209	61	4	—	274 (54.8)
No	32	105	78	11	226 (45.2)
Column Total	241 (48.2%)	166 (33.2%)	82 (16.4%)	11 (2,2%)	500 (100.0%)

Pearson chi sq = 217.3, sig.0000 df 3

P < 0.01 = Significant

Pearson's R value = .47.

From table 5.15, one can deduct that how a person evaluates his/her relationship with health providers influences whether he/she will patronise such people or not. Out of 241 mothers who noted relationship with immunization team as very cordial, 209 of them practise immunization while only 32 did not. Also out of 166 respondents who rated the relationship as netural, 61 of them turned out to immunization while 105 did not. For mother who rated the relationship as cold, who are 82 in number, only 4 participated in immunization while majority, 78 did not . Lastly for 11 respondents who prefers conflict to refer to the relationship with health team, none of them patronised this health programme.

From the pearsons chi square value, and the fact that our test is highly significant we reject the null hypothesis of no relationship between relationship with immunization/health team and participation and accept the

alternative hypothesis of relationship with the team.

To statistically rest the degree of relationship, the pearsons product moment correlation coefficient (r) is calculated. Pearson's R value = .47 which shows that the realtionship between relationship with health teams and the practise of immunization is about 47% and positively related.

HYPOTHESIS TWO

H1 : Education positively affect participation in immunization programmes.

Ho: Education does not have a positive effect on participation in immunization programmes.

TABLE 5.16 PRACTISE OF IMMUNIZATION BY EDUCATION

Practise Immuniz...	No Formal Education Koranic Ed.	Primary/ Secondary	Tertiary	Row Total
Yes	39	153	82	274 (54.8%)
No	154	71	1	226 (45.2%)
Column Total	193 (38.6%)	224 (44.8%)	83 (16.6%)	500 (100%)

Pearsons chi sq value 236.4, df 2

sig.0000 $P < 0.01$ = Significant

Pearson's R value - .62.

A glance at table 5:16 shows that out of 193 mothers who had either no formal education or Koranic education only, 39 participate in immunization programmes while 154 do not.

Furthermore an analysis of those with primary or secondary education and its equivalent shows that out of 224 of them, 153 go for immunization while 71 do not patronize the centre.

In the same vein, for mothers who attended tertiary instituions (OND, NCE Degree) who numbered about 83, 82 of the reportedly participate in immunication programmes where as only one person does not.

The chi square calculated is far above the one tabulated as shown by the very high level of significance, we therefore reject the null hypothesis and accept the alternative hypothesis of that there is a relationship between practise of immunization and the level of education of respondents.

However to statistically test the degree of relationship the pearsons moment correlation coefficient (r) is also computed. The r = 0.62 and this means that the relationship between education and practise of immunization is about 62% but inversely related. The negative sign should not be misunderstood to mean that as one increases the other decrease. The explanation for the negative sign is that since the level of education is measured in terms of the number of years one spent at school and the quality of such education in the western sense of the word, most mothers in the sample had no post secondary school education. As a result of the small number of respondents with higher (post secondary education) 83, their full weight (value) could not be felt in a sample of 500. Therefore even though almost all the mothers with post secondary education patronise immunization programmes, the effect is diluted by the majority of others who do not but constitutes glaring majority. Had it been my sample were of normal distribution and not skewed this result would not have been obtainable, and the relationship would have been in the positive direction.

HYPOTHESIS THREE

H1: Distance affects participation in immunization programmes

Ho: Distance does not affect it.

TABLE 5:17 PRACTISE IMMUNIZATION BY DISTANCE TO IMMUNIZATION/HEALTH CENTRE

Practise Immunization	1 0-4km	2 5-8km	3 8km	Row Total
Yes	185	77	12	274 (54.8%)
No	32	112	82	226 (45.2%)
	217 (43,4%)	189 (37.8%)	94 (18.8%)	500 (110.0%)

Pearson's Chi sq value 163.3 df 2, sig.0000

$P < 0.01$ = Significant

Pearson's R value .57

Table 5:17 above potrays the fact that out of 217 respondents who live between 0 - 4 km to immunization/ health centres, 185 participate in immunization programmes while 32 do not. Also out of 189 mothers whose places of domicile are within 5-8 km from the hospitals, only 77 practise immunization while 112 do not. Finally out of 94 mothers whose place of abode is greater than 8km, only 12 of them participate in immunization while 82 of them stay away from the health centre.

An analysis of the result vividly shows that since the relationship is highly signifcant ie $<.01$ which is a stronger test than .05, we reject the null hypothesis of no relationship between distance and participation in immunization and accept the substantive hypothesis that there is a relationship.

Furthermore, to statistically test the degree of relationship using pearson R which is found to be .57 This means that distance affects immunization in the neighbourhood of 57% and is positively related. The R calculated is statistically significant at a tougher test indicating a high level of relationship between the variables.

HYPOTHESIS FOUR

H1 : Economic freedom affects participation in immunization programmes.

Ho : Economic freedom does not affect it.

TABLE 5: 18 PRACTISE OF IMMUNIZATION BY ECONOMIC FREEDOM OF RESPONDENTS

Participate in Immunization	Yes	No	Partially	Row Total
Yes	56	152	66	274
No	9	185	32	226
Column	65 (13.0)	337 (70.4)	98 (19.6)	500 (100.0)

Pearson' chi square value = 48.1 df 2,

Sig. = .0000

P < .01 Significant

Pearson's R = .081

Table 5:18 shows that out of 65 respondents who are not economically dependent ie who are economically free, 56 of them participate in immunization programmes while only 9 did not. Also out of 337 mothers who are not economically free, 152 of them practise immunization while 185 did not. Finally of the 98 mothers who reported being partially dependent economically on their husbands 66 practised immunization while 32 did stayed away from immunization.

Because of the fact that our tests is significant, we reject the null hypothesis of no relationship between economic freedom and participation in the programme. At the same time, we accept the substantive hypothesis that a relationship exists between the two.

To further test the level relationship the pearsons r is computed to be .081. This shows a positive but weak relationship between the two variables.

HYPOTHESIS FIVE

H1: Husband's support affects participation in immunization programmes.

Ho; Husbands support does not affect it.

TABLE 5:19

PARTICIPATION IN IMMUNIZATION
BY HUSBANDS SUPPORT

Practise Immunization	0 No Response	1 Yes	2 No	3 Don't Care	Row Total
Yes		248	7	19	274 (54.8%)
No	1	17	141	67	226 (45.2%)
Column Total	(.2)	265 (53.0)	148 (29.6)	86 (17.2)	500 (100.0)

Chi sq 349.1, df 3, sig.0000 P $<$.01 = Significant

Pearson's R value = .69.

The table above shows that of the 265 mothers whose husbands support their participation in immunization/ health related programmes, 248 are actually participating while only 17 are not. Also out of 148 respondents whose husbands do not encourage their participating, a whopping majority (141) did not participate while only 7 of them participated.

In the same vein out of 86 mothers whose husbands did not give a damn whether they attended or not, most of them choose not to participate i.e. 67 while only 19 participated.

We can then suspect a relationship between husbands support and participation in the programme. This suspision is confirmed by the fact that our level of signficance potrays the fact that there is a relationship between the two variables. We therefore reject the null hypothesis of no relationship between the two variables and accept the substantive hypothesis that there is a relationship between husbands support and participation in immunization programmes.

To further show the degree of relationship between the two variables, the pearson's R is calculated to be .67. This show that husband's support affects participation in immunization in the neighbourhood of 69%. This is a positive and strong relationship.

CHAPTER SIX

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

From the literature reviewed and from practical experience, we can see that different people all over the world practise some form of preventive medicine according to their own conception on the causes of diseases and their prevention. Thus people evaluate the acceptability of newly offered medical advise according to their own matrix of culturally conditioned understanding.

In developing countries such as Nigeria, it is pertinent that among the rural dwellers who constitutes a bulk of non literate population in the western sense of the word, new items of information must be fitted somehow into this established ideology if they are to be received at all. Also the tangible positive effects of th new innovation must be obvious vis-a-vis their old way of doing things. This is because the villagers are most often very conservative and tend to hold steadfastly to their already conceived notions. To modify the community's view, a social worker or health educator must organise regular public campaigns to re-educate the people.

Also in order to enhance the chances of success, the social worker must have to modify the nature of his health message so that it makes sense to the particular audience for which the campaign was meant. Further more, the social worker must incorporate the local population in his campaign team. The villagers always feel more at ease when talked to by one of them who is highly respected rather than a 'foreigner' whom they might not trully trust.

It is therefore not just enough to bring a medical technique into a community, no matter how well established the system might be in developed countries. The health service, even though may be free of charge should be presented afresh to each new social group in a way that would command conviction and acceptance.

Nowadays however, there is a recognition that the nations greatest investment should be in health, education and welfare of its children. This point was clearly expressed by Schineider (1975:3).
Consequently much of the credits we have made to date in reducing infant and child mortality can be attributed to dramatic advances made in medicare knowledge and technology. Therefore much kudos should go to the

World Health Organization, the UNICEF and coming nearer home the Federal Ministry of health and the Family Support Programme of the Nigerian's First Lady for the massive campaigns organised nationwide on National Programmes on Immunization.

As indicated in the table on the level of awareness, majority of the people - even in educationally disadvantaged states such as Katsina are aware of the existence of the programme. Also there is an increasing rate of participation in the programme as indicated by the 54.8 participation rate. All these are used to bring about a striking reduction in death rate especially among infants and children - being the most vulnerable group to infectious diseases like whooping cough, diphtheria, polio myelitis, neonatal tetanus etc.

Health centres have really emerged in Nigeria as an avenue for curing illness and preventing disease infection. As such, health centres embody the principle of both curative and preventive medicine. It is therefore necessary to make the impact of health clinics in the city to be felt in other sorrounding communities.

Buttresing this statement, Levi (1976:23) stated that "the biggest stumbling block to successful immunization programme are not medical, (rather) they derive directly from the practical difficulty facing field operations in remote areas. This he said, calls for an urgent need for mass education and mounting periodic but regular campaigns in the villages.

By way of an advice Gortmaker (1979:280) said that any policies such as EPI or ORT that are drawn up for the purpose of alleviating the adverse influence of low socio-economic status on infant mortality must look both at the correlates of low SES that impinge on the health of new born infant (ie the quality of postnatal care, adequacy of diet, quality of housing, sanitary status of the home environs etc) and at those indirect influences that relate to the health of the mother and operate through her to influence pregnancy outcome (quality of pre-natal care, age, parity, eating, drinking and smoking habbits etc).

RECOMMENDATIONS

From the findings of the study, we came to realise that although immunization is practised in Katsina local government area, the degree of such participation varied amongst segments of the population as factors such as educational level, economic freedom, husbands support, distance to immunization centres, cultural beliefs and the rapport existing between health teams and the local population must be taken into consideration.

It is my opinion that the improved participation by the local population is because of the improved level of campaign which increasingly make the villagers understand that sacrifices and attonement do not and cannot save children from the deadly diseases of polio whooping cough, measles etc.

I hereby recommend that all avenues towards ensuring a health population should be explored and utilized adequately and extensively. Attempts should be made to improve the literacy level of the citizenry because as seen earlier on in this write up, education enhances a womans knowledge of modern health care facilities and

heightens her demand for modern health care facilities. This elevation of womens educational status is even more demanding in such states as Katsina.

The traditional rulers - "Emirs", Wakilis", Hakimi's will do a lot to modify the villagers cultural views which has been observed to constitute a cog in the wheel of smooth implementation of NPI. This is because their leaders are always well respected. For instance in Katsina, the military Governor of Katsina State resident in the capital city do not command as much respect from the local populace as the Emir of Katsina. The Ministry of Health officials and other world bodies can solicit the assistance of these local/traditional authorities.

The Family Support Programme should intensify efforts trully aimed at women empowerment that could disentangle them from illiteracy, poverty and dependency. This will enable them take care of themselves and their children properly even without the husbands assistance. The implication of my statement is that the Family Support Programme should go beyond mere politiking and making sanctimonous speeches at well publised occasions properly garnished with decitful words of their

achievements so far.

Lastly the Federal Government of Nigeria should as a matter of urgency reorder their priorities and place education and health of the citizenry uppermost at their scale of preference of priority programmes. Instead of wasting much needed funds in some useless image making international ventures while the bulk of the citizens are literarily "feeding from dust bins", such scarce resources should be channelled towards provision of facilities in our educational and health institutions Qualitative education and health should be a right to all Nigerians and not just an exclusive privilege of a few who can afford them.

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APPENDIX

INTERVIEW SCHEDULE

INSTRUCTIONS TO THE INTERVIEWER

(a) Tick good ( ) where the respondents answer is already among those coded

(b) Fill in the gap in cases of open ended questions

SECTION A: RESPONDENTS BACKGROUND

1. Your Age last birthday. Specify _____

(a) 15-20 years ( ) (b) 21-25 years ( )
(c) 26-30 years ( ) (d) 31-35 years ( )
(e) 36-40 years ( ) (f) 41 years and above( )

2. Your level of Education

(a) No formal Ed. ( ) (b) Koranic Ed. only ( )
(c) Primary Ed. ( ) (d) Secondary/TTC ( )
(e) OND/NCE ( ) (f) HND/1st Degree ( )
(g) Higher Degree

3. Your ethnic group

(a) Yoruba ( ) (b) Hausa ( )
(c) Ibo ( ) (d) Efik ( )
(e) Nupe ( ) (f) Kanuri ( )
(g) Tiv ( ) (h) Other specify _____.

4. Your religion affiliation

(a) Islam ( ) (b) Christianity ( )
(c) African Trad.religion ( )
(d) Others specify _____.

5. Your Occupation.

(a) Civil/Public Servant ( )
(b) Farming ( )
(c) Trading ( )
(d) Traching ( )
(e) Artisan (handwork) ( )
(f) Full time house wife ( )
(g) Others specify _____.

SECTION B: MATERNITY AND MARRIAGE HISTORY

6. How long have you been married. Specify _____.

(a) Less than 1 year ( )
(b) 1 - 5 Years ( )
(c) 6 - 10 years ( )
(d) 11 -15 years ( )
(e) 16-20 years ( )
(f) 21-25 years ( )
(g) 26-30 years ( )
(h) 31-35 years ( )

7. How many children are you blessed with (state exact number living) _____.

8. How many of your children are males _____.

(a) 1-2 ( ) (b) 3-4 ( )
(c) 5-6 ( ) (d) 7-8 ( )
(e) 9-10 ( ) (f) 10 + ( )

9. How many of them are females _____.

(a) 1-2 ( ) (b) 3-4 ( )
(c) 5-6 ( ) (d) 7.8 ( )
(e) 9-10 ( ) (f) 10 + ( )

10. How old is your first child _____.

(a) ≤ 5 years ( )
(b) 6 -10 years ( )
(c) 11 -15 years ( )
(d) 16 - 20 Years ( )
(e) 21 - 25 years ( )
(f) 26 - 30 years ( )
(g) 31 years ( )

11. How old is your last child _____.

(a) ≤ 5 years ( ) (b) 6 - 10 years ( )
(c) 11 -15 years ( ) (d) 16-20 years ( )
(e) 21 - 25 years ( ) (f) 26 - 30 years ( )
(g) 31 years ( )

SECTION C: KNOWLEDGE, ATTITUTES AND USE OF IMMUNIZATION FACILITIES

12. Are you aware of the availability of immunization programmes in your area (a) yes ( ) (b) No ( )

13. If yes, do you visit health centres for such facilities
(a) Yes ( ) (b) No ( )

14. What were your reasons for getting your children immunized. (After this question skip to question 16).

(a) To satisfy appeal from health personnel ( )
(b) To prevent the deadly diseases ( )
(c) To do as my friends (other mothers) did ( )
(d) Immunization centre was just close to my hom ( )
(e) Others, specify _____.

15. If you had not visited immunization centre before, what were your reasons

(a) I had no time, I was so busy ( )
(b) I have not heard of immunization before ( )
(c) Traditional form of medicare is better ( )
(d) The health workers are so unfriendly ( )
(e) The vaccines always get exhausted midway ( )
(f) Economic reasons ( )
(g) There is no health centre near me ( )
(h) Others, specify _____.

16a Do you have a card where vaccination for your children are written down? (a) Yes ( ) (b) No ( )

16b If yes, may I see it please?
(Interviewer scrutineses the card and jots down frequency of visitation as signified).

17. How many of your children fully completed the following vaccination during their infancy stages.
Specify _____.

No of Children	Type of Vaccine	No of Times		
	BCG at birth	Once only		
	Polio & DPT	1st dose 6 weeks	2nd dose 10 weeks	3rd dose 14 weeks
	Polio & DPT			
	Polio & DPT			
	Measles (9-11 months	Once only		
	Mothers Tetanus Toxoid	1st dose	2nd dose	

18. How many of your children partially completed the immunization schedule.

No of children	Type of Vaccine	No of Times		
	BCG at birth	Once only		
		1st dose 6 weeks	2nd dose 10 weeks	3rd dose 14 weeks
	Polio & DPT			
	Polio & DPT			
	Polio & DPT			
	Measles (9-11 months)	Once only		
	Mothers Tetanus Toxoid	1st dose	2nd dose	

19. How many of your children were not immunized at all.

Specify _____.

SECTION D: COUNSELLING/HUSBAND'S SUPPORT

20. Have you ever received formal counselling/education on the availability and use of vaccines.
(a) Yes ( ) (b) No ( ).

21. If yes, what is/are your source(s) of counselling or education (Tick as many as in applicable).

(a) News media (Radio/Television/Newspapers) ( )
(b) Community Voluntary workers/Associations ( )
(c) Health workers (through antenatal advice) ( )
(d) Friends/peers ( )
(e) Through village/local leaders ( )
(f) Through religious leaders ( )
(g) Through organised seminars/workshops ( )
(h) Any other, specify _____.

22. What do you think are the three best methods of passing information to people on immunization programmes (Rank them).

(a) Health workers (Doctors, Nurses etc) ( )
(b) Friends/peers ( )
(c) Extended Kinship networks ( )
(d) Radio/television jingles ( )
(e) Magazines, palmphlets, newspapers, posters ( )
(f) Religious leaders ( )
(g) Community based Association ( )
(h) Organised workershops/seminars ( )
(i) Others, specify _____.

23. Are you economically depended on your husband.
(a) Yes ( ) (b) No ( ) (c) Partially ( )

24. Does your husband encourage or support your participation in the programme (a) Yes ( )
(b) ( ) (c) He doesn't care ( ).

25. The last time your child was sick, was it you or your husband who decided wherethe child went for treatment
(a) Husband ( ) (b) Wife ( ) (c) Both ( )

26. Where die you take him/her to

(a) Native doctor ( ) (b) Hospital
(c) Clinic (c) Spiritual/faith healing ( )
(d) Patent medicine dealers ( )
(e) Pharmacy ( ) (f) Hawkers of English medicine ( )

27. Give your reason for taking to that option

(a) Lower transport cost ( )
(b) Shorter time waiting for facility ( )
(c) Better quality care ( )
(d) Shorter travel time ro source of care ( )
(e) Cheapter in terms of cost (price) ( )
(f) No alternative source of care ( )
(g) Any other, specify _____.

28. Have there been any occasion while you were pregnant and you had to delay registering at an antenatal clinic.
(a) Yes ( ) (b) No ( )

29. Ife yes, why? Specify _____.

30. How long did you have to wait _____

SECTION E: AVAILABILITY OF HOSPITALS/IMMUNIZATION CENTRES

31. What is the name of the nearest hospital in this community that has services such as antenatal care and immunization? _____

_____

32. Where is it located? _____

33. How far is it in miles or kilometers from your place? Estimate _____

34. How long is hours and minutes does it take you to get to the hospital by walking _____

35. Is the immunization/health centre too far away from your place of residence as to affect your going there?

(a) Yes ( ) (b) No ( )

36. By what means do you people normally travel to the health centre.

(a) By commercial vehicle (Taxi) ( )

(b) On foot ( ) (c) By motor cycle (express men) (d) By animal e.g. Dunkey ( )

(e) Private car ( ) (f) Any other, specify _____

37. What is the cost of transportation (in monetary terms) to the immunization centre/health centre. Specify _____

38. Does this hospital provide the following services?

(a) Antenatal services (b) Delivery care ( )

(c) Post natal services ( ) (d) Immunization (NPI) ( ) (e) Growth monitoring (nutrition) ( )

(f) Oral rehydration therapy unit ( )

SECTION F: PEOPLE'S BELIEFS/COPING STRATEGIES

39. Generally, people in this community think (tick where appropriate)

	T	F
(a) That there are long waiting times at hospital		
(b) That the hospital itself is unhygenic		
(c) That staff are incompetent		
(d) That medicines are readily available		
(e) That hospital is too far away		
(f) That drugs/medical services are expensive		
(g) That more staff are needed in hospitals		

40. How do you evaluate the relationship existing between community members and immunization/health team teams.

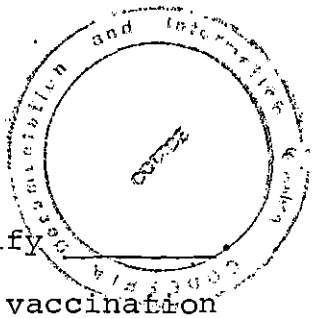
(a) Very cordial ( ) (b) Neutral ( )
(c) Cold and reserved ( ) (d) Conflictual ( )

41. Which of these cultural beliefs (if any) do you have about immunization or vaccination generally?

(a) Vaccination is a device to such people's blood for a certain purpose.
(b) Traditional medicine through native medicine men is better than immunization.
(c) Vaccination on mothers is a ploy to enforce family planning population control, not for any disease.
(d) Immunization makes children ill instead of preventing illness.
(e) Illness has spiritual undertone and there is nothing vaccination can do to stop it.
(f) Any other, specify _____.

42. In addition to vaccination, do you take to other mode of treatment to ensure the health of your child.

(a) Yes ( ) (b) No ( )



43. If yes, what specifically do you do specify _____

44. Have you ever noticed any side effect of vaccination on your child? (a) Yes ( ) (b) No ( ).

45. If yes, what was it like? Please specify with particular reference to the following vaccines.

Name of Vaccine	Side effect noticed (if any)
BCG	
Polio	
DPT	
Measles	
Mothers Tetanus Toxoid	

46. How and where did you treat such side effect.

(a) Self medication at home ( )
(b) Native doctor/Traditional healing ( )
(c) Patent medicine dealer/Chemist ( )
(d) Hospital/Clinic ( )
(e) Hawkers of English medicine ( )
(f) Any other, specify _____

47. What was the cost of treatment (if any) Specify _____.