

## QUANTIFICATION OF DIFFERENCE IN CLIENT VISITS BETWEEN INTERVENTION AND CONTROL FACILITIES

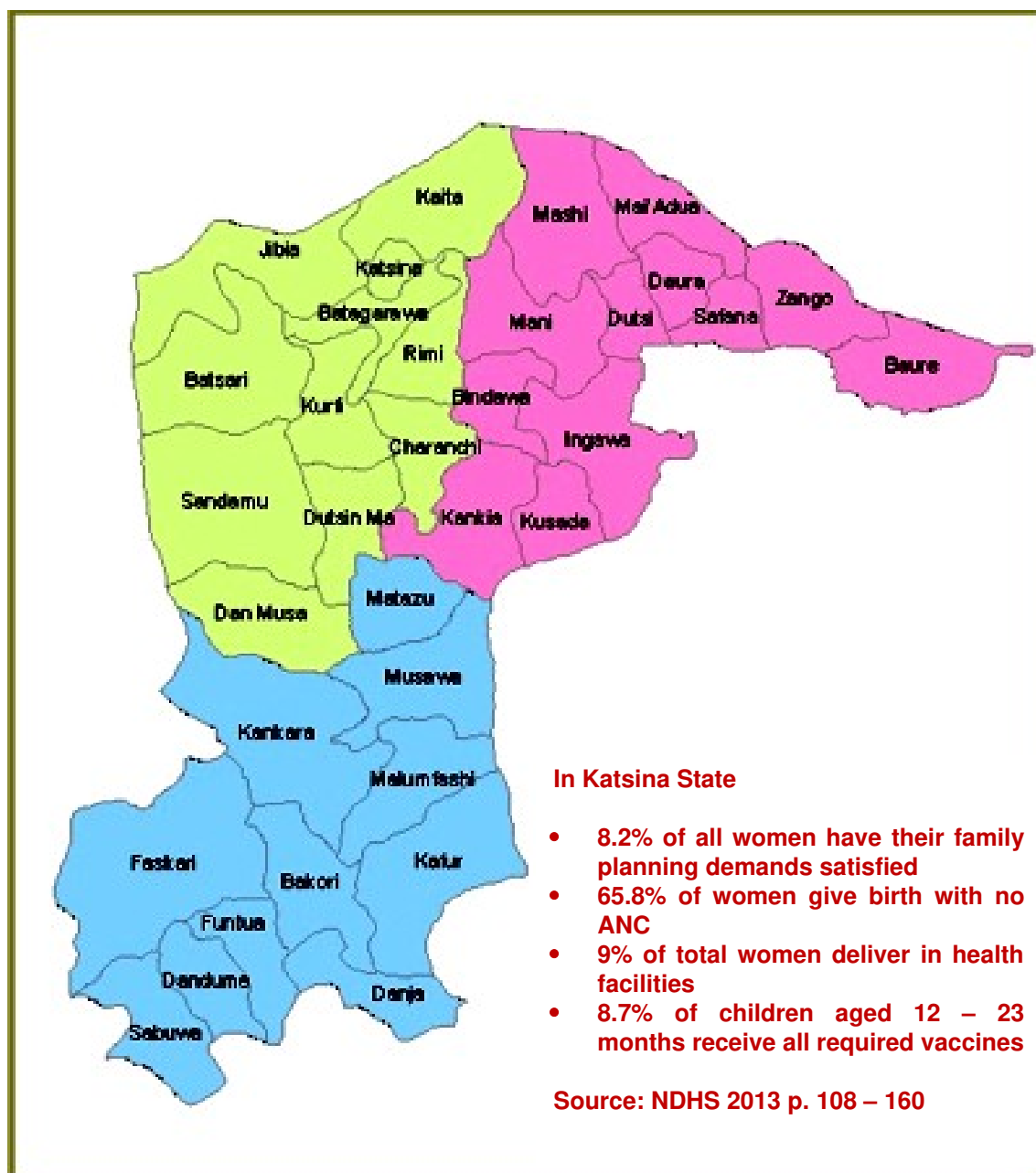


SAVING  
LIVES  
AT BIRTH:  
A GRAND CHALLENGE FOR DEVELOPMENT



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GATES foundation





Source: <http://www.theodora.com/maps/>

## BACKGROUND

The overall objective of this project is to increase awareness and knowledge on the benefits of issues pertaining to MNCH which includes routine/polio immunization and nutrition for the neonate and children at community level by supporting the activities of Islamic Opinion Leaders as public health communicators and advocates. Ultimately what the project aimed to achieve was increased numbers of clients accessing counseling services in health facilities at point of care.

The high levels of mother and child morbidity and mortality due to ignorance, attitudes, beliefs, and culture by people living in rural and remote locations indicates that this target groups (Women and men) needs to be counseled on a continuous basis in order to make correct decisions about their infant and children's health. It is due to this reason that the uptake of increased counseling is important. As part of the training by the Muslim Opinion Leaders (MOLs), Health care providers were given all the necessary tools and technics to face religious misconceptions during counseling.

High populations of people who live in the rural areas and even in some urban areas are conservative due to socio cultural influences are often at elevated risk of mortality. This is because such men prevent their family from accessing basic health care services such as immunization due to misinformed beliefs, attitudes and culture. Therefore, the need to change attitude, behaviors and quality care seeking behavior is paramount. As such changing the behaviors and perceptions of this group is essential to reducing the rate of infant and child mortality as increased knowledge and healthy practices amongst them will influence reduction of child mortality and morbidity.



**Figure 1:- Patients/Clients waiting to be attended to during a Counseling session at Maternal and Child Health Clinic Daura**

## DEFINITION OF TERMS

**Counseling:** The most important way that health care providers reach out to the patients is through counseling when they want access different services or even when they refuse. In the target (Katsina) state which is a very conservative Hausa Muslim state and so have a lot of reservations going to the facilities for any service and so the low turnout of clients for counseling. Before the GCC/SLaB intervention patients are usually ashamed to seen asking or trying to find out about Family planning/ Child spacing issues in Katsina state. The usual practice done is that most clients wait till the Health worker closes from work and then follow him/her home to be counseled or even if possible collect the products or commodities. After the intervention it was categorically noted and due to testimonies by Health care providers the number of clients being counseled in and around the facilities has increased exponentially

especially in the areas of Family Planning/ Child Spacing, Polio/ routine immunization antenatal care/ hospital delivery and even in Early marriage. However, there are still people that come to the facilities for counseling but do not go inside rather the health still have to meet them outside but in the vicinity of the facilities, While some insist on seeing the Health workers at home. The good thing is the number outside the facility is reducing on a daily basis.



**Figure 2:- Group Counseling session in progress during Ante-natal clinic Health talk by Health Care Providers in Comprehensive Health Centre Funtua**



## METHODOLOGY

**Study location:** The location for this study was Katsina state located in the North Western part of Nigeria. This location was selected following reports of low uptake and utilization of MNCH counselling services at health facilities in Muslim communities. Two control and five intervention facilities were selected to collect records on client's attendance seeking counseling on MNCH services such as antenatal care, facility child delivery, family planning and routine immunization. The intervention facilities were Maternal and Child Health Center (MCHC) Fago, Comprehensive Health Center (CHC) Daura, MCHC Shinkafi, CHC facilities were CHC Danja and CHC Kaura.



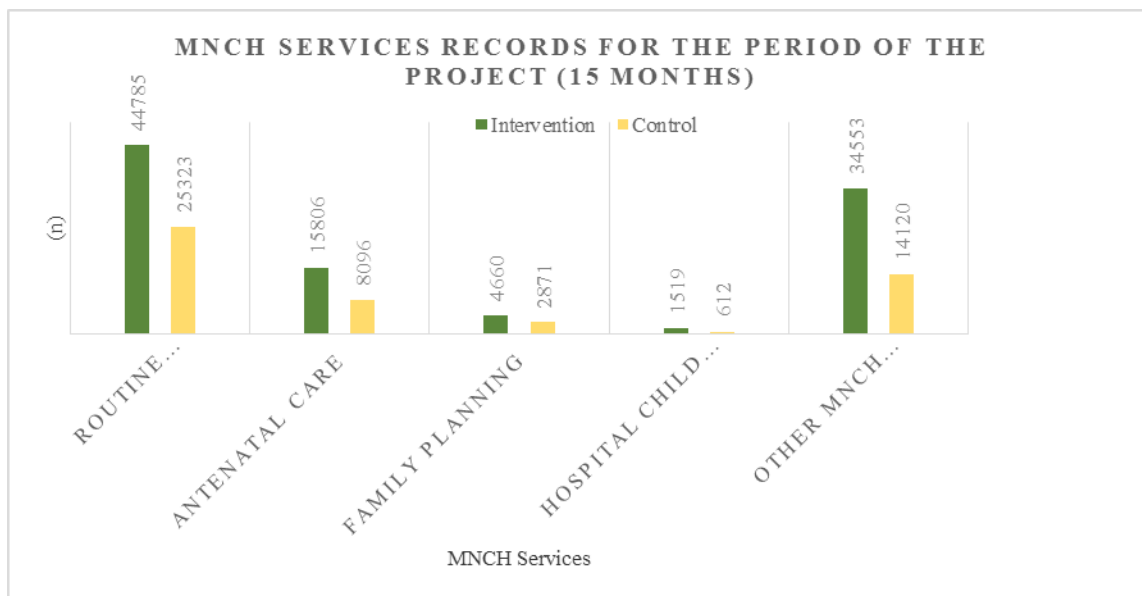
**Figure 3:- A female Islamic Scholar Malama Binta Abdullahi (Mallarabci) addressing Health workers during the training for health care providers**

**Data collection:** To determine the number of clients accessing counseling on MNCH services such as antenatal care, facility child delivery, family planning and routine immunization the monitoring and evaluation team of the dRPC collaborated with the record staff both intervention and control facilities to collect detailed hospital records on the number of clients attending their facilities to access these services. The data collected was only on clients accessing counseling services over a period of fifteen (15) months dating from when the intervention program was implemented, this was collected based on weekly visits with a monthly summary of the total visitations.

**Data Analysis:** Data analysis was done using Microsoft Excel 2013 (Microsoft Inc. U.S.A) and IBM SPSS Version 22 (IBM Inc.). Quantitative data from the hospital records was first entered into a Microsoft Excel spreadsheet. Data entry was categorized based on type of facility as either intervention or control, and also based on the type of counseling service accessed which was either antenatal care, facility child delivery, family planning and routine immunization. Frequencies, measures of central tendency and dispersion were then ran to check for the quality and consistency of the data. To summarize the data, the cumulative visits for counseling services in the various facilities were then cumulated and plotted onto graphs. This data was then exported from Microsoft Excel into SPSS where a Multiple Logistic Regression analysis was done to determine the association between client's accessing MNCH counseling services and the type of facility. The enter method was used for the regression analysis where  $\alpha$  was set at 0.05 at 95% confidence interval.

## Results and Findings

In figure 1 is shown the results of the cumulative records of client visits for various MNCH services such as antenatal care, facility child delivery, family planning and routine immunization at both intervention and control facilities. It can be seen from the figure that highest recorded cumulative figures were routine immunization where the intervention facilities had a total of 44,785 while the controls had 25,323. The lowest recorded figures were for hospital child delivery where there was 1,519 for the intervention facilities and 612 for the controls over the intervention monitoring period. These findings show that quantitatively there is a significant difference recorded in clients accessing MNCH counseling services between intervention and control facilities. More details are illustrated in figure 1. Then in table 1 is presented the results of Multiple Logistic regression analysis. This analysis however shows that there is no statistically significant ( $p > 0.05$ ) association between clients accessing MNCH counseling services and type of facility. More details of the significance of each variable is presented in Table 1.



**Figure 1. MNCH Services records for both intervention and control facilities over 15 months**

**Table 1. Multiple Logistic Regression analysis**

	B	S.E.	Wald	df	Sig.	Exp (B)	95% C.I. for EXP(B)	
							Lower	Upper
Antenatal visits	0.528	0.408	1.677	1	0.195	1.695	0.763	3.768
Facility Child delivery	-0.039	0.378	0.011	1	0.918	0.962	0.458	2.019
Routine immunization	0.904	0.478	3.581	1	0.058	2.469	0.968	6.298
Constant	1.394	0.270	26.585	1	<0.001	4.032		

## CONCLUSIONS

Inclusion our findings show that a quantitative difference exists in the clients accessing counseling services on MNCH between intervention and control facilities. We can also say that this difference was brought about due the effect of our intervention. This is also supported by our earlier result where we reported a moderate effect size (Cohens  $d = 0.43$ ) between the intervention and control facilities.