THE EFFECTS OF A DONOR SUPPORT ON DISTRICT HEALTH SERVICE UTILIZATION IN ENUGU STATE, NIGERIA

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ABSTRACT

Health outcomes are poor in the developing world, hence donor organizations usually support health care delivery system of developing countries. In 2005, Enugu State commenced implementation of District Health System with a unitarised healthcare delivery structure. The aim of this study is to evaluate the effect of the PATHS programme (DFID) support on the District Health service utilization in Enugu State. Seventy seven supported public primary health care facilities constituted the study population, while same number of non-supported ones were selected randomly as the control health facilities. Retrospective Intervention study technique was used. The study period was the last six months of the PATHS programme in the state (January to June, 2008). The study revealed among other findings that the support by DFID to Enugu State health sector through the PATHS programme resulted in significant increase in district health service utilization, as demonstrated in increased outpatient attendance from 15052 to 73336 (percentage increase of 387.22%, Chi square = 279.11, P<0.0001) and delivery of babies from 647 to 1052 (percentage increase of 62.60%, Chi square = 32.08, P<0.0001) in the supported health facilities. For control facilities, outpatient attendance increased from 8216 to 35126 (percentage increase of 327.50%, Chi square of 233.76, P < 0.0001) and delivery from 370 to 441 (percentage increase of 19.19%, Chi square = 4.60, P<0.47). The difference between the study and control facilities' outpatient attendance became wider after the intervention. The out-patient attendance increased significantly in both the study and control facilities after the intervention. Deliveries increased significantly in the supported facilities, while the increase in the control facilities was not significant.

Key Words: Donor, Support, Service, Utilization, Outpatient, Delivery

INTRODUCTION

The World Health Organization (WHO) Global Programme Committee in 1986 defined the District Health System based on Primary Health Care, as a self contained segment of the national health system. It comprises a well defined population (usually 50,000 – 500,000), living within a clearly delineated administrative and geographical area, which could be urban or rural. It includes all institutions and individuals providing healthcare in the district, whether governmental, social security, non-governmental, private, or traditional. (WHO, 1988).

It was noted that many people in the developing countries do not benefit from modern knowledge and technology that could have protected and restored their health. The situation is more difficult in the poorest countries that spend less than US $20 per head per annum. This has necessitated governments to undertake reform of the health sector. In this context health sector reform means sustained, purposeful change to improve efficiency, equity and effectiveness of the health sector (Lucas and Gilles, 2003).

Health outcomes are poor across most of the developing world, and the persistence of deep inequities in health status is a problem from which no country in the world is exempt (WHO, 2007). In 1985, the African member states of the WHO adopted the three-phased African health development scenario under which the district became the focus for health development (Chatora and Tomusiime , 2004).

The District Health System provides the

best chances of implementing Primary Health care as laid down in the declaration of Alma-Ata in 1978 (Gorgen et al, 2004). This finding was incorporated in the 1987 Harare declaration (Tarimo, 1991). With the launching of the National Health Policy in 1988, a National PHC system was adopted in Nigeria using the District Health System approach to ensure a self reliant healthcare delivery to the entire population (Obionu , 2007). In the Enugu State health policy published in December, 2003, it was stated that the state healthcare system will operate a District Health System with a unitarised healthcare delivery structure based on 17 LGAs, and 39 LGA Development Centres (Enugu State Ministry of Health, 2003).

In June 8th to 10th, 2009, the Nigeria National Health Conference held at Uyo, Akwa Ibom State, with a total of 650 participants comprising of core stakeholders in health observed that in spite of decades of implementation of PHC and short time left before 2015 for the attainment of MDGs, the progress made so far was very poor, coverage with key high impact cost-effective interventions remained very limited and health status indicators have remained unacceptable (HERFON, 2009). Nigeria's health indicators are among the worst in the world; life expectancy has declined to 43years (2006) from 47 years. The National Health conference held in Abuja in 2006 which was facilitated by Health Reform Foundation of Nigeria (HERFON), concluded that the Nigerian Health system remained in a deplorable state, being dysfunctional and grossly underfunded (HERFON, 2007). Since 1993; there has been a downward trend in health development. A very high proportion of PHC facilities serve only about 5 – 10% of their potential patient load, due to consumers' loss of confidence in them, among other causes. Our secondary healthcare facilities are in a prostrate condition. It was also observed that erratic supply and non-availability of essential drugs and related materials was a common feature (Federal Ministry of Health, 2005).

Nigeria was ranked 187th among the 191 UN member states of the WHO in 2000 (WHO, 2000). The infant and maternal mortality rates e remained one of the highest in Africa; Infant Mortality Rate was 115/1,000, Under-5 Mortality Rate was 205/1,000, while Maternal Mortality Ratio was put at 948/100,000 (Federal Ministry of Health, 2004). Availability and usage of drugs has been challenging to healthcare delivery system in Nigeria. Nigeria started implementing the Bamako Initiative in 1989 in only 53 LGAs. Later the Petroleum Trust Fund (PTF) supported the programme, and by 1999 all the LGAs were reported to have been supplied with drugs, worth three billion Naira. As at 2004, there was no tangible result of the PTF's financial investment in the Bamako Initiative in the country (HERFON, 2006).

In Enugu State, the need to reform arose as a result of the negative health indicators in the state and Nigeria generally. Core welfare indicators in the state (2002) revealed as follows: 37% of households in the urban areas and 27% in the rural areas had reasonable access to health facilities (Enugu State Government, 2003).

The Enugu State District Health System specifically provided for (Enugu State Ministry of Health, 2004);

I.   A pro–poor focused healthcare service.
II. Integration of primary and secondary healthcare.
III. A strong partnership between public and private care providers
IV. A devolved management structure down to the point of service delivery.

The Partnership for Transforming Health Systems (PATHS), which is a programme of the United Kingdom Department for International Development (DFID), has been supporting some health projects in Enugu state since 2002 (PATHS Enugu, 2008). However, after the adoption of the DHS by the state Government in 2004, as the new approach to healthcare, PATHS effectively provided the necessary technical assistance and expertise for the development of the DHS (Enugu State Ministry of Health, 2004). By July 2004, the draft legal framework of the DHS was developed. In August 2004, the State Governor approved the governance structure and the composition of the constituent bodies. At that stage, the constituent bodies were (PATHS Enugu, 2008);

a. The Policy Development and Planning Directorate (PDPD).
b. The State Health Board (SHB)
c. Seven District Health Boards (DHBs).

These bodies were formally inaugurated by the State Governor on September 21, 2004 (PATHS Enugu, 2008). In addition to the initially inaugurated nine constituent bodies, fifty six Local Health Authorities (LHAs) were inaugurated in September 2005. The number was based on the 56 local councils created by the State Government out of the Federal Government recognized 17 Local Government Areas.

The vision of DHS in Enugu State was to allow primary and secondary health services integration, thereby marking an end to fragmented and inefficient service delivery. The devolution of management under the DHS was also expected to create new opportunities to revitalize poorly functioning PHC facilities. DHS implementation in Enugu State required a fundamental shift in roles, responsibilities and approaches of all constituent bodies. PATHS facilitated these changes and provided support in the following specific areas (PATHS Enugu, 2008).

I. The framing of the DHS legislation.
II. Establishment of the constituent bodies.
III. Establishment of District headquarters.
IV. Extensive capacity building trainings for the seven hundred, and seventy six (776) constituent body members to acquaint them of their revised roles and responsibilities.
V. Designing, development and implementation of the underpinning systems for financial management, human resources management, health management information system (HMIS), and drug revolving fund (DRF), all adapted to reflect the new structure.
VI. Development of business plans and budgets for each of the constituent bodies and the working interfaces between them.
VII. Engagement and Advocacy, aimed at local governments to improve their knowledge and understanding of the new system.
VIII. Strengthening the new management lines of accountability to support the shift away from

local government control of primary care.
IX. Encouragement of reporting channels with, and between the constituent bodies.
X. A study tour to learn from the Ghana DHS.

The Enugu State District Health System law was legislated upon, and passed in July, 2005; while it was signed into law by the Executive Governor in August of the same year. Essential parts of that law specify the constituent bodies of the Enugu State model, their membership, as well as their roles and responsibilities (Enugu State Government, 2005). From the onset of the implementation of the DHS in Enugu State, till June 30, 2008 when PATHS programme terminated in the state; significant progress was made in delivering quality healthcare to the people of the state. The healthcare system in the state however continues to suffer from substantial problems. It remains under funded, lacking in sufficient qualified staff, has a poor infrastructure base, and lacks some supplies of basic drugs and other consumables. These inadequacies continue to influence the quality of the health services being provided to the public. The exact status of health outcomes in the state is however difficult to know, as data, whilst improving, is generally lacking or of poor quality (Enugu State Ministry of Health, 2008a).

Despite the fact that the public sector had 436 facilities at the start of the PATHS programme, due to the very poor state of these facilities, much of the healthcare delivery before the DHS was introduced was provided by the private and faith based sectors (PATHS Enugu, 2008). By the end of its programme in Enugu state (June 2008), PATHS had facilitated the supply of medical equipment and drugs by DFID to eighty one (81) public health facilities and fifteen (15) private/faith based health facilities. Among these public health facilities are seventy seven (77) Primary Healthcare Centers, and four (4) Secondary Healthcare facilities. Health workers of these facilities were trained on the use of the medical equipment, Drug Revolving Fund (DRF) implementation, Interpersonal Communication Skills, Life saving skills, Packages of care, Essential obstetrics Care, and

Financial management. This support was concluded by December 31st, 2007 in the 77 PHC facilities (PATHS Enugu, 2008). The Enugu DHS, delivers healthcare services to a defined population within a geographical area (varying in size from 160,000 – 600,000) and through various categories of health facilities (Uzochukwu et al, 2009).

An evaluation of the first phase of PATHS supported health facilities is imperative, as phase 2 of the PATHS programme had just commenced at the time the study was carried out. This is the aim of this study. Findings would shed light on the changes occasioned by PATHS support, and would serve as baseline for phase 2 of the PATHS programme.

MATERIALS AND METHODS

The study was conducted in Enugu state which is located in the South Eastern part of Nigeria, and is one of the 36 states that make up the Nigerian Federation. The state has 17 Local Government Areas and shares boundaries with six other states namely, Imo and Abia States on the South, Benue and Kogi States on the North, Anambra State on the West and Ebonyi State towards the East. People of Igbo extraction are the natives of Enugu state. Some people from other tribes and nationalities also reside in Enugu State (Enugu State Government, 2009). Based on the Nigerian population Census of 2006, the state is inhabited by about 3.26 million people (National Population Commission, Nigeria, 2008). Majority of the people in the urban areas are civil servants while those living in the rural areas are predominantly farmers and palm wine tappers. There are also traders, artisans and industrialists in the urban areas.

The Public Health facilities in the state are 436 (PATHS, 2008), comprising 4 tertiary hospitals, one of which is owned by the state Government, while the others belong to the Federal Government; 55 secondary healthcare facilities while the rest (377) are public primary healthcare facilities. There are also about 485 private and faith based health facilities in the state, providing different levels of healthcare services in the state (Enugu State Ministry of Health, 2008b).

Retrospective Intervention study technique was used. Relevant Health Management Information System data in both the control and study health facilities were extracted from the Planning, Research and Statistics (DPRS) unit of the State Ministry of Health. The outpatient attendance and the number of deliveries in those facilities were collected for a period of six months (January – June, 2008). 2004 data for the same six months period were collected and used as baseline, since DFID (PATHS) support to health facilities commenced in 2005. The study focused on the last six months of PATHS programme in Enugu state; that is from January 1, 2008 to June 30, 2008. All the 77 supported public PHC facilities were included in the study. Similarly 77 non-supported public PHC facilities which were selected by simple random sampling method constituted the control facilities.

Exclusion Criteria:
- Secondary and Tertiary health facilities
- Private health facilities
- Health Posts and Health Clinics

Study Instruments And Data Collection:
Secondary data were collected from records domiciled in the Department of planning, research and statistics (DPRS) of the State Ministry of Health, using a proforma. Information was collected on monthly outpatient attendance, and monthly deliveries. Data collection, collation, analysis and interpretation, were commenced in mid-March, 2010; and completed by the end of July, 2010.

Data Analysis: The information generated was analyzed, using statistical package for social sciences (SPSS) 11.0 for windows. The analysis was done quantitatively only and presented in the form of tables, and charts. Chi –Square test at $p < 0.05$ level of significance and 95% confidence interval were used to compare variables.

Outcome Measures: The Health Management Information System data were analyzed in terms of out-patient attendance, and number of deliveries.

Ethical Consideration: The Ethical committee of the University of Nigeria Teaching Hospital gave formal approval prior to the commencement of the study. Consent was obtained from the Hon. Commissioner for Health Enugu State.

Limitation Of The Study: It is noted that utilization of health services is a complex behavioural phenomenon, related to the availability of services, quality and cost of services, social structure, cultural factors, geographic factors, economic factors, health beliefs, and characteristics of the users (Erinosho , 1998). These factors possibly could have influenced the utilization of the health facilities in both the study and control groups.

RESULTS

This study assessed the effects of a donor (DFID) support through the PATHS programme on district health service utilization in Enugu state, with the aim of providing a credible guide to the Partnership for transforming Health Systems 2 (PATHS2) programme, towards making a better impact on the health status of the people of Enugu State.

General Characteristics of Health Facilities in both the study and control groups: The facilities in both the study and control groups are predominantly rural. 8 (5.4%) of the study facilities are in the urban area, while 141 (94.6%) are rural. On the other hand, 11 (7.6%) of the control facilities are urban, while 134 (92.4%) are rural.

Out-patient attendance: Out-patient attendance was significantly higher in the supported facilities prior to intervention (Chi square of 35.22, and P value < 0.0001). Total outpatient attendance for the six months (January to June) in the study facilities before intervention was 15052, while that for the control was 8216. However, the difference between the study and control facilities became wider after intervention. (Chi square of 592.02, and P value < 0.0001). 73336 outpatient attendance was recorded in the study population, while 35126 attended in the control facilities post intervention.

Percentage increase in out-patient attendance in the study group and control group: Comparing the percentage increase in out-patient attendance from 2004 pre-PATHS intervention to 2008 post-PATHS intervention in both the study and control groups, revealed that it is statistically significant (Chi square of 74.23 and P value = 0.0001). As stated above, the total outpatient attendance in the study facilities pre-intervention was 15052, while the total post intervention outpatient attendance was 73336; resulting in an increase of 58284 (387.22%). In the control health facilities, the total pre-intervention outpatient attendance was 8216, while the post intervention total outpatient attendance was 35126. The increase in outpatient attendance was 26910 (327.53%).

Outpatient attendance in the study facilities pre and post intervention: For study facilities, pre-intervention (2004) versus post intervention (2008): Chi square = 279.11, P < 0.0001. The intervention led to a very significant increase in the outpatient attendance in the study facilities.

Outpatient attendance in the control facilities pre and post PATHS intervention: For control facilities, 2004 baseline data versus 2008 data revealed Chi square of 233.76, P < 0.0001. There was no direct support from PATHS by way of drug and equipment to these facilities, yet they recorded significant increase in the outpatient attendance after the intervention was made in the study facilities.

Monthly records of delivery of babies in the study and control facilities pre-intervention: The study facilities were already recording significantly higher levels of deliveries than the control facilities prior to the PATHS support (Chi square = 46.80, P<0.0001). The study facilities had a total of 647 deliveries, while the control facilities recorded 370 deliveries.

Table 1: Out-patient attendance in the study and control facilities pre-intervention (2004 baseline data).

Month	Study (Outpatient attendance)	Control (Outpatient attendance)	Chi square (p value)
January	2333	1387	35.22
February	2537	1336	P < 0.0001
March	2648	1361	
April	2208	1239	
May	2485	1513	
June	2841	1380	
Total	15052	8216	

Table 2: Out --patient attendance in the study and control facilities post intervention (2008 data)

Month	Study (Outpatient attendance)	Control (Outpatient attendance)	Chi square (p value)
January	12922	4984	592.02
February	10566	4825	P < 0.0001
March	10172	5069	
April	12917	7422	
May	13106	7377	
June	13653	5449	
Total	73336	35126	

Table 3: Percentage increase in out-patient attendance in the study group and control group.

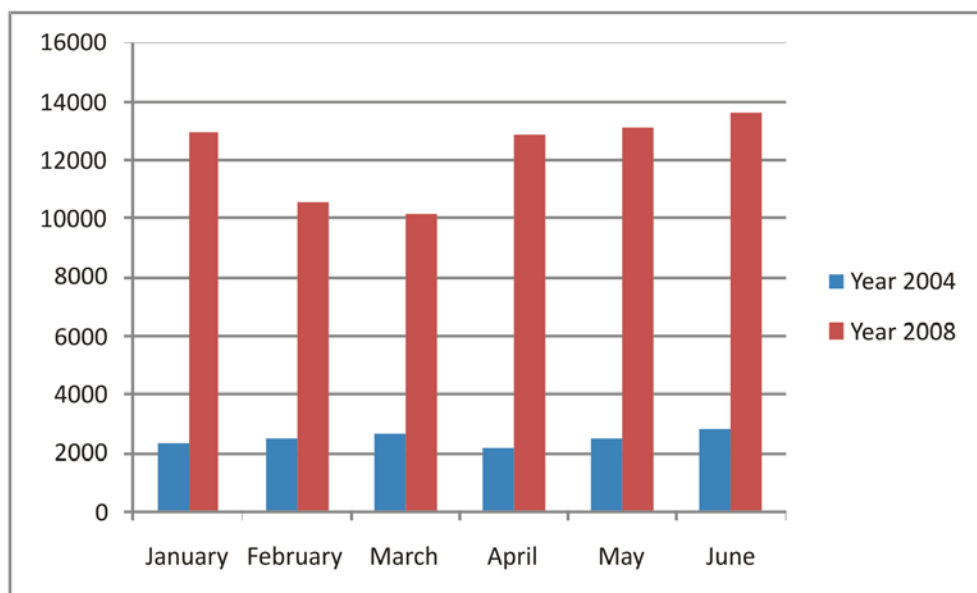|	Year	Out -patient Attendance	Increase (%)	Chi square (p value)
Study group	2004	15052	58284	
	2008	73336	(387.22%)	74.23 (p =
Control group	2004	8216	26910	0.000 1)
	2008	35126	(327.53%)	
Difference between % increase			59.69%	

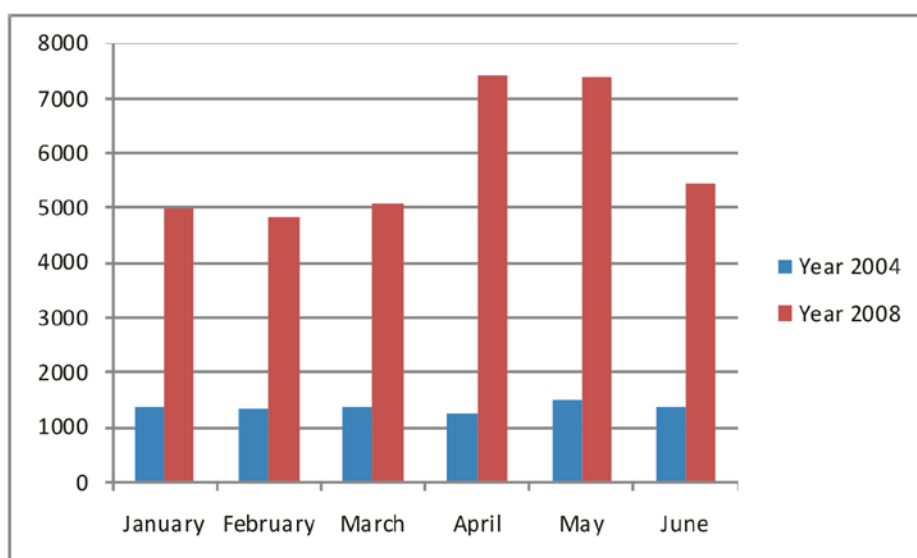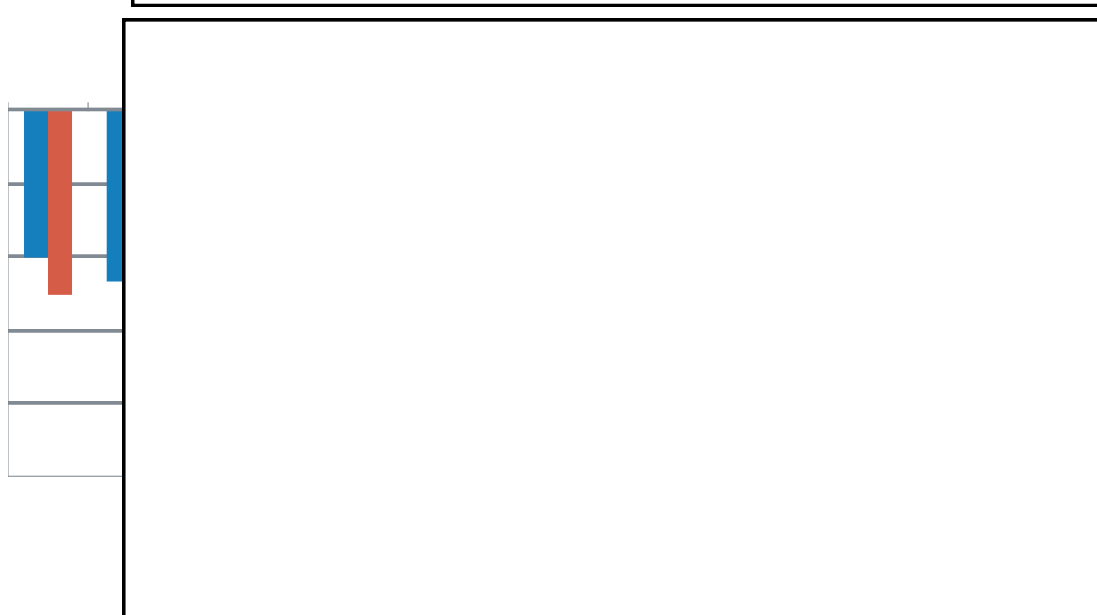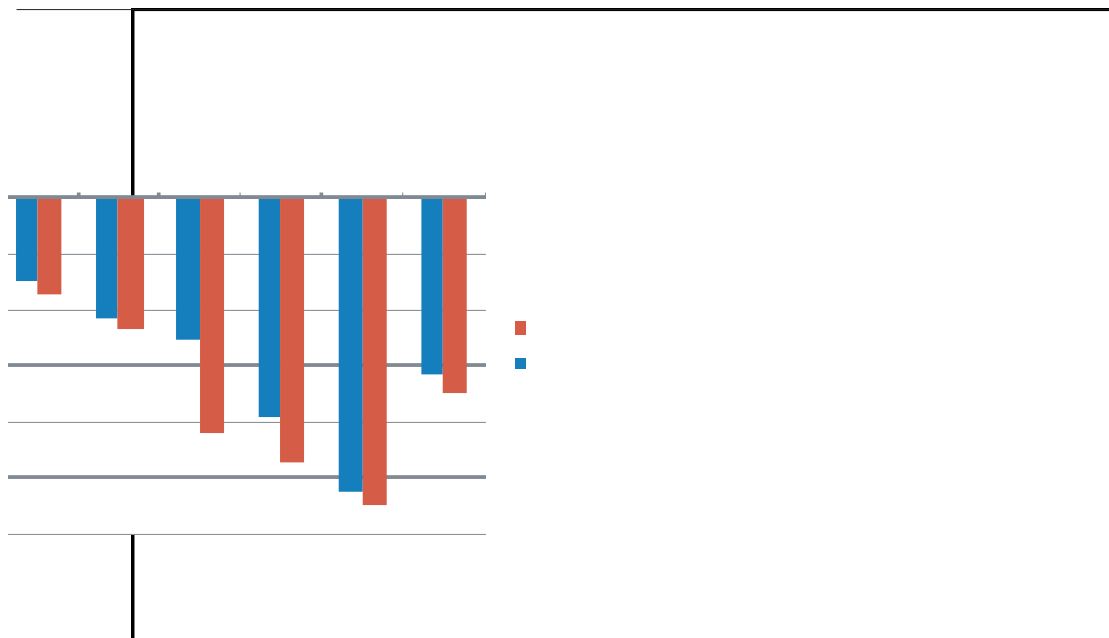**Fig 1: Outpatient attendance in the study facilities pre and post intervention.**

Fig 2: Outpatient attendance in the control facilities pre and post PATHS intervention.

Table 4: Monthly records of baby deliveries in the study and control facilities pre-PATHS intervention (January to June, 2004).

Month	Study (Deliveries)	Control (Deliveries)	Chi square (p value)
January	102	30	46.80
February	118	43	P<0.0001
March	135	51	
April	96	78	
May	106	105	
June	90	63	
Total	647	370	

Table 5: Monthly records of baby deliveries in the study and control facilities post PATHS intervention (January to June, 2008).

Month	Study (Deliveries)	Control (Deliveries)	Chi square (p value)
January	126	35	18.30
February	145	47	P = 0.0025
March	161	84	
April	192	95	
May	212	110	
June	216	70	
Total	1052	441	

Monthly records of baby deliveries in the study and control facilities post PATHS intervention: After the intervention, the study facilities had a total deliveries of 1052, while the control facilities recorded 441. This gave Chi square of 18.30 and P value of <0.0025.

Comparing record of delivery of babies in the study facilities pre- and post-PATHS intervention: For study facilities, pre-intervention deliveries was 647, while post intervention deliveries was 1052 (Chi square = 32.08, P < 0.0001). The intervention clearly resulted in a statistically significant increase in the number of deliveries recorded in these facilities.

Comparing record delivery of babies in the control facilities pre- and post-PATHS intervention: For control facilities pre-intervention baby deliveries was 370, while post intervention baby deliveries was 441 (Chi square = 4.60, P < 0.47). There is no significant increase in the number of deliveries recorded in the control facilities from their baseline data before PATHS intervention in the study facilities, to their record in 2008 after PATHS had intervened in the study facilities.

DISCUSSION

The general characteristics of the studied facilities in both the urban and rural areas, and support from other donor organizations were not significantly different. Most of the facilities were rural based. The percentage increase in out-patient attendance in the study facilities after the intervention is statistically significant. This increase in out-patient attendance is consistent with findings in Tanzania (Tanner, 2005) and Cambodia (Huot and Chhon, 2002), where donor support has been shown to contribute to improved primary health facilities utilization. The same finding was made in studies carried out in Kyrgyzstan where support from agencies such as DFID, USAID, WHO, and UNICEF led to significant improvement in the utilization of primary health care services (Akkazieva et al, 2009) . In Utta Pradesh, India also there was consistent increase in monthly out-patient attendance as a result of donor support (Peters et al, 2004). In a study that sought to determine the effect of Bamako Initiative on health facility utilization in Nigeria, it was found that all Local Government Areas that showed increased health facility utilization were donor agency supported (Uzochukwu et al, 2004). That study is consistent with our finding.

It was observed that out-patient attendance in the control health facilities also increased significantly after the PATHS intervention. Although the PATHS programme did not offer direct support by way of drug or equipment supply to the control facilities, the formal introduction of the district health system in Enugu state and the attendant reforms which were heavily supported by PATHS may have contributed to improved health care delivery across the state. The increase in the out-patient attendance in the control facilities was however not as significant as the increase in the supported facilities after the support. This suggests that the PATHS support possibly directly played a role in the improved out-patient attendance noted in the supported facilities. The finding that the supported facilities recorded significantly more out-patient attendance than the control facilities prior to the PATHS support, could be attributed to the fact that baseline survey was conducted to select the most functional facilities in the state before offering support to them. The PATHS leadership then possibly reasoned that supporting facilities that already showed clear signs of viability will ensure good returns on their investment (Nwobodo et al , 2006). The difference between the percentage increase in the study population and the Control group is statistically significant (P<0.0001). This again is consistent with the view that PATHS intervention contributed significantly to improved out-patient attendance in the supported facilities.

It is noted that some factors that can affect health facility utilization include socio-economic issues, distance from the facility, availability of properly trained health personnel, type of services available, attitude of health workers, perceived quality of care, mobilization and involvement of communities in health however

management and the political will of governments (Erinosho , 1998; HERFON, 2008; Uzochukwu et al, 2004; Sule et al, 2008; Gilson et al, 1993; Diop et al, 1995; Osibogun , 2005). It is however assumed that these factors did not significantly affect the positive outcome of the donor support on district health service utilization in this study, since both control and study facilities were mostly located in rural areas, and the facilities being randomly selected would have ensured that they have similar exposure to the stated factors.

The number of deliveries in the supported health facilities increased significantly after the support. This finding agrees with a study carried out in Zimbabwe to assess the impact of World Bank support. It was discovered that in Zimbabwe, the support improved service quality and contributed to increased facility deliveries (World Bank, 2001). Significantly more deliveries were recorded in the supported health facilities than in the control facilities prior to the support (P<0.0001). This also could be as a result of the bias noted above in selecting the facilities for support. Though the supported facilities performed better in the area of deliveries, the difference was not as significant as recorded prior to the support (P<0.0025). Some of the suggested reasons for this include the observation that more deliveries are occurring outside the public health facilities, issues such as security concern, poor work environment and poor health worker/client relationship undermine 24-hour service in the facilities; hence adversely affecting deliveries that frequently required monitoring overnight (Enugu State Ministry of Health, 2010). More deliveries occurring outside the public health facilities could be as a result of PATHS support to the private health care providers by way of training of traditional birth attendants (TBAs) and partnering with four Faith based secondary care facilities in the area of Emergency Obstetrics care. Fifteen private health care facilities were also supplied with drugs and equipment by PATHS (PATHS, 2008). These measures taken by the PATHS programme towards improving the services of the private sector health providers appear to have made the services of the private health facilities in those localities attractive.

Some earlier studies noted that majority of health facilities surveyed in the south eastern part of Nigeria do not provide all services required of them because they are poorly maintained and do not have enough skilled health workers (Chukwuani et al, 2006). PATHS support contributed towards addressing these challenges by renovating some health facilities, training a good number of health workers on certain aspects of health management and service delivery, and supplying facilities with drugs and other medical goods. Poor work ethics among health workers, leading to marked staff indiscipline, poor staff motivation and reward system were also identified as reasons why health facilities performed poorly (Enugu State Ministry of Health, 2010). The PATHS support however resulted in significantly increased out-patient attendance, and deliveries in the supported facilities.

CONCLUSION

The results of this study specifically revealed that outpatient attendance and delivery of babies improved tremendously in the PATHS supported health facilities. Although there were some level of improvement recorded in the control facilities, the difference between the levels of improvement recorded in both groups was significant, hence DFID support through the PATHS programme contributed significantly to improved district health facilities utilization in Enugu State as seen in outpatient attendance, and delivery of babies.

REFERENCES

Akkazieva B, Samiev A, Temirov A, (2009) The Global Alliance for Vaccination and Immunization, Health Systems Strengthening Tracking Study. Centre for Health Development, Kyrgyzstan.

Chatora R. Tomusiime P, (2004) Module 1, DHMT training modules: Health Sector Reform and District Health Systems. WHO Regional office for Africa, Brazzaville.

Chukwuani C.M, Olugboji A, Akuto E.E, Odebunmi A, Ezeilo E, Ugbene E; (2006) A baseline survey of the Primary Health Care System in South eastern

Nigeria. Health Policy Journal, July, page 182-201.

Diop F, Yazbeek A, Bitran R, (1995) The impact of alternative cost recovery schemes on access and equity in Niger. Health Policy and Planning, Vol . 10(3), page 223-2.

Enugu State Government, (2003) Enugu State Poverty Reduction Strategy/State Economic Empowerment Strategy.

Enugu State Government, (2005) Enugu State Government. Health Law, 2005.

Enugu State Government, (2009) Enugu State Government Diary, 2009.

Enugu State Ministry of Health, (2003) Enugu State Health Policy.

Enugu State Ministry of Health, (2004) Enugu State Ministry of Health, Health Sector Reform: Implementing the District Health System.

Enugu State Ministry of Health, (2008a) Enugu State Ministry of Health, Strategy for Health 2008 – 2013

Enugu State Ministry of Health, (2008b) Enugu State Ministry of Health Services Directory.

Enugu State Ministry of Health, (2010) Report of 2010 1st quarterly District Health Board review

Erinosho, (1998) Health Sociology. Sam Bookman Educational and Communication Services, Ijebu-Ode.

Federal Ministry of Health, (2004) Health Sector Reform Programme: Strategic thrusts with a logical Framework and Plans of Action, 2004-2007. Abuja

Federal Ministry of Health, (2005) Revised National Health Policy, September 2004. Abuja.

Gilson L, Kitange H, Teuscher T, (1993) Assessment of process quality in Tanzania primary care. Health Policy Journal.

Gorgen H, Kirsch-Woik T, Schmidt-Ehry B, (2004) The District Health System; Experiences and Prospects in Africa. Manual for Public Health Practitioners. GTZ; 2nd Edition.

HERFON, (2009) Nigeria National Conference 2009; Communiqué issued at the end of the 2009 Nigeria national Health Conference with the theme: PRIMARY HEALTHCARE IN NIGERIA: 30 YEARS AFTER 'ALMA ATA. HERFON Secretariat, Abuja.

HERFON, (2008) Nigeria Health Review 2007, Primary health Care in Nigeria: 30 years after Alma-Ata.

HERFON, (2006) Nigerian Health Review, 2006. HERFON Secretariat, Abuja.

HERFON, (2007) Health Reform Foundation of Nigeria (HERFON) – Strategic Plan; August 2007 - July 2012. HERFON Secretariat, Abuja.

Huot H. S, Chhon K, (2002) Financial Sustainability Plan for Immunization Services. Submitted to GAVI. Kingdom of Cambodia.

Lucas A. O, Gilles H.M, (2003) Short Textbook of Public Health Medicine for the Tropics. International students' Edition. Fourth Edition. ARNOLD, London.

National Population Commission, Nigeria, (2008) Data for National Development. Internet search 10/11/09, www.population.gov.ng/index.php/state-population.

Nwobodo E, (2006) Continuing Support for the District Health System Implementation in Enugu state. PATHS office, Enugu.

Obionu C.N, (2007) Primary Healthcare for Developing Countries. Institute for Development Studies, University of Nigeria, Enugu Campus, Enugu. 2nd Edition.

Osibogun A, (2005) Health Care Resources in Nigeria: Situation and Prospects. Com-Heal Nigeria Ltd, Lagos.

PATHS Enugu, (2008) Togetherness in Health: The Enugu Experience in Health Sector Reform, 2002-2008. PATHS (DFID), Abuja.

Peters D, Rao K, Ramana G N V, (2004) Equity Effects of quality improvements on Health Service Utilization, and Patient Satisfaction in Uttar Pradesh State, India. Health, Nutrition and Population Division, Human Development Department, World Bank.

Sule S. S, Ijadunola K T, Onayade A. A, Fatusi A. O, Soetan R.O, Connell F. A, (2008) Utilization of Primary Health Care Facilities: Lessons from a rural community in Southwest Nigeria. The Nigeria Journal of Medicine, January – March.

Tanner M, (2005) Strengthening District Health Systems, Bulletin of the World Health Organization, Geneva

Tarimo I. E, (1991) Towards a Healthy District: Organizing and Managing District Health Systems based on Primary Healthcare, WHO, Geneva.

Uzochukwu B.S.C, Onwujekwe E.O, Soludo E, Nkoli E, Uguru N P, (2009) The District Health System in Enugu State, Nigeria: An analysis of Policy development and implementation; Consortium for Research on Equitable Health Systems (Health Policy Research Group, College of Medicine, University of Nigeria, Enugu – Campus).

Uzochukwu B.S.C, Onwujekwe E.O, Akpala C. O, (2004) Did the Bamako Initiative improve the utilization of maternal and child health care services in Nigeria? A case study of Oji River Local Government Area in Southeast Nigeria. Journal of Health and Population in Developing Countries; Department of Health Policy and Administration, School of Public Health, University of North Carolina at Chapel Hills.

WHO, (1988) The Challenge of Implementation: District Health Systems for Primary Healthcare. WHO, Geneva.

WHO, (2000) The World Health Report 2000. Health System: Improving Performance, WHO, Geneva

WHO, (2007) Every body's business: Strengthening Systems to improve health outcomes: WHO'S frame work for Action. WHO Health Systems and Services, Geneva.

World Bank, (2001) Independent Evaluation Group (IEG), The Impact of World Bank Support to the Health, Nutrition and Population (HNP) sector in Zimbabwe; World Bank.