EVALUATION OF CHILD HEALTH CARE SERVICES IN HEALTH FACILITIES IN NSUKKA URBAN OF ENUGU STATE

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Title Page

Evaluation of Child Health Care Services in Health Facilities in Nsukka Urban of Enugu State.

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Approval Page

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Dedication

To Almighty God for His infinite love, strength and mercy which sustains me; to my family for their support and encouragement and to my new born Chibugwu-Godôs Grace abounds and tell them that you need adequate mother care high quality and child health care which will help to keep you alive and healthy.

Acknowledge

I wish to express my immense gratitude to Almighty God who gave me the strength and insight for the successful completion of this project report. I thank my project supervisor, Tr. Prof. R. U. Okafor whose assistance and motivation especially during my project proposal made the successful completion of possible. The contribution of my questionnaire validators Prof. C. E. Ezedum, Prof. O. E. Umeakuka, Prof. B. G. Nworgu, Dr. E. S. Samuel and Dr. Nwagu is highly appreciated.

I appreciate the support of my parents Mr & Mrs. Nicho has Onugwu to help me appreciate them the more. They have nutur me up tell this moment and I pry that God will give me a good position Chinelo my brothers Martin Chikas and Chibueze I love you all. I remember the time and effort my brother Chibueze devoted to teach me internet usage which helped me in sourcing adequate materials for this project report.

The management and personnel of both the public and private health facilities used for this work deserves my acknowledgement for their tolerance and assistance. This helped me to relate adequately with my respondents and to collect enough data for this work.

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Abstract

Evaluation of child health care services in health facilities in Nsukka Urban is the main focus of this work. To achieve the purpose of this work, 430 mothers and 156 health care providers were used to collect quantitative data for the establishment of the baseline data. The instrument for data collection was the evaluation of child health care questionnaire comprised of two questionnaires, which helped to gain responses from mothers and health care providers respectively. The data collected was analyzed using arithmetic mean and percentages for the research questions and t-test statistics for the hypotheses. The findings of the study showed that the components of child health care services proved supportive in the improvement of childrenôs health status in Nsukka urban and staff were reasonably commended as competent in their effort ensure quality care for children in health facilities. The findings of the study also showed that the investigated administrative problems and strategies for improvement in child health care services were considerable and should constitute part of the established standard protect providers in their practice in order to avoid obstacles and uphold high quality care for children.

CHAPTER ONE

Introduction

Background to the Study

Child health was once part of adult medicine, but emerged in the 19th and early 20th century as a medical specialty because of the gradual awareness that the health problems of children are different from those of grown ups and that response to illness and medication depends upon the age of the child (Hetch & Shiel, 2006). Children are the promise and future of every nation and the core of development which made World Health Organization-WHO (2004) observe that investing in childrenôs health and development means investing in future of a nation. Children are vulnerable group whose needs and rights must be protected including the right to health and development. Paediatricts (2004) also reported that advances in prenatal intensive care have been associated with improved survival of high risk neonates, but have not resulted in decreased morbidity in children. This helped to bring about child health care services.

Child health care services according to Turmen (2006) are provisions made to improve optimal growth and development in infancy and childhood through disease prevention, good nutrition and health supervision. Hetch and Shiel (2006) defined child health care as services which focus on the well-being of children from conception and is concerned with all aspects of childrenôs growth and development and with the unique opportunities that each child has to achieve his or her full potential as a healthy adult. According to Onuzulike (2005), child care services are total care and services rendered to children 0 ï 5 years in order to maintain their healthy living. Therefore, child health care services are efficient strategies provided by health workers in order to promote health and prevent diseases, disabilities and death in children through simple cost effective measures. Hetch and Shiel (2006) observed that a healthy childôs development actually begins from the parents, and once the baby is delivered other matters such as breastfeeding, newborn screening tests, sleeping safety, health care appointments for check ups and immunizations are considered. As services are provisions made for the public to use as much as they need in order to benefit from them, the purpose of child health care in health facilities is to promote the health of children, provide support in maintaining and improving childrenôs health through counseling, medical examination, treatment and immunization.

Child health is a critical issue of concern to everyone, and at the level of the family, the community, the nation and the international community. This is because successful societies safeguard their future by continually striving to improve the well being of their children. They understand that healthy, well developed educated and respected progeny ensures that past

achievements serve as the foundation for continuing progress (Turmen, 2006). In order to improve health outcomes of children there should be more effective organization of preventive services and more coordination between practices. Intervention to achieve an effect on children and to overcome specific barriers in the process of care delivery needs to be adopted so that preventive services could be effectively delivered.

Therefore, Changes in the organization of the delivery system that concerns children will lead to improvement in preventive health outcomes for them (Margolis et al., 2005). International communities and individual countries are repeatedly committed to improving child health. WHO (2004) however stated that this commitment needs to be translated into stronger action if the silent tragedy of preventable death, illness, disability and impaired psychosocial development among children are to be avoided, and if childrenôs quality of life is to be improved.

Improving child health development relies, to a great extent, on understanding the causes of child morbidity and mortality with programmes and policies aimed at improving the health of children. Moy (1998) reported that twelve million children under five years of age in developing countries die every year before their fifth birthday and seventy per cent of these deaths are due to five common preventable and easily treated childhood diseases namely: acute respiratory infections, diarrhea, measles, malaria, and malnutrition or the combination of all five which also account for three quarter of all childhood morbidity. Schor (2004) observed that historically, the field of paediatrics has been concerned with promoting childrenôs health and development as with treating childrenôs diseases, and the trend in childrenôs health status showed that their physical health is better than it has ever been. This is as result of scientific progress which has led to substantial reduction in many of the acute morbidities of the early 20th century and increasing survival from acute illness and premature births.

Various interventions for the prevention and management of childhood illnesses have been established to be provided through health services. According to Moy (1998), Expanded Programme on Immunization (EPI) was founded by WHO in 1977, the control of Diarrhoeal Diseases Programme (CDD) was established in 1980, and in 1985 the control of Acute Respiratory Infection Programme (ARI) was added to these vertical strategies. With WHO technical support and UNICEF (United Nations Childrenôs Fund) sponsorship, these three programmes have been put in place and health workers are trained through workshops to recognize key signs of illnesses and to implement correct treatment and follow-up actions. Also, a strategy known as integrated management of childhood illnesses (IMCI) was formulated by WHO and UNICEF in 1996 as an additional and principal strategy to improve

child health, which concentrates on their overall health status by integrating all intervention for prevention, treatment and health promotion (Healthy Children Goal, 2002).

However, the potential policy option for reducing the burden of childrenôs diseases would be to utilize the public and private sector health resources in a coordinated fashion with options for health sector reform to achieve its goal of providing quality health care to members of the population (Thind, 2004). Evaluation of child health care services is one of the strategies that can be used to provide for this reform, to encourage improvement in the quality of care provided for children.

Trochim (2006) defined evaluation as the systematic acquisition and assessment of information to provide useful feedback about some object. Evaluation as it concerns child health care in hospitals can be defined as the assessment of the features or attributes of hospital provisions for childrenôs care in order to determine their influence on childrenôs health, and the extent to which they are meeting the objectives of child health care. The goal of evaluation is to provide useful feedback to clients, groups, administrators, staff and other relevant constituencies and to influence decision making or policy formulation. It strengthens or improves the object being evaluated by examining the delivery of the programme, the quality of its implementation, the organizational context, personnel, procedures and inputs.

Evaluation helps to emphasize the importance of evaluation participants, especially the client or users of a programme and stake holders. Agency for Health Care Research and quality ï AHRQ (2007) observed that potential audiences for quality measurement report for child health care services are the providers and the consumers. This is because providers are more familiar with their methods and problems they encounter in care delivery. Also parents are useful observers of the pattern of services provided for their children. In this case, several parental and health care providersô perception measures, as well as several measures of the delivery of preventive care may be used to assess the quality of the health plan or programme for children in hospitals and health centres in Nsukka Urban. WHO (2004) observed that the main providers of health care and their role in child health includes the two main categories of government and public sector players. Thind (2004) added that the quality of the public facilities and quality of the private facilities were variables based on drug availability and ORS (Oral rehydration solution). This is because provisions for child health care in government hospitals may differ from provisions for child health care in private hospitals in both coverage and quality.

However, AHRQ (2007) emphasized that regular measurement of quality is an important programme management tool because it;

1. promotes the effective use of scarce resources and delivery of needed services;

2. provides information needed to manage health plans and providers;
3. provides basis for offering incentives to them;
4. allows programme managers to access the extent of their own accomplishments;
5. allows comparison of plan or programme performance with that of other plan or programmes in the state;
6. allows the tracking of trends over time; and
7. provides an objective basis for ongoing quality improvement programme.

AHRQ (2007) also noted that health care should have the following qualities:

1. effectiveness which relates to providing care process and achieving outcomes;
2. efficiency which relates to maximizing the quality of health care delivered or health benefits achieved for a given unit of health care resources used;
3. equity which relates to providing health care of equal quality for the same clinical condition to those who differ in personal characteristics;
4. patient centeredness which relates to meeting patientôs needs and preferences;
5. safety which relates to precaution for avoidance of actual or potential bodily harm, and
6. timeliness which relates to obtaining needed care while minimizing delay.

Therefore, increased attention to performance monitoring is essential for ensuring, the delivery of quality services for childrenôs health and development, because quality measurement provides one of the tools needed for effective quality improvement initiatives, especially in hospitals.

Hospital standard for child health care involves: the quality and safety of care; child-centered care which addresses the broader needs of children, and the hospital environment. Improvement in the training of staff, appropriate emergency cover and organization of services are also emphasized (Commission, for Health Care Audit and Inspection, 2007). Specifically, hospital standard states that the care of children in hospitals should be provided in building that are accessible, safe, suitable, and child-and-family-friendly with separate facilities for the treatment of children wherever possible. In out-patient departments there should be partitioned waiting areas for children, or appointments organized so that all children are seen at the start of a clinic. Also, children receiving in-patient care should be treated in child-only ward separate from adults. This will enable children to benefit more appropriately from cares put in place for them.

However, it is not surprising that preventive care services for children as they are being provided currently may not be meeting the needs of children and many families with children.

Schor (2004) observed that the quality of child health care services varies greatly among physician practices and parents are signaling their dissatisfaction by failing to obtain approximately one half of recommended preventive care services. It is not possible in the time available, to provide even the few preventive services most highly recommended, nor is it possible to respond effectively to the myriad recommendations for the content of well-child care (Yarnall, Pollak, Ostbye, Krause & Michener, 2003) and the current care system cannot do the work except if there is change in the system of care (Committee on Quality of Health Care in America, 2001). Commission for Health Care Audit and Inspection (2007) found that hospitals have made poor progress in meeting the broader needs of children which reflects more widely across different services in hospitals. Insufficient number of staff is trained in the management of pain in children, and to deliver resuscitation and initiate treatment in serious emergencies, especially at night.

Radolph, Fried, Loeding, Margolis and Lannon (2005) discovered that few hospital practices have evidence of comprehensive system of prevention and some organizational characteristics were at level that might impede delivery of high quality care for children. Furthermore, under immunization and inadequate screening were observed as significant problems in private paediatric practices and some physicians are not always aware of the rates of under immunization in their hospitals. Many experts in the field of preventive care for children know that the current system of preventive care for children may not be very scientific and they also know that only a few of the recommendations for the contents and processes of well-child care are supported by evidence of effectiveness. The current quality of preventive care for children is quite variable and the need of many children and parents are not being met because the existing guidance and approaches to well-child care are inadequate to the task and stand as barriers to effective and efficient care as is the case below.

The Kennedy report into events surrounding the deaths of children who underwent heart surgery at the Bristol Royal Infirmary found that the quality of care was less than it should have been, services were fragmented, the rights and vulnerability of children were overlooked, and open and honest relationship with children and parents were lacking (Commission for Health Care Audit and Inspection, 2007). According to their observations service providers treated children as if they were mini-adults who need smaller beds and smaller portion of food. Staff were skilled in treating adults but had no specific training in treating children and facilities were designed with little acknowledgement of the needs of children. These should be considered in response to the rights and vulnerability of children.

McGlynn and Halfon (1998) stated that child care quality has not received the kind of attention that has been given to adult health care, and childrenôs issues have not been

emphasized in many national quality measurement and improvement efforts. Health care quality in some hospitals is focused on early detection and management of diseases in adults rather than on the promotion of healthy development and prevention of illness and injury in children. The broader needs of children were not being recognized or given priority in many hospitals. Therefore, Safeguarding children remains a major area of risk and many children are having worse experience of hospital than they should because of lack of training in communication, and staff who specialize in child care. Level of training in child protection were often not up to standard and there were particular problems relating to the level of intermediate training in emergency care with significant and unexplained variation in the delivery of child health care across hospitals. WHO (2005) observed that radiology, and laboratory services are minimal or non-existent in first level facilities in low income countries, and drugs and equipment are often scarce. These factors leave doctors with few opportunities to practise complicated clinical procedures. Practitioners often rely on signs and symptoms to determine the course of treatment that makes the best use of available resources.

A list of barriers to providing the preventive and curative services that are recommended for children which urgently need to be addressed as provided by Schor (2004), includes: time constraint; too much work-load; low level of reimbursement for preventive child care; lack of training in child development; lack of trained-non-physician staff members; limited access to community services to support families and children, and few external incentives. These barriers may be factors that lead to poor performance and may be the reasons why the needs of children for preventive care are not fully met. Therefore, consideration has broad implications for the organization, and provision of child health care and there is need for clinicians to improve the efficiency of their practices.

This suggests a growing need for research that examines the impact of organizational characteristics on the quality of care for children especially as it concerns health facilities in Nsukka Urban. Evaluation of child health care services in health facilities is considered an effective quality measurement initiative for care provided for children because it will help to access whether hospitals were meeting or making progress towards key requirements of hospital standard with regard to the objectives of child health care. Bethal, Reuland, Halfon, and Schor (2004) also suggested effective evaluation research as a means that will help to improve effective child health interventions. Lucas and Gilles (2003) observed that the objectives of child health care services are to promote and protect the health of children in order to prevent diseases and ensure that they achieve optimal growth and development physically and mentally. Child heath care also aims at the early treatment of childhood diseases to avoid dangerous complications. As there may be need for major revision of well-child care

taking into account the objectives of child health care and the varying needs of children, prompting a re-examination of child health care will help in reducing medical errors and improving quality relying on evidence-based medical approaches.

Health care for children needs to be rationalized and the rationale must be apparent in the documents guiding the provision of child health care. Hospital directorates must accept that they have to meet the hospital standard, and improving the provision of services for children must be integral to the plans. All services accessed by children need to be scrutinized and staff influenced to ensure the management of the performance of all relevant services, with respect to quality of care provided for children. With consideration of the child health care objectives, hospitals can be held responsible to account for improvement in managing performance and planning in child health care (Schor, 2004). This translates to the need for health care providers to be adequately informed of their responsibilities towards child health care and development.

Margolis et al. (2004) observed that better office system can improve the delivery of preventive care for children. They defined office system as an organized series of interrelated activities carried out by several members of staff to achieve a specific purpose. The focus of office system for preventive care is on interactions of patients, staff, and clinicians to ensure that each step of preventive care is carried out for every eligible patient at every encounter. This involves practices that receive continuous medical education and process. The elements of governance are extremely important because they are the first steps to ensuring that the requirements of hospital standard are met. The review of the Commission for Health Care Audit and Inspection (2007) found that the needs of children were better met when they were, cared for in services managed by paediatric directorates. However, leaders in other directorates such as general practitioners need to ensure that improving the care of children is integral to their plans. Improvement in methods used for implementing office systems of health care interventions would ensure higher rate of core preventive services, than practices that do not undergo improvement. The provision of tools and materials allow practices to concentrate on improving care, and emphasis on measurement encourages practitioners to learn from their data (Margolis et al., 2004).

Circle of research action and evaluation has provided remarkable achievements in global health as it concerns decline in child mortality, but there are many infants and children who have not benefited from the progress in research for whom the fruits of research remain inaccessible. Therefore research is essential to ensure that effective interventions for childrenôs health are made available to those in need of them in order to improve the survival, health and development of infants and children especially as it concerns health facilities in Nsukka urban. From the foregoing, this study will attempt to determine the extent in which public and private

health facilities are striving to improve child health care and the effectiveness of their services and care towards the achievement of the objectives of child health care services. It is believed that adequate provision of quality child health care in hospitals is imperative, because it would greatly help to improve the quality of childrenôs health.

Although, it is the responsibility of parents and guardians to take children to hospitals for essential health services which will be beneficial to their health, health care providers also play major role of keeping appointments for immunizations, check-ups, and ensuring readiness for preventive, curative and emergency care. Therefore, parents and hospital staff were involved in this study.

Statement of the Problem

In developed countries, the under-five mortality rate has been reduced below 10 per 1000 live births, but many developing countries still record rates that are over 100 per 1000 (Lucas & Gilles, 2003). Campbell, Sow, Levine and Kottloff (2004) also observed that the burden of mortality from infectious diseases weighed most heavily on children living in the developing world where seventy per cent of all childhood deaths are attributed to the five diseases of clinical syndromes: acute respiratory infection (ARI), diarrhea, measles, malaria and malnutrition. This fact is most disturbing given the existence, in many instances, of effective methods of prevention and intervention.

According to Turmen (2006), mortality rates among newborn infants remain stubbornly high in many countries because mothers lack care during pregnancy and child birth and babies do not receive essential newborn care. The aftermath of survival in weakened children who do not receive necessary care is worse because, they may be stunted or live in blindness. Such children may drag out painful lives crippled by polio or be mentally retarded because of poorly managed delivery in health care systems which often fail to meet the needs of the most vulnerable group (children and child bearing mothers) in the society (Belsey, 1984). All children and pregnant women have a right to comprehensive health care that is fully portable and ensures continuous coverage.

Therefore, much remains to be done in reducing the avoidable mortality and morbidity rates by making the services reach all children. The importance of children receiving well-child and other primary care services in their early years is well established. Even for healthy children obtaining routine preventive care during the first year of life can be critical to development. For those who experience acute or chronic conditions, or who have special health needs, obtaining regular medical attention is even more important (Delone, 2006). Consequently, initiative to improve child health can have an enormous impact in reducing the

global burden of disease. Postnatal care requires further assessment as to the quality of services and their outcome.

In childrenôs preventive care for which the healthy development and avoidance of injury and illness are the desired outcomes and for which guidelines are more consensus based than evidence based, special challenges in both accurately and efficiently measuring health care performance exists (Bethel, Reuland, Halfon & Schor, 2004). Bethel et al. (2004) also observed that health care performance assessment effort at the national, state, health system, and medical practice levels all face real constraints in the amount of information about performance that can be collected, included or reasonably absorbed in performance report to or about health systems or providers. Care for children is largely composed of routine services to promote their healthy development, prevent injuries, and screen for illness and other threat to health.

Therefore, health system in general are being required to be assessed for improvement in the quality of care that they provide for children in order to make performance information available to their patients and stakeholders of health services. Since the goal of evaluations is to provide useful feedback to relevant constituencies such as client groups, administrators and staff, feedback is perceived as useful if it aids in decision-making or policy formulation. The CIPP evaluation model of evaluation which was adopted in this study is among the management oriented systems model where the C stands for context the I for input, the first P for process and the second P for product. This modal emphasized comprehensiveness in evaluation, playing evaluation within a larger framework of organizational activities (Stufflebeam, 2000). It is focused on programme evaluation aimed at affecting long-term, sustainable improvements with questions such as, what needs to be done? How should it be done? and Did it succeed? In this case the concept of evaluation is to assess and report merits, worth and significance and present lessons learned to encourage improvement in child health care services in health facilities. The evaluation of child health care services in health facilities in Nsukka urban in necessary because designing and conducting effective evaluation research will contribute to maximizing effective child health interventions.

Purpose of the Study

The purpose of this study is to evaluate child health care services in health facilities in Nuskka urban of Enugu State. Specifically, the objectives of the study are to:

1. determine the efficiency of components of immunization services provided in public and private health facilities in Nsukka urban;

2. determine the reliability of the growth monitoring and screening services carried out in public and private health facilities.
3. assess the effectiveness of the curative health services provided in these health facilities for children;
4. assess the reliability of the emergency health services provided in these health facilities for children;
5. determine the usefulness of the nutritional services provided in these health facilities for children;
6. assess the consistency of the health education components provided in these health facilities for children;
7. determine the competency of staff who are responsible for the provision of child health care in these health facilities;
8. determine administrative problems that affect child health care services in public and private health facilities.
9. determine administrative strategies used for improving child health care services in public and private health facilities.

Research Questions

The following research questions have been formulated to guide the study:

1. How efficient are the immunization services provided in public and private health facilities in Nsukka urban?
2. How reliable are the growth monitoring services and screening tests provided in these health facilities for children?
3. How effective are the curative health care services available for children in these health facilities?
4. How reliable are the emergency care services available for children in these health facilities?
5. How useful are the nutritional services provided in these health facilities for children?
6. How consistent are the health education services provided in the health facilities for children?
7. How competent is the staff that provides child health care services in these health facilities?
8. What administrative problems affect provisions for child health care services in these health facilities?

9. What administrative strategies are used for improving child health care in these health facilities?

Hypotheses

To provide direction to the study each of the following three hypotheses are formulated to be tested at .05 level of significance.

1. There is no statistically significant difference between private and public health facilities in relation to the quality of services provided for children.
2. There is no statistically significant difference between public and private health facilities in relation to the competency of staff that provide care for children.
3. There is no statistically significant difference between public and private health facilities in the administrative problems encountered in the provision of child health care services.

Significance of the Study

Health workers and parents will find the information on evaluation of child health care services useful to check whether their local hospitals provide a safe child friendly services and to press for improvement in line with the recommendations that was made for the benefit of children. The information will also help administrators of health facilities reorganize the services provided for children in their hospitals in realizing their responsibilities in health care provision for children and in managing performance and planning in child health care

This study generated information on efficiency of immunization services which will help health workers and parents to know if government and private health facilities ensure quality and coverage of this service. This will help to ensure improvement in immunization services which form an important aspect of childrenôs preventive medicine against diseases that cause disabilities and death in children.

The information that was be obtained on the reliability of growth monitoring (e.g., height and weight measurement) and screening tests will help health care providers to ascertain if these services are ignored in their hospitals or health centers. With the information that is be provided, the knowledge of parents and health care givers on growth monitoring and screening tests as important indicators for childrenôs health and development can be improved. Observations and screening tests can provide the bases for teaching parents the need for improvement in the nutritional status of their children.

By providing information on the effectiveness of curative services in public and private health facilities the attention of health care providers will be drawn in integrated management

of childhood illness (ARI), with combination of therapies for several conditions. Data collected will help health care providers in planning and improvement on multiple approaches to help children who often present in hospitals with multiple symptoms. Parents and health workers will use the information on curative services to check whether hospitals provide safe child friendly care by meeting the broader needs of children (e.g., play to reduce fear), that helps to ensure effectiveness in child health care provisions.

The findings on the reliability of emergency services in health facilities will hopefully encourage health care providers in the establishment and sustenance of strategies to help prioritize sick children. This will help to reduce morbidity mortality and permanent disability in children and ensure that parents are confident in the ability of staff to place special consideration for children in health facilities.

The information on the usefulness of the nutritional services in these hospitals will help to provide bases for the education of parents to place emphasis on the nutritional needs of their children and for health workers to ensure quality of child health care by making necessary provisions (e.g., Vitamin A and micronutrient supplementation). With the confirmation of parents, health workers will use the information to note if they have considerations for this important aspect in child health care.

Information generated on the consistency of health education services provided in these health facilities for children will provide bases for health workers to appreciate and improve on this important aspect in services for children. The information will help to ensure that health education is integrated with other services to enhance improvement in child health care quality. Parents will also benefit from improvement in health education that will help to enhance their childrenôs health status through knowledge consequently, provided for them on disease prevention and simple remedies for common diseases (e.g., oral rehydration therapy, accident prevention and sleeping positioning).

By providing information on the competency of staff who provide care for children in these hospitals, this study will hopefully help health care providers to be clear about the minimum requirement in the care of children. They will use the information to understand and appreciate what is required for professionals to improve and maintain their competence in working with children. The information can also provide bases for in service training of auxiliary hospital staff members to improve their performance in the care of children.

In this study, data was generated on problems that affect child health care services in government and private health facilities. By addressing all areas of weakness identified, health care providers can be helped to press for improvement of services for children in line with the recommendations in this project report. The information can help hospital trusts in the

development of plans based on the areas of weakness identified by this report and to ensure that these plans are achieved through incentives for improvement in child health care.

The study hopes to generate data on strategies for improving child health care in government and private health facilities through which guidelines can be provided to facilitate improvement in services for childrenôs welfare. The information will help to encourage providers to continually improve their services and the way they work and to improve the coordination of child health care services which will lead to changes in the process of preventive services delivery in practice. They will use the information in decision making and in carrying out their responsibilities in multiple practice organization for children.

Scope of the Study

The study was delimited to health facilities in Nsukka Urban. Therefore, hospitals and health centres in Nsukka urban was used for this study with special consideration for public and private sectors as providers of health care services for children (WHO, 2004). The study was guided by the programme area of child health care services prescribed by WHO (2004) for children. These services include: immunization services, growth monitoring and screening tests, nutritional services, health education, emergency and curative services as well as the functions of health facilities and personnel. All the health personnel in these health facilities that are involved in the provision of child health care services were used as respondents for the study. This is because they are more knowledgeable in the pattern of health services they provide. Parents (especially mothers) as useful observers of health care services provided for their children were also involved.

CHAPTER TWO

Review of Related Literature

A careful review of related literature shows that literature is moderate in the area of child health care. Reviewed literature relevant to the present study is hereby presented under the following headings:

1. conceptual framework;
2. theoretical framework;
3. objectives and importance of child health care;
4. factors affecting the provision of child health services; and
5. studies on child health services.

Conceptual Framework

New born infants appear quite helpless and ignorant; they seem capable, of little, other than sleeping, feeding and crying. Children as one of the most vulnerable population, face unusually high health risks as they grow. With still developing immune systems, they are completely reliant on others for their survival (Turmen, 2006). According to Hecht and Shiel (2006) childrenôs health or paediatrics focuses on the well being of children from conception and is concerned with all aspect of childrenôs growth and development and with the unique opportunity that each child has to achieve their full potential as a healthy adult. Onuzulike (2005) defined child health care services as total care and services rendered to children 0 ï 5 years in order to maintain their healthy living. Through child health care services, optimal growth and development in infancy and childhood by means of good nutrition, disease prevention and health supervision will be achieved. Child health care are efficient health services provided by parents and health workers in order to promote health and prevent diseases, disabilities, and death in children through simple cost effective measures aimed at improving the health of children. Parents and health systems should try and ensure a fairer chance for every child who is born with these measures.

Akubue (2000) opined that the health of a child is so important that everybody should participate in the promotion of child health, because the future of the human race depends on the health and survival of the child. The baby in the womb and the baby after birth represent various delicate stages of development and growth which requires special care. Maturation requires appropriate environmental support if normal development is to occur. Cigarette smoking contributes to infant mortality by increasing the risk of low birth weight. Also, malnourishment and drugs such as alcohol can interfere with normal foetal development. Healthy infants and toddlers require protection, nurturing, consistency and developmentally

appropriate guidance and stimulation by caregivers to reach their potential (Hakes, 1995). According to Erikson psychosocial developmental theory, development is a series of discrete stages with unique set of conflicts and crises: failure to deal successfully with a conflict in one stage of development may carry problems associated with that conflict into later life (Darley, Gluckbery and Kinchla (1991). Therefore the determinant of adult personality is rooted in early childhood experiences.

PughMathis and Imenshein (1995) suggested that useful measures of childrenôs health status are: mortality rates from all preventable causes; mortality rates from natural causes; childrenôs immunizations status; and the prevalence of growth stunting among children. This is because the above are all important reasons why children should receive adequate preventive health and medical care. Lawoyin, Onadeko & Kolude (2003) observed that the commonest causes of morbidity and mortality in Nigerian children include malaria fever, acute respiratory tract infection (ARI), diarrhoeal diseases, vaccine preventable diseases (e.g. measles and pertussis) and malnutrition. Robinson (1995) added that three of four deaths of children under five are caused by diarrhea, pneumonia, measles, malaria, malnutrition or by combination of these illnesses. This is the reason why WHO (World Health Organization) recommended that children should be routinely assessed for all of these conditions before deciding on the best treatment, because a single diagnosis is not always appropriate. Turmen (2006) stated that of the five leading causes of premature death and disability in the world today, three are primarily or exclusively childhood disease. These deaths are all the more tragic because they are completely avoidable, given the widespread use of simple, cost-effective interventions, such as immunization, integrated management of childhood illness and health care during pregnancy and child birth.

According to Quade (2002), child mortality is typically defined as the number of death of children less than five years of age in a given year per 1000 children in this age group. In developing countries child mortality rates play a more significant role as an indicator of broader health, environment and social issues such as malnutrition, water, sanitation, poverty and access to health system as well as provision of health services. The obstacle to optimal health is greatest for children born into poverty because they are often exposed to infectious disease and unclean water with the greatest risk of malnutrition. Children, under the age of five years, the age group that is considered most vulnerable, according to WHO (2004), require quick and effective action including the highest possible level of commitment in a country to achieve the child health related millennium development goals (MDGs). Child health and development both currently and in future is a process which requires good coordination, time and human resource and needs to be carefully planned for. The optimal health of children can

best be achieved by providing access to comprehensive health care benefits which involves services and procedures specific to the delivery of comprehensive, preventive, prenatal, postnatal, and mental health care (American Academy of Paediatrics-AAP, 2006).

Health services can be organized to ensure that children obtain the maximum benefit from current knowledge and practice for the promotion, maintenance and restoration of their health (Park, 2007). With available cost effective interventions against the diseases that account for the most of disability, death, and health losses among children, childrenôs health and development can be promoted. All new born, infants and children must have access to comprehensive health care benefits that will ensure their optimal health and well-being. As children are more frequent users of health care than adults with different needs to adults, hospitals must be consistent in providing safe and child-friendly care.

Children suffer from different range of diseases and disorders from those seen in adults, and have different anatomy and physiology. Their skill in communication and their ability to choose and consent to treatment are different. Therefore, they are often brought to hospitals by their parents. Schor (2004) opined that it is important that staff coming into contact with children are appropriately trained and work with enough children every year in order to maintain their skill in treating them, because most parents want their children to have high quality up-to-date and evidence-based care. More than other groups, children need to be kept safe, they have a basic need for play which can also help their understanding and speed their recovery from ill health. Commission for Health Care Audit and Inspection (2001) supported the idea of safeguarding children, which means protecting children from maltreatment, preventing the impairment of childrenôs health or development, and ensuring that children are growing up in circumstances consistent with the provision of safe and effective care.

Health promotion measures require the provision of adequate and effective health care that is available at all levels with personnel and essential drugs and services needed to preserve health and prevent death. American Academy of Paediatircs (AAP) (2006) suggested that child health care services that are physician-directed and prescribed should include: health supervision with preventive care and immunization; diagnosis and treatment of acute and chronic illnesses, developmental disabilities, learning disorders and behavioural problems; surgical care; emergency medical and trauma care services, and in-patient hospital care services. They also observed that care for all new born infants should include: management of high risk deliveries; health supervision; treatment of congenital abnormalities and other medical conditions; new born intensive care and when indicated by infant physician; follow-up visit in childôs home or in physician office within 48 hours of discharge. Others include laboratory and pathology services (e.g. screening for metabolic and other congenital disorders),

transfer/transport to a hospital or health facility; preventive and restorative dental care and oral surgery; nutritional and lactation counseling services; and prescription drugs, medical and surgical supplies, with special nutritional supplements.

Furthermore, World Health Organization (WHO, 2004) prescribed the programme area of child health as those dealing with: Immunization, Childhood Illnesses, nutrition, malaria (where relevant), HIV/AID control, maternal and neonatal health, perinatal care, oral health, essential drugs, injury prevention and control and health education and promotion. Each of these constitutes an aspect of child health and can serve as a touchstone for individuals and communities in both the provision and monitoring of child health services.

There is no doubt that child care closely depends on maternal care. Health promotion of a child begins from the womb of the mother. The health of a child is primarily shaped by the health of the mother, starting with birth weight because children born with low birth weight often have an impaired immune function, putting them at high risk of infection and death (Turmen, 2006). Improvement in the nutrition of women of childbearing age translates into reduced risk of having low birth weight babies. According to Akubue (2000), the health of the child depends on what happen to it while in the womb (e.g. drugs taken during pregnancy), during delivery (birth injury and sexually transmitted diseases) and early childhood. Neonatal tetanus can be prevented by administering tetanus toxoid to pregnant women which helps to protect the newborn baby from tetanus for the first six weeks of life. Furthermore, as HIV/AIDS is readily transmitted from a mother to the unborn child, measures are adopted to protect the child. This includes delivery by caesarean section, avoidance of breast feeding and administration of antiretroviral drugs in the last week of pregnancy and during child birth. Antenatal care provides the opportunity of monitoring the progress of the pregnancy, so that any deviation from normal can be detected at an early stage before serious complications occur (Lucas & Gilles, 2003).

The new born main needs as recognized by Manandha and Ellis, (1996), are to breathe and get oxygen, be warm, be fed and bond with the mother, and be free from infections. These special neonatal cares require cleanliness by health workers and early treatment of infections with clear antibiotics policy. Clear electricity, a source of water, a warm room (at $25^{o}C$), oxygen and suction (in delivery room and after-care area) and incubators (adequately cleaned and maintained) or locally manufactured trolleys with 100w electric bulb (as an overhead heat source) are all required. Most needs of newborn infants as listed by Manandha and Ellis (1996) can be met by simple low-cost techniques such as involving the mother; keeping the baby warm and encouraging and supporting breast feeding. Also, train staff should be trained in bag

and mask resuscitation; use of nasal prongs to give oxygen to infant with respiratory distress, and staff hygiene with a clear antibiotic policy.

Inspiration may delay after delivery until the airway has been sucked off mucus, therefore the pharynx should be cleared with mucus extractor and the infant may require resuscitation in order to establish respiration (Okereke, 2005). The baby should be cleansed of nervix caeseosa and the cord tied and cut. Okereke (2005) went further to state that a comprehensive examination which should be made immediately after birth in order to detect congenital defects includes: the head to detect intra cranial injury and the eye to detect Downôs Syndrome; mouth to check for cleft palate (harelip); arm and hand to detect fracture, dislocation or paralysis; spine to check for spinal bifida; anus to check perforation and potency of the anus, and cord at least once a day to ensure that it is free from infection.

Infants at risk during the neonatal period needs identification, close observation and care by experienced physicians and nurses. Stroll and Kilegman (2004) observed that birth weight and gestational age have traditionally been used as strong indicators for the risk of neonatal death and prematurity tends to increase the severity of the clinical manifestation of most neonatal diseases. The perinatal mortality of twins are four times that of singletons especially with prematurity and the likelihood of entangling their cord leading to asphyxia which requires prompt treatment. Stroll and Kliegman (2004) also stated that the highest risk of neonatal mortality occur with infants who weigh less than 100 g at birth and whose gestation was less than 30 weeks, and the lowest occur in infants with birth weight of 3000-4000g and gestational age of 38 ï 42 weeks. Prematurity and conditions associated with it cause more than half of neonatal deaths, worsened by ill-equipped hospitals with lack of experienced health personnel and poor transportation facilities for referral (Ugochukwu, Ezechukwu, Agbata & Ezumba 2002). Ertem, Cakmak, Saka and Ceylan (2004) reported that neonatal tetanus (NNT) which occur as result of unhygienic birth practice (i.e. when tetanus spores contaminate the umbilical cord) is responsible for 14 per cent (215000) of all neonatal deaths, which can be reduced with proper treatment protocols with good nursing care and proper baby care facilities .A babyôs immunity inherited from the mother diminishes with time after birth. Therefore, immunity can be induced through vaccination with small doses of a specific infectious agent altered to avoid active infection (Okereke, 2005).

Immunization provides a strong shield which protects infants and children. Onuzulike (2005) defined immunization as a deliberate stimulation of the bodyôs defenses against specific harmful germs or bacteria. Immunization as an important aspect of preventive medicine against diseases that disable thousands of children yearly requires world wide immunization programme to reduce morbidity and mortality rates from childhood deadly diseases (i.e.

measles, poliomyelitis, tuberculosis, diphtheria, whooping cough (pertussis) and tetanus). Akubue (2002) opined that immunity is achieved through vaccination with vaccines that contains killed (inactivated) or attenuated (modified) virus and bacteria which when administered helps the immune system of the body to produce antibodies to fight and prevent infecting agents from causing diseases. The expanded programme on immunization, as observed by Moy (1998), was founded by WHO in 1977 and has substantially enhanced global vaccination coverage with subsequent major reduction in the incidence of the six main vaccine preventable diseases. The National Programme on immunization was also launched in Nigeria to support the former. Vaccines and diseases they provide protection against as stated by Akubue (2000) are as follows:

1. BCG (Bacillus Camette-Guerin) vaccine which contains live attenuated bacilli organism, provides lifelong immunity against tuberculosis (TB);
2. DPT (Diphtheria, Pertussis and Tetanus) vaccine which contains the toxins of diphtheria and tetanus and killed bacteria of pertussis, provides protection against diphtheria, pertussis (whooping cough) and tetanus;
3. Oral polio (poliomyelitis) vaccine which contains live attenuated virus given orally, provides protection against polio, a viral infection which causes muscle weakness and paralysis;
4. Measles vaccine which contains a life attenuated virus provides protection against measles, a viral infection of the respiratory system (pp 99 ï 100).

However, vaccination can fail to confer immunity and protection may be unreliable when the schedule is not strictly followed and when an out-of-date or badly stored vaccine is used. According to WHO (2004), Expanded programme on immunization also involves: Immunization schedule for children under five years of age; immunization coverage targets and accomplishment and quality control of locally manufactured vaccines; cold chain and monitoring equipment; supplies (syringes, needles, safety boxes). Immunization approaches identified includes facility based session versus mobile outreach services and frequency of immunization sessions; human resources (categories of providers by levels), surveillance and information system, and Government financing schemes for immunization services.

Okolo et al. (2003) stated that the National Programme on Immunization (NPI) was established in Nigeria to solve the problem of decline in Immunization, the cold chain, supervision, vaccine supply and community mobilization. Okolo et al. (2003) continued by listing the factors responsible for achieving and maintaining high coverage of immunization to include, adequate supply of vaccine; accessibility of vaccination sites; convenient hour of

vaccination; short waiting times and; low rates of missed opportunities for vaccination. Lucas and Gilles (2003) observed that safe precaution must be taken to avoid risks of cross infection by use of disposable injection equipment and to preserve vaccine potency by the use of refrigerators to keep them cold until administered. Campbell (1986) suggested that staff at all health services should keep in mind the need to screen women and children for missing doses of vaccine and be ready to provide them. This can be done by ensuring that every infant, child and pregnant woman who attend are screened and immunized as appropriate without waiting for routine immunization services which often miss significant number of children and infants who should be immunized.

Growth monitoring, observations and screening tests are important indicators of child health in health care facilities. Check-ups allow doctors and nurses to review a childôs growth and development and perform tests. Measurement of weight and height gain, motor and mental capabilities are readily available indicators of good health (Manciaux, 1984). Lucas and Gilles (2003) observed that during the first five years of life, the growth and development of each child should be carefully monitored regularly at the clinic with simple chart showing graphs of normal growth curve which is effective in monitoring the childôs physical development. PughMathis and Imershien (1995) observed that in a normal population of children where all children receive adequate nutrition and few suffer chronic infection, no more than 5 percent of children will fail to meet the fifth percentile of age appropriate height. When a higher prevalence of children fail to meet this percentile, poor nutrition, chronic infection or in some cases combination of these two factors are implicated. Assessment of growth should include birth weight, birth length, and birth head circumference relative to an appropriate growth chart and an accurate determination of gestational age at birth (Pediatrics, 2004). Pediatrics (2004) continued to state that neurological examination for neurological outcome for early intervention of the toddler and older children involves an early assessment which helps to identify infants with mild, moderate and severe abnormalities.

Meltzer (2002) observed that early detection and treatment of disease and disability for high-risk populations requires screening and interventions. Screening includes measurement of height and weight, blood pressure, hearing, vision, dental exams and oral health. Ashworth and Khanum (1996) opined that severe wasting means a child is less than 70 per cent weight-for-height. The diagnosis of failure to strive (marasmus in severe cases) caused by calorie deficiency ranges from obvious weight loss to failure to gain weight and wasting of cheeks, buttock and fat pads (Okereke, 2005). Through growth monitoring mothers can be taught on ways of improving the nutritional level of their children. Robinson (1995) stated that the common general signs a health worker should observe to identify a severely sick child is the

child; has had convulsion in the course of the illness; is unconscious or lethargic; vomits everything he or she eats; and is unable to drink and breastfeed. They should also check for cough and difficulty in breathing; diarrhea; fever and measles and nutritional status. Robinson (1995) further suggested that Health workers should have simple routine for looking for the most important causes of severe illness and identifying emergency treatment with checks for cough and difficult breathing; diarrhea; fever and measles and; nutritional status. Thyroid diseases and sickle cell diseases can also be diagnosed through newborn screening tests (Agency for Health Research and Quality AHRQ, 2004).

Children are particularly vulnerable to the effect of malnutrition especially during the weaning period. Malnutrition makes the child more susceptible to infection, recovery is slower and mortality is higher. Normal growth and development of children requires good nutrition which depends upon adequate intake of food and proper nutritional habits. The quality of food and the amount of valuable micronutrients it supplies contribute to improved child health. Turmen (2006) stated that malnutrition contributes directly or indirectly to 60% of the more than ten million child deaths each year. Ashworth and Khanum (1996) observed that too often when a child growth starts to falter, no action is taken, until his or her weight falls into the malnutrition zone and the poor clinical state of severely malnourished children and complications such as dehydration make treatment difficult and demand much staff time. Therefore, health care providers should instruct clients how best to use foods and maintain a healthy diet for pregnant women, breastfeeding women, infants and children 0 ï 5 years of age. Lawoyin, Onadeko and Kolude (2003) observed that malnourished children had significantly higher incidence of diarrhoea diseases and other infections than their well nourished counterparts, because malnutrition increases the risk of infection among under five children.

Breastfeeding is associated with improved growth, at least during the first few months of life and malnutrition is rare in this period if feeding is optimal. Exclusive breastfeeding for the first six months of life which was officially launched in Nigeria in 1992 has the dual advantage of improving the nutritional status of infants and reducing infant mortality and morbidity if encouraged (Lawoyin et al., 2003). This was supported by Okereke (2005), who also stated that breastfeeding provides the complete first food for infants and is one of the worldôs most valuable natural resource, which has a bacteriostic effect on E coli. All staff should be committed in promoting breastfeeding and should inform mothers (especially working mothers about the advantages of breastfeeding exclusively (6 months of age) and discourage bottle feeding and breast milk substitutes.

Dietary supplements are used to prevent nutritional deficiencies. There is need to provide guidelines on micronutrients for treatment of deficiency disorders, supplementation

(Vitamin A, Vitamin D, Iron, Zinc, and Iodine) and food fortification and their impact (WHO, 2004). Lucas and Gilles (2003) stated that Vitamin A deficiency has serious consequences on mortality and morbidity and giving supplements of Vitamin A to young deficient children helps in reducing death rates, complications and mortality in measles and reduces severity of diarrhea and respiratory diseases. Turmen (2006) stated that zinc, supplementation can reduce the incidence, duration and severity of diarrhea and acute respiratory infections and Vitamin A supplementation can help strengthen a childôs immune system and thus prevent death from infectious diseases. Vitamin A deficiency is a major cause of childhood blindness and an underlying factor in increased mortality from measles and diarrhea. Improving the Vitamin A status of deficient children significantly lower their risk of death by about 30 percent (Ghana Vast Study Team, 1993). The World Bank identified Vitamin A supplementation as one of the most cost-effective health intervention in all the public health (World Bank, 1993). According to Ojukwu, Njoku and Adedoyin (2003), dehydration which accounts for the majority of death in children with diarrhoeal disease can be prevented and corrected with the early use of oral rehydration therapy (ORT), instead of intravenous fluid therapy when it becomes severe. Knowledge about the importance of ORT by both health care givers and parents will consequently change the incidence and outcome of dehydration following diarrhoeal disease.

Health care providers, facilities and services for child health care require an elaborate description. According to Lucas and Gilles (2003), a skilled attendant at every birth is a doctor, midwife or nurse who has learnt the skills necessary to manage normal deliveries and diagnose or refer obstetric complications. Delivery may be in maternity centres, clinics and hospitals or home delivery provided that the person attending the delivery has adequate training and equipment and that referral to a higher level of care is available in case of complications. Health workers are the most important group for saving lives of very sick children with preventive measures early diagnosis and treatment. PughMathis and Imershein (1995) stated that child health programmes includes: information, education and counselling, early and continuous prenatal care; risk assessment; treatment or referral of complications and minor diseases; premature labour prevention, home visits for high risk clients; routine labouratory services and coordination with other health units and community programmes. WHO (2004) stated that organization of work in health facilities should put into consideration factors such as: responsibilities of health personnel (Job description); categories and type of health facility (flow of patients), and use of parenteral drugs, administration of antibiotics, ORT, and counselling on feeding.

Okolo, Ogbonna, and Bode-Thomas (2002) stated that the ability to deliver the best quality care to patients depends on a chain of health care workers who are independently

responsible for the quality of their specific jobs which helps in avoiding delay in rendering medical services. This is because delay may lead to worsening of illness, death or permanent disability if patient recovers. Additionally, health care providerôs training (pre-service and in-service training) with academia in integrated management of childhood illnesses (IMCI) and access to providers trained in IMCI who is regularly supplied with drugs for treatment and prevention of case fatality rates of children under five years are considered (WHO, 2004). WHO (2004) also observed that main providers of health care and their role in child health includes the two main categories of public parastatals and private sectors such as medical services run by the ministry of health, ministry of defense and other ministries, universities, health insurance, government run companies, and private sector players. Thind (2004) opined that quality of the public facilities and quality of the private facility was defined as good if ORS was available and poor if it is unavailable. Robinson (1995) identified two levels of care as follows:

1. First level of primary health facilities (i.e. first level of health services for children). This includes health centres, clinics, health posts, dispensaries and out patient department of hospitals where treatment should be started so that a childôs condition does not get worse if referral is delayed; and
2. Referral facilities (secondary care) which is comprised of hospitals with impatient beds, equipment, supplies and trained medical staff for treatment of severely ill patients. (p. 4)

Referral facility is required in the course of pregnancy and delivery to deal with obstructed labour and haemorrhage that requires skilled intervention to save the life of the mother and her baby. The first referral should be equipped to carry out emergency obstetric care which includes: surgery blood replacement and neonatal special care (Lucas & Gills, 2003). Robinson (1995) added that referral can be given when a child has severe pneumonia, severe dehydration, severe measles and severe malnutrition. It is important that very ill children are identified and referred immediately and are not detained unnecessarily in an observation area.

An effective emergency care according to Simkiss (2003), requires pre-hospital care and care at the hospital with staff to deal with all emergencies in a hospital environment by recognizing Shock (signs of shock) and signs of dehydration in children. Tamburlini (1996) observed three key aspects to providing appropriate emergency care for every sick child who reach hospital. According to him emergency care can be organized within hospital routine by identifying those who are very sick, setting apart emergency care ward, provision of essential equipment and drugs and standard treatment guidelines for common childhood illnesses. Also,

emergencies can be identified and treated with the four signs ABCD (A ï Airway, B ï Breathing, C ï circulation, and D ï neurological danger signs) which helps to identify life threatening conditions for emergency care. In addition, hospital staff should monitor, re-assess and modify treatment where needed (i.e. very sick children should be closely monitored based on the same A B C D signs, until clinical conditions stabilize).

Brewster (1995) noted that it is better to have an organized system for prioritizing waiting children and making sure that the most seriously ill are seen and treated urgently. It can be helpful that a child is brought to the front of the queue by hospital staff because of convulsion or other sign of deterioration during the waiting period. The queue can be watched from time to time to identify very sick children.

Laboratory investigations, an essential part of health care as observed by Cater (1996), provides a set of care tests to help in the treatment of the sick child. Clinical staff needs to be able to order tests appropriately and interpret results correctly with carefully chosen equipment. Moy (1998) observed that children often present with multiple symptoms (i.e. their symptoms may not be specific for one disease) making a single diagnosis impossible. A child with cough and fast breathing may have pneumonia, severe anaemia or malaria and a lethargic child may have severe dehydration, meningitis, severe pneumonia or cerebral malaria.

Therefore, an integrated approach, known as integrated management of childhood illnesses (IMCI) with a combination of therapies for several conditions is required with guidelines (training) for staff and essential drugs and supplies. WHO (2005) defined IMCI as an integrated approach to child health that focuses on the well-being of the whole child which aims to reduce death, illness and disability and to promote improved growth and development among children under 5 years of age. IMCI strategy addresses the principal causes of child mortality i.e. diarrhoeal diseases, acute respiratory infection, measles, malaria and malnutrition. With both preventive and curative elements, IMCI takes into account the variety of factors that put children at serious risk and ensures the combined treatment of the major childhood illnesses. Healthy Children Goal (2002) observed that IMCI helps to improve child health in hospitals by improving: the performance of health workers in the prevention and treatment of childhood diseases and the organization and operation of health services so that they provide quality care. It also improves family and community care practices through health education on disease prevention and child health promotion.

Lucas and Gilles (2003) added that IMCI was developed by WHO and UNICEF (United Nations Childrenôs Fund) in order to promote the right of children to health and health care and to improve practice in health facilities and homes. According to them, this approach involves a combination of: improved management of childhood illness; improved nutrition;

immunization; breastfeeding support; oral rehydration therapy, vitamin A and micronutrient supplementation; use of insecticide impregnated nets; and compliance with treatments. It is important that these services identify the high risk groups (i.e. children 0 ï 5 years).

Hakes (1995) stated that system of services depends on the quality of caregivers, communication between services coordinators and procedures that provides checks and balances for critical components. These collaborative planning includes fiscal efficiency through eliminating duplicative or overlapping programmes and process; family friendly, flexible and easily accessible services, and service continuity over time through establishing a system of transitional elements.

Health system planners facilitates improved service delivery and fosters a better understanding of access to health care both of which can reduce child mortality (Turmen 2006). Information about how to promote childrenôs health and development has been dramatically increasing, therefore, reducing medical errors of commission and omission and improving quality by relying on evidence-based medical approach and process of well-child care is required (Schor, 2004). It is an important duty of health personnel to educate individuals on the value of preventive services (e.g. immunization and environmental sanitation)

Proper co-ordination and improvement in child care services requires effective communication between parents and care givers. AHRQ (2004) noted that check-ups are good time for parents to ask questions and provide information about their childrenôs health history which may include the family history of diseases, operations and medications the child has had. This is because parents are the major source of information about their childrenôs health for many years (especially 0 ï 5 years). Therefore, systems devised to teach parents what to do if their children fall sick-how to look after them at home (e.g. use of ORT, sponging and avoidance of malnutrition), and where to go if they are ill and importance of following treatment advice are necessary.

Lucas and Gilles (2003) opined that simple remedies should be made available to parents for the treatment of common diseases of childhood. Mothers should learn how to prepare and administer ORT in cases of diarrhea and how to treat simple cuts and abrasions to prevent infection. Bethel, Reuland, Halfon, and Schor (2004) supported this idea by stating that guidelines recommend that paediatric clinicians provide anticipatory guidance and education to parents on topics related to promoting child health and development, injury prevention, nutrition counseling and sleep positioning. Bratt (1995), observed that due to lack of understanding of the need for referral, many families needs to be convinced through communication with better explanation of illness, why referral is necessary and what is likely to happen if referral does not take place. According to Graeff and Ahmed (1996), practical

communication includes the use of appropriate language by health workers and should be a part of their continuing education programme. They further recommended that improvement of communication will ensure that hospital staff develops clear policies on which health practice to promote with a list of approved health message on general and specific topic and time for effective communication by ensuring that they receive training in communication skills. Nursing supervisors should encourage nurses in communication.

Effective communication between caregivers and children is also extremely important. This is because children will be less scared and more able to cope if they understand their treatment. If staff are trained to understand the way children (even those who are unable to talk) communicate, they will be able to provide better treatment, including more appropriate pain relief and to fulfill their responsibility for safeguarding children (McGlynn & Halfon, 1998). Children also have a basic need for play which may be used as therapy, or distraction and a powerful means of communication. Play helps the child to understand what is happening and adjust to potentially frightening environment. Commission for Health care Audit and Inspection (2007) discovered the evidence that play speeds recovery and reduces the need for children to receive general anaesthetic while receiving certain forms of treatment.

Markel (2004) observed that all staff working with children has a statutory responsibility to make arrangement to safeguard and protect the welfare of children. Staff should have training on safeguarding and promoting the welfare of children by identifying appropriate locally provided courses which should cover technical, personal and communication skill necessary to treat children properly. It is also important that staff work with enough children every year to maintain their skills in treating them. Commission for Health care Audit and Inspection (2007) added that employers have a responsibility to ensure that all staff are made aware of arrangements for children's care in hospitals and their corporate and individual responsibilities in this area, with appropriate supervision put in place.

Different parts within the hospital need to work together to deliver and improve services for children. The hospital standard with regards to child health care services covers all departments and services that deliver care to children in hospitals; including children's wards or departments, and services where children are treated alongside adults (McGlynn & Halfon, 1998). It is often common to find that hospitals and health centres run general clinics on most working days, but schedule special clinics (immunization) for specific days. Commission for Health Care Audit and Inspection (2007) advised that the board of hospital trusts need to be sure that all the services that they provide to children are of high quality and clinically safe, have appropriate level of staffing, and are provided by appropriately trained staff who maintain their skill in surgery, life support and management of pain. These services should meet the

requirement for effective child protection which address the broader needs of children and are delivered in child-focused environment.

However, Markel (2004) observed that improvement in the standard of child health care services in hospitals will help to ensure that there is: improved performance of health workers when tending to children and improved knowledge on best practices for children in hospitals with guidelines for evaluating the care provided to children in hospitals. This will consequently lead to training courses to improve the quality of health care providers and improved organization and functioning of health care services for efficient good-quality care.

Quality measures can be used to evaluate a; managed care organization, health plan or programme; hospital; and health care practitioners (AHRQ, 2007). Health care quality measurement for children was defined by AHRQ (2007) as the process of using a scientifically sound tool to access the extent to which children are receiving quality health care in any of the institute of medicine. They went further to state that quality measurement is used for:

1. project management: overseeing functions to ensure that programme goals are met and resources are used effectively;
2. accountability: to demonstrate achievement of identified goals;
3. quality improvement: by tracking the impact of targeted interventions designed to improve health services; and
4. reporting result: to varieties of stakeholders and other audiences. (p. 1)

Commission for Health Care Audit and Inspection (2007) also stated that the categories of quality measures (structure, process, and outcome) as developed by Avedis Donabedian, a pioneer in the science of measuring health care quality can be used to measure child health care services. Process involves the appropriateness to which physicians and other providers carry out their activities to deliver care. Structure involves the resources and organization arrangement put in place to deliver care. Outcome includes the result of physician and other providersô activities (e.g. experience with health care or level of satisfaction with care).

Theoretical Framework

Awareness of and commitment to protecting the health of children and their nurturance has increased in recent decades with observational and empirical research by individuals and groups (Institute of Medicine, 2004). Theories by individuals such as Erik Erikson (Psychosocial theory), George C. Homans and Peter M. Blau (social exchange theory), and Icek Ajzen and Martin Fishbein (Theory of reasoned action) will help to create a theoretical

base for understanding the importance of childhood and need to develop and improve on strategies for childrenôs health and welfare.

Erikson believed that childhood is very important in personality development. Falkner (1980) posited that childhood is the most important age group in all societies, not because they constitute about 40 per cent of total population, but because of the renewed awareness that the determinant of chronic diseases in later life and health behaviour are laid down at this stage. According to Davis (1995), the stages in Eriksonôs theory is characterized by psychosocial crisis of conflicts between competing tendencies which is based on development from one stage to another with demands put on an individual by the society. Only if individuals negotiate with each of these huddles successfully can they continue to develop in a normal healthy manner. Crisis in each stage should be resolved in order for development to proceed correctly. The outcome of each stage is determined by experiences (good or bad) with mixture of traits attained at each stage. Personality development is considered successful if the individual has more of the good traits than the bad traits.

Since young children are vulnerable to social and health hazards which can retard or arrest their physical and mental development during these critical years, they deserve special attention by parents and other care-givers. The welfare of children is increasingly understood as a shared social responsibility and is influenced by, their families and social forces (Park, 2004). Children are the human resources of the future, so they need special attention. A complete understanding of the problems of children will help, prevent and treat diseases and promote adequate growth and development, through an organized health structure with delivery of comprehensive and continuous child health care services. Many low cost measures are available for saving the lives of children (e.g. Immunization, growth monitoring, breastfeeding, oral rehydration), otherwise more and more children may reach adulthood with their health already largely impaired. Some childhood conditions do not kill their victims, but cause serious disability (e.g., blindness, paralysis) and some diseases which become manifest later in life (e.g., heart disease and mental retardation). Therefore, childrenôs health, development and achievement requires the interest, guidance and protection of both families and societies in order to prepare them for the challenges of life as they grow and develop into adults for societyôs collective future.

Social exchange theory underlies the way people deal with others (Gleitman, 1996). People give something to the other and expect to receive something in return (e.g., buyers and sellers as in goods for labour or money). The theory holds that social behaviour consists of an exchange of activities between at least two people that are perceived as being more or less

rewarding to one another. An activity between individuals will continue if it is profitable to both parties. If one partner gives but receives nothing in return, the relationship will disintegrate sooner or later. This reciprocity principle is a basic rule that affects many aspect of social behaviour. People enter into social exchange because they derive rewards from doing so. In this process people either satisfy or dissatisfy each otherôs needs.

Child health care services are rendered by agents of health services for the purpose of promoting, maintaining, monitoring and restoring childrenôs health. In this case children are being served through diagnosis, treatment and education by health personnel. In most cases parents pay for these services with the intention of achieving their benefits for their childrenôs health promotion. Families with high expectations target preventive and medical services for their children in response to perception of signs and symptoms of diseases. Due to medical competence or incompetence, medical care delivery can make them healthy or less healthy than they were. Systems, of healthcare delivery can influence childrenôs health status by the way they are planned and implemented. A patient who has heard good things about a hospital from a former patient will probably find a way to go there for health care. As satisfied patients will tell others of their experiences, so also will dissatisfied patients. Therefore, parents will often find their way to hospitals where they can get full cooperation of health care-givers with regard to their childrenôs health care needs.

Theory of reasoned action has three general construct: behavioural intention; attitude; and subjective norm (Lezin, 2007). Hale, Householder, and Greene (2003) observed that the theory suggests that a personôs behavioural intention depends on the personôs attitude about the behaviour and subjective norms (B 1 = A + SN) where BI=behavioural intention, A=attitude, and SN=subjective norms. They described attitude as comprising beliefs about the consequences of performing the behaviour multiplied by the valuation of these consequences. Subjective norm was seen as a combination of perceived expectations from relevant individuals or groups with intention to comply with these expectations. That is, a personôs perceptions of what relevant people think about his or her performance. Lezin (2007) also observed that behavioural intent which is seen as the main determinant of behaviour can be understood by looking at a personôs attitude towards that behaviour as well as the subjective norms of people and groups that could influence such attitude.

Health system factors can influence childrenôs health status through direct impact of provided services on their state of health and illness. The ability of provided services to make children well after they have been sick and to keep them from getting afflicted with diseases and health problems is determined by how they are organized. The attitude of health care providers towards child health care and subjective norms about child health care will influence

health care providerôs intention with strategic plans for improvement in child health care in any health care setting. Considering the vulnerability and importance of children, health issues concerning them will influence care providerôs decision in structuring health care settings and provisions in order to meet their needs. The perception and opinion of important individuals (parents) will help to predict or influence the behavioural intention of care providers in their effort to achieve excellence in health care for children. Improved performance will correspond with the expectation of parents and the society that children should develop into healthy adults for societyôs collective future.

Hospital administrators can get a handle on what specific thing that needs to be improved in order to get the needed changes implemented, by a careful selection of the right process for improvement that will impact patient satisfaction the most (Fishbein, 2005). Patient safety improvement and quality of care (especially for children) should always be the foundation and core mission of care providers which can be communicated in the pattern of their dedication to their profession within each health care setting. Fishbein (2005) also noted that a true patient focused is achieved when every staff member has a commitment to excellent patient care and operational performance that is demonstrated everyday in practice and action. Evaluation of the effectiveness of health care is among the initiatives that can bring attention to improvement in health care and safety measures for children. Partnership with parents and health care, providers will help to provide essential components in quality child care by exploring and describing their perception of important child care provisions and their experiences of quality child care.

Objectives and Importance of Child Health Care

The word objective refers to a goal stated in general term (e.g. to reduce deaths in children under five years). According to PughMathis and Imershein (1995), child health programme is structured to provide preventive services for pregnant women, infants and young children including immunizations and nutritional programmes. It provides maternal and child health services which promotes traditional prenatal and infancy preventive programmes to improve pregnancy outcomes for high risk pregnancies and critically ill/low birth weight babies. Lucas and Gilles (2003) stated that the three major objectives of child health services are to:

1. promote the health of children and ensure that they achieve optimal growth and development both physically and mentally;

2. protect children from major hazards through specific measures (immunization, chemoprophylaxis, dietary supplements) and through improvement in the level of care provided by the mothers and the family; and
3. treat diseases and disorders with particular emphasis on early diagnosis in order to provide effective remedy at an early stage before dangerous complications occur. (p. 326).

Ensuring childrenôs health is critical not only for reducing child morbidity and mortality, but also for increasing the likelihood of healthier adult life (Meltzer, 2002). Therefore, the primary goal of child health services is to prevent the major causes of death, disabilities and disease during childhood (e.g. accidental injuries, infections, education and behavioural problems). Turmen (2006) discovered that the objectives of different types of research in child health are to:

1. describe the magnitude of the problem of epidemiology and identify the cases of child illness and death in different communities;
2. understand the determinants of childhood diseases;
3. design the most appropriate strategies to improve child health;
4. measure the effect of the implemented strategies and raise new research questions;
5. increase the effectiveness of child health interventions and services; and
6. analyse retrospectively and monitor prospectively the scaling up of child health and nutrition interventions (p. 13).

The burden of mortality from infectious diseases weigh most heavily on children in developing world where 70 per cent of all childhood deaths are attributed to five diseases or clinical syndromes: acute respiratory infections (ARI), diarrhea, measles, malaria and malnutrition (Campbell, Sow, Levine, & Kotloff, 2004). Through child health services, optimal growth and development in infancy and childhood by means of good nutrition, disease prevention, and health supervision will be achieved (Onuzulike, 2005). Lucas and Gilles (2003) observed that the child survival programmes that UNICEF and WHO spear headed have made significant contributions to the dramatic fall in child mortality rates in developing countries. The past decade have witnessed major improvement in the health of children throughout the world through interventions such as growth monitoring, oral rehydration, breast feeding, immunization, family planning and; supplementary feeding of pregnant women and children. A child is most vulnerable to the long-term consequences of contracting an infectious disease in the very early years of life. Vaccination is one of the sharpest weapons for cutting

into the vicious circle, and reducing the frequency and severity of setbacks to the normal growth and development of children in their most formative years (Tarag, Al-mazron, Al-Jefry, al-Shehri, Baldo & Farghali, 1995). Hakes (1995) stated that early, timely, responsive intervention for very young children with physical, biological or genetic conditions associated with disabilities and risk conditions helps in reducing later disability and prevents adverse conditions from interacting with growth and development. Action Now (1981) identified the following importance of child health services:

1. Maternal health is relevant to child health and immunization of women twice before the birth of the baby is sufficient to prevent neonatal tetanus.
2. Vitamin A and vitamin D deficiency diseases could be prevented through provision of needed nutritional supplements. This helps to avoid sufferings such as blindness and deformities caused by their deficiencies.
3. Deaths due to diarrhoeal disease could be reduced significantly by immediate application of ORT, giving young children chance to survive the crucial weaning period.
4. Systematic immunization against diphtheria, tetanus, tuberculosis, measles and poliomyelitis can effectively reduce the incidence of these diseases. This helps in avoiding death and disabilities due to childhood diseases (pp. 79 ï 80).

Lucas and Gilles (2003) identified the importance of special health services to women and children as a means which helps to:

1. identify the high risk groups for early intervention against adverse maternal and prenatal conditions and childhood diseases;
2. specify solutions for interrelated problems (i.e. intimate related health problems of mother and unborn child);
3. provide opportunities for prophylaxis through interventions which jointly protects pregnant women and their unborn babies (e.g. nutritional supplements and tetanus toxoid immunization during pregnancy);
4. encourage early diagnosis for early defection and treatment of complications which may lead to death of mother and child;
5. provide critical care during delivery with skilled persons to avoid risks during childbirth; and
6. ensure that continuity of care for a child is provided jointly with the care of the mother after birth (e.g. immunization and growth monitoring) (p. 319).

Institutional delivery has dramatically reduced maternal and infant mortality and is certainly preferred when available, accessible and affordable (Baldo, Al-Mazron, Aziz, Farag & al-Shehri, 1995). Improved prenatal care in maternal and child health centres, with closer supervision of high risk deliveries, helps to improve both maternal and new born prospects.

Factors Affecting the Provision of Child Health Care Services

Observation about a number of factors which hampers the achievement of the general objectives of child health care services has been made by various authors. Hakes (1995), observed that staff always want to do their best for children, but were hampered by a lack of staff system supports which cause delay for children in obtaining services. WHO (2004) observed that the management and organization of the health system, public or private may be disorganized leading to lack of coordination among vertical programmes and projects, duplication of effort with subsequent suboptimal utilization of available resources and inconsistency in technical guidelines among programmes. Challenges to delivering emergency care in poor resource settings are poor recruitment and retention of staff with lack of training, inadequate equipment and unsuitable work environment (Simkiss, 2005). Many caregivers of children work twelve months in a year for long hours, therefore, getting appropriate training and finding time to coordinate services for families or children is difficult. Schor (2004) identified the barriers to providing the preventive services that are recommended to include: time constraints; low level of reimbursement for preventive care and for developmental services; lack of training in child development and lack of trained non-physician staff members. Also identified are Limited access to community services to support families and children, and few external incentives.

These are the reasons why the needs of children and families for preventive and curative care are not being fully met. Lack of knowledge by workers of other programmes, rude service providers, and no systematic means of identifying, tracking and ensuring that infants and families receive what they needed over-time effects the provision of services (Hakes, 1995). Standard and quality in child health care may be difficult when pay is low, programme cost are high and parents who need early intervention or child care have limited resources.

Robinson (1995) observed that referral to hospitals may not always be possible due to lack of money for transport and for admission fee, and lack of understanding and faith in the services provided by the referral hospitals. The level of familiarity and confidence parents have with first level providers make them to take secondary facilities (hospitals) as waste of money. Robinson (1995) also observed that one of the problems which health workers face is that very

sick children often present with the same general signs of disease which do not point to a particular diagnosis. Therefore, diagnosis is not easy because there is considerable overlap in the signs and symptoms of several of the major childhood diseases.

Furthermore, Campbell (1986) stated that one of the main reasons for the failure of immunization is a break in the cold chain, allowing the vaccine to become warm and resulting in a loss of potency. Major problems are due to: refrigeration and transportation difficulties between the place of manufacture and storage centre, and peripheral clinics; and failure or fluctuation in power supplies to storage centres. Lack of cold packs or cold storage facilities at immunization centres, and lack of understanding by personnel at all levels of the need to maintain the cold chain right until the time of immunization, also contribute. Therefore, all vaccines must be stored under the correct conditions of temperature from the time of production to injection to remain active. After removal from refrigerator, the vaccine should be kept in an ice-pack and used within one to two hours depending on the temperature of the surroundings.

Hakes (1995) recommended that the establishment of comprehensive system of self development for staff which provides for pre-service and in-service training to be conducted on an interdisciplinary basis is necessary. This will help to promote holistic, compatible services that ensure the range, flexibility and depth of services needed by the child and the family, if they need multiple services. Better collaboration and coordination of programmes requires enormous amount of energy in meetings; training of staff in multiple rules, regulations and practice and more elaborate and complicated administrative system to ensure that each programme can meet their guidelines when coordinating functions to meet regulations of multiple programmes (Hakes, 1995). According to WHO (2004), development of human resources for child health care merits a place as human resources are the back bone of any health system, which must rely on its work force competence, motivation and effectiveness to deliver quality services. This includes: number and distribution of health providers by categories; motivation schemes to attract and retain health providers (e.g. certificates, awards, financial incentives); priority areas for in-service training, and database of trained staff.

To be of benefit, child health care must be available and accessible in an ongoing and routine fashion. Access to care and improvement in care are essential in order to accomplish the screening and preventive care, as well as to ensure that children receive treatment for both acute and chronic illnesses (Meltzer, 2003). There is need to use medical check-ups as an opportunity to provide necessary information and promote effective preventive measures. Meltzer (2002) also suggested that the important task of establishing an emergency medical service system for children is necessary in order to implement medical service plans

systematically with reformed medical treatment fees and government subsidies. Schor (2004) observed that a preventive services flow sheet for providers on which the provision of preventive services can be documented, serves as an effective prompt to remind staff members what service ought to be provided at a given visit. According to Simkiss (2005) coordinated and collaborative approach is required with outcomes improved through support of health workers, structured clinical care for children and better use of existing resources. Appropriate plans needs to be made to encourage improvement in institutional delivery with facilities and services upgraded to encourage proper delivery of child health care.

Studies on Child Health Services

The sensitive nature of child health attracts many researchers towards its direction, therefore, studies abound in child health care. These studies were made in specific areas of child health care services that are related to the present study. The documentations of the studies are as follows:

Turmen (2006) identified four areas of research findings which have led to significant improvement in child health. The areas are: diarrhoea management, breastfeeding promotion, prevention of mother to child transmission (MTCT), and remedying vitamin A deficiency (VAD).

Diarrhoeal diseases are among the major cause of death in children who may experience as many as 10 episodes of diarrhea per year. In the past twenty years, child death from diarrhea decreased from 4.6 million to 1.3 million following the discovery of the efficiency of ORS. Continued research resulted in wider application of ORS and training of health workers and others to allow ORS administration in the field.

The global community recognized breastfeeding as the primary nutritional support, for infants and young children. In 1900ôs, social change resulted in wide spread use of breast milk substitutes. By the 1970ôs studies confirmed the important role of exclusive breastfeeding in reducing infant and childhood illness and death. The hazards of artificial feeding for infants include increased risk of infection and malnutrition.

In the last two decades studies revealed that an estimated thirty percent of HIV-infected women transmitted HIV to their new born babies which would have been reduced by number of interventions. In high income countries anti-retroviral (ARV) drugs administered prior to and during delivery, in addition with increasing caesarean section deliveries and use of replacement feeding succeeded in reducing MTCT to less than two percent of children born to HIV ï infected mothers.

VAD is a major cause of blindness in children and an underlying factor in death from diarrhea and measles. In the 1980ôs, research found that children with eye infections linked to Vitamin A died at a higher rate than their peers. Further investigation concluded that supplementation of vitamin A in deficient children lower their risk of death by eighty percent. This has led to the global recognition of the peril of VAD and of vitamin A supplementation as one of public healthôs cost effective interventions.

Baldo, Al-Mazrou, Aziz, Farag and Al-Shehri (1995) in their study of the coverage and quality of Natal and postnatal care in Saudi Arabia described the services with high coverage judging by the high level of utilized care and physicians involved. They discovered that delivery facilities were used by seventy six per cent of women with 61 per cent of deliveries assisted by physicians, twenty nine per cent by nurses and home deliveries were fourteen percent. Eighty eight percent of women reported for postnatal check up, seventy three percent of which was by physician and thirteen per cent by nurses.

Campbell, Sow, Levine and Kotloff (2004) in a study conducted in Bamako, Mali to determine the causes and consequences of hospital admission and death among children discovered that mortality rate due to infectious diseases among hospitalized children recorded in private and public hospitals and clinics was seen to exceed that reported for united states children in 1915 (100 per 1000 live births), prior to the availability of antibiotics, immunization and modern sanitation systems. They discovered that 113 per 1000 children die before first birthday and additional 130 per 1000 die aged one to four years among children in Bamako and only thirteen per cent and one percent respectively of all deaths in these age strata occur in hospital. The most common causes of death in hospitalized children in Bamako were found to be infectious diseases (fifty per cent) and infections (seventy per cent) of all non perinatal deaths.

Ertein, Cakmak, Saka and Ceylan (2004) in their study to determine the extent of neonatal tetanus (NNT) in the south eastern region of Turkey discovered that the infants studied were delivered by the help of unqualified midwives to mothers who did not receive any tetanus vaccine during pregnancy. According to the study neonatal tetanus also abound in the cities with all the NNT cases born without professional help at delivery, in spite of higher vaccination coverage and delivery facilities available in the city centres. Among the fifty six cases of NNT studied, thirty eight cases died (70.4 per cent) and thirteen cases (46.4 per cent) survived. Antenatal care, tetanus immunization, birth attendance with good nursing care and better management with quality tools of intensive care was found to reduce the mortality rate due to NNT to twenty per cent.

Necil, Zafer, Ayten, Ayse and Fadil (1996) in their study to examine the effect of maternal immunization in pregnancy for protection against neonatal tetanus of infants and for specific antibody responses in infants to tetanus toxoid immunization, noted that administration of two doses of tetanus toxoid to women during pregnancy will provide passive immunity of infants against tetanus before administration of DPT vaccine. They observed that before primary immunization with DPT, serum tetanus antitoxin higher than protective level of 0.1 was found in 100 per cent infants of mothers immunized during pregnancy and thirty one per cent of infants born to non immunized mothers had serum tetanus antitoxin in litres below the protective level.

Emodi (2002) in an article to highlight various approaches to prevent or reduce mother-to child-transmission (MTCT) of HIV during pregnancy and breastfeeding, noted that the reduction of MTCT to less than two per cent has been reported in Europe and United States with the use of antiretroviral drugs by the woman and the baby, avoidance of breastfeeding and elective caesarean section. She stated that the same percentage can be achieved in developing countries if necessary changes are made in health care policies.

Okolo et al. (2003) in their study of the immunization status of children in rural communities of Sokoto State discovered that immunization coverage of children in nine communities randomly selected is by far lower than the current national coverage level for each of the vaccination. In this study, only seven per cent of the children where fully immunized, while the partially immunized and not immunized at all are 73.9 per cent and 19.1 per cent respectively. Reasons identified for these results includes: poor community mobilization and health campaign by health personnel; lack of logistic support for procurement and storage of vaccine (there is no electricity supply in the communities).

Thind (2004) in a study to establish the determinants of health service use by children in rural Bihar noted that Bihar has one of the highest proportions (28 per cent) of children having no immunization whatsoever. The percentage is better than the former study. The study added that sixty percent of all villages do not have any medical facility, forcing people to travel outside their villages to seek medical care. Twenty per cent have only one medical facility for the entire village, while twenty per cent can be described as having plurality of choice, with two or more medical facilities available. In this situation, mothers only seek medical care considering the seriousness of ill health. Children with respiratory illness (21 per cent) and those with both respiratory illness and diarrhea (38 per cent) are more likely to use services, compared with children having diarrhea alone. This is because of increased self treatment of diarrhea by mothers with home made or sachet ORS.

Farag et al. (1995) in a study to determine the immunization coverage level against the six killer diseases of childhood, observed that national immunization coverage by all of the six vaccines reached eighty six per cent, while partially immunized and non-immunized were fourteen per cent and one per cent (five out of 1100 infants) respectively. This finding is different from that of Okolo et al. (2003). According to the study; immunization coverage used to be very low in Saudi Arabia, but improvement was attributed to the establishment of primary health care (PHC) in 1983 with 1700 health centres distributed all over the kingdom and Royal degree which made immunization mandatory for obtaining birth certificate with active involvement of mass media.

Taffa, Chepngena and Amuyunzu-Nyamongo (2005) in their study to assess determinants of child morbidity and health care utilization among slum residents in Nairobi city Kenya reported that 51.5 per cent sick or injured children often receive homemade medications and drugs purchased over the counter. The caretakers (71.2 per cent) believe that child illness was not serious enough to require medical attention or they have financial or transport constraints (18.1 per cent) to seek health care. They added that poor access to public health facilities made expensive private for profit facilities that operates informally, using ill-trained personnel to serve as alternative sources for health care services in communities. They further recommended that partnership with private health care providers to increase access to services must be balanced with proper regulation of their operations.

Thind (2003) conducted a study to examine determinants of utilization of childrenôs health services in Dominican Republic. The study recognized diarrhea as a leading cause of paediatric morbidity and mortality in the Dominican Republic where it is responsible for more than half the deaths in infants under one your of age. Duration of illness (more than two days), location (urban dwellers use services more than rural dwellers), distance (i.e., travel time to the nearest source of care) and maternal education (educated mothers are 4.04 times greater than uneducated mothers) were found to be significant predictors of private sector rather than public sector utilization.

Ojukwu, Njoku, and Adedoyin (2003) conducted a study to expose the impact of ORT on childhood diarrhoeal disease in the Diarrhoea Training Unit (DTU) of the University of Ilorin Teaching Hospital. The study observed that increased awareness of benefits of ORT by mothers who commenced the treatment at home early enough has led to the reduction of severe dehydration in children with diarrhea disease. The study also observed that the use of ORT at home before presentation at health facility improved from six per cent in 1993/94 to twenty two per cent in 1997/98. Additionally, severe dehydration was seen in eleven per cent of the cases in 1993/94 and five per cent was seen in the 1997/98 group.

Nweneke, and Eneh (2004) conducted a study to investigate the role of malaria in neonatal morbidity and mortality in Port Harcourt. They discovered that malaria has a case prevalence of 35.71 per cent and eighty per cent of all neonates with fever have blood film for malaria parasite. This is contrary to the believe that malaria is so uncommon in neonates and does not merit special investigation (routine screening). Therefore, prompt diagnosis and treatment is required to reduce the risk of death from complications of malaria such as anaemia.

Ibeziako and Ibekwe (2002) in their study which describes the patterns, outcome and effectiveness of admissions in the paediatric emergency room of the University of Nigeria Teaching Hospital, Enugu, observed that life threatening medical emergencies contributed to 93.5 per cent of all presentations. Surgical emergencies were found to contribute to 6.1 per cent while the remaining 0.4 per cent was cold cases. The commonest medical emergencies identified are febrile convulsion (22.5 per cent), severe malaria with heart failure and anaemia (18.4 per cent), sickle cell anaemia (7.6 per cent) acute respiratory tract infection (16.1 per cent), bronchial asthma (5.2 per cent) and diarrhoeal diseases (12.3 per cent). The recorded principle causes of death are severe malaria with anaemia (30 per cent), acute respiratory tract infection (19.3 per cent), severe dehydration and shock due to gastro-enteritis (10.9 per cent), complications of sickle cell anaemia (7.6 per cent), acute neurological conditions (7.4 per cent) and neonatal deaths (10.4 per cent).

Oyedeji and Oyedeji (2003) in their study to determine the trends in the patterns of injuries responsible for hospital admissions over a period of fifteen years discovered that accidents and injuries are major causes of morbidity and mortality in children. They found that injuries accounts for 5.1 per cent of total paediatric admissions and 5.4 per cent of deaths. The major injuries discussed in their study are fractures, burns, poisoning, soft tissue and head injuries which constitutes to 36.5, 23.4, 13.3, 12.2 and 10.6 per cent respectively of the total 1,249 total injuries reported. Motor vehicle accidents were responsible for 85.6 per cent fractures soft tissues and head injuries, while hot water caused 52.1 per cent of all burns and 36.7 and 24.7 per cent are of poisoning due to kerosene and traditional mixtures respectively. Mortality rates were 9.2 and 12.7 per cent respectively for burns and poisoning both of which contribute to 71.6 per cent deaths due to injuries.

Okolo, Ogbonna and Bode-Thomas (2002) in the study to audit and intervene in the poor timelines of health services delivery in an emergency paediatric unit (EPU) of Jos University Teaching Hospital noted that the overall excess time from arrival to being seen by a doctor was 133 ± 121.8 minutes. Sixty percent of this excess time was the time between retrieving the patientôs folder and actually being seen by the doctor. Following interventions,

the excess time was significantly reduced from 133 ± 121.8 minutes to eighty nine minutes and eight minutes subsequently. Increase in doctorôs strength and the ability of doctors and nurses to prioritize cases by determining a childôs emergency status, help to reduce waiting time, offering the possible reduction in serious morbidity and mortality or a permanent disability.

Ezenduka (1989) conducted a study to determine child health services provided in the institute of child health, University of Nigeria Teaching hospital (UNTH), Enugu, with thirty six health workers of the institute. The findings included the availability of services as follows: Growth monitoring (100 per cent); Immunization services (100 per cent); Health and nutrition education services (diarrhea ï 88.89 per cent, protein-calorie malnutrition 86.11 per cent and refuse disposal 26.22 per cent); and curative services (100 per cent). She recommended that the services should be maintained with necessary equipment, funding and supervision.

Commission for Health Care Audit and Inspection (2007) in their study to determine the improvement of services for children in hospitals discovered that a small number of hospitals could not provide assurance that they had appropriate cover for serious paediatric emergencies. Specifically, it was found that of the 248 hospitals that provided emergency, impatient or day care to children: 10% had insufficient on site cover for serious emergencies; and 12% had insufficient overall cover (including consultant support by staff trained in advanced paediatric). They also found that majority of individual services that children use did not meet the recommended standard of 50% trained nurses.

Radolph, Fried, Loeding, Margolis and Lannon (2005), in their study to determine organizational characteristics and preventive services delivery in private practice with a cross-sectional study of 44 private medical practices in North Carolina discovered that practices demonstrated low level of preventive service performance, with substantial variation among practices. Among the 60 randomly selected children, they found that only 30% received 3 of the 4 recommended preventive services and few practices demonstrated evidence of systematic approach to prevention. Also, only 12 (27%) of the 44 practices used > 1 of five recommended preventive service delivery strategies. Furthermore, they found that practices vary greatly with respect to many of the measured organizational characteristics, which were consistent with organizational stress in some cases.

Summary of Literature

Literature has shown that child health care is comprised of services which focus on the well being of children from conception in order to prevent diseases, disabilities and death and for their optimal growth and development (Hetch & Shiel, 2006). Important components of child health services as shown with literature include: maternal health as it concerns child

health; neonatal special care, immunization; growth monitoring observations and screening tests; curative care; emergency care; nutrition; and the responsibilities of health care providers and facilities (WHO, 2004). These components provided guide for this study.

Literature helped to identify and describe some theories that illustrated the importance of developing and improving strategies for childrenôs welfare. These theories includes Eric Erickson psychosocial theory (Davis, 1995), George C. Homans and Peter M Blaus social exchange theory (Gleitman, 1996) and Icek Ajzen and Martin Fishbein theory of reasoned action (Lezin, 2007 and Hale, Householder and Greene 2003). These theories helped to emphasize the need for health care providers to show commitment to improvement in the quality of care for children.

Literature has also shown the objectives (Lucas & Gilles, 2003) and importance (Action Now, 1981) of child health services as well as the factors which effect child health services (Schor, 2004) with suggestions made on need for improvement in quality of care (Meltzer, 2003). Finally, studies have been carried out in child health care services; especially in specific areas of child health care at different geographical locations but none has been seen on evaluation of health care for children in health facilities in Nsukka Urban. It is understandable that studies conducted in other locations cannot be identified completely with the one conducted in Nsukka Urban. This extremely suggests the need to conduct a study on evaluation of child health care services in health facilities in Nsukka urban to fill the gap.

CHAPTER THREE
Methods

This chapter presents description of the research design, population, sample and sampling technique, instrument for data collection, method of data collection, and method of data analysis which were used for the present study.

Research Design

In order to accomplish the objectives of this study the cross sectional survey research design was adopted. British Dental Association (2007) defined cross sectional survey research as a method used to gather information from representatives of a population, with the intention to describe current practice or to evaluate a programme or activity in which the participants have been involved. Levine (2006) stated that cross sectional studies are usually conducted to estimate the prevalence of the outcome of interest for a given population commonly for the purpose of public health planning. Cross sectional survey provides a snap shot of a situation in a population, and the characteristics associated with it at a specific point in time. This is in line with the observation of Thomas and Nelson (1990) that the purpose of survey is to reveal current state of a condition and to show the need for change.

The cross sectional survey research design was considered appropriate for the present study because it was successfully used by Obilom (1993) to evaluate the role of Anambra State environmental sanitation authority in the disposal of refuse in Enugu and Onitsha urban areas. The design was also successfully used by Agbaje (2006), to study constraints to provision and utilization of basic water supply and sanitation facilities in Nsukka.

Population for the Study

The population for this study is comprised of 106 personnel in the four public hospitals and 282 personnel in the twenty six private hospitals and health centres in Nsukka urban, with regard to staff strength-records of public and private hospitals respectively. Childrenôs representatives (women of child-bearing age) will also be part of the population. Hospital records showed that a total of 1833 children registered in public health facilities, and a total of 2750 children registered in private health facilities for child health care from January to July 2007. It is however estimated that for public and private hospitals 1730 women and 2570 women of child bearing age respectively visit hospitals and health centres for their childrenôs health care. Therefore, a total number of 388 hospital personnel and 4300 women of child-bearing age constituted the population for the study.

Sample and Sampling Technique

A sample of 43 and 113 personnel was used for public and private health facilities respectively. Also, a sample of 173 and 257 women of child bearing age was used for public and private health facilities respectively. Simple random sampling technique of balloting without replacement was used to select 13 (50%) hospitals from the twenty six private hospitals for study. All the four public health facilities were used for the study. This is to ensure true representative of the health facilities. Simple random sampling technique of balloting without replacement was used to select 156 (40%) health care providers from both private and public health facilities. Simple random sampling technique of balloting without replacement was also applied to select 430 (10%) women of child-bearing age who visit public and private health facilities for their childrenôs health care. This follows the role of the thumb principle of Nwana (1990), which suggest that if the population is a few hundreds, a 40% or more sample will do; if many hundreds, a 20% sample will do; and if several thousands, a 5% or less sample will do. Furthermore, proportionate stratified random sampling with the ratio of 3:8 and 2:3 of personnel and women of childbearing age was used respectively for public and private health facilities.

Instrument for Data Collection

The questionnaire was used as the instrument for data collection. The questionnaire was constructed following a thorough review of literature and the established standard for child health care services. Since childrenôs representatives (mothers) and health care providers participated in this study, two questionnaires (one for mothers and the other for care givers) were developed for data collection. The questionnaire for mothers is comprised of numbers 1-8 questions. Indicators to measure performance (e.g., High efficacy, Moderate efficacy, Low efficacy, No efficacy for immunization services) in relation to standard were created for mothers which helped to discover the contribution of child health care services in health facilities on childrenôs health status and identify key areas requiring improvement in child health care. The questionnaire for health care providers involved two Sections A and B. Section A involved questions on problems that affect adequate provision of child health care with responses ñYesò and ñNoò to indicate agreement or disagreement. Section B involves questions on strategies for improvement in child health care services also with responses ñYesò and ñNoò to indicate agreement or disagreement.

Validity of instrument.

The face and content validity of the research instruments was established through expert advice of the project supervisor, and judgments of five lecturers: three in the Department of Health and Physical Education and two in the Department of Science Education. This was because they have had wide experience in research process.

Reliability of instrument.

The reliability coefficient of the research instruments was determined using Test-retest method for motherôs questionnaire and split-half method for health care providerôs questionnaire and correlated using Kuder Richardson 21 (KR-21) formula.. The test items for motherôs questionnaire were tested using twenty participants and a reliability of .78 was achieved after computation. The questions for health care providers was divided into two equal halves (odd numbered items and even numbered items), and using twenty participants the reliability coefficient of .84 was obtained. This is high enough with the suggestion of Ogbazi and Okpala (1994) that an instrument is considered good if the criterion is up to .60.

Method of Data Collection

In order to facilitate access to the area of study, and to obtain maximum co-operation from the respondents, a letter of introduction from the Head, Department of Health and Physical Education was presented to the directors of each of the health facilities visited. The distribution and collection of the questionnaire was enhanced by the training of eight research assistants after which the best four were used. The research assistants were trained to be familiar with the contents of the questionnaires, manner of approach and the location of the health facilities. The questionnaires were distributed and collected on the spot by the researcher and her assistants.

Method of Data Analysis

The result of the evaluation of child health care provisions was based on a score of four-point scale ranging from high efficacy, moderate efficacy, low efficacy, and no efficacy (for immunization services) i.e., 4, 3, 2, and 1, which will be assigned to each of the services provided for children. The responses ñYesò and ñNoò was assigned to each of the administrative problems and strategies for improvement respectively. The responses on the completed questionnaires were coded and data analyzed on an item-by-item basis, using arithmetic mean and percentages for the research questions and t-test statistics for the hypotheses.

The criterion-mean score for the study was obtained by adding all the scores assigned to the response options and dividing the sum by the number of the responses as follows.

$$\frac{4 + 3 + 2 + 1}{4} = \frac{10}{4} = 2.5$$

Therefore, for the purpose of description and answering the research questions, a mean score of 2.5 and above indicated that a service is efficacious, effective, reliable, useful and consistent and that staff that provide child health care are competent. The reverse was the case if the mean score is below 2.5. Frequencies and percentages were used to interpret the scores obtained for the research questions on the administrative problems and strategies for improvement. A percentage of 50 and above was considered agreement and a percentage of below 50 was considered disagreement. The null hypotheses 1 ï 3 was verified at .05 level of significance using the t-test statistics.

CHAPTER FOUR

Results and Discussion

This chapter presents the findings of the study in tables, according to the research questions and hypotheses. The findings of the study were discussed and summarized after the table presentation.

Research Question 1

How efficient are the immunization services provided in public and private health facilities in Nsukka urban? Data answering this research question are contained in Table 1.

Table 1

Efficiency of Immunization Services in Health Facilities in Nsukka Urban (N = 408)

S/No	Efficiency of Immunization Services	$\bar{x}$	Decision
1.	Tetanus	3.67	Efficient
2.	Tuberculosis	3.71	Efficient
3.	Diphtheria	3.67	Efficient
4.	Poliomyelitis	3.65	Efficient
5.	Measles	3.60	Efficient
6.	Whooping Cough	3.59	Efficient
7.	Yellow Fever	3.64	Efficient
8.	Hepatitis	3.67	Efficient
	Overall $\bar{x}$	**3.65**	**Efficient**

The result in Table 1 shows that all the immunization services provided in health facilities in Nsukka Urban were considered efficient (overall $\bar{x}$ = 3.65) by the respondents. This is because the mean ($\bar{x}$) ranging from 3.59 to 3.71 for the immunization services provided are above the criterion mean of 2.5. The immunization against tuberculosis attracted the highest mean of 3.71 while immunization for whooping cough obtained the lowest mean of 3.59 as can be seen on the table.

Research Question 2

How reliable are the growth monitoring and screening tests provided in these health facilities for children? Table 2 presents the data answering this research question.

Table 2

Mean Ratings of the Reliability of Growth Monitoring and Screening Tests Provided in Health Facilities for Children. (N = 408)

S/No	Reliability of Growth Monitoring and Screening Tests	$\bar{x}$	Decision
1.	Height and weight gain	3.57	Reliable
2.	Health condition	3.52	Reliable
3.	Visual and hearing capability	3.31	Reliable
4.	Mental capability	3.17	Reliable
	Overall $\bar{x}$	**3.39**	**Reliable**

Table 2 shows that the growth monitoring and screening tests provided in health facilities in Nsukka urban were considered reliable (overall $\bar{x}$ = 3.39) by the respondents. The growth monitoring and screening tests attracted mean scores ranging from 3.57 to 3.17, which is higher than the criterion mean score of 2.5. The highest score of 3.57 was assigned to its component of checking for height and weight gain while the lowest score of 3.17 was given to checking for mental capability.

Research Question 3

How effective are the curative health care service available for children on these health facilities? Table 3 presents the data for answering research question 3.

Table 3

Effectiveness of the Curative Health Care Services in Health Facilities for the Specified Health Conditions (N = 408)

S/No	Effectiveness of Curative Services	$\bar{x}$	Decision
1.	Malaria	3.46	Effective
2.	Diarrhoea	3.43	Effective
3.	Accidents	3.16	Effective
4.	Respiratory	3.24	Effective
5.	Tetanus	3.36	Effective

Overall $\bar{x}$	**3.33**	**Effective**

The result in Table 3 indicates that the respondents agreed that the curative health care services provided in health facilities are effective (overall $\bar{x}$ = 3.33) for improvement in the health of their children. The respondents most agreed for the curative care given for malaria with the highest mean of 3.46. The least mean of 3.16 was attributed to the curative care given for accident cases. However, the mean score obtained for each curative care is above the criterion mean of 2.5 as can be observed in the table above.

Research Question 4

How reliable are the emergency care services available for children in health facilities? Data answering this research question are contained in Table 4.

Table 4

Mean Ratings of Responses for the Reliability of Child Care Emergency Services in the Specified Situations (N = 408)

S/No	Reliability of Emergency Services	$\bar{x}$	Decision
1.	Newborn intensive care	3.68	Reliable
2.	Accident cases	3.20	Reliable
3.	Respiratory condition	3.25	Reliable
4.	Unconsciousness	3.33	Reliable
	Overall $\bar{x}$	**3.37**	**Reliable**

The results presented in Table 4 showed that the emergency care provided in the health facilities are seen to be reliable (overall $\bar{x}$ = 3.37) by the respondents. The table above indicates that their mean responses ranging from 3.20 to 3.68 were higher than the criterion mean of 2.5. The respondents mostly accepted that the emergency services provided for new born intensive care is highest (3.68), while that of accident cases were seen to be the least reliable with the mean score of 3.20.

Research Question 5

How useful are the nutritional services provided in these health facilities for children? Data answering this research question are contained in Table 5.

Table 5

Mean Ratings of the Responses About the Usefulness of Nutritional Services Provided in Health Facilities for Children According to the Specified Conditions (N = 408)

S/No	Usefulness of Nutritional Services	$\bar{x}$	Decision
1.	Reducing malnutrition in your child	3.48	Useful
2.	Bringing your childôs health condition to normal	3.51	Useful
3.	Promoting breastfeeding for your child	3.65	Useful
4.	The prevention and treatment of diarrhoea	3.48	Useful
	Overall $\bar{x}$	**3.53**	**Useful**

Table 5 indicates that nutritional services provided in health facilities are generally seen as useful (overall $\bar{x}$ = 3.53) by the respondents because their responses are greater than the criterion mean of 2.5. The table shows that the nutritional services were most useful in promoting breastfeeding for the children of the respondents with the mean of 3.65. The least mean of 3.48 was obtained from its usefulness of reducing malnutrition in children and the prevention and treatment of diarrhoea.

Research Question 6

How consistent are the health education services provided in health facilities for children? Table 6 presents the data answering research question 6.

Table 6

Consistency of the Expected Health Education Services Provided in Health Facilities for Children (N=408)

S/No	Consistency of Health Education Services	$\bar{x}$	Decision
1.	Improved nutrition for children	3.55	Consistent
2.	Environmental sanitation	3.40	Consistent
3.	Water purity	3.38	Consistent
4.	Exclusive breastfeeding	3.61	Consistent
5.	Injury prevention and control	3.35	Consistent
6.	Value of prevention services (e.g., immunization)	3.67	Consistent
	Overall $\bar{x}$	**3.49**	**Consistent**

Table 6 shows that the suggested health education services for children in health facilities were considered consistent (overall $\bar{x}$=3.49) by the respondents, having achieved mean ranging from 3.35 to 3.67, greater than the criterion mean of 2.5. The result also identified health education on the value of preventive services as the most consistent with the mean of 3.67. Health education on injury prevention and control attracted the least mean of 3.35, suggesting that less emphasis was placed on it.

Research Question 7

How competent is the staff that provides child health care in health facilities. Data answering the research question are contained in Table 7.

Table 7

Competency of Staff who Provide Care for Children in Health Facilities for Specified Situations (N=408)

S/No	Competency of Staff	$\bar{x}$	Decision
1.	New born intensive care	3.63	Competent
2.	Prevention of infections	3.50	Competent
3.	Maintenance of staff hygiene	3.48	Competent
4.	Maintenance of hospital hygiene	3.50	Competent
5.	Diagnosis of child health condition	3.38	Competent
6.	Rendering medical services	3.39	Competent
7.	Use of appropriate language	3.35	Competent
	Overall $\bar{x}$	**3.46**	**Competent**

The results presented in table 7 reveals that all the conditions for judging the competency of staff in health facilities were in their favour. The opinion of the respondents proved that hospital staff are competent (overall $\bar{x}$ = 3.46) in rendering care for the specified situation especially in new born intensive came which attracted the highest mean of 3.63. Staff was seen to be least competent in the use of appropriate language (3.35) during care delivery.

Research Question 8

What administrative problems affect provisions for child health care services in health facilities? Data answering this research question are contained in Table 8.

Table 8

Administrative Problems that Affect Provisions for Child Health Care in Health Facilities (N=138)

S/No	Administrative Problems	Frequencies		Percentages		Remarks
		Yes	No	Yes	No	
1.	Insufficient training in child health care and development	108	30	78.3	21.7	Agree
2.	Difficulties in diagnosis of childhood conditions	86	52	62.3	37.7	Agree
3.	Difficulty in treatment of childhood conditions	78	60	56.5	43.5	Agree
4.	Lack of understanding of the vulnerability of children by staff	69	69	50.0	50.0	Agree
5.	Poor recruitment and retention of staff that specialize in child health care	112	26	81.2	18.8	Agree
6.	Inadequate equipment	112	26	81.2	18.8	Agree
7.	Unsuitable work environment for children	80	58	58.0	42.0	Agree
8.	Time constraint	59	79	42.8	57.2	Disagree
9.	Rudeness of service providers	64	74	46.4	53.6	Disagree
s						
11.	High cost of care	105	33	76.1	23.9	Agree
12.	Limited resources of parents	112	25	81.2	18.8	Agree
13.	Lack of money for transport in case of referral	101	36	73.2	26.1	Agree
14.	Low level of reimbursement for preventive care (e.g. immunization)	84	54	60.9	39.1	Agree
15.	Lack of understanding and confidence by parents	95	43	68.8	31.2	Agree
	Overall %			**66.4**	**33.5**	

Table 8 shows that the problems of poor recruitment and retention of staff that specialize in child health care, inadequate equipment and limited resources of parents were seen as the most pertinent problems with the highest percentage of 81.2 each. While lack of understanding of the vulnerability of children by staff, time constraint and rudeness of service

providers (50.0%, 42.8% and 46.4% respectively) were not considered much of a problem by the respondents. The overall yes percentage of 66.4 indicates that health care providers accepted that the identified problems truly affect child health care services.

Research Question 9

What administrative strategies are used for improving child health care in health facilities? Data answering this research question are contained in Table 9.

Table 9

Administrative Strategies Used for Improvement in Child Health Care in Health Facilities (N=138)

S/No	Administrative Strategies	Frequencies		Percentages		Remarks
		Yes	No	Yes	No	
1.	Written policy for child health care strictly adhered to by hospital staff	110	28	79.7	20.3	Agree
2.	Documented preventive flow sheet for child health care providers	108	30	78.3	21.7	Agree
3.	Education of parents on preventive care	137	1	99.3	.7	Agree
4.	Pre service training for staff	121	17	87.7	12.3	Agree
5.	In-service training plan for staff working with children	130	8	94.3	5.8	Agree
6.	Standard treatment guidelines for common childhood illnesses	127	11	92.0	8.0	Agree
7.	Motivational schemes to attract and retain child health care providers	124	14	89.9	10.1	Agree
8.	Improved financial incentives for staff	128	10	92.8	7.2	Agree
9.	Support of clinical directors by government and voluntary agencies	133	5	96.4	3.6	Agree
10.	Reformed medical treatment fee in the case of children	118	20	85.5	14.6	Agree
11.	Emergency medical service system for children	134	4	97.1	2.9	Agree
12.	Trained staff onsite for serious emergency child care	107	31	77.5	22.5	Agree
13.	Separate waiting area for children appointment	91	47	65.9	34.1	Agree
	Overall %			**87.4**	**12.6**	

Table 9 shows that education of parents on preventive care (99.3), emergency medical service system for children (97.1) and, support of clinical directors by government and voluntary agencies (96.4) were mostly recommended for improvement in child health care by the respondents. In service training plan for staff working with children (94.3), improved financial incentives for staff (92.8) and standard treatment guidelines for common childhood illnesses (92.0) were also considerably recommended by the health care providers. The respondents attribute less interest in the use of separate waiting area for children appointment which achieved the least percentage of 65.9. However the overall percentage of 87.4 suggests that the respondents are familiar with the strategies for improvement in child health care.

Hypothesis I

There is no statistically significant difference between public and private health facilities in relation to the quality of services provided for children. Data verifying this hypothesis are contained in Table 10.

Table 10

Summary of t-test Analysis of Services Provided in Public and Private Health Facilities (N=408)

S/No	Items	$\bar{x}_1$	$\bar{x}_2$	t-cal	t-tab	Decision
	Immunization services					
1.	Tetanus	3.75	3.62	.050	1.96	Accepted
2.	Tuberculosis	3.81	3.64	.006	1.96	Accepted
3.	Diphtheria	3.69	3.66	.592	1.96	Accepted
4.	Poliomyelitis	3.71	3.61	.132	1.96	Accepted
5.	Measles	3.63	3.58	.054	1.96	Accepted
6.	Whooping cough	3.70	3.51	.007	1.96	Accepted
7.	Yellow Fever	3.69	3.61	.271	1.96	Accepted
8.	Hepatitis	3.71	3.64	.338	1.96	Accepted
	Growth Monitoring and Screening Tests					
9.	Height and weight gain	3.72	3.46	.000	1.96	Accepted
10.	Health condition	3.71	3.40	.000	1.96	Accepted
11.	Visual and hearing capability	3.51	3.17	.000	1.96	Accepted
12.	Mental capability	3.50	2.95	.000	1.96	Accepted
	Curative Health Care					
13.	Malaria	3.63	3.34	.000	1.96	Accepted
14.	Diarrhoea	3.62	3.30	.000	1.96	Accepted
15.	Accidents	3.46	2.95	.000	1.96	Accepted
16.	Respiratory condition	3.60	2.99	.000	1.96	Accepted
17.	Tetanus	3.62	3.17	.000	1.96	Accepted
	Emergency Health Care					
18.	Newborn intensive care	3.72	3.66	.244	1.96	Accepted
19.	Accident cases	3.35	3.09	.002	1.96	Accepted
20.	Respiratory condition	3.41	3.15	.001	1.96	Accepted
21.	Unconsciousness	3.47	3.23	.002	1.96	Accepted
	Nutritional Services					
22.	Reducing malnutrition in your child	3.68	3.34	.000	1.96	Accepted
23.	Bringing your child health condition to normal	3.66	3.41	.000	1.96	Accepted
24.	Promoting breastfeeding for your child	3.70	3.62	.208	1.96	Accepted
25.	The prevention and treatment of diarrhoea	3.61	3.38	.002	1.96	Accepted
	Health Education Services					
26.	Improved nutrition for your child	3.71	3.44	.000	1.96	Accepted
27.	Environmental sanitation	3.68	3.20	.000	1.96	Accepted
28.	Water purity	3.63	3.20	.000	1.96	Accepted
29.	Exclusive breastfeeding	3.75	3.51	.000	1.96	Accepted
30.	Injury prevention and control	3.68	3.12	.000	1.96	Accepted
31.	Value of preventive services (e.g. immunization)	3.82	3.57	.000	1.96	Accepted

$\bar{x}_1$ = Mean of services provided in public health facilities

$\bar{x}_2$ = Mean of services provided in private health facilities

Results in Table 10 indicate that for all the items, the calculated t-value ranging from .000 to .596 are not greater than the critical t-value of 1.96 (two tail test) at .05 level of significant and 406 degrees of freedom. Therefore, there is no significant difference between the services provided in public health facilities and private health facilities. The null hypothesis is accepted.

Hypothesis 2

There is no statistically significant difference between public and private health facilities in relation to the competency of staff that provide care for children. Data verifying this null hypothesis are contained in Table 11.

Table 11

Summary of t-test Analysis of Competency of Staff who Provide Care for Children in Public and Private Health Facilities (N=408)

S/No	Items	$\bar{x}_1$	$\bar{x}_2$	t-cal	t-tab	Decision
1.	Newborn Intensive Care	3.77	3.54	.000	1.96	Accepted
2.	Prevention of infection	3.67	3.38	.000	1.96	Accepted
3.	Maintenance of staff hygiene	3.67	3.34	.000	1.96	Accepted
4.	Maintenance of hospital hygiene	3.65	3.40	.000	1.96	Accepted
5.	Diagnosis of child health condition	3.54	3.26	.000	1.96	Accepted
6.	Rendering medical services	3.52	3.30	.000	1.96	Accepted
7.	Use of appropriate language	3.51	3.24	.000	1.96	Accepted

Table 11 reveals that the calculated t-value of all the items for the competency of staff in public and private health facilities is less than the critical t-value 1.96 at .05 level of significance. Therefore, the null hypothesis that there is no statistically significant difference between pubic and private health facilities in relation to the competency of staff that provide care for child is accepted.

Hypothesis 3

There is no statistically significant difference between public and private health facilities in the administrative problems encountered in the provision of child health care services. Data verifying this null hypothesis are contained in Table 12.

Table 12

Summary of t-Test Analysis of Problems Encountered in Public Hospitals and Problems Encountered in Private Hospitals (N=138)

S/No	Items	$\bar{x}_1$	$\bar{x}_2$	t-cal	t-tab	Decision
1.	Insufficient training in child health and development	1.35	1.16	.016	1.96	Accepted
2.	Difficulties in diagnosis o f childhood conditions	1.55	1.31	.007	1.96	Accepted
3.	Difficulties in treatment of childhood conditions	1.60	1.37	.012	1.96	Accepted
4.	Lack of understanding of the vulnerability of children by staff	1.65	1.44	.024	1.96	Accepted
5.	Poor recruitment and retention of staff that specialize in child care	1.28	1.15	.098	1.96	Accepted
6.	Inadequate equipment	1.10	1.23	.084	1.96	Accepted
7.	Unsuitable work environment for children	1.58	1.52	563	1.96	Accepted
8.	Time constraint	1.60	1.56	.679	1.96	Accepted
9.	Rudeness of service providers	1.58	1.52	.563	1.96	Accepted
10.	Low incentive to workers	1.38	1.14	.003	1.96	Accepted
11.	High cost of care	1.28	1.22	.531	1.96	Accepted
12.	Limited resources of parents	1.13	1.20	.277	1.96	Accepted
13.	Lack of money for transport in case of referral	1.28	1.28	.885	1.96	Accepted
14.	Low level of reimbursement for preventive care (e.g., immunization)	1.40	1.39	.895	1.96	Accepted
15.	Lack of understanding and Accepted confidence by parents.	1.20	1.36	.071	1.96	Accepted

The result in Table 12 reveals that none of the calculated t-values ranging from .003 to .995 is greater than the critical t-value of 1.96 for all the problems at .05 level of significance and 136 degree of freedom. Hence, the null hypothesis that there is no statistically significant difference between government and private health facilities in the administrative problems encountered in the provision of child health care services is not rejected.

Summary of Major Findings

The major findings of the study are summarized as follows:

1. Immunization services ($\bar{x}$=3.65) provided in health facilities in Nsukka Urban for children are efficient (Table 1).
2. Growth monitoring and screening tests ($\bar{x}$=3.39) provided in health facilities for children are reliable (Table 2).
3. Curative health care services ($\bar{x}$=3.33) provided for children in health facilities are effective (Table 3).
4. Emergency services ($\bar{x}$=3.37) available for children in health facilities are reliable (Table 4).
5. Nutritional services ($\bar{x}$=3.53) provided for children in health facilities are useful (Table 5).
6. Health Education services ($\bar{x}$=3.49) provided for children in health facilities are consistent (Table 6).
7. Staff who provide child health care ($\bar{x}$=3.46) in health facilities are competent (Table 7).
8. The identified problems (66.4%) affect the provision of child health care in health facilities (Table 8).
9. The recommended administrative strategies (87.4%) can be used for improvement in child health care (Table 9).
10. No significant difference (t-cal = .062 < t-tab = 1.96 p. > .05) was found between quality of services provided for children in public and private health facilities (Table 10)
11. No significant difference (t-cal = .000 < t-tab = 1.96 p. > .05) was found between competency of staff in public health facilities and staff in private health facilities (Table 11).

12. No significant difference (t-cal = .33 < t-tab = 1.96 p. > .05) was seen between public and private health facilities in terms of administrative problems that affect child health care.

Discussion of Findings

The findings of the study are hereby discussed under the following headings:

1. efficiency of services provided in health facilities for children;
2. reliability of the growth monitoring and screening tests provided in health facilities for children;
3. effectiveness of the curative services provided in health facilities for children;
4. reliability of the emergency services available in health facilities for children;
5. usefulness of the nutritional services available in health facilities for children;
6. consistency of health education services available for children in health facilities;
7. competency of staff who provide care for children in health facilities;
8. problems that affect the provision of child health care in health facilities;
9. administrative strategies for improvement in child health care in health facilities; and
10. differences in the quality of services, competency of staff and administrative problems of public and private health facilities.

Efficiency of the Immunization Services Provided in Health Facilities for Children

Results in Table 1 showed that the immunization services provided in health facilities is efficient (overall $\bar{x}$ = 3.65). These results indicate that health care providers are determined with the provision of this very important aspect of preventive care for children. Immunization services provided for children in health facilities is impressive enough, considering the large number of women who turn up with their children for the service on the specified dates in order to avoid the experience of the heavy burden of the diseases (e.g., paralyses, blindness, mental retardation and death). This however illustrates the fact that immunization services provided in health facilities are of immense help for improvement in childrenôs health status with the cooperation of mothers and assistance of health care providers. This fact is closely connected with the idea of social exchange theory that an activity between individuals will continue if it is profitable to both parties (Gleitman, 1996). Hospital staff understands that immunization services as a preventive care can be efficiently delivered to achieve an effect on childrenôs health.

The effectiveness of immunization services with improved health outcomes can be explained with the distribution of health facilities in Nsukka urban which makes the service highly reachable to children. This is extremely identifiable and contradictory to the findings of Thind (2004) that children in rural Bihar hardly have access to medical facilities, and therefore do not have adequate immunization. It rather agrees with the discovery of Farag et al. (1995) that national immunization coverage is high in Saudi Arabia as a result of the establishment of primary health care with 1700 health centres distributed all over the kingdom. The alarming rates of death (130 per 1000 aged one to four years) due to infectious diseases and infections discovered in children in Bamako (Cambell et al., 2004) may therefore not apply to children in Nsukka urban who have access to health facilities and immunization services that are efficient.

However, as Turmen (2006) stated that childhood diseases account for three out of five leading causes of premature deaths in the world today, immunization as one of the interventions mapped out for its reduction have substantially made a remarkable influence on childrenôs health in Nsukka urban. The efficiency of immunization services provided in health facilities in Nsukka urban is reasonable and commendable as can be observed with major reduction in children living with paralysis and blindness.

Reliability of Growth Monitory and Screening Tests Provided in Health Facilities for Children

Results in Table 2 reveals that the growth monitoring and screening tests provided for children in health facilities is reliable (overall $\bar{x}$ = 3.39) . The highest $\bar{x}$ score obtained for the reliability of the service for the detection of weight and height gain conforms to the recommendation of Lucas and Gills (2003) that the growth and development of every child should be monitored regularly at clinics in order to determine a child physical development, nutritional status, and the health condition. This result is considerable because children are often measured before routine immunization. Identification of poor nutrition and chronic infections as major implications of poor growth and development will help to determine accurate intervention based on early assessment. In this case mothers can be advised to improve on their childrenôs nutrition.

As Mancianx (1984) identified measurement of weight and height gain, health condition, motor and mental capability as readily available indicators of good health, accurate and early detection of a childôs deterioration in health is extremely considerable. This will help to ensure that early and timely intervention be employed for specific identifiable health condition in children.

Table 2 also shows that screening for a childôs health condition, visual and hearing capability and mental capability was described as reliable by the mothers. This illustrates the fact that health care providers conforms with the recommendation of Robinson (1995) that they should have simple routine for identifying illnesses especially the ones that requires emergency treatment such as difficulty in breathing, darrhoea, fever, measles and nutritional status. Health workers require the assistance of mothers for this important aspect of child health care to achieve a desired impact on childrenôs health. A Mother is expected to provide a reasonable description of her observations based on the health condition of a child. This will consequently provide guide on proper recommendations for appropriate screening that is reliable and, conforms to treatment for improvement in childrenôs health status.

Effectiveness of the Curative Services Provided in Health Facilities for Children

Data in Table 3 showed that curative services provided in health facilities is effective (overall $\bar{x}$ = 3.33). The observation of Schor (2004) that trend in childrenôs health status showed that their physical health is better than it has ever been explains the above situation. Child health is concerned with promoting childrenôs health and development and treating childrenôs diseases with the assistance of hospital staff. This explains the need for parents to show reasonable confidence in hospital staff who as has been shown are not ill disposed in their effort to provide comprehensive health care for children in health facilities.

However, Delone (2006) advised that regular medical attention is required for children with special health needs or experience acute or chronic conditions. This illustrates the need for hospital staff to continually examine the very sick children in order to modify treatments when the need arise until a childôs condition stabilizes because children may need multiple service. Effectiveness in the curative services provided for children in health facilities may be closely connected with the fact that hospital staff is observant and dutiful in their effort to reduce deterioration in childrenôs health status with combination of therapies. Special understanding and consideration of the vulnerability and importance children is critical to the fact that their curative health care should be effective. Therefore the behaivoural intent of health care providers to ensure effective care influenced by their attitude towards child health care suggestive of theory of reasoned action (Lesin, 2007) should influence their performance to impact on childrenôs health status. This result is reasonable and confirms the assumption that health care providers are familiar with the concept of IMCI, which comprises both preventive and curative elements and helps to improve their performance in the organization and operation of health services in order to provide quality care in health facilities. Additionally, children

deserve special attention by parents and health workers, so that their problems can be identified and understood for appropriate treatment to take place.

Reliability of the Emergency Services Available in Health Facilities for children.

Results in Table 4 indicates that respondents agreed that the emergency services provided in health facilities are reliable (overall $\bar{x}$ = 3.37). This finding contradicts the observation of commission for Health Care Audit and Inspection (2007) that a small number of hospitals could provide assurance that they had appropriate cover for serious emergencies. The result supports the suggestion of Meltzer (2002) that important task of establishing an emergency medical service system for children is important in order to implement medical service plans systematically. The result also conforms to the recommendation of Brewster (1995) that it is important to have an organized system for prioritizing waiting children so that the most seriously ill are seen and treated urgently. However, the delivery of a comprehensive and reliable emergency child care needs to be continuous in order to meet the expectations of parents and improve their confidence that immediate medical attention will be provided when they perceive signs of serious illness in their children. In this case emergency care ward is set apart with essential drugs and staff to deal with all emergencies and with special consideration for children.

Table 4 also showed that reliability of emergency services in health facilities in the case of accident yielded the least mean of 3.20. This result is substantial, but inappropriate because it subordinates the discovery of Oyedeji and Oyedeji (2003) that accidents and injuries are the major causes of morbidity and mortality in children. This is especially in situations where health care providers are not always able to identify and prioritize cases by determining a childôs emergency status. Reduction in waiting time especially in the case of accidents and injuries will help to achieve reduction in serious morbidity, mortality and permanent disability. Saving a childôs life should take precedence over every other thing in health facilities.

Furthermore, the highest mean of 3.68 obtained on the reliability of new born intensive care is plausible and encouraging, showing the extreme satisfaction and confidence of parents in care providers with regards to their effort in this essential component of child health care. In this case children in Nsukka urban are not supposed to be included in findings of Turmen (2006) that mortality rates among newborn infants remain stubbornly high in many countries because mothers lack care during pregnancy and childbirth and babies do not receive essential newborn care. Quality birth attendance with good nursing care is continually required with the

assurance that hospital staff are dedicated in their effort to reasonably achieve the confidence of parents in their ability to provide needed and timely assistance for children in need.

Improvement is however required in child health emergencies in order to reduce the possibility their health workers will disregard the present position they are placed as regards this important aspect of child health care. In line with the above assertions health workers are required to reduce possible hindrances that contribute to unreliable child care emergency services with appropriate vigilance and reasonable control over their resources which will suggest improved health outcomes for children.

Usefulness of Nutritional Services Available in Health Facilities for Children

Data in table 5 showed that the nutritional services provided for children in health facilities proved useful (overall $\bar{x}$ = 3.53) This finding is satisfactory because it will help to proffer solution to the observation of Turmen (2006) that malnutrition contributes directly or indirectly to 60% of the more than ten million child deaths each year. Instruction provided on how to maintain a healthy diet for infants and children 0 ï 5 years of age helps in the effort of care givers to reduce malnutrition and contributes to improved child health. However, the finding is contrary to the postulation of Ashworth and Khanum (1996) that no action is often taken by care givers until a childôs weight falls into the malnutrition zone with complications such as dehydration which makes treatment difficult. The findings will help to emphasize the commitment of health care providers to reduce the risks of exposing children to dangers of malnutrition using health talks and nutritional supplements.

The mean of 3.65 attributed to the usefulness of nutritional services in promoting breastfeeding is considerable as it explains the high esteem often placed on exclusive breastfeeding by health care providers. This finding further illustrates the observation of Lawoyin et al., (2003) that exclusive breastfeeding for the first six months of life has the dual advantage of improving nutritional status of children and reducing infant mortality and morbidity if encouraged. Therefore, the commitment of hospital staff will help to ensure that mothers are adequately informed and guided in their effort to breastfeed exclusively.

The finding also indicates that for nutritional services the lowest mean score of 3.48 was given to its aspect of reducing malnutrition in children and prevention and treatment of diarrhoea. The score is satisfactory but somehow opposed the observation of Ojukwu et al., (2003) that increased awareness of benefits of ORT by mothers who are expected to commence treatment early enough at home will lead to reduction of severe dehydration in children with diarrhoea. Furthermore, as Lawoyin et al., (2003) observed that malnourished children have

higher incidence of diarrhoea and other infection because malnutrition increases the risk of infection. Staff is expected to ensure that parents adhere to their recommendations on how to improve the nutritional status of their children. Instructions on the usefulness of ORT are indispensable considering the vulnerability of children and the fact that they need immediate solution to the problems of malnutrition and ill health. This also emphasized the need to accommodate a nutritionist whose assistance will reasonably encourage the usefulness of this service for improvement in child health care in health facilities.

Consistency of Health Education Services Available for Children in Health Facilities

Results in tale 6 revealed that the health education services provided in health facilities are consistent (overall $\bar{x}$ = 3.49). This fining is quite satisfactory because it supports the idea of Bethal et al., (2004) that anticipatory guidance and education on topics related to promoting child health and development should be given to patents. Since parents needs to be adequately informed and convinced about the causes and prevention of ill health through similar educational effort, Lucas and Gilles (2003) advised that simple remedies should be made available to parents for treatment of common diseases of childhood. These simple remedies are often primarily concerned with the nature of care expected with special consideration of the preventive aspect targeted at reducing the vulnerability of children as can be seen on the table.

Consistent health education illustrates the need for health workers to understand the aspects of childrenôs health, which is often similar to the ones on the table so that adequate emphasis should be placed on them. The observation of AHRQ (2004) that check ups are good time for parents to ask questions and provide information about their childôs health, suggests that this period also provides an opportunity for health workers to give necessary health information for improvement in childrenôs health status. However observations made showed that immunization period also provides great opportunity for health talks that was often given by a staff at the start of clinic. This is also closely connected to the finding that education on value of preventive services e.g. (immunization) received the highest mean of 3.67 because this aspect is often emphasized during clinic. The lowest mean of 3.35 attributed to consistency of health education on injury prevention and control needs to be addressed. This is because it contradicts the discovery of Oyedeji and Oyedeji (2003) that accidents and injures are major causes of morbidity and mortality in children. Therefore, it is considerable that reasonable emphasis should be assigned to this aspect of childcare health education process. The assistance of a health educator is also recommendable in order to ensure proper coverage of contents in health matters, as regards child health care. The consistency of childcare health

education will improve immensely if the responsibility is assigned to qualified health educators employed in health facilities.

Competency of Staff who Provide Care for Children in Health Facilities

Results in Table 7 showed that hospital staff are substantially competent (overall $\bar{x}$ = 3.46), in their service. This results is encouraging because it proffers solution to the advice of commission for Health Care Audit and Inspection (2007) that hospital trusts need to be sure that all services for children are of high quality and clinically safe. The finding is contradictory to the observation of Schor (2004) that parents are signaling their dissatisfaction by failing to obtain one half of the recommended preventive care services and that of commission for Health Care Audit and Inspection (2007) that hospitals have made poor progress in meeting the broader needs of children.

This finding will be advantageous to health facilities because Bethal et al., (2004) already pointed out that health care performance assessment efforts at the national, state, health system and medical practice levels all face real constraints in the amount of information about performance of health systems and providers. The result indicates that health care providers are highly committed in their effort to reasonably utilize their resources to ensure improved health outcomes for children. Since staff are considered competent in their area of specialization as regards child health care, they need to continually comply with the expectation of parents based on their attitude towards child health care and their determination to better organize and improve child care in any health facility. This is in line with the suggestion of by Okolo et al., (2002) that the ability to deliver the best quality care to patients depends on chain of health care workers who are independently responsible for the quality of their specific jobs.

The highest mean of 3.63 obtained for newborn intensive care is highly commendable and identifiable with the report of Ertern et al., (2004) that neonatal tetanus which occurs as result of unhygienic birth practice can be reduced with proper treatment protocol with good nursing care and proper baby care facilities. This result is not surprising because the birth of every child is a period of uncontrollable joy for everybody around especially for caregivers who tries to ensure that extreme carefulness is employed in their effort to make mother and child comfortable. This also suggests that caregivers are mostly women who may place themselves in the shoes of a mother during delivery, considering the sensitive nature of childbirth.

Furthermore, it will be necessary to highlight on the judgment made by the respondents about the use of appropriate language ($\bar{x}$ = 3.35) in care delivery as it concerns children.

Although the mean score is reasonable and indicates competency, it is necessary that care givers should improve in the use of appropriate language. This is suggestive of the idea of Graeff and Ahmed (1996) who emphasized that the use of appropriate language in practical communication should be a part of the continuing education of health workers. Training in effective communication will help to ensure that caregivers are confident, but not abusive in their choice of words when handling children. Parents need better explanation of illness and treatment proceedings, so that they can comply reasonably as expected to achieve improvement in their childrenôs health status.

However, as Commission for Health Care Audit and Inspection (2007) advised that employers should ensure that staff are made aware of the arrangements for children in hospitals and their corporate and individual responsibilities, with appropriate supervision put in place, staff need to work with enough children every year in order to maintain their skill in treating them. This further illustrates the need for staff to be trained in IMCI with regular supplies of drugs put in place for prevention and treatment of childhood conditions, because parents often expect to get high quality care for their children.

Problems that Affects the Provision of Child Health Care in Health Facilities

Table 8 showed that all the administrative problems specified was considered as hindrance (overall % = 66.4) to the provision of child health care services in health facilities. This finding agrees with that of Hakes (1995) and Schor (2004) who made a list of barriers to providing the services recommended for children in health facilities which urgently needs to be addressed because it affects the performance of health care providers. The findings showed that respondents substantially supported the observation of Simkiss (2005) that poor recruitment and retention of staff (81.2%) and inadequate equipment (81.2%) and unsuitable work environment (58.0%) are challenges to the delivery of emergency care in poor resource setting. This suggests the need for services to be maintained with trained staff, necessary equipment adequate funding and continuous supervision with special considerations made on the needs of children and the expectation of parents that these needs should be met in health care settings.

However, it is important to take cognizance of the observation of Commission for Health Care Audit and Inspection (2007) and Radolph et al., (2005) that majority of individual services that children use did not meet the recommended standard of 50% trained nurses and that practices vary greatly with respect to many of the organizational characteristics which were consistent with organizational stress. This may be closely connected to the fact that there may be substantive variation among practices in terms of management and regulation of resources in the delivery of services. Despite the fact that problems encountered in one area

many not be the same with that of another area staff generally, need to make appropriate plans to counter identifiable problems in child care delivery and encourage improvement through high quality services for the benefit of children.

Administrative Strategies for Improvement in Child Health Care in Health Facilities

Table 9 showed that all the administrative strategies recommended for improvement in child health care was accepted (87.7%) by the health care providers. This confirms the assertion made by Schor (2004) that hospitals could be held responsible to account for improvement in managing performance and planning in child health care. This is because information on how to promote childrenôs health has increased which will assist health care providers in their effort to reduce medical errors and improve on quality in the process of child care.

The table revealed that education of parents on preventive care was mostly recommended (99.3%). This important aspect was suggestive of Bethal et al., (2004) with the statement that anticipatory guidance and education should be given to parents on topics related to promoting child health and development. Therefore, effective communication between parents and caregivers is required because children (0-5 yrs) only consent to treatment in the presence of their parents. The establishment of emergency medical service system for children (97.1%) was considerable and conforms to the suggestion of Meltzer (2002) that this aspect is necessary to implement medical service plans systematically. Hence, the survival of every child should be paramount in all health facilities.

As Simkiss (2005) encouraged the assistance of health workers to ensure coordinated and collaborative approach in care delivery, it is identifiable on the table that the support of clinical directors by government and voluntary agencies was reasonably recommended (96.4%). Furthermore, it is necessary to state that if this assistance is provided adequately, it will help to ensure in service training plan for staff working with children and improved financial incentives for staff which gained a considerable percentage of 94.3 and 92.8 respectively. Consequently, staff will not be ill disposed in their responsibility to render care. This situation is closely connected with the idea of WHO (2004) that development of human resources for child health care are the backbone of any health system which will help to improve competence, motivation and effective delivery of services.

Additionally, the establishment of standard treatment guidelines for common childhood illnesses gained a percentage of 92.0 as one of the strategies highly identified for improvement. This will help to ensure structured clinical care for children as Schor (2004) emphasized that preventive service can be documented to serve as prompt to remind staff of the services needed

at any given time. This precautionary measure helps to illustrate the emphasis that the promotion, maintenance and restoration of childrenôs health need proper organization of health services. This will also help to ensure that children obtain the maximum benefit from necessary interventions put in place for them, which must be consistent, and of high quality.

Differences in the Quality of Services, Competency of Staff and Administrative Problems of Public Health Facilities and Private Health Facilities

Results in Table 10 showed that there is no significant difference (t-cal = .062 < = t-tab = 1.96 p.>.05) between public and private health facilities in the services provided for children. This similarity shows that hospital staff are generally aware of their responsibilities and the vulnerability of children which consequently contributes to substantial improvement in their care delivery. This is contrary to the observation of Rudolph et al., (2005) that some organizational characteristics were at level that might impede delivery of high quality care for children. However, their observation that private practices in North Carolina demonstrated low level of preventive service performance, with substantial variation among practices may be true of private health facilities in Nsukka urban. This is because, the enquiries made helped to confirm the fact that not all private health facilities provides immunization services. In this case children are often referred to clinics where they can get adequate access to the service.

Result in Table 11 revealed that there is no significant difference (t-cal=.000<t-tab=1.96 p.>.05) between public and private health facilities in relation to the competency of staff who provide care for children. This illustrates the fact that health care providers in either of the health facilities always ensures that the services they provide for children are of high quality and clinically safe with appropriate level of staffing as commission for health care Audit and Inspection (2007) advised. However as Radolph et al., (2005) observed that some organizational characteristics were at a level that might impede delivery of high quality care for children conscious effort should be made to describe public and private facilities. Taffa et al., (2005) complained that there is poor access to public health facilities and private facilities use ill-trained personnel. The finding that the competency of staff in public health facilities is similar with that of the private health facilities disagrees with the judgment that staff are ill disposed to render high quality care for children in health facilities in Nsukka urban. The similarity in the competency of staff underlies the fact that staff generally understands and accepts their responsibilities and always ensures readiness to adequately assist in the care of children whether they are ill treated or not. The existence of ill trained staff in health facilities conforms to the need to encourage in service training of staff that will help to ensure that reasonable improvement is made in the system of child health care service delivery.

Table 12 showed that there is no significant difference (t-cal = .33 < t-tab= 1.96 p. > .05) between public and private health facilities in the administrative problems encountered during child health care provision. This is contrary to the observation of Radolph et al., (2005) that practices vary greatly with respect to the measured organizational characteristics, which were consistent with organizational stress in some cases. The similarity in the responses of problems that affects child health care shows that the organizational stress identified can reasonably be attributed to either public or private health facility. This demands that every health facilities should adequately plan and organize resources and strategies in order to ensure that the effects of these problems are adequately reduced. Constant supervision will contribute to recognition of problems as early as possible in any health care setting for early intervention. Contradictions should not be allowed to disorganize the established fact that health care providers have generally agreed to put in their best in their effort to achieve high quality care for children in health facilities.

CHAPTER FIVE

Summary, Conclusions and Recommendations

The purpose of the study was to evaluate child health care services in health facilities in Nsukka urban. In order to achieve this purpose, nine specific objective and corresponding research questions were formulated to guide the study. Three null hypotheses were also postulated for verification. Components of child health care services covered by the study includes, immunization services, growth monitoring and screening test services, curative health services, emergency health services, nutritional services, health education services, and competency of staff who provide these services. Also, administrative problems and strategies for improvement in child health services were investigated. Literatures relevant to the study were reviewed under the following headings: conceptual framework, theoretical framework, objectives and importance of child health care, factors affecting the provision of child health care services, and studies on child health services.

The cross-sectional survey research design was used for the study. The population for the study consisted of 388 hospital personnel and 4300 women of childbearing age. Simple random sampling technique of balloting without replacement as well as proportionate stratified random sampling was used to draw a sample of 43 and 113 personnel for public and private hospitals respectively. A sample of 173 and 257 women of childbearing age were also drawn from public and private hospital respectively using the same technique.

The researcher designed two questionnaires as the instrument for data collection (one for mothers and the other for health care providers). Five experts, three from the department of Health and Physical Education and two from the department of Science Education validated the instrument. Kuder Richardson 21 (KR-21) formula was used for test of reliability. Mean scores and percentages were used for answering the research questions while t-test statistics was used for verifying the postulated null hypotheses. The SPSS batch system was used in analyzing the data. The following were the major findings of the study:

1. Immunization services ($\bar{x}$ = 3.65) provided for children in health facilities in Nsukka urban are efficient (Table 1).
2. Growth monitoring and Screening tests ($\bar{x}$ = 3.39) provided in health facilities for children are reliable (Table 2).
3. Curative health cares ($\bar{x}$ = 3.33) provided in health facilities for children are effective (Table 3).

4. Emergency services ($\bar{x}$ = 3.37) available for children in health facilities are reliable (Table 4).
5. Nutritional services ($\bar{x}$ = 3.53) provided in health facilities for children are useful (Table 5).
6. Health education services ($\bar{x}$ = 3.49) provided for children in health facilities are consistent (Table 6).
7. Staff who provides care ($\bar{x}$ = 3.46) for children in health facilities are considered competent (Table 7).
8. The identified problems (66.4%) affect the provision of child health care in health facilities (Table 8).
9. The administrative strategies (87.4%) for improvement recommended for health facilities are considerable (Table 9).
10. There was no significant difference (t-cal = .062 < t-tab = 1.96) between public and private health facilities in the services provided for children (Table 10).
11. There was no significant difference (t-cal = .000 < t-tab = 1.96) between public and private health facilities in the competency of staff who provide care for children (Table 11).
12. There was no significant difference (t-cal = .33 < t-tab = 1.96) between public and private health facilities in the administrative problems that affects children health care.

Conclusion

On the basis of the findings and discussion of the study, the following conclusions were made:

1. Child health care immunization services are efficient in health facilities in Nsukka urban.
2. Child health care growth monitoring and screening tests in health facilities are reliable.
3. Childcare curative services available in health facilities are effective.
4. Child health emergency services available in health facilities are reliable.
5. Child health nutritional services in health facilities are useful.
6. Childcare health education services in health facilities are consistent.
7. Staff are competent in their effort to provide child health care in health facilities.

8. The identified problems can effect the provision of child health are services in health facilities.
9. The administrative strategies for improvement are considered as recommended for improvement in child health care in health facilities.
10. No significant difference was found between private and public health facilities in terms of services provided for children.
11. No significant difference was found between public and private health facilities in the area of competency of staff as regards child health care.
12. No significant difference was found between public and private health facilities as regards administrative problems that affect the provision of child health care.

Implications of the Study

The findings of the study showed that all interventions for child health care in health facilities in Nsukka urban are in close conformity to what can be reasonably described as commendable. The implication of this finding is that provisions made for efficient, effective, reliable, useful and consistent child health care services are readily available in health facilities in Nsukka urban. This amounts to delivery of safe and comprehensive child health care for improvement in childrenôs health status in Nsukka urban. However, the expectation of parents that the provision of essential and comprehensive services for their children needs considerable improvement that should be continuous will help to ensure that care givers are vigilant in order to discourage relapse in their care delivery. When the needs of children are prioritized in health facilities, their problems can be understood early and taken care of to ensure improvement in their health status.

Health care providers in both public and private health facilities were generally rated as competent in their effort to provide needed and available services to children. This fact disputes the complaints made by some authors that staff in public health facilities are ill trained. However special considerations needs to be made with regards to the in- service training of staff in health facilities in order to ensure safer and more reliable services especially for children who require improved health care. This is because the delivery of comprehensive health care for children is commensurate to the skill and experience of caregivers in handling children and their attitude towards child health care. Since staff was considered a little ill disposed in the use of appropriate language in care delivery, emphasis should be placed on improvement in communication skills that will conform to the care of children who needs to be adequately controlled with the assistance of parents during care delivery. The readiness of staff to adequately provide needed care for children irrespective of public or private health facilities

depends on their understanding of the vulnerability of children with reasonable improvements made to ensure that children continually benefit maximally from the various services available for them in health facilities.

The findings about the problems that affects the provision of child health care services indicates that the already subsumed administrative strategies recommended should be adequately employed to ensure progress in care delivery. Therefore a substantial amount recognized and corrected as early as possible. Needed modifications can be made in child health care provisions based on the determination of health care providers to better, organize and improve on their effort to achieve improved health outcomes for children in any health facility. Therefore as evaluation can identify the most cost effective interventions for improvement, adequate monitoring of the onsite implementation of a health intervention or programme is essential to understanding and designing needed modifications where problems are identified early in any health care setting. This is because child health research aimed at bettering the lives of children with broader view of health problems encourages a holistic approach to understanding what determines good child health.

Recommendations

Based on the findings, discussions, and conclusions of this study, the following recommendations were made:

1. Since mothers who often take their children to health facilities for necessary care identified the services as comprehensive enough, staff should be able to improve considerably to discourage relapse in their system of care delivery. This illustrates the need for staff in both public and private health facilities to ensure that needed cares are provided adequately to conform to the sensitive nature of children and expectations of parents.
2. Health care providers who are considered competent in their duty and ability to provide child health care services should take necessary precaution to ensure continual development in their skills for handling children. This also suggests the need for stakeholders, in public and private health facilities to ensure that reasonable assistance and encouragement are given to staff for substantial improvement in the provision of services. Staff development through in service training (in areas where they lack) and adequate remuneration are of immense importance in the description of improved child health care services.
3. Health care providers in their effort to ensure adequate provision of child health care services should endevour to always identify and counter problems in the

systems of care delivery. This describes the need for staff to considerably employ the strategies for improvement in child health care services to protect the right and needs of children to quality health care. Emphasis should be laid on progress in child health care delivery with needed modifications made for better organization of services.

Limitation of the Study

The researcher collected data on the present condition of child health care services in health facilities in Nsukka urban which were based on the perception of parents and health care providers. The status of the services are commendable, but one cannot dispute the fact that it may change from time to time, and from one system of care to another if consistent investigations are not put in place to always remind staff of their responsibilities and achievements.

Suggestions for Further Studies

This study can be conducted periodically (may be five years interval) to ensure that the quality of care conforms to the needs of children. The study can also extend to health facilities in rural areas in order to ensure that children in these areas are not deprived.

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Appendix III

List of Health Facilities Studied

4. University of Nigeria, Medical Centre
5. Comprehensive Health Centre Obukpa
6. Nsukka Health Centre
4. General Hospital, Nsukka
5. Bishop Shonahan Hospital
6. Good Shepherd Hospital
7. Nsukka Medical Clinic
8. All Saints Medical Clinic
9. St. Antaonyôs Hosptial
10. St. Michael Cottage Hosptial
11. Holy Child Clinic and Maternity
12. Unity Medical Clinic
13. Chukwuemeka Hospital and Maternity
14. Arinze Memorial Hospital
15. Akulue Memorial Hospital
16. Chidubem Hospital
17. Zenith Hospital