Journal of Public Administration, Policy and Governance Research (JPAPGR), Vol. 1, No. 3, Sept., 2023.
Available online at https://jpapgr.com/index.php/research. ISSN:2787-0464. Covered in google scholar, etc.
Bassey, Augustine Eze, Abonor, Lazarus Bassey & Clement Akintimi, 2023, 1(3):92-100

Culture and Parental Perception of Childhood Diseases in Central Senatorial District of Cross River State, Nigeria

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Abstract

Childhood diseases are becoming increasingly significant in developing nations, particularly in rural communities. These diseases are linked to various other health and social issues, affecting many children. The challenge lies in accurately diagnosing and providing appropriate treatment due to certain parental belief systems that delay or discourage timely medical intervention, exacerbating health conditions. To address this issue, a cross-sectional survey was conducted to investigate the influence of belief systems on parental understanding of childhood diseases and their choices in seeking healthcare in the Cross River Central Senatorial Districts of Nigeria. Both quantitative and qualitative research methods were utilised for data collection. The results revealed that cultural and belief systems often hindered parents' ability to recognise the seriousness of their children's health conditions. Furthermore, there was a significant correlation between cultural practices and belief systems and their healthcare-seeking behaviour. Based on these findings, it is recommended that health promoters incorporate the beliefs and cultural practices of the community into their health promotion programs. This approach will allow for the integration of both traditional cultural values and modern healthcare services, ultimately improving the overall health outcomes for children in these communities.
Keywords: *Culture, Parental Perception, Childhood Diseases, Communities, Senatorial Districts*

Introduction

Childhood health and related issues, such as child mortality, continue to pose significant challenges in Nigeria and several sub-Saharan nations, with the most severe impact felt in rural areas. In 2004, UNICEF's State of the World's Children report highlighted Nigeria as having the highest infant mortality rate globally, ranking 15th in terms of child mortality. It remains a matter of debate whether this ranking has improved since then. The Millennium Development Goals (MDGs), now the Sustainable Development Goals (SDGs), aimed to reduce under-5 mortality to 64 per 1,000 live births and infant mortality to 30 deaths per 1,000 live births by 2015, but this goal was not achieved. In the past five years, infant and under-5 mortality rates have ranged from 69 to 128 deaths per 1,000 live births, with rural communities experiencing even worse morbidity and mortality patterns, according to UNICEF (2012) and the National Vital Statistics Report (NVSR, 2014). The urgency to address this issue has led to the initiation of this study.

The pursuit of good health and the highest standard of health is a universal aspiration transcending race, religion, beliefs, economic status, and social conditions (WHO, 1990). "Health for All" was a rallying cry during its launch in 2000, yet, nineteen years later, it remains an elusive goal for many communities in Nigeria. Childhood health, including infant mortality, serves as a significant indicator of a country's socio-economic standards, as it is intertwined with variables such as maternal well-being, access to healthcare, economic conditions, and overall health (Olson et al., 2011). Shockingly, one out of eight children in

Nigeria dies before their first birthday, and one out of six does not live to see their fifth birthday. The National Strategic Health Plan (NSHP, 2010) revealed that Nigeria's infant mortality rate was higher than that of countries with similar incomes. According to the Strengthening Health System document (2009), children and infants from the poorest 20% of the population are three times more likely to die compared to the wealthiest 20%. This disparity is even more pronounced for under-5 mortality, with a mortality rate of 87 per 1000 among the wealthiest population and a staggering 219 per 1000 among the poorest (Federal Ministry of Health, 2009).

How people acquire and express beliefs, attitudes, and customs regarding diseases, their causes, signs, and symptoms shapes perceptions of illness and infection (Helmam, 1985, as cited in Akpenpuun & Mpem, 2015). Childhood diseases, like malaria, are conceptualised differently in traditional societies, resulting in various terms and classifications. Consequently, this study aims to investigate how culture and belief systems influence parental perceptions of childhood diseases and choices for seeking healthcare among the population of the Central Senatorial District of Cross River State, Nigeria.

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

Parental perception of childhood disease

Children represent the most vulnerable age group in any community, making the youth mortality rate a key indicator of overall well-being in countries. In 2011, an estimated 7 million children under the age of 5 died worldwide, with most of these deaths resulting from preventable conditions for which simple and affordable interventions were available. The primary causes of these deaths included pneumonia, complications from preterm birth, diarrhoea, birth asphyxia, and malaria (WHO, 2012). Malnutrition was identified as a contributing factor in over two-thirds of these deaths. Progress has been made towards achieving the Millennium Development Goals (MDGs), now known as the Sustainable Development Goals (WHO, 2012). However, it's worth noting that the global under-5 mortality rate decreased from 87 deaths per 1000 live births in 1990 to 51 deaths per 1000 live births in 2011.

Cultural contexts have a significant impact on people's understanding and interpretation of disease in African societies, including Nigeria (Ogunjuyigbe, 2004). Ogunjuyigbe added that people's cultural backgrounds have a big impact on how they use healthcare services. According to MacKian (2003), as cited in Akpenpuun and Mpem (2015), the interplay between group dynamics and an individual's personal views on medicine has a profound impact on their health-seeking behaviour. This is especially relevant today, as the achievement of good health in Nigerian society seems increasingly difficult due to the limited availability of healthcare services and the beliefs people hold about the causes of their illnesses. These factors play a crucial role in determining whether and where people seek medical assistance. Some individuals, upon recognising specific physical symptoms such as pain or high fever, may promptly consult a physician, while others with similar symptoms might resort to self-medication or simply ignore their symptoms (Akpenpuun & Mpem, 2015). This behavioural disposition is notably common among the Yakurr, Mbembe, and Ofutop people of Cross River Central Senatorial District due to their belief system.

The concept of health-seeking behaviour has been defined as a series of actions taken by an individual with a medical condition or ailment to find a suitable remedy (Musah and Kayode, 2014). They further explain that this behaviour is based on an informative model, which encompasses specific social features related to health-seeking behaviour and influences individuals accordingly. The Informative model for a particular illness includes recognising signs and symptoms by which the disease is identified before diagnosis. The perceived cause of the illness and prevention strategies can then be established (MacKian, 2001). These interpretations are made by individuals or their family members, who subsequently address the situation through standard diagnostic methods. The transition from illness to seeking medical care can be complex, especially if the illness is not life-threatening. For instance, the cost of healthcare is a significant concern for economically disadvantaged individuals in Nigeria and similar countries.

However, the pace of this decline in child mortality is still insufficient to reach the goal of reducing 1990 mortality levels by two-thirds by 2015, a goal that was deemed achievable (WHO, 2012). Achieving

success in reducing child mortality requires more than just the availability of adequate healthcare services staffed by well-trained professionals; it also necessitates collaboration between parents, healthcare workers, and community support (WHO, 2012).

Epidemiologists and social researchers have focused on studying the relationship between childhood diseases and health-seeking behaviour. When someone has a medical condition or illness, health-seeking behaviour is broadly defined as any action they take to find the best treatment for themselves or those in their care (Johnson et al., 2012). While there is a growing body of literature on health-seeking behaviour and the determinants of healthcare service utilisation, these studies often describe patterns of behaviour without delving into the underlying reasons, thus falling short of providing meaningful recommendations.

Cultural practices and health seeking behaviour

The origin of each infection typically has a social or distant cause, which is often overlooked by biomedical sciences. In every society, the presence of an ailment is attributed to supernatural forces. Perceptions about diseases can be described as shared beliefs, views, customs, and values that define illnesses, their origins, signs, and symptoms. Disease is believed to be influenced by cultural factors. The understanding, conception, and management of medical conditions are shaped by the culture of a community. While chronic illnesses exist in all societies, attitudes towards medical conditions and treatment vary from one group to another (Ojua, Ishor, & Ndom, 2013).

The belief system of a community is rooted in a traditional culture where the concept of illness is linked to magical and religious factors. The community appears to have greater faith in the healing abilities of traditional healers than in those of Western healthcare institutions that people have access to. Different traditional beliefs, superstitions, and folklore are deeply ingrained in our societies, and a community's culture has a direct impact on their healthcare-seeking behaviour. Sociologists have long been interested in the distribution of illness in the population and the factors leading to its occurrence. While traditional sociological literature on disease distribution primarily focused on factors like age, gender, and social class (occupation and income), more recent attention is given to attitudes, behavioural norms, and complex social processes (Specialist, 1978, cited in Charles, 2014).

In general, studies have indicated that African societies perceive illness as stemming from three sources: natural, spiritual, and supernatural (Erinoso, 1976; Oke, 1982). Jegede (1996), cited in Ogunjuigbe (2004), added another perspective from the Yoruba viewpoint, suggesting that illness causation includes natural, powerful, supernatural, and hereditary factors. The cultural approach to health involves examining the connections between definitions of health, responses to illness, social patterns, and everyday lifestyles that shape how illness is perceived, expressed, and reacted to. To some extent, the cultural context defines the conditions that are recognized, the attributions made to them, and the individuals with legitimate authority to assess and define such conditions (Ogunjuigbe, 2004).

Additionally, as noted by Linton, cited in Ogunjuigbe (2004), the manifestation of many disease conditions is culturally constructed. He further believed that if one understood the essence of the culture, one could reasonably predict the form this condition would take. However, it is evident that the cultural basis of many diseases is heavily influenced by the social fabric of a society and is deeply integrated with the patterns of life as they exist in that culture. Social and cultural factors determine whether or not we seek formal treatment and how we respond to it. For instance, society may view certain illnesses as necessitating medical intervention, while for others, individuals may carry on with their daily activities because society does not classify them as illnesses. People in ethnic communities often hold folk beliefs that do not align with those of medical professionals, which can deter them from seeking medical treatment (Vander, 1990, cited in Charles, 2014).

It is asserted that in all communities, disease is perceived as a phenomenon threatening not only the individual, but also their group and society as a whole. Therefore, all societies have developed their own approaches to treating and coping with the diseases they face. The unpredictability of when ill health may strike and the uncertainty surrounding the outcomes of many medical interventions are the main

sources of uncertainty in human life. In response, every society establishes tailored action systems to alleviate not only pain and suffering, but also anxiety and tensions. Surgical, physical, and pharmaceutical treatments are just part of this coping mechanism (Vander, 1990, in Charles, 2014).

METHODOLOGY

The study employed a cross-sectional survey research design chosen for its suitability in utilising questionnaires, Key Informant Interviews (KII), and Focus Group Discussions (FGD) to address the research questions. The study focused on the Central Senatorial District of Cross River State, located in the southeastern part of Nigeria within the south-south geographical zone. The senatorial district encompasses six local government areas: Abi, Boki, Etung, Ikom, Obubra, and Yakurr. It is characterised by a diverse range of tribes, including Yakurr, Agbo, Agoi, and Bahumono in Yakurr and Abi LGAs, while the Mbembe are primarily found in Obubra LGA. In the northern part of the Central District, there are various sub-dialectical groups such as Etung, Olulume, OfutopNkim/Nkum, Abanajam, Nseke, and Boki across Ikom, Etung, and Boki LGAs. Despite the linguistic diversity, all indigenous languages in the state share common roots in the Niger-Congo language family.

The study involved 600 respondents selected from the Senatorial District for questionnaire administration. Given the presence of Local Government Areas, Political wards, and villages in the district, a multi-stage sampling technique was employed. In the first stage, the six LGAs formed the initial stratum, with five wards systematically selected from each LGA, resulting in a total of 30 wards. In the second stage, representative samples were identified within each ward.

The sample consisted of 600 parents residing in the Local Government Areas and communities within the Cross River Central Senatorial District, representing the study population. The parents included those who had given birth at the time of the study and those with parental experiences, representing diverse occupations such as farmers, traders, civil servants, and the unemployed. Data for the study was sourced from both primary and secondary outlets. Primary sources encompassed firsthand information collected through fieldwork, utilising questionnaires, KII, and FGD. Secondary data comprised a review of existing scholarly works, journals, and internet resources.

The researchers, assisted by four trained research assistants, administered the instruments (structured questionnaire, FGDs, and KIIs) to selected respondents in Cross River Central Senatorial District. Duplicate surveys were distributed to randomly selected respondents within the 41 groups in the study area. Respondents lacking proficiency were aided by the researcher or a colleague in understanding complex items in the questionnaire. This approach ensured accurate responses and encouraged respondent participation. The instruments were collected on the same day to achieve a 100 percent retrieval rate.

Data analysis involved hypothesis testing at a 0.05 level of significance. The researcher initially coded the data and performed data entry using Excel 2010, which was subsequently imported into the Statistical Packages for Social Sciences (SPSS) version 21. Descriptive statistics guided the analysis, complemented by direct quotations from the in-depth interviews. Hypothesis testing was conducted using the Pearson Product Moment Correlation Coefficient (PPMCC).

RESULT

TABLE 1: Respondents Rating on parental perception of cultural beliefs and health seeking option.

	Factors	Rating %						Mean	STD
S/N	Statements	VSA	SA	A	D	SD	VSD		
1	Herbs are more effective	37	46	86	96	107	60	3.86	1.478
2.	All illnesses are caused by evil spirit	98	82	146	48	23	35	2.82	1.457
3	Some illnesses are as a result of cultural norms	35	47	132	104	59	55	3.63	1.407
4	Healing of illness is only through traditional ritual cleansing	79	79	150	55	34	35	2.98	1.446
5	Culture promotes high patronage of traditional healers	42	62	106	106	58	58	3.58	1.481
6	Most children illnesses are not for the hospital	23	26	53	171	71	88	4.17	1.341
7	Our cultural practices do affect our health status	33	37	65	122	92	83	4.05	1.471
8	All illnesses are as a result of violation of cultural norms	40	87	107	95	38	65	3.46	1.514
9	Most illnesses are not caused by evil spirit	32	49	50	106	125	70	4.05	1.475
10	All children illnesses are for the traditional healers	29	29	53	137	74	110	4.22	1.463

Source: Fieldwork, 2019

As presented in Table 1, and for reporting purposes, very strongly agree (VSA), strongly agree (SA) and agree (A) was reported as agreed while very strongly disagree (VSD), strongly disagree (SD) and disagree (D) was reported as disagreed to each of the statements in the sub-scale. As presented in Table 1, there are ten items in this sub-scale used to measure cultural practices/ belief system. Out of these ten items, most of the respondents' 57% and above expressed agreement to four (1, 4, 5 and 6) out of ten statements in this subscale while many respondents 43% and above disagreed to three statements (2, 3 and 7,8,9 and 10) in this subscale. The seven positive statements were positively worded, supporting influence of cultural practices/belief systems on perception of childhood diseases while the three statements that most respondents disagreed to were negatively worded.

From Table 1, 24.8% perceived, herbs as most effective compared to orthodox medicine in the treatment of children illness while 34.7%) perceived that, healing of ill children is only possible through traditional ritual cleansing; (104 or 24.8%) agreed that their culture promotes high patronage of traditional healers and (171 or 39.6%) respondents perceived that most children illness are not for the hospital. While the result was so, many respondents (48 or 11.1%) disagreed to "item 2" which states that, all cases of children's' illness are caused by evil spirits; out of the 432 respondents used for the study, (95 or 22.0%) disagreed that, children illness occur as a result of violation of cultural norms and values and (122 or 28.3%) disagreed that, their cultural practice does affect their health. On the basis of this result in Table 1, overall, cultural practices and belief system influences parental perception of childhood diseases in the Central Senatorial District of Cross River State to a moderate extent.

Test of hypotheses

Parental perception of cultural practices and health seeking options

H_o: there is no significant relationship between parental perception of cultural practices/belief system and health seeking behaviour of parents with infants.

H_i: there is significant relationship between parental perception of cultural practices/belief system and health seeking behaviour of parents with infants.

Table 2 showed results for Parental perception of cultural practices and health seeking Options. It indicated that a majority of the cultural practices are positively related to the health seeking option available to the parents. Over fifty percent of the responses are significant at 0.01 level of significance, while over forty percent were significant at the 0.05 level of significance.

Table 2: Mean, Standard deviation and Pearson correlation matrix of the relationship between Parental perception of Cultural practices and Health seeking option.

	Mean	Std. Deviation	PPC1	PPC2	PPC3	PPC4	PP5	PPC6	PPC7	PPC8	PPC9	PPC10
1 Herbs are most effective	3.86	1.478	1									
2 All illnesess are caused by evil spirits.	2.82	1.457	.206**	1								
			.									
3 Some illnesses are as a result of violation of cultural norms	3.63	1.407	.000	.329**	1							
4 Healing of illness is only through traditional ritual cleansing.	2.98	1.446	.094	.473**	.347**	1						
5 Culture promotes high patronage of traditional healers.	3.58	1.481	.040	.327**	.325**	.370**	1					
6 Most children illnesses are not for the hospital.	4.17	1.341	.043	.065	.272**	.080	.099*	1				
							.					
7 Our cultural practice does affect our health status.	4.05	1.471	.190**	-.004	.087	-.005	.151**	.175**	1			
						.	.					
8 All illnesess are as a result of violation of cultural norms	3.46	1.514	.021	.181**	.346**	.236**	.353**	.277**	.185**	1		
			.			.	.	.				
9 Most illnesses are not caused by evil spirit	4.05	1.475	.284**	.026	-.024	.049	.054	.091	.307**	.043	1	
				.								
10. All children illness are for the traditional healer.	4.22	1.463	.087	-.086	-.023	-.033	-.019	.061	.114*	-.022	.055	1
							.	.	.	.		

**. Correlation is significant at the 0.01 level (2-tailed).

This mean that, the null hypothesis which states that, there is no significant relationship between Cultural practices /Belief system and their health seeking behaviour was rejected while the alternate hypothesis was retained. The correlation coefficient is a standardized measure of an observed effect, it is a commonly used measure of the size of an effect and r-values of ± 0.1 represent a small, ±0.3 represent medium effect while ± 0.5 is a large effect. Also, the results showed a positive correlation coefficient (this is because of the negative sign of the p-value). Which implies that, an increase in the independent variable (Cultural practice/Belief system) directly result to an increase in the dependent variable (health seeking behaviour). Therefore, we can conclude that, there are statistically significant relationship between parental perception of Cultural practices /Belief system and their health seeking behaviour. This result is in agreement with the findings of the qualitative data. During the Focus Group Discussion (FGD), a 34-year-old female discussant have this to say:

> *Ah, it is not all children sicknesses that are natural and are caused by bacteria and viruses, some mid-night crying and convulsion are most times messages from the spirit of our ancestors*.

Again, another discussant, male 40-year-old has this to say:

> *My mother told me that when a child is very hot and always cry at night, I should check the child's name and do some sacrifices to appease the spirit that, may have doubles in an animal that is causing the child such troubles*.

In the same vein, a 29 years old female from Nko, supported the above by saying;

> *it is not all baby's illnesses that is for the hospital especially watery stool and vomiting my family is known in this community to have great healing power to stop such sickness and it was transferred to me by my grand-father and it has been with us for a very long time.*

Also, in an in-depth interview session with a community health extension worker in Ekori, Health center, the interviewee has this to say;

> *for the six years of my stay in this community, parents only come to the health center when they have finished trying herbs and use of concoction and failed, and at that point we only have about 30% of success in our intervention which is a very slim chance for survival.*

Another 42 years old male Nurse, from Ofotop in Ikom LGA, have this experience to share;

> *I once had parents that brought a child in a very critical state, I tried all that I could only to find out very late that it's was dog bite and they have taken the child to a native healer three days earlier before coming to the health center, when the gems had already spread to all parts of the body and beyond redemption and truly, your sincerely we lost the child.*

This was also in line the findings from the Focus Group Discussion session.
Excerpt, a 45 years old parent, had this to say;

> *I, cannot take my child to the hospital when I suspects that, a particular symptom, indicate that spirits are behind such illnesses. I will consult the gods first to ascertain the specific treatment to be given. Especially when the child is hot, vomits and eventually convulse.*

Again, in another Focus Group Discussion held in Onyedama, in Obubra, Local Government Area;

> *A 42 years old participant had this to say. 'I have not used the hospital before, for any of my children's illnesses. I feel there will be expensive and time consuming, so I prefer*

preparing concoctions for children each time they fall ill, for me, it is cheaper and faster".

In the null form, the first hypothesis states thus: there is no significant relationship between parental perception of cultural practices/belief system and health seeking behaviour of parents with infants. The free factor in this theory is parental impression of social practices, this variable was estimated consistently, while the reliant variable is wellbeing looking for conduct of guardians, and this variable was likewise estimated ceaselessly as well. Subsequent to testing the outcome uncovered that, there is a huge connection between parental impression of social practices/conviction and wellbeing looking for choices.

This finding teamed up crafted by Abia (2012) which uncovered that, the way of life of a gathering influences each part of development and improvement, the obtaining of objectives and yearnings, the danger variables to which one is uncovered and methods of reaction and transformation from origination to death. Pretty much every significant educational experience is moulded somewhat by social convictions and directions. Who is qualified to mate, family size, taking care of and weaning of youngsters which assumes a fundamental part in the weakness of a kid to disease, these and a lot more rely upon social traditions and restrictions. The mother\'s expertise influences the advancement of the youthful and may clarify to a limited extent why moms in the more advantaged classes and the people who are better instructed experience lower baby mortality.

Likewise, this is in consonance with, a comparative investigation completed by Repairman (1978), referred to in Charles (2014) which concurred with the above discoveries, however added, that nourishment is a vital component in wellbeing. Notwithstanding, food arrangement and eating conduct are impacted by social standards, and numerous youngsters devour eats less which are lacking in protein, calories and nutrients which is involved in various youth sicknesses. In spite of the means economies of customary social orders, most moms who followed social examples of bosom taking care of could give babies satisfactory nourishment, essentially before weaning. With the dissemination of current newborn child taking care of practices in which equations supplant bosom taking care of, new issues emerge.

Conclusion

Based on the statistical analysis of each of the hypotheses, that gave a direction to the study; it was found that a considerable number of individuals don't have clear view of sickness and therapy while some appended the demise of under-five kids to odd notion This has a genuine ramification on under-five dismalness and mortality in Nigeria.

A definitive objective of states all around the world is to delay the unavoidable \'Life ends\' by decreasing mortality to low levels and guarantee the great soundness, all things considered. Be that as it may, disregarding an overall decrease in baby and kid mortality in creating world, the rates are still high by world norm. Regardless of the way that the Nigerian Wellbeing Strategy perceives the need to decrease the current high youth mortality, the people\'s conviction and conduct rehearses have not been satisfactorily coordinated into wellbeing intercession programs.

Recommendations

Based on the findings from the study, the following recommendations were made.

1. It is very necessary to coordinate the people's convictions, perspectives and social practices into some local area wellbeing advancement projects to accomplish a most extreme decrease in youngster and newborn child dreariness and mortality rates.
2. Adequate health Education of parents especially nursing mothers from the foregoing is highly recommended particularly for those in the study areas. This can be achieved through the activities of the primary Healthcare delivery system.
3. Government should subsidize the medical charges (Users fees) or reintroduce free medical care for pregnant women and under 5 infants as it was during Governor Liyel Imoke's Administration in 2011-2015, particularly for the less endowed communities for better and adequate utilization of

Health services not just for the rich, but also for the poor. This will motivate most parents to embrace modern Healthcare services thereby reducing their dependence on cultural practices in their Health seeking process.

References

Akpenpuun, J. R. Mpem, T. (2015). Perception of Malaria and treatment seeking among rural dwellers in Nigeria. Global Journal of Interdisciplinary Social Sciences, 4(2), 1-6.

Ashoru, U. (2003). Child health seeking in Lungwena, Malawi. Academy dissertation: Tampere University.

Charles, J. O. (2014). Sociological theories: A historical analytical approach to man. Calabar: University of Calabar Press.

Dzurgba, A. (2011). The Tiv and their culture. Ibadan: John Archers (Publisher) Ltd.

Helmam, C. (1985). Culture, health and illness. Bristol: John Wright.

Johnson, E. W., Carvajal, L., Newby, H. & Young, M. (2012). Pneumonia and diarrhea; tackling the deadliest disease for the world poorest children. New York: UNICEF (2012) available from http://www.unicef.org/media/files/unicef_pd_complete.0604.pdf accessed Dec. 27, 2012.

MacKian, S. (2011). A review of health seeking behavior: Problems and prospects. Internal concept paper. Health systems Development programme. London School of Hygiene and Tropical Medicine.

Ogunjuyigbe, P.O. (2004). Under five mortality in Nigeria: Perception and culture of the Yorubas towards the existence of 'Abiku'.Mac-planckgesellschaft. Online at ***www.demographic-reseach.org/volumes/vo/11/2/Dol:104054/DemRes.2004.11.2***.

Ojua, T. A., Ishor, D. G. & Ndom, P. J. (2013). African cultural practices and health implications for Nigeria rural development. International Review of Management and Business Research, 2(1), 176-183.

Oke, E. A. (2002). An introduction to social anthropology. London: Macmillan Education LtdPp. 19-20.

Olson, R. M., Mark, B. S., Andrew, K., Kwamena, B., Stacy, M., David, H. & Ivo, O. (2011). Pattern of care among patients recovery from radiation therapy for bones. International Journal of Radiation Oncology, Bology, Physics, 69(5), 20-45.

UNICEF (2016), The state of the world's children 2016. a fair chance for every child. [Online] Available: https://www.unicef.org/publications/files/UNICEF_SOVOC_2016. pdf (June 2016)

Vander, Z. & James, W. (1990). The social experience: An introduction to sociology (2nd ed.). New York: McGraw Hill.

W.H.O. (1978). The promotion and development of traditional medicine. Technical Report Series. 622, WHO, Geneva

W.H.O. (2005). World malaria report. Fact Sheet

WHO (2012). Children in community IMCI: Briefing package to facilitators (webpage on the internet). http://www.who.in/mediacentre/factslects/178/en/index/html) accessed Oct. 12, 2012.

WHO (2012). Children: Reducing mortality (webpage on the internet available from http://www.who.in/mediacentre/factslects/178/en/index/html) accessed Oct. 12, 2012.