

SOCIAL DETERMINANTS OF DIFFERENTIAL ACCESS TO HEALTH SERVICES ACROSS FIVE STATES OF SOUTHEAST NIGERIA

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Abstract

Differential access to health remains a critical problem facing health care delivery system in Nigeria. The composition and character of social determinants that generate such unequal and uneasy access differ across geo-political zones of the country due to diversity of social-cultural attributes. This study, anchored on cross-sectional survey design and guided by three research questions examined the determinants of differential access to health services across the five states of southeast Nigeria. A sample size of 200 respondents drawn through multi-stage and simple random sampling techniques constituted the study participants. A multiple triangulation of instruments comprising questionnaire, in-depth interview and focused group discussions were combined and complemented each other in the data gathering process. The study found that access to health services is strongly affected by factors like level of education, gender, patriarchal social arrangement, rural residence, poverty, religious and cultural beliefs about certain diseases and location of health facilities etc. It was recommended that provision of health services must be complemented with institutional arrangement and massive public enlightenment that counter several social constraints that prevent access and full utilization of health services by the people of southeast Nigeria.

Keywords: Differential access, health services, social determinants, healthcare system, socio-cultural attributes

Introduction

Man's quest for optimal level of health is a cultural universal across societies. This could be explained by the fact that good health is crucial both for man's survival and his ability to meet set goals and aspirations on planet earth. For man to live and function to his fullest capacities, use of health facilities is critical. That is why societies have over the years, developed patterns of health services to care for their people. Nonetheless, quality of population's health; how fairly health facilities are distributed across the social spectrum and people's accessibility or use of such facilities have remained problematic especially among the poor.

Administrators of health care delivery services often concentrate on improving the quality of staff skills, protocols of treatment, availability of supplies and environment of health facilities. Yet, while these interventions are important, they do not always address many of the obstacles to accessing services faced by the population. Often, health services of a reasonable quality may exist, but few use them. Equally important are concerns about physical and financial accessibility of services, knowledge of what services exist, education about how to best utilize self and practitioner-provided services and cultural norms of treatment.

According to the Behavioural Model propounded by Anderson and Newman (1973), visit to a health facility is determined by three factors:

- a. Predisposing factors such as age, gender, race/ethnic group and social services.
- b. Enabling factors which include conditions that facilitate or inhibit the use of health services such as insurance coverage, income, distance to the health centre etc.
- c. Need or health status variables which may include perceived need and urgency, level of distress and presence of psychiatric co-mortality. Their argument implies that when all the aforementioned factors are inadequate, it results to poor utilization of health facilities.

On the other hand, Maine (1997) in his Delays Model outlined three barriers to use of health facilities which include; delay in the decision to seek care, delay in getting to the facility and the delay in obtaining appropriate care at the facility. According to him, the first two delays constitute demand barriers (use barriers). The delay in the decision to seek care may be due lack of information and education, or unavailability of resources at the time of need particularly as risk-pooling (health insurance) with its advantages towards equity is yet to be fully operational. Similarly, delay in getting to the facility is likely due to financial handicap or due to ignorance of appropriate transport means to the facility.

In Nigeria, health service is on the concurrent list whereby the three tiers of government, namely federal, state and local government levels to incur expenditure. The private sector also plays key roles in health care delivery in Nigeria. These include 'private for profit' and 'private not for profit' health care institutions owned by individuals, corporate firms, nongovernmental organizations and faith based groups.

The utilization of health services have remained low in Nigeria although there has been increasing public expenditure on the provision of modern health care. This suggests that a myriad of complex and potentially confusing choices interplay before the decision to go for treatment and consequent arrival at a facility. Often times, those considerations are strong enough to divert interest to other treatment options even when the condition could be best managed in public health facilities. It means therefore that provision of accessible and cost effective health services to patients requires thorough understanding of factors associated with the use of health services. (see Joweth 1999, Wagstaff ,2000)

In Southeast Nigeria, the use of health facilities tends to be more developed in high income groups than among their low and medium income counterparts. Alder and Estrove (2006) noted that the more socio-economically advantaged individuals are, the better their health. On the other hand, the poor are more likely to be ill, but are less able to access health care (Corner and Norman, 2001).

Similarly, as physical environment varies in characteristics from place to place it has implications for the pattern of use of health facilities by residents. Indeed facility use behavior of residents in Southeast Nigeria may be shaped by a number of factors which include the size of household finances (income) and structural issues like bad roads, poor transportation systems and distant location of health facilities (based on political considerations other than on equity). All these may result in non use or in delay in use and consequent complication of ailment.

Furthermore, low level of education limits information about health. High level of illiteracy in Southeast Nigeria contributes to low life expectancy because the individual may not recognize early symptoms of illness nor seek prompt medical advice. Illiteracy leads to low appreciation of the benefits of use of health services. According to State of the World's Children Report (2004), an extra year of education can prevent two maternal deaths per 100,000 live births.

The problem of low use of health facilities is so critical that Professor Amobi Ilika, a former commissioner for health in Anambra State, lamented that although the state subsidizes health care for antenatal, malaria and infant treatments by 75% while HIV-AIDS,

tuberculosis and immunization services are free in both private and public hospitals, yet associated illness and diseases are on the rise because use of these services remain very low (Ministry of Health, Anambra State, 2010).

It is against the foregoing background and problems that the study was undertaken to examine social determinants of differential access to health services in the five states of Southeast Nigeria.

Research Questions

The following research questions guided the study:

- a) To what extent are available health facilities/services in Southeast Nigeria used/accessible to the residents of the area?
- b) What is the perception of residents of Southeast Nigeria about forms of differential access to health services in their area and the role of government in generating such differentials?
- c) What are the major socio-economic and cultural factors that affect or determine use /access to health facilities and services by residents of Southeast Nigeria?

Study Hypotheses

The following hypotheses were formulated and tested in the study:

- 1) There is a significant relationship between level of educational attainment of residents of Southeast Nigeria and their use of health facilities in the area.
- 2) The female gender is more likely to use the health facilities /services more than the male gender in Southeast Nigeria.
- 3) There is a significant relationship between level of income of residents and their use/access to health facilities in Southeast Nigeria.

Theoretical thrust

The theoretical platform on which this paper is anchored is the Health Belief Model (HBM). This is a health behaviour change model first developed in the 1950s by social-psychologists – Kegel Rosenstock and Houchbaum. HBM is a conceptual tool used to understand, explain and predict health behaviour (curative and preventive), including reasons for non-compliance with recommended health action. In its attempt to explain and predict health related responses, HBM tries to understand the roles that knowledge, beliefs, perception and attitude play in shaping personal decisions and actions relevant to disease situations or health services.

Corner and Norman (2001) identified broad areas of application of HBM. These include:

- Preventive health behaviours like dieting, exercising, vaccination and family planning
- Health risk behaviour e.g. smoking and prostitution.
- Sick role behaviours which refer to compliance with recommended treatment requires.
- Clinic use which includes physical visit to health facilities for a number of reasons.
- The assumption of HBM is that observed health behavior are related or hinged on four perception indicators listed below:
 - Perceived susceptibility (an individual's assessment of their risk of getting the conditions preached against).
 - Perceived severity (an individual's assessment of the seriousness of the condition and its potential consequences).
 - Perceived barriers (an individual's assessment of the influences that facilitate or discourage adoption of promoted behaviour).

- Perceived benefit (an individual's assessment of the positive consequences of adopting the behaviour).

These items of perception however, respond to the modifying or mediating factors that influence use of health facilities. HBM is a suitable theoretical framework for this study because it addressed utilization of health facilities and why people may not take up or patronize available and sometimes free medical services. The individual's perceived barriers such as low income, difficult terrain; distant location of health facilities, low level of knowledge, etc could discourage anticipated positive responses which promote health.

Area of the Study

The study was located in southeast geo-political zone of Nigeria which is made up of five states out of which Anambra and Ebonyi states were randomly selected for study. The indigenous ethnic group in the two states is the Igbo, of whom Ifemesia (1979) observes that their territory covers an area of over 15,800 square miles. Nwala (1985) circumscribed the area between 6° and 8½° East longitude and 4½° and 7½° North latitude. He noted that Igbo land is densely populated which is true of Anambra and Ebonyi states whose populations as at 2006 were 4,177,828 and 2,176,947 respectively (National Population Commission, NPC 2006).

Anambra and Ebonyi states are rich in natural resources and arable soil. Land cultivation, trading, arts and crafts, animal husbandry and civil service positions are major economic activities in the two states. However, people of Anambra state are more involved in entrepreneurship and commerce whereas Ebonyi state is notable for her agricultural prowess.

Despite presence of democratically elected civilian governments in Anambra and Ebonyi states, many intricate socio-political structures and pressure groups that characterize Igbo traditional societies have remained visible and functional. As such gerontocracy, village assembly, titled men, women groups etc are still relevant to grass root administration in both states. Similarly, Christianity enjoys greater follower ship in the area but exists side by side with traditional religion which still has many adherents.

Methods

The cross-sectional survey design was adopted for this study. The study population consisted of all adults resident in both states whose total sum up to 3,515,370 (NPC, 2006). A sample size of 200 respondents, adequate for applicable tests and constituting 0.0057% of the study population was used to generate quantitative data. These participants were drawn from the two state capitals (50 from each capital) and a rural community close to each capital city (50 from each rural community). Purposive sampling technique was used to select streets or routes from where households and respondents were drawn. Convenience of availability was also applied to select respondents who cut across segments of the large population in little proportions. In addition to 200 respondents who responded to the questionnaire, there were 32 participants in the focus group discussion (16 from each state); and 6 respondents who were interviewed (3 each from Anambra and Ebonyi states).

The questionnaire with twenty two (22) items of closed and open ended character was other administered in English language after pre-tests outside the study area to ensure reliability and suitability. It was interpreted in vernacular for illiterate respondents. There were also four Focus Group Discussion (FGD) sessions with nine participants each (conducted in English language) with male and female groups in each state segmented across rural-urban divide. The third tool was In-depth Interviews (IDI) with medical records staff, doctors and community leaders in both states. Both FGD and IDI participants were persons who have not responded to the questionnaire. Two field assistants, field notebooks, tape recorder were used for fieldwork that lasted approximately three weeks.

Findings

Out of 200 uniformed questionnaires administered, 182 were retrieved and used for analysis.

Table I: Demographic Characteristics of the Study Population (n =182).

	Variables	Frequency	Percentage
Sex	Male	78	42.9%
	Female	104	57.1%
	Total	182	100%
Age	18 – 27	108	59.3%
	28 – 37	28	15.4%
	38 – 47	20	11.1%
	48 – 57	9	4.9%
	58 – 67	8	4.4%
	68 and above	9	4.9%
Religion	Total	182	100%
	Christianity	176	96.7%
	Islamic	-	-
	African Traditional religion and others	6	3.3%
	Total	182	100%
Marital Status	Single	120	66.0%
	Married	54	29.7%
	Separated	-	-
	Divorced	1	0.5%
	Widowed	7	3.8%
	Total	182	100%
Occupation	Farmer	15	8.2%
	Trader	104	57.1%
	Student	25	13.7%
	Civil Servant	29	16.1%
	Artisans/Others	9	4.9%
	Total	182	100%
Educational attainment	No formal education	4	2.2%
	primary	18	9.9%
	Secondary	49	26.9%
	Tertiary	85	46.7%
	Above 1 st degree	26	14.3%
	Total	182	100%
Monthly income	None/Below N18,000	58	31.9%
	N18,000-N38,000	46	25.3%
	N39,000-N59,000	19	10.4%
	N60,000 and Above	59	32.4%
	Total	182	100%

Table 1 shows that 78 (42.9%) of the respondents were males while 104 (57.1%) were females. The table also shows that 108(59.3%) of the respondents were within the ages of 18-27. Therefore, majority of the respondents were relatively young. The **mean age** of

respondents was **27.3 years old**. Table 1 further shows that 176 (96.7%) of the respondents were Christians. On the other hand, 120 (66.0%) constituting majority of respondents were single, 54(29.7%) were married. Only 1(0.5%) was divorced. The low number of divorcees in the sample could be related to the high cultural premium on stable marriage.

Table 1 further shows that 85(46.7%) of the respondents have attained tertiary education while 4(2.2%) have no formal education. Finally, Table 1 suggests that the level of poverty is high in the area. This is because 58(31.9%) of the respondents earn below the national monthly minimum wage of N18,000 while only 59 or 34.4% earn above N60,000 per month.

Analysis of Research Questions: The analysis are presented below:-

Research Question 1: To what extent are health facilities and services in Southeast Nigeria accessible to residents in the area? The findings are shown at table 2, 3 and 4

Table 2: Distribution of Respondents by their views on extent to which health facilities/services are accessible to all residents of Southeast Nigeria.

Very accessible to all	1	0.5%
Moderately accessible to all	17	9.2.0%
Accessible only to the rich	78	43%
Very inaccessible to the poor	84	46.2%
No response	2	1.1%
Total	182	100%

Table 2 shows majority of the respondents (46.2%) believe that public health services are very inaccessible to the poor whereas 43% opined that such services are accessible to the rich. The results were corroborated by FGD participants most of whom maintained that high cost of public health services has taken such services out of the reach of the poor masses.

Table 3: Distribution of Respondents by their views on features of health facilities/services in Southeast Nigeria which could affect access of residents to such services.

Responses	Frequency	Percentage
There are adequate quality of public health services at lower charges at door step of households	64	35.2%
Health services for public use are limited in supply and still very costly and out of reach for most citizens	93	51.1%
Health facilities are far from homes at difficult terrain	18	9.9%
Rural areas lack health facilities and health manpower	2	1.1%
No response	5	2.7%
Total	182	100%

Table 3 shows that majority of respondents (51.1%) were of the opinion that health services for public use are in short supply, very costly and out of reach to most residents.

Research Question 2: What is the perception of residents of Southeast Nigeria about the major forms of differential access to health service experienced in their areas and the role of government in creating same?

Table 4: Distribution of Respondents by their views on major form of differential access applicable to use of public health services in Southeast Nigeria.

Responses	Frequency	Percentage
The rich has greater access to health service	9	4.95%
Males enjoy greater access than females	8	4.40%
Urban residents have greater access than rural residents	9	4.95%

All of the above	156	85.71%
Total	182	100%

Table 4 shows that differentials in access to healthcare cut across class, gender and rural-urban residence as most respondents chose the aggregate of the options (ie all of the above)

Table 5: Distribution of Respondents by their views on role of government in creating differential access to public health services in Southeast Nigeria.

Responses	Frequency	Percentage
Has poorly functioning economic empowerment package	11	6.04%
Skewed distribution of health facilities in favour of urban areas	8	4.39%
Government budgets very low for health	7	3.85%
All of the above	154	84.62%
Total	182	100%

Table 5 shows that majority of respondents were of the opinion that government contributes to differential access to health services of citizens through poor distribution of health facilities, poor economic empowerment packages and low budget for health services.

Research Question 3: What is the major socio-economic and cultural factor that affects or determines access to public health facilities/in Southeast area of Nigeria?

Table 6: Distribution of Respondents by their opinion on major socio-economic and cultural factor that affects or determines access to public health facilities/services in their area

Responses	Frequency	Percentage
Low level of income (poverty)	94	51.6%
Low level of education	38	21.0%
Distance and difficult terrain of health facilities	23	12.6%
Lack of awareness about existing health facility	13	7.1%
Delay in getting permission for clinic attendance from male head (effect of patriarchy)	2	1.1%
Poor quality of service provided at public health institutions	12	6.6%
Total	182	100%

Table 6 above shows that majority of the respondent 94(51.6%) were of the view that use of health facilities is mostly affected by low level of income; 38(21.0%) saw level of education as the major factor while 23(12.6%)of the respondents felt that distance and difficult terrain were the major factors affecting access to public health institutions. However, a female focus group participant at Awka, capital of Anambra state observed that “\one problem public health facilities have is poor attitude to work among staff particularly lateness of doctors to work. There is also short supply of adequately trained and skilled health personnel. These situations often scare me and other citizens from patronizing such public health institutions”(female FGD participant, urban resident,42 years old). Meanwhile, a male health worker interviewed in the same town (Awka) stressed that level of income is not actually the main factor but resident’s attitude to public health facilities occasioned by prevailing belief system and orientation. In his words, “lower charges and free treatment administered to patients in public health facilities generate doubts about quality and efficacy of those treatments. This is because the people believe that good things don’t come too cheap. The

situation is compounded by generally low level of education among residents but could be reversed with intensive public enlightenment campaign” (male interviewee, urban resident, 36 years old).

Test of Hypotheses: Three hypotheses postulated for this study were tested as shown below;

Hypothesis 1

There is a significant relationship between level of educational attainment and use of health facilities among residents of Southeast Nigeria. Test was based on data in table 7.

Table 7: Relationship between level of educational attainment and use of health facilities among residents of Southeast Nigeria.

Level of use of health facilities					Total
Level of Education	Very often	Often	Rarely	Never	
No formal education	1(0.46)	-(1.12)	3(1.67)	-(0.74)	4
Primary	-(2.08)	3(5.04)	12(7.52)	3(3.36)	18
Secondary	4(5.65)	17(13.73)	20(20.46)	8(9.15)	49
Tertiary	10(9.81)	24(23.82)	32(35.49)	19(15.88)	85
Above first degree	6(3)	7(7.39)	9(10.86)	4(94.86)	26
	21	51	76	34	182

$X^2=32.47$, $df=12$, $P, 0.05$

The computed value of Chi-square is 32.47 while the table value of Chi-square at 0.05 level of significance with a degree of freedom (df) of 12 is 21.026. Since the computed Chi-square is greater than the table value, the alternative hypothesis was accepted: It implies that there is a significant relationship between level of education and use of health facilities among residents in Southeast Nigeria. This implies that more educated residents are more likely to use the health facilities than poorly educated residents. This is because a higher level of education enables a person to recognize early symptoms of illness resulting in willingness to seek early treatment.

Hypothesis 2:

The female gender is more likely to use public health facilities more than the male gender among residents of Southeast Nigeria. Test was based on data in table 8 below.

Table 8: Relationship between gender and use of health facilities.

Level of use of health facilities					Total
Gender	Very often	Often	Rarely	Never	
Male	9 (9)	20(21.86)	36 (32.56)	18 (14.57)	78
Female	12 (12)	31 (29.14)	40 (43.42)	16 (19.43)	104
Total	21	51	76	34	182

$X^2=55.99$, $df=3$, $P=0.05$

The computed value of Chi-square is 55.99 while table value of Chi-square at 0.05 level of significance with a degree of freedom of (df) of 3 is 7.815. Since the computed Chi-square is greater than the critical value, the alternative hypothesis was accepted. This implies that, the female gender uses health facilities more than the male gender in Southeast Nigeria. This may be because females undergo more physiological, biological and reproductive changes than the male gender. Such requires regular visits to health facilities such as for antenatal services, deliveries, immunization of their children, health counseling and family planning etc.

Hypothesis 3

There is a significant relationship between level of income and use of health facilities in Southeast Nigeria. Test results showed that computed value of Chi-square is 58.12 while table value of Chi-square at 0.05 level of significance and degree of freedom (df) of 9 is 16.919. Thus, since the computed Chi-square value is greater than the critical value; the alternative hypothesis was accepted. This implies that there is a significant relationship between level of income and use of health facilities among residents of Southeast Nigeria. This suggests that higher income earners use health facilities more than low income earners.

Discussion of Findings

In this study, it was found that available public health facilities in Southeast area of Nigeria are lowly utilised. It was also found that social factors determine or impede access/use of those services. Such factors include low income, low level of education, negative attitudes towards health facilities, gender, beliefs, distance of facility away from neighborhoods, difficult terrains of health facilities, patriarchal social structure and perception of quality of treatment available etc. These factors contribute to differential access whereby persons with high socio-economic status (i.e. greater income and higher educational attainment) tend to use health facilities more than those with poor income and low educational background. However, the study revealed that low income (poverty) ranks higher among other factors that influence use of health facilities in Southeast Nigeria.

The above findings agree with some earlier studies among other social groups in Nigeria (see Nigeria Demographic and Health Survey, 2006). Also, Vietnam National Health Survey 2001-2002 similarly reported that income is strongly positively related to probability of seeking professional health care when ill. The poorest group has less opportunity to obtain health care; while the richest has highest opportunity to seek health care. Furthermore, there is a greater tendency among the poor to postpone seeking care.

Similarly, the study observed positive effect of education on access to health services in consonance with literature. Schooling is an important correlate of good health. Maternal schooling, for example, was found to be the most important determinant of infant survival in a study in Pakistan (Agha, 2000). Similarly, Moore, Hart and George (2011) in their study of utilization of health care services by pregnant mothers during delivery in Gokana Local Government Area of River State, Nigeria observed that although the rate of utilization of health facilities for delivery by pregnant women in the area stood at 57.1%, mother's education contributed significantly to increased health facility utilization.

Furthermore, the study revealed that the female gender utilizes health facilities more than the male gender either as a result of the female's biological, physiological and reproductive nature. Other forms of disparity in access to health services in Southeast Nigeria are related to rural-urban residence, as well as class. Above all, 41.8% of respondents stated that they rarely use public health facilities. To further compound the issues, respondents were of the view that government contribute to the problem of differential level of access to health services through poorly functioning economic empowerment programmes, low health budgets and skewed or inequitable distribution of health facilities to the disadvantage of rural areas and difficult terrains.

Consequences of low use of health facilities on the health status of the residents of Southeast Nigeria include high morbidity and mortality and inability to function at full capacity. The finding is in line with earlier findings Deneulin and Shakam (2009). Inability to function to full capacity (due to poor health) is a major consequence of low use of health facilities in the area. This explains frequency of diseases and deaths due to what Nigerians now call brief illness.

Respondents suggested reduction in the cost of health services; creation of awareness on existing facilities; training and re-training of health personnel and increment in their salaries; need for closer location of health facilities; improvements in education, adoption of positive attitude by residents; and improvements in transportation system as measures to improve access to services

Conclusion

Health is a basic human need. The extent of development of society could be rightly judged by the quality of her population's health and how fairly health facilities are distributed across social spectrum. Questions are also asked about people's access to available services. The influence of socio-economic and cultural factors on use of health facilities is not only a threat to health status of individuals but also a threat to national development. This is because it constitutes a set back to the actualization of Millennium Development Goals and other important aspirations of both individuals and the state. Hence it requires utmost attention. Accordingly, advances in both public and private health and breakthroughs in medical sciences will amount to nothingness if obstacles to use of health facilities as identified in this study are not dismantled.

Recommendations

Government should make essential drugs and health services free of charge at public health institutions with a monitoring team to ensure effective implementation.

Health facilities should be located nearer to the people especially in the rural areas with minimal class and political considerations that may disadvantage the poor masses.

Improved health workers salary and transportation systems should be put in place to facilitate happy workforce and easy access to services particularly during emergencies.

Public awareness programmes should be strengthened by the government and should involve all agents of socialization. They should address importance of use of health facilities and dangers of delays in health response on health status of individuals.

Universal basic education programme should be strengthened in Southeast Nigeria to ease low male enrolment and boost mothers' educational level and quality of care.

Government should provide job opportunities to enable people earn income with which to take care of their health through adequate use of health facilities in their area.

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