

# African Research Review

---

An International *Multidisciplinary Journal, Ethiopia*  
Vol. 8(3), Serial No. 34, July, 2014:140-154  
ISSN 1994-9057 (Print) ISSN 2070--0083 (Online)  
DOI: <http://dx.doi.org/10.4314/afrr.v8i3.12>

---

## **An Assessment of the Psychological Aspects of Health Communication among Port Harcourt City Residents**

**Omego, Christie U.**

Department of Linguistics and Communication Studies  
University of Port Harcourt, Port Harcourt  
Rivers State, Nigeria  
Phone: +2348033504741  
E-mail: [omegochristie@yahoo.com](mailto:omegochristie@yahoo.com)

**&**

**Nwachukwu, Faustinus Ginikanwa**

Department of Linguistics and Communication Studies  
University of Port Harcourt, Port Harcourt  
Rivers State, Nigeria  
Phone No: +2348038509307  
E-mail: [ginikanwa4ever@yahoo.com](mailto:ginikanwa4ever@yahoo.com)

### **Abstract**

*This study set out to find out how mass communication messages on health and health-related issues have resulted in attitudinal and behavioural changes among Port Harcourt (Nigeria) residents. It was a survey research which used the questionnaire as research instrument. Out of a population of 3,000,000 residents in Port Harcourt, 1,200 respondents were sampled through purposive and accidental sampling methods to assess the impact of health messages on the psychology of the residents. To achieve the set objectives of the study, three research questions were posed, and the data collected were analysed using simple percentages as statistical*

*tool. The study indicated that in spite of the various efforts made by the government, healthcare givers and other change agents to improve the health conditions of Nigerians through attitude and behaviour change, these messages were found not to have diffused evenly among the populace. This was due to poor choice of communication channels, inappropriate and poorly co-ordinated communication strategies. It was, therefore, recommended that efforts should be intensified and health communication approach redefined and readjusted to meet the health needs of the people. Finally, it was also recommended that the people be reached through communication channels readily available and accessible to them.*

**Key Words:** Health, Communication, Psychological Principles, Attitude change.

### **Background to the study**

The great medical progress heralded in the 20th century is billed for consolidation in the present century. These medical progresses are in the areas of hygiene, vaccines and antibiotics, advocating the prevention of damaging behaviours such as smoking, drug abuse, poor diet and change in health-related behaviours in community and workplace settings. These efforts have helped in prolonging the lifespan of many. The desire to consolidate progress in health-related issues in the 21st century has made health one of the cardinal issues in the Millennium Development Goals (MDGS) of Nigeria and indeed Africa

Currently, Nigeria as a developing nation is saddled with many health-related problems such as polio eradication, infant mortality, malaria, drug abuse, yellow fever, sickle cell anaemia HIV/AIDS pandemic, etc. HIV/AIDS, for instance is, one the greatest health problems threatening the human race, in general and the African sub region, in particular. An estimated 22.5 million people were living with HIV/AIDS at the end of 2007 and approximately 1.7 million additional people were infected with HIV that year. In 2008, the AIDS pandemic in Africa had claimed the lives of an estimated 1.6 million people of this region. More than eleven million children have also been orphaned by HIV/AIDS (Opusuju, 2009).

The media, no doubt, have mounted campaigns on how to know one's HIV status. There are also campaigns and media messages geared towards sensitizing and educating the populace on the importance of immunizing infants against the six-killer diseases, fellow fever, etc.

The awareness of many towards health as an important aspect of human life is on the increase. In years gone, especially in the last eight years, people have lived in a disordered, anybody-in-charge world of health. Even now, with the opportunity to transmit data instantaneously, prevent diseases through life style and behaviour, and even cure diseases with innovative pharmacological and surgical intervention, the

general population in Nigeria relies on health systems, rather than on themselves to manage health issues.

Given the fact that the tremendous achievements of our country in public health in the early years of this millennium have diffused unevenly throughout the country, it becomes necessary to put in place a practical and action-based intervention aimed at meeting the objective of the nation's Millennium Development Goals in the health sector.

It is against this backdrop that this study was carried out to assess the psychological aspects of health communication among Port Harcourt city residents.

### **The Problem**

The importance of a healthy populace cannot be over-stretched, and as Nwabueze (2010) notes that health is crucial to the development of any nation. It is true that there has been tremendous progress made in public health. However, such progress has diffused unevenly throughout the country. Gibbs and Warhover (2002) note that doctors are notorious for communicating in ways understandable only by other doctors. Izenberg (2009) also states that these publications are written for scientific community... In relation to this, it becomes necessary to access the potentials of a new powerful intervention which can help advance health, especially, the psychological aspects. This powerful intervention is communication. It is, therefore, the aim of this study to assess the psychological aspects of health communication among Port Harcourt city residents.

### **Objectives of study**

The main purpose of this study was an assessment of the psychological aspects of health communication among Port Harcourt City residents. The following are specific objectives:

1. to ascertain the effects of health intervention campaigns on the residents of Port Harcourt City?
2. to find out the communication strategies employed by health interventionists in communicating with Port Harcourt residents?
3. to reveal the strengths and weaknesses of the techniques employed in bringing about the required changes in the lifestyle and health of Port Harcourt residents

### **Research questions**

The following questions were posed to guide this study:

1. What are the effects of health intervention campaigns on the residents of Port Harcourt City?
2. What are the communication strategies employed by health interventionists in communicating with Port Harcourt residents?

3. What are the strengths and weaknesses of the techniques employed in bringing about required changes in the lifestyle and health of Port Harcourt residents?

### **Significance of study**

This study will be of benefit to the following:

1. Port Harcourt residents and the general public will find this study very illuminating by knowing the aim of media messages directed at them;
2. Government and Non-governmental Organisations and other interested agencies or health institutions will benefit from this study which will them in both their long and short-term plan
3. The mass media will also gain by knowing the best channel and how best to package mass communication messages on health and health-related issues that would result in attitudinal and behavioural changes among Port Harcourt (Nigeria) residents.

### **Theoretical framework**

For the purpose of this study, the theoretical framework upon which this study is based is the ACADA communication planning framework. ACADA, according to UNICEF, involves Situation Assessment; Communication Analysis; Design and Action. This model is informed by the fact that influencing or modifying human behaviour through communication is a complex process that needs to be planned carefully. The ACADA model is a model designed to bring about development in which attitudinal change is a core element. This model is based on the popularly used "Triple A" planning circle (Assessment, Analysis and Action). In other words, what this model is saying is that for communication aimed at achieving a change in attitude and behaviour to succeed, there must be effective planning. This plan will take care of such elements as situation report assessment; communication analysis which should consider issues such as problem statement, audience behaviour and participation on existing performances, channels/media for communication, communication objectives and indicators; Design for communication implementation, and action which is programme implementation. ACADA also advocates programme evaluation to assess impact over set objectives.

### **Conceptual review**

The following terms have been reviewed conceptually:

#### **Health psychology principles**

Psychological principles involve the strategies used to promote changes in people's behaviours and attitudes, especially their attitudes, thinking and behaviour about

health and illness. These areas in terms of health psychology are quite vast and may encompass, but not restricted to the following:

- ❖ Use of psychological theories and intervention to prevent damaging behaviours as in drug abuse, poor diet and smoking and the change in health-related behaviours in community and workplace;
- ❖ Promoting and protecting health by encouraging behaviours such as healthy dietary choice, exercise, health check/self examination, teeth brushing;
- ❖ Health-related cognitions: investigating the processes which can explain, predict and change health and illness behaviours;
- ❖ Processes influencing health care delivery: the nature and effects of communication between health care practitioners and patients, including interventions to improve communication, facilitate adherence, prepare for stressful medical procedures and so on,
- ❖ Psychological aspects of illness: looking at the psychological impact of acute and chronic illness on individual families and careers.

Psychological principles or interventions may be used to help promote self management, facilitate coping with pain or illness, help to improve quality of life and to reduce disability and handicap (class@uidaho.com).

Our concern in this paper is more related to the aspect of health psychology that deals with the processes influencing health care delivery; the nature and effects of communication between health practitioners and patients, including interventions to improve communication.

#### **Communication and attitude change**

According to Asemah (2011), attitude is our acquired mental position regarding something, idea or object. Anaeto and Anaeto (2010), indicate that attitudes are formed through exposure to information. Communication is, therefore, a vital tool for attitude change. In view of the importance of communication in behaviour change, Wilson (1997) sees communication as having tremendous impact on society which impact has influenced the order of change with its attendant effects. He adds that, communication is perhaps the most instrumental source of change in our society today. As a change agent, communication justifies its purpose by creating the awareness, which stimulates and catalyzes the review of opinions which may bring about attitudinal change. However, this requires that individuals willingly accept the information which could lead them to review their opinions on the issues raised which could subsequently lead to attitudinal and behavioural changes. It is also necessary to mention that for communication to achieve attitudinal and behavioural change such communication must be in line with the individual's cultural diameter (Ugboaja, 1979). That is to say that such communication whether from the mass

media or on interpersonal levels must agree with community's beliefs, symbols and artifacts, norms and values. Communication is a public enlightenment strategy which acts as the catalyst that facilitate issue acceptance and encourage behavioural change to conform to a predetermined objective (Nwanmuo, 2008).

In view of the fact that inertia exists and plays a strong role in resisting change by people, it is necessary that communication geared towards change must be persuasive enough to bring about the expected behavioural change. Such communication must be credible, sincere, authoritative and reliable (Nwachukwu, 2008).

### **Health communication**

The World Health Assembly defines health as a "state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity (Wikipedia 2007, p.1)

Health communication is very vital and indispensable to the achievement of a healthy nation. It provides vital and necessary information on health and other health-related issues. The purpose is to bring the populace abreast of events, issues and concerns of health and the consequences of new found diseases on the health and social well being of the people.

According to Nwabueze (2009), "health communication is the adoption of communication strategies to enlighten the public on health-related matters and influence individual, government on communication decisions that positively impact on health" (p.228). Health communication, according to Healthy People (p.227), is relevant in disease prevention and health promotion in the following ways:

- Health professional patient relations; for and use of health information
- Individual's adherence to clinical recommendations and regimens
- The construction of public health messages and campaigns
- The dissemination of individual and population health risk information, that is risk in the mass media and the culture at large,
- The education of consumers about how to gain access to public health and health care systems and the development of tele health applications (p. I)

In a more recent study, Healthy People (2010) defines health communication as "the art and technique of informing, influencing and motivating individual, institutional and public audiences about important health issues. The scope of health communication includes disease prevention, health promotion, health care policy, and the business of health care as well as enhancement of the quality of life and health of individuals within the community (pp.11-20). Still Speaking on health

communication, Cline (2003) says, it is an area of theory, research and practice related to understanding and influencing the interdependence of communication action (symbolic interaction in forms of messages and meaning) and health-related beliefs, behaviours and outcomes.

In the view of Schiavo (2007), health communication is a multifaceted and multi-disciplinary approach to reach different audiences and share health-related information with the goals of influencing, engaging and supporting individuals, communities, health professionals, special groups, policy makers and the public, to champion, introduce, adopt, or sustain a behaviour, practice or policy that will ultimately improve outcomes (p.7).

From the above, we discover that health communication is a vital link to health awareness, disease control and overall change in behaviour of the people in relation to health and health risk behaviours. Such change arises from awakening the receiver's recognition and appealing to their psyche.

### **Method of study**

The study used the opinion survey for data collection. The questionnaire was used as the research instrument. This instrument was administered on 1200 (0.04%) of the population of Port Harcourt City residents put at projected 3,000,000 (three Million) persons by the 2006 census. These 1200 respondents are those who agreed to have been exposed to various media messages on change in behaviour related to health issues.

In all, 1200 (100%) copies of the questionnaire were well completed and returned. These were found useful for data analysis. To access the respondents, the study adopted the purposive and accidental sampling methods. To do this, Port Harcourt City was divided into clusters and 12 areas were selected through the random sampling technique. The areas selected were Rumuola, D-line, Rumueme, Rumukwursi, Choba, Mgboba, Woji, Rumomasi, Rumuokwuta, Elioza, Abuloma and Mile 3.

For the purpose of questionnaire administration, a total of 100 copies of the questionnaire were administered in each cluster (i.e. on 12 clusters in all). This gave a total number of 1200 respondents. Data gathered in this process were presented and analyzed using simple percentages and frequency counts. This is to ensure clarity, simplicity and ease of understanding of the findings. The aim of data analysis here is to provide answers to the research questions and to satisfy the research objectives.

### **Data presentation and discussions**

The major interest of health intervention is geared towards prevention rather than treat a disease. This is done through surveillance behaviours. In doing this, effective

communication is an imperative. This is in view of the powerful effects of communication on the psychology of information consumers. In Nigeria today, there has been a lot of effort on the part of government, non-governmental organizations and health care givers to inform Nigeria on the need for attitude change especially on the health aspects. These health campaign interventions are aimed at meeting the objectives of the nation's millennium development goals in the health sector.

**Research question one:** *What are the effects of health intervention campaigns on the residents of Port Harcourt City?*

To determine or assess the psychological aspects of health communication among residents of Port Harcourt, it was found useful to first know if the respondents are exposed to behaviour change messages on health issues.

**Table 1: Respondents' Awareness of Health Messages**

S/N	Responses	No of Respondents	Percentage%
4	To a very great extent	983	82
3	To a great extent	197	16
2	To a little extent	20	2
1	To a very little extent	-	
0	To no extent	-	
	<b>Total</b>	1200	100

The data available from the survey indicate that 983 (82%) of the respondents are exposed to change messages to a very great extent, 197 (16%) are exposed to change messages on health issues to a great extent and another 20 (20%) said they are exposed to such messages to a little extent. What this means is that all or the majority of the respondents in the study are exposed to behaviour change messages on health matters.

As a follow up, the researchers sought to know the areas of health behaviour which the messages they have been exposed to covered. Table 2 provides details of the responses.

**Table 2: Areas of Coverage of Health Messages**

S/N	Health issue	No of Respondents	Parentage %
1	Smoking	953	79
2	Drug abuse	967	81
3	Risky sex behaviour	949	79
4	Regular exercise	720	60
5	Child immunization	1012	84
6	Healthy feeding	1151	96
7	Family planning	1178	98

As table 2 above depicts, 953 (79%) of the respondents have been exposed to attitude change messages on smoking, 967 (81%) have heard messages on the dangers of drug abuse, 949 (79%) on the issue of risky sexual behaviours, 720 (60%) on the importance of regular exercise, 1012 (84%) on the area of child immunization, 1151 (96%) on issues related to healthy feeding, while 1178 (98%) say they have heard messages on healthy attitude change in the areas of family planning and family health.

A closer look at the pattern of responses on Table 2 would show that the respondents are almost exposed to various health related messages at different levels. There is a clear indication that those who are exposed to messages on smoking also indicated their exposure to messages on drug abuse, risky sexual behaviours and so on.

The respondents were then asked if these messages have resulted in any change of behaviour in relation to the areas of concentration of the health related messages.

To this 1001 (83%) of the respondent said to a very great extent the messages have resulted to attitude change in them, 73 (6%) said this has happened to a great extent, another 77 (7%) said to a little extent, while 49 (4%) said the messages have affected them positively to a very little extent.

**Table 3: Extent of attitude change due to exposure to health messages**

S/N	Responses	No of respondents	Parentage %
4	To a very great extent	1001	83
3	To a great extent	73	6
2	To a little extent	77	7
1	To a very little extent	49	4
0	To no extent	-	-
	<b>Total</b>	<b>1200</b>	100

This research result indicates that although many of the respondents agree that they have had behaviour changes as a result of their exposures to the health messages, a total of 126 (11%) respondents said the messages have not resulted in significant attitude changes in them.

From the data gathered from the respondents to answer research question one, it is apparent that the majority of respondents are exposed to health intervention messages, yet the data shows that there are some respondents who said they have been exposed to such messages to a little extent. This goes to prove true, our statement earlier that health intervention messages in Nigeria have diffused unevenly among the people.

**Research question 2:** *What are the communication strategies employed by health interventionists in communicating with Port Harcourt residents?*

This research question was asked in an attempt to find out what communication strategies were employed in bringing to the respondents behavioural change on health issues. In relation to this, the respondents were asked to first mention the various sources of this message.

**Table 4: Sources of behaviour change messages to respondents**

S/N	Message source	No of respondents	Percentage %
1.	Radio	811	68%
2.	Television	612	51%
3.	Newspapers & magazine	480	40%
4.	African comm. Systems	129	11%
5.	Friends/peers	600	50%
6.	Family	95	8%
7.	Health workers	141	12%

To the above question, 811 (68%) of the respondents said radio is a source of information on behaviour change messages on health issues which they have. Still 612 (5%) other respondents said television also provides them with attitude change messages in the area of health, similarly, 480 (40%) respondents agree to have also been exposed to such messages through newspapers and magazines, while 129 (11%) pointed to African traditional communication system, another 600 (50%) said they also got these messages from friends and peers, while 95 (8%) of the respondents tipped the family as a source of such messages.

Also when requested to choose a preferred source for attitude change communication on health matters, the respondents provided information as contained in Table 5 below:

**Table 5: Preferred source on health messages**

S/N	Sources	No of respondents	Percentage %
1	Radio	151	13
2	Television	203	17
3	Newspaper/magazines	74	6
4	African traditional system	209	17
5	Friends/peers	80	7
6	Family	52	4
7	Health workers	431	36
	<b>Total</b>	<b>1200</b>	<b>100</b>

Information provided in Table 5 above indicate that 151 (13%) of the respondents prefer the radio as the source of health information, 203 (17%) prefer the television, 74 (6%) of the respondents prefer newspapers and magazines. Yet 209 (17%) of the respondents chose the traditional African communication systems, 80 (7%) choose friends/peers, while 52 (4%) respondents preferred the family as source for such message. However majority of the respondents 431 (36%) said they prefer health workers as sources of health communication.

A cursory look at the information provided by the respondents on Tables 4 and 5 above reveals that a gap existed between the sources employed by the health interventionists in Nigeria in communicating with the people and the peoples' source preferences. Generally speaking, while the respondents prefer health agents and workers as source of health communication messages, such messages are transmitted to them through other media.

As a follow up to the above, the researchers sought to know in concrete terms, the communication strategies adopted in communicating health messages to the respondents. Table 6 provides details.

**Table 6 Communication strategies adopted**

S/N	Strategies	No of respondents	Percentage %
1	Mediated messages	987	82
2	Health fora/seminars	143	12
3	Special events	70	6
4	Regular meetings	-	-
5	Orientation programmes	-	-
6	Lobbying	-	-
	Total	1200	100

The data in the Table above shows that the main communication strategy adopted in communicating health messages to the respondents is largely the mediated fora; 987 respondents or 82% of the respondents attested to this. Other strategies adopted are the health fora or health seminars; 143 (12%) and special events; 70 (6%).

What this mean is that there is the possibility that the health communication efforts of health interventionists in Nigeria may not fully yield the expected behaviour change due to the difference that existed between choice of media and the communication strategies adopted in communicating health messages to the people. It is apparent that while the people prefer an interpersonal relationship with health agents or the interventionists, the agents employ mediated source in communicating with the people.

**Research Question 3:** *What are the strengths and weaknesses of adopted techniques in the life style and health of Port Harcourt residents?*

In a bid to satisfy the objectives of this study, the respondents were asked to state the strength of the employed communication strategies adopted in communicating health messages to them. The answer to this is presented in Table 7.

**Table 7: The strength of the strategies**

S/N	Strength	No of respondents	Percentage %
1	Allows participation	-	-
2	Has personal touch	-	-
3	Are authoritative	511	43
4	Large coverage	689	57
	Total	1200	100

Table 7 indicates that 511 (43%) of the respondents think the strength of the strategies adopted in communicating health messages to them is that they are authoritative, while 689 (57%) think these strategies' strength lies in the large coverage which they have.

In the same vein, the respondents were asked to mention the weaknesses of these strategies. Table 8 provides details.

**Table 8: Weaknesses of communication strategies**

S/N	Weaknesses	No of respondents	Percentage %
1	Poor feedback	-	-
2	Impersonal in nature	-	-
3	Power problem	-	-
4	Inaccessibility of to source	-	-
5	All of the above	1200	100
	Total	1200	100

The information on this Table shows that all the respondents, 1200 (100%), see poor feedback mechanism, impersonal nature of the strategies, poor power supply and inaccessibility of the message sources as the weaknesses of the communication

strategies adopted by health interventionists in communicating health messages to the people.

### **Conclusion**

From the data generated and analyzed in this study, the following conclusions were drawn. Port Harcourt residents are exposed to behaviour change messages on health matters though a certain percentage of the population are to a little extent exposed to these messages. This has proved true the problem of this study that although government and its agencies are doing much to ensure disease prevention through health communication, these efforts have not diffused evenly among the people. This situation exists because as the study shows, the communication strategies adopted in communicating with the people do not get to the people through sources preferred by the people that would have had the expected impact on them. The study also indicated that in spite of the strengths of the strategies adopted, they have obvious weaknesses. These problems have not helped to achieve the psychological impact expected to result in behavioural and attitude change in the people concerning health and health-related issues.

It was also observed that communication on health in Nigeria has not relied adequately on the ACADA model and its attendant benefits as suggested in the theoretical foundation in his study. The model suggests adequate planning and consultation with the people for whom the communication is meant for, if the expected change is to occur. This involves regular meetings, health seminars, orientation programmes, lobbying, etc.

### **Recommendations**

As shown in this study, health workers and other behaviour change agents working to achieve preventive instead of curative health for the people should adopt more of inter-personal communication strategies in communicating with the people.

There should be regular and consistent evaluation of communication strategies and modes adopted for health communication. This will help to assess achievements against set objectives.

There should also be regular appraisal of each strategy, so that the strength of each strategy can be used to complement the weakness of the other.

Finally, attention should be paid to the benefits and advantages of the African communication systems in communicating health to the people. Wilson (1991) has noted that other scholars state that traditional forms of communication though not often acknowledged are powerful forces of transformation. This is in line with the findings of this study indicating that many respondents prefer the system as source of health messages. This is coupled with the fact that research has proved that the

system is effective in communicating with our people because they are rooted in the people's culture and is popular, credible, familiar, authoritative and time-honoured (Wilson, 1988).

## References

- Anaeto, S. & Anaeto, M. (2010). *Development communication: Principles and practice* (2nd Edition), Ibadan: Stirling Horden Publishers.
- Asemah, S. E. (2011). *Selected mass media themes*, Jos: Matkol Press.
- Cline R. (2003). American Public Health Association (APHA) Health Communication Working Group Brochure <http://www.Healthcommunication.Net/APHA/APHA.Humi>. Retrieved March 2011.
- Gibbs, C. & Warhover, T. (2002). *Getting the whole story: Reporting and writing the news*, New York: Guilford Press.
- Health people 2010, volume kind 2 [http://www.health people.Gov./document/HTML/Volume I/ ii Health. Com.htm](http://www.healthpeople.Gov./document/HTML/Volume I/ ii Health. Com.htm). retrieved March 08, 2011.
- Izenberg, C. (2009). *Concept of rural community journalism: Prevention and treatment 3*. Article 0001a.allAfrica.com. retrieved 05/01/2011
- MDGR (2006). Millenium Development Goals Report, Nigeria: FMF.
- Nwabueze, C. (2009). *Reporting*, Owerri: TopShelves Publishers.
- Nwabueze, C. (2010). Native media, Health Promotion and Disease Prevention in Nigeria, In Sola, E., Batta, H. and nwabueze, c. (Eds.) *Communication and Africa's development crisis*, Germany: VDM. Pp.105-116
- Nwachukwu, F. G. (2008). Adverting Effectiveness: The Indigenous languages Option, In Nnayerugo, O. (ed.) *International journal of Communication*, No. 8, April 2008, Nsukka: CSF. Pp. 77-88.
- Nwanmuo, S. (2008). Mass media and propagation of foreign culture: Implications to developing nations of Africa, In Agbanu, V. N. and Nwabueze, C. (Eds.) *Readings in mass communication: Global Perspectives on Communication Issues*, Owerri: TopShelves Publishers. Pp.211-224.
- Opusunju, M.V. (2009). Effectiveness of AKBC HIV/AIDS radio campaign on youths in Ikot Ekpene. A Seminar Paper Presented to the Department of Linguistics and Communication Studies, University of Port Harcourt, Nigeria. Pp 15-17

- Schiavo, R. (2007). *Health communication: From theory to practice*, San Francisco: Jossey-Bass.
- Ugboaja, F. (1979). Developing indigenous communication in Nigeria, In *Journal of Communication*, Autumn, Vol. 29; No. 4. Pp. 40-45.
- UNICEF (2004). *Communication handbook for polio eradication and routine immunization (EPI)*, Lagos: FMH.
- Wikipedia (2007). Health. <http://en.wikipedia.org/wiki/health>. Retrieved 23/03/11.
- Wilson, D. (1988). A survey of traditional-modern communication systems in old Calabar province (1846-1986), *A Doctoral thesis of the University of Ibadan*, Ibadan, Nigeria.
- Wilson, D. (1991). The mass media and rural development in Calix Udofia (ed.) *African Journalism in Perspective*, Abak: Itiaba Publishers. Pp. 201-205.
- Wilson, D. (1997). *Communication and social action*, Port Harcourt: Footstep Publications <http://heathpro.oxfordjournals.org/content>. Retrieved March 2011