



LOCATION AND MEDIA DYNAMICS IN INFORMATION SHARING IN IBADAN, SOUTHWESTERN NIGERIA

Kabiru K. **SALAMI** and Chinwe M. **ONUEGBU**

*Department of Sociology,
University of Ibadan,
Ibadan, Nigeria
E.mail:kabsalami@yahoo.co.uk*

ABSTRACT

This paper focuses on information needs and sharing among Ibadan residents, taking into cognizance the people's social environment and media accessibility. Five hundred copies of a questionnaire were administered among household heads and 12 key informant interviews were conducted in Ibadan, south-western Nigeria. Most respondents in the rural (57%) and urban (93%) areas possessed radio which was mainly used for information sharing and entertainment purposes. Mobile phones (93%) and television sets (76%) were possessed by urban dwellers more than their rural counterparts, whereas Internet facilities were more accessed (42%) than possessed (36%) by urban dwellers. Both rural and urban dwellers attributed inability to fully utilize the media to factors such as poor electricity supply, network uncertainties, promotion of immorality and frequent bad news projected by radio and television. Findings in this study emphasised the social and environmental differences in the adoption of the media for information sharing among rural and urban dwellers. Thus, the goal of the media is better achieved when the factors that determine the use of media in different zones are properly examined and messages are designed to fit the nature of particular environments.

Keywords: *Information sharing, media sources, multimedia dynamics, mass communication*

INTRODUCTION

Contemporary media techniques have made significant contribution to information dissemination by ensuring socio-political news, crime reports and sport news are made known to the public through electronic and print media (Gupta and Sinha, 2010; Mwisukha, Muniu and Chumba, 2013; Ahmmed, 2014) that utilize context-specific languages (Odegbenle, 2013). Large body of literature on development has examined the relevance of the media sector to the development process in Africa, especially its key roles of serving as a channel for information flow, a platform for enhancing voices and a watch dog on political actions (Stolz, Stolz and Anderson, 2008). As a weapon of peace and war, the media can be noted for its contribution towards development process in Africa (Hieber, 2001; Stolz, Stolz and Anderson, 2008; Abroms and Lefebvre, 2009; United Nations Development Programme, 2010). The analysis of locational spread and advantage of media sources make radio an important media source, reaching both rural and urban dwellers in Africa (Myers, 2008; Harande, 2009), keeping the entire society informed and up-to-date by processing raw information for the users in all sections of the society.

The media make tremendous efforts to ensure economic development. Jonathan, Mark and Mohammed (2010) noted that the economic performance of a country is greatly influenced by media sources as the media instigates the spirit of entrepreneurship amongst people, provides



career advice and encourages competition among investors. The media is also very useful for helping businesses thrive, irrespective of locations, through means of advertisement and flow of information. Recently, the mass media were engaged to monitor and evaluate the political and democratic process in Nigeria (Ajayi and Adesote, 2015). Elections in Nigeria were monitored by different media, enlightening the people on electioneering process and affairs of the government, thereby creating a politically active and observant citizenry. This is evident in the 2015 presidential and gubernatorial elections held in Nigeria (Oyenuga, 2015). The social media (Facebook, Blogs, Vlogs, and Twitter) were utilized to give progress report on the elections in different locations.

Health behaviour change which is often facilitated through extensive awareness among different categories of people (Levac and O'sullivan, 2010) is effectively driven through well-tailored communication messages in the media in the forms of television programmes, radio shows, health magazines, and billboards, all geared towards standard health care practices (Nasrin, Taher, Datis, Mahdi and Mohammed, 2013). Hence, public communication campaigns and positive media representations have become key instruments used in promoting healthy attitudes and behaviours and in informing and empowering the audience on health-related issues (Raftopoulou, 2007; Bergsma, 2011). The use of the mass media increases the potential for easy access to preventive medicine, interaction with health care providers, inter-professional communication in emergency management, and generally improved public health (Levac and O'sullivan, 2010; Aminian et. al., 2013). However, this is not to disregard the argument put forward by scholars such as Wallace (1990) that advertisement and mass media campaigns have negative impacts on people's behaviour.

A review that centres on positive media messages and health promotion reveal a close connection between the two. Raftopoulou (2007), in a study of audience perception on anti-smoking advertisements amongst young adult smokers in London, discovered that the use of fear appeals in such advertisements drew audience's attention, and had the potential to prompt anti-smoking behaviour. In another study (Nasrin, Taher, Datis, Mahdi and Mohammed, 2013), it was noted that the media has the responsibility to reduce the gap between the onset of symptoms and diagnosis of ill health condition. The media also improves patients' participation and cooperation in diagnosis, treatment process and follow up visits for lung disease. Several studies (Ndifreke, Abraham and Aniekan, 2012; Gidado, Olademeji, Roberts, Nguku, Waziri, *et al.*, 2014; Anatsui, 2014; Ilesanmi, Omotosho, Alele and Adewuyi, 2015) on health challenges report that mass media techniques are very instrumental as sources of information to the populace on emerging endemic diseases in Nigeria. From the foregoing, it can be deduced that the media play an important role in human development and in the promotion of best practices among the populace. However, while the general media trends in different sectors are documented, there is still sparse literature on the interaction between particular socio-environment and the dynamics of media accessibility. The main objective of the study in this paper is to identify media preferences and the dynamics of its accessibility in rural and urban areas of Ibadan, Nigeria.



METHODS

This study adopted a descriptive cross-sectional design in purposively selected rural and urban communities in Egbeda Local Government Area (LGA) and Ibadan North LGA in Ibadan. Ibadan is the capital of Oyo State and is considered the largest indigenous metropolitan area in sub-Saharan Africa (Adedimeji et al, 2008). A projection from the National Population Commission (NPC) office in Ibadan puts an estimated population of the city at 3,232,016 in 2014. The city of Ibadan is made up of 11 local government councils; five councils are located within the metropolis while the remaining six are in the outskirts of the city (Bello, et al, 2008). This study was conducted among house-hold heads and patent medicine vendors in Egbeda LGA and Ibadan North LGA in Ibadan, Oyo State.

The study ensured the inclusion of caregivers (parents or any other person who is responsible for provision of care and other forms of support in the family). Both quantitative and qualitative methods were used in data collection. The quantitative aspect of the study involved the administration of well-structured questionnaire to caregivers in the household while the qualitative aspect involved the conduct of key-informant interviews amongst patent medicine vendors (PMVs) and pharmacists. Through a multi-stage sampling procedure adopted in a larger study from which this paper was derived, a total of 500 caregivers and 12 medicine vendors were selected for the study. While the questionnaire (designed in line with the study objectives) was administered amongst caregivers in their homes, key-informant interview sessions were held with PMVs (the people's first choice in the provision of healthcare) and pharmacists to corroborate the quantitative data. The questionnaire is a set of questions designed to elicit information on socio-demographic characteristics, ownership and accessibility of media sources to the respondents, factors that promote usage of the media and the factors restraining media usage. The IDI guide addressed the question of ownership of media sources and its dynamic role in rural and urban locations.

At the wards sampled for the study, efforts were made to locate respondents by visiting them in their homes. On getting to each home, respondents were informed about the focus of the study and their consent was sought to participate in the study. Participation was voluntary, and the questionnaire was administered in 150 households of caregivers while key-informant interviews were conducted among three PMVs, from each of the four wards. The quantitative data were analysed using descriptive statistics. All quantitative data generated from the field were edited daily and coded through a comprehensive coding sheet. Afterwards, data were entered and analysed using the Statistical Package for the Social Sciences (SPSS) Version 17. Descriptive tools such as simple frequency and percentage were used to describe variables. The qualitative data were tape-recorded, transcribed and content analysed. The confidentiality of the respondents was ensured. In the rural areas, permission was sought from the village heads known as '*baale*' to conduct the study in the selected locality. At the household level, consent was also sought from each respondent both in the rural and urban locations.



RESULTS

Socio-demographic Characteristics of Respondents

More male caregivers (57%) than female (43%) were involved in this study. The respondents were mostly between ages of 16 and 25. Table 1 shows that about 35% of the respondents had SSCE as the highest educational qualification while about 30% had either 'no formal education' or 'primary school education'. A large majority (80.8%) of the respondents were married. Others were single (15.8%), divorced (0.4%) or widowed (3.0%). Respondents were Yoruba (77.8%), Igbo (12%), Hausa (1.4%) and 'Others' (9.0%). 'Others' is constituted of Tiv and Cotonou. More than half (58.0%) of the respondents were Christians. Others were Muslims (36%) and traditional worshipers (4.0%). Respondents were farmers (45%), traders/business men and women (37%) and civil servants (11%).

Table 1: Socio-demographic Characteristics of the Respondents

Variable		Frequency (N=500)	Percentage
Location	Rural	250	50.0
	Urban	250	50.0
Sex	Male	285	57.0
	Female	215	43.0
Age	16-25	57	11.4
	26-35	108	21.6
	36-45	141	28.2
	46-55	132	26.4
	56-65	53	10.6
	66-75	3	0.6
	76-85	4	0.8
	No response	4	0.8
Educational status	No formal education	70	14.0
	Primary	81	16.2
	JSSE	28	5.6
	SSCE	176	35.2
	OND	24	4.8
	HND	63	12.6
	B. Sc	20	4.0
	Others *	26	5.2
	No response	12	2.4
Marital status	Married	404	80.8
	Single	79	15.8
	Widowed	15	3.0
	Divorced	2	0.4
Ethnic group	Igbo	59	11.8
	Yoruba	389	77.8
	Hausa	7	1.4
	Others **	44	8.8
	No response	1	0.2
Religion	Christianity	290	58.0
	Islam	180	36.0
	Traditional	20	4.0
	No response	10	2.0
Household structure	Nuclear	412	82.4
	Extended	79	17.4
	No response	9	1.8

* Education level others: Arabic, Diploma

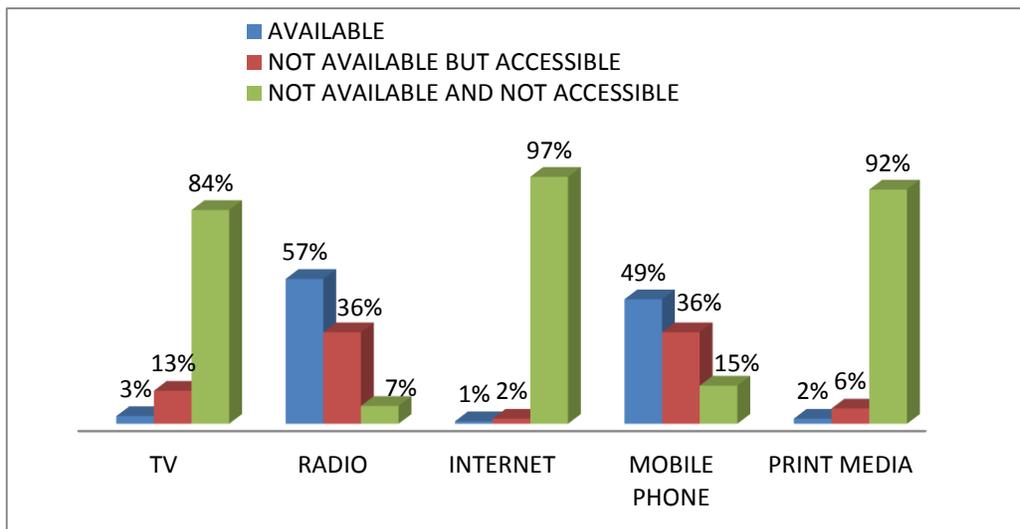
** 'Others' include: Tiv, Cotonou

Media availability and accessibility among rural and urban dwellers

More than half (n=143; 57%) of the rural dwellers had radio set in their homes as source of information. Respondents (n=90; 36%) who did not have radio were reportedly able to access it on the farm, at local shops or from neighbours. Very few (n=17; 7%) neither had radio sets in their homes nor had access to it. Figure 1 shows that ownership of mobile phones was relatively high (n= 123; 49%) among rural dwellers while some (n=91; 36%) who did not have were able to access it from their neighbours, friends, and local business centres. However, the Internet, which is a contemporary media, was sparsely utilized by rural dwellers. A very high proportion (n=242;

97%) neither had Internet facilities nor were able to access it. Only two (1%) respondents had such facilities in their homes. Patronage of print media was low among rural dwellers. Print media which include daily newspaper, magazines and other hard copy materials was reportedly neither possessed by almost all (n=230; 92%) nor accessible. In the same way, large proportion (n=210; 84%) of the rural dwellers neither had television device nor were able to access it. Only a few (n=40; 16%) indicated that they had access to it.

Figure 1: Available and Accessible Media Sources in the Rural Households



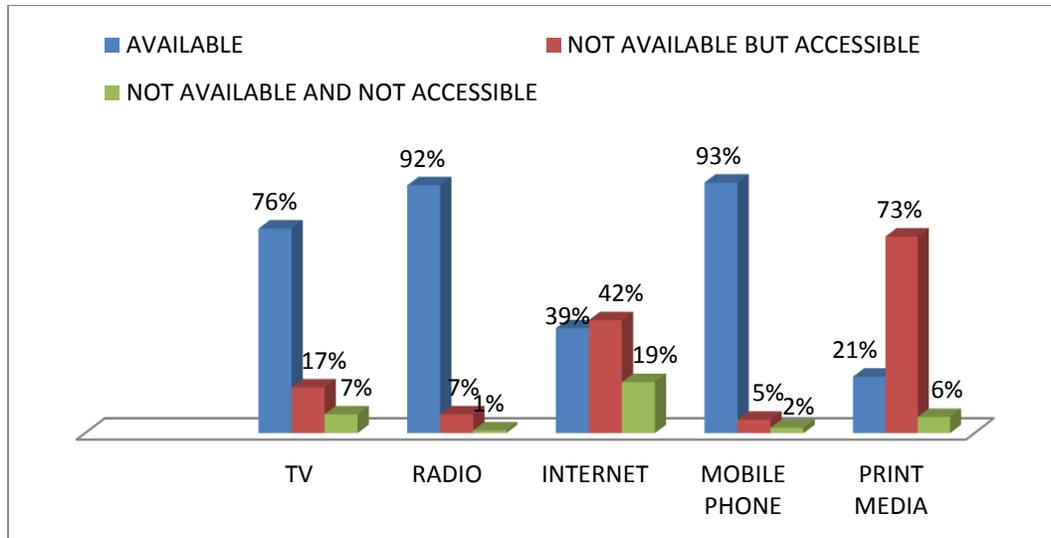
Narratives from the Patent Medicine Vendors (PMVs) confirmed the findings from household survey. The PMVs who were close to the people at the grassroots due to the location of their business in the communities and their membership of an important business guild in the community, were also well experienced about the structure of the community. The PMVs noted that more interpersonal means were effective for communication in small communities. Hence, information is disseminated through words of mouth and through an assigned representative of the community. For instance, a middle-age male PMV noted that:

This is a small community, so the best way to pass information here would be to organize a town hall meeting in the evening. The notice about the meeting will be passed across by a town crier, and this is the only way to make an impact in the people of this locality.

Figure 2 clearly showed that radio was prominently owned and accessed as information source in the urban site. A large majority (n=229; 92%) of respondents from urban area owned and utilized radio while the few (n=18; 7%) who did not possess radio at home reportedly accessed it at public places. Similarly, mobile phones were owned by almost all the respondents (n=233; 93%) and television also was either owned by or accessible to a large proportion (232; 93%) of the respondents. The Internet was mostly (n=104; 42%) not available but accessible among urban dwellers. The number of those who owned Internet facilities was below average

(n=98; 39%). Analysis of narratives showed that places where the Internet was accessed were mostly cyber cafes or few places with Wi-fi connections. This requires exploring business centers to be able to get better services.

Figure 2: Available and Accessible Sources of Information in the Urban Households



The interviews with PMVs in the urban area revealed that the dynamics of communication and media sources in the urban and rural areas varied. For instance, urban dwellers clearly noted to better incline to more advanced means of communication and new media than the rural dwellers. In one of the interview sessions, a female PMV in urban community expressed satisfaction with the different sources and their flexibility in service delivery:

In this our high technology age, there are several improved methods of passing and receiving information. For instance, since almost everyone has their sim cards registered, it will be wise to send messages to people from time to time. Even e-mails are also effective. This is because even though one does not read the message at a particular time, one can always access it or make reference to it in future. In this area, a bill board is a necessity and for young children they can be fully informed by their schools.

Preference for radio over television was expressed by some urban dwellers. Tight work schedule, ease of mobility and accessibility of the radio were the factors that motivated the preference as expressed by a PMV in urban community:

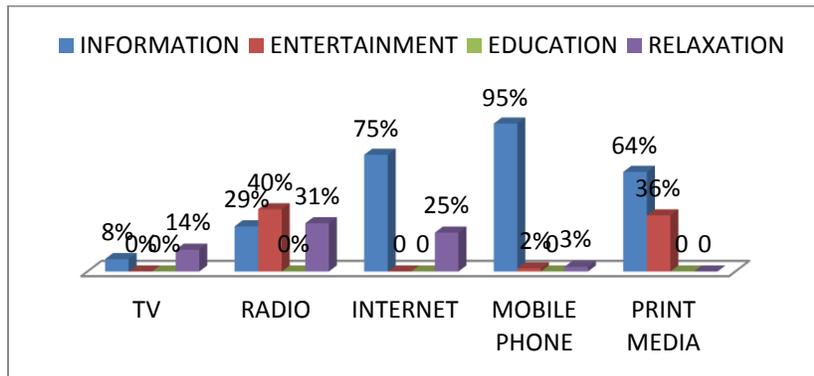
The media is an important channel for passing across information here. Work places and pharmacy outlets should have materials for reading. Another important thing is that in this area since people do not have time to watch television, the best

media is radio. This is because people can listen to the radio in their car, place of work, market etc. Billboards are also good but people do not have the time to stop by and start looking at them.

Factors influencing the use of media services in rural and urban areas

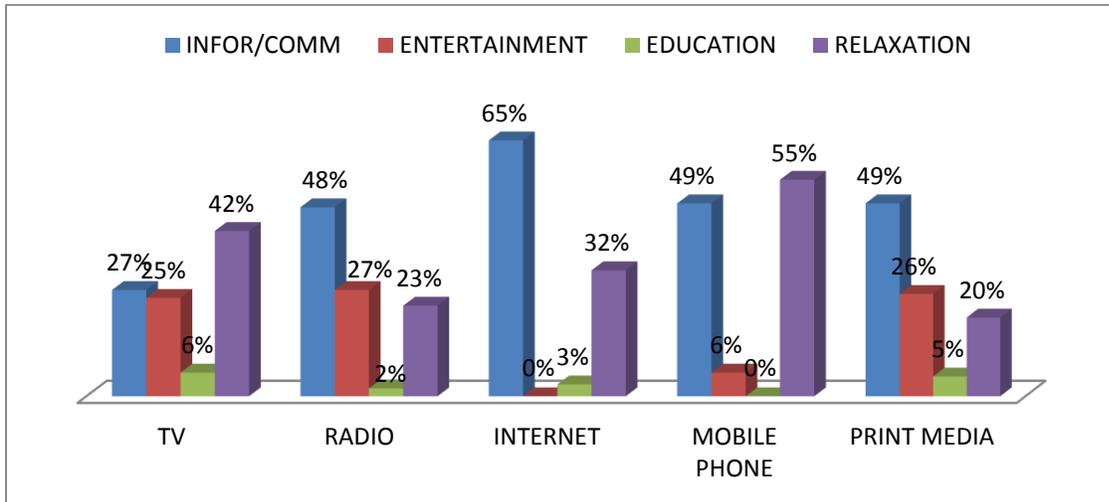
Figure 3 showed that the radio, which was mostly owned and /or used by rural dwellers, was reportedly a good source of information (n=63; 29%), entertainment (n=87; 40%) and relaxation (n=68; 31%). The mobile phone served the purpose of giving and receiving information (n=116; 95%) as well as relaxation (n=5; 3%).

Figure 3: Factors that Encourage the Use of Sources of Information in the Rural Area



In the same pattern, urban dwellers, also used the radio more for information (n=190; 48%), than for entertainment (n=108; 27%) and relaxation (n=88; 23%) purposes. The television serves as a means of accessing relaxation for most urban dwellers (n=162; 42%) and as a source of information (n=106; 27%). The Internet was also reportedly useful for giving or receiving information (n=124; 65%), for relaxation purposes (n=62; 32%) and for education (n=6; 3%).

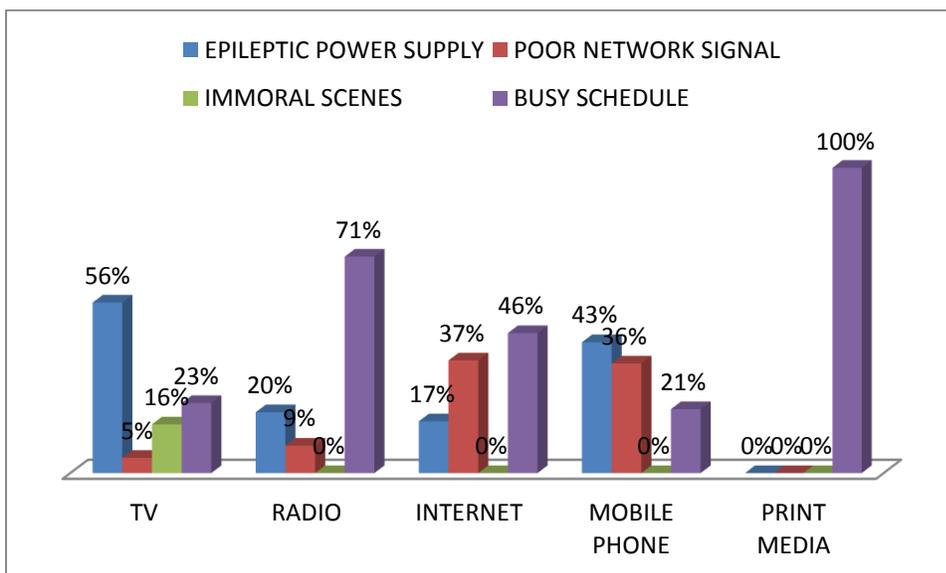
Figure 4: Factors that Encourage the Use of Sources of Information in the Urban Area



Factors restraining media usage in rural and urban areas

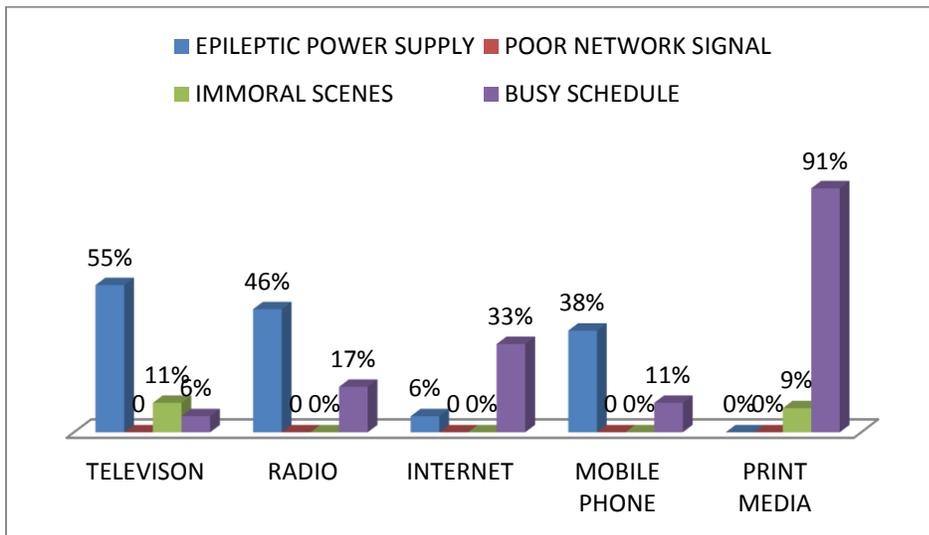
Respondents indicated the factors that prevented them from using media sources. Most rural dwellers did not own or have access to television due to epileptic power supply (56%), busy schedule faced in the work life (23%), immoral scenes often projected and discussed on the television (16%) and poor network signal that projects objects poorly on the screen (5%). All the respondents reported that their busy schedule deterred them from accessing the print media.

Figure 5: Factors that Prevented the Use of Information Sources in the Rural Area



In the same manner, most (55%) urban dwellers were unable to use the television because of epileptic power supply. Some (28%) respondents reported poor network signal, few reported immoral scenes and the rest reported busy schedule or avoidance of bad news. Poor Internet use was caused mostly by poor network signal (61%) issues, busy schedule (33%) and epileptic power supply (6%).

Figure 6: Factors that Discourage the Use of Information Sources in the Urban Area



DISCUSSION

A high level of radio (57%) and mobile phone (49%) ownership was reported among the rural dwellers in Ibadan. This complements the findings of Osakue (2010) which revealed a high ownership and preference for radio over television as a means of sourcing information especially on health matters among rural dwellers. It was also discovered that Internet connections in the rural area was very poor, hence, most (97%) dwellers neither owned nor were able to access the Internet. Similar finding by the National Bureau of Statistics in 2011 confirmed that only about 1.5% of the rural dwellers had access to the Internet. Television owners were very few (16%) among the rural dwellers. This could be a resultant influence of rurality and the nature of the community, as was represented in the reports of National Bureau of Statistics (2011). Availability of print media in the rural areas was also poor. Almost all the study respondents (92%) in the rural area had no access to newspaper and magazines as was observed in another study (Ariyo *et al.*, 2013). Poor access to newspaper and ownership of television indicated that rural dwellers cannot be adequately reached through the print media and television sets. This information is pertinent for rural development in Nigeria. By implication, the effectiveness of well-designed advertisement and programmes communicated through television, print media and/or the internet, may be lessened by limited access in the rural areas. This suggests that information should be



transmitted to people through the media sources available and accessible to them. The communal lifestyle and nature of the rural dwellers determine their preferred media of information and these have been identified as radio, town hall meetings and rallies as found in this study and confirmed in a previous study (Luyiga, 2013).

On the other hand, the peculiarity of the urban area is reflected in the ownership of and accessibility to media sources. This study revealed a high rate of ownership of mobile phone (93%) and radio sets (92%) at home, work place and or in the cars. Notwithstanding, others have access to these media sources elsewhere. These findings were supported by the reports of the National Bureau of Statistics (2011) in which about 90% of urban dwellers in Nigeria are reported to either own or have access to the radio. In addition, a large number (76%) of urban dwellers had television sets while the few who did not have were able to access it from their neighbours' place, or at their work place. Print media were sparsely available (21%) but very much accessible (73%) to urban dwellers. This is true of the urban centres, churches, mosques, schools, clinics, pharmacists and other public places (Keating, Meekers and Adewuyi, 2006).

The inquiry into the factors that motivate media use by the rural dwellers revealed that since a large number of them have mobile phones, they were motivated by the need to send information to and receive information from their family members and business partners in the urban centres. This is in line with the findings of Haruna *et al.*, (2007) that most rural dwellers owned mobile phones and found it very effective in sourcing and sending information regarding their farming business. The radio, which is the most accessible medium in rural areas, was mainly used for entertainment, information and relaxation purposes. This result is supported by the findings by Umar *et al.*, (2012) who discovered a high rate of reliance on the radio as a means of obtaining agricultural information in the rural areas. Access to and ownership of mobile phones are important to the urban dwellers for information and relaxation purposes. The radio mostly serves to provide information, entertainment, relaxation and education. The television is necessary to the urban dwellers mostly for relaxation (especially sports, music, and movies), and also for receiving information about happenings in the country, for entertainment and for getting some form of informal education. The Internet, an evolving medium, is indispensable to the urban dwellers as they depended on it mostly for information, communication and relaxation. This is evident in the massive number of people who visit the Internet for latest news on happenings, for trading activities and other e-business potentials (Mossa, 2011).

The study examines also the factors that act as barriers to the use of television, radio, Internet facilities, mobile phones and print media among rural and urban dwellers. For television, lack of regular power supply made the possession of television sets unnecessary for some respondents while some were too busy to access the television. Others complained that the immoral scenes on television discouraged them from owning the device. All respondents from the rural communities did not utilise print media due to their busy schedule; many of them spent most hours of the day on the farm. The mobile phone and the radio set, which were used by most dwellers, are often under-utilized mostly due to poor network supply and epileptic power supply respectively. This finding is in line with the results of previous studies (Pur and Gwary, 2008; Ariyo *et al.*, 2013) where irregularity of power supply distorts the consistent flow of information on agricultural practices. For the urban dwellers, majority reportedly attributed their lack of access to print media to their busy schedule. This could also be because the Internet meets their daily needs for news and information on job, business and other opportunities. Most urban dwellers identified the epileptic nature of power supply as a factor that discourages them from using the television, some referred to poor network signal, immoral scenes as a barrier to using the television while others are too busy to utilise the television. By implication, findings from this study reveal that



there is a connection between location and media preference in Ibadan, southwest Nigeria. The study showed that information, which is a necessary tool for social interaction, can be effectively shared using the available and accessible media in context-specific locations.

CONCLUSION AND RECOMMENDATION

The media is undoubtedly a reliable source of information, education, integration, communication and relaxation among rural and urban dwellers in Ibadan. However, particular attention should be paid to cultural and environmental differences in the discourse of the availability, accessibility and preferences of the various forms of the media in the rural and urban areas of Ibadan, Nigeria. The findings of this study reveal the dominance of radio and mobile phones alongside face-to-face interactions (town hall meetings, house-to-house visitations and rallies) over the print media, television and the Internet in the rural areas. Meanwhile the urban areas had more access to the television, the Internet, radio and mobile phones. Thus, the goal of the media is better achieved when the factors that determine the use of media in different zones are properly evaluated, and messages are designed to fit the nature of particular environments.

This study recommends that important information should be passed to both urban and rural dwellers through the radio, as it is more available to residents in both locations. More efforts should be made to provide electricity as its constant supply aids information sharing and communication. Information sharing in rural areas should be facilitated through gatekeepers and other grassroots media such as town hall meetings, rallies, and house-to-house visitations. Indigenous languages should also be considered appropriate when designing communication programmes for different areas.

**REFERENCES**

- Ahmed, M (2014) Impact of Mass Media in Creating Political Concern in Bangladesh. *Online Journal of Communication and Media Technologies* 4 (2). 1 - 5
- Ajayi, A.I and Adesote, S.A (2015) The New Social Media and Consolidation of Democracy in Nigeria: Uses, Potentials and Challenges; *Journal of Good Governance and Sustainable Development in Africa*, Vol. 2 (4).47 – 58
- Aminian, N., Arbatani, T.R, Khajeheian, D., Zangi, M and Shadmehr, M.B (2013) Media Mix for Awareness and Health Promotion in Lung Cancer Patients. *National Research Institute of Tuberculosis and Lung Disease* 12(4): 42-47.
- Ariyo, O.C, Ariyo, M.O, Okelola, O.E, Aasa, O.S, Awotide, O.G, Aaron, A.J and Oni, O.B (2013) Assessment of the Role of Mass Media in the Dissemination of Agricultural Technologies among Farmers in Kaduna North Local Government Area of Kaduna State, Nigeria. *Journal of Biology, Agriculture and Healthcare*. Vol.3 (6). 19 - 28
- Bergsma, L. (2011) Media literacy and health promotion of adolescents. *Journal of media literacy education* 3:1 (25-28).
- Gidado, S. Olademeji, A.M, Roberts, A.A, Nguku, P., Waziri, N.E, Shuaib, F., Oguntimehin, O, Musa, E, Nzuki, C, Nasidi, A, Adewuyi, P, Daniel, T.A, Olayinka, A., Odunbanjo, O. and Poggensee, G. (2014). Public Knowledge, Perception and Source of Information on Ebola Virus Disease in Lagos, Nigeria. *Public Library of Science Currents* 8:7, 1 - 67
- Harande, Y.I (2009) Information Services for Rural Community Development in Nigeria. *Library Philosophy and Practice (e-journal)*, Paper 271. ISSN 1522 - 0222
- Haruna, S. K., Jamilu, A. A., Abdullahi, A. Y. and Muritala, G. B. (2013). Ownership and Use of Mobile Phone Among Farmers in North Senatorial Zone of Kaduna State. *Journal of Agricultural Extension* Vol.17 (2). 151 – 175
- Hieber, L. (2001) Lifeline Media: Reaching Populations in Crisis. A Guide to Developing Media Projects in Conflict Situations. Geneva: Media Action International.
- Illesanmi, O.S, Omotosho, B., Alele, O.F and Adewuyi, P (2015) Awareness of Lassa Fever in a Rural Community in South West Nigeria. *Scholars Journal of Applied Medical Sciences*. 3(3): 1137-1142.
- Jonathan, L., Mark, H. and Mohammed, S.K (2010) Impact of Media on Entrepreneurial Intentions and Actions. Published by Global Entrepreneurship Monitor (GEM).
- Keating, J., Meekers, D and Adewuyi, A. (2006) Assessing effects of a media campaign on HIV/AIDS awareness and prevention in Nigeria: results from the VISION Project. *BMC Public Health* 6:123. DOI:10.1186/1471-2458-6-123
- Levac, J. and O'suvillan, T. (2010) Social media and its use in health promotion. *Interdisciplinary Journal for Health Sciences*, 1, 49-57.
- Local Government Area Record (2009) Retrieved from Ibadan North Local Government Area, Ibadan, Nigeria.
- Local Government Area Record (2016) Retrieved from Egbeda Local Government Area, Ibadan, Nigeria.
- Luyiga, F. (2013) Knowledge, attitude and practices on malaria prevention and control in Uganda. Published by Communication for Development Foundation Uganda (CDFU). Retrieved online via <http://www.cdc.gov/Malaria/Malariaworldwide/index.html>
- Gupta, A. and Sinha, A.K (2010) Health Coverage in Mass Media: A Content Analysis. *Journal of Communication* 1(1): 19-25.



- Mossa, C. (2011) Barriers and Drivers in Media Adoption: the Chief Marketing Officer's Perspective. Published by Copenhagen Business School.
- Mwisukha, A., Muniu, R.K. and Chumba, J.M (2013) Comparative Ranking of the Electronic and Print Mass Media in Dissemination of Sports Information in Kenya. *International Journal of Business and Social Science* Vol. 4 (10), 105 - 107
- Odegbenle L.B (2013) Language of Communication in the Nigeria Media. *Singaporean Journal for Business Economics and Management Studies*; 1 (11), 162 - 168.
- Osakue S.O (2010) Broadcast Media in Family Planning Matters in Rural Nigeria: The Ebelle Scenario. *Journal of Communication*, 1(2): 77-85.
- Oloyede-Kosoko, S.O and Akingbogun, A.A (2013) Geospatial Information in Public Health: Using Geographical Information System to Model the Spread of Tuberculosis. An Article prepared for FIG Working Week, Environment for Sustainability, Abuja, Nigeria.
- Oyenuga, A.S (2015) Social Media Participation and Pollution of the 2015 General Elections in Nigeria. Retrieved online via <http://www.inecnigeria.org/wp-content/uploads/2015/07/Conference>.
- Myres, M. (2008) Radio and Development in Africa – A Concept Paper Prepared for the International Development Research Centre (IDRC), Canada.
- National Bureau of statistics (NBS) (2011) Annual Socio-Economic Report: Access to ICT.
- Nasrin, A., Taher, R., Datis, K., Mahdi, Z., Mohammed, B. (2013) Media mix for awareness and health promotion in lung cancer patients. *National Research Institute tuberculosis and lung disease, Iran* 12(4): 42-47.
- Ndifreke, E.U, Abraham, N.G and Aniekan, J.E (2013) Malaria: Knowledge and Prevention Practices among School Adolescents in a Coastal Community in Calabar, Nigeria. *African Journal of Primary Healthcare and Family Medicine*, 2 (1), 1 - 4.
- Pur, J.T. and Gwary, M.M (2008) Determinants of Effectiveness of Electronic Media in Agricultural Information Delivery in Yola North Local Government Area of Adamawa State, Nigeria. *PAT* 4(1): 21-27.
- Raftopoulou, C. (2007) Audience Reception of Health-Promoting Advertising: Young adult smokers make-sense, interpret and decode shocking anti-smoking advertisements. Retrieved online via <http://www.lse.ac.uk/collections/media@lse/mediaWorkingPapers/>
- Stolz, V., Stolz, T. and Anderson, G (2008) The role of the Mass Media in Local and Regional Economic Development (LRED). Published online by Employment-oriented Private Sector Development Programme (EPSD).
- Umar, A.M., Mahmood, H.U., Muhammad, K (2012) Farmers' Media Use Pattern in Adamawa State, Nigeria. *International Journal of Academic Research in Business and Social Sciences*, 2 (1), 167 – 174..
- United Nations Development Programme (UNDP). (2010) A baseline readiness assessment of the Nigerian media as forum for citizen engagement in the 2011 elections.
- Wallack, L. (1990) *Mass Media and Health Promotion*. London: Sage