

## ENDOGENOUS PATHWAYS AND DISSEMINATION OF PERSONAL CLEANLINESS AND FAMILY HYGIENE TO RURAL FARMERS IN SOUTH EASTERN NIGERIA

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### ABSTRACT

The study investigated the effectiveness of endogenous channels in transferring messages on personal cleanliness and family hygiene to rural farmers. The study was carried out in Southeastern Agro-Ecological zone of Nigeria. Four research objectives were proposed to guide the study. Multi stage sampling technique was used to select respondents for the study. Four states were selected for the study; two states that participated in UNICEF promoted community dialogue and two that never participated. Two LGAs were sampled from each of the states and from each LGA, two autonomous communities. Twenty-five respondents were sampled from each of the communities. This gave a total of two hundred respondents from each group of rural farmers. A set of questionnaire was used to elicit information from the respondents. Frequency counts, percentages, mean as well as Z-Statistic were used to analyse the data collected from the study. Result of the analysis shows that respondents that participated in the community dialogue had better knowledge, attitude and behaviour towards the messages on personal cleanliness and family hygiene than the nonparticipants. Result of the Z-Statistic shows that at 1 per cent level of significance there are differences in the attitude and behaviour of participants and nonparticipants towards messages on personal cleanliness and family hygiene. Based on the result it was recommended that Non-Governmental Organisations, government agencies and media houses disseminating messages on sanitation and hygiene should use communication channels that are integrative and appeal to both the senses of the audience and their social status.

**Keywords: Message, Channel, Endogenous, Rural Transfer, and Communication**

### Introduction

Communication is the process by which people share information, ideas and feelings. Nwachukwu (2005) defined communication as a process by which two or more people exchange ideas, facts, feelings and impressions in a way that each gains clear understanding of the meaning, intent and use of the message. Hybel and Weaver (1999) noted that communication can be seen either as a process, transaction or a function. From the process perspective, Nwachukwu (2003) defined communication as a conscious attempt to share information and ideas with others. This assumes that communication is an interactional process whereby a message is passed from a source to a receiver in order to elicit a response from the receiver. On the transactional nature of communication, Hybel and Weaver (1999) wrote that communication is a transaction which involves not only the physical act of communicating but also a psychological act through which impressions are formed in the minds of people who are communicating so that the

behaviours of the communicators are influenced. Onuoha and Nnadi (1999) concurring with this view defined communication as the basic process by which an idea is transferred from a source to one or more receivers with intent to change their behaviours. This buttresses that the major purpose of communication is to modify or influence the behaviour of the audience.

Explaining communication as a function, Nwachukwu (2003) wrote that communication emphasizes on the ways in which people can utilize message. He elaborated that effective communication employs a horizontal social relationship based on genuine dialogue which offers free and proportional opportunity for people to influence each another. Genuine communication involves dialogue which may have as its major role to persuade the audience to reach a level of change in behaviour and attitude. For communication to be dialogical therefore, the communicators must be ready to establish a two-way flow of information through debate and discussion so that there will be a shared meaning or overlap in

meaning between that assigned by the initiator of the communication process and that given to it by the audience.

Communication, whether viewed from process, transaction or function perspective is important for social transformation. In most cases however, communication seems to be a reserve of the mass media (Osewhere, 1997). Wilson and Ekanem (2015) regretted that the mass communication channels are exogenous to Africa and employ high and complex technologies which are acquired and installed at a huge cost. Equally a careful analysis of the coverage, reports and content of the mass media will show that they have information about the urban dwellers than the rural social class and also will tend to have a wider circulation in the urban centers. For communication to bring about the expected change in behaviour and social transformation especially among rural dwellers, the communication channel or media must be endogenous.

Endogenous communication channel is that which has its origin and expression from within a communicating group. Suleiman (2011) described the endogenous communication pattern as African media. He wrote that they are the indigenous means of communication in the various countries of the continent of Africa. They reflect in the various talking drums, the folk songs, drama, festivals, town criers, traditional wears, the artifacts, art works, paintings, stories, and among other cultural architecture that reflects in the palaces, shrines, and African cities, towns and villages of Africa. African media, the endogenous communication pattern are variously described with terms such as the local media, oramedia, traditional media or informal media and these terms are interchangeably used. Adesoji and Ogunjimi (2014) described them as indigenous communication media and explained that they are the vehicles common people or rural dwellers employ for the delivery of their messages.

Panford, Nyaney, Amoah and Adoo (2001) defined endogenous communication pattern or channel as that system or pattern of communication which by virtue of its origin from and integration into a specific culture serves as a channel for messages in a way and manner that requires the utilization of the values, symbols, institutions and ethos of the host culture through its unique qualities and attributes. They are based on the social and cultural realities of the indigenous people. Panford *et al* (2001) noted that endogenous communication channels can also be called folk media and are often used for personal as well as group information sharing and discussion and draw their popularity from their entertaining nature.

They listed the types of endogenous media, oramedia, traditional media or folk media to include storytelling, puppetry, proverbs, visual art, drama, role play, concerts, gong beating, dirges, songs, drumming and dancing. Ansu-Kyeremeh (1998) buttressed that the endogenous media have evolved as grass root expressions of the value and life style of the people and because they use local language with which the people are familiar with. They are used to communicate entertainments, news, announcements, persuasion and social exchange of all types.

Suleiman (2011) extolling the benefits of using the endogenous media in information sharing wrote that they are highly effective than all other means of communication because they are interactive, interpersonal, combine verbal communications with non-verbal codifications, and they are simple, natural and less expensive. The high content of non-verbal in the oramedia actually makes them to be more effective because non-verbal communicates the mind more than verbal. He illustrated that when anybody wants to lie, it is non-verbal that readily contradicts the verbal lies. Suleiman summed it that non-verbal codes speak louder than words and shout the truth where words lie. Waseem and Shabir (2017) is of the view that African endogenous communication tools have always existed and used by the indigenous Nigerians before the colonial adventurers got to the shores of Nigeria. According to him the traditional media perform in their own styles, virtually all the functions of communication such as information dissemination, education, entertainment to even the persuasive communication, public relations and political communication and mobilization.

Endogenous communication methods are important in enhancing individual and social behaviour change in rural communities. They are used to build advocacy against some socially accepted behaviours that are counterproductive and inimical to development. UNICEF (2012a) cited poor sanitation and personal hygiene as an area that requires the use and application of traditional communication tools. According to UNICEF open defecation for instance is a socially accepted traditional behaviour; many households and communities consider toilets unclean and the availability of open defecation fields in rural areas supports the continuation of such a belief. This ultimately is poor hygiene and its effects seep into every aspect of life; ranging from health, nutrition, development, economy, dignity to empowerment and perpetuates an intergenerational cycle of poverty and deprivation. Pinfold (1999) wrote that open defecation is the chief and primary cause of diarrhea. Diarrheal disease is one of the major causes of illness and infant death in developing countries. Improving

sanitation and hygiene in the rural areas requires the building of toilets, ensuring their quality, use and maintenance. This is achieved by creating a culture of social sanctions that challenge the acceptance of open defecation. Making this happen requires the inculcation of lasting change in behaviour and adoption of key hygiene practices at the community and household level.

There has been an increasing recognition over recent years that communication and rural education programmes that emphasis on improvements to hygiene behaviours can play a major role in the control of diarrheal disease. Unfortunately such communication and education programmes adopted in the past have been largely disappointing as they have failed to deliver the expected health impact (Bern *et al.*, 1992; Esrey *et al.*, 1991). Pinfold (1999) elaborated that conventional communication and health education methods have taken responsibility for hygiene behaviour; he however noted that unfortunately, evidence and documentation describing the effectiveness of such health education programmes in developing countries remain weak. Such programmes according to Pinfold are notorious for generating long lists of 'good' behaviours in the hope that these will be adopted by the target group and consequently lead to a reduction in disease transmission. However, studies have shown that knowledge does not necessarily translate into practice (Stanton and Clemens, 1987; Curtis *et al.*, 1993) and the better informed programmes have focused more on promoting behaviour directly. In order to improve further the design of hygiene promotion programmes in rural areas, there is need for an investigation into the effectiveness of endogenous or African traditional communication channels in promoting behaviours that will translate to better personal cleanliness and family hygiene.

### **Methodology**

The study investigated the attitude and behaviour of two groups of rural farmers towards messages on personal cleanliness and family hygiene in South East Agro-Ecological Zone of Nigeria. These were farmers that participated in a UNICEF promoted traditional communication programme and those that never participated. The states that make up South East Agro Ecological Zone are Abia, Akwa –Ibom, Anambra, Bayelsa, Cross-river, Ebonyi, Enugu, Imo and River states. The region lies between latitude 4.200 and 7.250 North and longitude 5.250 and 8.510 East and with a land mass of approximately 110,000 km representing about 11.86 percent of the total land area in the country (Federal Survey Office of Nigeria-FSON, 1998). It has a total human population of thirty million, seventy nine thousand, six hundred and sixty

one (30,079,661) people including fifteen million, four hundred and fifty six thousand, five hundred and ninety four (15,456,594) males and fourteen million, six hundred and twenty three thousand and sixty seven (14,623,067) females (National Population Commission 2006) Multi stage sampling technique was used to select the respondents for the study. In the first stage, purposive sampling technique was used to select four states from the zone. These were two states that participated in the UNICEF communication project and two that never participated. Later two Local Government Areas were selected from each of the sampled states giving a total of four states from each group of states. Two communities were further sampled from each of the selected LGAs; this gave a total of four communities for each state. Twenty-five respondents were randomly sampled from each of the selected communities. This gave a total sample size of 200 respondents from those that participated in the community dialogue and another 200 from those that never participated. The states selected for the study were Imo, Ebonyi, Abia and River states. Imo and Ebonyi states participated in community dialogue while Abia and River states never participated. Data collected from the study was analysed with the aid of a combination of descriptive statistical tools such as means and percentages, and an inferential statistical tool, Z-Statistic. Likert 5-point scaling system was used to collect data on the attitude of the respondents towards the messages. The responses were rated in the order of strongly disagree= 0, disagreed= 1, undecided= 2, agreed= 3 and strongly agreed=4. The levels of change in attitude and behaviour were obtained by dividing the five spaces in the Likert's five point scale (0, 1, 2, 3 and 4) into three parts. This gave a unit interval of 1.67. The unit interval was successively subtracted from the maximum point (5) downward to obtain lower class marks of 3.33, 1.67 and 0.00 respectively. On this basis, mean acceptance within 3.33-5.0 of a particular message (change in either attitude or behaviour) in the study was considered as high, mean acceptance of a message within 1.67-3.32 was assumed to be medium while mean acceptance within 0.00-1.66 was considered low. To determine if significant differences existed in the attitude and behaviour of the two groups of respondents, the mean scores obtained on the attitude and behaviour of the two groups of respondent were subjected to Z-Statistic analysis.

### **Results and Discussion**

#### **Knowledge of Messages on Personal Cleanliness and Family Hygiene in South-Eastern Nigeria**

The knowledge of rural farmers who participated in the UNICEF promoted messages on personal cleanliness and family hygiene and those who never participated but depended on the conventional mass

media for such information is shown in Table 1. The table shows that as 88.75% of the participants in UNICEF promoted community dialogue had knowledge of the messages on maintenance of personal cleanliness and family hygiene only 47.63% of the non-participants had knowledge of the messages. More specifically, 98.0% of the respondents that participated in the UNICEF traditional communication programme, community dialogue could recall the messages they received on how to maintain good personal cleanliness and family hygiene while 49.5% of the nonparticipants could recall the messages. Also, 83.0% of the participants could vividly explain how they were taught to clean their hands after using the toilet while 43.0% of the nonparticipants could recall and explain those messages. On what parents should do before preparing the babies food to prevent disease infection, 81.0% of participants in the UNICEF promoted traditional communication project, community dialogue remembered the message while 46.0% of the nonparticipants had knowledge of the same message. As well, 93.0% of the participants could recount the messages on what parents should do to ensure that the water for the baby is clean and safe, only 52.0% of the nonparticipants knew what to do to ensure that water for their baby is clean and safe.

Rural farmers that participated in the UNICEF promoted traditional communication project had better knowledge of messages and issues concerning personal cleanliness and family hygiene. The participants in community dialogue had better knowledge because the message was packaged and disseminated using various interpersonal patterns that are endogenous to the people. The pattern conforms to the expectation of UNICEF (2012a) that to raise awareness and increase knowledge on sanitation and hygiene, the message content and channel of dissemination must be that which have close social network with the socio-cultural and physical environment of the communicating group.

#### **Attitude of Participants towards Personal Cleanliness and Family Hygiene**

Table 2 shows an analysis of the attitude of the rural farmers towards personal cleanliness and family hygiene due to participation in UNICEF promoted traditional communication project, community dialogue. The table shows that with a mean score of 3.99 participants in the UNICEF community dialogue agreed that good personal cleanliness and family hygiene will help to protect the child from diseases. The nonparticipants in the community dialogue who must have got the message through various mass media had mean score of 1.84. Also with a mean score of 3.98, the participants were of the opinion that

disease transmission can be stopped by washing the hand very well with soap or ash after using the toilet, the nonparticipants had mean score of 1.33. On if washing the hand very well and cleaning up properly can help prevent the spread of childhood diseases, the participants had mean score of 3.99 while the nonparticipants scored 2.89. With a mean score of 3.98 the participants agreed that it is important to boil and filter the water for family use especially that of the baby, on this, the nonparticipants scored 2.57. The analysis shows that generally the level of change in the attitude of the respondents towards personal cleanliness and hygiene as a result of exposure to the UNICEF community dialogue has very high cumulative mean score of 3.99.

The result shows that participants in the UNICEF community dialogue were more attitudinally disposed to messages on personal cleanliness and family hygiene than the nonparticipants who ordinarily got information through various mass media channels. The result implies that interpersonal communication patterns that are endogenous can be very effective in helping individuals to build attitudes that may translate to healthy practices towards community and social issues. Effective medium for sanitation is that which has the ability of changing the attitude and overall mindset of the people. To achieve positive change in attitude towards messages on sanitation and hygiene, the method of dissemination must be eclectic and combines the best of different communication channels. This agrees with Arulchevan and Uma (2013) that a judicious mix of media needs to be used for taking forward the desired message to the audience. Thus to enhance positive mindset towards sanitation and hygiene interpersonal communication, group communication, mass media, traditional and folk media need to be combined to achieve better result.

#### **Behaviour Change towards Personal Cleanliness and Family Hygiene**

The behaviour of rural farmers towards issues of personal cleanliness and family hygiene as a result of participation in the UNICEF traditional communication project, community dialogue is shown in Table 3. According to the table, on a five point Likert scaling system the participants in the UNICEF communication project had cumulative mean score of 3.87 while the nonparticipants had cumulative mean score of 1.99. On the frequency of hand washing after using the toilet, the participants had high mean score of 3.9 while the nonparticipants had 2.04. Also on the rate of monitoring to ensure that other family members wash their hands properly after using the toilet, the participants had mean score of 3.8 while the respondents who never participated in the

traditional communication project had mean score of 2.65. As well, on how regularly the environment should be kept clean by avoiding bushy surroundings and stagnant water, as well as encouraging others to do same, the respondents who participated in the UNICEF community dialogue had very high mean score of 3.9 while the nonparticipants scored 1.99.

The higher mean score of participants in the UNICEF promoted traditional communication programme shows that endogenous communication tools have greater potentials of changing the behaviours of rural dwellers and mobilizing them for action against social and communal issues. The participants in the community dialogue who also as members of the wider society got information on better sanitation and hygiene practices from the mass media while the nonparticipants obtained their information only from the mass media. The result agrees with Wakefield, Loken and Hornik (2010) which criticized that mass media messages often do not meet expectations, are increasingly fractured and cluttered media environment. According to them the mass media are for disseminating homogeneous messages which are not persuasive to the heterogeneous rural audiences. WASH (2016) advocated the use of various low cost interpersonal sources such as face-to-face communication to ensure that relevant messages are related to the audience. UNICEF (2012b) maintained that traditional or indigenous channels which are endogenous to the people are most fitting for reaching the target audiences.

### **Effect of Traditional Communication Patterns on Attitude and Behaviour towards Personal Cleanliness and Family Hygiene**

Z-statistic was used to determine if differences exist in the attitude and behaviour of two groups of rural farmers towards personal cleanliness and family hygiene. These were those that participated in the UNICEF promoted traditional communication programme, community dialogue and those that never participated. Data on the attitude and behaviour of these groups of farmers towards personal cleanliness and family hygiene, collected using Likert 5-point scaling system were subjected to Z-Statistic analysis. The mean score on the attitude of the participants in the traditional communication project, community dialogue was 3.8550 while that of rural farmers who never participated was 2.3105. The mean difference for these two groups was 1.54444. Result of the Z-Statistic was significant at 1% significant level. The Z-calculated, 101.748 was greater than the Z-tabulated 2.65. Also the mean score for the behaviour of participants in the community dialogue was 3.7398 while that of those that never participated was 2.7974.

The mean difference for the two groups of rural farmers on behaviour changes towards personal cleanliness and family hygiene was 0.94238. Result of the Z-Statistic analysis for a difference in the behaviour of the participants and nonparticipants in the traditional communication project was significant at 1% level of significance as the Z-calculated (64.981) is more than the table Z (2.65). Significant differences exist in the attitude and behaviour of the two groups of respondents towards personal cleanliness and family hygiene. The participants in the UNICEF promoted community dialogue who must have also received mass media messages had better attitude towards issues of personal cleanliness and family hygiene and would likely adopt better practices towards them than the nonparticipants in the traditional communication programme. This entails that although the mass media has the promise of relating messages to a large mass of audiences repeatedly, over time, in an incidental manner, and at a low cost per head (Naveena, 2015); still may not holistically appeal to the rural audience (Orewere, 1991). Oroles (2014) reasoned that this is so since traditional media can be the most effective in rural areas, tribal areas and among illiterates as they may not understand the language of modern communication. As well Mathiyazhagan, Kaur, Ravindhar, and Devrani (2015) noted that face-to-face, interpersonal communication which is endogenous is more amenable for use by rural audience because it functions both vertically and horizontally and are natural, real and inevitable in a community's planned and unplanned advancement

### **Conclusion**

Poor sanitation and hygiene is the major cause of diarrhea and other diseases prevalent in the rural areas. Eradicating these diseases requires the development of strong and positive attitude towards issues on personal cleanliness and family hygiene as well as eliciting behavioural practices that promote them. Communication plays very important role in building such level of attitude and behaviour. The communication method adopted for this purpose depends on the culture and environment of the communicating group. For communication to produce sustainable positive change in behaviour both the message and its channel of dissemination must be endogenous in outlook, employing the values and ethos of the people. The traditional communication pattern, community dialogue adopted by UNICEF in the promotion of messages on personal cleanliness and family hygiene was found to be very effective in increasing rural people's knowledge, attitude and behaviour. The Z-Statistic analysis comparing attitude and behaviour of participants in community dialogue and nonparticipants shows that

users of community dialogue had better attitude and behaviour towards personal cleanliness and family hygiene at 1% level of significance. It is therefore recommended that Non-Governmental Organisations, government agencies as well as media houses disseminating health messages should use communication channels that are integrative and appeal to both the senses of the audience and their social status.

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Table 1: Knowledge Messages on Personal Cleanliness and Family Hygiene

S/No	Items	Participants		Non Participants	
		Scores	Percentages	Scores	Percentages
	Can you recall the message on how to maintain good personal cleanliness and family hygiene?	196	98.0	99	49.5
	How will you clean your hands after using the toilet?	166	83.0	86	43.0
	What should parents do before preparing the babies food to prevent disease infection?	162	81.0	92	46.0
	How will parents ensure that the water for the baby is clean and safe?	186	93.0	104	52.0
	<b>Total</b>	<b>710</b>	<b>88.75</b>	<b>381</b>	<b>47.63</b>

Table 2: Attitude Change towards Messages on Personal Cleanliness and Family Hygiene

S/No	Items	Participants' Mean	Non Participants Mean	Mean Difference
	Good personal cleanliness and family hygiene will help to protect the child from diseases	3.99	1.84	2.15
	Disease transmission can be stopped by washing the hand very well with soap or ash after using the toilet	3.98	1.33	2.65
	Washing the hands very well cleaning the baby very well before preparing the babies food can help prevent the spread childhood diseases	3.99	2.89	1.10
	It is very important to boil and filter the water for family use	3.98	2.57	1.41
	Cumulative Mean	3.99	2.16	1.83

Table 3: Behaviour Change towards Messages on Personal Cleanliness and Family Hygiene

S/No	Items	Participants' Mean	Non Participants Mean	Mean Difference
	How often do you wash your hands with soap or ash after using the toilet or cleaning up the baby?	3.9	1.86	2.04
	How often do you monitor and ensure that others wash their hands appropriately before feeding the baby?	3.8	1.80	2.65
	How often do you keep a clean environment by avoiding bushy surrounding and stagnant water and encourage others to do same?	3.9	1.99	1.91
	<b>Cumulative Mean</b>	<b>3.87</b>	<b>1.88</b>	<b>1.99</b>

Table 4: Z-Test for a Difference in the Attitude and Behaviour of Two Groups of Rural Farmers towards Personal Cleanliness and Family Hygiene

Variables	Mean	Mean Difference	Standard Deviation	t- Calculated	Table-t
<b>Pair I</b>					
Part-Attitude	3.8550				
Nonpart-Attitude	2.3105				
Part-Attitude ---					
Nonpart-Attitude		1.54444	0.21466	101.748***	2.5
<b>Pair II</b>					
Part-Behaviour	3.7398				
Nonpart-Behaviour	2.7974				
Part-Behaviour --					
Nonpart-Behaviour		0.94238	0.20510	64.981***	

Source: Field Survey

Where:

Part-Attitude: Attitude of participants in UNICEF promoted Messages on Personal Cleanliness and Family Hygiene

Nonpart-Attitude: Attitude of Non-participants in UNICEF promoted Messages on Personal Cleanliness and Family Hygiene

Part-Behaviour: Behaviour of participants in UNICEF promoted Messages on Personal Cleanliness and Family Hygiene

Nonpart-Behaviour: Behaviour of Non-participants in UNICEF promoted Messages on Personal Cleanliness and Family Hygiene

\*\*\* = Indicates variables that are significant at 1%