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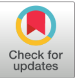
Rural Health Workers and Primary Health Care Promotion in Southeast Nigeria: Challenges and Their Implication to Community and Sustainable Development



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ABSTRACT

Community health workers are the inalienable agent of sustainable development across the globe especially, in the developing nations where majority of the population are located in the rural areas. While the basic structure of primary healthcare is in dear need of grass root personnel in the rural communities, the community health workers are readily trained and provided to fill this gap. In Nigeria, the actualization of the aforementioned in line with sustainable development goal-SDG-3, which emphasizes the sacrosanct of comprehensive and inclusive healthcare, is still in doubt owing to the scanty of community health workers in the rural areas. In view of the above situation, this study focused on the social indicators affecting the performances of the community health workers in Southeast Nigeria. The study involved 252 men and women employed as community health workers in different capacities in government health facilities in the rural communities. The study, which was guided by Douglas McGregor X, Y Theory, applied survey design and quantitative data gathering techniques, while the collected data were analyzed using descriptive and inferential statistics such as Mean and standard deviation as well as t-test and linear model. Among the major findings, age, familiarity with the host communities as well as receptivity by the communities are the among the sustainable factors to rural health workers, while improved communication, welfare of the health workers and improvement in skill among the health workers predicted the effective promotion of primary health care services delivery among Community Health Workers.

1. INTRODUCTION

According to the World Health Organization [1], every year, an estimated eleven million children in developing countries die before they reach their fifth birthday. By extrapolation according to the earlier documentation by the WHO, 73% of these deaths are due to the childhood diseases occurring individually or in combination such as diarrhea, measles, acute respiratory infection, malaria and malnutrition. With the current global medical practices and advancement, these deaths could be prevented by available community-based interventions that are feasible in resource poor settings. The death in infants and children under the age of five were due to poor access to health services, insufficient resources at household level, poor knowledge of health education, inadequate quality of health facilities and insufficient health personnel. The same situation is similar to that of the experience of the other segments of the overall population in the rural setting where the number of health workers are insignificantly footed by the proportion of the population living in the rural setting.

From relevant documentations of the global, regional and national bodies such as the World Health Organization, UNICEF, African Union, ECOWAS and the Nigerian Federal Ministry of Health, the growing population of the infants, youth as well as the ageing population have all increased the burden of health in the rural communities where the large chunk of this population is located [2, 3]. While the growing burden of health management is increasing in almost geometric progression, the number of health workers especially the community health workers seem to be stagnated or in worst scenarios, deteriorating among the developing nations such as Nigeria. For instance, for every 1000 citizens in the developing nations, there is virtually one or less than the presence of a medical doctor compared to the average of 5.0-7 medical doctors per 1000 citizens in the developed nations. As at 2018, Nigeria had 0.4 medical Doctor per every 1000 citizens and this drastically reduced in the 2020 to 2022 season due to the unprecedented migration of medical personnel out of Nigeria. Equally, the dearth of comprehensive documentation and specialized researches is making it more complicated to understand the current data coupled with scarcity of empirical information on primary healthcare across the nation. While the economic situation in Nigeria has affected the employment and mobilization of the much needed health workers, the infrastructural challenges in the health facilities and the near absence of social amenities in the rural settings have made it difficult for the availability and

accessibility to community health workers across the rural communities in Nigeria [4, 5]. In view of the emphasis on community health workers by the World Health Organization [6], as the inalienable agents for community health sustainability, the activities of Community Health Workers (CHWs) has been viewed with dominant roles owing to the need to expand the provision of healthcare services as well as actualizing the World Health Organization vision of health for all.

Community Health Workers build individual and community capacity by increasing health knowledge and self-sufficiency through a range of activities such as outreach, community education, social support and advocacy. Community Health Workers have proven impact in important areas such as access to care, prenatal/postnatal care, and chronic disease management, utilization of health services, to reduce numbers of patients "lost" to follow up and help to reduce hospital re-admission. Community Health Workers comprise of men, women, single, and married persons who are trained in health practices in rural and urban communities.

Among the three tiers of health care such as primary, secondary and tertiary health care, community health workers appeared to have contributed much in the actualization of the globally proposed 'health for all' vision owing to the integration of the community health workers in the primary health care system [7-9]. Integration of CHWs into primary healthcare setting has helped to build partnership with formal healthcare delivery systems to connect people with the services they needed and to stimulate social action that influence community participation in the health system as required for comprehensive health care and wellbeing of the population. In 1978, the World Health Organization (WHO) adopted the primary health care approach (PHC) as the basis for effective delivery of health services as outlined in the Declaration of Alma-Ata. According to World Health Organization (1978) as cited in WHO (2018), Primary Health Care is essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and the country can afford to maintain at every stage of their development in spirit of self-reliance and self-determination.

The adoption of 'Health for All' by government implies a commitment to promote the advancement of all citizens on a broad front of development and a resolution to encourage the individual citizen to achieve a higher quality of life [10]. The health services must be accessible to all through Primary Health Care Centers in which basic medical help is available in every community, backed up by referral services for more specialized care. As a matter of fact, this is embedded in the goal of the National Health Policy, which is to bring about a comprehensive health care system based on PHC and backed up in the rural communities by community health workers, bringing a healthcare system that is promotive, protective, preventive, restorative and rehabilitative to all citizens within the available resources so that individuals and communities are assured of productivity, social well-being and enjoyment of living [11, 12]. Unfortunately, this is yet to be achieved among many developing nations especially in the sub-Saharan Africa where the globally designated health goals are yet to be settled among the government and the population [13-15].

The United Nations sustainable development goal (SDG-3) agenda, which is to build and maintain healthy population to ensure other dimensions of the sustainable development agenda is yet to be achieved in Nigeria especially within the southeast Nigerian community health districts as the rural community health districts are seriously underserved when compared to their urban counterparts as well as in other parts of the world. Most rural primary health care facilities in this region of the country are in various state of disrepair, with equipment and infrastructures being either absent, not functioning, inadequate or obsolete [16]. Equally, their referral service system is almost non-existent owing to the human resource and administrative lacuna [17]. While other scholars have given attention to the infrastructural as well as policy dimensions of the failures of primary health care and community health services in the rural communities in the sub-Saharan Africa [18, 19], the much pressing factor of the community health workers participation in the process and other underlying factors to their predispositions have either been scarcely researched on or not given attention to in southeast region of Nigerian. A study of this pedigree is much overdue owing to the implication of the challenges of the primary health care and community health services in the rural communities to the overall United Nations' sustainable development goal agenda aimed at health globalization and sustainable wellbeing for all.

In the course of our pilot study, it was observed that doctors come once or twice a week so as to cover the whole health centers in the rural communities here within a week, and this is with limited hours as not all available cases are attended to in the affected health districts. Most nurses when posted in these rural communities stay a while and seek for transfer to urban areas. These community health centers in the rural areas are left with few trained doctors and nurses who manage to stay but operate in inconsistent manners such that they are not much available as demanded by the services of the community health centers. More importantly, the available community health workers who are to keep appointment for immunization, checkups and to give education on health issues, are in most cases lacking certain moderate training enough to manage the pressures observed in the rural health centre, as well, they are left with their own challenges bordering on the family related commitment as well as other individual factors. These have caused the rural dwellers lots of hardship and health consequences which manifest itself in high mortality rate, epidemics, malnutrition and so on. Thus, it is against this backdrop that this study investigates the role of Community Health Workers in the promotion of primary health care practices in the southeast Nigeria. The study focused on some selected communities/health districts in southeast Nigeria with the community health workers as the targeted population.

2. RESEARCH QUESTIONS

In view of the aforementioned, the following research questions were answered in this study.

(1) What are the primary healthcare services and measures for effective promotion of PHC services by the community health workers in the southeast Nigeria?

(2) What are the constraints to participation in effective promotion of primary healthcare services delivery among the married male and female community health workers in the southeast Nigeria?

(3) What are the sustaining factors to community healthcare workers in the rural communities in southeast Nigeria?

(4) What are the predictors to effective primary healthcare promotion among the rural health workers in southeast Nigeria?

3. THEORETICAL FRAMEWORK (DOUGLAS MCGREGOR THEORY X, Y)

By early 60s, McGregor began to examine the relationship that existed between the employers of labour and the class of employees in different capacities and categories. With much emphasis on the capitalistic movement and the corresponding high level of individualism, he envisaged a situation in which the human beings may not be able to satisfy their overarching needs based on the diverse views of morality and self centeredness warranting, the need for a defined framework and stiff approach to its implementation. For McGregor in relation to the employees' institution and that of the employers' institution, human beings are controlled by certain instincts naturally negating the principles of labour and survival. According to the assumptions of the theory X,

- The employee is lazy and does not like to work if he is to decide
- Employee is not ambitious with indifferent attitude towards responsibilities and by implication, can only be functional to the organization of employment when led.
- The employee is selfish and likely uninterested in the organizational interest.
- Management has the great deal of responsibility in assembling the factors of production.
- Managers are required to control the employees, manage their efforts, motivate them and manage their behaviours to meet the organizational needs.
- The management must intervene to keep the employees working towards the economic ends, persuade, reward, motivate and punish where necessary to get the work completed.

The contrasting theory Y relies on the participative style of management, where the managers assume that the employees are self-directed and self- motivated to accomplish the organizational objectives. Thus, here the management attempts to get the maximum output with least efforts on their part. Thus according to the assumption of theory Y:

- The average human being does not inherently dislike work; they are creative and self-motivated and like to work with greater responsibilities.
- Employees are self-directed and self-controlled and therefore the threat of punishment is not only the means for getting the desired results.
- The extent to which an employee is committed to objectives is determined by the rewards associated with their achievement. The most significant rewards in this context could be the satisfaction of the ego and the fulfillment of self-actualization needs.
- The average human being is ambitious and is ready to take responsibilities. He likes to lead rather than to be led by others.
- The employees exercise a relatively high degree of imagination and creativity in solving the complex organizational problems.

Thus, theory X and theory Y are two contrasting models that depict the set of assumptions a manager holds on his employees, which may or may not coincide with their general way of behaving.

As these apply to the community health workers in the rural communities in the southeast Nigeria, the system is inconsistent in terms of performance and meeting the needs of the rural population owing to the lacuna in the management of the activities of the community health workers in the region. This affects the way they are being recruited and supervised in the field as well as their promotions. Most of the community health workers posted to the rural communities are living in the cities and visit their place of assignment once in a while. This in most cases has left the rural communities out of the moving train of global health and wellness as in most cases the affected individuals and groups end up with the options of going to the nearby private clinics with exorbitant fares, going to the city or even resorting to the traditional herbs lacking standards and accuracy in dealing with a particular ailment. Specifically, the McGregor's X-Y thesis projects the challenges faced by the community health management in view of the fact that the community health workers lack the zeal for work in such context except if there are stringent measures to curtail their excesses as well as compelling them to do the needful.

4. RESEARCH METHODOLOGY

Survey design was employed in the gathering of information from the population. The study was carried out in southeast Nigeria focusing on Enugu State; the regional health district divisions where the study was carried out included Nsukka, Uzo-Uwani and Igbo-Etiti areas in southeast Nigeria. Staffs in these areas are mostly Igbo speaking with different dialects. They have common values, beliefs and different religions. Christianity, African Traditional and Islamic religions are the three major religions of the staffs. People living in the communities under these areas are characterized by some socio-cultural background such as the members of the communities depend on many factors which include their social, cultural practices and their belief system. All these to some extent constitute an impediment to the conventional health care services acceptance and accessibility among the members of these communities. They still conceive the idea that sickness and diseases are induced by supernatural forces which make them to ignore taking serious cases to the hospital for diagnosis except in complicated cases. These practices are the contributory factors that hinder the role of CHW's in promotion of Primary Health Care Practices. The population of this study was made up of 503 staff of the health centers comprising both the medical (6, doctors and 44 nurses) and other primary health care providers (425, CHW'S and 28 Admin staff) in the 82 health centers within the selected health districts in Igbo-Etiti, Nsukka and Uzo-Uwani.

The sample for this study was made up of 252 medical and para-medical staff drawn from the 41 health centers in the three LGA's. A proportionate stratified random sampling procedure was employed by taking a percentage of all the cluster of the population in each LGA. Hence the composition of each element in the stratum using 50% was randomly selected. The choice of 50% is based on the premise that the entire population is below 2000. Therefore 50% sample was deemed appropriate for this study.

The instrument for data collection in this study was a structured questionnaire entitled "Community Health Workers and Primary Health Care Providers Questionnaire" (CHWPHCPQ). Questionnaire was used to collect data on the

role of community Health workers in promotion of primary health care practices within the Health District. The structured questionnaire adopted a 4-point rating scale of Strongly Agree (SA), Agree (A), Disagree (DA), and Strongly Disagree (SD) with assigned numerical values of 4, 3, 2 and 1, respectively provided to indicate the respondent's opinion. The questionnaire was made up of two sections: A and B. Section A consists of questions on socio-demographic information, while Section B comprises of thirty-eight (38) items which was used to elicit responses from respondents on the substantive issues to the study.

To ensure the reliability of the instrument, a pilot study was carried out. The questionnaire was administered to 10 medical staff, and 10 paramedical (non-medical) staff at some selected Health Centers to obtain the reliability coefficient of the instrument. The data collected was calculated using Cronback Alpha reliability co-efficient to establish the internal consistency of the items as well as the acceptability of the instrument for the study. The internal consistency reliability estimate of 0.93, 0.88, and 0.90, were obtained for clusters A, B and C. The overall reliability coefficient for the entire clusters was 0.90. Thus, the instrument was viewed as reliable for use in the study.

The instrument was administered to the respondents in their various offices and work posts in the health centers. The data collected from the respondents was analyzed using mean/standard deviation, t-test statistics as well as regression models. The mean formula is shown below:

$$\overline{X} = \sum fx$$

where, $\sum$=Summation sign, F=Frequency of respondent, X=Assigned Scale of response Category, N=Total Number of Respondent, $\overline{X}$=Mean.

The criterion mean score was obtained by adding all scores assigned to the response options and dividing the sum by the number of response as follows:

$$\overline{X} = \frac{4+2+3+1}{4}$$

$$= \frac{10}{4}$$

$$=2.50$$

The criterion mean for the responses was 2.50.

5. PRESENTATION OF THE FINDINGS

Table1 presented the relevant services provided by the community health workers in the promotion of primary healthcare in southeast Nigeria. This was probed, using the mean and standard deviation of the included variables to understand the prevailing services provided by the community health workers in this region. Based on the criterion mean set for the study, the eight variables were picked by the descriptive statistics to show the prevailing services by the community health workers in this region. Among other services provided, the prevailing ones according to the mean criterion are Maternal health care/family planning, Immunization against six killer diseases, Enlightenment on adequate nutrition, Enlightenment on potable water supply and adequate environmental sanitation, Control of locally endemic diseases, Health Education, Treatment of minor ailment and Referral services.

Table 1. Mean/standard deviation of the types of Primary Healthcare services provided by Community Health workers in promotion of Primary HealthCare in Southeast Nigeria

Items	$\overline{X}$	Std Deviation	Decision
Maternal health care/family planning	3.17	.384	Accepted
Immunization against six killer diseases	3.93	.239	Accepted
Enlightenment on adequate nutrition	3.12	.367	Accepted
Enlightenment on potable water supply and adequate environmental sanitation	3.17	.692	Accepted
Control of locally endemic diseases	3.15	.362	Accepted
Health Education	3.06	.606	Accepted
Treatment of minor ailment	3.32	.517	Accepted
Referral services	3.42	.664	Accepted
Overall	**3.29**	**.392**	**Accepted**

Maternal healthcare and family planning is one of the aspect of women and child health, which have suffered a great deal of failure in many developing nations including in many regions in Nigeria such as the Northeast with 115 death per every 1000 birth, Northwest with 162 death per every 1000 birth and North central with 102 death per every 1000 birth. As a matter of fact, in southeast Nigeria, infant mortality rate is as low as 67 death per every 1,000 birth; maternal mortality is as low as 157 death per 100,000 live birth, compared to about 1600 death per every 100,000 live birth in mostly northern region of Nigeria [20], while the fertility rate is as low as 4.6 compared to 5.33 in north central Nigeria, 6.4 in northeast Nigeria and 7.3 in north west Nigeria. This by implication showed the efficacy of the services of the community health workers in this region.

Immunization against the six killer diseases such as BCG, Hap B at birth, Polio, Yellow fever, Pentavalent and measles has been difficult in most developing nations due to the absence of community health workers in many regions and localities. For instance, this is reflected on the rate of these diseases among the populations in the Northeast, Northwest and North central regions of Nigeria compared to the southeast region of Nigeria in particular, where the activities of the community health workers were present with some level of consistency. Furthermore, the rate of vaccination among the six geopolitical zones of the country paints the picture of the presence and efforts of the community health workers in the southeast Nigeria. As at 2017 Nigeria Multiple Indicator Cluster Survey, 2016-17, southeast Nigeria has recorded over 90% coverage on vaccination against BCG, 64.9% coverage on Hap B at birth, 82.5% coverage on Polio vaccination, 73.9% coverage on Pentavalent vaccination, 76.2% coverage of Yellow fever vaccination, 44.4% coverage on Measles vaccination more than any other region in the country. While healthcare services are basic and relevant in the overall survival of humanity, public enlightenment on prevention of diseases and ailment is inalienable to the overall management of the public health anywhere in the world. For instance, the

study by Mohapatra et al. [13] revealed that public health improvement was observed among the enlightened communities where there is adequate public health enlightenment. This in the present context showed the relevance of the community health workers in the overall achievement of comprehensive primary healthcare in the rural communities where ignorance and belief system harms the overall public health interest.

Among the rural communities in the developing nations, prompt response to minor ailments and referral to the appropriate health facilities when necessary, has been a great challenge among the local communities resulting to preventable death and high mortality rate in the rural communities. However, studies have shown that the presence of community health workers can reduce the situation and improve the overall public health of the rural dwellers [21, 22]. In the present study, the community health workers appear to be complementing the overall objectives of the primary healthcare as well as the Sustainable Development Goal agenda.

The Table 2 probed the prevailing measures in the promotion of effective community health workers for improved and enhanced primary health care service delivery. From the findings of the table, the descriptive statistics selected the prevailing measures based on the set criterion mean. From the table, functional communication and information system, capacity building and other support to CHWs working within their locality, increase in skill acquisition of community health workers, improving of medical personnel welfare, within the community health facilities and adapting the use of indigenous language in sensitizing of people were all shown to be prevailing measures currently applied to promote effective community health workers for the overall improvement of the primary health care in the region of southeast Nigeria. The finding here corroborate with the findings of [23, 24], which revealed that for effective community health services to be achieved, there was the need for proper communication, capacity building and proper welfare management among the community health care workers in the rural areas. In other study areas, other scholars have confirmed the imperative of linguistic balance as well as indigenous approach to the management of community health care services for the certainty of success in the program [25].

Table 2. Mean/standard deviation of the measures for promoting effective CHW in order to improve and enhance adequate PHC service delivery

Items	$\bar{X}$	Std Deviation	Decision
To provide functional communication and information system to enable CHW's and the host community work together	3.04	.935	Accepted
To provide capacity building and other support to CHW's working within their locality.	3.27	.666	Accepted
Increase in skill acquisition of community health workers to enhance PHC services	3.34	.611	Accepted
Improving of medical personnel welfare, within the community health facilities	3.14	.981	Accepted
Adapting the use of indigenous language in sensitising of people about available Primary Health Care services in the communities	3.48	.630	Accepted
Overall	**3.25**	**.702**	**Accepted**

The Table 3 probed the constraints to effective promotion of primary health care services delivery among the male and female community health workers in southeast Nigeria. This was to understand the areas of differences needing improvement in the promotion of primary health care services among the rural dwellers in the region. According to the findings on the table, certain areas of operation among the community health workers showed some level of differences such as in the services related to maternal and child healthcare and family planning, participating in community meetings, control of local endemic diseases dispensing drugs as well as referral of complex health problems. The finding shows that there is a significant difference between the mean ratings of male and female respondents on the activities of community health workers on the above mentioned items. This is because the z – tail significant level statistically set to cut off the non significant items is equal to or less than the $P > 0.05$ level of significance. Therefore, the alternative hypothesis is accepted maintaining that there is a gender difference in the provision of community health services by the community health workers in the services related to maternal and child healthcare and family planning, participating in community meetings, control of local endemic diseases dispensing drugs as well as referral of complex health problems. Other studies have shown similar findings from other regions such as the studies [26, 27], which showed that gender is a major factor in the effectiveness of community health care services owing to the masculine nature of some of the basic activities of the community health workers. While in some places, culture has made certain activities related to community health care services more of female activities, in others, some of the activities appear as male-specific activities. As related to family planning maternal healthcare and community meetings, there is evidence of perception differences as well as involvement among the men due to the dominant belief system and culture in the area. While family planning is still struggling with gender specific approach, maternal healthcare appear more of women affairs than general phenomenon. This is also applicable to the case of community meetings wherein the organizers sometimes follow the line of dominant communal principles anchoring on gender differences. Among the community health workers, family planning is in most cases directed to the women, which they go home to relate with their husbands as such, managing such in community health centers is more of feminine.

The study in Table 4 probed the relationship between marital status and effective promotion of primary healthcare focusing on, the constraining factors amidst the two variables (marital status and effective promotion of primary healthcare). Among the included independent variables against dependent variable (effective promotion of primary healthcare), lack of familiarity with clients and PHC agents, inadequate integration of the receiving communities, inefficient information and communication, low participation of the beneficiaries due to inadequate sensitization, culture of the communities hinders acceptance of PHC services, inadequate training in PHC and poor motivational strategies by community health workers all appeared as constraints with significance in the promotion of primary healthcare delivery among the community health workers in this region.

The Table 5 showed the coefficients of sustainability of community healthcare workers in the rural communities in the southeast Nigeria. The explanatory power of the model is about 71% with F value of 74.946. All the included variables were significant save for the career orientation of the community healthcare workers involved in the study. However, from the model, years in service and educational qualifications of the healthcare workers seem to negate the possibility of their continuous stay in the rural health facilities for services while, gender, age, integration of the receiving communities, familiarity with the local communities as well as financial support to the rural healthcare workers appeared to be supporting factors to the sustainability of the rural healthcare workers in the southeast Nigeria.

The Table 5 showed the predicting factors to effective healthcare promotion by the rural healthcare workers in the southeast Nigeria. The explanatory power of the model is about 75% with F value of 104.808. From the model, all the included variables were all significant. By implication, the included variables proved to be facilitating factors to the effective promotion of primary healthcare in the rural communities by the community healthcare workers.

Table 3. T-test analysis of constraints to effective promotion of primary health care services delivery among male and female CHWs in promotion of PHC practices

Variables	Sex	Mean	SD	T	Df	Sig
Maternal and child health care/family planning	Male Female	3.47 3.83	506 370	5.21	244	000
Treatment of minor ailment	Male Female	3.73 3.82	446 452	1.07	244	.286
Assisting in health centres activities	Male Female	3.73 3.87	446 390	1.89	244	.059
Participating in community meeting	Male Female	3.94 3.32	1.250 .921	2.19	244	.029
Control of local endemic disease	Male Female	3.73 3.87	446 405	1.96	244	050
Dispensing drugs	Male Female	3.47 3.83	506 375	5.10	244	000
Referral of complex health problems	Male Female	3.73 3.88	446 362	2.22	244	027
Overall	**Male** **Female**	**3.54** **3.77**	**536** **427**	**2.92**	**244**	**.004**

Table 4. T-test analysis of mean scores of the single and married on constraints to effective promotion of primary health care service delivery

Variables	M.Status	Mean	SD	T	Df	Sig
Lack of familiarity with clients and PHC agents	Single Married	3.10 2.74	.552 1.179	3.16	240	.002
Inadequate integration of the receiving communities	Single Married	3.32 9.44	.468 1.213	3.29	240	.001
Inefficient information and communication	Single Married	3.32 3.38	.650 1.231	3.53	240	.000
Low participation of the beneficiaries due to inadequate sensitization	Single Married	3.08 2.66	575 1.253	3.41	240	001
Culture of the communities hinders acceptance of PHC services	Single Married	3.30 2.84	493 1.208	4.04	240	000
Inadequate training in PHC	Single Married	3.22 2.78	570 1.127	3.90	240	000
Poor motivational strategies by community health workers	Single Married	3.19 2.82	642 1.134	3.19	240	002
Inadequate financial support	Single Married	3.52 3.64	.500 .535	1.77	240	078
Overall	**Single** **Married**	**3.25** **2.95**	**.496** **1.020**	**2.96**	**240**	**003**

Table 5. Coefficients of sustainability of community healthcare workers in the rural communities

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	99.0%Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	1.222	.115		10.602	.000	.924	1.519
Gender	.176	.050	.123	3.523	.000	.047	.304
Age	.410	.030	.410	13.777	.000	.333	.487
Year in service	-.073	.014	-.135	-5.224	.000	-.108	-.037
Education	-.086	.024	-.101	-3.565	.000	-.149	-.024
Integration of the receiving communities	.155	.025	.191	6.334	.000	.219	-.092
Career orientation	-.003	.037	-.003	-.090	.929	-.100	.093
Familiarity with the local communities	.115	.021	.142	5.460	.000	.061	.170
Financial support	.416	.054	.285	7.651	.000	.276	.556

a. Dependent sustainability of community healthcare workers in the rural communities

R=0.710 (71.0%), F=74.946, P=.000

6. DISCUSSION

The overall interest of the United Nations Sustainable Development Goal (SDG-3) is to ensure comprehensive health for all and sundry, which in any case, is achievable through the mechanism of primary healthcare and community health system across the globe especially in the developing nations. And this is partly ensured through affordable healthcare among the population, which has been substantiated by the research [28].

The community health workers in the developing nations such as Nigeria are the backbone of the actualization of primary healthcare and effective public health. In the present study, the salient position of the community health workers has been probed through certain statistical tools with glaring results about the prevailing situation in the southeast Nigeria. From the study, the basic health services needed for effective public health and community health promotion are covered by the community health workers in this part of the world with enormous positive implication to the internal and external public health interests. For instance, the overall activities and services of the community health workers in the southeast Nigeria are designed to promote public health enlightenment, effective family planning, prompt attention to minor health cases and improvement and sustainability of effective referral system with the disjointed community and localities in the region. The impact of these services by the community health workers can be observed on the low level of infant mortality, low maternal mortality as well as fertility rate in southeast Nigeria.

In an effort to achieve a competent community health services in the southeast region of Nigeria, certain measures have been applied by the community health workers in the region such as functional communication and information system, capacity building and other support to CHWs working within the locality, increase in skill acquisition of community health workers, improving medical personnel welfare, within the community health facilities and adapting the use of indigenous language in sensitizing of people. Functional communication and information system has been discovered by other researchers as the basic factor in the sustainable public health in other developed regions of the world [29]. This in part, is explained by the fact that primary, secondary and tertiary healthcare are anchored on the network of community healthcare and the referral system.

The indigenous approach to healthcare among the community health workers is one of the enduring approaches in the management and sustainability of public healthcare among the developing nations. As such, the effectiveness of community health workers as well as primary healthcare system in the southeast Nigeria is invariably connected to the approach as it accommodates the members of the host communities. Meanwhile, the effectiveness of community health care services as provided by the community health workers is affected by certain factors domicile with the gender and marital status of the community health workers in the southeast Nigeria.

7. CONCLUSIONS

Community health care workers in the developing nations are part of the sustainable capacity of the sustainable development goals. This is evidence in the core values of their profession, which reflects the basic need for their services among the rural population. However, the activities of the community health care workers are constrained by other socioeconomic factors surrounding their family and individual lives, which in most cases needed the administrative interventions guided by some theoretical models. In the case of the community health care workers in southeast Nigeria, there is the need for the MCGregor theory X intervention to improve their works and operations so far in view of the dominant constraints to their operation in the region. Meanwhile, the study was limited in terms of area, scope and population due to the constraining logistics to the study.

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