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Synchronization of Educational Activities, Presumptive of Health Education Roles in Health Care Work by the Available Resources and Within Primary Health Care System

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Abstract: **Introduction:** Health education aims to encourage behavior changes for better health (Green et al., 1980; Tone and Tilford, 1994). Researchers like Green et al. (1980), Sunderland (1979), French and Adams (1986), Smail (1992), and Macdonald (1994) have contributed to health education research. Publications like Jinadu and Adetugbo (1992), Das Gupta, Gauri, and Khemani (2003), and Nigerian Demographic and Health Survey (2008) offer insights, especially in developing nations like Nigeria.

However, a lack of data on health education's impact in developing nations like Nigeria (FMOH, 2004) hinders policy reform. The effectiveness of health education is often questioned due to the absence of specific approaches, frameworks, and program successes. Stereotypical approaches and terms like "social mobilization" and "IEC" dominate primary healthcare (PHC) settings.

There are gaps in health education management processes, and its alignment with PHC programs is unclear. Policies often prioritize program acceptability rather than specific behavioral and non-behavioral impacts. The Ward Minimum Health Care Package (WMHCP) aims to provide ward-level services but lacks clear health education strategies.

The study addresses the disorganization in PHC health education, focusing on integrated maternal, newborn, and child health (IMNCH) in Ekiti-State. It aims to explore how community needs influence health education practices. The importance of health education in community development has been a topic of debate globally (Brieger and Edozien, 1982; Ransome-Kuti et al, 1990; Macdonald, 1994). Management elements play a crucial role in strengthening health education standards and achieving measurable results, which is also relevant in Nigeria's context.

Objectives: This study meticulously investigates the demographics, training methodologies, day-to-day practices, and challenges faced by health education workers across various echelons of the PHC system. A primary focus is placed on the critical examination of the prevalent organizational models within educational interventions, aiming to identify potential gaps and inefficiencies that hinder the optimal delivery of health education services. Additionally, the study aims to quantify these gaps through statistical analysis, shedding light on specific areas that demand immediate attention and intervention.

Method of Data Analysis: The research methodology involves a rigorous approach, encompassing meticulously structured surveys and in-depth interviews conducted with health education workers across diverse tiers within the PHC framework. Quantitative data was subjected to comprehensive statistical analyses, revealing crucial percentages and numerical trends. Qualitative responses were meticulously analyzed thematically, offering nuanced insights into the challenges faced and potential solutions.

Results: The empirical findings of this study illuminate critical aspects of the PHC health education landscape. The study revealed that 72% of health education workers are female, indicating a significant gender disparity within the workforce. Notably, 89% of these professionals received training exclusively on the job or through workshops, emphasizing the lack of formal educational protocols. The study discovered that 68% of health education workers operate within the dispersed organizational model, while 22% adopt coexisting models and 10% specialist approaches. Moreover, 56% of respondents expressed reliance on external partners for planning, indicating a concerning dependency on non-internal resources. A striking 85% of health education workers lacked concrete selection criteria for educational targets, underscoring a critical gap in strategic planning.

Conclusion: The comprehensive analysis highlights the urgent need for standardized guidelines, strategic planning, and coordinated efforts to enhance the efficacy and impact of health education interventions within PHC settings. The numerical data presented underscores the gravity of the situation, demanding immediate policy revisions and targeted interventions.

Recommendations: Urgent policy revisions are necessary, focusing on gender equality, standardized training, and structured planning protocols for health education workers. The national health policy should prioritize comprehensive strategies for health education, emphasizing internal coordination and reduced dependence on external partners. Additionally, investing in robust capacity-building initiatives, specifically formal education for health education workers, is essential to bridge the training gap.

Keywords: Health Education Workers, Primary Health Care, Standardization, Educational Interventions, Organizational Models, Gender Disparity, Research and Development.

INTRODUCTION

According to popular understanding, health education consists of a variety of activities meant to encourage voluntary behavior modification for the purpose of promoting good health (Green et al., 1980; Tone and Tilford, 1994). Its main goal is to promote a healthy lifestyle by making constructive changes to habits related to health. It is therefore anticipated that it will take center stage in any educational initiatives targeted at facilitating health behaviours.

Researchers like Green et al. (1980), Sunderland (1979), French and Adams (1986), Smail (1992), and Macdonald (1994) have made significant contributions to extant research work on health education and its practice. Publications like Jinadu and Adetugbo (1992), Das Gupta, Gauri, and Khemani (2003), National Primary Health Care Development Agency (2007), and the Nigerian Demographic and Health Survey (NDHS) of 2008 provide additional pertinent insights into development countries' settings, including Nigeria.

It is notable that a complex portrayal of health education impact on healthcare interventions may occasionally occur still, dearth of data defining the merits and demerit, especially in developing nations like Nigeria (FMOH, 2004) tends to undermine attentions to refocus on needs of a health education specific policy modification or of its total reform. In order to strategically review the position of health education within Nigeria's healthcare development objectives, the aforementioned remark highlights a basic issue that calls for a thorough analysis of the situation.

Thus, the success of health education in the context of Health Care services is frequently questioned especially in view of gaps from empirical data regarding 'what worked'. This cynicism is strengthened by dearth of hard data addressing particular approaches, frameworks, and the successes attained as a result of health education programs. The oversimplification of health education as a general responsibility of all healthcare providers, presumably without the need for specialized training, only serves to increase the confusion (Macdonald, 1994; Coalition of National Health Education Organizations, 1999).

As a result, it seems that the landscape of educational interventions is dominated by stereotypical approaches using numerous terminologies. The fact that phrases like "social mobilization," "information," "education," and "communication" (IEC) frequently take primacy in PHC settings is not surprising. For example, it is possible to view the social mobilization method that is widely used in PHC education as a result of governmental instructions (as seen in FMOH, 2004; 2007).

However, it can be argued that there are gaps in the management input and output processes that frequently lead to questions about health education's effectiveness.

Critical analysis reveals that the PHC programs that health education is supposed to support are rarely tangible when compared to the priority assigned to health education in policy papers about structuring health educational activities by their purpose (see FMOH, 2004; 2007, NPHCDA, 2007). The purpose of health education appears to only be geared at increasing the acceptability of the particular program of interest, as depicted for example in the national health policy and the ward minimum health care package (WMHCP).

Targeting behavioural and non-behavioural impacts does not appear to be specifically stated for instance, in some of the policy papers (FMOH, 2004; NPHCDA, 2007). Such appears to be presented instead in the form of advertising campaigns that are essentially crude propaganda weapons. Even though the policy paper seems tacit on the contributions of health education to PHC's plan, the WMHCP strives to provide ward-level service in the context of effective health care initiative, which appears not totally devoid of health education approaches as part of its building blocks. Theoretically viewed, if a health education intervention is successful, the result should go beyond simply getting the program on the agenda to a point where it also illustrates proper health action (Green et al; Tones and Tilford, 1994; Fawole et al, 1999).

Since health education seems relevant to the WMHCP, a greater foundation for practical planning and execution arguably, should result than what currently seems apparent in the document. From the above contexts, the repercussions of unmet educational objectives may seem covert but the scope of health education blames inherently grows and overtly too, depending on which health care programme's indicators it's dynamics may be set to service.

It has been a topic of significant dispute even outside of Africa in Asia and South America (Brieger and Edozien, 1982; Ransome-Kuti et al, 1990; Macdonald, 1994) how important health education is to the basic requirements of the community. The role of management elements as a

crucial component in strengthening health education standards and producing quantifiable results seems difficult. Nonetheless, Nigeria's situation has not been an exception in the discourse either.

The current study was inspired by the worry that the PHC system's health education practice lacked essential organization. It chooses a PHC intervention which statutorily demands cohesive interactive working team, ie., integrated maternal, newborn and child health (IMNCH) in order to understand the extents to which management concept applies in IMNCH health education activity. It proposes to investigate the case of Ekiti-State, looking at how community educational requirements are given consideration, drawing representative samples from which their health education practices may be discernible.

Main objective of the study

The main objective of the study is to determine the degree of coordination, which exists in the processes involved in the performance of health education role and by the available resources.

Specific objective

This is to examine and document opinions of health education workers on the management and coordination of their input and output processes, focusing on the followings areas

1. Assess the level of skills acquired by this group in performing the health education function on IMNCH component programme;
2. Assess the categories of health education activities, implemented in respect of IMNCH services and available standard;
3. Establish the pattern of practice in the planning, programming and implementing health education work with the type and style of support obtained;
4. Establish the pattern of practice in reporting activities and archiving materials used for educational activities.
5. Assess the level of organization and coordination structures between the different levels implementing health education for IMNCH (State, LGA and Ward / HF levels);
6. Establish the pattern of practice in documenting achievements and quality (focusing on attitudes towards encouraging behavior change).

Research questions

1. What are the level of skills acquired by this group in performing the health education function on IMNCH component programed;
2. What are the categories of health education activities, implemented in respect of IMNCH services and available standard;
3. What is the pattern of practice in the planning, programming and implementing health education work with the type and style of support obtained;
4. What is the pattern of practice in reporting activities and archiving materials used for educational activities?
5. What is the level of organization and coordination structures between the different levels implementing health education for IMNCH (State, LGA and Ward / HF levels);
6. What is the pattern of practice in documenting achievements and quality (focusing on attitudes towards encouraging behavior change)?

Research hypothesis (null and alternative)

H0: There is no relationship in the organization of educational activities by health education workers and the ambiguity that may occur with the educational outcomes

H1: There is a relationship in the organization of educational activities by health education workers and the ambiguity that may occur with the educational outcomes.

Methods and Material

The research study design

The study was conducted using a descriptive cross-sectional design, with a self-administered questionnaire serving as the main instrument. The purpose of choosing this design was to evaluate the degree of coordination between the various steps involved in carrying out the job of health education and the resource availability.

STUDY AREA

This study was carried out in Ekiti State and by estimates from the National Population Census for the year 2012, Ekiti State had a population of 2,863,498, with IMNCH services targeting 25% of this population as mandated by national guidelines (FMOH, 2004; 2007; NPHCDA, 2007). This target population includes children under the age of 5, constituting 20% of the total population (572,700), and pregnant women, making up 5% (147,613). It's important to note that the population figures stated above serve to illustrate the potential beneficiaries of health behavior improvements and do not necessarily represent the sample used in the study. The primary focus of the current study is on healthcare providers, as described in the sampling units. This illustration serves to underscore the value of aligning educational interventions with the strategic goals of health interventions.

Sample population

The sample population consists of healthcare workers in Ekiti State, Nigeria, who incorporate health education into their responsibilities while carrying out their duties as related to IMNCH.

Sampling method

In order to find potential health education work related participants, this study used a random sample strategy to select wards and healthcare facilities (HFs) while maintaining all other variables as constant, participants will be drawn from 20% of the total 293 extant HFs in order to create a representative sample for this study.

In turn, these chosen HFs will make up a portion of our sampling framework, which will comprise 40% (6) of the 16 LGAs divided into three senatorial districts in the State. Titled health educators will be in the participation pool both at the State & LGA levels.

Study Instrument

The self-administered survey was created with the intention of looking into issues pertaining to the delivery of health education in Primary Healthcare (PHC) settings. The questionnaire, titled "Survey of Health Workers on Education-Packaged IMNCH Services," is focused on the educational aspects of IMNCH work of the prospective participants.

This self-administered questionnaire (SAQ) has six sections, each with a different style of question, such as a closed-ended, interval, scaling, or yes/no question. Most of these questions have multiple-choice and single-option categories. The healthcare facilities/wards and the Local Government Area (LGA)/State strata are two subgroups of the sample that are each subject to the identical questionnaire.

Data collection Method

The instruments were compiled into a questionnaire that contained questions relating to demographic information and contained the five psychometric instruments. The data collection was interviewer administered.

Method of analysis

All collected data were inputted and analyzed using IBM SPSS Statistics version 20. The analysis involved the utilization of descriptive statistics, with the data presented through frequency tables and percentages. Additionally, inferential statistics, including the application of the chi-square test, were employed. Furthermore, Pearson's product moment correlation coefficients were computed to assess the relationships between the dependent and independent variables.

Ethical issues

Because the study aspires to gather information from primary health care professionals, need to access the subjects rest on not only systematic approach but it also deserves ethical considerations. The fact that the prospective subjects function within statutory authority necessitates acquainting the superior with the purpose of the research and would entail spelling out the relevance of participation of the samples.

RESULTS

Demographic characteristics of the respondents

Table 4.1.1: Distribution pattern of respondents by cluster LGAs and the sampling strata

S/N	Cluster LGAs	HF/Ward stratum	LGA/State stratum	Total
1	Ado LGA/State	14	7	**21 (27%)**
2	Oye	11	4	**15 (19%)**
3	Ekiti SW	9	4	**13 (16%)**
4	Ikere	7	4	**11 (14%)**
5	Ise-Orun	7	3	**10 (13%)**
6	Efon	6	3	**9 (11%)**
Total		**54 (68%)**	**25 (32%)**	**79 (100%)**

The table shows that 54 (68%) of the respondents were from the HF/Ward stratum and 25 (32%) respondents were from the LGA/State stratum.

Table 4.1.10: Distribution pattern of responses concerning the key areas of responsibility compared by respondents' health care work title

S/N	Key area of responsibilities	Health care work title							Total
		CHEW/CHO	Ward focal person / OIC	Health educator	Nutrition officer / focal person	Malaria control officer / focal person	Immunization officer / focal person	Nursing officer	
1	Clinic and community-based health care	23	2	0	3	1	0	4	**33 (42%)**
2	Immunization and community related services	16	5	0	0	0	6	0	**27 (34%)**
3	PHC component education	0	0	7	0	0	0	0	**7 (9%)**

4	Malaria control and education	0	0	0	0	5	0	0	**5 (6%)**
5	Nutrition and education	0	0	0	4	0	0	0	**4 (5%)**
6	Reproductive health care and mobilization	1	1	0	0	0	0	1	**3 (4%)**
Total		**40 (51%)**	**8 (10%)**	**7 (9%)**	**7 (9%)**	**6 (8%)**	**6 (8%)**	**5 (6%)**	**79 (100%)**

Table 4.1.10 shows that the majority 23 of the 40 (51%) respondents who identified by the CHEW/CHO title performed clinic-based child welfare / community services, 16 of the respondents in similar category performed immunization / community related services. All the seven respondents who identified as health educator indicated PHC component education.

The six respondents that identified as immunization officer / focal person kept responsibilities in similar scope (ie, immunization and community related services). Five of the 6 (8%) respondents who identified by malaria control programme also kept responsibilities within the scope.

4.2 Skills acquired by the respondents and level

Table 4.2.1: Distribution pattern by type of qualification, obtained

S/N	Qualification obtained	Total
1	BSc. Degree in Health Education (**Formal training**)	9 **(11.4%)**
2	MSc. Degree in Health Education (**Formal training**)	1 **(1.3%)**
3	Advanced Dip Certificate in Health Education (**Formal training**)	1 **(1.3%)**
4	Informal or non-health education specific exposure	68 **(86.1%)**
Total		**79 (100%)**

The table shows two major groupings (ie, formal and informal) to illustrate the type of qualification cohort of the respondents in relation to health education. On the formal category were nine (11%) of the respondents with BSc degree in health education, and a respondent each for MSc degree and advanced diploma respectively. Thus, the category of respondents that indicated having formal exposure formed an aggregate of 11 (14%).

The remaining 68 (86%) respondents had either only informal exposure to health education or had qualification that was not specifically in the area of health education.

Table 4.2.2: Frequency distribution of responses by the degree of training exposures (formal and informal)

S/N	Level of training exposures	Total
1	Formal training **plus** workshop (informal) exposure	6 **(8%)**
2	Formal training **plus** on the job(informal) exposure	3 **(4%)**
3	Formal training only	2 **(3%)**
4	Non h/education specific qualification **but** on the job exposure	39 **(49%)**
5	Non h/education specific qualification **but** workshop exposure	25 **(32%)**
6	Had neither formal nor informal h/education qualification	4 **(5%)**
Total		**79 (100%)**

6(8%) of the respondents had formal health education training with additional workshop exposure, 3 (4%) had on-the-job exposure as an addition and 2% had just formal training

exposure. Among the respondents that had non-health education specific qualification were the 39 (49%) who had on-the-job exposure and the 25 (32%) who had workshop exposure.

Figure 4.2.2 shows the proportion in categories by the level of health education exposure. The depiction emerged in four categories by the type of exposure if any, whether formal, informal or combined and if none at all.

Table 4.2.6: Category of the level of training exposures compared by respondents' years of working experience

S/N	Category of training exposures on h/education	Year of working experience						
		1-5 years	6-10 years	11-15 years	16-20 years	21-25 years	above 25 years	Total
1	Formal and informal training exposures	1	2	2	1	2	1	**9 (11%)**
2	Formal training only	0	0	0	0	1	1	**2 (3%)**
3	Only informal exposures (workshop and on-the-job)	17	17	12	5	12	1	**64 (81%)**
4	Had neither formal nor informal exposures	2	2	0	0	0	0	**4 (5%)**
Total		**20 (25%)**	**21 (27%)**	**14 18%)**	**6 (8%)**	**15 (19%)**	**3 (4%)**	**79 (100%)**

The table shows that the category of respondents who had combined (ie, formal and informal) exposures about health education emerged across the six categories of years of working experience. Similarly, the category of respondents who had just informal exposures featured in varying proportions across the six categories.

4.3 Pattern of practice in planning, programming and implementing health education work based on standard procedure or guideline

Table 4.3.1: Compare the pattern of responses about work plan for educational activities with results from the 'archival data (AD) checker list', applied concomitantly with the SAQ

S/N	Work plan availability	Yes	No
		Total respondents	**Total** respondents
1	Normally have work plan for educational work, conducted (**SAQ**)	44 **(56%)**	35 **(44%)**
2	Educational work plan / schedule specific to routine programme **not** campaign or supplemental programmes (**AD checker list's assessment**)	0 **(0%)**	79 **(100%)**
3	Educational work plan / schedule, specific to campaign / supplemental programmes **not** routine programme (**AD checker list's assessment**)	16 **(20%)**	63 **(80%)**

Table 4.3.1 shows that 44 (56%) respondents indicated to have work plan for educational activities concerning IMNCH services. By the AD checker list, only 16 (20%) respondents had educational schedules / work plan that was only specific for supplemental programme rather than for routine activities at the duty post. Figure 4.3.1 compares results generated via the SAQ and the AD checker list about availability of respondents' work plan or schedule.

Table 4.3.8: Distribution pattern of responses on methods, involved at deriving educational messages for the target audience, compared by the respondents' key area of responsibility

S/N	Methods involved at deriving educational messages for the target audience	Health care services / key area of responsibility						Total
		Clinic- & comm-based health care	Immunization & comm related services	Reproductive health care & mobilizatn	PHC component education	Malaria control & education	Nutrition & education	
1	Depend on messages produced by other levels / partners	33	22	3	0	0	1	**59 (75%)**
2	Modify / reproduce educational messages from partner thru education unit for local use	0	2	0	0	4	1	**7 (9%)**
3	Adapt and reproduce educational messages by national / partners posted thru the State for local use	0	1	0	3	1	0	**5 (6%)**
4	Develop / produce educational messages and circulate for use	0	0	0	2	0	2	**4 (5%)**
5	Work with via education unit or mass media to produce educational messages and circulate	0	2	0	0	0	0	**2 (3%)**

6	Adapt and reproduce educational messages by national / partners for local use	0	0	0	2	0	0	**2 (3%)**
Total		**33 (42%)**	**27 (34%)**	**7 (9%)**	**7 (9%)**	**5 (6%)**	**4 (5%)**	**79 (100%)**

Table 4.3.8 shows that 33 of the 59 (75%) respondents who indicated dependence on other levels / partners for educational messages were on clinic based child welfare and related services while 22 respondents in the category were on immunization services. Four of the seven (9%) respondents who indicated modifying / reproducing messages from other levels for local use were on malaria control and component education. Three of the five (6%) who indicated adapting and reproducing messages from the national, were on PHC component education.

4.5 Organisation/coordination structure about health education work for IMNCH services

Parts 4 and 5 of the SAQ explored the views and experiences of respondents about coordinated reporting system. The variables explored products of existing standards through monitoring and evaluation (M&E), targeting feedback and control as the results in this perspective captured category of monitors by the regular period of monitoring. Monitoring and evaluation forms an aspect of the indicator for organisation and coordination.

Results about the experiences of respondents, on coordinated reporting cross tabulate with results on availability or evidence of educational work plan. This stands as a dependent factor of organisation and coordination in health education work at establishing a relationship. Table 4.5.1 shows the response pattern in terms of the monitoring and evaluation of respondents' educational activities by the period of monitoring.

Table 4.5.1: Pattern of the responses about the monitoring and evaluation system for health education work

S/N	Category of the monitoring and evaluation system	Total
1	State team on routine supportive supervision	23 **(29%)**
2	State team on campaign activities	20 **(25%)**
3	LGA level PHC team on routine supportive supervision	11 **(14%)**
4	National level team on evaluation of special projects	5 **(6%)**
5	State health education office on routine supportive supervision	4 **(5%)**
6	Don't know	16 **(20%)**
Total		**79 (100%)**

Table 4.5.1 shows that 23 (29%) of the respondents indicated the State team as a category of monitor during the period of routine supportive supervision. Still, the State team, indicated by 20 (25%) of the respondents reckoned with such monitoring as conducted during campaign activities. Sixteen (20%) do not know about monitoring and evaluation of educational activities. Table 4.5.2 examines the pattern by respondents' key area of responsibility.

Table 4.5.2: Compares the response pattern on the monitoring and evaluation system for health education work by the respondent's key area of responsibility.

S/N	Category of the monitoring and evaluation system	Health care services / key area of responsibility						Total
		Clinic-& comm-based health care	Immunization & comm related services	PHC component education	Malaria control & education	Nutrition & education	Reproductive health care & mobilizatn	
1	State team on routine supervision	6	7	4	3	3	0	**23 (29%)**
2	State team on campaign activities	9	9	1	0	1	0	**20 (25%)**
3	LGA level PHC team on routine supervision	4	5	0	0	0	2	**11 (14%)**
4	National level team on evaluation of special projects	2	2	0	1	0	0	**5 (6%)**
5	State health education office on routine supervision	1	1	2	0	0	0	**4 (5%)**
6	**Don't know**	9	5	0	1	0	1	**16 (20%)**
Total		**33 (42%)**	**27 (34%**	**7 (9%)**	**5 (6%)**	**4 (5%)**	**3 (4%)**	**79 (100%)**

Table 4.5.2 shows high indication for the State team on the routine supportive supervision period by 23 (295) of the respondents and State team during campaign monitoring period by 20 (25%) of the respondents. Respondents on clinic based child welfare services and those on immunization services contributed to the high indications.

Still, it is noticeable that the highest number of respondents on PHC component education, malaria control and nutrition contributed to indications for the State team monitors on routine supportive supervision. Table 4.5.3 assesses the distribution pattern by the official duty post of respondents.

Figure 4.6.1 depicts the response patterns about the proportion of respondents that compiled reports. Table 4.6.1 compares the response pattern by respondents' key area of responsibility.

Figure 4.6.1: Distribution pattern of the responses on compilation and filing of educational reports

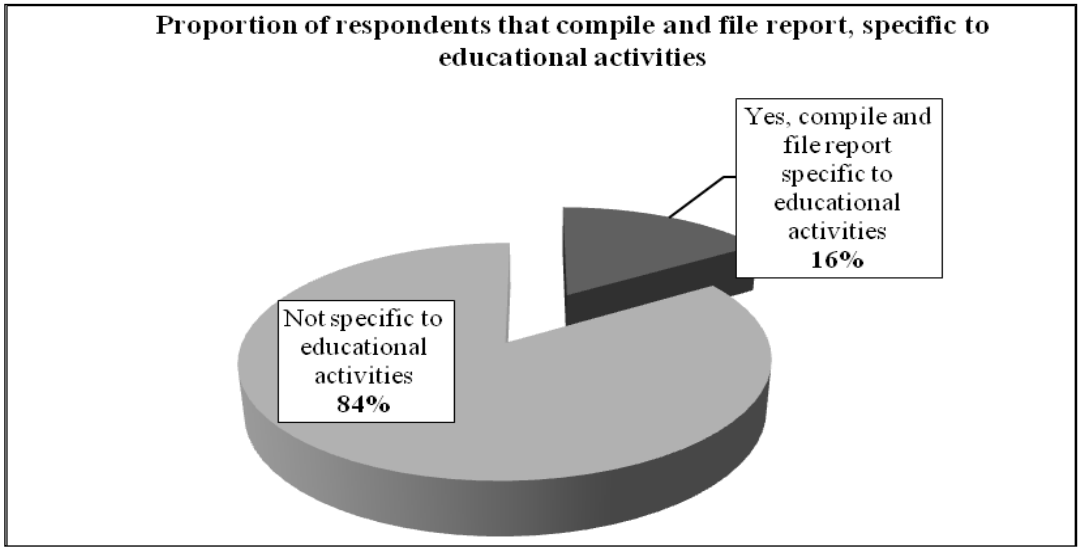

Figure 4.6.1 shows that 16% compiled and filed reports, specific to educational activities. Table 4.6.1 shows the distribution pattern by respondents' key areas of responsibility.

Table 4.6.1: Compares a pattern of the responses on compilation and filing of desk reports by the respondents' key area of responsibility

S/N	Health care services / key area of responsibility	Compilation and filing of desk reports on educational activities		Total
		No	Yes	
1	Clinic and community-based health care services	33	0	33 (42%)
2	Immunization / community related services	22	5	27 (34%)
3	PHC component education	1	6	7 (9%)
4	Malaria control and education	4	1	5 (6%)
5	Nutrition and education	3	1	4 (5%)
6	Reproductive health care & mobilization	3	0	3 (4%)
Total		**66 (84%)**	**13 (16%)**	**79 (100%)**

Table 4.6.1 shows that six of the seven (9%) respondents who compile and file desk reports on educational activities were respondents on PHC component education. Table 4.6.2 shows the distribution pattern by cluster LGAs.

Table 4.6.2: Compares a pattern of the responses on compilation and filing of desk reports by the respondents' cluster LGAs

S/N	Cluster LGAs	Compilation and filing of desk reports on educational activities		Total
		No	Yes	
1	Ado LGA/State	15	6	**21 (27%)**
2	Oye	13	2	**15 (19%)**
3	Ise-Orun	9	1	**10 (13%)**
4	Efon	8	1	**9 (11%)**
5	Ikere	10	1	**11 (14%)**
6	Ekiti SW	11	2	**13 (16%)**
Total		**66 (84%)**	**13 (16%)**	**79 (100%)**

Table 4.6.2 showed that six of the 12 (15%) respondents who compiled and filed desk reports on educational activities were in Ado LGA/State cluster. Table 4.6.3 shows the distribution pattern by the official duty post of respondents.

6th obj4.7 Pattern of practice at documenting achievements / quality

The results generated through this indicator dwelt in part five of the SAQ, measured by educational activities, mostly captured in a report, the action taken with compiled report and feedback to illustrate achievements and quality. The variables also entailed documentation of educational outcomes, thrusting on the results from the AD checker list.

Chi-square test, applied to results generated from contents of educational reports, as a variable of educational outcomes and work plan, which constitutes an indicator of coordination. Figure 4.6.1 under section 4.6 above already showed that only 13 (16%) of the respondents compile and file desk reports on educational activities. Table 4.7.1 depicts the pattern of responses concerning educational activities, mostly captured in respondents' desk report.

Table 4.7.1: Type of educational activities, mostly captured in reports

S/N	Category of the educational activities, mostly captured in reports	Total
1	Campaign data / mobilization material	7 **(9%)**
2	Not separated in campaign programme report, education aspect given to health educators as inputs for educational report	3 **(4%)**
3	Immunization (RI / SIA) reports	1 **(1%)**
4	Programme education / mobilization activities (health talk)	2 **(3%)**
5	Did not compile specific reports on educational activities	66 **(84%)**
Total		**79 (100%)**

Table 4.7.1 shows that campaign activities / material distribution were mostly captured in the report of seven (9%) of the 13 (16%) respondents that compiled and filed reports, specific to educational activities while the remaining three (4%) did joint reporting. Table 4.7.2 examines the pattern by the respondents' key area of responsibility.

Table 4.7.2: Compare the type of educational activities, mostly captured in reports by the respondents' key area of responsibility

S/N	Category of educational activities, mostly captured	Health care services / key area of responsibility						Total
		Clinic-& comm-based H/care	Immunization & comm related services	PHC component education	Malaria control & education	Nutrition & education	Reproductive H/care & mobilizatn	
1	Campaign data & demonstration materials	0	0	6	1	0	0	**7 (9%)**
2	Not separated in campaign programme report	0	2	0	0	1	0	**3 (4%)**
3	Immunization	0	1	0	0	0	0	**1 (1%)**
4	Programme education & mobilization (health talk)	0	2	0	0	0	0	**2 (3%)**
5	Did not compile the specific report	33	22	1	4	3	3	**66 (84%)**
Total		**33 (42%)**	**27 (34%)**	**7 (9%)**	**5 (6%)**	**4 (5%)**	**3 (4%)**	**79 (100%)**

Table 4.7.2 shows that all the seven (ie, 9% of respondents) who captured campaign / material distribution were on PHC component education. Table 4.7.3 examines the pattern by respondents' official duty post.

All the 33 (42%) respondents on the clinic and community based health care services were among the 66 (84%) respondents who did not compile reports on educational activities, followed by the 22 respondents on immunization services. Table 4.7.3 examines the pattern by respondents' official duty post.

Table 4.8.1: Cross tabulation of the variables about educational outputs and the organisation

Organization and the outputs variables		Evidence seen of compiled and filed reports on educational activities		Total
		No	**Yes**	
Evidence seen of action taken with such compiled educational reports	**No**	66	0	66
	Yes	0	13	13
Total		**66**	**13**	**79**

Table 4.8.1 shows the pattern of distribution concerning the respondents with an evidence of compiled reports and those with an evidence of action taken with such compiled educational reports. Table 4.8.2 shows the statistical differences between the two groups.

Table 4.8.2: The Chi-Square Test

The test	Value	Degree of freedom	Asymptotic Sig (2-sided)
Pearson Chi-Square	79.000[a]	1	.001
No. of Valid Cases	79		
Cells (25.0%) have expected count less than 5. The minimum expected count is 2.14			

The Chi-Square result shows an alpha value of 79.000 on one degree of freedom with an asymptotic significance of .001. A depiction of either organization or outcome in the educational activities of the respondents was indecisive without a clarification of the status.

Therefore, in an attempt to establish whether the status about the organization of the respondents' educational activities was good or poor, a further test for the significance of the differences between the evidence about archiving and that of a work plan applied. Availability of a work plan was an indicator that measured coordination. Still, a similar test applied to examine the status for the outcome indicator in the context of the hypothesis.

Table 4.8.3: Relationship between organization and educational outcomes

Organisation and outcomes variables		Evidence seen of documented achievements from educational activities (outcomes)		Total
		No	Yes	
Evidence seen of compiled and filed reports on educational activities	No	66	0	63
	Yes	4	9	13
Total		70	9	79

Table 4.8.3 shows a pattern of the responses about evidence seen of archiving of educational activities and results on evidence seen of documented achievements from educational activities. Table 4.8.4 illustrates the statistical differences between the two variables.

Table 4.8.4: The Chi-Square Test

The test	Value	Degree of freedom	Asymptotic Sig (2-sided)
Pearson Chi-Square	51.567[a]	1	.001
No. of Valid Cases	79		
Cells (25.0%) have expected count less than 5. The minimum expected count is 1.48.			

The Chi-Square result shows an alpha value of 51.567 on one degree of freedom with an asymptotic significance of .001. Section 4.8.2 articulates the record keeping characteristics of the respondents, using the AD linked results for evidence about the content of a record kept.

Discussion, conclusions and recommendations

The study populations were health workers that engaged in educational activities on integrated maternal, newborn and child health (IMNCH). The target appears disbursed across a wide geographic location at health facility (HF)/ward, LGA and State levels. As part of its methods therefore, the current study adopted a multi-stage random sampling at drawing the cluster LGA and the sampling units.

It used a self-administered questionnaire (SAQ) with an archival data (AD) checker list as an addendum to take notes from the archives, available evidence on the status of educational activities, performed by respondents in the sample. The addendum was an implication from the pilot study (Chapter 3 refers) that applied just to four variables.

The affected variables were the pattern of practice in the planning and programming of health education work; coordinated reporting and feedback; the pattern of practice in reporting educational activities; and the pattern of practice in documenting achievements and quality. The variables' indicators bordered on evidence of the followings: work plan, standard procedure / guideline, monitoring and feedback, and records of educational outcomes.

5.1 The discussion

The respondents constituted 18% of the study population and emerged from six LGA clusters. Ado LGA/State cluster had the highest proportion of the respondent (27%) while Efon LGA cluster, with 11% had the lowest proportion of the respondents. This is consistent with the current study's sampling design

The demographic data shows that overall, the highest proportion of the respondents in the sample were health facility based with more females than males (Table 4.1.2 refers). All the State based respondents were females.

In terms of professional background, the community health extension workers/community health officers (CHEWs/CHOs) constituted the majority of the respondents (68%) and were mostly health facility based. The majority of the 27% LGA based respondents were from the nursing profession.

The environmental health officers (EHOs) were more than any other category of the 5% respondents sampled at the State level, yet in equal proportion with those sampled at the LGA level. There was no representation of the CHEW/CHOs among the State based sample, which seems to conform with a vision for PHC in terms of the human resources at the grassroots (see, Ransome-Kuti et al, 1990; FMOH, 2007).

A study conducted in Kogi and Lagos States by Das Gupta et al (2003) on decentralized PHC showed that in aggregate, community health officers (including, junior / senior community health extension workers) were dominant in proportion compared to the medical and other health worker categories in the health settings, sampled. The current finding is similar in pattern as the proportion of community health workers beset that of the other health workers.

A similar perspective exists in a list of categories of health workers in Nigeria by FMOH (2007) where community health practitioners appeared to be the highest in number compared to the other categories. Therefore, the result seems an illustration of such vision, nurtured for PHC about human resources, particularly at the grassroots.

By the emerging varieties in the respondents' professional background (ie, CHEW/CHO, nursing officers, environmental health officers, and two others), the result concurs with existing theory on multi-professional involvements in health education (see Baric, 1976, Green et al, 1980; Ochor, 1983; Macdonald, 1994) still, the respondents answered to titles that depicted either their professional background or type of health care role they supervised.

A high proportion of the respondents based their identities on a title generated by the specific health care work they supervised and took recognition after such programed either as an officer or as a focal person. Such included immunization, nutrition, health education and malaria control are within the study design even as certain respondents in charge of ward / health facility activities identified as ward focal person / officer in charge (WFP/OIC).

The highest majority of the community health respondents (ie, CHEW/CHO) with the two nutritionists in the sample and a fraction of the nursing respondents (6%) retained a constant identity professionally and in the health work, they supervised (Table 4.1.7 refers). Whereas, there was a variation in the identity of many of the other category of respondents swapping their professional identity to the title of the health care work, they supervised.

Almost all the health care programmes indicated appeared supervised by health workers from a variety of professional backgrounds. Respondents with a nursing background had the widest spread and visibly shown under each health care work title, indicated (Table 4.1.7 refers). Four categories of health professionals in the sample adopted the malaria control officer / focal person title while three respondents adopted the nutrition title.

The immunization officer, health educator and ward focal person/OIC titles seem adopted by respondents from two health professional backgrounds and mostly, nursing. The EHOs respondents were a small proportion in the sample but identified exclusively with the health educator title. The only health information technician in the sample, identified as a malaria control officer / focal person title

Respondents also indicated a key area of health care responsibility that seemed an emphasis of the health care work title, specified by the majority. Therefore, in comparing the health care work title with the key area of health care responsibilities, results for the health educator, malaria control and nutrition respondents appear consistent with the health care responsibilities, indicated.

The majority of the respondents that identified as WFP/OIC by title were among the 34% on immunisation and community related services. A large majority (42%) was responsible for clinic and community-based health care, and 34% were for immunisation and community related services. The CHEW/CHO respondents were a dominant professional group in both the areas of health care responsibility.

A further probe showed that those that identified by the health educator title emerged only from two professional backgrounds i.e., nursing and environmental health with the proportion of the respondents in the category of the latter (3/4) larger than that of the former (4/18). The above emphasis is pertinent partly because the main concern of the current study rests on health education management.

The emerging result underscores an assertion in the findings by Das Gupta et al (2003) that environmental health officers (EHOs) tend to specialise in sanitation inspection and health education. The consistency of the assertion is subject to a critical examination under the results, yielded under subsequent assessing tasks related to establishing the objective of current study.

Experts such as Baric (1976) posit that the integration of health education into health care activities imply that inputs to the educational activities could depend on personal preference of the individual professional. The observable variations in the identity of the respondents, not limited to the official job title but to either the professional title or a health care work, linked title arguably, offers latitude for such dependence even in multiple scopes.

With increasing arguments for role delineation among health workers who engage in health education (Baric, 1976; Neutens, 1984), the results from the respondents' varied titles and professional background define a purpose for such need. Neutens (1984) aptly advised that such delineation should evolve via research at provoking effective coordination processes in health education work. This result poses a case for subscription to such advice.

On the aggregate, only 14% of the respondents had a formal training while 86% had a non-health education specific training (Figure 4.2.1 refers). However, a good proportion of the 14% respondents with formal health education exposure had a BSc degree (see Table 4.2.1). All the EHOs (4/4) had a formal health education exposure thus; consistent with the assertion earlier credited to the findings by Das Gupta et al (2003).

Among the respondents that had a non-health educational specific training were the 81% that had an informal exposure (Figure 4.2.2 refers). A huge proportion of the CHEW/CHO respondents constituted the highest majority, followed by majority of the nursing respondents (Table 4.2.3 refers). The respondents with such informal exposure had it essentially through workshops and on-the-job training.

The results appear similar to some findings by Stetson and Davis (1999) about the mode in which many health educators in developing countries enhanced their proficiency in the field of health education. The results are also consistent with the observations made by Ransome Kuti et al (1990); specifically asserting that UNICEF represents a key donor agency offering capacity training in the area of health education to health workers in Nigeria.

On the average, a quarter of the respondents had between 14.5 to 17.5 years of working experience while the majority (52%) had between 3.5 to 7.5 years of experience on the field. Experience counts in employment markets (Haralambos and Holborn, 1991), an attainment of between three to seven years in a field would seem a fine interval for skills improvement. The majority of the respondents are thus, much likely to have good level of working experience.

The level of skills acquired by the respondents in performing health education functions, constituted a specific task of the current study, which a part of the above results assisted to achieve. From the findings, it is obvious that health education workers emerge from different professional backgrounds, which seems consistent with findings in some of the previous studies (Stetson and Davis, 1999; Das Gupta et al, 2003).

The CHEW/CHO appeared comparably dominant among the category of health workers, sampled. The highest proportion of the category had a very poor exposure to formal health education training (see Table 4.2.3). Whereas the ward minimum health care package (NPHCDA, 2007) indicated that by the end of 2012, at least two health workers per ward will train as health educators, the effect of which seems shaky by the current result.

Among the 68% ward/health facility based respondents, was just a tiny fraction that trained formally as health educators. A huge majority (49/54) of this category had an informal training exposure. The fieldwork that yielded these results held when the WMHCP plan period should be rounding up (i.e., December 2012) just to illustrate a possible gap in the WMHCP's, goal achievements.

The respondents' opinion in terms of pattern of practice in the planning and programming of educational work was another task within the specific objectives set by the current study. Results from both the SAQ and the archival data (AD) checker list were crucial for necessary comparisons.

The SAQ indicated that 56% of the respondents claimed to have a work plan for educational activities while results from the AD checker list on the same variable skewed almost to the negative direction. It showed that just 20% of the respondents had evidence of an educational work plan and such was only specific to campaign /supplemental, programme .

There was barely an evidence to document for an educational work plan for the respondents' routine programmes . However, the respondents with evidence of a work plan were mostly LGA/State based .The highest proportion that had no evidence of a work plan for educational activities was HF based.

Experience informs that a work plan can articulate certain units of intention for proper organization of strategies aimed for the implementation of a programed. Glanz and Rimer (1990) argue that a theory directed educational or behavior change programme stimulate needs for organized methods, setting of targets, objectives, timeline, budget and the expected outcome of an intended programme that achievements can be measurable.

The lack of evidence for a work plan depicts that the implementation of an educational activity simply rested on assumptions with the expected outcomes, ill-defined and balanced on guesswork. The situation mimics a platform often perceived as creating 'more of the same' educational work, to which critics of health education categorically punched the holes (see Kelvin, 1980; Rawson, 1992; Macdonald, 1994).

From a management angle, Cole (1986) posits that planning is a strategic level process with the emerging activities having a bearing with strategic goals of an organisation. A growing body of evidence supports this view (Baric, 1976; Kickbush, 1990; Macdonald, 1994), still, strategic planning about health education seems overshadowed in some developing countries' policy papers by concerns for reduction in disease morbidity and mortality (FMOH, 2004).

The strategic goals in the context of the Nigeria's health policy (FMOH, 2004), scarcely feature a clear structure for health education processes. Yet, in pursuance of reductions in morbidity and mortality rates, the document (FMOH, 2007) lamented that only a marginal rate existed between 2000 and 2004.

Evidence abounds that significant reduction in morbidity and mortality has a bearing with human behaviours (see McKeown, 1976; Ashton and Seymour, 1986; Tanahill, 1992; Giesecke, 2002). Experts argue that a country's health policy inspires modalities for health intervention strategies (Jobert, 1985; Baric, 1994) and the health education practice, exposed to necessary reforms (Sunderland, 1979; Baric, 1994) to match the strategies.

The ward minimum health care package (NPHCDA, 2007) represents a type of strategic document. It professes that health education and community mobilization are a key element at achieving set goals. Such goals included establishing a broad health care system based on PHC that is promotive, protective, preventive, restorative and rehabilitative to every citizen within available assets (FMOH, 2004), supported in the WMHCP (NPHCDA, 2007).

The work schedule for the health education and community mobilization components in the context of the WMHCP reflect no operational strategy for the implementation (see, NPHCDA, 2007). Therefore, the current results about poor evidence for a work plan in the educational work of most respondents seems resonate of the contents of both the strategic plan (FMOH, 2004) and of the ward minimum health care package for health education work.

The findings seem an illustration of concerns raised in many health education publications that poor planning and coordination in health education work jeopardises reasonable outcomes (Baric, 1976; Ochor, 1983; Macdonald, 1994). Still, there are accounts that when a health programme links with educational or behaviour theory; identifies targets, methods and evaluation of change, the benefits are most likely obvious (Glanz and Rimer, 1990).

In respect of methods used at deriving educational messages, a large part of the respondents (75%) depended on messages produced by other levels, mainly partner agencies (Table 4.3.7 refers). The highest proportion was health facility based. A split quarter (5/21) of LGA based respondents adapted and reproduced educational messages by partner while, the other quarter were with the majority that depended on produced messages by the other levels.

Almost all the State based respondents (3/4) showed a similar bias in adapting and reproducing educational messages from partners (Table 4.3.7 refers). In terms of IEC materials, all the State based respondents (4/4) in a similar trend as observed with educational messages, still adapted and reproduced IEC materials from partner agencies (Tables 4.3.7 and 4.3.10 refer).

The majority of the health facility based respondents either used old IEC materials or depended on the modified ones (supplied largely by partner agencies) by the State or LGA (Table 4.3.10 refers). A third of LGA based respondents (7/21) similarly adapted and reproduced IEC materials supplied by partner agencies unlike a split group observed on the methods used in deriving educational messages.

Even if reliance on agencies for educational supplies was the order, using IEC materials for an example, it seems grounded by health education theories that such materials gain exposure to some level of pre-testing (see, Lefevbre, 1992; Green et al, 1980). Pre-testing forms a vital criterion in the quality management cycle (QMC) context, as the consumer gets important priority at the production of promotional materials (see, Cole, 1997).

Thus, educational materials derive inputs from a sample of the consumer targets towards encouraging sustainable service demand and utilisation. Still, the reviews showed that the involvement of consumer targets is an endorsed standard to whet the platforms of ownership of educational contents and promote a strong basis for acceptability (see, Lefevbre, 1992; Wallenstein and Bernstein, 1994; Cole, 1997).

Otherwise, where the consumer target of an educational activity appeared ill involved and the educational messages and materials for such targets were only derivable from a source outside the targets' cultural system, it may not yield the desired response from such consumer targets. Yet, there was no aspect of the results that suggest pretesting method at deriving educational materials let alone involving consumer targets.

From the perspective of diagnostic health education planning (see, Green et al, 1980), pretesting forms a standard means of producing health education products. Therefore, the expectation for pretesting of educational materials seems overwhelmed by the prospect of deriving educational supplies from development partners perhaps, without considerations about the potentialities in such donated supplies.

Based on the absence of pretesting in the respondents' indications about means for deriving educational materials suggests a gap. Still, given PHC's interests about community involvement in matters, relating to their health, the result also posits that such omission seems critical.

It presupposes that the PHC principle of community participation (WHO, 1978) seems lost out of balance. The weight of an endorsement made for a PHC driven system (Ransome-Kuti et al, 1990) appeared, baseless.

Critics abound questioning the effectiveness of health education and argue that the variation in its activities were 'more of the same' (see Rawson and Grigg, 1988; Rawson, 1992). The aspect that showed respondents' dependence on external educational commodities could be a further amplification of the critics' concerns considering that inputs of the respondents to educational package could appear more passive than active by such acts of dependence.

However, clinic-community based and immunisation-community related work formed the respondents' key area of responsibilities (see Tables 4.3.8). Dependence on the other level or partner agencies for educational materials appeared strongly from the indication by most respondents. The findings seem a further illustration of a view by Stetson and Davis (1999) that NGOs play key roles in the shaping of educational strategies in developing countries.

A huge proportion (75%) of the respondents ran their IMNCH related educational package as a content of the programme, mostly health facility based. A high proportion of the LGA based respondents (16%) ran the package as integral part of the programme and 9%, still mostly LGA based ran it as a major programme.

The respondents on clinic-community based and immunization-community related work mostly ran the educational package as a content of the programme. The majority on malaria control ran the package as an integral part of the programme while all of the 9% respondents on PHC component education ran it as a major programme.

The outcomes about the methods used in the running of education packages of IMNCH services invoke the worth of Baric's (1976) organisational models. These are the coexisting, dispersed and specialist models, illustrating some standards that could be shaping the management of health education processes.

The result concurs with a growing body of evidence suggesting that educational functions in PHC system are a shared responsibility among a variety of the professionals even within the same setting (see Ochor, 1983; Macdonald, 1994; Stetson and Davis, 1999). The result posits that the 16% of the respondents that ran IMNCH educational package as an integral component of the programme trailed the verge of a coexisting model.

By implication, the educational activities of a specialist should coexist with those integrated into the IMNCH package of the 16% respondents (see Baric, 1976; Adeniyi and Brieger, 1981). The specialist matter is debatable under the results dwelling on type of skills acquired by the respondents. Still, respondents having malaria control and nutrition as a key area of responsibilities was among the 16% that ran the package as an integral.

The 75% respondents who ran the educational package as a content of the programme showed a pattern of practice relating to the dispersed method of educational intervention (see, Baric, 1976; Ochor, 1983). The majority of the respondents had clinic-community based and immunisation / community related services as key areas of their responsibilities.

By a school of thought, the dispersed model involves sharing health education duties among a variety of experts working in settings where there is no formal health education service (Baric, 1976). The majority of the respondents in this category were health facility based where educational activities informally run concurrently within a framework of health care service delivery. Therefore, the result appears consistent with the ideology of the model.

The 9% respondents that ran the educational package in the context of a formal service within PHC offered it as a major programme, and were essentially the same group of respondents that identified specifically as health educators. Still, extant literature posits that health education specialist is a higher-level status than that of a health educator (see Baric, 1976; Adeniyi and Brieger, 1981).

Health education credentialing related publications suggest that the position of a specialist demands a master's degree holder (Adeniyi and Brieger, 1981; NCHEC, 1985; 1996). This is a pre-requisite, which just one out of the 14% respondents with a formal health education exposure matches (see Table 4.2.1). The specialist manages and coordinates the educational roles of the other related experts (Baric, 1976; Adeniyi and Brieger, 1981; NCHEC, 1996).

The result about health education skills emphasises the dearth of specialist among the categories of health education workers, sampled and concurs with the concerns about health education resources in Nigeria (Adeniyi and Brieger, 1981; Ochor, 1983). For example, Ransome Kuti et al (1990) regret that the scarcity of well-trained health educators, poor budgetary allocation and inadequate facilities hamper the functions of health education.

Ochor (1983) perceive little or no policy attention towards improving the course of health education processes, which the current finding corroborates. Still, the recent health policy reform (FMOH, 2004; 2007) shows no sophistication for an improvement from the long-standing situation. This seemed critiqued in the work of Ochor yet, dispersed approach appears a dominant practice among the health workers, sampled.

Reflecting on the virtue of a coexisting model in terms of the 16% that ran integral package and looking at the scanty number of those with a specialist qualification, the respondents' educational work linked to a dispersed model might be understandable. The result showing a respondent with such specialist qualification posits that the educational activities of the other health workers could be better than currently discovered, coexisting with that of a specialist.

A huge proportion of the respondents (53%) had no criteria for targeting groups for educational activities while 46% ordinarily used the specific programme targets. The majority of the respondents who saw campaign opportunity at selecting targets for educational activities still had no criteria. The result assumes that the educational work of such category of respondents could be incidental.

It thus seems pertinent to single out the opinion variation of the 9% respondents on PHC component education (Table 4.3.19 refers), and notably health educators. Out of the seven respondents concerned (9%), two adopted audience segmentation as a criterion at selecting the target for an educational intervention while a respondent engaged a high risk analysis as a criterion.

Even though a further probe into the respondents' purpose for choosing criteria was a limitation, Akinyele (1999) argues that health workers need to have the right frame of philosophy, upon which their plans and actions can anchor. Target setting according to some management views (Cole, 1986; Akinyele, 1999; Ojeifo and Azelama, 2007), is a key facet in forecasting processes and notably a crucial thinking in health care programmes' planning.

It could seem fine that a health worker adopted a maternal group as the target for an educational activity designed for a maternal and child health programme; a criterion forms a part of the aptness of the methodologies. Experience shows that an educational activity that lacks criterion in targeting its audience is comparable to what Tanahill (1992) describes as tantamount to a neglect of methodological issues, resulting in oversimplification of purpose.

Health education focuses on a dynamic miscellany of target groups for an objective multiplier effects in an educational activity, (Green et al, 1980; Tones and Tilford, 1994; Stetson and Davis, 1999). Even where it is patient or individually focused, the need to target family, community and groups for basic compliance and facilitation of health promoting action remained a constant educational objective (Green et al, 1980; Brieger and Edozien, 1983).

The respondents who adopted either the segmentation or high-risk analysis criteria appear to be insignificant in number. The respondents' efforts arguably hinged on a specific educational plan possibly to analyse merits and demerits towards further necessary action. Both the attempts seem to conform to certain diagnosis and planning principles of health education (see Green et al, 1980; Tones, 1986; Green and Krueter, 2005).

Thus, in subscription to Akinyele's (1999) argument, the two-health-education workers who conducted educational activities based on criteria selected target audience likely operated on a frame of philosophy that probably anchored their educational plans. The educational actions of the respondents could seem a display of a good knowledge of the theory, the meaning and goal underlying health education at making reasonable impacts (Stetson and Davis, 1999).

The need to have such clear understanding seems to explain the views expressed by 95% of the respondents who thought standard procedure or guideline was desirable for educational interventions. Such expressed views underscore the results concerning the respondents' awareness about availability of standard procedure or guideline for educational activities while only 29% indicated awareness and stated title of educational models.

A model mentioned by 11% of the respondents was the knowledge, attitude and practices (KAP). A very small fraction of the respondents indicated communication and empowerment models. However, it is crucial to place emphasis on these models as shown by a few respondents, given the popularity of such models in health education (see, French and Adams, 1986; Baric, 1994; Tones and Tilford, 1994; Stetson and Davis, 1999).

In the above context, a good number of the 9% respondents who functioned on PHC component education as a key area of their responsibilities demonstrated knowledge of a standard procedure. When compared with the category of health education training exposures, it emerged that all the respondents that had exposures (ie, formal and informal) in health education reported awareness of a model. It thus seems significant.

Overall, these results helped to establish a pattern of practice in the planning and programming of the health education work of the respondents. It shows that majority of the respondents lacked evidence of a work plan for educational activities with no evidence at all for routine but supplemental / campaign work. The ubiquity of the dispersed method in the educational practice of the respondents was apparent.

Still, the dependence of the respondents on educational materials and messages from donor agencies is a factor for attention. However, the result corroborates the views of experts (Macdonald, 1994; Flanagan, 1996; Stetson and Davis, 1999) over the influential roles of partner agencies on the educational interventions of developing countries.

Perhaps not total dependence, a submission in the policy paper (FMOH, 2004) on fostering partnerships for health development seems underscoring to the result. However, the implication of educational interventions without a work plan can be further explicable under the task dealing with organisation / coordination structure of health education, to illustrate some pertinence.

Meanwhile, the respondents' educational packages for IMNCH related services were in multiples and diverse but seems in consonance with the key areas of their responsibilities. The majority of the respondents (68%) that did client and patient education were on clinic-community based services, so was the 62% that did home visiting/community link services and all the 32% that did discussion and counselling.

Respondents on immunisation and community related services as a key area of responsibility mostly did community-client mobilization and ward development relations as an educational package. The same category of respondents were mostly health facility based, so was all the 68% and 62% that did clinic client education and home visiting, respectively. The highest majority were from the CHEW/CHO background.

This result appears similar to a finding in a study by Das Gupta et al (2003) about work done by different categories of health workers. In the study, the CHEW/CHO competed only with nursing staff especially in outpatient care and health education.

The emergence of client education illustrates a viewpoint of health education experts on its pertinence as problem solving approach to addressing illness and wellness (Brieger and Edozien, 1983; Delaune and Ladner, 1998). Several health education accounts posit that the appraisal of patient education relies on the basic cognitive approach of KAP model (Green et al, 1980; Baric, 1994); known only to 9% respondents.

Community education and mobilisation formed a type of educational activities indicated by 15% of the respondents, most of whom were LGA based, many were also part of the 14% that did group sensitization and likewise the 13% that did social marketing. All the State based (5%) respondents were among the proportions that did community education and mobilisation, group sensitization and social marketing, respectively.

The educational activities, indicated above concur with the kinds classified under the empowerment and health communication models (Tones and Tilford, 1994; Stetson and Davis, 1999). Still, the amount of respondents that earlier claimed awareness for these two models (Tab were comparably small (ie, 4% and 3% respectively) to those that indicated the educational activities grouped under the models.

Although, the majority of the health facility based respondents notably did community related educational activities, none in the category claimed awareness of an empowerment method (Tables 4.3.26 and 4.4.4 refer). The result could be an exhibition of incidental planning in the respondents' educational activities. Understanding the result as mimicry of a coexisting approach in organizational perspective, it conceivably, underlines a lack of specialist's touch.

Whereas, the majority of the respondents that demonstrated a poor level of awareness over the existence of educational models made indication of educational activities normally grouped under such approaches (see Tones and Tilford, 1994; Stetson and Davis, 1999). Such outcome recalls an argument by Jobert (1985) about the deficiencies trailing health education approaches that offer it as a commodity in health care interventions.

It appeared as though the respondents applied educational methods based on assumptions or previous educational work done. Experts argue that such could be a factor of the preponderant problems emanating within programme to imply some level of neglect as part of methodological issues in the educational programming of respondents (see, Green et al, 1980; Tanahill, 1992).

Green et al (1980) assert that educational efforts short of a clear perception of preponderant issues emanating from 'within programme' 'within organisation' and inter-organisational could

defy sound planning and proper management. The result could be a consequence of the existing strategic standards for health education by the policy documents (FMOH, 2004; 2007).

Thus, the quality of the educational work of the respondents may be questionable where policy guidelines were explicit with articulate standard procedures. The planning and programming of an educational activity seem arguably a matter for the individual health education worker, presumably under a dispersed organisational model and without recourse to health education philosophy and specialist attention.

Cole (1997) argues that quality management begins with a consideration of the consumer target, asserting that the consumer wants and needs translate into specifications before services can begin. With such dependence on educational messages and materials from partner agencies, the tendency that consideration for the consumers' wants and needs was nonexistent in the educational work of the respondents seemed high.

Still, the policy documents (FMOH, 2004; 2007) possibly defined the quality of the processes for the production of educational products to which its specifications probably emerged in the practice as shown via the experiences of the respondents (see, Baric 1994). Meanwhile, an aggregate of 62% respondents shared an opinion that availability of a guideline is a pre-requisite in the planning and programming of educational work.

An aspect aimed at understanding the type of supports derived by respondents for educational activities was an addendum to the task of establishing the pattern of practice in educational planning and programming of the respondents. Two categories of stakeholders emerged in the responses of the participants and these were the functional and the provider stakeholders.

From the respondents' experience, the functional stakeholders that supported educational work exist within the health sector, other governmental sectors and community settings. The most enlisted category of the stakeholders was the WFPs/OICs by 33% respondents, followed by the community-based organizations (CBOs) by 30% respondents.

The type of educational work mostly supported by the WFPs/OICs and health facility staff was client counselling. Although, the type mostly supported by the CBOs was community sensitization and mobilization, the WFP/OIC did more of this type of educational work than found with any other functional stakeholders, indicated by the respondents.

In aggregate, 65% respondents indicated community sensitization but staggered in nearly equal proportions among the various categories of the stakeholders that emerged on such educational activity. Therefore, it seems to imply that all the categories of functional stakeholders indicated by the respondents performed community sensitization role even though it was in varying proportions.

Despite the above, the result about the WFPs/OICs being a part of the functional stakeholder group, indicated by the respondents may seem peculiar to critical minds. It seems consistent with the aim of the WMHCP to boost the capabilities of PHC workers at the grassroots for the delivery of a minimum set of PHC interventions, including educational roles to meet the basic health requirements of a majority of Nigerians (see, NPHCDA, 2007).

The result could also be an illustration of the polyvalent nature of health workers' roles often exerted while performing their primary functions as health care workers. Such seems well documented as a common experience in many developing countries (see, Macdonald, 1994; Das Gupta et al, 2003). The emergence of the WFPs/OICs as health sector stakeholders implies that the category extends their health care roles beyond patient-clientele routines**.**

The collection of educational roles credited to the WFPs/OICs seems a practical expression of improvements in the aptitude of PHC workers. Apart from client counselling, WFPs/OICs also featured on community sensitization and mobilization with more significant indications from the

respondents than observed with the CBO category (see, Table 4.4.8). Yet, the educational role mostly credited to the CBOs was community sensitization and mobilization.

The other categories of functional stakeholders credited with community sensitization and mobilization role were governmental agencies and a mixed class of influential others outside of the health sector. These categories of functional stakeholders emerged from a variety of backgrounds within the different agencies and communities to support the respondents' educational activities as volunteers or community/ward development committee members.

Still, the community sensitization role of those stakeholders, outside the health sector concurs with an aspect of the WMHCP proposal about developing ward level committees for health care roles (NPHCDA, 2007). It also identifies with the PHC's principle of community involvement and participation, which seems well documented in extant literature (WHO, 1978; Ransome-Kuti et al, 1990; Macdonald, 1994).

Health experts argue that the active citizen involvements in empowerment-linked methods generate a solid foundation for community ownership (UNICEF, 1993; Lefevbre, 1992; Tones and Tilford, 1994). The community sensitization and mobilization roles credited to most categories of the stakeholders are clearly part of empowerment approaches, but the extent of generating community ownership remains explicable under the achievement-probing task.

Such educational roles accruing from stakeholders both within and outside the health sector seems underpinning to multi-sectoral involvements, effective partnership and collaboration enshrined as a strategy in the policy document (FMOH, 2004). The aim of such approach is about enhancing people's access to health services and information while its realization is explicable in the respondents' pattern of practice in documenting achievement and quality.

The manner by which the respondents involved functional stakeholders on the variety of educational methods, shown depicts a pattern mostly linked to the dispersed method in the organizational models of health education practice (Baric, 1976). In the context of such model, the educational roles of the group of stakeholders outside the health sector evolve as inputs from voluntary change agents having a role in health promotion services (Baric, 1976).

Even though, both the coexisting and specialist models, as composites of the organizational models of educational intervention seem yet, scarcely functional in the findings, the place of external stakeholders in educational roles suggests a respite point in the respondents' work. Hence, the intervals by which the respondents involved functional stakeholders demand some clarity to appreciate the style of involvements based on the types, already indicated.

The intervals of involvement emerged from a list of response options, narrowed to the three categories such as 'very often' 'when needed' and 'very rarely'. The interval scales thus depict the relative periods by which the respondents involved functional stakeholders.

The respondents' IMNCH packaged educational work also compares with the intervals for involvement to value the focus about stakeholders' educational roles as maybe directed by respondents' capacity. In general, 51% of the respondents involved functional stakeholders, only when needed with the CBOs having the highest proportion of the indications, followed by the other groups, similarly from outside the health sector.

Among the categories of functional stakeholders involved very often by the respondents were the WFPs/OIC and the health facility workers (both exist naturally within the health sector). The WFPs/OICs had the highest proportion of the indications.

Comparing the targets of an educational package by the involvement intervals of functional stakeholders, the campaign target was topmost, trailed by immunization, which comprised both the routine and supplemental targets (Table 4.4.10 refers). Experience impresses that a veteran health care worker could argue that both the campaign and immunization targets were identical groups with children and women of childbearing age, constituting the regular focus.

For instance, polio eradication initiative (PEI) is a type of campaign in poliomyelitis high-risk countries like Nigeria and drives supplemental immunization activities (SIAs) in the country (see, FMOH 2004). The maternal, newborn and child health week (MNCHW) forms a crucial part of IMNCH interventions, operated twice a year and thus assuming the campaign status (FMOH, 2007). The package of MNCHW also entails immunization services.

The realisation that the constant target for immunisation activities exists in two major groupings aids an understanding about the focus of such hypothetical argument. Under routine immunisation services, for example, women of childbearing age (WCBA) and children less than a year old form the targets while children below five years old constitutes the target for campaigns whether in the SIAs or during the MNCHW.

Hence, the mere selection of a programme targets for an educational activity such as revealed with campaign and immunisation would seem ordinarily too simplistic, ambiguous and ill defined. The WCBA group for instance could be a veritable target for educational activities while children in such age cohorts less than five years old, (both in campaign and routine immunisation contexts) are much unlikely to be a proper choice for an educational activity.

It is only commonsensical as children in such age brackets would be in their infancy and unlikely to have the capabilities needed to understand the purpose and relevance of educational plans let alone act on the messages. This point extols the significance of the work plan that is operational on a concurrent basis at elucidating areas of improvements mistrust, inadequacies and improprieties in the educational interventions of the respondents.

Therefore, the above hypothetical argument could be relevant to extents of implying that those respondents that used a programme as the criteria to select targets for educational work (see, Table 4.3.18) probably lacked a consideration about the inherent implications. Such action seems a re-invention of what Tanahill (1992) portrays as ill-defined situation and 'a neglect of methodological issues' with the consequence of gross oversimplification of plans.

Perhaps in a subscription to Tanahill's view, Wallerstein and Bernstein (1994) assert that health education practice needs a repertoire of methods to match different targets' needs in other to meet changing situations and chances. Still, Stetson and Davis (1999) argue the need for debates that can strengthen the skills of health education workers in selection, planning, implementation and evaluation of suitable approaches by organisational objectives and goals.

Just as IMNCH component programmes vary in types (see, FMOH, 2007) likewise, the strategies of health education (see Green et al, 1980; Tones and Tilford, 1994). In a subscription to the view of the experts (Wallerstein and Bernstein, 1994; Stetson and Davis, 1999), there can only be a measurable response from targets of an educational activity when the criterion used in selecting targets is matching to the selection of the educational strategies.

Still, the result suggests there might be disorder in the process of articulating specific scopes for educational processes in the course of delivering regular health care service. The import of target segmentation in educational efforts (see, Green et al, 1980) seems blighted perhaps in a consciousness that the target readily exists for specific IMNCH programmes (see FMOH, 2004; 2007) and could be an equivalent target for the programme's educational intervention.

Therefore, that some respondents indicated campaign target suggests a gap in their ability to separate educational targets from the programme one. Such gap could be a repercussion from the health education experience of most respondents and partly implicated by the dispersed model, subtly endorsed by the policy (see, FMOH 2004) for organising educational plans without recourse to the goal of health education.

Conclusions and policy implications

Based on the findings of the current study, the study concludes as follows:

Within the PHC setting, there appears to be more female health education workers than the males. The health education workers were professionals from a wide variety of health care backgrounds such as the community-health extension workers / community health officers (CHEW/CHOs), nursing officers, environmental health officers, nutritionists and health information technician.

Most of the health education workers had training exposure into health education practice only while on the job and through workshop experiences. Health education workers at the health facility level mostly ran the educational packages as a content of their IMNCH services while those at the LGA / State levels either ran such packages as an integral part of the PHC services or as a major programme in the context of PHC component education.

Most of the health education workers lacked awareness about the existence of any standard operational procedure or guideline for educational interventions. Based on the variety of the professionals, involved in educational activities, the dispersed approach appears the dominant organisational model of educational intervention adopted with no observable evidence about either the coexisting or the specialist model in the respondents' patterns of the practice.

Regardless of the professional background and level of working experience, the health education workers tend to identify with the health care work title or health care responsibility of assignment. The health care roles of many of the health facility based health education workers tend to be polyvalent and more likely operated at both the clinic and community levels unlike seen with those at the LGA/State levels.

A greater proportion of the environmental health workers with formal health education training tend to perform health education responsibilities as a major function than other health care workers within the PHC setting. Still, health education activities within the setting seem operated more on a dispersed approach than the other organisational models (ie, coexisting and specialist) of intervention notable in extant literature.

There is a tendency that the planning and programming of educational activities within the PHC setting rely on development partners and donor agencies for information, education and communication (IEC) messages and materials to reach out to the public. The place of a work plan in the educational work of the health education workers seem almost nonexistent as campaign activities appear mostly central to educational efforts directed at IMNCH services.

Apart from the target groups established by the concurrent protocols of a specific PHC intervention, most PHC programme related education work lacked specific criteria, backing the selection of targets for educational activities. Thus, targets of educational activities seem ill defined and educational interventions structured, merely on assumptions, incidental planning and or on the educational intervention of the previous health care work done.

The majority of the health education workers on IMNCH services share good opinions about the relevance of standard procedures or operational guidelines in health education work. Despite such opinion, most of the health education workers lacked understanding about the relevance and the manner of application of such educational approaches as KAP / KAPB, empowerment and communication in education interventions.

Health education workers at the HF level mostly did more of clinic patient education and community link activities than community / ward- development-committee relations and counselling. The majority of those at the LGA level seem to limit their focus only to such educational work as community education and group sensitisation activities more than considered a need to combine such with social marketing strategies (media and advocacy).

State-level health education workers mostly engaged in community education, group sensitisation and social marketing strategies. Even though on seldom basis, a good proportion of the health education workers engaged functional stakeholders from outside the health sector in such educational activities as community sensitisation and essentially during SIA campaign periods more than seen with other routine IMNCH activities.

Both the functional and provider stakeholders seemed to have vital roles in the educational work of the participants but in diverse ways. While such functional stakeholder groups tend to offer supports mostly in the operational realms of educational activities, the provider stakeholders seemed to offer supports in the context of logistics related resources.

For example, the majority of the health education workers experienced logistics, funding and training supports, mainly in relation to campaign related educational activities. Donor agencies constituted a major provider stakeholder groups, had the most credits in many areas of the supports that included provision of educational materials and messages, with the prototypes either adapted or completely adopted for use among the target population.

Still, the pertinence of the quality management cycle failed to reflect in the findings from the means by which the health education workers derived educational materials and messages, except for the increased reliance on partner agencies. Thus, a purpose set to understand the quality of the processes involved in the production of the product (ie, content educational messages and materials) to which specification will apply (Baric, 1994) seemed defeated.

There was no clear evidence about behaviour change documentation in the respondents' record of achievements. Most of the health education workers, across the various categories sampled at the HF/ward and LGA/State levels, lacked evidence of educational outcomes.

In all, the findings conveys some intricacies about the sharing of health education duties among a variety of experts with ample chance for stereotype practice, not structured on active coordination, standard and health education professionalism. Thus, the overall findings seem underpinning to the proposition of the conceptual framework to suggest that the education packaged IMNCH activities of the respondents were unlikely operational based on standards.

Given the above conclusions, the policy implications covet a need for a review of the health education roles of the variety of the professionals involved and given the context of the aims and goal of the national health policy. The relevance of such role review appear underscoring to experts' arguments that move in support of role delineation among health education workers.

Baric (1976) for example, argues the need for role delineation in view of the multi-professional involvements and unnecessary complacencies where effective coordination lacks. Neutens (1984), perhaps in an investigative context argues the need for delineation research for effective coordination processes while the specialist and coexisting models of educational intervention demands consideration (see Adeniyi and Brieger, 1981).

Recommendations

Based on the conclusions, reached in the current study and the policy implication, the recommendations, reflecting the opinions of the majority of the respondents are thus as follows:

1. Government should formulate policies that will encourage the growth and professionalization of health education work toward effectively influencing the implementation of educational processes in a more dynamic and professional manners than observed in the current Ekiti-State experience.
2. The National Council on Health (NHC) should refocus on the status of health education planning, management and coordination within the current health policy and facilitate platforms for its improved strategic management.

3. The National Council on Health (NHC) should facilitate an effective coalition of health education professionals about the planning, management and coordination given the diverse categories of health care professionals and partner agencies, involved.
4. The National Council on Health (NHC) should facilitate role delineation projects, exploring the best practices in countries like the UK and United States of America.
5. Further studies (in-depth) should explore such areas as the methodological issues in health education planning and programming, using qualitative research design and focusing on a large sample size.
6. Further studies, using a quantitative research approach and a large sample size should also be a line of consideration at exploring aspects concerned with the management and coordination of educational inputs, outputs and outcomes processes within a PHC system.
7. Government should formulate policies that will encourage sustainable development of health education research and programming processes

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