EDUCATIONAL OCCUPATIONAL HEALTH SERVICES NEEDS AND NEEDS - MEETING STRATEGIES OF UNIVERSITY WOMEN ACADEMICS IN BENUE STATE, NIGERIA

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Abstract
The study investigated the educational occupational health services needs and needs-meeting strategies of university women academics in Benue State, to be provided with basic occupational health services needs for effective job performance. The study utililized the cross-sectional research design. The population of the study consisted of all women academics, and two key officers involved in provision of OHSNs in the state and federal government owned universities in Benue state. A sample size of two hundred and ninety-eight (298) participants comprising 296women academics and two key officers participated in the study. Four instruments were used for data collection. These were a 5-item adapted and modified community needs assessment questionnaire by Aparna, Mindy and Yolanda (2000), otherwise called Occupational Health Services Needs Assessment Questionnaire (OHSNAQ), A Focus Group Discussion (FGD) guide, Key Information Interview (KII) guide, and Occupational Health Services Needs-Meeting Strategies Questionnaire (OHSNMSQ) structured by the researcher were validated and utilized for data collection. The reliability co-efficient index of OHSNAQ was determined through split half method which yield reliability co-efficient index of .90 for section A, and .84 for section B as determined through Cronbach Alpha statistic. Data collected from 288 respondents were analysed. Using mean and percentages. The null hypothesis was tested using chi-Square statistics. Findings of the study indicated that EOHSNs of women academics were:the s by women academics while only 53.91 percent women academics indicated they needs were provided . Suggested EOHSNs were adjudged very impotant suggest Equipping the Faculty and Departmental libraries with current books, re-awakening NAWAS, and regular power supply. This was generated through FGD. Results further show that there was no significant differences in the EOHSNs responses of the women academics based on university type in EOHSNs (Calχ^2value = 4.037, P= .284 > 0.05) EOHSNMS were formulated based on the identified EOHSNs. The study recommended among others that, the Benue State Government should collaborate with the State University to adopt the EOHSNMS formulated by this study for implementation. This could be achieved by building the strategies formulated into the government and university policy and implementing it correctly.

Key words: Educational, Occupational Health, Health Services, Women Academics

Introduction

The need to provide educational services to workers cannot be overemphasized. This is because educational services constitute a major aspect of Occupational Health Services (OHS) needed by workers especially the women academics in universities who perform the duties of teaching and training students. The importance of training has been emphasized by Asogwa (2007). Training allows the worker to acquire skills and competencies in performing assigned jobs. Education and training have been identified by Muiruri and Mulinge (2014) as key activities in a work place that enables workers to acquire sufficient knowledge, skills and competencies to perform tasks belonging to the profession of choice. Through education, the professional has a duty to keep the professional competences on an appropriate level during the professional life. Similarly, Yu, Cheng, Tse, and Wong (2002) identified training and education in establishments in the form of health advice at regular intervals to be very important in improving the health of workers at the workplace. Training and education are feasible through the provision of undergraduate and post-graduate courses,

participating in scientific or other relevant meetings especially in academic settings as found among university women academics. Chukwunenye and Amgbare (2010) stated that in the public service, which includes academic setting, the training services are provided through sponsorship of research studies, workshops and seminars, conferences, in-service education, and staff development programme which include on the job training. The intention is to keep academic staff abreast of new knowledge in the specific areas of specialization and to expose staff to modern working techniques that will reduce exposure to hazards in the physical, chemical and biological environment of the workplace. Gohil (2012) recommended education services to all workers to enhance knowledge, attitude and skills. Yu, cheng, Tse and Wong (2002) found that employers were provided with education and training services. However, Ekpo (2007) found out that there were insufficient educational facilities, poor library materials in the universities studied. Furthermore, Chukwunenye and Amgbare (2010) reported that staff of Patani Local Government Area were not provided with training opportunities such as workshops and seminars. Bankole and Ibrahim (2012) found significant differences between vulnerability to occupational health hazards of factory workers exposed to regular health education classes and those not exposed.

The provision of educational services is very important to the university workers which women academics are part of. This, therefore, means that providing the needed educational services to the women academics will amount to caring for the health of these workers. Unfortunately, due to scarce resources, or lack of commitment, or ignorance, all these services may not be provided in the university workplaces. In order to use limited resources and provide the necessary educational services for women academics, it is, therefore, important to first of all identify the Educational Occupational Health Services Needs (EOHSNs) of women academics in universities in Benue State.

Need is that important thing required by individuals which may not be readily available to help live a normal and functional life. Green (1999) defined a need as lacking of something that is important. This paper refers to need as important favourable educational occupational condition that is lacking in the universities in Benue State for effective and maximum performance of educational tasks by women academics. The present study identified the EOHSNs of university women academics in Benue State. This was accomplished through the process of needs assessment (NA).

Needs Assessment (NA)is a process for determining and addressing gaps between current and desired conditions. It is carried out to minimize wasting lean resources, so that most important needs can be achieved. National Institute for Assessment Health and Clinical Excellence from the UK's National Health Services (2005) defined NA as a systematic method for reviewing the health care needs for a particular segment of the population. The segment could be university women academics in Benue State whose EOHSNs were assessed based on the objectives of OH. When NA is linked to educational occupational health services, it is termed educational occupational health services needs assessment (EOHSNA). EOHSNA, therefore, refers to a process of identifying gaps between the important and the provided EOHS of university women academics in Benue State, Nigeria. This was accomplished through identification of the EOHS that are important to the women academics and matching it against the services that are provided. The gaps in provision were therefore referred to as the identified needs. The identification of such needs was a necessary step to the formulation of strategies for meeting such needs.

A strategy is a plan of actions to attain one or more of the desired goals. Strategy refers to skillful formulation, co-ordination and application of objectives, using appropriate ways and means to promote and defend national interest (National Institute for Policy and Strategic Study –NIPPS (2008). Nickolas (2012) defines strategy as a complex web of thoughts, ideas and plans that provides general guidance for specific actions in pursuit of particular ends. In the context of this study, strategy is seen as a blue print of thoughts, plans, ideas, and actions and measures to be taken to meet the EOHSNs of university women academics in Benue State. This study involved the formulation of needs meeting strategies by choosing the most appropriate ways, actions and measures that are capable of meeting the EOHSNs of the university women academics in Benue State.

University women academics are females holding various academic positions in the university. In Benue State, such women are found in the Federal University of Agriculture, Makurdi and Benue State University Makurdi.. The present study therefore investigated educational occupational health of services needs of women academics in Benue State University.

EOHS are provided for workers to promote and maintain health. However, providing EOHS according to the needs of workers including women is problematic worldwide. This may be as a result of improper planning on the part of administrators who may not carry out needs assessment to know the exact services needs of women in the workplace. Women academics of higher institutions especially those in Benue State appear not to be provided with basic educational occupational health service needs for effective job performance.State. Following from this, the study identified the educational occupational health services needs and needs-meeting strategies of university women academics in Benue State, Nigeria. Specifically, the study identified the:

1. Educational occupational health services needs of university women academics;
2. Educational occupational health services needs of women academics based on university type; and
3. formulated strategies for meeting the EOHSNs of the university women academics. Additionally, the study tested one null hypothesis that there was no significant difference in the EOHSNs of women academics of Federal and State universities.

Method

The present study was a cross - sectional university based survey which was conducted in 2015 using Federal University of Agriculture and Benue University, all in Makurdi. Benue State.

Population of the Study

The population for the study consisted of 198 Federal University women academics and 98 State university women academics totalling296. These data were obtained from Personnel Services Departments in the two universities. The study also used two key officers (Registrar Establishment) one from each of the universities for Key Informant Interview. Focus Group Discussion was conducted.

Sampling

There was no sampling as all the 296 women academics were used for the study. This was based on the assertion by Anaekwe and Unigwe (2007) that if a topic demands studying a specific group of people that are distinguished from any other group and the number of the target population is small, it is preferable to utilize all the subjects in order to ensure representativeness and generalization of the findings. There was therefore no need for sampling of the women academics in this study. The same women academics constituted the FGD groups. 2 key officers were purposively (Registrar Establishment) one from each of the universities for Key Informant Interview (KII)

Instruments for data collection

Four instruments were utilized for data collection. An adapted and modified community needs assessment questionnaire designed by Aparna, Mindy, and Yolanda (2000). The modified questionnaire otherwise called Educational Occupational Health Services Needs Assessment Questionnaire (EOHSNAQ); Focus Group Discussion (FGD) Guide. Key Informant Interview (KII) Guide, and Educational Occupational Health Service's Needs-Meeting Strategies Questionnaire (EOHSNMSQ) structured by the researcher based on the specific objectives of the study.

The EOHSNAQ centered on 5 items classified into two sections (A& B). Section A contained one item demanding the bio data of the respondents. Section B contained four items on EOHSNs of university women academics. All the items on sections B were divided into two columns of A and B. The items on column A focused on the types of EOHS that were important to the women academics and were assigned response options which range from Very Important need, Important Need, Unimportant Need, and Completely Unimportant need. These were rated 4, 3, 2, and1 respectively.

The items in section B focused on the provision of the EOHS to the women academics and were assigned two response options of Provided (P) and Not Provided (NP) and were rated 2 and 1 respectively. The respondents were requested to tick (√) against the option that was applicable to the university situation. The items in the questionnaire were organized to reflect the specific purposes of the study as well as the research questions and hypotheses.

The FGD guide and the KII contained two questions each prepared in line with the research objectives to elicit in-depth information on EOHSNs of women academics. The formulation of EOHSNMSQ started with the packaging of summary of major findings of the study, followed by a list

of possible strategies for meeting the identified educational occupational health services needs of the women academics The suggested strategies had three response options: very appropriate, appropriate and not appropriate. These were rated 3, 2, and1 respectively.The EOHSNAQ and EOHSNMSQ was validated by experts in the Department of Human Kinetics and Health Education.

Reliability of the instruments

The reliability of the EOHSNAQ was determined through split half method. using Cronbach Alpha statistic. The reliability co-efficient index of EOHSNAQ was as follows: Column A 0.90, Column B 0.84.

Method of data collection

The instrument was administered to all the women academics in their respective universities. The FGD and KII were conducted and the proceedings of the discussion and interview were documented. The results were used in the discussion.

Method of data analysis

The data were analysed on item by item basis. The response options in column A were assigned four point scale ranging from Very Important (VI), Important (IM), Unimportant (UI) and Completely Unimportant (CU) with corresponding scores of 4,3,2, and 1 respectively. Limits of numbers were used to interpret the results. A mean score of 3.5 to 4 was interpreted as very important service, 2.5 to 3.49 was interpreted as important service while a mean score of between 1.5 to 2.49 represented unimportant service, and a score of 1.0 to 1.49 was interpreted as completely unimportant service. The qualitative data (FGD & KII) were organized in themes and were used to substantiate the quantitative data. The responses were weighted as follows: very appropriate (3 points), appropriate (2 points), and not appropriate (1 point). A criterion mean of 2.0 was adopted for taking a decision. In other words, for each suggested strategy, a mean value of 2.0 and above showed it was an appropriate strategy while any mean value below the criterion mean signified that the affected strategy was inappropriate for meeting the needs.The null hypothesis was tested at .05 level of significance using Chi- Square statistic.

Results

Table 1

Mean Responses of Educational OHS of Women Academics (n = 288)

S/N	Education OHS	$\bar{x}$	SD	Decision
1.	Daycare centers and crèches	3.62	.54	Very important
2.	Conferences	3.61	.51	Very important
3.	Training through workshops and seminars	3.69	.49	Very important
4.	In-service training and staff development	3.77	.43	Very important
	Grand mean	**3.67**	**.49**	Very important

Table 1 indicates a grand mean response of 3.67 which falls between 3.50 and 4.00, indicating that EOHS were very important for university women academics. The Table further indicates mean responses for day care centers and crèches ($\bar{x}$ = 3.62); conferences ($\bar{x}$ = 3.61); training through workshops and seminars ($\bar{x}$ = 3.69); in-service training and staff development ($\bar{x}$ = 3.77) which falls between 3.50 and 4.00, indicating that these were very important EOHS of university women academics.

Table 2
Proportion of University Women Academics Provided With EOHS (N= 288)

S/N	EOHS item Provision	Provided		Not provided	
		f	%	f	%
1.	Day care centres and crèches for staff children	189	65.60	99	34.40
2.	Conferences	184	63.90	104	36.10
3.	Training through workshops and seminars	188	65.30	100	34.70
4.	In-service training and staff development	187	64.90	101	35.10
	Overall percentage		**64.92**		**35.08**

Table 2 shows that majority of university women academics indicated they were provided with day care centers (65.60%); training through workshops and seminars (65.30%); in-service training and staff development (64.90%); and conferences (63.90%). However, transcriptions from FGD revealed that the discussants had need for electricity and ICT, well equipped libraries with current text books, internet services, funding for research and to reawaken National Association of Women Academics for senior women lecturers to nurture younger ones.

Table 3: Mean Responses of EOHS of University Women Academics According to University Type (n = 288)

S/N	EOHS item	University Type			
		Federal Govt. owned (n= 192)		State Govt. owned (n= 96)	
		$\bar{x}$	Decision	$\bar{x}$	Decision
1.	Day care centres and crèches for staff children	3.54	Very important	3.79	Very important
2.	Conferences	3.57	Very important	3.71	Very important
3.	Training through workshops and seminars	3.65	Very important	3.76	Very important
4.	In-service training and staff development	3.74	Very important	3.83	Very important
	Cluster mean	**3.63**	**Very important**	**3.77**	**Very important**

Data in Table 3 show that the mean responses of women academics in State Government owned university were slightly higher than those in the Federal Government owned university (State $\bar{x}$ = 3.77 >Federal $\bar{x}$ = 3.63), The mean responses fall between 3.50 and 4.00, indicating that the educational services were very important.

Table 4:
Proportion of Women Academics Provided With EOHS Based on University Type (N=288)

S/N	EOHS items provision	University Type							
		Federal government owned(n=192)				State govt. owned (n=96)			
		Provided		Not provided		Provided		Not provided	
		f	%	f	%	f	%	f	%
1.	Day care centers and crèches for staff children	112	58.33	80	41.67	77	80.21	19	19.79
2.	Conferences	119	61.98	73	38.02	65	67.71	31	32.29
3.	Training through workshops and seminars	123	28.12	69	71.88	65	67.71	31	32.29
4.	In-service training and staff development	129	67.19	63	32.81	58	60.42	38	39.58
	Overall %		**53.91**		**46.09**		**69.02**		**30.99**

Table 4 indicates that majority of women academics in the State and slightly more than half of Federal government owned universities were provided with educational services of day care centres and crèches (State government owned = 80.21% > Federal government owned = 58.33%), conferences (State government owned = 67.71% > Federal government owned = 61.98%), and training through workshops and seminars (State government owned = 67.71%). The Table also indicates that majority of Federal and State government owned university women academics were provided with in-service training and staff development (Federal government owned = 67.19% > state government owned = 60.42%. However, majority (71.88%) of women academics in federal government owned university indicated that training through workshop and seminars were not being provided.

Table 5
Mean Responses of Educational Occupational Health Services' Needs-Meeting Strategies (n=20)

Identified EOHSNs	**S/N**	**Objectives**	**Mean Responses**	**Decision**	**S/N**	**Strategies**	**Mean Responses**	**Decision**
Equipping the main, faculty and Departmental libraries with current books	1	To provide up to date information to women academics in the various fields of endeavours.	2.55	A	1	Formulation and implementation of workable education policy.	2.60	A
Re-awaken national Association of women academics (NAWAs)	2	*For senior women academics to nurture the junior ones through mentoring.*	2.65	A	*2*	*Establish mentoring programmes for women academics in various disciplines.*	2.50	A
Epileptic Power supply	3	To provide steady power supply to all campuses and women academics	2.50	A	*3*	*Advocacy*	2.50	A
		Cluster mean	**2.57**	A		***Cluster mean***	**2.53**	A

KEY:
A = Appropriate NA = Not Appropriate

Table 5 shows a cluster mean response of 2.53 which implies that all the proposed strategies of educational OHSNs were considered appropriate by experts. Table also show the highest mean response of 2.60 by item 1 (formulation and implementation of workable education policy) while the lowest mean response of 2.50 was shown by items 2, and 3 (establish mentoring programmes for women academics in various disciplines; and advocacy respectively).

Table 6: **Result of Chi-square Analysis Testing the Null Hypothesis of No Significant Difference in the EOHSNs of Women Academics Based on University Type**

S/N		University Type				Cal χ^2 Value	df	P-value	Decision
		Federal govt. owned		State govt. owned					
		Provided	Not Provided	Provided	Not Provided				
1.	Day care centers and crèches for staff children	112 (126.00)	80 (66.00)	77 (63.00)	19 (33.00)	13.576	1	.000	Reject
2.	Conferences	119 (122.70)	73 (69.30)	65 (61.30)	31 (34.70)	.911	1	.340	Accept
3.	Training through workshops and seminars	123 (125.30)	69 (66.70)	65 (62.70)	31 (33.30)	.375	1	.540	Accept
4.	In-service training and staff development	129 (124.70)	63 (67.30)	58 (62.30)	38 (33.70)	1.289	1	.256	Accept
	Cluster χ^2					**4.037**	**1**	**.284**	**Accept**

Data in Table 6 show the cluster calculated χ^2 values with their corresponding P-values at one degree of freedom for educational OHSNs (χ^2=4.037, P= .284 > 0.05) which the P- value is more than .05 level of significance at one degree of freedom. The null hypothesis of no significant difference was therefore accepted. This implies that the educational OHSNs did not differ according to university type. The Table further show the calculated χ^2 values with their corresponding P-values at one degree of freedom for day care centres and crèches for staff children (χ^2= 13.576, P= .000 < 0.05) which is less than 0.05 level of significance at one degree of freedom. The null hypothesis of no significant difference was rejected. This implies that these women's educational OHSNs differed according to university type.

The Table further shows the calculated χ^2 value with their corresponding P-values at one degree of freedom for conferences (χ^2=. 911, P = .340 > 0.05); training through workshops and seminars (χ^2= .375, P = .540 > 0.05); and in-service training and staff development (χ^2= 1.289, P = .340 > 0.05) which are greater than 0.05 level of significance at one degree of freedom. The null hypothesis of no significance difference was accepted. This implies that the women's educational OHSNs did not differ according to university type.

Discussion

Tables 1 and 2 revealed that educational OHS of women academics were all provided. The finding supports that of Yu, Cheng, Tse and Wong (2002) which found that the staff were provided with education and training services. However, the finding negates that of Chukwunenye and Ambare (2010) which reported that staff of Patani Local Government Council were not provided with training opportunities such as workshops, seminars and on the job training.

FGD results, however, indicated that women academics had need for current textual materials in the libraries, good power supply and the re-awakening of the National Association of Women Academics Staff (NAWAS) for senior rank women academics to train or nurture the younger or lower rank women academics. Transcriptions from FGD were supported by findings of Ekpo (2007) which found that there were insufficient educational facilities and poor library materials for effective work performance.

KII result revealed that universities had good educational policies that are well implemented; although there are times when power failure from the public power supply truncate academics activities. It also revealed that the university is also making efforts to stock the libraries with current books. The findings on educational OHSNs showed that the women academics had need for current books, re-awaking of NAWAS and good power supply which the study strategises for improved provision.

Data in Tables 3 and 4 showed that EOHSNs of women academics in the Federal and state government owned universities were educational services were very important and provided respectively. Gohil (2012) recommended educational services to workers of all categories in order to enhance knowledge and build competencies that improve productivity. Moreover, as a centre of learning, it is quite obvious that universities should be provided with educational services that will build and improve the human capacity of those who are teaching so that, they will be effective in the work of creating and generating knowledge and skills that are useful to the society. From the KII and FGD conducted, the result confirmed that educational OHS were the needs of university women academics in the Federal Government owned universities. Results in Table 4 revealed that there was no significant difference (χ^2cal 4.037, P = .284 > .05) in the educational OHSNs responses of women academics based on university type. The finding is in line with that of Bankole and Ibrahim (2012) which found a significant difference between the vulnerability to occupational health hazards of factory workers exposed to regular health education and factory workers not exposed. The implication of this finding is that the women academics have education needs. Strategies were formulated to bridge the gap in education needs.

Data in Table 5 showed that the major objectives were accepted as very appropriate for inclusion in the OHSNMS. This is because the objectives were formulated based on comprehensive review of related literature, and was also validated by experts in Health and Physical Education. When objectives are precise, they tend to facilitate accomplishment of programmes intended to address. These were precise and in line with the findings of the study.

Conclusion

Based on the findings and discussion of the study, the following conclusions were made;

1. Equipping the Faculty and Departmental libraries with current books, re-awakening NAWAS, and epileptic power supply were the educational OHSNs of the women academics. This was generated through FGD.
2. All the proposed contents of OHSNMS were adjudged as very appropriate for inclusion and implementation for women academics in the universities in Benue state.. (Table5).
3. There was no significant difference in the mean responses of women academics with regards to educational OHSNs according to university type..

Recommendations

On the basis of findings of this study, the discussions and conclusions, the following recommendations were made:

1. The Benue state government should collaborate with the State University to adopt the EOHSNMS designed by this study for implementation. This could be achieved by building the strategies into the university policy and implementing it correctly.
2. The universities should adopt the strategies formulated by this study to plan for the needed service; formulate, enforce and support policies that will encourage the provision of the EOHSNs identified; and should put in place a machinery to monitor and evaluate the extent of provision of EOHSNs of women academics in the universities.
3. Women academics should use the result to take educational services seriously by making use of the available services judiciously.

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