Research Article

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Evaluation of the BSc Nursing Science Programme: Employer's Perspective

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ABSTRACT

In the educational system, programme evaluation is an important component for quality assurance. Evaluation in open and distance learning is undertaken to guide decision-makers, programme leaders and programme coordinators, with an overall aim of improving processes and service delivery in order to achieve stakeholder satisfaction.

A cross-sectional survey was conducted to evaluate the BSc Nursing Science Programme from the employer's perspective. Purpose of the study was to gain some insight into performance of the Zimbabwe Open University BSc graduates as they operated in the various fields of health care. A purposive sample of 48 respondents was drawn from a population of all employers in health institutions in the ten regions of Zimbabwe, who occupied senior positions in their institutions. Questionnaires were distributed to stakeholders who had interacted with ZOU graduates and the BSc. Nursing Science learning materials. Comparisons were made on the graduates' performance before, during training and after graduating. Data were analysed using SPSS and results presented in cross tabulations and bar graphs.

Demographic data of respondents is presented in Section 'A'. General performance and performance levels in the various areas of care are summarized in Section 'B'. Information on the quality of modules is presented in Section 'C' of the results. More females participated in the research. Seventy five percent worked in government institutions. Major highligts of the findings indicated that ZOU graduates performed favourably compared to their counter-parts who trained at conventional institutions. However, some gaps in terms of the need to strengthen hands on experience were highlighted.

Key words: Distance education, programme evaluation, practicum, standards of competences

INTRODUCTION

Programme evaluation is a systematic way of gathering, analyzing data and utilizing information to answer questions about projects, policies and programmes. Evaluation for open and distance learning is undertaken to guide decision-makers, programme leaders and coordinators, with an overall aim of improving service delivery and stakeholder satisfaction.

The BSc Nursing Science Programme by distance education (DE) started in September 2000. The first cohort graduated in 2005 and ever since, the programme has undergone several phases of development which include the evaluation that was conducted in 2007. The thrust of the evaluation was to identify gaps in the delivery from the learners' perspectives. Findings have since been incorporated to improve delivery. Since the discipline of Nursing is competence-based, the emphasis is now being placed on skills acquisition through practicum where students have to fulfill field requirements. Modules are also being reviewed and revised to capture the dynamic and current trends in nursing.

This current research was undertaken to evaluate the Zimbabwe Open University (ZOU)'s Bachelor of Science Nursing Science Programme from the employer's perspective. The purpose was to gain insight into the quality of the product being produced. The University strives to ensure that students who enter a programme exit with the requisite standards of performance through employing a combination of learning and infrastructural resources.

BACKGROUND

A comprehensive evaluation of a distance education programme (DE) must scrutinize the condition of the individual components. The evaluator needs a clear understanding of the processes of learning offered through a distance mode. Distance education (DE) institutions consist of an array of infrastructures and personnel (Lockee, Moore & Burton, 2002). Some of the factors to consider when unlocking this complex system for study purposes include institutional, technological implementation, and organizational issues. These factors make up the components of a DE system, and the malfunctioning of any one of them is a threat to quality assurance in DE as learners fail to engage in a meaningful way. Offering education through distance and open learning at university level creates some of the most compelling tasks for the determination of quality assurance. The open and distance university has a set up with a threat of duplication of duties in the various stations where the regional offices are. These duplications have an implication on the quality of the learning processes, outputs and outcomes. As opposed to the traditional set-up of conventional universities, open and distance learning moves closer to the learner, but such education comes at a cost and with a myriad of problems. Some of these problems are contained through properly and adequately designed and timed evaluation programmes of both the learning materials, staff competencies and the student admissions and learning processes. The input of both, the learner, the employer and other consumers of the product is critical if a holistic evaluation process is to ensure. Therefore, this research focused on the quality of graduates being churned out of the BSc Nursing Science Programme of the Zimbabwe Open University (ZOU). The input of the 2007 evaluation process was of value as it assisted to improve programme delivery.

THE CONCEPT OF PROGRAMME EVALUATION

Programme Evaluation has different perspectives from academics and practitioners in the field. The variation in thinking about evaluation brings to fore the challenges encountered when one tries to define programme evaluation and quality assurance. Programme evaluation is a management tool. It is a time-bound exercise that attempts to assess systematically and objectively, the relevance, performance and success of ongoing and completed programmes and projects (Pradhan, 2006).

Components of the evaluation activities as described by Pradhan(2006), involve several processes that include needs analysis, formative evaluation and implementation. The implementation stage is followed by the processes of post testing and summative evaluation. Decisions made following the summative evaluation process are based on the consideration of all the other stages.Distance and Open Learning programmes are for learners and focus is on learners. Programmes should be continually evaluated to improve the quality of the graduate (Pradhan 2006).It also assists to decide whether the programme is worth pursuing in terms of its relevance and usefulness to both the learners and stakeholders. The following research questions were considered to guide the evaluation process of the BSc Nursing Science programme;

- How is the general performance of the ZOU Nursing Science graduates at your institution?
- Are the ZOU modules adequate for the programme?
- What is your comment on the quality of the learning materials?
- What do you think are the strengths and weaknesses of the programme?
- What is your comment on the relevancy of the ZOU Nursing Science Programme?
- What is your comment on the work performance of graduates in the various specialty areas?

METHODOLOGY

A cross-sectional survey was conducted usinga purposive sample of 48 respondents drawn from a population of all employers in health institutions in the ten regions of Zimbabwe, who occupied senior positions in their institutions. Stakeholderswho had interacted with ZOU graduates and the BSc. Nursing Science learning materials received questionnaires. Comparisons made on the graduates' performance before, during training and after graduating revealed interesting patterns as results presented in cross-tabulations and bar graphs.

RESULTS

Section 'A' outlines the demographic data of respondents. General performance and performance levels in the various areas of care are summarized in Section 'B'. Information on the quality of modules is presented in Section 'C' of the results.

Section A: Demagraphic Data
Table 1: Age distribution of respondents

Age			
	Frequency	Percent	Cumulative Percent
Below 30 years	7	14.6	14.6
31 - 40 years	6	12.5	27.1
41 - 50 years	16	33.3	60.4
51 - 60 years	13	27.1	87.5
61 or above	6	12.5	100.0
Total	48	100.0	

Sixteen (33.3%) of the respondents were in the 41 to 60 years age group. Only six (12.5%) of the respondents were above 60 year and 7 (14.6%) were below 30 years. It is clear that the majority who participated in the evaluation were mature and experienced as all of them had worked in the field for more than ten years.

Table 2: Distribution of respondents by sex

Sex			
	Frequency	Percent	Valid Percent
Male	12	25.0	26.7
Female	33	68.8	73.3
Total	45	93.8	100.0
Missing values	3	6.2	
Total	48	100.0	

Out of the 48 distributed questionnaires, 3 (6.2 %) were lost to follow-up. Thirty- three of respondents (68.8%) were female while 12 (25%) were males. The distribution pattern is expected as traditionally, more females train for nursing than males (Chitura 2007).

Table 3: Distribution of respondents by place of employment

Employer				
	Frequency	Percent	Valid Percent	Cumulative Percent
Government	36	75.0	78.3	78.3
NGOs	3	6.2	6.5	84.8
Municipality	3	6.2	6.5	91.3
Private hospital	4	8.3	8.7	100.0
Total	46	95.8	100.0	
Missing value	2	4.2		
Total	48	100.0		

The majority, 36 (75 %) of the respondents worked for the government while the rest worked for municipalities, Non-Governmental Organisations and private hospitals. Hospitals are the consumers of graduates of the programme.

Table 4: Distribution of respondents by qualification

Qualification	Frequency	Percent	Valid Percent	Cumulative Percent
BSc Hons. Nursing	1	2.1	2.5	2.5
BSc Nursing	13	27.1	32.5	35
Dip. Comm. Health Nursing	2	4.2	5	40
Dip. Human Resources	1	2.1	2.5	42.5
Dip. Nursing	7	14.6	17.5	60
Dip. Nursing Admin	1	2.1	2.5	62.5
DNA ICN SCM	1	2.1	2.5	65
MBA	2	4.2	5	70
MSc Health Studies	1	2.1	2.5	72.5
MSc Medicine	1	2.1	2.5	75
MSc Nursing	6	12.5	15	90

Public Health Nursing	1	2.1	2.5	92.5
RGN	2	4.2	5	97.5
RGN SCM	1	2.1	2.5	100
Total	40	83.3	100	
Missing values	8	16.7		
Total	48	100		

Eleven (74%) of the managers possessed Masters Degrees in Nursing or related fields of health. The missing data 8 (16.7%) were from respondents who did not indicate their qualifications.

Table 5: Distribution of respondents by position held

Position held	Frequency	Percent	Valid Percent	Cumulative Percent
ALCNO	1	2.1	2.2	2.2
CEO	1	2.1	2.2	4.4
Coordinator, BatsiraiProject, Mash West	1	2.1	2.2	6.7
District Nursing Officer	1	2.1	2.2	8.9
HR Asst.	1	2.1	2.2	11.1
Matron	4	8.3	8.9	20
Matron 2	1	2.1	2.2	22.2
Matron 3	3	6.2	6.7	28.9
Nurse tutor	4	8.3	8.9	37.8
Provincial AIDS Coordinator	1	2.1	2.2	40
Provincial Nursing Officer	4	8.3	8.9	48.9
Registered General Nurse	4	8.3	8.9	57.8
Sister in-charge.	9	18.8	20	77.8
SCM /RGN	1	2.1	2.2	80
Senior Delivery Coordinator	1	2.1	2.2	82.2
Senior Nursing Officer 2	1	2.1	2.2	84.4
Senior Tutor	2	4.2	4.4	88.9
Senior Nursing Officer 3	2	4.2	4.4	97.8
Senior RGN	1	2.1	2.2	100
Total	45	93.8	100	
Missing values	3	6.2		
Total	48	100		

Thirty-four (70.8%) of the respondents held senior positions in their institutions. Among the senior personnel, 8 (16.6%) were matrons, 4 (8.3%) were provincial nursing officers. Nine (18.8%) were sisters in charge of units while 6 (12.5%) were nurse tutors. It is critical that appropriate levels of respondents participate in the evaluation process, and this profile shows that high ranking people in the profession participated in the research.

Section B: Performance Levels
Table 6: General level of satisfaction of the graduates' performance by employers

	Frequency	Percent	Valid Percent	Cumulative Percent
Satisfied	35	72.9	97.2	97.2
Not satisfied	1	2.1	2.8	100
Total	36	75	100	
Missing values	6	12.5		
NA	6	12.5		
Total	12	25		
Total	48	100		

Thirty-five (72.9%) of the respondents indicated that they were satisfied with the general performance of ZOU graduates. One (2.1%) indicated that he or she was not satisfied by the general performance. Twelve (25%) gotlost to follow-up or respondents did not indicate.
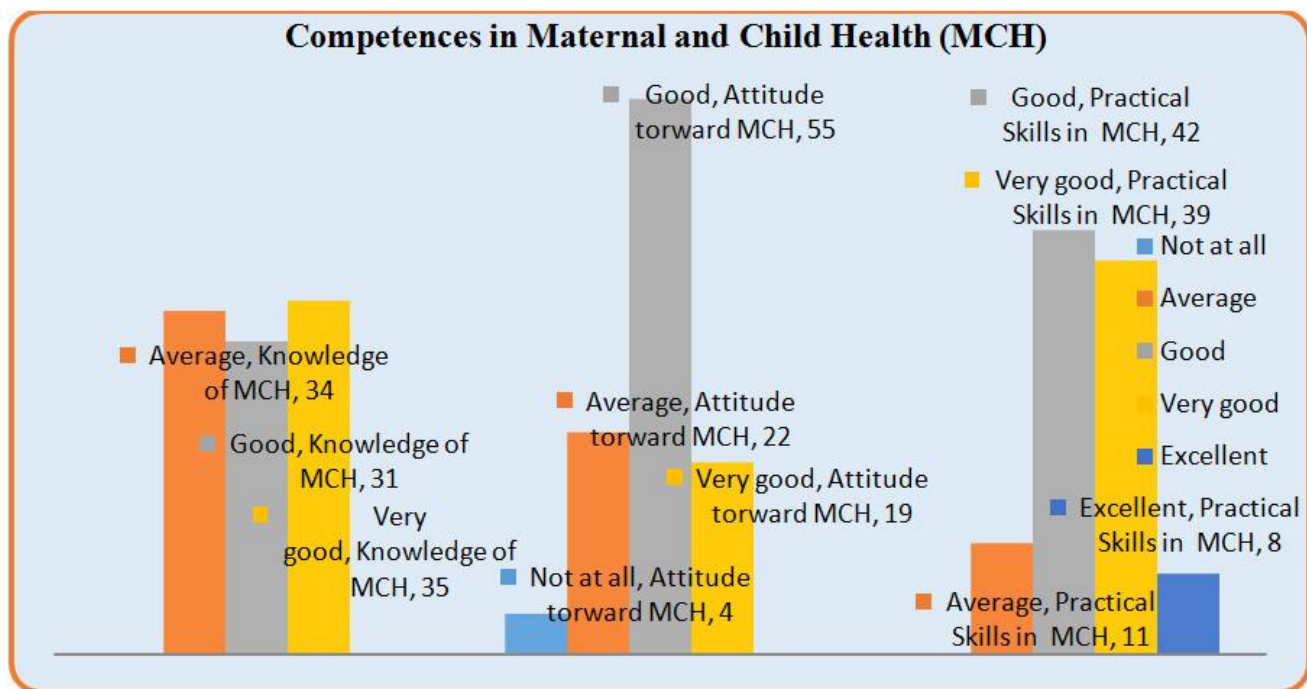
Figure 1: Competencies in Maternal and Child Health (MCH)

Thirty-one percent (31%) of respondents cited that the ZOU products had knowledge of Maternal and Child Health. Fifty-five out of a hundred thought the products had good attitude towards MCH while eight percent reported that the graduates were excellent in practicals.
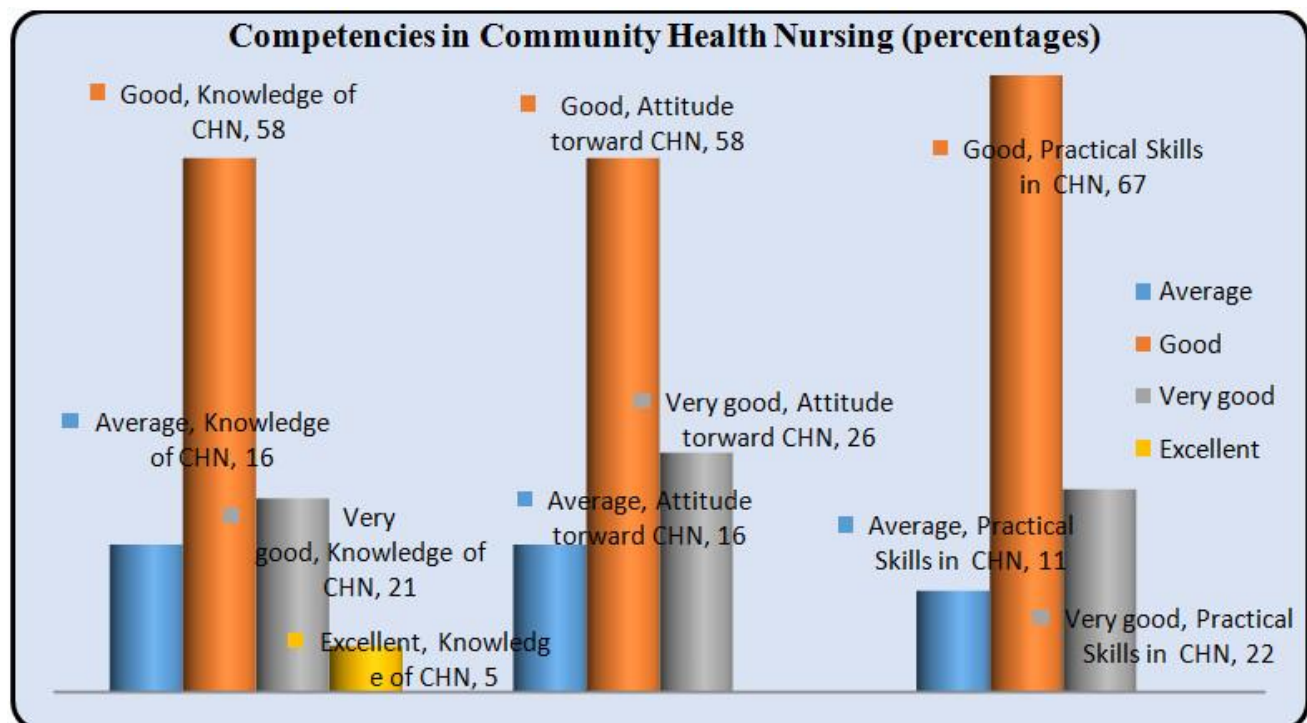

Figure 2: Competencies in Community Health Nursing (CHN)

For competencies in Community Health Nursing, 58 to 67 respondents rated the graduates to be good in knowledge, attitude and practical skills. Twenty-one to twenty-six percent rated them good. Five percent rated the graduates to be excellent in knowledge.
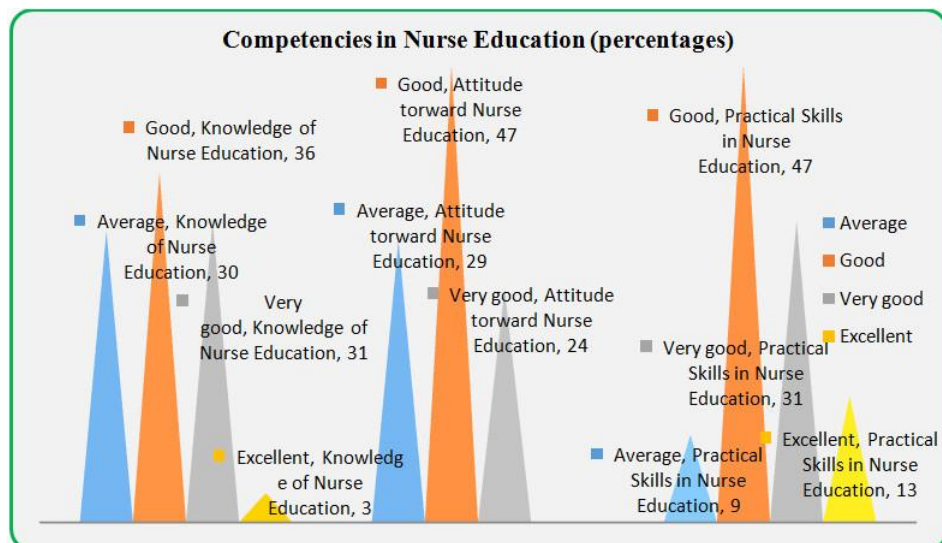
Figure 3: Competencies in Nurse Education

Thirty-six to forty-seven percent of the respondents indicated good performance in knowledge, attitude and practical skills. Nine to thirty percent cited average performance in the knowledge, attitude and practicals. Twenty-four to thirty-one rated the graduates highly.
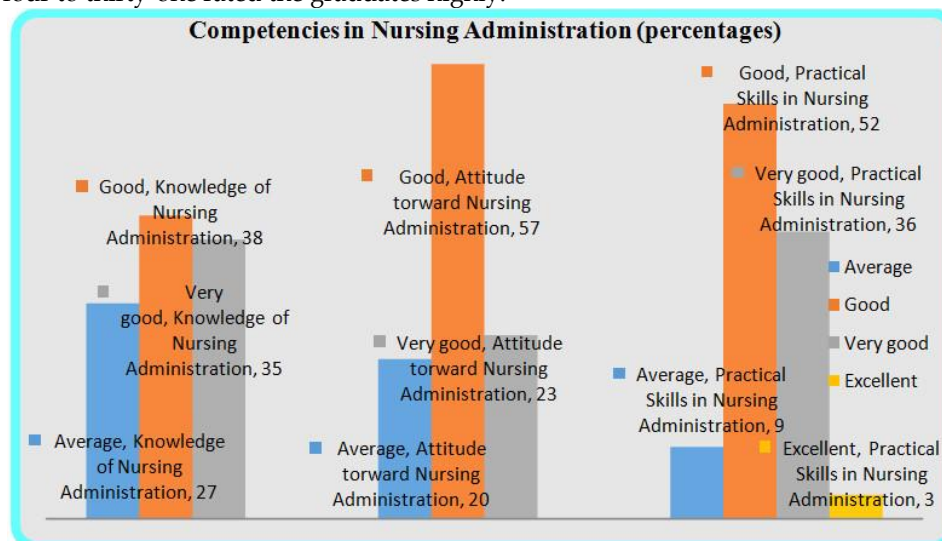

Figure 4: Competencies in NurseLeadership/Administration

While nineto twenty-seven percent rated the administrative knowledge of graduates to be average, 3% rated them excellently in practical and 38 -57% rated the graduates good in all the areas.

Table 7: Performance of ZOU graduate at work before, during and after Degree programme

Period of Assessment * Performance level Crosstabulation							
		Performance level					Total
		Poor	Fairly good	Good	Very good	Excellent	
Before Degree Programme	Count	3	41	80	21	1	146
	% within Period of Assessment	2.1%	28.1%	54.8%	14.4%	.7%	100.0%
During Degree Programme	Count	0	18	86	40	1	145
	% within Period of Assessment	.0%	12.4%	59.3%	27.6%	.7%	100.0%
After graduation	Count	0	4	45	71	28	148
	% within Period of Assessment	.0%	2.7%	30.4%	48.0%	18.9%	100.0%
Total	Count	3	63	211	132	30	439
	% within Period of Assessment	.7%	14.4%	48.1%	30.1%	6.8%	100.0%

Performance levels were assessed before undertaking undergraduate studies, during studies and after graduating. It was noted that graduates gained from the studies as there was continued improvement in their performance with 18.9% of respondents rating the graduates as excellent. Only 0.7% were rated excellent before training and during training.

OTHER RELEVANT INFORMATION

Respondents commented on the way modules were presented and the sections organized. More than 50 % of the respondents were happy with module presentations. The content was found to be appropriate. Ninety percent of the modules were found to be relevant for the programme. Some respondents testified that other institutions of higher education both locally and internationally, were utilizing ZOU Nursing Science modules for their studies.

The majority of respondents (80%) found the modules to be interactive enough, a critical attribute as 'the module' is considered to be 'the lecturer' in distance education.

Respondents were asked to indicate graduates' areas of strengths. The following responses were given:

- the graduates rationalize their actions
- graduates from ZOU initiated research in our institution
- they reason better than products from conventional institutions
- they see issues differently and are more open minded
- ZOU graduates are interested in clinical teaching
- they are competent practitioners
- the graduates are knowledgeable
- they seem to enjoy their work

However, some respondents indicated that the graduates needed to have more hands-on experience in Community Health Nursing. Respondents gave the following recommendations to improve the BSc. Nursing Science programme.

- strengthen the attachment component
- increase the duration of the period of attachment
- follow-up students on attachment
- link up with field mentors so that they know how to assist students
- simplify the Biochemistry module and only include what is necessary for nurses
- increase tutorial hours and introduce computer skills course
- teach health economics and budgeting on the programme
- include environment and social sustainability issues
- send students for exchange programmes
- make tutorials a must, to assist learners grasp concepts
- introduce Masters Programmes to motivate nurses to undertake the undergraduate Nursing programme studies.

DISCUSSION

The majority of respondents (62%) were in the 41 to 60 years age group. These were quite mature and experienced. Their evaluation is objective. Seventy-four percent of the respondents held Masters' qualifications. It is quite pleasing to note that governmental institutions consumed most of the graduates who are now working as senior personnel in the major hospitalsin the country. In addition, tracer studies show that some ZOU graduates from the Nursing Science programme have assumed leadership posts while others have completed Masters' Degrees both locally and abroad. The main purpose of the evaluation process was to ascertain the graduates' competencies in the various areas of care, identify gaps in the input, process and output issues of the programme in order to strengthen the ZOU BSc. Nursing Science programme. Respondents rated the graduates' performance as good all round. However, areas that needed improvement were pointed out. These included revision of some modules, lengthening the period of attachment and inclusion of new concepts such as computers and Health Economics.

The Degree has given an opportunity to the working class who might have missed the opportunity to pursue University education. The competency gap that resulted fromthe movement of professionals to other countries in search of greener pastures has been filled. The degree of cross-breeding and infusion of ideas through the use expertise from various universities and colleges is welcome. Part-time members are required to participate in the writing of course materials and are allowed to enhance course content, based on their experience and expertise. Writers come in to assist curriculum design or providing suggestions for the programme and course content. This process of infusion might have contributed to the quality of the learning materials. Respondents expressed satisfaction on the quality of modules.

In some instances, the process of programme evaluation might encompass a political necessity, specifically to ensure future contributions by stakeholders to institutions. In many instances,the accrediting agencies establish criteria that must be satisfiedprogramme recognition. Comparisons with other Universities that offer Nursing Science Programmes is practiced. In Zimbabwe,educational institutions of higher learning are registered with the council for higher education. In industry these days, most companies associate with the international and local standards organization as a means for quality assurance. Two External Examiners, prepared at Ph.D. level, periodically review the BSc. Nursing Science programme and examinations to enhance quality. The Nurses Council of Zimbabwe plays a pivotal role in the quality assurance of all Nurses' programmes in the country,

hence the continued interactions and consultations. The ZOU programme now boasts of a Ph.D. qualified chairperson and several research fellows/ lecturers who are at various stages studying for their Doctoral degrees.

RECOMMENDATIONS

- Modules need to be periodically reviewed and revised when necessary
- The period of students' attachment needs to be longer than four weeks and follow-ups by Faculty members should be strengthened.
- University staff needs to interact with staff at institutions where ZOU students are and facilitate the field activities
- There is need to employ a liaison/attachment officer who should coordinate students' practical activities
- Establish Masters programmes to allow career progression
- Strengthen exchange programmes that exist with overseas universities in order to tap new ideas
- The Department needs to continue engaging external examiners for the examination standardization process and programme review.

CONCLUSION

Woodley and Kirkwood (1986) proposed some categories of evaluation information for those engaged in the process of evaluating distance education programmes. These included measures of efficiency focusing on quality teaching and usefulness of learning materials, acceptability of learning materials as well as outcome measures. The Nursing Science modules of ZOU were ranked highly in the evaluation process. A number of students, locally and internationally, refer to these resources for their studies. The outcome measures they set as a criterion, included an establishment of learning centres and e-learning facilities and Achievement of programme aims. ZOU has established several learning centres throughout the country, to bring education to the student's door-steps. The proposed inclusion of measures of policy issues in terms of market involvement and relevance as well as the attainment of quality at all levels are achieved in a variety of ways. The Department is currently working towards ISO certification under the guidance of the university's Quality Assurance Directorate. The researchers evaluated the BSc. Nursing Science programme from the employer's perspective as a follow-up study to the one on the students' perspective. It is relevant that the two perspectives are examined. Findings from the earlier study were utilized to improve on the programme delivery. In recent years, basing on the specifications of the Council for higher education, it has become a yardstick to focus on quality issues in all educational programmes. Nursing is competence based, and the practical component needs continued strengthening, hence the continued consultations with the regulatory body, the Nurses' Council of Zimbabwe and the Ministry of Health and Child Care. The bench-marking with relevant stakeholders will guide practice and confine the programme within the current trends in the practice of nursing. Results from this research will be utilised to strengthen the ZOU BSc Nursing Science Programme.

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