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Standards-Based Educational Management and Recognition to Improve the Quality of Pre-service Education

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Abstract

Jhpiego, an affiliate of the Johns Hopkins University, is an international non governmental organization supporting ministries of health and education of Ethiopia in capacity building programs. The objective of the study was to initiate standards based educational quality management and recognition (SBEM-R) in higher institutes.

Between October 15 and November 25, Jhpiego conducted onsite orientation workshops on standards-based educational management and recognition (SBEM-R) at three public universities and facilitated formation of SBEM-R teams. The teams assessed the status of medical, nursing and midwifery education using the assessment tool in the seven respective schools under the universities. The tool has 62 educational standards in five areas, namely, classroom and practical instruction, clinical instruction and practice, assessment approaches, school infrastructure and teaching materials and educational management.

The assessment findings revealed low achievement across all areas in the seven schools with a total average of 23.9%. Achievements by schools ranged from 17.9 % to 30.6 %. When computed by area, school infrastructure and teaching materials had the lowest score (11.4 %) followed by assessment approaches (13.3 %). The situation was almost similar across medical, nursing and midwifery schools. These findings lay the ground for the subsequent small and incremental quality improvement. The use of SBEM-R will help educators and students to actively participate and institutionalize educational quality improvement, as the tools are easy to use, and have both" what to do" and "how to do" components.

Introduction

Background

Jhpiego, an affiliate of the Johns Hopkins University, is an international non-governmental organization supporting ministries of health and education of Ethiopia in capacity building programs. Ethiopia is one of the countries hard hit by HIV/AIDS epidemic and facing its adverse socio-economic impacts. In response, the Ethiopian Government planned to scale up HIV/AIDS prevention, care and treatment services. However, shortage of trained human power is one of the rate limiting factors in this endeavor. In order to respond to the aforementioned situation, Ethiopia included capacity development programs through in-service training and pre-service training. However, higher education institutions do not adequately prepare health professionals to deliver quality HIV/AIDS services, creating a seemingly unending need for in-service training, which is costly (HERQA, 2006).

Therefore, as part of the long-term sustainability plan, PEPFAR (The U.S. President's Emergency Plan for AIDS Relief), through CDC (Centers for Disease Control) Ethiopia and implementing organization Jhpiego, initiated and funded a pre-service educational strengthening program since 2007. In the two years of implementation Jhpiego learned that the quality of teaching learning process for medical, nursing and midwifery students in higher education was below the required level of competencies as defined by international and national standards. Consequently, Jhpiego in collaboration with three public universities started an educational quality improvement program using Standards Based Educational Management and Recognition (described in detail below).

Problem Statement

Quality assurance in many countries is exercised with the intention of ensuring minimum standards indicated in the quality of inputs; processes and outcomes. However, there are no universally agreed upon standards of quality since different institutions are observed using different measures to check quality of their programs.

With mounting evidence that quality could no longer be taken for granted, the emphasis moved from assurance of the status quo towards active efforts to identify weaknesses as opportunities for improvement. Even that, some argued, might be only a one-step benefit: it ought to be more dynamic and continuous, reaching for ever-higher levels. In this way, the closed quality cycle would become the open quality spiral.

The African Union (AU) has identified quality assurance as one of the key focus areas of higher education in its Plan of Action for the Second Decade of Education for Africa. A survey of leaders and experts in the United States suggested that continuous quality improvement has succeeded in moving attribution of blame for failures away from individuals and towards systems and has put new emphasis on the customer, but that it remains to show benefit to the United States health system overall. A cluster of papers in the ISQua journal (from France, Israel and the United States) debated the sustainability of continuous quality improvement in health care, generally concluding that it can be effective and sustained if it is used correctly in a receptive environment (Jhpiego, 2006).

In Ethiopia, numerous small scale initiatives to improve the quality of educational practices were tried in order to address the different components of quality: structure, process and outcome. Higher Education Relevance and Quality Agency (HERQA) initiated a structured quality enhancement and accreditation system (Jhpiego, 2006). In its consultation paper entitled "Developing the Quality Assurance and Standards Framework for Higher Education in Ethiopia," HERQA advocates the development of benchmark information on subject standard threshold which articulates the minimum levels of knowledge, attitude and skills expected of a degree graduates in different subjects. The purpose of such a framework is to assist

- higher education institutions in designing and approving new programs of study in health science;
- external examiners and academic reviewers in verifying minimum requirements are met and comparing educational quality and relevance across schools or academic programs;

- where appropriate, professional societies in their role in accreditation and review of academic programs relating to professional competence; and,
- students and employers when seeking information about quality and relevance of higher education provision that meets their needs.

The agency has also developed a draft internal quality assessment manual identifying ten focal areas for self-evaluation by the higher education institutions. The manual, however, doesn't clearly indicate what is to be assessed under each focal area.

Through this office there were a number of accomplishments in the use of standards or benchmarks to improve the quality of education in higher education institutions. Nevertheless, the undertakings by HERQA so far, by in large, focused on content standard development, with the anticipation that Academic Development Resource Centers (ADRC) in higher institutions will support the educational processes (Jhpiego, 2005).

The use of Standards-Based Educational Management and Recognition, therefore, will compliment the already initiated movement towards improving educational quality. SBEM-R does this through its focus on the educational process i.e. classroom, practical, infrastructure, students assessment and overall educational management. Though the support of PEPFAR began with that of HIV/AIDS pre-service education strengthening, Jhpiego Ethiopia believes building continuous quality improvement of higher educational processes will serve as a basis to creating the system and culture of making quality in the hands of individual faculty members. In addition, the use of standards can also, in the long run, be institutionalized to such offices as ADRCs to be continually reviewed and changed to meet the needs.

Quality in Health and Health Sciences Education

Quality assurance is a more comprehensive approach to quality. It is related to compliance with standards and can be applied to facilities, programs, systems and sectors. The main purpose is to foster an environment in which everyone involved

supports quality, is alert to problems of performance and opportunities for improvement and is prepared to take responsibility for setting in motion the needed changes to improve care. Thus, quality assurance is primarily rehabilitative rather than punitive, aiming to give the fullest possible play to the capacities for self-expression and self-actualization innate to everyone (Jhpiego, 2005).

The quality assurance approach aims at continuously improving overall performance, and total quality management allows the integration of other quality assurance approaches to quality, such as quality control and accreditation. The comprehensiveness of total quality management draws on quality models that take all the functions and key elements of the entire organization into account. Total quality management is based on the whole system and on the participation of customers, clients and society. An important aspect is introducing quality models that aim to identify the key aspects of the organization or system such as leadership, staff, infrastructure, core processes of service delivery and key results inspired by the structure–space–outcome framework.

In recent years, the ministry of education has started undertaking a higher education system overhaul with the intention of improving the governance, management and leadership in the higher education system, in order to achieve the objectives of the reforms indicated in the higher education proclamation number 315/2003 (Federal Democratic Republic of Ethiopia, 2003). HERQA also plays role in ensuring the relevance and quality of the training program. As one of its powers and duties, the agency will also assess the relevance of the curriculum in the universities to Ethiopia's development needs.

Use of Standards for Quality Improvement

There are many learned discussions surrounding the definition of standards. Perhaps the best discussion of definition is advanced by Avedis (2007). He tells us that standards are "professionally developed expressions of range of acceptable variations from a norm or criterion. He goes on to define the criteria as "predetermined elements against which aspects of quality of medical service/education may be compared, and norms as measures of usual observed performance." (WHO, 2003).

The Oxford Dictionary provides several key concepts for the definition of standards. First, it notes that standards are degrees of excellence. Second, it suggests that standards serve as a basis of comparison. Third, it notes that standards are a minimum with which a community may be reasonably content and, finally, that a standard is recognized as a model for imitation. If these same concepts are applied to health sciences teaching we can formulate a definition of standards as a "benchmark" of achievement which is based on desired level of excellence. As such, standards become models to be imitated and may serve, in turn, as the basis for comparison.

Standards-Based Educational Management and Recognition (SBEM-R)

SBEM-R is a practical management approach for improving the performance and quality of health sciences pre-service education. It is the systematic utilization of performance standards as the basis for the organization and functioning of this implementation and the rewarding of compliance with standards through recognition mechanisms. SBEM-R follows four basic steps:

- Setting standards of performance in an operational way
- Implementing the standards through a streamlined process
- Measuring progress to guide the improvement process toward these standards
- Recognizing the achievement of the standards



Figure 1: Steps of the SBEM-R Process

This process begins with the development of evidence-based operational standards in a specific area of higher education for health. The performance standards developed are included in an assessment tool that can be used for self-, peer, internal and external assessments at the faculty and/or department level. Implementation of the assessment tool leads to identification of performance gaps to be reduced or eliminated. University/college managers and providers can then analyze the causes of the gaps - lack of knowledge and skills, inadequate enabling environment (including resources and policies) and/or lack of motivation - and identify and implement appropriate interventions to close these gaps.

Individual faculty members and departments are encouraged to focus on action and begin with simple interventions (the "low-hanging fruit") in order to achieve early results, create momentum for change and gradually acquire change management skills to address more complex educational process gaps.

Partial improvements are rewarded during the process using a combination of measures including feedback and social recognition (e.g., ceremonies, symbolic rewards). The university's overall achievement of compliance with standards is acknowledged through a recognition mechanism, which is usually designed by the Ministry of Education or other key stakeholders or institutions in each country program. This recognition normally involves institutional authorities and the community (Avedis, 2007).

How SBEM-R is Unique

SBEM-R uses the essential elements of the performance improvement approach, enhances them with practical quality improvement and quality assurance methodologies, and incorporates the experiences gained in implementing similar approaches by other international health organizations. The result is a simplified process that has the following distinguishing characteristics:

 SBEM-R is a much focused approach that does not begin with the discussion of performance of quality methodologies in general. Rather, the improvement process is built around specific content area, making the process more concrete and meaningful for users.

- Uses a proactive approach, focusing not on problems but on the desired level of performance and quality to be attained.
- The operational performance standards show providers and managers, in detail, not only what to do but also how to do it.
- The motivational element is considered essential for the success of SBEM- R
 process. The recognition of achievements in improving performance is a key
 element of the approach.
- Continual measurement is used as a mechanism to guide the process, inform managerial decisions and reinforce the momentum for change.
- The power of clients, students, and the community is an important element of SBEM-R. Through the establishment and dissemination of clear and objective standards, SBEM-R facilitates the empowerment of clients to act as informed consumers and enables partnerships among teaching institutes' personnel and students and clients and communities.

Moreover, SBEM-R is not the only possible way of dealing with performance and quality improvement challenges, but it can be a powerful and practical mechanism to orient and strengthen instructors and managers in the fulfillment of their tasks.

Finally, this paper will try to describe the participatory operational research conducted by Jhpiego Ethiopia in collaboration with Addis Ababa, Gondar, Jimma Universities, and medical, nursing and midwifery faculty members in the three universities. The baseline assessment showed actual performance measured against desired performance level defined by the assessment tools.

- Are the performances in educational management successfully met?
- Is the class room experience of students meeting principles of adult learning?
- Do the educational infrastructures meet the minimum standards for a quality teaching and learning in the three universities?

 Are the clinical practices organized to equip students with the needed skills for service provision upon graduation?

Materials and Methods

Jhpiego organized modular workshops on standard-based educational management and recognition for the medical, nursing and midwifery schools in three public universities. The first three-day modular workshops were conducted on-site at each University campus between October and November 2007. The purpose of the first module workshops was to enable participants to prepare for and initiate an SBEM-R process in their respective universities and schools. Topics that were covered include: quality in education, standards-based educational management and recognition model, setting standards, implementing standards, gap identification and cause analysis, and change management. Prior to the workshop Jhpiego adapted the SBEM-R assessment tool from that one used in Afghanistan for accreditation of midwifery education. The tool is organized into five key sections focusing on the core and support functions of educational programs, namely, classroom and practical instruction, clinical instruction and practice, student assessment approaches, school infrastructure and teaching materials, and educational management. The tool was also pilot-tested and revised. Further revisions were also made based on comments given by faculties. The three day workshop at each university culminated in the formation of university and school level SBEM-R teams tasked with facilitation of the SBEM-R process in their respective institutions. The teams further reviewed the assessment tools at greater depth and the tools were revised accordingly.

Then, university working groups conducted baseline assessment in the month of December 2007 using the revised assessment tools. The tool has 62 educational performance standards and many more verification criteria corresponding to each standard. Sixteen standards are that of classroom and practical instruction, fifteen are that of clinical instruction and practice, ten are of assessment approaches, ten are of school infrastructure and teaching materials, and eleven are that of educational management. The possible answers are yes, no or not applicable and there is a comment section. A performance standard would be considered met if the answer for all the verification

criteria would be yes or a combination of some positive responses and some not applicable responses. The data collection techniques were interviewing, observing and document review. Respondents for the interview included: school deans, department heads, instructors and students. Observations were made of classroom and clinical sessions as well as school infrastructure. Document review was applied where it was necessary to verify the presence and appropriateness of school policies, rules and other relevant files. Interviewees and observed sessions were selected purposively. Using a predetermined scoring system the assessment results were manually compiled and percentage achievements scored by area and total.

Six months after the first module workshop, a second module workshop was held in Hawassa attended by SBEM-R team members and heads of the participating schools/departments at the three Universities.

Results

We report here the results of the SBEM-R Module One Workshop, findings from the baseline assessment and Module Two Workshop.

I. SBEM-R Module I Workshop

The first module workshops organized at the three Universities between October and November were attended by 116 faculty members involved in the teaching of medical, nursing, and midwifery students. Specifically, 27 were from the first, 41 from the second and 48 from the third university. The onsite workshops led to the establishment of SBEM-R teams at each university with representation of target schools and sampling of faculties across basic and clinical sciences as well as public health departments. Generally, the initiative was well received. Despite initial uncertainties, participants in all the universities welcome the need to monitor and improve quality of education and put it as a shared concern. They also expressed their willingness to promote and use Standards-Based Educational Management and Recognition as an approach in this endeavor. There were rich and hot discussions and debates on the performance standards and verification criteria of the assessment tool which helped in enriching the tool and persuading faculties

about the purpose and relevance of SBEM-R. The Jhpiego team further discussed with the SBEM-R teams at each university, gathered more comments and suggestions on the tool and developed plan of action for baseline assessment. The tools were further revised based on the feedbacks obtained from faculties.

II. Findings of the Baseline Assessment

All the seven schools under the three universities completed the baseline assessment between December 2007 and January 2008. All the three universities were found to have low scores. Medical, nursing and midwifery schools alike did not meet majority of the standards. Of the 62 educational standards, school achievements ranged from 17.86 to 30.61 %, the average being 23.9 %. Overall, lowest achievements were observed in school infrastructure and teaching materials (11.40%) and student performance assessment (13.32 %). Table 1 summarizes the findings by area, school and university.

Table 1: Findings of SBEM-R Baseline Assessment at Three Public Universities in Ethiopia, 2008

		Percentage Achievement by Area of Assessment					
University	School	Classroom & Practical Instruction (16)	Clinical Instruction and Practice (15)	Assessment Approaches (10)	School Infrastructure and Teaching Materials (10)	Educational Management (11)	Total (62)
University I	MDS	18.75	28.6	0	10	45.45	21.31
University I	NSS	50	20	20	10	0	22.58
University I	MWS	31.25	13.33	20	10	36.36	22.58
University II	MDS	33.3	7.14	22.2	10	18.8	17.86
University II	NSS	50	20	11.1	20	36.4	30.61
University III	MDS	18.75	40	20	10	36.36	25.81
University III	NSS/ MWS	50	7.1	0	10	54.5	26.23
	Total	36	19.5	13.32	11.4	32.6	23.9

III. SBEM-R Module II Workshop

Jhpiego organized a second module workshop in Hawassa on May 19-21 with the aim of strengthening the SBEM-R process at each teaching institution. A total of 27 participants including SBEM-R team members and department heads attended the workshop. Jhpiego team gave interactive presentations and facilitated group exercise on such topics as gap identification and cause analysis techniques, selection of interventions, networking and benchmarking, recognition of achievements and resource mobilization. University SBEM-R teams presented the results of their baseline assessment, experiences using the assessment tool, successes and challenges. In their report, SBEM-R teams indicated that they had given feedback to their respective schools and colleagues. They also expressed their plan to further disseminate the baseline results using multiple channels. The major discussion issue during the presentation was the scoring system. Some felt scoring based on standards is demotivating as it requires fulfillment of all the verification criteria. Others argued it should continue as it is once we agree on the essential verification criteria for a standard to be met. After thorough discussion it was agreed to continue using the standards with the option of using verification criteria based scoring as additional. Motivational issues for SBEM-R team members were also another big discussion point. It was agreed that there needs to be a system for motivating faculties actively working in SBEM-R and other pre-service training strengthening activities. Jhpiego team stressed that universities themselves should primarily be responsible for putting in place a sustainable recognition scheme. Jhpiego would do its part by providing a package of non-monetary incentives like opportunities for involvement in trainings as co-trainers and participants, sponsoring paper presentation in conferences and purchase of educational books. Finally, participants prepared institutional plans of actions to continue implementing the SBEM-R program. The major issues in their plan were strengthening SBEM-R teams; gap identification and detailed cause analysis; selecting and implementing interventions; and monitoring progress.

Discussion

Jhpiego has successfully implemented Standards-Based Management and Recognition approach to monitor the performance and improve quality of health services in several countries in Africa, Latin America and Asia. The approach has been applied to improve diverse health service areas like infection prevention, maternal and neonatal health, essential obstetric care, and family planning/reproductive health (5). Jhpiego has also introduced in several hospitals of Ethiopia to improve quality of HIV/AIDS services. And there have been documented improvements in serial measurements. (Personal Communication, Abdu Nurhussien). Similarly, Standards-Based Management and Recognition has been applied for strengthening and accreditation of midwifery education in Afghanistan with great success. (6)

As part of its pre-service HIV/AIDS education strengthening project, Jhpiego Ethiopia introduced SBEM-R as a quality improvement tool. At present, there are SBEM-R teams at each university facilitating the SBEM-R process. The program and its team members are recognized by the respective institutions and schools.

Although the three public universities are among the most experienced in health professional training, baseline results leave a lot to be desired. But as experience in implementation of SBM-R and SBEM-R shows, low baseline score is rather the norm than the exception. This finding is consistent with the findings of the needs assessment on medical, nursing and midwifery education completed in 2006. The needs assessment report shows that teaching methods were largely traditional, student performance assessment was problematic and infrastructures and teaching materials were inadequate (HERQA, 2006). However, the initiated program lays the ground for small and incremental quality improvement by putting the onus on faculties and institutions themselves. The tools tell not only what to do but also how to do it. Based on the action plan developed during the second module workshop, schools will do detailed cause analysis, select and implement interventions, and measure progress before coming to the third module workshop.

Conclusion

The Standards-Based Educational Management and Recognition is a useful tool to monitor and improve quality of education in higher institutions. The use of SBEM-R will help educators and students to actively participate and institutionalize educational quality improvement, as the tools are easy to use, and have both" what to do" and "how to do" components. Even though the scores reflect the low baseline score by the three major public universities, the authors believe that these findings lay the ground for the subsequent small and incremental quality improvement.

References

- Avedis, D. (2007). Exploration in quality assessment and monitoring. The method and findings of quality assessment and monitoring: An illustrated analysis, (Volume III).
- Higher Education Relevance and Quality Agency (2006). *Areas of focus for institutional quality audits draft manual*. Unpublished manuscript, HERQA at Addis Ababa.
- Jhpiego (2005). Standards-based management and recognition field guide for countries with limited resources. Unpublished manuscript, Jhpiego at Addis Ababa
- Jhpiego (2006). HIV/AIDS related pre-service education needs assessment: Understanding the current status of HIV/AIDS teaching at three Ethiopian Universities. Unpublished manuscript, Jhpiego at Addis Ababa.
- Sheena, C., Pashtoon, A., and Rebecca, F. (XXXX). A bold new beginning for midwifery in Afghanistan. *XXXXXXXXXXXXXXXX*, 23, 226-234
- WHO (2003). *Quality and accreditation in health care services:* A global review. XXXXXXX: WHO.