

Standards to assure quality in nursing research

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Abstrak

Die fokus van die artikel is kwaliteitsversekering in verpleegnavorsing, spesifiek die interne aspek, selfevaluering. Departemente van Verpleging is verplig om maatreëls in te stel om die kwaliteit van verpleegnavorsing te verseker, nie net as gevolg van bewese probleme in die onderwys van verpleegnavorsing nie, maar ook vanweë die plig om kwaliteit in alle onderwys aangeleenthede te verseker. 'n Departement van Verpleging funksioneer in 'n goed gedefinieerde eksterne konteks. Die eksterne konteks word definieer deur spesifieke aspekte, onder andere rolspeler verwagtings en ook die huidige onderwys en professionele wetgewing. Ten einde kwaliteit te kan verseker, moet standarde opgestel en valideer word. Standaarde is die basiese komponente van 'n kwaliteitsversekeringstelsel (Booyens, 1996:305). Standaarde is rigtinggewend en moet opgestel word met inagneming van die land se kulturele, filosofiese en etiese sisteem sowel as die sosiale, ekonomiese en politieke ontwikkeling.

Die aanname van die studie is dat indien die onderrig van verpleegnavorsing, teweens die totale bestuur van navorsing in die departement, onderwerp word aan kwaliteitsbestuur, die uitkoms positief kan wees. Die navorsingsdoelwit van die studie was om standarde te formuleer en te valideer waarteen kwaliteit in verpleegnavorsing gemeet kan word. Muller se fases van standaardformulering (1998:69) is gebruik as metodologiese basis vir die studie. Optimale, spesifieke standarde is geformuleer deur gebruik te maak van 'n deduktiewe proses en die standarde is valideer deur implementering in 'n verpleegdepartement.

Abstract

The focus of this article is quality assurance in nursing research. Due to well established problems regarding the education of nursing research and increasing pressure to take responsibility for the quality of all educational activities, departments of nursing are obliged to initiate actions to assure quality in nursing research. A nursing department functions within a well-defined external context. The external context comprises of various aspects such as role player expectations and current educational and professional legislation. Standards are the basic components of any quality assurance system (Booyens, 1996:305). Standards give direction to the practitioner and must be compiled within the context of the country's cultural, philosophical and ethical value systems, as well as its social economic and political development.

The premise of the study was that if the education of nursing research, indeed the total management of nursing research within the department, is subjected to quality assurance, the outcome of the in terms of nursing research will be positive. The research objective addressed in the study was to formulate and validate standards against which quality in nursing research in a nursing department can be judged. Muller's phases of standard formulation were used as the methodological basis for the study. Optimal, specific standards were formulated using a deductive process and validated by implementing the standards in a department of nursing.

Introduction

Due to well established problems regarding the education of nursing research and increasing pressure to take responsibility for the quality of all educational activities, departments of nursing are obliged to initiate actions to assure quality in nursing research (Zeelie, 2002:1-3). Standards are the basic components of any quality assurance system (Booyens, 196:305).

Standards give direction to the practitioner, and must be

compiled within the context of the country's cultural, philosophical, ethical value systems, and its social, economic and political development. Donabedian (1990:118) defined standards as a specification of good practice; and criteria as measurement scales that specify the degree of quality attained. Speller, Evans and Head (1997:218) define standards as agreed levels of excellence of performance that should be acceptable to colleagues and service users. Standards are statements of acceptable quality, but to be measurable as Donabedian indicated, criteria of quality of the standard must also be set. Criteria are defined as de-

scriptive measurable statements, which are used to assess the level of performance towards meeting a standard. In addition, Bowden (1995:167) stated that criteria might address an educational process, an outcome, or both. There is no single correct format or way to postulate a criterion. The data that it should generate is the only guiding principle.

To enable the researcher to draft standards that comply with current best practices, the following points are important in respect of standards (Bowden, 1995:167):

- Foundational to quality assurance and the essence of the self-evaluation system
- Points of reference that define quality
- Directional
- Contextual
- Acceptable to colleagues and service users
- Measurable
- Written
- Have specific criteria

Quality assurance for nursing research must take cognisance of the external context in South Africa within which the quality must be assured. The external context includes the role player expectations regarding nursing research and the educational legislation within which a nursing department must function. Also to be included in the external context is the current best practice as reflected in national and international literature.

The premise of the study was that if the education of nursing research, indeed the total management of nursing research within the department, is subjected to quality assurance, the outcome of the in terms of nursing research will be positive. Quality assurance, specifically the internal aspect of self-evaluation, has become a critical managerial responsibility in departments of higher education in the twenty-first century. The manager of a department of nursing has the responsibility to assure quality in nursing research within the context of the current educational and professional legislation. Inherent in the responsibility of the manager, is the need to fulfil the mission of the department and that of the parent institution in terms of research.

The National Plan for Higher Education of the Ministry of Education (2001:1-4) prescribes the creation and implementation of a self-evaluation system in educational departments, but provides no blueprint for the development and validation of such a system. This article reports on the formulation and validation of standards to assure quality in nursing research that were formulated as the basis of a self-evaluation system for quality assurance in nursing research.

Research objective

The research objective addressed in the research study was to formulate and validate standards against which quality in nursing research in a nursing department can be

judged.

Formulation and validation of standards

Muller (1998:69) described phases of standard formulation that were employed as the methodological basis for the research study. The phases are described as the formulation phase, the quantifying phase and the testing phase. The formulation phase is based on an empirical and normative approach.

The empirical phase had a qualitative exploratory design and naïve sketches were used to elicit role player perceptions regarding the education of nursing research (Zeelie, 2002:17-55). The role player population included nurse educators, managers, clinical nurses, researchers and nursing students. The medical profession in an academic environment, and the nursing professional organisation were also included in the population. Specific criteria for participation were drafted and the sample was chosen conveniently and purposively (Brink, 1996:140-1). Convenient in the sense of availability in South Africa through electronic means or the postal system and purposive due to the criteria set for inclusion in the sample. The context encompassed institutions of higher education and hospitals in South Africa.

The concepts deduced from the data were contextualised and recontextualised using Morse and Field's approach (1996:103-107) in combination with Tesch's data analysis approach as cited by Creswell (1994:154-156). From this basis, an extended national and international educational literature exploration was done to endorse the expectations and expand the concepts based on internationally reported best practice.

Optimal, specific standards with criteria were formulated using a deductive process and validated by implementing the standards in a nursing department (Zeelie 2002:Chapter 4). This process represents the quantifying and testing phases as prescribed by Muller. The standards and criteria are reported in full in the following section.

Standards and criteria to assure quality in nursing research

Twenty-six standards are formulated to assure quality in nursing research. Aspects that were considered are as follows: the nursing department manager's responsibilities with regards to nursing research, the research learning programme, academic environment, personnel, students, departmental policies, support systems, funding, co-ordinated research programme, quality data gathering system, facilities/infrastructure, supervision, capacity building, feelings of competence, systematic audit process, networking, satisfaction, relevance, productive scholarship, collectively

intended, accountability, and centre of excellence.

The standards encompass the three characteristics of structure, process, and outcome, but due to the interconnectedness of these aspects, all aspects applicable to a specific standard are combined in one standard.

Standard 1

Based upon the vision and mission of the parent institution and the vision and mission of the nursing department and managerial responsibilities, the nursing manager has the responsibility to ensure quality in the education of nursing research.

Criteria:

- 1.1 The job description of the manager reflects the responsibility and accountability for the management of the education of nursing research.
- 1.2 The manager is actively involved in the control of quality education of nursing research.
- 1.3 The manager supports and is actively involved in standard setting and attaining standards with regards to the education of nursing research

Standard 2

The manager of the department of nursing demonstrates appropriate abilities (knowledge, skills/competencies, attitudes, and values) required to effectively manage the education of nursing research.

Criteria:

- 1.1 The departmental manager is registered with the South African Nursing Council in nursing education and management.
- 1.2 The departmental manager shows the ability to assemble, analyse and utilise appropriate educational statistics to optimise the research educational outcomes and goals/objectives.
- 1.3 The departmental manager maintains appropriate processes to facilitate the creation of a learning and educational environment that is conducive to quality research education.

Standard 3

The education of nursing research is managed according to the strategic plan for the department.

Criteria:

- 1.1 There is a policy regarding the research program's vision, mission, goals and objectives.
- 1.2 There is a written strategic plan for the department that includes the education of nursing research.
- 1.3 The departmental strategic plan reflects the current educational legislative requirements.
- 1.4 There is a written mission statement guiding and focussing the educational activities of the department.

- 5.5 Fulfilling the mission statement should enable the department to achieve the transformational objectives of the National Plan of the Ministry of Education.
- 5.6 Goals/objectives is available in written form, stating clearly what is expected of the graduate after finishing the research program.
- 5.7 There is a written educational philosophy reflecting belief statements on education, the student and the nursing educator.
- 5.8 The short and long-term goals/objectives are described including those for the education of nursing research.
- 5.9 There is an operational plan for the realisation of the goals/objectives of the education of nursing research.
- 5.10 A progress report on the strategic report is available.
- 5.11 There is an information technology system to facilitate educational service management.
- 5.12 There are policies and procedures to formulate a structured design to manage research in the department.

Standard 4

The research education program is planned, integrated, value-adding, building contextually on learners' existing frames of reference, experiential and outcomes based.

Criteria:

- 1.1 The research education program is the main vehicle to achieve the formulated goals and objectives of the department with regards to the education of nursing research.
- 1.2 The content of the research education program enables the student to achieve the expected outcomes.
- 1.3 The research education program produces graduates with the knowledge, skills and competencies required to participate as nursing professionals in the modern world.
- 1.4 There are clear indications of the development of leadership in students
- 1.5 The core content is identified.
- 1.6 The content is relevant to the profile of the institution's location and context and its responsiveness to regional and national priorities.
- 1.7 The organisational structure for the program should be chosen based on specific criteria.
- 1.8 There is a system to evaluate the organisational form periodically.
- 1.9 The teaching strategies promote the attainment of the outcomes of the research education program.
- 1.10 There is a system to review and research the teaching strategies to ascertain their effectiveness, efficiency and applicability to the education of nursing research.
- 1.11 The outcome of the program must be of such quality that the mission of the department and institution can be fulfilled.
- 1.12 Nursing research does not constitute an end in it

self but meets real needs in the practice and education of nursing.

- 1.13 Enquiring minds are being developed in students.
- 1.14 Research related outcomes are formulated for different levels of research education.
- 1.15 Different levels of programs build on previous knowledge and skills.
- 1.16 Program outcomes are measurable.

Standard 5

The department of nursing ascribes to an accepted didactic concept in the context of the education of nursing research.

Criteria:

- 1.1 The department has decided upon a didactic concept.
- 1.2 The didactic concept is consistent with the mission and objectives of the program.
- 1.3 Nurse educators adhere to the departmental didactic concept
- 1.4 The didactic concept of the department must be relevant and evidence-based.
- 1.5 The didactic concept should cause in students a life-long love of learning and critical intellectual abilities.

Standard 6

The nursing research curriculum is designed to produce nursing practitioners who can provide appropriate care in a society with ever changing needs and an increasing technological environment.

Criteria:

- 1.1 Evidence-based nursing care is facilitated by a research focus in all nursing programmes.
- 1.2 The research program inculcates evidenced-based nursing care in students.
- 1.3 Research methodology is introduced in the first year of the basic program.
- 1.4 The research program in the basic degree is experimental and develops research knowledge and skills as well as capabilities in the students.
- 1.5 The basic course should prepare student for higher degrees.
- 1.6 The research theory and practica is correlated.
- 1.7 The curriculum allows enough time for research projects.
- 1.8 Through all the educational activities prescribed by the curriculum, a research culture is initiated and maintained.

Standard 7

Student assessment is systematic, ongoing, comprehensive, and focussed on the nursing research program's specific mission and goals.

Criteria:

- 1.1 A departmental policy is in place regarding all as-

sessments.

- 1.2 Written standards regarding the criteria for the acceptance of a theses or dissertation are available.
- 1.3 The criteria for assessment are recognised by the profession and institution.
- 1.4 Assessment includes understanding as well as knowledge.
- 1.5 Objectivity is ensured in all assessments.
- 1.6 A system exists to evaluate supervision (mentoring) of students at all levels.
- 1.7 A system exists to gather data regarding assessments as well as methods to present evidence and matching these against the criteria.
- 1.8 There is a system to ensure recommendations and feedback mechanisms exist regarding all assessments regarding the education of nursing research done in the department.

Standard 8

An academic environment, which realises through the motivation by management, nurse educators and students to pursue the goals of quality teaching, learning, research as well as positive advice, support and encouragement to attain quality research education outcomes

Criteria:

- 1.1 An environment in which mentoring of colleagues and students in the field of research is accomplished.
- 1.2 An environment exists in which the socialisation of students in the field of nursing research occurs and in which the existence of a community of scholars can excel.
- 1.3 A critical mass of academics is readily available to establish and maintain an academic environment.

Standard 9

The quality of the nurse educators is such that the department is capable of meeting the research related requirements set by the department and the parent institution.

Criteria:

- 1.1 The quality of the nurse educators influences the quality of the program positively.
- 1.2 Nurse educators are knowledgeable in research methodology and are doing research.
- 1.3 The number of doctorally prepared nurse educators in the department is sufficient to realise the department's goal/objective concerning its research requirements.
- 1.4 For doctoral programs, the educators is doctors/ researchers in the program area and capable of conceiving and implementing research programs.
- 1.5 The educator/student ratio is such that the optimal number of research students can be admitted each year.
- 1.6 Continuous training of nurse educators occurs.
- 1.7 Post-doctoral research activities are maintained.
- 1.8 A standard exists regarding the publications and presentation requirements of nurse educators.

- 1.9 The prescribed number of published articles in accredited refereed journals is maintained.
- 1.10 There is delivery of presentations at national and international scientific meetings.
- 1.11 Personnel participate in committees at a national and international level.
- 1.12 Personnel participate on the editorial board of scientific journals.
- 1.13 Supervision skills are developed and nurtured.
- 1.14 A system is in place to develop research leadership potential in nurse educators.
- 1.15 There are policies and procedures regarding publications, marketing of research results and how regularly a member of staff is expected to publish.
- 1.16 There are policies regarding study leave for nurse educators.
- 1.17 Policies and procedures exist regarding the distribution of research and teaching loads and the deployment of members of staff for teaching and research.
- 1.18 A policy and procedures exist for a strategy to build staff members' research expertise (setting up a personal capacity building plan for each).
- 1.19 There is a system to ensure that all nurse educators concerned study and implement the policies and procedures.

Standard 10

The education of nursing research is equipped towards addressing the research skills and competencies required of professional nursing graduates in the modern world.

Criteria:

- 1.1 The student's position as a novice scientist is recognised.
- 1.2 Admission criteria are consistent with those of the institution and within the scope of the Ministry of Education.
- 1.3 Graduation rates and throughput rates are according to the benchmarks of the Department of Education.
- 1.4 The research program's dropout rate is reduced.
- 1.5 Student should be involved in the practical aspects of research during the programme.
- 1.6 A system is in place to review the annual progress of doctoral students based on written comments by all concerned including the student.
- 1.7 A standard of productive scholarship exists stipulating collaboration with the educators and peers in scientific activities that result in the presentation and publication of papers.
- 1.8 Leadership potential is developed in research students.
- 1.9 Graduates are skilled and competent after completion of the programme.
- 1.10 The throughput rate of post-graduate students is optimised.
- 1.11 Students are considered as customers of the research program and as such are entitled to high quality education.

- 1.12 There are policies and procedures to ensure a rolling plan to attract and train masters and doctoral students.
- 1.13 Policies exist regarding the appointment of students as research assistants.

Standard 11

There are written, appropriate, legally valid and updated departmental policies in place to administer and manage the education of nursing research effectively and efficiently.

Criteria:

- 1.1 The policies are in line with the parent institution.
- 1.2 There are policies and procedures for the role and function of research related committees.
- 1.1 Policies and procedures are dated and signed.
- 1.2 The policies and procedures are reviewed at least annually or according to predetermined review dates.
- 1.3 The policies and procedures are appropriately indexed, filed and retrieved to facilitate accessible by all nurse educators.

Standard 12

Support systems are of sufficient scope to enable students to attain the skills and competencies set as outcomes for the research program

Criteria:

- 1.1 Support systems are facilitative in nature.
- 1.2 Support systems are available within the resource systems to assist student attain their goals.
- 1.3 There is funding available to ensure the quality of the resource systems.
- 1.4 Resource systems are accessible.
- 1.5 The physical infrastructure is sufficient to accomplish the goals of the department for research, teaching and service.

Standard 13

Financial support is available for students and educators doing research

Criteria:

- 1.1 Nurse educators are taking a responsibility towards obtaining funding for research projects.
- 1.2 Research outputs are of such a nature that funding based on research outputs are readily available to the department.
- 1.3 Policies and procedures exist regarding applications for research funding,
- 1.4 Students are assisted in applying for funds.
- 1.5 A policy for procedures to develop sources of funding for research – internal and external.

Standard 14

The existence of a co-ordinated research program versus

lone-standing projects is fundamental to focussed research capacity building to purposefully empower new researchers and re-empower others.

Criteria:

- 1.1 A co-ordinated research program exists where new research can be built on previous work.
- 1.2 The co-ordinated research programs are representative of the nurse educator expertise in the department.
- 1.3 The co-ordinated research programs are congruent with the priorities in the field and the community.
- 1.4 Mechanisms to ensure elevated quality of research such as peer review, mentoring and consultation exist and are implemented.
- 1.5 Capacity building is a planned, specifically constructed process.
- 1.6 The co-ordinated research program is of such a capacity that diverse groups can work together within a collaborative research plan that considers themes, which are common priorities among the partners, on a local, national and international level.

Standard 15

Supervision, a goal-directed, interpersonal engagement between a research supervisor and post-graduate student, is facilitative of the student's development as a scientist.

Criteria:

- 1.1 Departmental policies exist regarding supervision (mentoring).
- 1.2 There are policies and procedures stipulating the role and function of research supervisors.
- 1.3 A system exists to support and prepare principal and co-supervisors in the role of supervising (mentoring) doctoral students in nursing.
- 1.4 A rolling model of supervision exists in the department to increase the research capacity in the department.
- 1.5 There is evidence of progressive, guided and independent status of research experiences as students progress towards and through their doctoral studies.
- 1.6 Structured research skill development activities are implemented.
- 1.1 A system is in place to ensure interpersonal micro-skills such as explaining, questioning, listening, encouraging and advising.
- 1.1 There are policies on student assessment of research supervision.
- 1.2 A system exists where the quality of the supervision of postgraduate students is evaluated on an annual basis.

Standard 16

Building research capacity is considered vital in the attainment of the department research mission

Criteria:

- 1.1 Research capacity is actively developed in the de-

partment of nursing.

- 1.2 Departmental policies exist regarding research capacity building.
- 1.3 A system is in place to retain research expertise for future generations of students.
- 1.4 Incentives for research outputs are in place and research awards are employed to stimulate interest in research.

Standard 17

Support for students enrolled in the research program is planned and implemented pro-actively

Criteria:

- 1.1 Departmental policies exist regarding student support.
- 1.2 Various strategies, including bridging programs are operationalised to support students.
- 1.3 A system of student orientation exists and is operationalised.
- 1.4 There is a system to maximise throughput, success and graduation rates by supporting students of good academic standing who dropout but not for financial reasons.

Standard 18

Nurse educators and students are feeling competent to perform their research-related roles

Criteria:

- 1.1 There is evidence of feelings of competence, for both the nurse educator and student, to perform their respective roles in the social and professional environment.

Standard 19

A systematic audit process regarding the education of nursing research is operationalised

Criteria:

- 1.1 A system exists that provides for comparison of program processes and outcomes to the standards of its parent institution and selected peer groups within the nursing profession.
- 1.2 The system includes ongoing feedback to nurse educators and administrators to promote research education program involvement.
- 1.3 A system exists to generate comprehensive data in order to determine patterns and trends and recommend future directions at regular intervals.
- 1.4 Data gathering are structured and managed through departmental policies.
- 1.5 Time frames for review are stipulated.
- 1.6 A variety of internal and external sources of data have been identified and operationalised.
- 1.7 The self-evaluation system is supported with adequate personnel, financial, and institutional resources.
- 1.8 A regular cycle of self-evaluation is developed and

- executed.
- 1.9 Departmental policies exist and are executed according to plan.
- 1.10 Students are included as evaluators in the audit process.

Standard 20

Networking is considered important and it is promoted and actively expanded

Criteria:

- 1.1 Networking, nationally and internationally, is actively developed in the department of nursing
- 1.2 A policy exists with clear guidelines for collaboration with external organisations and industry.

Standard 21

The satisfaction of all role-players is considered an important aspect in the quality assurance of the education of nursing research

Criteria:

- 1.1 Satisfaction with the performance of the program should be measured regularly as part of the self-evaluation cycle.
- 1.2 Satisfaction with the organisational effectiveness of the department in terms of the education of nursing research should be measured regularly as part of the self-evaluation cycle.
- 1.3 Community interaction is a concept must be included in the measurement of satisfaction.
- 1.4 Motivation should be evaluated as part of the self-evaluation cycle.

Standard 22

Relevance is of primary importance to the research program's continued existence

Criteria:

- 1.1 The program is currently relevant.
- 1.2 The research education program is responsive to regional and national needs.
- 1.3 The program is evaluated periodically in terms of its relevance.

Standard 23

Nursing scholars on all levels of expertise are active in the production, acquisition, application, and dissemination of knowledge

Criteria:

- 1.1 Strategies are in place to encourage scholarship.
- 1.2 Departmental policies exist regarding the scholarly productivity of nursing educators and students.
- 1.3 Implementation of research results should result in measurable progress in clinical nursing.
- 1.4 Scholarship of nursing is equivalent to other professional disciplines.

- 1.5 There are no deviations from the traditional model of academic requirements for tenure.

Standard 24

A democratic ethos and a culture of human rights conducive to critical discourse and creative thinking, cultural tolerance, and a common commitment to a humane, non-racist and non-sexist order are fostered through the research program

Criteria:

- 1.1 An outcome of the program is the development of graduates who are collectively intended.

Standard 25

Accountability is essential and it is promoted and actively expanded

Criteria:

- 1.1 There is evidence of accountability in the education of nursing research.
- 1.2 The research program is implemented efficiently and effectively.
- 1.3 Strategies are in place to improve accountability.

Standard 26

Excellence is the definitive goal for the education of nursing research

Criteria:

- 1.1 Excellence is the vision for in the education of nursing research.
- 1.2 There are policies for developing the department into a centre of excellence within a given period.
- 1.3 The research mission statement contains guidelines that focus the department in its quest for excellence.
- 1.4 Research goals and objectives are available in the department stipulating definite actions to be taken to realise the research mission and the vision of the department.

Conclusion

It must be emphasised the nursing research is a dynamic process and as such, the standards are part of that dynamic process and they will have to be reviewed when changes occur or they become obsolete. These standards are incapable of themselves to assure quality in nursing research; standards must be implemented in a system to fulfil the goal they were formulated to achieve, which is assuring quality in nursing research.

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