

My Africa by Adamson S. Muula

amuula@medcol.mw

> Croat Med J. 2007;48:568-73

Status of Scholarly Productivity among Nursing Academics in Malawi

Although clinical and community services, teaching, and supervision of students is valued in academic nursing, promotion of faculty is mainly driven by publications in peer-reviewed journals (1,2). Kitson (3) has reported on the four essential elements of university education: a) enabling students to acquire skills and knowledge in preparation for the job market, b) equipping students with problem-solving skills, c) generation of new knowledge for the benefit of the (nursing) profession and the wider community, and d) transmission and preservation of society's values. There is, however, not always consensus on how to balance the importance of teaching, nursing practice, and publications for tenure and promotion (4).

According to Kitson (3), nursing scholarship has diverse roles or benefits and not just the generation of new knowledge and facilitating that the researcher-nurse-teacher climbs the academic ladder. Research also allows the researcher to recognize the past through the researchers' acknowledgment of existing knowledge. This recognition leads to reflection, synthesis, and identification of gaps in knowledge through critical appraisal of the literature. The research process itself is important for nursing as a profession since it allows for opportunity to think logically, communicate effectively with editors, reviewers, and readers, and therefore sharpens argumentation leaving little room for arrogance and protectionist impressions. Researchers develop attributes in working systematically, dealing with conflict, truthfulness, and transparency in origins of ideas or concepts. Research experience provides evidence that knowledge evolves over time. Meleis (5) has argued that "best practices in nursing are developed through rigorous research conducted by nurse scientist." The faculty members who publish benefit from the peer-review process in that their research findings and ideas are presented to the clinical services and academic world for scrutiny.

Nurse scholarly productivity is not uniformly distributed across the world. Yonge et al (6) have reported that out of 1286 articles on nursing education research in "major journals" published between 1991 and 2000, 90% of the articles were from North America and Europe. Gill (7) reported that nursing research and publications were poorly developed in the UK and lagged behind other university disciplines. The challenges facing nursing community in the developing world, which are often reported in the literature, are the lack of adequate supplies and equipment to ensure delivery of safe health services; shortage of nurses, exacerbated by the migration from the developing to developed nations; and low remuneration. Not much attention has been paid to understanding the difficulties in career progression in academics.

Some authors have suggested that the dearth in scholarly productivity is due to lack of nurses trained to doctoral level. For instance, Holston et al (8) reported that "a rarity of nurses conducting research already exists, since only 0.6% of the 2.2 million employed registered nurses in the US have a doctoral degree in nursing or related field." While doctoral programs generally emphasize scholarship more than any other (non-doctoral) programs, it seems rather a too general statement to imply that other levels of nursing profession outside of the doctorate holders cannot advance scholarship.

Meleis and Dracup (9), in arguing against the Doctorate of Nursing Practice (DNP) programs being proposed in the United States, stated that the Master of Nursing degree already gears nurses in inquiry and practice; so there is no need for the introduction of the doctorate program. Magyary et al (10), however, reported that the DNP of the University of Washington promotes nursing inquiry and scholarship. What this clearly shows is that the same program at different institutions may prepare graduates differently for research. Although comparisons between MSc and PhD faculty may not be appropriate, it may still be informative to have insights as to whether attainment of a PhD degree provides impetus for research.

The limited recent publications on the health professions in Malawi have concentrated on health professional migration (11-14) and the training of physicians. Articles on clinical aspects of nursing practice and nurse education are lacking.

For the purpose of this essays, I analyzed the number of scholarly publications by faculty at the Kamuzu College of Nursing indexed in selected databases to assess whether socio-demographic characteristics could be associated with scholarly productivity in Malawi. The Kamuzu College of Nursing was established in 1979 as a constituent college of the University of Malawi. Prior to this time, training of registered nurses was being conducted at the National School of Nursing of the Ministry of Health (15). The Kamuzu College of Nursing has two campuses, 300 km apart, and the student enrolment of about 250. My analysis had the following objectives: a) to quantify the number of publications from Kamuzu College of Nursing faculty since opening of the institutions in 1979 to mid 2006 indexed in selected databases; b) explore the academic environment of the Kamuzu College of Nursing in as far as it may be relevant to scholarly productivity.

Three databases - Medline/ PubMed, Psychinfo, and Web of Science, were searched between July and September 2006 to identify papers authored by the members of Kamuzu College of Nursing faculty. The names of all faculty members at the Kamuzu College of Nursing as of March 2005 were obtained from the Registrar's office. Database search was performed for each name on the list. Another search was carried out using the terms "Kamuzu" and "College and Nursing." Only five articles were retrieved using this second search criterion and were already retrieved by the name searches. The year of publication for each article and the presence of one or more authors from the Kamuzu College of Nursing were identified and recorded. Records of publications were then aggregated to produce publications by departments within the nursing school.

For the members of the Kamuzu College of Nursing faculty, their academic position (assistant lecturer, lecturer, senior lecturer, and professor), highest academic qualifications, and whether they had qualifications in nursing were recorded. The limitation of database search may have been incorrect spelling of names of authors in journals or in the databases, which could result in under-counting of the number of articles published under one's name.

In 2005, there were 57 faculty members – 1 associate professor, 9 (15.8%) senior lecturers, 27 (47.3%) lecturers, and 21 (36.8%) assistant lecturers. This means that 84.1% of the faculty was at the lecturer level or below. There were 12 men and 45 women. Fourty-eight (84.2%) of the faculty amounted to registered nurses. Of the 5 teaching departments, only one was headed by a senior lecturer, while the rest were headed by lecturer level faculty (Table 1 and Table 2).

 Table 1. Academic qualifications of faculty members at the Kamuzu College of Nursing, 2005

	A			
Department	philosophy doctors	masters	bachelors	Total
Basic Studies	1	7	1	11
Community and mental health	0	7	2	9
Maternal and child health	2	8	5	15
Medical/surgical	1	8	7	16
Clinical	0	2	5	7
Total	5	32	20	57

 Table 2. Published papers by department and the last year of publication at Kamuzu College of Nursing from 1979 to 2005

Department	Number of publications*	Last year of publication
Basic studies	13	2004
Community and mental health	1	2006
Maternal and child health	16	2006
Medical/surgical	7	2004
Clinical	5	2004

*These papers were associated with just 20 faculty members. Twelve (30.8%) articles were associated with the faculty who had no nursing qualification.

Fifty-seven faculty members of the Kamuzu College of Nursing, University of Malawi had a total of 42 articles indexed in the Medline/PubMed, Pyschinfo, or Web of Science, translating into 1.4 faculty members per article. The situation is much worse when one considers that 16 of those articles were associated with only two individuals. Some of the articles were also published as early as 1988, suggesting that scholarly publication output per year had been extremely low.

The fact that about a third (33.3%) of the teaching staff had no graduate qualifications is of particular importance. There may be no immediate or medium term incentives to publish. With no graduate qualification, a teacher at the University of Malawi can be appointed either as associate or assistant lecturer. Because nursing is an advanced professional degree compared to other first degrees in Malawi, nurses are appointed as assistant lecturers ie, one step behind a lecturer. However, they cannot be promoted only based on publications, but require a graduate degree.

Although my investigation was not aimed at identifying the causes of this low scholarly output, several factors can be suggested. These include: high teaching loads (16), gender distribution of faculty members with the majority being women which may require a different approach to enhance academic productivity, lack of graduate study opportunities, lack of competition against another nursing school offering degree courses in nursing, lack of research funding, and no role models.

At the end of July 2006, there were 27 African journals indexed in Medline/PubMed, and only Curationis, published by the South African Nursing Association, is a nursing journal (17). This is an indication that African journals that report nursing research may find it difficult to be indexed in international databases. As publication in an international journal often requires that the topic of the article is of interest to a wider audience at a global level, it is possible that research output from Kamuzu College of Nursing nurse faculty may not be acceptable to an international audience. However, this does not seem plausible as there is no nursing journal in the country.

In Malawi, there is a single medical journal, the *Malawi Medical Journal*, published by the Medical Association of Malawi and the College of Medicine. However, this journal rarely publishes nursing articles and articles from Kamuzu College of Nursing.

Balancing family responsibilities and academic life may be particularly difficult for female academicians. Jagsi et al (18) reported that, although there have been an increased number of female academicians in the field of medicine in the United States, women still remained a minority of authors in prominent medical journals.

It is possible that the limited scholarly achievements at the Kamuzu College of Nursing may be a refection of this situation. However, this may not be the whole story as if gender was the main reason, male counterparts would have published more. There is a need to identify the underlying reasons why it is difficult for academic staff at the Kamuzu College of Nursing to engage in research and publications.

Yonge et al (6) reported that out of 1286 articles on nursing education research that they reviewed, about 80% were not funded. As a country, Malawi does not devote much financial resources for research. This may be understandable since it is one of the ten poorest countries in the world. There are other immediate pressing needs that deserve attention. This is ironic because a country like Malawi, with its huge burden of disease and poverty, is perhaps most in need for research which would lead the interventions for change.

Most of the funded health research in Malawi is from foreign sources. This is where collaboration between junior and upcom-

ing researchers may be valuable for nurse academics in Malawi. While the research dollar is important, much research can be conducted with minimal local funding. All nurse students at an institution must conduct research as a requirement for graduation. Using the institution's name to search for publications, one fails to identify any article that has been published by students. However, the College of Medicine in Malawi is known for such student-faculty projects that have been published in indexed journal (19).

Some studies have identified mentoring as an important facilitator to academic growth and scholarly productivity (20,21). Turnbull and Roberts (22), however, report that equivocal findings have been obtained on the issue as to whether mentoring is beneficial to scholarly productive. These authors also identified that the burden of teaching, administrative duties, and an environment that does not support mentoring were identified as disincentives.

The attributes of mentors who may facilitate academic growth of junior faculty have been a matter of interesting debate. Leslie et al (21) reported that mentors were perceived to be more effective when they were paired to junior faculty of similar gender. A study by Jackson et al (20), however, reported that having mentors of similar gender or race were not perceived as beneficial. They reported that "having the right chemistry" between the mentor and junior faculty was seen as more important than similarities in gender or race.

Most health-related publications are in English. For most people in Malawi, English is a second language. Rassool (23) from Brazil suggested that the challenge to master the English language was an impediment to getting published. In Malawi, however, instruction in secondary and tertiary education is done in English. English is also one of the two official languages of communication. Whether and to what extent problems with English may contribute to low scholarly output in Malawi deserve further study.

The low scholarly output is a vicious circle since without publications it is unlikely for a faculty to obtain research grants as principal investigators. Lack of research grants may consequently mean lack of original research worth publication.

Segrott et al (24) have suggested that capacity building in research should take cognizance of the context, especially the infrastructural and political environment of the nursing school. Similarly, Closs (16) reported that, at least in the UK, the expectations and contributions by the National Health Services (NHS), the education consortia, and the training institution have in some cases been an impediment toward conducting research among nurse academicians.

Tahan (25) argues that all nurses, and not just academics, owe their contribution to the advance of the profession through scholarly inquiry and not just through organized research and publications. For the academic nurse just like in any other field, not to publish is a recipe for difficult times within the academic circles.

In a study on dentists who had joined the academia in the United States within 4 years after graduation, Schenkein and Best (26) reported that many were attracted to academic career through interest in research. What are the attractions to faculty at Kamuzu College of Nursing? Do other attractions rank superior as compared to research and publications? If research was among the attraction, what job satisfaction do they get since there is certainly dearth in research publications? These questions deserve study.

For a long time, the Kamuzu College of Nursing was the only college in Malawi offering a degree course in nursing. This may have to an extent provided no possibility of competition. Muula (12) has argued elsewhere that sometimes, having more than one institution offering the same courses in the same country may be a good thing as there is possibility of "healthy" competition. Currently, another institution in Malawi has started offering degree courses in nursing. To what extent this may facilitate healthy competition so as to encourage scholarship remains to be seen.

The Kamuzu College of Nursing faculty has a large number of staff with a lower academics degree, especially assistant lecturers. In order to be appointed to a substantive position within the University of Malawi, one needs to hold at least a masters' degree. There are no master degree courses in Nursing at the Kamuzu College of Nursing and so all holders of masters degree in nursing have previously obtained the qualification abroad. The Kamuzu College of Nursing has plans to start a master's degree course in 2007. The scholarly aspect of its faculty will certainly require attention for the masters' program to stand on sound academic footing. If we compare Kamuzu College of Nursing with Thailand, Kamuzu College of Nursing's faculty doctorate:masters:bachelors ratio is 1:6.4:4 compared with 1:9.2:2.2. in Thailand. Thailand also produces 50 nurse doctorates each year from 6 programs, while the Kamuzu College of Nursing has no such program (27). The population of Thailand is about 60 million, compared with 12 million for Malawi.

In conclusion, faculty members at the Kamuzu College of Nursing have low scholarly productivity. There is need to explore the reasons behind this state of affairs so as to design programs that can assist in improving faculty's scholarly productivity.

References

- Green B, Segrott J, Hewitt J. Developing nursing and midwifery research capacity in a university department: a case study. J Adv Nurs. 2006;56:302-13. <u>Medline:17042809</u>
- 2 Roberts KK, Turnbull BJ. Nurseacademics' scholarly productivity: perceived frames and facilitators. Contemp Nurse. 2004;17:282-92. <u>Medline:15551679</u>
- 3 Kitson A. The relevance of scholarship for nursing research and practice. 1999. J Adv Nurs. 2006;55:541-3. <u>Medline:16907783</u>
- 4 Ramcharan P, Ashmore R, Nicklin L, Drew J. Nursing scholarship within the British university system. Br J Nurs. 2001;10:196-202. <u>Medline:12170665</u>
- Meleis AI. Shortage of nurses means shortage of nurse scientists. J Adv Nurs. 2005;49:111. <u>Medline:</u> <u>15641942</u>
- 6 Yonge OJ, Anderson M, Profetto-McGrath J, Olson JK, Skillen DL, Boman J, et al. An inventory of nursing education research. Int J Nurs Educ Scholarsh. 2005;2:11.
 - Gill P. Difficulties in developing a nursing research culture in the UK. Br J Nurs. 2004;13:876-9. <u>Medline:</u> <u>15284653</u>
- 8 Holston EC, Schweitzer R, Meeker ME, Hendrix CC, Gaspar PM, Kossman S, et al. Preparing junior investigators to develop gerontological research. Nurs Outlook. 2006;54:287-93. <u>Medline:17027606</u>

9

- Meleis A, Dracup K. The case against the DNP: history, timing, substance, and marginalization. Online Journal of Issues in Nursing 2005;10:3. Available from: http:// www.nursingworld.org/ojin/topic28/ tpc28_2.htm.
- 10 Magyary D, Whitney JD, Brown MA. Advancing practice inquiry: research foundations of the practice

doctorate in nursing. Nurs Outlook. 2006;54:139-51. <u>Medline:16759938</u>

- 11 Muula AS, Mfutso-Bengo JM, Makoza J, Chatipwa E. The ethics of developed nations recruiting nurses from developing countries: the case of Malawi. Nurs Ethics. 2003;10:433-8. <u>Medline:12875540</u>
- 12 Muula AS. Every country or state needs two medical schools. Croat Med J. 2006;47:669-72. <u>Medline:</u> 16909465
- 13 Muula AS, Panulo B, Maseko FC. The financial losses from the migration of nurses from Malawi. BMC Nurs. 2006;5:9. <u>Medline:17081302</u>
- Record R, Mohiddin A. An economic perspective on Malawi's medical "brain drain". Global Health. 2006;2: 12. <u>Medline:17176457</u>
- 15 Namate DE. The cost of registered nurse-midwifery education in Malawi. J Adv Nurs. 1995;22:410-5. <u>Medline:7499606</u>
- 16 Closs J. Research for nursing: whose job is it anyway? Nurse Educ Today. 2000;20:423-5. <u>Medline:10959128</u>

- 17 National Library of Medicine. List of journals indexed for MEDLINE. Bethseda, MD: National Institutes of Health; 2006.
- 18 Jagsi R, Guancial EA, Worobey CC, Henault LE, Chang Y, Starr R, et al. The "gender gap" in authorship of academic medical literature – a 35-year perspective. N Engl J Med. 2006;355:281-7. <u>Medline:16855268</u>
- 19 Muula AS, Broadhead RL. The first decade of the Malawi College of Medicine: a critical appraisal. Trop Med Int Health. 2001;6:155-9. <u>Medline:11251912</u>
- 20 Jackson VA, Palepu A, Szalacha L, Caswell C, Carr PL, Inui T. "Having the right chemistry": a qualitative study of mentoring in academic medicine. Acad Med. 2003;78:328-34. Medline:12634219
- 21 Leslie K, Lingard L, Whyte S. Junior faculty experiences with informal mentoring. Med Teach. 2005;27:693-8. <u>Medline:16451889</u>
- 22 Turnbull BJ, Roberts K. Nurseacademics' mentorship: rhetoric or

reality? Collegian. 2005;12:33-8. Medline:16619911

- 23 Rassool GH. Writing for international publication in nursing journals: a personal perspective (part 1). Rev Lat Am Enfermagem. 2006;14:266-70. <u>Medline:16699702</u>
- 24 Segrott J, McIvor M, Green B. Challenges and strategies in developing nursing research capacity: a review of the literature. Int J Nurs Stud. 2006;43:637-51.<u>Medline:16157338</u>
- 25 Tahan HA. Perspectives of an American University of Beirut graduate on nursing scholarship. J Transcult Nurs. 2006;17:398-401. <u>Medline:16946124</u>
- 26 Schenkein HA, Best AM. Factors considered by new faculty in their decision to choose careers in academic dentistry. J Dent Educ. 2001;65:832-40. <u>Medline:11569598</u>
- 27 Ketefian S, Davidson P, Daly J, Chang E, Srisuphan W. Issues and challenges in international doctoral education in nursing. Nurs Health Sci. 2005;7:150-6. <u>Medline:16083477</u>