

NEEDS ASSESSMENT FOR NURSING FACULTY DEVELOPMENT PROGRAM IN PAKISTAN

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ABSTRACT

An observational study was conducted from March to April 2007 and data was collected from all nursing schools in the country as well as from other external sources to assess the needs of nursing faculty in Pakistan. There were a total of 14 nursing degree programs in Pakistan with 97 faculty members and an annual enrolment of 711 students. Over the next five years, the annual student enrollment is expected to rise to 1,200. To meet these needs, an additional 291 nursing faculty will be required, including 20 Professors/Associate Professors with PhD and 250 Assistant Professors with MScN degrees. A five year program has been developed for the training of the nursing faculty at an estimated cost of 1512.25 million Pakistani rupees. In order to promote nursing higher education in the country, comprehensive efforts are needed to implement a comprehensive faculty development program.

Key words: nursing, faculty development, Pakistan

INTRODUCTION

Until recently, nursing education in Pakistan has remained largely ignored due to various factors, including the non-availability of trained faculty¹. This lack of trained nursing faculty, both in the public and the private sectors, has resulted in few new teaching institutions being established and a limited enrolment of nursing students in existing diploma and graduate programs, thereby adversely affecting the existing nurse to patient ratio as well as the nurse to doctor ratio in Pakistan².

According to the Federal Bureau of Statistics of the Government of Pakistan, there are only 52,960 registered nurses (RN) in the country in comparison to 121,374 registered doctors, putting the nurse to doctor ratio at 1:2.66³⁻⁵. Each nurse serves 2,973 people, while each doctor only serves 1,287 people³⁻⁵. The majority of the nurses registered with the Pakistan Nursing Council have

a three-years diploma in nursing and only a few have a higher education. Whether it be a Bachelor of Sciences in Nursing (BScN), a Masters of Science in Nursing (MScN), or a Doctor of Philosophy in Nursing (PhDN). Although several public and private medical universities have been established in the country in the last ten years, there are currently only a few nursing schools in Pakistan which are offering a BScN program, and only a single institute in the private sector offers a MScN program. At the time of writing the report none was offering a PhDN program.

To address the shortage of qualified nurses which compromises the quality of care provided in Pakistan, it will be necessary to increase the enrolment of nursing students in degree programs leading to BScN (or higher degrees), by establishing new Schools of Nursing (SON) and enhancing the capacity of the existing ones. To achieve these objectives, a sufficient number of trained and qualified nursing faculty will be required.

The nursing task force on nursing education of the Higher Education Commission (HEC) of Pakistan, in its fifth meeting, constituted the Nursing Faculty Development Committee. This task force committee comprised of five members coming from different nursing institutes, both

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in the public and the private sectors and was assigned the responsibility to assess the needs of the nursing faculty in Pakistan and to develop a nursing faculty development program. This report describes the needs assessment process, results and recommendations of the Nursing Faculty Development Program.

METHODOLOGY

The faculty development committee convened its first meeting in March 2007 at the HEC regional center in Lahore. The first task of the committee was to compile a provisional list of all existing and up-coming SON (SON with approved plans) offering BScN and MScN programs, in the different provinces of Pakistan. All the committee members were in charge of nursing programs in various universities. If information was not available for a particular institution, the committee members contacted their nursing colleagues during the meeting and obtained the required information by phone. Information about Schools of Nursing registered with the Pakistan Nursing Council (PNC) was also collected from its website and through direct correspondence.

After compiling the list of all Schools of Nursing offering BScN and MScN programs, the committee developed a structured questionnaire to collect data from each institution. The questionnaires were administered either by mail or by e-mail. Four members of the committee were assigned the data collection task. Meanwhile, two committee members collected information (mostly through the internet) on international institutions offering MScN and PhDN nursing training programs, and compiled a list of international institutions for nursing faculty training according to the following criteria: (1) academic credibility (types of institution, faculty profiles, research grants, profile of the graduates); (2) medium of instruction (English); (3) particular institutional expertise (i.e. such as nursing research, life-saving skills or midwifery); and (4) costs.

All committee members presented the data they collected from the different SON. The two members who collected information on international institutions where the Pakistani nursing faculty could be trained presented their findings. The matter was thoroughly discussed and a consensus was reached on the proposed list of international institutes for faculty trainings. To estimate the faculty requirements, the committee decided to follow the current HEC and PNC guidelines, which require maintaining the teacher to student ratio at 1:10. A consensus was reached on the

minimum levels to qualify (1) as a lecturer with a BScN, (2) as an Assistant Professor an MScN (3) as an Associate or Full Professor with PhDN. Faculty requirement estimates were made, keeping in mind existing enrolment and the expected growth in enrolment in the next five years. The cost estimates were established on the basis of information obtained from national and international Nursing training institutions.

The Faculty Development Committee presented the preliminary report at the 6th Taskforce meeting held in April 2007 at the HEC in Islamabad. All the members of the taskforce discussed the matter in detail and gave their input. At the final meeting of faculty development committee in August 2007, the final report was developed after a consensus was reached and issues were thoroughly discussed.

RESULTS

There were a total of 14 SON in Pakistan, which were offering a BScN program (either a 2 year post RN BScN or a 4 year BScN). These schools were found both in the public and the private sector, however only one school in the private sector offered an MScN program (Table 1). The total annual enrolment in all 14 institutes was 711 students. On the basis of future planning, it was estimated that annual enrolment will increase to 1200 students per year in next five years.

There were a total of 97 full-time nursing faculty members working in all 14 SON, including 2 Professors, 3 Associate Professors, 23 Assistant Professors and 69 Lecturers (Table II).

Since the Committee expected the total number of SON to increase to 20 and the total annual enrollment to peak to 1200 students per year, the estimated total was 647 faculty members would be needed in the next five years including 40 Professors/Associate Professors with PhD in Nursing, 285 Assistant Professors with a Masters in Nursing. With an expected 60-40 ratio of nursing and non-nursing faculty teaching at the SON, the total nursing faculty requirement came up to 388 in number. With the 97 faculty members, this would bring the requirements for additional faculty to 291.

The following training program was recommended by the Committee to the HEC for nursing faculty development during the next five years on the basis of the needs assessment results. For all non-nursing subjects such as

Table I: Schools of Nursing offering degree programs in nursing in Pakistan

S. No.	School of Nursing	Sector	Location	2 Year	4 Year	Annual	PNC	
				Post RN BScN	BScN		Enrol-ment	Recognition
1	PIMS College of Nursing	Public	Islamabad	Yes	No	No	20	Post RN BScN in process**
2	Shifa College of Nursing,	Private	Islamabad	No	Yes	No	20	BScN recognized
3	AFPGMI	Public	Rawalpindi, Punjab	Yes	Yes	No	60	BScN recognized, Post RN BScN in process
4	College of Nursing, AIMC	Public	Lahore Punjab	No	Yes	No	30	BScN in process
5	Shalimar College of Nursing,	Private	Lahore Punjab	No	Yes	No	30	BScN in process
6	JPMC, College of Nursing	Public	Karachi, Sindh	Yes	No	No	20	Post RN BScN recognized
7	AKU, College of Nursing	Private	Karachi, Sindh	Yes	Yes	Yes	*242	BScN, Post RN BScN, MScN recognized
8	DUHS, Institute of Nursing	Public	Karachi, Sindh	Yes	No	No	50	Post RN BScN in process
9	Liaquat National College of Nursing	Private	Karachi, Sindh	Yes	No	No	50	Post RN BScN in process
10	Isra University SON	Private	Hyderabad, Sindh	No	Yes	No	50	No correspondence with PNC
11	Baqai University SON	Private	Karachi, Sindh	Yes	No	No	50	Post RN BScN in process
12	Jamshoro College of Nursing	Public	Jamshoro	Yes	No	No	20	Post RN BScN recognized
13	National School of Nursing LUHMS	Public	Jamshoro Sindh	No	Yes	No	44	BScN in process
14	Murshid Hospital College of Nursing Hub	Private	Balochistan	Yes	No	No	25	No correspondence with PNC

* Post RN BSc 70
 BSc N 144
 MSc N 28

** Program in process = Being considered for recognition at PNC.

Table II: Current full time faculty position in public and private sector Schools of Nursing offering Degree programs*

S. No.	School of Nursing	Prof-essor	Asso-ciate	Assis-tant	Lect-urer	Total
1.	PIMS College of Nursing Islamabad	0	0	1	4	5
2.	Shifa College of Nursing Islamabad	0	0	1	12	3
3.	AFPGMI, Rawalpindi	0	0	0	14	14
4.	College of Nursing AIMC Lahore	0	0	1	3	4
5.	Shalimar College of Nursing Lahore	1	0	0	4	5
6.	JPMC college of Nursing Karachi	0	0	1	5	6
7.	Aga Khan School of Nursing Karachi	1	3	12+1 ⁰	3	20
8.	DUHS, Institute of Nursing Karachi	0	0	1	5	6
9.	Liaquat National College of Nursing, Karachi	0	0	0	1	1
10.	Isra University School of Nursing, Hyderabad	0	0	2	9	11
11.	Baqai University School of Nursing, Karachi	0	0	1	2	3
12.	Jamshoro School of Nursing Jamshoro	0	0	1	4	5
13.	National School of Nursing LUHMS Jamshoro	0	0	1	1	2
14.	Murshid Hospital College of Nursing, Hub	0	0	0	2	2
Total		2	3	23	69	87

*Non nursing and part time faculty not included

**One Assistant Professor on study leave

Minimum Qualification;

- 1) Professor PhD N
- 2) Associate Professor PhD N
- 3) Assistant Professor MSc N
- 3) Lecturer BSc N

Table III: Nursing faculty needs in Pakistan 2008-2012*

Sector	Existing	Planned SON	Projected Enrolment	Faculty Required	Nursing Faculty Required**	Current Nursing Faculty Available
Public	7	3	3140	314	188	42
Private	7	3	3330	333	200	55
Total	14	6	6470	647	388	97

* Based on Teachers Students Ratio 1:10

** 60 % of total faculty

Table IV: Cost estimates of nursing faculty development program

Program	Cost Estimate*
PhDn training overseas	183.1 Million
MScN training overseas	1117.4 Million
Post RN BScN intensive training	132 Million
National conferences	
International conferences	15.75 Million
Short term courses	25 Million
Grand Total	1512.25 Million

* in Pakistan Rupees

English, Information Technology, Sociology, Psychology, and Biostatistics, academic qualifications in Nursing are not necessary for the faculty. The ratio of Nursing to non-Nursing faculty is expected to be at 60:40. The faculty would be encouraged with MPH (Masters in Public Health) and Masters in education for non-nursing subjects.

A. Long term training program: The long-term training program includes 2 years MScN and 3-5 years PhDN either at The Aga Khan University in Karachi, Pakistan or overseas. Because international partnerships can be invaluable both in training and in research capacity building (through student/faculty exchanges, training programs and

collaborative research)^{6,7}, the following Universities were recommended for degree training for Pakistani nursing faculty: (1) the University of Manchester in UK, (2) the University of Alberta in Canada, (3) the University of Dublin/ Trinity College in Ireland, (4) the University of Alabama at Birmingham, USA, (5) Vanderbilt University (VUSN) in Nashville, Tennessee, USA, (6) John Hopkins University in Maryland, USA, and (7) Edith Cowan University in Australia. The committee recommended that a minimum of 20 Pakistani faculty members may be provided with scholarships for PhD and 250 with scholarships for MScN in the next five years.

B. Mid term training program: A one-year intensive post RN BScN training program was proposed to produce 1,500 post RN BScN Lecturers in five years to meet the urgent demand of the Pakistani SON, and create a pool of promising teachers, from which eligible faculty members can be selected for further Masters and PhD training. To be eligible for this program, the candidates will be required to have had (1) a three-year basic nursing education (a nursing diploma); (2) a one year nursing specialty area; (3) a two year post basic nursing education or a management course; and (4) a total of six year of nursing education.

C. Short term training programs: The committee suggested that short-term training programs included short courses and workshops from one week to six weeks in different topics, as well as attendance to national and international conferences. Suggested topics for the short courses and workshops included (1) teaching and communication skills; (2) nursing research methodology; (3) curriculum planning and development; (4) testing and assessment; (5) scientific writing; (6) proposal development; and (7) professional development. In the next five years, the committee suggested offering the opportunity of short courses to 600 faculty members, and to send 600 to national conferences and 350 to international conferences.

D. Additional training programs: In addition to the above training programs, the committee also suggested to consider some distance-learning program options and a teaching program with visiting faculty from abroad. For distance learning, the Committee recommended that Pakistani nursing faculty be provided with the opportunity to enroll in existing distance learning programs leading to MScN and PhD offered by the partner international institutions. Additionally, the committee recommended an online clinical research-training program offered by

UAB (US) for nursing faculty training. The committee also recommended inviting visiting foreign faculty for one semester to teach a course based on the need of the Pakistani institutions. In each instance a Pakistani faculty member would co-instruct the course along with the foreign faculty member for appropriate technology transfer. The visiting faculty will be from one of our partner institutions in the UK, US, Sweden, Canada or Australia.

The estimated total cost of five-year nursing faculty development program, recommended by the committee was a grand total of Pak Rs. 1512.25 Million, the break up being stated in table IV.

DISCUSSION

The most important finding of this study was the very low number of SON in Pakistan offering degree programs either in the public or the private sector. Another crucial finding was the fact that not a single institution in the public sector offered an MScN and/or a PhD program and only one SON in the private sector offers an MScN. Those numbers clearly showed a tremendous lack of commitment as far as higher education in nursing is concerned. Governmental financial constraints are clearly not the issue when one considers that the Pakistani government just invested huge sums in the establishment of several new medical colleges around the country.

Prioritizing the needs is however definitively an issue for nursing in Pakistan, while several medical colleges have been recently established, the needs of nursing education are yet to be addressed⁸. In order to promote the nursing profession in the country, the government needs to enhance its investment in nursing education, particularly in the institutions of the public sector.

A third important finding is the acute shortage of qualified faculty all around the country. According to the HEC criteria for the appointment of a Professor and an Associate Professor, a PhD is essential. The results of our study show only one SON in the private sector had a Professor and three Associate Professors, while only one SON in the public sector has one single Professor. Without properly qualified faculty, there is no possibility for the development of the nursing profession in Pakistan. If we compare the doctor to nurse ratio between Pakistan and several other neighboring countries, Pakistan suffers from a severe nursing shortage and the nurse to doctor ratio is 1:2.66^{1, 3-5, 9}.

A strong faculty development program is required to produce qualified teachers, in order to improve the quality of teaching in the SON and enhance their enrolment as well as bring positive changes in the nursing profession in the country. Since its establishment in 2002, HEC has made revolutionary changes in the realm of the higher education programmes of Pakistan. While the overall university student enrolment is increasing, the situation of higher education in nursing is still below the desirable; out of a total 423,236 university students in Pakistan only 0.17% are nursing students¹⁰.

The constitution of a task force on nursing education was certainly an important step towards the development of nursing education in the country. Graduate nursing programs are currently being introduced in Pakistan and while these programs are currently confined to a few private institutions, it is feasible to imagine government SON evolving from diploma to baccalaureate education within the next 15–20 years¹¹.

CONCLUSION

On the basis of the above findings, a comprehensive nursing faculty development program was developed and proposed to the HEC. This training program proposes to produce trained faculty in sufficient numbers, including 20 PhDN, 250 MScN and 1,500 BScN. The proposed nursing faculty development program also includes short courses and opportunities to attend national and international conferences which will enhance teaching and research capabilities of Pakistani nursing faculty. This comprehensive training program should address the acute shortage of trained nursing faculty by promoting higher education in nursing in the country.

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