

## EVALUATION OF GRADUATE NURSE PROGRAMS

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### ABSTRACT

In Western Australia, one year graduate nurse programs are provided by the major metropolitan and regional hospitals to facilitate the transition of graduating nurses from university courses to full-time clinical nursing. This study investigated the effectiveness of the existing hospital based graduate nurse programs from the perspectives

of present and past graduate nurses, nurse educators and hospital administrators. The study employed both quantitative and qualitative probes in the form of a broad based questionnaire and over 100 individual interviews. The questionnaire and interviews involved all stakeholders from commencing graduate nurses through to hospital management. A pilot study identified the relevant items for inclusion in the questionnaire. The 40-item questionnaire was distributed statewide to every person who could be identified as being involved in graduate nurse programs. The resulting statistical data was interpreted and used to generate the interview question set. The subsequent interviews provided individual insights which along with the statistical data were used to answer the study's key questions. In general, stakeholders agreed that graduate nurse programs are both essential and effective in integrating graduating nurses into clinical practice in this state's hospitals.

#### Background to Graduate Nurse Programs

Traditionally, the training of clinical nurses in Western Australia was the responsibility of the hospitals in which the nurses were employed. The past decade saw this training responsibility move from the hospitals to the tertiary institutions. While these university courses included regular in-hospital practicums, the employing hospitals perceived that newly registered nurses lacked specific day-to-day skills that were essential prerequisites for independent clinical nursing. It has been reported (Royal College of Nursing, Australia. Western Australian Chapter, 1993; Health Western Australia, 1993) that the hospital based graduate nurse programs exist because the hospitals believe that following university graduation, most newly registered nurses are unable to either accept a full patient load or function efficiently on their own within the hospital. Perceived deficiencies in the university graduates occurred in the areas of confidence, time management and prioritisation of clinical duties. Consequently, most of the large metropolitan public and private hospitals along with a majority of the larger country hospitals instituted formal graduate nurse programs during the period 1988-91.

The graduate nurse programs' first priority became the orientation of the graduate nurses into the culture of the employing hospital and this was thought to be achieved most effectively through a carefully structured 12 month program. The large teaching hospitals have been able to maintain autonomous programs in which all the needs of their graduates are met within their institutions. Smaller hospitals, especially some of the regional hospitals, have combined with other accessible hospitals to add diversity to their programs.

There is usually no guarantee of employment at the end of a program though a significant number of the nurses who have completed a graduate program are offered subsequent employment by their hospital. Some hospitals acknowledge that the graduate program is seen by them as a

reliable means of recruiting suitable staff and one large hospital has set its graduate program's intake number to approximate their normal attrition rate. Thus, hospitals view graduate nurse programs as an efficient 'finishing school' for commencing nurses. They believe that the programs warrant continuing examination, redevelopment and that deficiencies should be identified and modified in the interests of

promoting the nursing profession. It was for this reason, the Western Australian Chapter of the Royal College of Nursing decided to engage an evaluation team to examine the effectiveness of the graduate nurse programs.

#### Theoretical Framework of the Evaluation

The study was based on a conceptual framework model devised originally by Travers & Westbury (1989) which focuses on the intended, implemented and attained curriculum. The intended curriculum is that written by the graduate program designers and contained in course documents. It is also the expectations held by the various stakeholders of what nurses should learn. The implemented curriculum relates to what occurs when the graduate program is in action. The attained curriculum is that actually learnt by the graduate nurse. For a complete and meaningful evaluation of a program it is necessary to describe all three parts of the model and it was applied to the graduate nurse program situation as illustrated in Figure 1.

Figure 1. Model of Investigation.

#### Methodology

##### Sources of Information

To gather information, hospital administrators, graduate nurse educators, nurses and university lecturers were chosen as the data sources for the evaluation because they were the principal stakeholders. The interdependence of the contributions of each of the stakeholders can be deduced from Figure 1.

The data collection methods adopted employed an appropriate mix of qualitative (interviews) and quantitative (questionnaire) research methods. This mix is compatible with current research paradigms (Patton, 1990; Merriam, 1988) and was especially appropriate to the multivariate social contexts of nurse education in Western Australia. It was felt that a quantitative survey could provide a relatively complete statewide coverage and produce both overall and specific pictures of the graduate nurse programs. In addition, qualitative probes (White & Gunstone, 1992, Hook, 1981) in the form of extended interviews with randomly selected personnel, would illuminate the various programs from the personal viewpoint of the participants. The interviews were especially useful given the diversity of the programs which were surveyed using a single instrument, because the person-to-person discussions elucidated aspects of the individual

graduate nurse programs that could not be asked using broad-brush survey questions.

### Survey

In order to clarify which questions would be appropriate for the questionnaire it was considered essential to conduct a pilot study. The pilot study consisted of an initial visit to four metropolitan and two country hospitals at which interviews were conducted with nurses, nurse educators and nurse administrators. An analysis of the results from these interviews identified the possible relevant issues and guided the writing of the questionnaire used in the main study.

A 40-item questionnaire labelled Graduate Nursing Programs in Western Australia (GNPWA), was developed following the pilot study. Items were written and submitted to a committee consisting of the evaluators, nursing administrators and nurse educators to ensure that the individual items were considered salient by those in the nursing profession. Finally, the set of items was reviewed by people with expertise in questionnaire development.

The sample surveyed comprised nurses, administrators and nurse educators in 17 government and private hospitals located in Western Australia. Each hospital known to have a graduate nurse program was involved in the study. Following its development, panelling and content validation, and after appropriate approval, the questionnaire was sent to each person who was involved in the administration of a graduate nurse program and to each nurse employed in Western Australian hospitals that ran a graduate nurse program. The questionnaire results were analysed and the issues arising were followed up and investigated during more intensive interviews in 12 hospitals.

### Interviews

The interviews took a semi-structured form containing a common core of questions, which were then expanded to pursue individual needs and perceptions (Hook, 1981). The researchers were conscious of the need to triangulate the data in order to illuminate the evaluation in a valid, reliable and objective manner (Gay, 1985; Guba & Lincoln, 1989; Mathison 1988; Patton, 1990). With this in mind, the survey and the interviews included practicing nurses, nurse educators and course administrators.

### Results

#### Survey

Over 300 responses were received from the 17 Western Australian hospitals. The respondents were requested to assign the degree to which they agreed with each statement. The items were scored 1 through 5, with 1 being "strongly disagree" and 5 being "strongly agree". The item means and standard deviations based on the analysis of all respondents were calculated for each item and a stronger

agreement with an item was reflected by a higher item mean.

The results indicated that, except for two items, the range of means was from 2.72 to 4.68 and most standard deviations were less than 1.00. For 20 of the 40 items the mean score was above 4.00 indicating strong support for many aspects of the program. The two items for which the mean was less than 2.5 (the mid-point), indicated that nurses should not be selected for employment on the basis of academic results alone and that registration should not be delayed after graduation. Respondents clearly believed that a graduate nurse program was necessary. If a level of greater than 3.50 is taken as an indication of fairly strong agreement then the following points can be made.

In relation to curriculum content issues, respondents indicated that the programs should emphasise clinical, practical, interpersonal, communication and time management skills. Programs should also enhance a nurse's theoretical knowledge, contain a broad spectrum of experiences including specialisations, develop the self confidence of the nurse and contain a common core of knowledge that should be available in all hospitals. In the delivery of the program respondents supported the use of preceptors, peer support, use of professional development days (study days), case studies, induction days and rotations of hospital specialisations (e.g. medical, surgical ward). Assessment should be based on the demonstration of competence by the nurse. There is a strong belief that it is not possible for the universities to provide all the practical skills required of a nurse.

Observed differences between group means on each item for nurses who are/have been in the program and those involved in administration or are nurse educators were tested (using t tests) to determine whether these differences were statistically significant. Almost all of those surveyed (92.1%) felt that the graduate nurse program was necessary following graduation from the university based course. Of these

two groups, administrators and nurse educators felt more strongly that the program was necessary. Administrators and nurse educators felt that nurses who had previous hospital experience should also experience the graduate program. This perception is being implemented in practice at some hospitals. Nurses, however, felt that the program was less likely to be necessary for nurses who already had some form of previous hospital experience, e.g. worked in a country hospital, than did the nurse educators and administrators. Most of the respondents (81.3%) felt that selection for the graduate nurse program should not be based on academic results. Administrators and nurse educators felt that selection based on academic results was less acceptable than did the nurses (Table 1).

Table 1 Differences between Perceptions of Administrators and Nurse

## Educators and the Practising Nurses

While it was felt that the program was essential, it was not generally felt that it was essential for nurses to have completed the program as a prerequisite for registration. This perception was particularly polarised between the nurse educators and the nurses in the program. The nurse educators were more agreed that nurses should not be registered until they had successfully completed the graduate nurse program while nurses disagree (Table 1).

The majority of those surveyed (96.1%) felt that the program should run for at least one year. In fact a few hospitals are extending the length of the program. The graduate nurse program was perceived to be necessary as it provided skill training not readily accessible during a university based course. This view was held more strongly by nurse educators and administrators. There was a strong agreement between the groups, that the graduate nurse program should contain a fairly broad spectrum of practical experiences. There was also strong agreement that the different hospital programs should contain a basic core of knowledge and skills. The total program however, need not be the same in all hospitals.

Nurses were more likely than administrators and nurse educators to feel that specialist wards should be offered as an option within the program (Table 1). Later interviews revealed that this option should preferably be offered after completion of medical and surgical experiences. Notably, there was agreement that nurses should be given variety so that they could gain a range of experiences. (Interviews revealed that this range of experiences should involve mainly patient care, medical and surgical experience.) This variety did not mean more rotations but rather a managed variety during the time the graduate nurse was on a particular ward. From the interviews, it became apparent that a few graduate nurses did not receive a similar variety of experiences compared with others in the same hospital's graduate nurse program. Case studies that focused on time management were seen as important by the majority of the participants (70.4%).

Nurses viewed the study days as being more essential than did the educators (Table 1). Importance of study days was particularly emphasised by nurses during interviews. Nurses perceived the study days to be particularly appropriate for sharing experiences and reflecting on learning that had occurred.

It was apparent from the survey (and reinforced later in the interviews), that most participants (94.1%) agreed that the preceptors (a mentor) are an important component of the program. The administrators/nurse educators agreed more strongly than the nurses on

this issue.

The induction period during the program was viewed by most as important and of adequate length. The rotation system was viewed as adequate given the time limitations involved. While nurses were more inclined to favour the opportunity to have experiences on other wards (theatre, intensive care unit, etc.) adequate time for each rotation was viewed as the major priority. During the rotations grounding in the basic medical and surgical care skills was seen to be of prime importance. There was a perception that the demonstration of competencies was an important aspect of whether or not a nurse had completed successfully the graduate nurse program.

#### Items for Inclusion in Graduate Nurse Programs

All participants surveyed were asked to indicate on a scale of 1 to 4, what priority should be given to various items that could be included in the graduate nurse program. Items designated 4 were of highest priority. The six most important content items, in order, considered by the respondents were:

- practical clinical skills
- time management skills
- patient care
- drug administration
- pre- and post- operative care
- clinical decision making

The participants considered the following six items, in order of ascending importance, to have the lowest priority in the graduate nurse program:

- obstetrics
- revision of theory covered in undergraduate course
- theatre
- intensive care
- accident and emergency (casualty) unit
- E.C.G. and other electronic technology

The results of t test of difference in perceptions between administrators and graduate nurse educators, and the nurses involved in the program concerning the priority of items in the program indicated that for each item, the nurses felt more strongly that a higher priority should be given to that content area in the graduate program than did the nurse educators. Only in drug administration did the administrators/educators consider that the item was a more important content area of the program than did the nurses.

#### Interviews

Analysis of the interview data revealed that nursing personnel believed that graduate nurse programs are effective in achieving their objective of producing competent, confident clinical practitioners. The support

given to graduate nurses from other staff, preceptors, staff development and peers was seen to be the major strength of graduate programs. Improving graduate programs in order to facilitate this support was seen as desirable and suggestions were made such as increasing peer support sessions on study days, ensuring adequate supernumerary supervision from preceptors at the beginning of rotations and improving graduate access to staff development. Providing some kind of preceptor training would help to maximise the support and educational guidance for graduate nurses. As an extension of the support theme, all the interviewees felt that it was necessary or would be beneficial to include some kind of stress management in the graduate

programs. Some people felt that current programs addressed this issue to a certain degree by including training in areas like time management, which is a major source of stress to graduate nurses. Graduate nurse programs which provide a broad spectrum of experiences were favoured and for this reason the majority of interviewees supported the inclusion of ward rotations and experience in specialist areas such as theatre and accident and emergency. Experiences in different settings such as community domiciliary and nursing homes during the graduate program, however, were given a low priority by the majority of people interviewed.

Interviewees felt that the graduate programs were effective in improving graduate nurses' time management, independence and confidence, and improved their skills in communication, clinical work, decision making and time management. They also felt that the programs helped the nurses to develop team relationships and gave them support. The support given to graduate nurses from preceptors, staff development, peers and other staff was seen to be a major strength of graduate programs.

Currently, study days are an integral component of graduate nurse programs. During study days, nurses receive a variety of learning experiences. In particular, case studies were seen to be beneficial. More importantly, peer interaction was seen by the graduate nurses to be the most supportive and beneficial component of study days. Many graduate nurses saw study days as an opportunity for them to discuss and possibly resolve problems they had encountered in their clinical work. It was felt highly beneficial to be able to discuss such issues with peers in a quiet environment. Simply being able to talk to peers, to get their feedback, to share common experiences, and voice their concerns and frustrations was highly valued by the nurses. Nurses, administrators and nurse educators all commented that support sessions were one of the most successful ways of helping graduates to regain confidence and give them a sense of achievement. Additionally, it was felt that study days help to make the connections between theory and practice. Nurses like to be given the opportunity to say what they want to do on study days.



Administrators and nurse educators who were interviewed tended to point out administrative deficiencies of their graduate programs. The lack of finance was referred to and some thought that the programs take a lot of resources for relatively short term benefits. Further areas which were considered to be deficiencies included such things as the stress caused for nurses and others on wards when graduates are working, the limited number of rotations (when there are only two) and the poor resources available to graduate nurses.

The course rotation structure varies from hospital to hospital and nurses who experienced two, three or even four rotations found their experience satisfactory. All personnel agreed that the value of graduate nurse programs arose from a continuous period of medical and surgical ward nursing. However, the need for nurses to, at the least, sample the specialties available in their hospital, was a significant finding of this study. Many of the hospitals in this study do not include such speciality experience in the graduate programs. The hospitals providing an operating theatre rotation for their graduate nurses found this enhanced their program and that this action was viewed positively by both the graduates and the hospital administration. A similar conclusion emerged in those hospitals that provide experience in special care units and accident and emergency work (both occurred late in their program).

Currently, nurses are monitored and assessed by an appraisal which usually involves the preceptor and the nurse supervisor. The assessment tends to be formative in nature. Both nurse educators and graduate nurses viewed continuous assessment, including self-appraisal and preceptor feedback, as essential. Theoretical examinations were not viewed as being appropriate during graduate nurse programs.

### Conclusion

Graduate nurse programs are effective in achieving their objective of producing competent, confident, clinical practitioners. The programs achieve this by creating a better nurse in the following three ways:

∑The programs instil a self-confidence and professionalism in the graduates through the staff and peer support they offer and the relevant topics studied.

∑The graduate nurses are able to practise and improve their clinical skills under the guidance of more skilled practitioners.

∑There is a definite development of time management and prioritisation skills which are considered important areas of the programs.

It follows that these successful programs warrant continuing examination and redevelopment in the interests of promoting the nursing profession.

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