

Facilitating Positive Attitudes Towards an Innovative Programme for Baccalaureate Nursing Education:

Example From The Clinical Setting In Durban

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"Respondents in the early part of the year, despite their previous exposure to the students undergoing PBL baccalaureate programme ... revealed a gross misunderstanding of the purpose and the intention of problem based learning to use "real world" problems as a context for students to develop and acquire life-long skills in areas of knowledge and practice."

Abstract

A survey of nurse ward leaders understanding of, and their attitude to, community/problem based learning (CPBL) approach adopted for the education of nursing students in the degree programme of the University of Natal in Durban (UND) was conducted. This was with a view to intervening, if necessary, to ensure positive understanding and attitude among the nurse leaders towards the non-traditional CPBL of UND nursing students. It was hypothesised that focused discussions, between facilitators and nurse ward leaders, aimed at providing information and explanation about the advantages of changing from traditional to non-traditional educational programmes in nursing would enhance positive attitude towards the students and their education programme. Using a questionnaire developed for this study, quantitative and qualitative data were twice collected at intervals of 5-6 months from 54 nurse ward leaders who interacted with the CPBL students in 27 wards of 2 provincial hospitals. The data, collected in the early part of the students' deployment and at 5-6 months after included information about the participants understanding of CPBL; their rating of CPBL students in terms of expected knowledge and practice; and their attitude towards CPBL nursing students in clinical settings. Contact sessions were held with the participants in between the measures for a discussion about the CPBL programme and the expectations of the learners. Analysis of the pre and post measures showed more favourable attitude, improved understanding, and tolerance towards the students by the nurse ward leaders in the post-measures than in the pre-measures. The writers concluded that if students in this type of programme must experience satisfaction with less intimidation, implementers of CPBL programmes in nursing should relentlessly involve the qualified nurses and other professionals working with the students in informative discussions about the purpose and the process of learning in such programmes.

Key words

Nursing Education, Baccalaureate Nursing Programme, Community-based learning (CBL), Problem-based learning (PBL)

Introduction

The School of Nursing at the University of Natal in Durban (UND) utilises a community/problem based learning (CPBL) approach for the education of the baccalaureate nursing students. This implies a shift in paradigm from the traditional hospital focused, content-based education to a less traditional self-directed CPBL in the School of Nursing. Teachers and students in this CPBL baccalaureate nursing programme need to constantly interact with the practising nurses in the clinical settings so as to meet the objectives of bridging the theory-practice gap in nursing education. Teachers, learners and the staff in the clinical settings, in order to achieve consonance between education and practice objectives, must have reasonable understanding of each other's goals and the process of achieving such goals. Lack of understanding among teachers, students and staff in the clinical settings may stem from disparities in past experiences and expectations from each other.

Like most graduates of previous and present educational programmes in nursing, most qualified nurses went through the traditional pedagogic teaching-learning method, with specified curriculum content.

The curriculum of the 4-year baccalaureate degree at this University makes provision for all nursing courses to be taught in a self-directed, community / problem-based manner. The clinical learning activities take place in 3 representative communities, which include an urban, a suburban, and a typically rural community setting; and in hospital settings. Using andragogic principles, the nursing students are expected to be self-motivated, and self-directed as they build new learning on past experiences. They

are expected to be capable of defining personal goals, and able to achieve maximal learning given appropriate learning opportunities (Knowles, 1984; Nielson, 1989). The School's shift from the traditional hospital, content based, pedagogic approach to nursing education had been reported to lead to different forms of favourable and unfavourable encounters among and within the students, the faculty and other nurses with whom they must interact in their day to day learning experiences (Adejumo & Brysiewicz 1998). This paper describes one of the approaches used to handle one of the problems encountered in the implementation of the CPBL programme of the School of nursing at UND.

Background to the problem

Twenty eight (28) third year CPBL nursing students of UND have been deployed to fifteen (15) of the twenty seven (27) wards in two (2) hospitals jointly used for the clinical experience of college nursing students who are in the traditional hospital based programmes. The only procedures these CPBL students learnt before their deployment to the hospitals were basic medical asepsis technique, bedmaking, physical assessment and bedbath. This was designed to enable them participate in the activities of the wards during their first week of orientation to the units. During the semester times, these students stay in the clinical settings for 27 hours per week of day duty, and are on for 40 hours per week of day duty, or 55 hours per week of night duty during the University vacations. Their clinical placements, no doubt, suggests heavy reliance on practising qualified nurses to serve as role models and mentors for the nursing students in clinical settings. Faculty members visiting students in the wards perform more of a liaison role than as providers of hands-on care. Wong and Wong (1987), and Linderman (1989) remarked this about faculty members that academic demands, arranging of placements, legal contracts, and commuting are some of the constraints that make faculties depend on the qualified staff to influence the learning of students in clinical areas. The third year students reporting in a group feedback, during classroom sessions, at the early part of their posting more than echo similar problems of initial experiences of nursing students in clinical settings. Students expressed confusion and frustration. They felt that the qualified nurses in the wards were not sympathetic and that they showed no understanding of their programme. In the students' own words, the qualified nurses "are not co-opera-

tive". A particular student said "I was made to feel inadequate on the ward because I was assigned to a patient who needed dressing, and I was totally lost". Another said that her "ward sister" could not understand "how in third year a nursing student would require assistance in discontinuing an intravenous drip".

Literature Review

Literature has consistently suggested that nursing students' clinical experiences are anxiety producing, and that, this is particularly true for initial experiences in different clinical settings or units (Kleehammer, Louise and Keck, 1990; Lewis, Gadd, & O'connor, 1987; McKay, 1978; Policinski & Davidhizar, 1985). Blainey (1980) suggested that student's anxiety can be reduced by creating a climate of acceptance for learning in which all behaviour and knowledge application are not expected to be perfect. In a study conducted by Windsor (1987), students reported that those things that facilitated their learning in the clinical settings included their own preparation, and that supportive supervision in a non-threatening atmosphere was conducive to learning. The same study reported that nursing students worry about approval from staff and students. Approval from staff made a clinical day good for the students, while criticisms from staff made the nursing students' clinical day bad for them. The consequence of negative attitude to students' learning is that the students ask questions of their peers, rather than risk being judged as incompetent by a non-understanding qualified staff. Service and education have traditionally viewed students differently. To a nurse educator, the clinical setting is a place where a nursing student comes in contact with clients and their families to acquire intellectual and psychomotor skills, but qualified nurses in service will often want to look at the clinical setting in terms of a setting to render quality care (Infante, 1986). Expectations conflict, and this may be accentuated by the shift in the mode of educating nursing students from a traditional approach to an innovative CPBL model.

Research Problem

It was against the background of the students' expressed discomfort in the clinical settings that this study was undertaken with the following questions in mind:

1. What understanding do the nurse ward leaders have concerning the CPBL approach in the education of baccalaureate nursing students?
2. How do the nurse ward leaders perceive the nursing students in a bacca-

laureate CPBL programme?

3. Can further explanation and discussions of the CPBL programme with the ward leaders improve positive attitude towards the CPBL programme in nursing?

Methodology

A survey design, with pre and post measures, was adopted to guide the data collection from the participants in this study. A total of 27 wards in two hospitals were identified by the faculty members during their normal clinical supervision of nursing students for this research. Sixteen (16) of the wards are in one hospital, while the remaining eleven (11) are located in the other hospital about 20 kilometres away from each other.

Target population

Nurse ward leaders with their deputies were targeted as participants in this study. They were specifically targeted because as leaders in the units, they wield enormous influence on the behaviour and attitude of their subordinates in the clinical settings through the usual act of expressed opinions, supervision and control. For the 27 wards, the number of participants was estimated to be 54, based on 2 participants per ward.

Instrument

The questionnaire is a three-part instrument developed by the researchers for the study. First part of the questionnaire elicited information about the respondents' understanding of community/ problem-based learning. The second part requested the participants to rate CPBL students in terms of expected knowledge and practice in the clinical settings on a visual comparative rating scale from 0-10 determined by using the same measure for the traditional nursing students in their units. This section also requests agreement or disagreement with 17 statements generated from the usual comments made by the students about the attitude of senior nursing staff towards them in the clinical settings. The third section of the questionnaire included open-ended portions that allowed the respondents to comment freely on their concern about problem based learning approach to educating nurses. The questionnaire also allowed the respondents to include any other thing they needed to know about CPBL, or on some aspects of the questionnaire. This semi-structured and self-completion questionnaire did not require the name of the participant or other forms of identification. The first page of the questionnaire contained a formal request by the investigators for the consent of the participants, with a guarantee of confidentiality for all responses given.

The questionnaire was reviewed for item clarity and face validity by four colleagues and four registered nurses working in hospitals different from those where the students are placed. The suggestions from this exercise were used to refine one item about duration of exposure to PBL, which yielded different measures of strings and numerical data. Validity and reliability were not subjected to further quantitative or statistical testing.

Attitude as used in this study simply implies communicated dispositions, like agreement or disagreement, capable of influencing behaviour. This is in recognition of the shortcomings inherent in the definitions of attitudes as dispositions, readiness to act or as behaviour, which have been sources of controversies in several writings (Lalljee, Brown, and Ginsburg, 1984; McGuire, 1986).

Procedure for Data Collection

During the normal faculty members' visits to the students in hospitals, the nurse ward leaders and or their deputies were requested for a quick chat about the nursing students that were on deployment to their wards. The participants were at this point requested to participate in the study with explanation of its process and the purpose. The covering letter on the questionnaires also repeated the explanation and reiterated that participation was voluntary and that participants were also free to discontinue participation at any stage of data collection. It was also reiterated that information provided would be treated confidentially and as anonymous. The questionnaires handed over to the participants were collected back by the researchers on an appointed date. This procedure was used for the initial administration of the questionnaire (pre-test) and a follow up administration six months after (post-test). The questionnaires were administered to the same respondents in early part of the students' deployment to the wards and six months later.

After the initial data collection, the participants were followed up with deliberate, unsolicited structured information built around the clinical experience of the CPBL students. Two sessions each of unsolicited discussions were initiated with the participants. The usual method of initiating the discussion with them was to ask if the students were coping with the demands on the ward, with a reminder of the difference in the learning styles of CPBL students. This invariably led to giving of structured information about: (1) CPBL programme of the School of Nursing at the UND; (2) the CPBL process; and (3) how the students learn in CPBL. Discussion with each participant usually took between 10-15 minutes per session. Each ward was

noted as completed once the discussion was concluded, and it took the whole of the third and fourth months of the year to get round all the participating nurses. The students had completed five months altogether in the various hospital wards before another set of data was requested from the initial participants, using the same instrument and procedure as earlier described. Results were compared for analysis.

Data Analysis and Findings

Data were collected from 54 respondents in the 27 wards of the two hospitals (see table 1). Fifty-two (96.3%) of the distributed 54 questionnaires were analysed for pre-test. The remaining were returned partially completed, and therefore excluded for analysis. Analysed post-test questionnaires were 47 (87.04%) of the 54. Ages of the participants in the pre and post measures ranged between 26 and 56, Mean age = 33 and 33.1 respectively. They have all been qualified as registered nurses, and at least one other additional qualification for the period ranging between 5 to 31 years. Average number of years of qualification is 12.4 and 12.5 in pre and post measures, respectively. Only 12 (23.1% and 25.5%) of the participants in both pre and post measures had university degrees in nursing, and one of the 12 was educated in a PBL format. The following are the findings from the responses analysed.

The question, "what does problem-based learning mean to you?" yielded different responses. The responses were content analysed. This provided four main categories as determined by 2 independent raters with 78% agreement. The categories are presented in Table 2. Even at the superficial level of the meaning of PBL, only 10 of the responses, in category 3, can be said to have offered meanings categorisable as correct.

Example of responses in Table 2 for category (1) is "I am not used to the term", or "Problem based learning is not clear". Example of category (2) is "...is the same as learning through the use of nursing process", or "this is the same as nursing process, and I don't like it". Example of category (3) is "this is learning through problem solving", or "learning from problems presented to the students". Example of category (4) is "learning nursing by case study", or "the same as case study method".

Post test responses for the same question are simply categorised as correct or incorrect by two independent raters with 91.49% agreement. Correct response for the purpose of this study means a

recognition of PBL, by the respondents as an approach/method of teaching/learning whereby students learn by studying and or analysing the actual problems or situations they come across during their clinical experience". Comparison of the 2 results is presented in table 3.

Respondents were requested to rate the performance of the PBL nursing students using the same criteria as they would use for the students in the traditional nursing programme (TNP) that are also using the same clinical facilities. Pre test and post test comparison of the rating of the knowledge of the PBL and the TNP yielded the results presented in table 4. All statistical analyses of the means between and within variables using Kruskal-Wallis analysis of variance (ANOVA) showed no significant difference, except for the practical rating of the PBL students that received improved rating at the post measures. For the pre and post test practical skills rating for the PBL students, Kruskal-Wallis $H = 13.313$, $df = 5$, $p = 0.0206 < 0.05$, indicates a significant improvement in the post test rating over the pre-test rating. The pre and post test knowledge means of the PBL students, Kruskal-Wallis $H = 6.378$, $df = 5$, $p = 0.271$, > 0.05 , are not significantly different.

Attitudes to the PBL students by the nursing sisters are rated on a 5-point scale with 5 representing highly positive, and 1 representing least positive. Respondents level of agreement or disagreements with the statements made about PBL and PBL Students were compared for any shift over time between the early period of exposure to the PBL students and later after exposure to the students and structured information about PBL. The responses are re-grouped into 6 themes for analysis. Positive dispositions are indicated with a plus sign (+), negative with a minus sign (-) and mid-range positions with a +/- sign. The findings are presented in Table 5.

Where the respondents were allowed a free space to ask a question or comment freely about their concern regarding PBL, attempts were made to analyse the comments before and after for themes. Seventeen (32.07%) of the 52 initial respondents wanted more information on problem based learning, 11 (21.1%) queried the rationale for delaying the students' hospital clinical experience till their third year. Other responses, 8 (15.4%) did not fall into a category in particular. They address different issues like: "... the degree students do their own thing, they only listen to their lecturers." Another respondent asked, "how will the patient benefit from being nursed by a nurse using problem-based learning?" Other respondents (30.7%) left the space blank for comments blank on the ques-

tionnaire. The post test free comments on the questionnaire yielded the following themes: Concern about students not spending "enough time" in the wards was raised by 19 (40.4%) respondents, the need for early information about PBL by 10 (21.2%) of the respondents. Concern about content coverage, e.g. "What if the students do not experience problems?" was raised by 13 (27.6%) respondents. The remaining responses do not fit into clear themes. Three (6.3%) of the respondents offered suggestion to the School of Nursing, that the School need to organise workshops/Seminars on PBL for the nurses in the clinical areas to assist them to understand the students' programme.

Discussion and Recommendation

Respondents in the early part of the year, despite their previous exposure to the students undergoing PBL baccalaureate programme from the UND School of Nursing revealed a gross misunderstanding of the purpose and the intention of problem based learning to use "real world" problems as a context for students to develop and acquire life-long skills in areas of knowledge and practice. Respondents' reaction to the PBL nursing students can be confirmed by the mean rating given to the PBL students on knowledge and practice when compared with those of the traditional diploma nursing students. The PBL students tended to receive more inferior rating than the traditional students initially, though, not significantly different, but this rating appeared to improve drastically for the PBL students in the post test. The rating for the traditional students nevertheless appeared to stagnate and in fact marginally less than the pre-test ratings. The explanation for this may be that the initial ratings were reactionary, which may have demonstrated what the respondents really feel and think of the degree nursing students in a PBL programme. The findings in table 5, also tend to confirm disharmony in the expectations of the qualified nurses, in relation to the expectations of the programme. The sisters appeared to expect that nursing students on the wards are to practice what is already learnt, while PBL sees students' experience in the ward as part of the process of learning. The post test scores on the attitudinal disposition of the respondents towards the students though generally showed a positive shift at the after measures, this may be attributable to several factors of time, the interaction, students own demonstration of learning, and the sisters better understanding of the process of PBL. Nursing students to a great extent

are still viewed as supplementing qualified staff requirements in the clinical settings. This position more than disadvantages the PBL students whose main and primary concern in the clinical settings is experiencing situations in order to identify learning issues for study and practice. Barnard and Dunn, (1994) noted this when they suggested that a guiding principle that must be considered in a review of the appropriateness of a clinical experience is that students are not involved in clinical practice to supplement the staffing requirements of a placement. The major concern of the respondents still appear to be how the students will be able to cover the content like in the traditional programme. They also feel that the period spent in the wards should be increased. This could be an indication of the respondents' inability to fully come to terms with the reiterated advantages of CPBL for the students and their community. Behaviour dispositions that may be linked with inferior rating of students' practice in the hospital wards can be intimidating to students. It becomes apparent that if the students in the CPBL programme are to experience more satisfaction with less intimidation, strong advocacy for the PBL programme, and the School's programme structure must precede the students before they get into the clinical areas and this must also vigorously continue, until noticeable signs of understanding are present. It is suggested that lecturers' follow up of students in the clinical areas in the early years of innovative changes like in PBL should be used as opportunity to deliberately involve qualified nurses and other professionals, working with the students, in informative discussions about the purpose and process of the changes. This kind of discussion need to be done relentlessly, as the hospitals that are used cannot continue to guarantee that the same staff spoken to this year would still be there in another year. Hospitals like those that are used for the students' clinical experience are known to experience high staff turnover rates which makes it imperative to continuously repeat discussions with new members of staff so as to achieve consistent results. The suggestion of workshops/seminars on a regular basis for the staff of the hospitals in order to continue to sort out the expectations of the programme in reconciliation with the expectations in clinical areas as put forward by three of the respondents can also assist to enlist the co-operation of staff in the hospitals. Students' satisfaction with this kind of radical learning approach can be compromised by negative attitudes to the programme by those that are seen by the students as senior members of the profession who should show understand-

ing of their needs and give guidance. Another possible strategy that can be suggested with non-financial implications is to experiment with appointment of clinical teaching associates, a model described by Melander and Roberts (1994) which incorporates the appointment of experienced registered nurses in the clinical areas as teaching associates which enhances the creation of an effective student/faculty/expert nurse triad in the clinical settings. This has the potential of strengthening the practice-education link, because the clinical teaching associates are able to identify with the university-based programme, recognise its credibility and worth, and therefore demonstrate support for the activities within the hospitals and the community.

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Table 5: Weighted pre and post measures of degree of positiveness towards PBL and Pbl students in the responding Qualified nurses.

Theme	Weighted Response (mean)		Comments
	Pre-test	Post-test	
CPBL students self directedness Assumes more responsibility for expanding own knowledge than a student from the traditional nursing programme	3.9	2.5	+ positive
CPBL students will be more independent and more competent in problem solving than the students of traditional nursing programmes	2.5	3.0	+/- neutral
CPBL Students level of performance Students using the PBL approach are as competent as those going through the traditional method of educating student nurses	1.5	2.0	- negative
I will expect that a 3rd year baccalaureate nursing student posted to a hospital ward or a clinic should just be developing the needed basic nursing skills for nursing practice.	2.7	3.0	+/- negative
I will expect that a 3rd year baccalaureate nursing student posted to a hospital ward or clinic should have developed basic clinical nursing skills needed for nursing practice.	1.7	2.0	- negative
PBL nursing students need more assistance in their work than the traditional nursing students.	1.9	2.5	- negative
Appropriateness of CPBL for professional Nursing Education: Problem-based learning method of teaching nurses is also effective for the education of professional nurses.	2.9	3.4	+/- negative
Students using the PBL can also be as competent in practical skills as much as the students in the traditional programme	1.9	3.2	+ positive
Assistance for CPBL students Ease of interacting with a PBL student compared with a student from the traditional nursing programme	2.8	3.4	+ positive
I sometime tend to neglect the PBL baccalaureate nursing students because I do not understand their programme.	3.5	3.6	+ positive
Ease of helping a CPBL student meet her learning needs in a clinical situation compared with that of students from the traditional nursing programme	2.7	3.2	+ positive
Able to assist the nursing students in a PBL programme by helping them identify what they need to know.	3.1	3.6	+ positive
Interest in CPBL approach to Nursing Education: I am interested in clinical supervision of PBL as much as for the students in the traditional nursing programme	2.5	2.6	- negative
I will like to work with students in a CPBL nursing programme	2.2	2.5	- negative
I accept suggestions from PBL students regarding patient's care	3.5	3.7	+ positive
I will also prefer being taught using the PBL approach to using the traditional method of teaching	2.6	3.1	+/- negative
Intellectual skill of the CPBL students Students in the PBL baccalaureate nursing programme are more able to think critically than the students of traditional nursing programmes.	2.5	3.1	+/- negative
PBL students are more independent and more competent in problem solving than other students from the traditional programme	2.5	3.0	+/- negative

Table 1: Ward Clusters and Participants' number in the 2 Hospital Settings

	Clusters	Hospital A	Hospital B	Total	Participants
1.	Medical	5	2	7	14
2.	Surgical	4	2	6	12
3.	Orthopaedics	3	2	5	10
4.	Gynaecology	1	1	2	4
5.	Paediatrics	2	4	6	12
6.	Urology	1	0	1	2
	Total	16	11	27	54

Table 2: Response categories for Meaning of PBL

	Category	Responses
1.	Meaning not clear	14 (26.9%)
2.	Same as Nursing Process	16 (30.8%)
3.	Problem solving	10 (19.2%)
4.	Case study method	12 (23.1%)
	Total	51 (100.0%)

Table 3: Comparison of Pre and post test response on meaning of PBL

	Meaning of PBL	Pre-test	Post-test
1.	Correct	10	27
2.	Incorrect	42	20
	Total	52	47

$\chi^2 = 13.81$ (Yates corrected), $p = 0.00002$; <0.001 , significant.

Table 4: Comparison of Pre and post test rating of PBL Vs TPN performance

Source	Knowledge		Practice	
	PBL	TNP	PBL	TNP
Pre-test means	4.979	6.234	4.894	6.128
Post test means	6.745	6.170	6.213	5.830

Kruskal-Wallis $H = 13.313$, $df = 5$, $p = 0.0206 < 0.05$ for pre and post tests of practical skills ratings,
 Kruskal-Wallis $H = 6.378$, $df = 5$, $p = 0.271$, >0.05 , for pre and post tests of the knowledge ratings.

