

*Full Length Research Paper*

# Assessment of the performance of nursing graduates based on selected task after completing a post registration Baccalaureate programme

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To assess the performance of graduates based on selected nursing duties after completing a post registration Baccalaureate nursing programme of the University of the West Indies, St Augustine, Trinidad and Tobago. All 273 graduates of the programme were asked to provide their self-assessment of their performance using a Likert-like scale. Additionally, 110 supervisors rated their satisfaction with graduates' performance using a self-administered Likert-like questionnaire. Response rates were 67.4% and 60.1% for graduates and supervisors respectively. Results show that 73.4% of the graduates are aged 21-40 years, while, 82.2% of the supervisors are 41 years or over. The mean scores from the supervisors were highest in Leadership (4.09) and lowest in "managing challenging situations" (3.22) while Graduates scored 4.41 and 3.87 for "Teaching junior nurses" and "Leadership" respectively. Results have shown high and positive agreement in the scores of the performance of the graduates but significantly discrepant scores on some of the nursing duties ( $p < 0.05$ ).

**Keywords:** Performance assessment, Nursing Education, programme evaluation and developing countries.

## INTRODUCTION

Since 2005, 273 nurses have graduated from (a) Nursing Education, (b) Nursing Administration, (c) School Nursing, and (d) Oncology of The UWI school of Nursing, University of the West Indies, St. Augustine, Trinidad and Tobago. Also many nurses have embarked upon a number of Continuing Education programmes from the school. We thought it important to ascertain how well the existing programmes are perceived by their "key stakeholders" especially those that supervise the graduates, and the graduates themselves so as to use the findings for improving the programme, and be cautioned by any weakness that the key stakeholders may express (Halcombe and Peter, 2009). Thus, it has become necessary to justify and validate the existence of the programmes with verifiable and validated performance data given their cost implications to the public (Newcomer, 2001).

Watson and Herbener (1990) gave an insight on the different ways an educational programme may be evaluated. In any way, the purposes of programme evaluation are to diagnose problems, weaknesses and

strengths, test new and different approaches for accomplishing and advancing the school's philosophy, objectives and conceptual framework, improve the operation of all aspects of the school (Poteet and Pollak, 1986). Programme evaluation in nursing education can help faculty and administrators account for scarce fiscal resources, make administrative and curricular decisions, appraise faculty and staff development needs, examine both intended and unintended effects of their nursing programmes within the community and provide a mechanism to assure fulfilment of accreditation requirements (Bradshaw and Merriman, 2007). Furthermore, Watson et al (2007) discussed the "untapped resource of data" pertaining to the evaluation of programme outcome in areas of professional competence. It is however necessary that these should be done regularly and reviewed over time so that general trends of strengths and weaknesses as well as unrealistic expectations of graduates can be identified (Knowles et al., 1985). This is perhaps why, in the UK, Bradshaw and Merriman (2007) attempted to find out if "nurses were fit

for practice” following a 2-decade intervention. We note that there may not be congruency in expectations between the graduates and their supervisors. For example, Lin, Wang, Yarbrough, Alfred and Martins (2010) have found a change in students value expectations in educational experience in Taiwan while, Meretoja et al (2003) posited that supervisors have significantly higher perceptions in managing situations than their nurses in clinical competence in Finland. Similarly, in Taiwan, discrepant perceptions were noted between the supervisors and their supervisees (Liu and Liu, 2011; Chen et al., 2012) Although the perceptions were largely high and positively good, the supervisors reported higher perceptions than their counsellors in an addiction treatment programme in Georgia, USA (Laschober et al., 2012). In this study, the authors’ intend to assess the graduates performance as a way gauging the extent to which the new Baccalaureate programme is accomplishing its intent (Meretoja and Leino-Kilpi, 2003). This is the first time the programmes are to be assessed since 2005 and we envisage the result will have implications for further development of the programmes (Jonson and Blankhorn, 2013).

**Aim:** To determine how the graduates and their supervisors assess the performance of graduates after completing a post registration nursing programme of the University of the West Indies, St Augustine, Trinidad and Tobago.

## Methodology

A cross sectional descriptive survey was conducted when 273 graduates of the school and all identified supervisors of the graduates were identified and requested to participate. Participation was voluntary, and each person was required to give his/her informed consent. This was carried throughout the twin island nation.

Two sets of instruments were designed, pre-tested and used. The instrument for (a) graduates was a Nurses’ Self Confidence Interval Scale adapted from Cleary, Matheson and Happell (2009). It was made up of two sections, the demographics in section A, and Section B solicited information on the nurses’ level of confidence in performing 10 selected nursing duties. The ten duties selected were; “care of patients, involvement in nursing team activities, performing interdisciplinary teamwork, communication with peers, supervisors and contemporaries, and how the nurses managed challenging situations. Others were; how the graduates are involved in teaching the junior nurses, the graduates’ expertise in documentation and records keeping, their expertise in medication discussions with patients, their counseling expertise and their ability to exhibit leadership qualities. Cleary et al (2009) itemize these among others, but we felt that these to a large extent captured the essence of the curriculum at the UWI school of Nursing.

A similar instrument was adapted for their supervisors,

aimed at gauging their level of satisfaction with the performance of the graduates under them. Section A of the instrument was to elicit the supervisors’ demographics, while section B was similar to section B for the graduates, but structured to assess the level of satisfaction the supervisors had in the performance of the graduates in their care. There were also 10 items coinciding with the 10 items in the section B of the graduates’ instrument.

These instruments were pre-tested repeatedly, and continuously adjusted until they were determined to have face, content, and convergent validity (Stommel and Wills, 2004).

The graduates were required to give their rating of the 10 items on a 5-point Likert-like scale ranging from “Definitely Confident”, 5points to “Absolutely no Confident” 1point on their perceptions of their performance at their respective work places describing their levels of expertise. On the other hand, the supervisors were required to give their rating of their supervisees on 10-item variables describing their perceptions of their satisfaction level of their supervisees as they performed these nursing tasks. A satisfaction index scale, already tested was adapted. Its rating scores ranged from “Very Satisfied” (5points) to “Very dissatisfied” for 1point (Cowin, 2001).

Before administering the instruments, the researchers first communicated to all regional health authority managers, for candidates in Trinidad and Tobago, for permission. Consents were sought from all anticipated participants who were required to give their informed consent. Necessary ethics clearances were secured from (a) the Ethics Committee of the Faculty of Medical Sciences, University of the West Indies, and (b) the Ethics Committees of the Regional Health Authorities. The distribution, monitoring and collection of the questionnaire were done by a Research Assistant who was trained on the distribution of the instruments to participants. All the questionnaires were self-administered.

**Data Processing:** All data were treated confidentially, collated manually and, entered into the SPSS version 16 programme. Frequencies were computed for the information on the demographics in sections A of the instruments for both the supervisors and the graduates. The means of the responses in Section B, were represented on (a) the percentage of graduates who indicated that they were “definitely confident” or “confident” in performing their tasks; compared with (b) the percentage of supervisors who indicated “very satisfied” and “satisfied”, since the items were identical, but while the graduates were registering their degree of confidence in performing their tasks, their supervisors were indicating the degree of satisfaction on how the graduates performed these tasks. All qualitative data were analyzed using chi-squared ( $\chi^2$ ) test for non-parametric parameters. A p-value less than 0.05 was

**Table 1.** Demographic Characteristics of the Supervisors and the Graduates

Demographic Characteristics	Supervisors (%)	Graduates (%)
<b>Age</b>		
21-30	6 (9)	51 (28.4)
31-40	6 (9)	99 (55)
41-50	19 (28.4)	27 (15.1)
51-60	18 (26.9)	7 (1.5)
61 and above	18 (26.9)	0 (0)
<b># of graduates supervised</b>		
1-2	35 (52.2)	
3-4	32 (48.8)	
<b>Sex</b>		
male	6 (9)	11 (5.9)
female	61 (91)	173 (94.1)
<b>Type of institution</b>		
Primary care facility	6 (9)	62 (33.7)
Secondary care facility	38 (56.7)	115 (62.5)
Tertiary care facility	23 (34.4)	7 (1.5)
<b>Recommend the programme to others</b>		
Yes	43 (64.2)	
Not sure	18 (26.9)	
No	6 (8.9)	

(N=67 for Supervisors)

(N=184 for Graduates)

**Table 2.** Percentage of Graduates and Supervisors rating Graduates' performance on selected nursing duties (N=184 for Graduates; N= 67 for Supervisors)

Nursing Duties	More than Midpoint%		Midpoint%		Less than Midpoint%	
	Graduates	Supervisors	Graduates	Supervisors	Graduates	Supervisors
Care of Patients	62	74	38	6	0	19.4
Nursing Teamwork	68.3	68.7	30.6	22.4	1.1	9
Interdisciplinary team work	64.6	50.4	33.2	28.4	1.8	20.9
Communication	67.5	73.1	31.4	17.9	1.1	9
Managing challenging situations	62.7	46.3	37.3	10.4	0	43.3
Teaching nurses	96.7	46.3	2.2	35.8	1.1	17.9
Documentation	70.8	68.6	29.2	22.4	0	9
Medication	62.4	73.1	30.3	17.9	7.4	9
Counselling	67.5	58.2	31.4	32.8	1.1	9
Leadership	61.6	82.1	37.8	9	2.6	9

considered statistically significant under 2-tailed testing (Onuoha et al., 2013).

## RESULT

The demographic characteristics of the graduates and

their supervisors shows that only 1.5% of the graduates are more than 50 years compared to their supervisors where only 18% are 40 years or younger (Table 1). Most (91% and 94.1%) were females for supervisors and the graduates respectively. Majority of the graduates and supervisors worked in the secondary care facilities (56.7% and 62.5%) respectively. Only 8.9% of the

**Table 3.** Mean Scores and their Standard Deviations of Supervisors and Graduates on Graduates' performance on selected nursing duties (N=67 for Supervisors; N=184 for Graduates)

Nursing Duties	Supervisors		Graduates	
	Mean Score	Standard Deviations	Mean Scores	Standard Deviations
Care of patients	3.55	.803	4.04	.938
Nursing teamwork	3.6	.653	4.14	.932
Interdisciplinary teamwork	3.61	1.141	4.02	.935
Communication	3.8	.833	4.12	.933
Managing challenging situations	3.22	1.380	3.91	.810
Teaching junior nurses	3.55	1.077	4.41	.648
Documentation	3.96	.976	4.24	.878
Medication	3.82	.833	3.93	1.154
Counselling	3.4	.660	4.12	.933
Leadership	4.09	.900	3.87	.785

supervisors would not recommend the programme to others while 52.2 and 48.8 of the supervisors supervised 1-2 or 3-4 graduates respectively (Table 1).

The percentage of graduates and supervisors who rated the graduates' performance according to (a) more than midpoint; for score of 4 and 5 in the likert-like rating scale, (b) midpoint; for score of 3 in the scale, and (c) less than midpoint, for scores of 1 and 2 were compared in table 2. It can be observed that the rating ranged from 0 to 7.4% for less than midpoint, among graduates rating their performance of the nursing duties. The supervisors' ratings ranged from 9 to 43.3% on the nursing duties. Interestingly, the rating for "managing challenging situation", "Interdisciplinary team work", "care of the patients" and "teaching junior nurses" were significantly different with the graduates' rating at 43.3%, 20.9%, 19.4 % and 17.9% respectively ( $p < 0.05$ , Table 2). Similarly, the percentage of supervisors rating the graduates' performance "more than midpoint" was significantly higher in "leadership" (82.1%), "medication" (73.1%) and "care of patients" (74%) while the graduates' rating was significantly higher in "teaching junior nurses" at 96.7% ( $p < 0.05$ , Table 2).

Table 3 compared the graduates' and the supervisors' mean scores and standard deviations of the performance of the graduates on the selected nursing duties. With mean of means of 3.66, and 4.08 for supervisors and graduates respectively, the mean scores from the graduates were significantly higher than the mean scores from their supervisors, in all 10 nursing duties investigated except for "leadership" which was scored significantly higher by the supervisors ( $p < 0.05$ ). Further

analyses showed that, generally, there was no significant gender-, type of institution-, or age-related differences in rating of the graduates' performances between the two groups.

## DISCUSSION

This study is an attempt to document for the first time the assessment of (a) the graduates and (b) their supervisors; of performances of graduates of the school, since graduating from the post-registration B.Sc. programme in Nursing. The findings show relative agreement in high scores from both groups in all 10 selected nursing duties. This finding can be reasonably interpreted to mean that the school's programme is meeting the expectations of the two stakeholders, even if "above the midpoint" is considered the acceptable level (Jones et al., 2001).

Also this study was aimed at determining if the perceptions of the two groups differ in their assessment of the graduates' performance of these duties. The results indicate significantly discrepant scores on a number of items. For example, when the supervisors perceived the graduates to be exhibiting reasonable leadership skills, the graduates did not score themselves as high. Conversely, whereas the graduates believed that they were doing enough of teaching to their junior counterparts, their supervisors did not score them as high. It is worth noting that the scores were all above the midpoint. This discrepancy in rating or expectations of the performance of graduate nurses between the graduates

and their supervisors concurs with Badr et al (2010); Lin et al (2010); Laschober et al (2012).

This study highlights four areas of concern namely:

(a) As much as 43% of the supervisors rated the graduates' performance as "less than midpoint" in "ability of the graduates to manage challenging situations";

(b) 20.9% of the supervisors rated the graduates' interdisciplinary teamwork "less than midpoint";

(c) As much as 19.4% of the supervisors scored the graduates' performance on care of patients "less than midpoint" and

(d) Significantly, 17.9% of the supervisors indicated a rating of graduates' performance "less than midpoint" in "teaching junior nurses".

The implication of these findings needs further exploring. Of note is that no graduate scored self below the midpoint on all nursing duties investigated. We are not sure what is responsible for these discrepant scores. It is interesting however that only 8.9% indicated they would not recommend the programmes at the school to others (Johnson and Blinkhorn, 2013).

#### The limitations:

Although the response rate was 67.4% and 60.1% for the graduates and their supervisors respectively, we had expected a higher return rate given the type of study population. Although these rates are reasonably high, we made several attempts, including a snowballing technique to reach out to the others until we were sure none more was forthcoming (Stommel and Wills, 2004). Another factor was that we were not able to include the foreign graduates, or those local graduates who had migrated outside of the Trinidad and Tobago. We believe, however that there would not have been any major variation in their responses to the items. Also, no list exists for the supervisors. And so, we estimated the supervisors from our knowledge of the health facilities in the small island nation. We could not confirm the real number of the supervisors as we relied on our estimation of the wards, the departments, and the offices that the graduates worked. We found out that some of our supervisors were themselves graduates of the programme. Some of these might have completed both questionnaires as supervisor and graduate. We are not sure the extent to which this may have had influence in their responses and therefore of the result.

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