Modification of a student feedback tool that provides feedback to staff in clinical contexts

AIM

To modify an existing tool that differentiated the salient features of the clinical learning environment that could be informative to clinical leaders.

BACKGROUND

The influence of a leader in the creation of the clinical milieu significantly impacts on how and what students learn. Leadership and guidance by the Nurse Unit Manager or equivalent is instrumental in determining the vision and inspiring the integration of students and student learning in the clinical context (Saarikoski and Leino-Kilpi 2002). Strong partnership between Nurse Unit Managers, clinical education coordinators, facilitators and clinical staff improves understanding around student needs (Andrews et al. 2006). All staff have a role in facilitating student learning (McNamara 2007). When staff are adequately prepared and guided about the learning needs of students they can effectively respond to assist student learning.

Psycho-social aspects of the clinical learning environment that students identify as important are described as personalisation, involvement, task orientation, innovation, individualisation, satisfaction (Chan 2003). These form the basis of the Clinical Learning Environment Inventory (Chan 2003). Student responses via this tool have indicated that placement in clinical areas where staff are assisted to integrate with students impacts positively on their perceptions of the learning environment (Henderson et al. 2009). A limitation with this tool has been in differentiating key aspects of the learning environment that can inform clinical leaders about requisite changes to improve the learning environment for students. Pre and post evaluations of intervention strategies

reveal that several subscales collectively improve. The common threads in the subscale definitions meant that feedback from the tool did not clearly differentiate to clinical leaders areas of their practice environment in need of improvement.

METHOD

A factor analysis using principal axis factoring and oblique rotation was performed via SPSS version 16.0 on responses during 2007 and 2008 to the Clinical Learning Environment Inventory CLEI (Chan 2003). The CLEI (42 items) was completed by nursing students at the completion of their practicum.

Tool

The Clinical Learning Environment Inventory is a valid and reliable measure of the psycho-social environment that influences students' learning during their clinical practicum. A four point likert scale was used to score items: 1 = 'Strongly Disagree', 2 = 'Disagree', 3 = 'Agree', 4 = 'Strongly Agree'. Positive and negatively worded statements were included.

RESULTS

Participants

Participants were 753 (in 2007) and 304 (in 2008) second and third year nursing students, from one university in South-East Queensland who participated in either a two or four week clinical practicum at one of three major health facilities within a six month period.

Factor Analysis

A series of factor analyses were conducted on the 42 items to identify items that added to a meaningful interpretation of the constructs for clinical leaders. Two items from the outset appeared independent from the others and were removed: 'The same nurse has worked with me for most of this placement' and 'I clock-watch on this ward'.

Items that cross loaded in a number of factors were deleted as their interpretation was ambiguous. Twenty-one items loaded across four factors. In the final analysis of the remaining items the Bartlett's Test of Sphericity reached statistical significance, supporting the factorability of the correlation matrix.

Factor Analysis revealed the presence of four factors with eigenvalues exceeding 1. The final four-factor solution (Table 1), explaining 56% of the variance, reflect the dimensions of - engagement with staff to complete tasks, dissatisfaction with ward activities, satisfaction with the clinical experience and student motivation.

Factor one, which accounted for most of the variance, was interpreted as engagement, facilitated through sharing of work with the ward staff. It contained items pertaining to students' interactions with staff around completing tasks that directly contributed to student learning. Assimilation into the practice environment has been consistently raised in the literature as important for student learning (Henderson et al. 2006). The second factor reflected student dissatisfaction with the ward activities, it identifies student displeasure with the clinical placement. The third factor indicated whether students were content with the learning experience; as separate from dissatisfaction. The fourth factor pertained to student motivation (relating to students seeking out learning opportunities). The concept of students being active learners is essential for students to remain abreast of contemporary health care practice upon graduation. Ideally, clinical settings encourage students to actively engage in the

community of learning practice. It is important that all four factors are monitored in the clinical context to gauge the value of educational leadership activities in the clinical setting. Internal reliability was reasonable across the four factors. Cronbach alpha was 0.87, 0.75, 0.67, 0.78 (Factors 1-4) respectively.

CONCLUSION

This study aimed to develop a student feedback tool that differentiated the nature of clinical learning opportunites. The tool was tested over two time periods. A revised form of the CLEI provides feedback that informs clinical leaders about staff engagement with students to accomplish tasks, student satisfaction and dissatisfaction, and student motivation.

RELEVANCE TO CLINICAL PRACTICE

From a leadership perspective it is critical that clinical teams work together to improve staff engagement with students, provide a satisfying learning experience, reduce dissatisfaction, and ideally motivate learning in the clinical context. The identification of these four factors lays the foundation of measurement of concepts important to ascertain whether clinical learning environments are effective. It can potentially through feedback guide nurse leaders in their clinical actions to maximise learning.

Contributions

Study design: AH, DC, MC

Data collection and analysis: RW, AH

Manuscript preparation: AH, DC, MC, RH

Conflict of interest: None

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TABLE 1: Structure Matrix

	Factor 1		Factor 2		Factor 3		Factor 4	
	2007	2008	2007	2008	2007	2008	2007	2008
Nurses in this ward tell me how and why they are doing things	**.676**	**.567**	.216	.194	.083	.095	.245	.274
The nurse often thinks of interesting learning activities	**.636**	**.675**	.137	.139	.292	.053	.073	.009
Ward assignments are clear so that I know what to do	**.601**	**.480**	.088	.170	.150	.136	.158	.195
The nurse working with me goes out of his/her way to help me	**.581**	**.647**	.271	.128	.056	.172	.291	.251
The nurse working with me helps me when I am having trouble with the work	**.565**	**.589**	.353	.125	.103	.096	.315	.258
There are opportunities for me to proceed at my own pace	**.563**	**.615**	.082	.147	.167	.173	.098	.103
The nurse working with me considers my feelings	**.500**	**.568**	.194	.075	.206	.119	.207	.202
I have a say in how the shift is spent	**.476**	**.606**	.084	.081	.101	.109	.002	.045
Workload allocation in this ward is carefully planned	**.444**	**.456**	.086	.339	.360	.028	.134	.236
Staff are punctual	**.413**	**.479**	.163	.190	.358	.170	.336	.198
The nurses are unfriendly and inconsiderate towards students	**.401**	**.443**	.598	.234	.098	.121	.088	.076
This clinical placement is a waste of time	.023	.074	**.630**	**.715**	.311	.157	.244	.091
This clinical placement is boring	.078	.166	**.606**	**.696**	.476	.245	.244	.141
This is a disorganised clinical placement	.275	.185	**.591**	**.574**	.084	.014	.080	.090
No one is interested in my problems	.406	.422	**.446**	**.413**	.105	.016	.102	.137
I enjoy coming to this ward	.393	.463	.206	.308	**.638**	**.577**	.291	.193
This clinical placement is interesting	.180	.286	.285	.609	**.577**	**.402**	.232	.199
I look forward to coming to this clinical placement	.290	.225	.158	.267	**.486**	**.596**	.216	.194
I put effort into what I do in the ward	.087	.076	.098	.136	.157	.192	**.657**	**.821**
I pay attention to what others are saying	.212	.307	.190	.133	.175	.095	**.648**	**.541**
The facilitator talks with me as an individual	.178	.220	.104	.127	.175	.045	**.437**	**.492**

Extraction Method: Principal Axis Factoring
Rotation Method: Oblimin with Kaiser Normalization
Putative factors shown in bold