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Issues with health student pre-placement clinical compliance: A mixed methods study

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Abstract

Objectives: The aims of the study were to: a) reveal the insights from Clinical Experience department staff on their observations of difficulties encountered by first-year nursing students in completing their pre-placement requirements; b) identify first year nursing students' challenges of completing the pre-placement requirements within the expected timeframe; and c) retrospectively describe second-year nursing students' experiences of completing their pre-placement requirements during the preceding year of study.

Background: Before entering clinical practice, nursing students are required to meet specified pre-placement clinical mandatory requirements. Yet many nursing students find the process challenging.

Study design and methods: A multi-method approach using quantitative and qualitative data through questionnaires and interviews. A questionnaire gathered retrospective data from students who had completed pre-placement clinical requirements in the previous year (n = 69). Focus groups investigated first year students experience in meeting the pre-placement clinical requirements (n= 6) and staff interviews (n=3). Data were analysed using quantitative and qualitative methods.

Results: Content analysis revealed central themes related to clinical safety, support structures and the need for the naïve novice to balance both life and University demands. Staff interviews had four emerging themes: Communication, Engagement in processes, Conflicting Information, and Technological Issues. The importance of meeting the pre-placement clinical requirements was only recognised retrospectively by the students after having experienced a clinical placement.

Conclusion: The implications for improving pre-placement clinical requirements for first year students could include the implementation of 'traffic light' symbols, as a guide to which requirement needs attention immediately, (red) what needs forward planning (yellow) what can be completed later (green). Establishing a contact person(s), drop-in sessions and on campus health clinics could assist in ensuring accurate and timely information for first year students.

I INTRODUCTION

On enrolment in Bachelor of Nursing (BN) degrees throughout Australia, student nurses are informed of the specific requirements for clinical practice, including vaccination, police clearance, fitness to work with children, first aid, and cardiopulmonary resuscitation (CPR) certification. Students are informed of this pre-enrolment, during orientation and at various junctures during their first semester of study. Despite this, many factors challenge students' ability to meet pre-placement clinical compliance. Identifying and understanding factors that impact student's completion of Pre-placement Clinical Mandatory Requirements (PCMR) are imperative if Universities are to both improve compliance and maximise placement utilisation.

II BACKGROUND/LITERATURE

A review of the literature reveals a plethora of research investigating factors related to clinical placement, such as preparation of students (McClure and Black, 2013; Neilsen et al., 2013), support for students (Henderson et al., 2012; Killam & Heerschap, 2013), clinical assessments (Calleja et al., 2016; Plakht et al., 2013), and the students' experience (Foster et al., 2015; Henderson et al., 2012; Myall et al., 2008). Nonetheless, the literature failed to adequately identify issues specifically related to nursing students' ability to navigate and complete their PCMR, successfully. While Levett-Jones and Bourgeois (2015) include useful coaching tips for students related to PCMR, the issues encountered by students preparing their evidence for compliance are not discussed. In contrast, a study of Australian nursing students' perceptions of their readiness for practice within their first year, identified issues such as anxiety about managing complex clinical situations, fear of not knowing enough or making mistakes, and concern about poor evaluations (Levett-Jones et al., 2015). Biles et al. (2022) discussed course expectations of nursing students relating to their actual experience and identified many aspects that could greatly enhance a student's experience, however, did not directly discuss issues relating to pre-clinical requirement issues.

Therefore, a more in-depth search was undertaken, using an array of databases, which included CINHAL, Medline, ProQuest, ERIC, and Scopus. Terms used included, compliance, nursing student, clinical placements, clinical and mandatory requirements. Unfortunately, the search failed to adequately address the issues faced by students when completing their preclinical mandatory requirements.

III METHODS

A *Aims*

The purpose of this study was to understand the key enablers and barriers that affected nursing students' ability to achieve pre-placement clinical compliance. The study aimed to a) reveal insights from the Clinical Experience Department Staff (CEDS), relating to their observations of difficulties encountered by first-year nursing students in completing their PCMR; b) identify first year nursing students' challenges of completing the PCMR within the expected timeframe; and c) retrospectively describe second-year nursing students' experiences of completing their PCMR during the preceding year of study.

B *Design*

The study used a multi-method approach that resulted in the mixing of quantitative and qualitative data through questionnaires and interviews (Schoonenboom & Johnson, 2017). Teddlie and Tashakkori (cited in Creswell & Planto Clarke, 2018) argued that by mixing reasearch methods, questions that cannot otherwise be answered were answered, which assists the researchers in gaining a better understanding of the behaviours and meanings being researched.

Based on this assumption, second-year participants were surveyed first to identify possible themes that may emerge. Following from this, first-year students were invited to attend focus groups to identify if there were any commonalities with the results of the survey. Finally, interviews were undertaken with the CEDS, to identify any association between all three groups. Therefore, mixing qualitative with quantitative methods, enabled a greater understanding of the complexities discovered by the researchers (Denzin & Lincoln, 2018).

Interviews of the CEDS was undertaken by one of the researchers, not directly involved in the placement team. Focus groups with the first-year students were undertaken by two of the researchers, who were not directly involved in teaching the first-year students. The intention of undertaking the research in this manner was to limit bias, in that students and staff would speak openly and honestly to an academic who was not their direct tutor or colleague. The qualitative and quantitative data was merged at the completion, to give strength to final assumptions and findings (Creswell & Plano Clark, 2018).

C *Participant selection/Recruitment*

Participants were recruited using a convenience sample of nursing students and CEDS, from one regional Australian university. Inclusion criteria for students, were enrolment in a first or second-year Bachelor of Nursing (BN) programme. For staff, employment in the area dealing with student clinical placements was essential, as working in the clinical placement team, staff have the knowledge and expertise of what was expected of students when completing their PCMR. All participants were emailed information outlining the purpose of the study and a consent form.

D *Ethical consideration*

Approval was obtained from the University Human Research Ethics Committee before recruitment, with approval number ECN-19-022 allocated. First year students and CEDS completed a consent form prior to interview / focus groups, and students who completed the on-line survey ticked a box consenting to take part before completion of the survey. Participation was voluntary and assurance given that participation or non-participation would not impact grades or work at the university. For participants in the interviews/focus groups, confidentiality was guaranteed through de-identifying the data when transcribed. The right to withdraw, up until data analysis commenced, was understood. The on-line survey was encrypted to ensure no student identification was available to the researchers, thereby anonymity was assured.

E *Data collection*

Data collection, from both student cohorts and CEDS, occurred between March–July 2019. CEDS were invited to attend an individual 15–20-minute interview with one of the researchers. Nursing students enrolled in a first year first-semester course, were invited to attend a focus group interview in the final two weeks of the semester. Each focus group was a 30-45-minute, semi-structured interview. The focus groups were facilitated by two members of the research team who did not have a direct connection to the students for that semester. This was undertaken both to allow students to speak freely and to limit any potential bias. Both the interviews and focus groups were audio taped with permission of the participants.

Second-year student nurses were surveyed to investigate what affected their ability to meet PCMR during their first year of enrolment in the BN programme. The survey was administered through an online survey platform, Qualtrics©. The survey consisted of open-ended questions to capture the richness of the students' responses.

F *Data analysis*

1 *Qualitative data*

Thematic analysis was used to analyse the qualitative data in order to identify, analyse, and report on emerging patterns (Braun & Clarke, 2006). Focus group data and interviews were transcribed by one of the researchers, which was then disseminated to all researchers for analysis. Using the systematic process of data coding, the researchers analysed each response to categorise the emerging data into themes (Creswell, 2014).

The researchers further reviewed the coded data within each theme for validity, to ascertain if each theme accurately reflected the data (Nowell et al., 2017). Once all the data was categorised into themes, names for the themes were identified through what the themes represented and how they best reflected the data (Nowell et al., 2014). Theme names followed Braun and Clark's (2006) suggestions of being punchy to give the reader an immediate sense of what the theme relates to.

2 *Quantitative data*

Second year student ratings of their confidence and experiences with compliance with PCMR were summarised in frequencies and percentages. Data were exported from Qualtrics© to Microsoft Excel© and then into IBM SPSS Version 25 for analysis.

Each questionnaire was allocated a reference number for the purpose of accuracy in data entry. Data were checked three times and cleaned by visually examining all data for accuracy and to minimise human error. Incomplete responses were highlighted and removed from the analysis. Additional narrative comments made by participants, against questions, were transcribed for the purpose of analysis.

Descriptive statistics (mean, standard deviation, and confidence interval, 95%) were calculated for each item. Inspection of the 95% confidence intervals was undertaken to identify any statistically significant variance in the data. Results from the statistical analysis and the qualitative thematic analysis were analysed to aid final inferences, interpret findings, and draw conclusions.

IV RESULTS

Results from the second-year student online survey are presented first, followed by narrative data collected from first-year student focus groups and CEDS interviews.

A *Online survey findings: Second-year students*

Of the invited 312 students, 69 responded (22%) with females (88%) and males (12%) of which more than half were under 35 years of age (62.7%). This is comparable to national nursing statistics where, in Australia, nine in every ten nurses are female (Australian Institute of Health and Welfare, 2015). Approximately one-quarter of students (23.9%) had previous nursing experience as either an Assistant in Nursing (20.9%) or an Enrolled Nurse (3%).

Prior to commencing their university course, more than half of these participants were confident (69.7%) in their ability to meet the PCMR (M = 2.85, S.D. = 1.20), with a quarter of participants (25%) believing they were well prepared to complete their PCMR (M = 3.16, S.D. = 1.24). During the second year of their degree most participants (83.6%) believed they were very well prepared to meet the PCMR.

Obtaining evidence of immunisation history was difficult with only a third of participants (31.3%) having easily obtained their vaccination records. Half of these participants (56.7%) were able to easily access and attend First Aid and CPR courses. The university provided information about these courses in students' local communities. Additionally, dates of these courses were identified, to give students time to register and complete within a reasonable timeframe. The timeframe, further coincided with the University's Census date, allowing students to withdraw, if need be, so as not to incur any additional financial burden, should they not be able to meet compliance.

A third of participants (34.3%) had difficulty in using the PCMR database. Many (83.6%) acknowledged the importance of being fully compliant with the PCMR.

Each element of the PCMR had a specific timeframe to be met, which was in accordance with both the University and Department of Health guidelines. However, some participants did not appear to fully comprehend what was required to meet the PCMR (35.8%), or the time required to complete the process (14.9%). Students identified complexities which hindered the process of completing their PCMR, such as obtaining a first aid and CPR certificate, and/or organising doctor appointments. They further acknowledged factors that impacted their ability to meet their PCMR within the timeframe including accessing vaccination records (70.1%), family responsibilities (49.3%), paid work commitments (43.3%), and the ability to access a doctor who bulk billed because costs created a financial burden for some participants (29.9%). The university process was problematic for half of the participants, who found difficulties with adjusting to the requirements of university life (41.8%), feeling overwhelmed with the new information (49.3%), and coping with new systems and processes, such as PCMR database (49.3%). For a small number of participants being away from home was distressing (13.4%). The staff within the placement unit worked with each student, to ensure as smooth as possible a transition through their PCMR. Where needed or identified, students were referred to the university's counselling service, for more specialised assistance with coping strategies.

B *Narrative data: First-year students*

Narrative data from the first-year student focus groups (n=6) identified eight themes: Ensuring safety; Professional requirement; Checklists; Support from others; Naïve novice; Travelling down a convoluted path, and Balancing life with University demands. In addition, the CEDS interviews (n=3) identified four emerging themes: Communication, Engagement in processes, Conflicting Information, and Staffing/technological troubles.

Students were asked for their thoughts on why it was important for them to be compliant for practice. From this, safety aspects dominated the discussions.

C *Ensuring safety*

Participants recognised that a prime reason for them to complete the PCMR was to protect themselves, patients, and staff. By protecting themselves they identified they were protecting vulnerable patients, as exemplified by the following:

> “As far as the immunizations go, that would be to protect us as students and also any vulnerable patients from catching anything” (P1) and “We just need to make sure that we are up to standard before we go into placement. You just can’t go into placement unwell or not knowing how to do CPR in case something happens” (P6).

D *Professional requirement*

Many students acknowledged the importance of being compliant with PCMR as set out by clinical facilities and their legislative requirements, as reiterated by two students:

> “It’s obviously part of the policies” (P1); “Basically it sets you up for real-world situations where if you want to become a nurse these things are going to happen anyway. So, you are going to have to get your CPR, you have to be immunised. We all need a Police check so it’s just a fence sort of thing, you want to do this (nursing) then you’ve got to do this (complete mandatory requirements) as well” (P3).

When asked what helped or enabled students to complete their PCMR, the importance of having a checklist and receiving support emerged. Both were seen as positive enablers for completing PCMR.

(a) Checklists

Students reported the value of the checklist, however, found that some further clarification about specific health-related tests and processes was required, as illustrated by the following comments:

> "Just having a list of everything that needs to be done and the timeframe… you have to figure out what needs to go first and go from there, which is not easy" (P6); "I found the [check] list really good. I just passed that to my Dr and said, 'this is what I need to have done. Can you help me make sure that I am all OK?' (P5) and "The pre-placement compliance checklist definitely helped me" (P1).

E *Support from others*

Some participants acknowledged that help came from their health professional and/or the CEDS, while other students reported a different experience:

> "My GP forgot to tick a box (on the lab request form), so then I had to go back (to get another form from the Dr), so I could get more serology done to prove that I was protected against that. This was unhelpful" (P4).

Participants also identified support as being in the form of face-to-face discussions, telephone consultations and e-mails, as being helpful when navigating their way through the PCMR.

On arrival at university many students were unfamiliar with much of the terminology used to describe the PCMR and found the process both protracted and complex.

F *Naïve novice*

The importance of starting the PCMR process early, was not realised.

> "I don't think I realised the urgency or how long it was going to take so I probably didn't get onto it straight away" (P1).

Others stated:

> "It was sort of a drawn-out process…trying to get it done was a bit of a mission" (P3).

Participants identified increasing frustration and confusion in understanding exactly what was required:

> "I went around all of these labs and they said 'we don't do it' (TB testing)… 'you have to go to [the] University [health clinic] ... So, I booked that appointment, and got an injection from them and a Mantoux test. So, I then submitted it to [the approver] and [name of person] wrote back to me saying, 'Unfortunately skin tests done outside of the TB service cannot be accepted. You will need to present to your GP and request your TB screening blood test, the IGRA (interferon gamma release assay)'. So, although I had a TB test [Mantoux] it was not accepted so I had to go and get a second one" (P1).

G *Travelling a convoluted path*

Many participants encountered difficulties in accessing their vaccination history, especially those who were mature-aged students or had lived overseas.

> "Having gone to different schools and moving around constantly, growing up, I could not find any past record of vaccinations" (P2); "…as I am a mature student…parents didn't have all the copies" (P3).

Some participants were creative in finding ways around vaccination barriers:

> "Started from scratch so I didn't even bother looking them up. It meant I didn't have to bother chasing up old records that would probably be difficult to locate so I just had, the initial serology which tells you what you need" (P1); "I was advised that a statutory declaration would suffice when combined with adequate serology reports, easiest way to complete it" (P6).

Learning to access and use the University's database to upload evidence of PCMR was viewed as a cumbersome, complicated process with many reporting that instructions were both limited and hard to understand without hands-on training:

"I was told just click on this and open this, select that and it's sort of hard, when it's not [PCMR database] in front of you to be able to do that…because they [CEDS] are using it every day they're familiar with it, whereas for us we are not" (P6).

H *Balancing life with University demands*

Participants found it difficult and time-consuming to juggle competing demands of adjusting to university, part time employment, family, sporting commitments and the need for self-care, while simultaneously trying to navigate their way through the PCMR, as exemplified by P3:

"I had to juggle my full-time study as well as work, home commitments…trying to fit in Drs appointments to get it all done and then not knowing how long it's going to take to get back, not being able to access [PCMR database], not knowing how to do the majority of this stuff …So I've gotta figure it out by myself."

The complexities involved in procuring all evidence needed, was highlighted as a barrier, and was identified as leading to loss of confidence and confusion as to what needed to be prioritised. P1 stated:

"Initially yes, I was confident but as I progressed, I became less and less confident because it became more confusing and less clear as to what [I needed to do]. For example, I thought that once I had all my Hep B injections, I thought that was it. I didn't realise that I then had to go and get serology done. So, it's kinda like you know you think yep, I've done that, I'm sweet, but then you're actually not because you have to get other tests done to confirm that you've got enough antibodies. So, I initially thought 'hey I've got a list of things to do, I've just gotta do them', but as I was doing them, it was just becoming well, more complicated, if you like".

Others were frustrated by the time required to complete some compliance requirements,

"It was the time factor for me. It meant I had to give up hours that I could have been working and earning money to go and do Drs appointments and chase up paper work" (P4) and, "It took time to go back from my GP and have a [blood] test, then get the results and go back … and then [have GP] say we need to have these ones [vaccines] now and go and do that, and then go back again. So it took longer than I expected" (P5).

Conflicting information delayed completion of the PCMR:

"It [PCMR] was so convoluted, getting my serology done. My GP forgot to tick a box [on the lab request form], so then I had to go back to get another form from the Dr, so I could get more serology done to prove that I was protected against that, it all took time" (P3).

Additionally, participants shared their experience of not being able to complete their vaccinations on time:

"The other problem was with my hepatitis B, I went for my 3rd one, after three months and the nurse at the GP practice said 'I am refusing to give it to you because our policy is that we have to wait six months not three months'. I said, 'I'm sorry I'm just following instructions' and she literally just sent me away saying 'No I'm not doing it as a health professional'. So, then I had to message [name] the health approver of vaccinations…it's just a tedious and time-consuming waste of time. I must have made at least half a dozen visits to the Dr with all of these [issues]" (P1).

The cost of obtaining requirements for the PCMR raised issues. Prior to enrolment, the costs associated with completing the PCMR, was not outlined. As a result, the unexpected costs, encountered along the way, was identified as overwhelming and a further source of frustration.

"Like if you have to have this [serology] done… for work it's free but at uni for placement it costs $89" (P6); "With the serology, it's the cost that some of us struggle with because it's not free (P2).

I *Narrative data: CEDS*

The CEDS (identified as participants A-C) acknowledged similar issues to that of students, however, their issues were from an administrative perspective.

J *Communication*

While it is acknowledged that effective communication is essential throughout nursing, this process is also critical for beginning students. Early, effective communication sets up students to be able to undertake components of their degree in a timely manner and with success. Therefore, regular communication with students, re cut of dates for compliance, was consistent throughout the process.

> "All preplacement information is given to students when they are offered enrolment into the degree" (PC) and "Emails are sent to students regularly, however, it has been commented that they [students] don't read them" (PA).

K *Engagement in processes*

CEDS commented that students did not appear to engage with their PCMR early, which could be related to clinical placement being at the end of session, therefore the urgency for completion was not apparent.

> "Students are not engaging early enough to be prepared with the documentation required (PC);" students get too much information [initially] and become overwhelmed with all they need to do, and do not realise the urgency of starting early" (PB); "placement occurs at the end of session, so they [students] are not seeing the need to do it [become compliant] now" (PC).

L *Conflicting Information*

CEDS identified that students received information from some General Medical Practice facilities that conflicted with the PCMR.

> "Students need to provide evidence of their immunisation…and often their doctors don't get it right and this gives students inaccurate information" (PB); "Students need to be able to go and see someone to get the correct/accurate advice…[CEDS] are not really qualified to answer [questions from students relating to immunisation issues]" (PC).

M *Staffing / technological troubles*

CEDS identified the PCMR database, was not always easy for students to understand.

> "Students are not taught how to use the clinical placement information data base" (PA) and "If no one 'walks' them [students] through how to use the clinical placement data base, it's difficult for them" (PC).

Limited staffing was identified as an issue related to assisting students with PCMR, which impacted on both the CEDS and students.

> "Students are invited to drop in …but having one staff member on reduced hours…it is time consuming" (PA).

V DISCUSSION

It is well documented that when students make the transition to university for the first time, they face numerous challenges (Bowles et al., 2014; Hughes & Smail, 2015; Nelson et al., 2012). Students in the current study reported feeling overwhelmed by having to juggle competing personal responsibilities with the new demands of university study, life and managing PCMR. First-year students did not appear to recognise or understand the importance or complexities of commencing their PCMR early.

CEDS identified that students do not actually engage in the PCMR process early enough, highlighting a disparity between student perceptions and their actions. A possible explanation is new students not knowing what they do not know and/or not understanding the relevance of health language used to describe what is needed regarding achieving pre-placement compliance. In this

way, students arrive at university as naïve novices and may not have sufficient insight into the consequences of non-completion. For example, with clinical placements being at least six-months into the degree, the idea that they would fail a unit or that the clinical placement would be cancelled, for not being PCMR compliant, may not have been a consideration.

Second-year students had greater insight into the relationship between compliance with PCMR and patient safety once they had attended their first clinical placement, whereas first year students did not have this insight. Ensuring that students are safe to care for patients, families and communities is paramount in the ethical principle of 'do no harm'.

Vaccination of nursing students against specified communicable diseases is a key mechanism in preventing transmission of infection (Australian Commission on Safety and Quality in Health Care, 2017). However, immunisation requirements had a significant impact on students' ability to complete PCMR in a timely manner, with non-compliant students, being at risk of having their clinical placements cancelled.

New South Wales (NSW) Health has a partially automatic booking system for University clinical placements. Should a student not be compliant with all vaccinations and checks, NSW Health will automatically cancel clinical placement of non-compliant students. Additionally, various health facilities across NSW have specific facility rules/policies relating to vaccinations. This was reiterated by Williamson et al. (2018) who identified inconsistencies with vaccinations required by different clinical agencies, however, they had not explored the impact on student progression into clinical placement. Furthermore, while some studies have investigated reasons why health care providers may not be immunised against vaccine preventable diseases (Little et al., 2015; Maltezou & Poland, 2016), there is a dearth of literature related to vaccination issues encountered by health students preparing for clinical placement. Barriers to students completing immunisations, identified in the current study, revealed several issues. Firstly, despite being provided with methods to locate previous vaccination records, many students encountered difficulties in accessing these. This was more evident in students who had moved locations within or outside of Australia several times throughout their lives, and/or who were of mature age where documents had not been kept. With the recent move in Australia to an electronic health record, enabling Australians to access their own information kept in the Australian Immunisation Register (Makeham, 2019), the barrier for local students accessing past vaccination records may diminish.

Secondly, several students appeared to misunderstand the significance of commencing vaccinations early to become compliant prior to attending clinical placement. For example, if student's initial serology indicated low or no immunity to Hepatitis B, the accepted three required vaccinations plus the follow up positive serology can take several months to complete.

The third barrier related to confusion that arose from the apparent contradictory information between what was provided by CEDS and some health care providers. Although CEDS presented students with information during Orientation, they reported that many students either did not read or understand its significance so early in their degree. Students were encouraged to attend to vaccinations and related serology early. Yet it appears that a few GPs and their Practice nurses gave students conflicting information, which took up valuable time and increased costs for students. The final barrier identified regarding vaccinations was the understanding and implications for students who were found to be non-responders to immunisations and the impact this would have on them going out on clinical practice. The information needed to be clearer for students.

The financial burden reported by students created another barrier to timely and successful completion of the PCMR. At the time of conducting this study, the estimated cost for students completing all PCMR was approximately A$450. Williamson et al. (2018) similarly reported the financial burden placed on health students in some university programmes in the USA as they prepare their PCMR. Notifying students in advance of their enrolment into their health degree, of these costs may reduce the impact of this financial burden. Currently it is not a university requirement to notify students ahead of time, the cost of becoming compliant. However, students are required to complete a Professional Experience Obligation and Disclosure form, which clearly

outlines the students' obligations and responsibilities in relation to placement activities (personal communication, participant C, April 21, 2022).

Lastly, navigating the clinical placement information electronic database, was problematic. The checklist and most CEDS were helpful in identifying which documents needed to be uploaded, however, students would like to have been better oriented to the 'nuts and bolts' of how to use this programme. CEDS acknowledged that using the clinical placement information database was not always straightforward for many students. While they anticipated students would seek appointments, CEDS acknowledged they had insufficient resources to meet student demand. Additionally, CEDS recognised that students were often overwhelmed in the first weeks of their study programme.

Staff tasked with managing PCMR for health students cannot assume that students in this era are 'digital natives". In recognition of the importance of having a secure, clinical record management system to facilitate student compliance with PCMR, Elting (2018) recommended tracking student PCMR to existing Learning Management Systems (LMS), as a useful way of both communicating with students and monitoring their compliance with immunisation and screening requirements.

VI THE WAY FORWARD

The why, what, and how of the PCMR could facilitate better understanding and in turn increase compliance amongst first year nursing students.

A *Why*

The reasons why nursing students need to be compliant well before attending clinical placement require explanation and linkage to both 'Standard 3: Maintains the capability for practice' (Nursing and Midwifery Board of Australia, 2016) and the Australian National Safety and Quality Health Service Standards (Australian Commission on Safety and Quality in Health Care, 2017).

B *What and How*

Written information, preferably within a designated on-line space, needs to be in easy-to-read language with clear, simple instructions and be readily accessible. For example, implementation of 'traffic light' symbols, as a guide to which PCMR needs attention immediately (obtaining past immunisation records), which need forward planning (booking into a first aid / CPR course), that can be completed later (student declarations), as well as how to achieve each requirement in a step-by-step manner would assist first year students to navigate through the process. The Traffic Light System [TLS], while common in education, is not commonly used in health/nursing programmes. However, a few articles have identified the benefit of the TLS, especially in communication, and overcoming various barriers within healthcare. MacDougall-Davis et al. (2016) found that TLS rated significantly high amongst users and its simple structure assisted in communication. Whereas Hadden (2017) identified that the TLS was successful in overcoming barriers. Therefore, by incorporating this system into PCMR, it has the benefit to help increase communication and assist students overcoming barriers.

C *When*

Digital reminders coded in accordance with the TLS, for example, text messages, pop-up messages on the student LMS, for when each PCMR should be commenced (green), planned for (orange) and completed with urgency (red) would further aid students to prioritise each requirement.

Scheduling short face-to-face drop-in sessions for students to attend in groups or individually would provide opportunities where students could clarify requirements as well as receive

guidance tailored to their individual needs. Such sessions maybe especially helpful for students experiencing unique challenges in completing their PCMR.

VII CONCLUSIONS

In conclusion, this study has highlighted the importance of ensuring that the information and procedures enabling undergraduate students to understand and become compliant with mandatory requirements well before they attend their first clinical placement is student centred. Information needs to be straightforward, clear, and presented in a manner that students find achievable within the allotted timeframe.

VIII LIMITATIONS

There are several limitations that apply to this study. Using research from one regional university may not be representative of metropolitan universities and therefore not generalisable. There were lower than expected response rates. Students who completed the on-line survey and those who attended the focus groups may have been either enthusiastic about their experiences or unhappy with their experience which may have resulted in response bias. However, researchers did attempt to ensure trustworthiness of the findings by interviewing both students and CEDS from different campuses using two different facilitators. Therefore, the narrative data does explore factors that affect nursing students' ability to achieve PCMR. Finally, although one-on-one interviews were used to understand the perspectives of the CEDS experiences, focus groups may have stimulated greater discussions. However, the one-on-one interviews offered the opportunity for a more candid discussion about their experiences with the process for students to meet pre-clinical placement requirements.

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