

# Competency Assessment for Community Health Nurses: A Focus Group Expert Panel Discussion

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## Research Article

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# Abstract

**Background:** General Practice setting in the Primary Health Care Services are the utmost visited by the public. It is important that the nurses' competencies in this area be assessed to ensure provision of safe and quality services.

**Aim/objective:** To explore perceptions and experiences of competencies assessment tool for community health nurses working at the General Practice setting in the Primary Health Care Services.

**Methods:** An exploratory qualitative study utilizing focus group discussions were conducted on purposive sample of 12 officers with expertise in competency assessment and community health nursing from higher nursing education institutions, the Nursing Training and Development Centre, the Nursing Board and the Community Health Nursing Services in Brunei Darussalam. The existing competencies assessment tool was revised, the participants were divided into two groups of expert panel review team and two focus group discussions were held with each team. The focus group discussions encompassed components and methods of assessment; methods of grading; and overall organization and structure of the revised competency assessment tool.

**Findings:** Four themes emerged: 1) International equivalent core competencies components; 2) Multi-methods approach to assessment; 3) Definitive guidelines as framework for assessment; and 4) Understanding and acceptability of the competency assessment tool.

**Conclusions/Implications to practice:** The expert panel reviews provide practical input that were inculcated in the preliminary developed competencies assessment tool. Identification of eligible assessors were recommended based on standardized criteria, and socialization and training held to set direction and guidance for implementing the utilization of the competencies assessment tool. Further studies are deemed important to critically evaluate and validate the preliminary competencies assessment tool for development of a more robust assessment instrument.

## Introduction

The worldwide perspectives of professional nursing competencies are focused on providing safe and quality service. It is the responsibility of each professional nurse to be competent in delivering the skills sets required to improve and sustain the quality of patient care, hence increase patient satisfaction (Feliciano et al., 2019). Substantial evidences also pinpointed the importance for health care organizations to give attention to professional competencies for nurses to maintain safety and quality service (Heydari et al., 2016). Medical errors, negligence or malpractice built from incompetence can risk patients' lives (WHO, 2018). With all these reasons, there is a need for valid and reliable instruments to assess the competencies of nurses in the practice setting. Many attempts to define competence and competencies have been published in the literatures but there are still confusion and lack of clarity surrounding the concept (Ahmadi, Yazdani & Mohammad-Pour, 2017). Competencies can be described as a combination of observable and measurable knowledge, skills, abilities and personal attributes that

constitute an employee's performance. Whatever the agreeable definition is, the ultimate goal is that the employee can demonstrate the required attributes to deliver safe and quality care (Joint Commission International, 2018).

## Background of the study

Core competency standards are the standards and requirements usually set by relevant nursing regulatory body that informed nurses' competencies in providing safe and quality care to patients. Having competent nurses in the healthcare services increase trust and confidence of the public (International Council of Nurses [ICN], 2009; Nursing and Midwifery Council of the United Kingdom, 2015; Jordanian Nursing Council, 2016). Being competent in providing patients' care also uphold the high reputation of nursing profession (American Nurses Association., 2013; Beogo et. al., 2016). Poor and unsafe patient care may occur if nursing practices do not met expectations laid in the core competency Standards (Wilkinson, 2013; Blazun et al., 2015).

Similar to other countries, in Brunei Darussalam (henceforth: Brunei), there also exists core competency standards for Registered Nurses developed by the Nursing Board for Brunei (Ministry of Health, 2013), the national regulatory body that governed nursing practice. However, the core competency standards are more generic but not specific to nurses working in a specific setting. One of the aims documented in the core competency standards is:

to assess clinical performance competency and measure the professions' fitness to continue practice in Brunei Darussalam

(Ministry of Health Brunei, 2013 p4).

A generic competency assessment tool (CAT) was developed by the Brunei Nursing Training and Development Centre (Pusat Latihan Perkembangan Kejururawatan [PLPK]). The CAT is generic for assessing newly employed nurse once only when they were first employed. Another CAT was developed in 2016 by a Primary Health Centre (PHC) (Ministry of Health, 2016), which is specific and used biennially for assessing core competency standards of the community health nurses working at General Practice in the PHC. It is observed that both competency assessment tools (CATs) were not developed using the principles underpinning instrument development and validation. The CATs were also never been reviewed and evaluated, hence, reliability and validity of the CATs have yet to be established. Moreover, to date, there is no evidence of regular and continuous use of the CATs in Brunei, let alone the CHNs working at General Practice in the PHC.

Assessment of core competency standards should not be a one off, but a regular and continuous process so that standards are consistently maintained throughout the nursing practices. This concurs with the international health care accrediting agencies such as The Joint Commission International (2018) which highlighted the requirement for periodic performance evaluation to assure ongoing competencies of nurses. It is also noteworthy to consider that the process of developing the instrument should first begin

with comprehensive systematic literature reviews. This is to ensure that the most current and appropriate measurement instruments are gathered, compare and contrasts, hence relevant data that informed the instrument development may be extracted (Flinkman et al., 2017). The methodology for instrument development also includes such as expert panel review of the instrument through focus group discussion(s) (FGDs), nominal group technique, Delphi approach or face-to-face interview. To ensure development of a robust instrument, it must also be further quantitatively pretested and piloted. The psychometric properties may also be further analyzed statistically, for examples, using Confirmatory Factor Analysis and Cronbach's alpha for its reliability and validity (Lavoie et al., 2018).

## **Aim/objective**

This study aimed to explore expert panel perceptions and experiences of competency assessment tools for community health nurses working at the General Practice setting in the Primary Health Care Services in Brunei Darussalam. The objectives were:

1. To examine the competencies required for community health nurses working at the General Practice setting in the Primary Health Care Services
2. To determine how would the competencies be assessed

## **Significance of the study**

The role of nurses in General Practice setting has expanded over the years (World Health Organization, 2010). With the evolving and expansion scopes of nurses working in the General Practice setting of the PHC, CAT developed need to be aligned with the expanded scope of practices (SoP) and consistent with the actual regulated practices. Reviewed of literature evident that nurses practices either below or beyond their SoP that cause either loss of or inadequate skills that eventually will compromise nursing practices in the General Practice setting of the PHC (Feringa, De Swardt, & Havenga, 2018). Hence, this study is significant in various ways: 1) consideration of development of a credible and reliable CAT that is appropriate and able to accurately assess competencies of CHNs working at the General Practice setting in the PHC; 2) in a longer term, this study can informed development of similar standardized CAT for assessing core competency standards of nurses in many different clinical setting in Brunei.

## **Research Design And Methods**

### **Design**

This study was qualitative and exploratory in nature that utilized focus group discussions to collect data of expert panel's perceptions and experiences of competencies assessment tool for community health nurses working at the General Practice setting in the PHC Services.

### **Ethical considerations**

This study is conducted in line with the principles underpinning the Declaration of Helsinki (World Medical Association, 2013). Ethical clearance was provided by the joint committee of the Pengiran Anak Puteri Rashidah, Institute of Health Sciences Research Ethics Committee (IHSREC), Universiti Brunei Darussalam and Medical and Health Research and Ethics Committee (MHREC), Ministry of Health (ERN: UBD/PAPRSBIHSREC/2019/18). Written permission to evaluate and re-developed the existing CAT was granted by the Director of Health Services and Director of Nursing Services. Participants were assured that their participations were voluntary and they could withdraw from the study without penalty at any time throughout the study prior to completion of data analysis. Written informed consent was obtained from all participants once their enquiries were answered and they were fully satisfied with the information about the study. Confidentiality was ensure where the study was done in private room free from distractions and access of others. Participants' anonymity were also ensured where participants were coded using a personal identification numbers (PIN code). They were requested to refer to this code and were not allowed to call real names during the FGDs. The research and any publications will not report participants' details that can easily identified their affiliations.

## Participants' selection and recruitment

Invitation letters were sent to the Dean and Directors of the higher nursing education institutions, Head of Nursing Board for Brunei, Head of Nursing Administration of the Community Health Nursing Services, and Head of the Nursing Training and Development Centre for nomination of at least an expert in developing CAT for community health nurses at the General Practice setting in the Primary Health Care Services. The mixture of different participants ensured a diverse range of stakeholders within the specialization of either community health nursing or competency assessment. The participants were selected using purposive sampling guided by coherent inclusion criteria (Table 1).

Table 1  
Inclusion criteria for the study

For participants to be eligible as expert panel in the study, they must have:

- 1) knowledge and/or experiences of either the domains, skills and job descriptions of community health nurses in General Practice settings of the PHC; or competency assessment tool development;
- 2) been working for at least five years in their field. Participants whom do not met this criteria were excluded.

## Data Collection

### Preliminary development of revised CAT

The study began with critical reviews of the research team on the existing CAT which was developed by a PHC in Brunei specifically designed for community health nurses at the General Practice setting in the PHC services. The CAT were critically reviewed, analyzed, compared and synthesized with the current empirical evidences from research and authoritative regulatory documents. Table 2 illustrated the key international regulatory documents. Several intensive meetings were held by the research team whom

comprised of expertise in community health nursing, primary health care, and competencies assessment. Domains and performance indicators were identified and refined which resulted to construction of a revised CAT.

Table 2  
International regulatory documents

- 1) General Practice Nurse Competencies from the United Kingdom (Royal College of General Practice Foundation and Royal College of Nursing, 2015)
- 2) Primary Health Care Competency Framework originated from Canada (Capital Health Nova Scotia, 2012)
- 3) National Practice Standards for Nurses in General Practice from Australia (Australian Nursing and Midwifery Federation, 2014)
- 4) World Health Organization, Competencies for nurses working in Primary Health Care (2015).

## Expert panel review team

Twelve participants volunteer in the study and were divided into two groups of expert panel review team with six members per group. The expert panel were tasked to critically review, analyzed, evaluate and suggest appropriate recommendations for further refinement of the revised CAT. They comprised of nursing academics from the higher nursing education institutions, nursing managers of Community Health Nursing Services from the PHC Services, nursing authorities from the Nursing Board and competencies evaluators and trainers from the Nursing Training and Development Centre.

Four FGDs, two for each team were held with the expert panel review team. The first focus group discussion was to collect analysis, evaluation, perceptions and experiences related to the revised competencies assessment tool from the first expert panel review team, and a second one was conducted to finalize their collective agreement. The third focus group discussion was held with the second expert panel review team to determine if there were any further divergent feedbacks which may be overlooked by the first team, and the last one was to finalize all feedbacks from the second team for development of a preliminary competencies assessment tool. The focus group discussions encompassed components and methods of assessment; methods of grading; and overall organization and structure of the revised competency assessment tool.

The revised CAT was emailed to the expert panel a week before the FGDs to allow them preparation prior to the FGDs. The FGDs were also guided with a pre-designed open-ended question so that the FGDs would not side track. All FGDs were audio recorded with consent from the participants to ascertain accurate and consistent account of the FGDs for transcriptions.

## Data Analysis

All FGDs were transcribed verbatim. The transcriptions were then checked for accuracy against the audio recordings. Two members of the research team (primary investigator and academic supervisor) systematically analyzed the transcripts to identify both deductive themes based on the focus group guide

and inductive themes that emerged during coding. Transcripts were read and re-read to identify potential themes. Emerging themes were then coded by hand independently by each team members, then coding was compared with discrepancies resolved through discussion to enhance reliability of the findings.

## **Results**

### **Participants' characteristics**

Participants were six nurse managers from Community Health Nursing Services, two academics from the higher nursing education institutions, two authorities from the Nursing Board and two senior nurses with capacities as competencies evaluators and trainers from the Nursing Training and Development Centre. Nine of the participants were female (75%) and the rest were male (25%). All members of the expert panel have more than 10 years of work experiences in their expert field. The details are displayed in Table 3. For confidentiality purpose, gender, exact age and qualifications, and workplace are not reported.

Table 3  
Expert Panel Characteristics

Participants' Personal Identification Number	Expert field	Age range	Qualification
P01	Competency Assessment	26–35 years	Degree
P02	Community Health Nursing	36–45 years	Higher Degree
P04	Competency Assessment	46–55 years	Higher Degree
P05	Community Health Nursing	26–35 years	Degree
P06	Competency Assessment	36–45 years	Diploma
P07	Community Health Nursing	46–55 years	Degree
P08	Competency Assessment	26–35 years	Degree
P09	Community Health Nursing	36–45 years	Higher Degree
P10	Competency Assessment	46–55 years	Higher Degree
P11	Community Health Nursing	36–45 years	Degree
P12	Competency Assessment	46–55 years	Degree

## Findings from the expert panel review

Four themes emerged: 1) International equivalent core competencies components; 2) Multi-methods approach to assessment; 3) Definitive guidelines framework for assessment; and 4) Understanding and acceptability of the competencies assessment tool.

### Theme 1: International equivalent core competencies components

This theme described the expert panel affirmation for the core competencies components to be equivalent of the international standards. All of the expert panel pointed out that the core competencies components should be benchmarked that equivalent to the international standards. The expert panel justified that this is to ensure that the community health nurses will achieve the minimal core competencies standards which should be arranged into key components. The World Health Organization

(WHO) is the most commonly referred international organization as the governing body for the community health nurses core competencies.

*“...the competencies tool should follow competency framework from WHO. It should be at the international standards so that performances of our community health nurses should be at par with other countries...The core competencies should be divided into five clusters and under each cluster there should be list of competencies to be achieved” (P04, Expert Panel Group 1, FGD 1)*

Majority of the expert panel also pointed out that benchmarking of the core competencies standards should be comparable with the requirement of the International Council for Nurses competencies framework (ICN, 2009). They also pinpointed that the core component of competencies also needs to reflect role of PHC nurses in General Practice or also called Out-Patient Department (OPD) setting, and should be consistent with the core competencies standards set by the Nursing Board for Brunei.

*“...the components of the competencies should mirrored the ICN competencies framework but also must matched with NBB (Nursing Board for Brunei) requirements. Comparing these both together, the core competencies components should be put into domain. For examples, ethical responsibilities, leadership or continuous professional development, and so on. Then it will be easy to arrange the competencies either skills or knowledge under each domain” (P02, Expert Panel Group 1, FGD 1)*

Arranging core components into key areas or domains was agreeable by the expert panel to provide clarity of the knowledge or skills set under the domains. Five core competency standards (Legal and ethical framework for practice; professional practice, leadership and management; continuous professional and personal development, and education and research) established by Nursing Board for Brunei (Ministry of Health, 2013) were commonly suggested by majority of the expert panel.

*“...The ICN core competency standards are extended version. But core competency standards from NBB are succinct. We should use the five main components and arranged list of competencies under these five main components accordingly” (P01, Expert Panel Group 1, FGD 1)*

*“...It would be more appropriate if we adopt competency standards from local context... so it would be meaningful as we also teach our student using these core competency standards.” (P05, Expert Panel Group 1, FGD 1)*

## **Theme 2: Multi-method approach to assessment**

This theme explained the expert panel assertion that the assessments grading system should not be rigid to observations only but diverse encompassing other methods such as audit, certificate of training and chart review. It was notified by some of expert panel that method of assessment in the revised CAT need more clarification in terms of appropriate methods of assessment that will accordingly assessed and measure specific competencies performance.

*"How do we assessed a specific skills required by the specific core competencies components? We cannot depend on 100% observations only. Assessing through discussion with others may be subjective too. The main point is the appropriateness of the competencies assessment, it should assess what it should measure. For examples achievement of skills require direct observations, demonstration of knowledge require evidence of assignments, and research may need evidence such as published manuscripts or evidences of changes in practices..." (P10, Expert Panel Group 2, FGD 1*

The expert panel believed that evidences of competencies should be included or submitted at the end of assessment period to ensure validity of the assessment conducted. The expert panel provided examples of evidences such as certificate of attendance or participation, audit result, chart review or other relevant documentation supporting the achievement of the core competencies. Quality improvement activity was also suggested by half or the expert panel to diversify methods of assessment. Other expert panel members also recommended that Objective Structured Clinical Examination (OSCE ) as on the best way to assess competency albeit time consuming.

*"...I think OSCE is a good way to assess competency but we may not able to afford it...It need time and lots of resources in preparation for the session" (P12, Expert Panel Group 2, FGD 2)*

Many participants favour the use of different methods of assessment over single method;

*"...apart from the stated methods, can we add quality improvement activity as one of the assessment method?. .. it can save much of our time to assess some of the components by just providing evidences of participation or contributions such as certificates, letter of acknowledgment or participation, and so on. This should be submitted to support the competencies assessment. This is to make sure that the community health nurses truthfully achieved the performances which were assessed." (P6, Expert Panel Group 1, FGD 2)*

## **Theme 3: Definitive guidelines as framework for assessment**

This theme represented the expert panel emphasis on the importance of a distinctive grading system that can differentiate the performance of newly employed nurses from the experienced nurses. All of the expert panel were on favor of a scoring or grading system for the competencies assessment.

*"The grading system or scoring system for competencies assessment is very good. It gives high marks to high performer nurses and low marks to low performer nurses. It is good because it differentiates how a nurse is more competent than the others, and remedies can be planned to improve competencies." (P09, Expert Panel Group 2, FGD 2)*

However, about three quarter of the expert panel recommended that in view of the multiple methods of assessment, explanations should accompany the grading system as a framework that guide the grading or scoring system. They commented that development of such framework will be useful because the General Practice or OPD is usually a very busy setting, hence, if the CAT is unclear, the purpose of doing

competency assessment will be defeated by time constraint, work overload, inadequate staffing and lack of knowledge on how to use the CAT among assessors and the nurses to be assessed.

*"...the use of different methods of assessments on the same competencies is very good. The direct observations may be complemented by collections of reflective diaries, which further can be strengthened by providing certificate of attendance that sharpen the skills being assessed. However, how do we know the assessor is choosing the right method of assessments for a particular performance in the core competencies component, while other assessor may also use different method for that same performance?"(P12, Expert Panel Group2, FGD 1)*

A few of the expert panel argued that due to the scale nature (1 to 5) of the grading system, there may be issues in segregating how the score be awarded to an experienced nurses from the new nurses.

*"...I am not a 100% supportive of the grading system... an assessor may not have adequate knowledge on how to rate the performance... again the different methods of assessment that can be employed... also because the scale is only 1, 2, 3, 4 and 5. How would you rate based on this scale to an experienced nurse and how would you differently rate a new graduate nurse?"(P11, Expert Panel Group 2, FGD 1)*

The concern about the possibilities of inconsistencies among assessors were also highlighted by a quarter of the expert panel as assessment can be subjective reliant on the individual assessor.

*"...different nurse managers may have different way of interpreting their competency assessment findings so at the end of the day we may have discrepancy of the score given" (P08, Expert Panel Group 2, FGD 1)*

*"...some nurse managers may be very lenient but some may strictly adhered to their high level of expectation..... this again all depend on their individual interpretation of the performance standards." (P05, Expert Panel Group 1, FGD 1)*

## **Theme 4 – Understanding and acceptability of the competencies assessment tool**

This theme illustrated the expert panel concern about the users' understanding of the CAT comprising the nurse assessing and the nurse to be assessed in order to ensure that expected performances are similarly perceived by both parties. Majority of the expert panel pointed out that competency standards should be appropriately assessed by an experienced or senior nurse. They further highlighted that assessment needs to be done regularly as an ongoing activity in order to monitor and maintained the standards of practice.

*"...The competencies assessment should not be a one-off activity...looking at the number of components, we must set interval period for the assessment to be conducted... are we going to make it annually or every 3 years..."(P07, Expert Panel Group 2, FGD 2)*

More than half of the expert panel felt that the CAT acknowledged their understanding of the CAT addressing that it will be useful to assist nurse managers in determining whether or not a community health nurse is competent in a particular standard. Having said that, the expert panel also proposed several recommendations to be put in place before the implementation of the CAT. It was perceived that the CAT can be utilize properly with adequate information and guidance along with adequate training, particularly on what are the expectations on the competency standards nurses have to achieve and how to utilize the CAT.

*"...I can see that this CAT can be useful to ensure nurses are competent though it may be very tough to conduct the assessment if nurse managers are not fully informed about the assessment. The CAT must be clear in every aspects so that the nurse whom assessed and the nurses to be assessed equally understand expectations laid on by the CAT. A briefing and training on how to use the CAT would be a good start before using the CAT in practice..."(P03, Expert Panel Group 1, FGD 2)*

Three quarters of the expert panel expressed their acceptability of the CAT and stated that the revised CAT would be more applicable and useful than the existing generic annual performance appraisal for civil servant. They raised the issue of time constraint and increase workload, if the CAT would be additional to the performance appraisal.

*"...I can foresee the difficulty face by nurse managers if the CAT is used in addition to annual performance appraisal establish for civil servant" It will be extra work for nurse managers and some of us may not have enough time to do them both at one time"(P08, Expert Panel Group 2, FGD 1)*

## **Discussion**

This study was conducted to explore expert panel perceptions and experiences on the revised CAT including its components, methods of assessment, grading system and its overall structure and organization. This study evident that it is fundamental to identify a comprehensive core competencies domains and the list of core competencies for community health nurses in the general practice setting of the PHC Services. The expected core competencies must be communicated to the community health nurses and their assessors so that they have similar understanding of the competencies, hence the competencies performance and assessment are conducted as expected. (Fater, et al., 2014; Mangubat et al, 2014).

The study demonstrated that the seven core competency generic nurses standards framework advocated by the ICN (2009) appropriately aligned with the five core competency generic nurses standards domains established by the Nursing Board for Brunei (Ministry of Health, 2013). Comparison of the two generic competencies standards with other international countries showed that the contents are all similar and relevant (Jordanian Nursing Council, 2016; Singapore Nursing Board, 2012; Capital Health Nova Scotia, 2012; Myanmar Nurse and Midwife Council, 2015; The Nursing Council of Hongkong, 2012). Despite this, the specific core competencies standards for community health nurses are compatible with the seven and five core competency standards domain for generic nurses established by the ICN (2009) and the

Nursing Board for Brunei (Ministry of Health, 2013). The preliminary CAT is specific for community health nurses in the general practice setting of the PHC Services which were developed through critical review of the existing CAT with reference to empirical evidences and regulatory documents of the ICN (2009), WHO (2010) and other countries (Nursing and Midwifery Council; Canada 2015). Further critical analyses and evaluations for refining and finalizing the preliminary CAT were undertaken through FGDs with expert panel that may be considered rigorous in terms of face and contents validity (Ladhani, Stevens and Scherpbier, 2014). Future studies should consider quantitative design encompassing pilot testing of the CAT and performing the psychometric properties for determining reliability and validity (Moyer, ). It is anticipated that the CAT for community health nurses in the general practice setting of the PHC Services would set the basis for assessment to determine the competence level of community health nurses from entry into practice and throughout their professional nursing careers instead of a one-off activity.

The core competencies standards assessed by the preliminary CAT should further be relevance to the Brunei healthcare system which has similarly been increasingly challenged by growing number of chronic diseases, ageing population and shortage of healthcare professionals. Community health nurses must be better equipped with knowledge, skill and ability to deal with these complexities in order to provide safe and the best care possible. In order to achieve this, assessing and evaluating the required explicit competences which are specific to Brunei context is central to patient care outcomes. This study implied that CAT should be developed based on benchmarking with international regulatory bodies and other countries so that community health nurses core competencies are of equal to international standards (Feringaa, De Swardtb, Havengaa, 20018). The development of the preliminary CAT also indicated that core competencies should incorporated the actual competencies of community health nurses in the Brunei context without compromised. The CAT should not comprised what is not expected in the scope of practice of the community health nurses in Brunei. The findings are consistent with qualitative research exploring the relevance of existing Australian Competency Standards for Registered Nurses that is capable of assessing the specific community health nursing practices (Tery and Bull, 2015). Review of the CATs internationally also suggested that the core competencies standards should be expanded to include higher level of knowledge and skills such as research, leadership and management (Wilkinson, 2013). It is also important to highlight that competencies are acquired and developed steadily and progressively overtime, which should not be a 'one off' or 'once-only' activity. Assessment should be continuous, on-going and perform at regular interval (Joint Commission International, 2018). The issue of 'once-only' assessment and a 'tick-box' approach in competency assessment should be given attention as there is empirical evidence to show that these strategies may not able to adequately assess competence (Franklin and Melville, 2013; Flinkman et al., 2017; Joint Commission International, 2018; Liu & Aunguroch, 2018).

Concern over the inconsistencies of perceptions of the CAT from the FGDs with the expert panel are also consistent with findings from the literature (Franklin and Melville, 2015). Zasadny and Bull (2015) also argued that traditional approach of competency assessment is distorted with ambiguity and inconsistency. Such concern may be justified because competencies assessments are subjective to individuals whom may either be lenient or have high expectations. In addition, interpretations of

assessors are subject to clarity of the core competencies to be assessed. This can be resolved by providing adequate information, guidance and training as proposed by the participants.

In term of acceptability to use in practice settings, time constraint, work overload, inadequate staffing and lack of knowledge on how to rate competence are the identified obstacles that may lead to hesitancy to use the preliminary CAT. These findings are similar to a study conducted by Figueroa, et al (2018) in determining the compliance of nurses to national core competency standard. The use of multi-methods and multi-assessors approaches in conducting assessment may solve this issue. Holanda et al. (2018) indicates that using these approaches may reduce inconsistencies among assessors as well as reduce time taken to do the assessment. Although evidences on the most effective method is limited, there is general agreement in the literature that competency assessment should use more than one assessment methods that include such as self -assessment, direct observation, Objective Structured Clinical Examination (OSCE), and simulation (Franklin and Melville, 2013; Flinkman et al., 2017). The multi-methods competencies assessment and multi-assessors of core competencies acknowledged uniqueness of individual nurses through diverse approaches. Other widely used method is patient-centered competency model which addressed patient as an assessor to add greater reliability and validity to the assessment process (Franklin and Melville, 2015). It is also suggested that core competencies be assessed over a time continuum rather than in a short period of time. This is particularly true in a way that it allows time for assessors to adequately observe, monitor and evaluate the performance rather than jump into conclusion at one hour observation for instance.

Usability and acceptability of using the preliminary CAT additional to the existing generic civil servants performance appraisal may be viewed as task duplications by assessors, in particular, nurse managers. The use of multiple competency assessment tools to meet mandatory evaluation of performance and regulatory requirements may put extra burden for the assessing nurses and the nurses being assessed alike. This may highly likely resulted to the 'tick-box' approach which defeat the purpose to adequately assess nurses ongoing ability to competently undertake their daily nursing duties. Moreover, due to tedious assessment preparation and documentation of evidences of competent, it may encourage a 'once-only' approach over a periodic, regular assessment. This is the present state in Brunei where competency assessment is conducted only for the new nursing graduates at the entry level. One of the issues related to a 'once-only' assessment is that nurses can often demonstrate the expected ability only once at entry level for the sake of the competency assessment but the question remains whether or not nurses practicing or complying to this same standards after a certain period of time. Similarly, a generic performance evaluation (annual appraisal) for civil servant must not replace the need of nursing competency assessment. Being specifically competent of nursing practices denotes safety and quality measures in nursing care whilst annual appraisal will only look at the general performance of aptitude and attitude nursing staff.

## Conclusion

This study had provided two distinct inputs. First, the valuable insight in the refinement of a preliminary developed CAT and second, the identification of issues that may affect the acceptability and the implementation process of the revised CAT. The expert panel had given substantial contributions in the revision process of the existing CAT leading to preliminary development of a new CAT. The study highlighted the significant of using a multi-method and multi-assessors approach in the assessment. These include direct observations of the nurse's practice, an interview to ascertain nursing care in different scenarios and evidences provided by the nurse (including self-assessments, exemplars or examples of practice, documentation, and reports from other nurses and other health professionals). Adequate information and training of using the preliminary new CAT, and providing clear explanations of terms used in the preliminary new CAT are some recommended solutions concerning the utilization and acceptability of the CAT. It is also suggested that competencies assessments should be periodic, regular assessment instead of a 'once-only' assessment. It is found imperative to paid attention to multiple competency assessment tools which may put extra burden to the nurses.

## **Strengths And Limitations Of The Study**

This study reviewed the preliminary developed CAT for CHNs working at the General Practice setting in PHC based on nurse educators and nurse managers points of views. Such data highlighted the need to move forward with the validation study of this assessment tool. It is worth mentioning that the revised CAT is intended to assess and evaluate competency standard at staff nurse level. Knowing the importance of assessing and evaluating competencies of other level of nurses, it is imperative to develop similar tool with different core competencies standards in the future studies. The FGDs with the expert panel evident that challenges remain in establishing components or domains of competencies, list of competencies and assessments approaches in terms of methods and assessors. Further FGDs may deem required to establish a more comprehensive list of assessment items. Further quantitative analysis is also required to assess the psychometric properties of the preliminary new CAT to evaluate the tool critically, hence development of a more robust assessment instrument.

## **Implication To Practice**

The World Health Organization (2010) emphasize that it is imperatively important to ensure nurses are competence to perform their jobs. The American Joint Commission on Accreditation of Healthcare Organization (AJCAHO) (2010) claimed that in order to provide quality patient care, the individuals delivering patient care services must be competent enough to do so. AJCAHO standards also require leaders to ensure the competence of staff members to be continually assessed, maintained, demonstrated and improved (Joint Commission International, 2018). Therefore, taking safety and quality of care into consideration, it is vital to utilize reliable and validated tool to assess competency.

There is no single best method that can be used to assess competence. The combination approach is recommended to ensure adequate assessment of competence. Methods of assessment identified in the literature include return demonstration, skill assessment inventories (via self, peers, supervisors, and

clients), portfolio development and review and observation of daily work (Levine & Johnson, 2012; Bezemek, 2017). Thus, this reflects that using 'one size fits all' approach poses a significant limitation to competency-based assessment in the clinical setting which demonstrated that one single method will not be able to adequately measure competence.

## Abbreviations

AJCAHO = American Joint Commission on Accreditation of Healthcare Organization

CATs = Competency Assessment Tools

CHNs = Community Health Nurses

FGDs = Focus Group Discussions

IHSREC = Institute of Health Sciences Research Ethics Committee

ICN = International Council of Nurses

MHREC = Medical and Health Research and Ethics

OPD = Outpatient Department

OSCE = Objective Structured Clinical Examination

PHC = Primary Health Care

PLPK = the Brunei Nursing Training and Development Centre

SoP = Scope of Practice

WHO = World Health Organization

## Declarations

### **Ethics approval and consent to participate**

The study protocol was designed and performed according to the Declaration of Helsinki. Ethical clearance was provided by the joint committee of the Pengiran Anak Puteri Rashidah, Institute of Health Sciences Research Ethics Committee (IHSREC), Universiti Brunei Darussalam and Medical and Health Research and Ethics Committee (MHREC), Ministry of Health (ERN: UBD/PAPRSBIHSREC/2019/18). Written informed consent was obtained from all participants

### **Consent for publication**

All authors have consented for publication.

### **Availability of data and material**

Data is available upon reasonable request.

### **Competing interests**

The authors do not have conflict of interest to declare.

### **Funding**

No funding was received for this undertaken project.

### **Authors' contributions**

RK, JS and KHAM contributed to the conception or design of the study. RK and KHAM were involved in acquisition of data/or interpretation of data. All authors participated in writing, drafting and revising the manuscript, and agreed to be accountable for all aspects of the work and any issues related to the accuracy or integrity of any part of the work.

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