



# Oral Presentation

*Room 2*



## A SCALE DEVELOPMENT OF NURSES PERCEIVED ORGANIZATIONAL CLIMATE

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### Abstract

**Background:** Enhancing the nursing workforce is essential, and the organizational climate of healthcare facilities has a role in how well retaining them by enhancing their overall well-being and working conditions.

**Objective:** This study aimed to develop and test the Perceived Organizational Climate Scale (POCS) to demonstrate its psychometric properties.

**Methodology:** The methodologic research design adhered to DeVellis's tactics (2017) on scale development. This study involved five steps of scale building (determine clearly what it is to be measured, generate an item pool, determine the format for the scale, have initial pool reviewed by experts, and consider inclusion of validation items) and three steps of psychometric testing (administer items to a development sample, evaluate the items, and optimize the scale length) to validate the scale's content, structure, and internal consistency. The conceptual framework was developed by integrating a concept analysis, thorough literature review (1939-2018), and inductive qualitative data collecting with the broader Competing Value Framework (Quinn et al., 2015). Proportionate stratified random sampling was used for step six, while purposive sampling was used for other steps. The expert panels validated the four-point scale with 81 items out of the 120 initial item pool. Exploratory factor analysis, the contrasting groups, and the split group analyses were done. A total of 1161 Myanmar nurses from eight general hospitals participated during August 2019 and September 2020.

**Result(s):** The final POCS has 35 items that can explain nearly 50% of the variation. Four dimensions illustrated factor loadings higher than .40 were transformational climate, bureaucratic climate, team climate, and strategic climate. The Cronbach's alpha for the final scale was .93, and those of dimensions varied from .82 to .85. The contrast-group validity analysis showed that novice nurses had a significantly lower mean score than experienced nurses. The acceptable values of internal consistency reliabilities across the split groups demonstrated the scale's stability.

**Discussion:** The scale illustrated robust psychometric properties to measure holistic organizational climate through its crucial components that help foster a global view of this concept. POCS can be used to assess organizational climate objectively as nurses perceive it in hospital settings to enhance working conditions.

**Keywords:** healthcare settings, nurses, organizational climate, scale development



## EVALUATION OF REAL-TIME LEAKAGE OF TRADITIONAL AND NEW N95 RESPIRATORS AMONG CHINESE HEALTHCARE WORKERS DURING THE SIMULATED CLINICAL PROCEDURES

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### Abstract

**Objective:** To evaluate real-time leakage of traditional and new N95 respirators among Chinese healthcare workers during two simulated clinical procedures.

**Methods:** This study employed a randomized cross-over trial that examined the effectiveness of respiratory protection by comparing traditional and new N95 respirators. Eligible participants were randomly allocated through a controlled crossover experiment to either a traditional or new respirator group (n = 100 in each arm) for performing standard clinical procedures. The primary outcome (real-time leakage) was recorded at 30s intervals during nasopharyngeal suctioning and cardiopulmonary resuscitation. The secondary outcomes were the fit rate and mask usability. After a 2 min suctioning (15s twice) and 4 min one-person CPR, the fit rate (assessed by standard N95 fit testing) and mask usability (measured by self-reported mask usability scale) were recorded as data of post-procedure. After 10 min rest, measurement of real-time leakage (i.e., crossover), fit test, and usability were repeated.

**Results:** Of those 201 participants who passed the fit testing of both new and traditional respirators, the new respirator reduced real-time leakage during suctioning, especially for small air particles (i.e., 0.253 $\mu$ m at t2 and t3, 0.352 $\mu$ m at t3 in the first group allocation). During CPR, the new respirator had much more real-time leakage than the traditional one. This was especially obvious in the initial group allocation and cross-over allocation, where air particles measured 0.488 $\mu$ m.

**Conclusion:** This study found that moderate to high-intensity body movement during clinical procedures may increase real-time leakage, particularly in the new respirator being evaluated.

**Keywords:** real-time leakage, new N95 respirators, healthcare workers



## FACILITATORS AND BARRIERS TO THE IMPLEMENTATION OF COMPETENCY-BASED NURSING CURRICULA IN SOUTHEAST ASIAN COUNTRIES

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### Abstract

**Background:** The competency-based nursing curriculum is widely regarded as an efficient method of preparing recent graduates to fulfill the public healthcare requirements by imparting the necessary knowledge, abilities, and skills. However, implementing this kind of curriculum reveals factors affecting the implementation process.

**Objective:** This study aimed to explore facilitators and barriers to implementing competency-based nursing curricula in ten South East Asian countries.

**Methodology:** A qualitative descriptive approach was used. The data was collected through twenty-six in-depth interviews and three group discussions with participants who were nurse educators from ten countries. Content analysis was used to analyze data.

**Results:** The facilitators and barriers to implementation were identified as individual and organizational factors. Facilitators included commitment, strong cooperation, the effectiveness of competency-based nursing curriculum, necessary renovation, and policies. Simultaneously, barriers were identified as limited preparedness in clinical transiting, resistance from implementers, limited resources, and a limited understanding of nursing competency.

**Discussion:** The competency-based nursing curricula were increasingly chosen to educate Southeast Asian nurses. It conventionally facilitates nursing education reform in the region, contributing to harmonizing nursing educational standards as mentioned in the ASEAN Mutual Recognition Arrangement 2006.

**Keywords:** competency, competency-based curriculum, nursing education, ASEAN, Southeast Asia



## INFLUENCING FACTORS ON SEXUAL SELF-EFFICACY AMONG COLLEGE STUDENTS

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### Abstract

**Background:** Higher sexual self-efficacy relates to safer sexual behaviors among youth students including college students to prevent HIV infection. At present the sexual self-efficacy and its influencing factors among the Chinese college students are not clear.

**Objectives:** To explore the sexual self-efficacy and its influencing factors among college students in Jiangxi Province China.

**Methodology:** An observational cross-sectional study was carried out among 2,452 students from a Comprehensive University in Jiujiang, Jiangxi Province, China from September 2020 to March 2021. The Sexual Self-Efficacy Scale, and the Acquired Immunodeficiency Syndrome (AIDS) Related to Sexual Knowledge, and Behavior Scale were used to collect data. Logistic regression was applied to analyze data.

**Results:** 2,452 cases were finally accepted into this study. The mean score of the total sexual self-efficacy was 99.61. Female and senior students from an urban area had statistically significant higher sexual self-efficacy scores than male and junior students from a rural area ( $P < 0.05$ ). Students with higher scores of AIDS related to sexual knowledge had statistically significant higher sexual self-efficacy scores ( $P < 0.05$ ). The mean score of the sexual self-efficacy among those who accepted premarital sex, experienced sexual behavior, and had their first sexual intercourse older than 18 years was statistically significant higher different from those who had not accepted premarital sex, not experienced sexual behavior, or had their first sexual intercourse before 16 years old ( $P < 0.05$ ).

**Conclusion:** The results of the study showed that male and junior college students, had less AIDS related sexual knowledge, having first sexual intercourse before 18 years old were the major influencing factors on sexual self-efficacy. Further action should provide a program to improve AIDS related sexual knowledge among college students especially the male and junior students to postpone their first sex after 16 years old.

**Keywords:** Sexual self-efficacy, College students, Influencing factors



## NURSE DECISION-MAKING IN EMERGENCY DEPARTMENT: A CONCEPT ANALYSIS

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### Abstract

**Background:** Developing decision-making models in emergencies is critical because emergencies can occur anytime and anywhere and require quick and appropriate action.

**Objectives:** The purpose of this concept analysis is to analyze and clarify the concept of decision-making in the scope of emergency and develop an operational definition of decision-making, as well as attributes, antecedents, and consequences of the concept of decision-making.

**Methods:** Walker and Avant's concept analysis approach was used. Literature reviews were conducted through several databases, namely PubMed, EBSCOhost, Science Direct, and Google Scholar, for articles published from 2012 to 2022.

**Results:** The analysis shows that the attributes of the concept of decision-making include the process of managing resources to ensure effectiveness and security. This management process uses appropriate and effective procedures in accordance with standards and the values that exist in society, which refer to human needs to achieve common goals. Antecedents for decision-making include used cases and technology. The consequences of decision-making include positive impacts such as readiness, experience, responsibility, and action according to emergency procedures.

**Conclusion and Implications:** A concept analysis helps nurses understand concepts and make action decisions in the emergency department. It is recommended that nurses be aware of the situation's characteristics and the technology used to guide them in performing actions. More research is needed to analyze the need for decision-making in nurses' activities in the emergency department.

**Keywords:** Decision making, Concept Analysis, Emergency Nurses



## NURSE PRACTICE ENVIRONMENT AND ORGANIZATIONAL COMMITMENT IN SELECTED GOVERNMENT HOSPITALS IN HANOI, VIETNAM

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### Abstract

**Introduction:** The hospital working environment is considered positive when it promotes nurses' participation in management, good foundation for quality care, supports of nurses, provides adequate resources, and builds a good collegial nurse-physician relation. Therefore, nurses must be aware that improving the working environment will promote their professional development and higher commitment to the organization. This study aims to understand the relationship between nurses' perceptions of the working environment and organizational commitment in selected hospitals in Hanoi, Vietnam.

**Research Methods:** A descriptive-correlational research design was utilized in this study with 372 nurse respondents who were randomly selected using the proportional sampling method. The Organizational Support Theory (Eisenberger et al., 1986) and Three Component Model of Commitment (Meyer & Allen, 2004) served as a theoretical basis that helped to understand the conceptual framework relating nurse practice environment and organizational commitment. A structured questionnaire was used to collect data between November and December 2023 in two selected government general hospitals. The SPSS software version 20 was used with descriptive statistics and the Shapiro-Wilk test to summarize the variables' demographic characteristics, frequency, proportion, and normality. A relationship between study variables was ascertained by applying Spearman's Rho at a 5% level of significance.

**Results:** The findings showed that nurse respondents' perception of their work environment was at a favorable level ( $M=3.14$ ;  $SD=.36$ ), and they exhibited the most affective commitment ( $M=3.86$ ,  $SD=.61$ ). In general, there was a positive significant correlation between Nurse Practice Environment and Organizational Commitment among nurses ( $r=.445$ ,  $p<.001$ ). All the dimensions in the Nurse Practice Environment scale positively correlated with all dimensions of the organizational commitment scale, with coefficient  $r$  ranging from  $.21$  to  $.41$ ,  $p<.001$ ). The more nurses participate in internal governance, and as they improve their relationship with physicians, the more they become affectively committed to their hospital ( $r=.46$  and  $r=.41$ ,  $p<.001$ ).

**Conclusion and Significance/ Implication:** A positive work environment encourages and sustains staff commitment. An attractive and supportive work environment has numerous properties that may influence motivation, commitment, satisfaction, and autonomy. Staff nurses should be more involved in governance and policy decisions to ensure a proactive nursing practice environment and organizational commitment.

**Keywords:** Nurse Practice Environment, Organizational Commitment, Nurses, Hospital



## UNDERSTANDING THE IMPACT OF SOFT SKILLS ON MEDICATION SAFETY IN CRITICAL CARE SETTINGS: A SCOPING REVIEW

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### Abstract

**Background:** Medication errors among nurses in critical care settings continue to pose a significant threat to patient safety. While technological advancements have improved medication administration processes, the role of soft skills in medication error prevention remains underexplored.

**Objective:** This study aimed to look for the available literature related to medication safety and understanding the importance of soft skills application in serving medications in critical care settings.

**Methodology:** A scoping review was conducted with the following databases: ProQuest, SpringerLink, Science Direct, PubMed, and Web of Science. The articles were selected by using the PRISMA flow. The selected articles included in this study were the studies done from 2019 to 2023.

**Results:** A total of 19 articles were included in this scoping review. Three themes emerged in this scoping review: medication errors among nurses in critical care settings, the importance of soft skills application in severing medications, and the impact of soft skills application on medication safety. The impact of soft skills application on medication safety is evident in the literature, with studies demonstrating a positive correlation between the application of these skills and medication error reduction.

**Conclusion and Implications:** This scoping review provides valuable insights into the relationship between soft skills and medication safety in critical care settings. The findings underscore the need for healthcare organizations to recognize the importance of soft skills in medication error prevention and invest in strategies to enhance these skills among critical care nurses.

**Keywords:** medication safety, medication errors, critical care setting, soft skills





## UPDATED REVIEW OF OBSERVATIONAL STUDIES OF INFECTION CONTROL PRACTICE AMONG HEALTHCARE WORKERS IN RESIDENTIAL CARE HOMES

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### Abstract

**Background:** Implementing infection control measures in residential care homes is essential for mitigating the transmission of contagious illnesses, especially among susceptible individuals such as older and immunocompromised persons. Prior research has indicated that healthcare workers in residential care settings frequently exhibit insufficient adherence to infection control measures, thereby elevating the likelihood of infection transmission. However, updated review for the past ten years is scarce regarding the observational studies on infection control practices and the factors influencing them.

**Objective:** This study aimed to review the utilization of observational studies in assessing infection control practices among healthcare workers in residential care homes and identify the factors that impact their implementation.

**Methods:** A systematic search of databases (PubMed, SCOPUS, Science Direct and CINAHL) using the keywords of “hand hygiene” or “infection control”, and “nursing home” or “residential care homes” or “nursing facility” was conducted. Observational studies in residential care homes published in English from January 2013 to December 2023 were included. Only studies that reported infection control compliance results among healthcare workers in residential care homes using observational methods, including participant and non-participant observations, were considered eligible. Additionally, factors that influence their practice had to be included for review.

**Results:** Out of the 118 reviewed studies, only five met the abovementioned criteria and were included in the review. These studies were carried out in China, the Netherlands, and Norway, involving over 40 residential care homes. The primary emphasis of all the studies was on evaluating hand hygiene, followed by examining glove use and respiratory protection. The compliance rates for individual studies on hand hygiene ranged from 11.3% to 58.3% among the 14,466 observations. The narrative comments highlighted several factors that could impede adherence to infection control practices, such as a lack of specialized training, non-licensed caring staff, frequent contact with older individuals, and a high turnover rate among staff members.

**Conclusion:** The level of adherence to infection control practices in residential care homes varies across regions, but none of them achieved the World Health Organization's recommended standard of 80% implementation. This review posed implications for the healthcare authorities that healthcare-associated infection may be at risk in residential care settings.

**Keywords:** Infection Control, Healthcare Workers, The residential care homes