

Research Capabilities and Engagement of Nurses from Training Hospitals in Tacloban City

Kristle Grace C. Mutya, MANM, Joel B. Serad, MD, DM, MAN, Joan P. Bacarisas, DM, MAN, Geronima Emma A. Amores, DM, MAN, and Resty L. Picardo, DM, JD, MAN

College of Allied Health Sciences, University of the Visayas

DOI: <https://doi.org/10.51244/IJRSI.2025.120500158>

Received: 10 May 2024; Accepted: 14 May 2025; Published: 18 June 2025

ABSTRACT

Research capabilities and engagement are essential for personal, professional, and social development. They encourage independent learning, critical thinking, innovation, and evidence-based decision-making among nurses. Finding the interrelationship among demographic characteristics, research capabilities, and research engagement among nurses has not been widely studied especially at the local level. This quantitative research made use of the descriptive, correlational design to assess the interrelationship among demographic characteristics, research capabilities, and research engagement of nurses in training hospitals in Tacloban City for the first quarter of 2025. Findings revealed that just over half were belonging to the 27 to 40 years old group and majority were females. Majority were college graduates, were staff nurses, and over a quarter had served for one to three years. Majority has not published their research work. Research capabilities was average and research engagement was moderate. Position was correlated with research capabilities. Personal characteristics were not correlated with research engagement. Research capabilities were correlated with research engagement. No matter what age, sex, educational attainment, years of service, and number of research, research capabilities and engagement can still be high. The higher the capabilities in research, the higher the engagement in research. The number one challenge was the heavy workload faced by nurses. To address the findings of the study, a research training plan was proposed.

Keywords: Descriptive, correlational design; Nurses; Research capabilities; Research engagement.

INTRODUCTION

Research in hospitals is essential for advancing healthcare services and improving patient outcomes, as it forms the foundation for evidence-based practice (EBP) and contributes to developing more effective clinical guidelines. Nurses play a pivotal role in leading and implementing research within the hospital setting, with their active engagement in research significantly impacting the quality of patient care (Carrick-Sen et al., 2016).

Research has been linked with evidence-based practice and it is important that nurses have to engage in evidence-based practice to be able utilize recent findings in research in their practice. According to Indeed Editorial Team (2024), comprehensive research helps health care professionals make more informed decisions regarding a situation. In addition, the evidence-based practice method requires these professionals to find relevant information, analyze them, and derive the best approach to produce the desired outcome. As a result, better decision-making helps improve the health care professional's confidence and ensure patients receive the best care possible. Research has not been adequately prioritized or supported in this area. Evidence-based practice, which combines clinical expertise with the best available research evidence, is fundamental to delivering high-quality patient care (Melnik & Fineout-Overholt, 2018). Developing robust research capabilities allows nurses to evaluate nursing interventions, assess patient care outcomes, and facilitate evidence-based decision-making within their units (Haleem, 2020). However, many hospitals face significant barriers, such as limited research training, insufficient resources, and a lack of research databases, preventing nurses from fully engaging in research activities (Pascua et al., 2020).

In a study made by Hu et al. (2019) results indicated that most of the nurses self-assessed that their research

capacity was relatively low. Most of the nurses expressed the need for training in research. Results showed participation in nursing research practices and pursuing a higher degree could improve nurses' research capacity. This study emphasized nurses' research capacity needs further improvement and more training courses on nursing research tailored to the requirements of nurses are needed.

In a very recent study made by Drury et al. (2024) nurses reported moderate to high research knowledge, attitudes, and practice scores. The most common barriers to engagement with research included a lack of time, lack of incentive or reward, lack of knowledge or skills, lack of training opportunities, and lack of experienced nursing research mentors. Holding a specialist, advanced practice, or administrative role, and a postgraduate qualification were associated with higher scores on the knowledge, attitudes and practice subscales. Previous experience of conducting research was associated with higher knowledge and attitudes scores. Previous experience of authoring a paper and submitting a grant were associated with higher knowledge scores.

The researcher's personal experience underscores the importance of this issue. As a nurse in Tacloban City, the researcher has witnessed the absence of formal hospital research initiatives. Conversations with colleagues reveal concerns: insufficient time, limited access to research databases, and a lack of formal research training. These challenges highlight the urgent need to develop strategies to enhance nurses' research capabilities, thereby improving patient care through evidence-based practice (Alasad & Ahmad, 2016). Very few had done research among staff nurses, if not for their requirement for their master's degree, they would have not undergone doing research studies. It is important to initially establish baseline information to know the extent of research capability activities and allow nurses to engage in research activities. Despite the recognized importance of research, many healthcare facilities, including those in Tacloban City, lack structured research programs that involve nurses, limiting the full integration of research into clinical practice. This gap in research engagement forms the basis of this study, which examines the research capabilities and level of engagement of nurses in training hospitals in Tacloban City.

This study aims to assess the relationship among demographic characteristics, nurses' research capabilities and level of engagement in training hospitals in Tacloban City, offering valuable insights into areas that require improvement. The study further determines the different challenges in research capability and engagement. This serves as the gap of the study. Addressing this gap is crucial for identifying opportunities to develop structured research programs that support nurses conducting and utilizing research which will greatly impact patients as well. The findings of this study will contribute to creating policies and training programs that foster a research culture within hospitals, ultimately enhancing patient outcomes by integrating research into everyday clinical practice (Halm, 2018). By tackling the current lack of research engagement, this study aspires to contribute to the professional development of nursing staff and elevate the overall quality of care in healthcare facilities. This work is aligned with the third sustainable developmental goal of good health and well-being.

Research Objectives

The study aimed to assess the interrelationship among demographic characteristics, research capabilities, and research engagement of nurses in training hospitals in Tacloban City for the first quarter of 2025.

Specifically, the study sought to answer the following:

1. What were the demographic characteristics of all nurses in terms of:

- 1.1 age;
- 1.2 sex;
- 1.3 number of years' experience as a nurse;
- 1.4 highest educational attainment;
- 1.5 position/title; and
- 1.6 no. of research publication?

2. What were the research capabilities of all nurses in tertiary hospitals in Tacloban City in terms of;

- 2.1 individual capabilities;
 - 2.2 collective capabilities; and
 - 2.3 cognitive capabilities?
3. What was the research engagement for all nurses in tertiary hospitals in Tacloban City in terms of:
- 3.1 participation in research activities;
 - 3.2 promotion of research activities; and
 - 3.3 application of research in practice?
4. Was there a significant relationship between;
- 4.1 demographic characteristics and research capabilities;
 - 4.2 demographic characteristics and research engagement; and
 - 4.3 research capabilities and research engagement?
5. What were the perceived challenges on research capabilities and engagement are encountered by all nurses from Training Hospitals in Tacloban City?
6. What research training plan was proposed based on the findings of the study?

Statement of Null Hypotheses

Ho1: There was no significant relationship between the demographic characteristics and research capabilities.

Ho2: There was no significant relationship between the demographic characteristics and research engagement.

Ho3: There was no significant relationship between research capabilities and research engagement.

REVIEW OF RELATED LITERATURE AND STUDIES

Research Capabilities. According to the study of Janerka et al. (2024), research capacity was low to moderate at the individual and group domains and moderate in the organizational domain. Participation in research activities was generally low.

Almost all nurses surveyed rated their research skills and success as low. At individual level, nurses generally reported most skill in finding and critically reviewing literature, and least skill in securing research funding and submitting for ethics approval (Rey et al., 2022).

The results in the study of Hu et al. (2019), indicated that most of the nurses self-assessed that their research capacity was relatively low. Most of the nurses expressed the need for training in research. Linear regression analysis showed participation in nursing research practices and pursuing a higher degree could improve nurses' research capacity.

Research Engagement. The findings in the study of Ndubuisi et al. (2021) revealed that 71.1 percent of the respondents had been involved in research activity; however, only 16.6 percent had participated in a research study after school. The result also revealed that only 23.6 percent of the respondents had been involved in health policy decision-making in the hospital.

In the study of Amicucci et al. (2022), overall, data were analyzed, of which about 21 percent reported participating in a research project, while 33 percent had attended a scientific conference as a speaker, and 11 percent had written at least one scientific paper.

In the study of Drury et al. (2024), three hundred and sixty-six nurses responded, of whom 15 percent had previously been involved in research. Nurses reported moderate to high research knowledge, attitudes, and practice scores.

In the study of Rojaye and Netangaheni (2023), all participants agreed on the low number of nurses engaging in healthcare research development, particularly human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS) research. Participants said that nurses do not consider healthcare research and policy formulation a nursing duty; instead, they believe that nurses exclusively care for their patients and that everything beyond the bedside is not their responsibility. Although participants agreed that each nursing function had various duties, the fundamental objective of a professional nurse remains the same to be the client's champion and deliver the best care based on scientific data.

Demographic Characteristics and Research Capabilities. The professional profile also influences the engagement of nurses in research activities. Nurses in higher-level positions, such as those with greater authority and autonomy, are more likely to engage in research activities because they can allocate time and resources more effectively (Cathcart et al., 2018).

Demographic Characteristics and Research Engagement. In the study of Rojaye and Netangaheni (2023) participants highlighted the need for more nurses to be engaged in research development, research development problems and recommended solutions. The critical requirement was that research has a direct impact on clinical practice. The results from this study show that research development allows nurses to participate in research relevant to their practice and objectives. More focus should be placed on developing and implementing context-specific nursing research agendas and implementation research skills.

In the study of Otid-Vallescas et al. (2023), the research engagement of the respondents did not have significant difference when grouped according to their profile such as age, sex, length of years in the service, and grade level handled. Further, position, highest educational attainment, research trainings attended, number of research activities done had significant relationship with research engagement. Additionally, lack of time and resources were the most common barriers and challenges they encountered in conducting action research.

Research Capabilities and Research Engagement. The results in the study of Amenabar and Pontillas (2024) indicated a moderate correlation between teachers' research capabilities and challenges, emphasizing that as capabilities improve, so do challenges. Variances in research capabilities were noted based on factors like educational attainment, underlining the significance of advanced education in nurturing research skills.

According to Mbimbi et al. (2025), strengthening individual research capacities, establishing dedicated research infrastructure and resources, and enhancing the communication and dissemination of research findings will foster a research-oriented culture and facilitate the utilization of clinical research.

Nurses' participation in clinical research was shown to be associated with their perception of benefit of research to practice as well as their understanding of time as a factor for them engaging in reading scientific articles. In addition, barriers associated with nurses' integration of research findings into the daily practice was their perceived lack of support from the collegium and their perception of research as not part of the nursing role (Nkrumah et al., 2018).

Results from the analysis of the study of Hero (2023) revealed that senior high school teachers possessed a moderate level of skills and capabilities towards research. It showed that there is a significant relationship between research skills and capabilities of respondents. Thus, it is important that hospital administration should look into the first step of capacitating their nurses on research for them to be able to engage in research activities.

Challenges. The biggest reported barrier to research involvement was the work role taking priority, followed by lack of time. Nearly half cited lack of suitable backfill and inadequate research funding. Lack of managerial and administrative support were also perceived barriers, as were lack of: research equipment, research software and internet/library access. Only one nurse reported no interest in research. Many nurses cited lack of research skills, with others feeling intimidated by research language and a fear of getting it wrong. A desire for work-life balance along with personal commitments were also barriers for some (Rey et al., 2022).

According to the study of Janerka et al. (2024), top barriers for research involved lack of time and backfill, and other work roles taking priority, whilst top enablers were skill development, job satisfaction, and addressing

identified problems. The results appeared similar across the two services.

Major challenges affecting the development of research skills have been identified including lack of time for research, high teaching loads, and need to balance this work with administrative and clinical responsibilities, Lack of funding, shortage of skilled personnel, and absence of research infrastructure. Some of the skills identified in the literature for augmenting research capacity, i.e., infrastructure development, promotion of research cultures and environments, and facilitation of training (Rani et al., 2024).

Organizational support, availability of resources, and time constraints are significant factors influencing research engagement (Khalili et al., 2020). Research engagement is also shaped by leadership support, workload, and institutional culture (Khalili et al., 2020; Duffield et al., 2014).

Nurses just have to be resourceful, a lot of resources are already available in the internet, it is just a matter first gaining the knowledge on how to access specific sites that will greatly contribute to research. Online access is for free and are just ready to be explored. The availability of support, mentorship, and professional development opportunities within the healthcare institution further enhances research engagement (Khalili et al., 2020).

RESEARCH METHODOLOGY

Design

This study used a quantitative correlational research design. The descriptive design was used in determining the demographic characteristics as well as the research capabilities and research engagement of the nurses while the correlational research design was used to assess the relationship among demographic characteristics, research capabilities, and research engagement.

Environment

The study was conducted in level III private hospitals in Tacloban City

Respondents

This study involved 100 registered nurses working in three training private hospitals in Tacloban City.

Sampling Design. This study used a complete enumeration sampling method.

Inclusion and Exclusion Criteria. To be eligible for participation, nurses must meet the following inclusion criteria: (a) they must be a registered nurse, (b) they must have at least 6 months of work experience in one of the selected hospitals, (3) they must have experience with or exposure to research, and (4) they must be willing to participate and provide informed consent. Those who had submitted their resignation or intent to retire were excluded from the study.

Instrument

This study used a researcher-developed instrument. The instrument consisted of four sections: Part one: Demographic Profile: This section will gather information on age, sex, years of experience, education level, hospital affiliation, and research publications. Part 2: Research Capabilities: This part assessed the respondents' self-reported capabilities. It is 30-item questionnaire composed of three dimensions namely: individual capabilities (10 items), collective capabilities (10 items), and cognitive capabilities (10 items). It utilizes a five-point Likert scale where 5 is very capable, 4 is capable, 3 is average, 2 is less capable, and 1 is not capable. It is scored by getting the mean score. Parametric scores and interpretation are as follows: A score of 1.00 – 1.80 is not capable, 1.81 – 2.60 is less capable, 2.61 – 3.40 is average, 3.41 – 4.20 is capable, and 4.21 – 5.00 is very capable. Part three: Research Engagement: This section evaluated the respondents' level of involvement in research activities. It is a 30-item instrument composed of three dimensions namely: participation in research activities (10 items), promotion of research activities (10 items), and application of research in

practice (10 items). It utilizes a five-point Likert scale where 5 is highly engaged, 4 is engaged, 3 is moderately engaged, 2 is less engaged, and 1 is not engaged. Parametric scores and interpretation are as follows: A score of 1.00 – 1.80 is not engaged (never), 1.81 – 2.60 is less engaged (rarely) 2.61 – 3.40 is moderately engaged (sometimes), 3.41 – 4.20 is engaged (frequently), and 4.21 – 5.00 is highly engaged (always).

Parts two and three of the questionnaire were pre-tested among 15 nurses who were not part of the study. Cronbach alpha results were as follows: Individual capabilities = .938, Collective capabilities = .926, Cognitive capabilities = .935, and overall research capabilities = .974. For the research engagement, the Cronbach alpha results were as follows: Participation in research activities = .926, Promotion of research activities = .923, Application of research in profession = .935, and overall research engagement = .973. Part four: Challenges and Barriers used multiple-choice questions to explore nurses' obstacles in developing research capabilities and engaging in research activities. This section identified common challenges, such as lack of time, resources, or support, which hindered research engagement.

Data Gathering Procedure

Before data collection began, the researcher sought approval from the Dean of Allied Health Science and the Chief of Hospitals/Medical Director of the training hospitals in Tacloban City. The study was then submitted to the Ethics Committee for approval. After obtaining all necessary permissions, the researcher distributed the survey questionnaires to the identified respondents. The study objectives were explained to the participants, and they were assured that their participation was voluntary and that their responses were kept confidential. Respondents were given adequate time to complete the questionnaires. The researcher emphasizes the confidentiality of the responses, ensuring that all data collected were used solely for research purposes and that individual identities remained undisclosed. The method of recruitment was a face-to-face intercept. Data gathering was done before their shifts or during their breaks or after their shifts. All questionnaires were checked if completely filled-out, else it was returned for completion. After the data collection phase, the researcher analyzed the data using appropriate statistical methods. The data analysis answered the research questions and met the study's objectives. Following the analysis, the researcher interpreted the results, discussing the findings and their implications for the research objectives. Data were presented in tables. The final step was to draw conclusions based on the research findings and suggest potential directions for future studies.

Statistical Treatment of Data

Frequency Distribution and simple Percentages were used to determine and present the data on the demographic characteristics of the nurses in terms of age, sex, years of experience, education level, position, and number of research publications. This was also used in determining the perceived challenges. The weighted mean and standard deviation were used to assess the nurses' research capabilities and the research engagement. The Chi square and Cramer's V were used to assess the relationship between demographic characteristics and research capabilities and demographic characteristics and research engagement. The Pearson r correlation was used to assess the relationship between the research capabilities and research engagement of the nurses.

Ethical Considerations

Ethical considerations are an essential component of any research study. The study was submitted for ethical approval prior to data gathering

Presentation, Analysis, and Interpretation of Data

Table 1 Demographic Characteristics of the Nurses

Demographic Characteristics	<i>F</i>	%
Age		
Generation Z (26 years old below)	28	28.00

Millennials/Generation Y (27–40 years old)	59	59.00
Generation X (41–56 years old)	12	12.00
Baby Boomers (57 years old and above)	1	1.00
Sex		
Female	87	87.00
Male	13	13.00
Highest Educational Attainment		
College Graduate	95	95.00
Completed Master's Units	2	2.00
Master's Degree Holder	3	3.00
Position/Title in the Hospital		
Staff Nurse	74	74.00
Head Nurse	13	13.00
Nurse Supervisor	7	7.00
Others (Chief Nurse, etc.)	6	6.00
Number of Years of Experience as a Nurse		
Less than 1 year	9	9.00
1–3 years	29	29.00
More than 3 years to 5 years	12	12.00
More than 5 years to 7 years	14	14.00
More than 7 years to 10 years	17	17.00
More than 10 years	19	19.00
Number of Research Publications		
Zero	80	80.00
One to three	20	20.00

Note: $n=100$.

Just over half of the respondents were Millennials/Generation Y or belonging to the age group of 27 to 40 years old while over a quarter were Generation Z or belonging to 26 years old below. Few were Generation X or belonging to the 41 to 56 years old and a single respondent is a Baby Boomer or belonging to the age group of 57 years old and above. This finding implies that indeed nurses are coming from different age groups. Majority of the respondents were female while few were males. This finding affirms that nursing is indeed a female dominated profession. However, in recent times, this has become popular also among males. Majority of the respondents were college graduates while very few had complete master's units and holders of master's degree. Also, majority of them were staff nurses while few were head nurses. Very few were nurse supervisors and chief nurse. Over a quarter of the respondents has served their organization for one to three years while few had served for more than ten years. Also, few of them had served for more than seven years to ten years, more than five years to seven years, and more than three to five years. Very few of them had served for less than one year. Majority of the respondents has not published their research work while few of them had published one to three research outputs.

Table 2 Research Capabilities of the Nurses

Dimensions	Mean score	SD	Interpretation
Individual Capabilities	3.38	0.524	Average
Collective Capabilities	3.40	0.549	Average
Cognitive Capabilities	3.28	0.564	Average
Grand mean	3.35	0.505	Average

Note: $n=100$.

Legend: 4.21 - 5.00 is Very Capable, 3.41 – 4,20 is Capable, 2.61 - 3.40 is Average, 1.81 – 2,60 is Less Capable, and 1.00 – 1.80 is Not Capable.

Overall, the respondents were average in terms of research capabilities. It can be deduced from this that nurses are curious about whether or not they are capable of conducting research. There is a possibility that this is the result of nurses not being interested in research. Due to the fact that they do not participate in research capabilities activities, they are disinterested. This could also be a consequence of the fact that they have a heavy workload, which causes them to not prioritize participating in research capabilities activities for themselves. There is also the possibility that this is the result of the administration's lack of support for activities related to research capacity. And these answers are also reflected in the final table, where they listed these factors as the most significant hurdles in terms of research capabilities and involvement. According to the study of Janerka et al. (2024), research capacity was low to moderate at the individual and group domains and moderate in the organizational domain. Participation in research activities was generally low.

Individual Capabilities. This was rated as average. Supporting this finding, the respondents were capable of choosing a meaningful research topic. They were also capable of searching for and reviewing relevant literature, analyzing data accurately, and communicating research ideas. However, they were only average in terms of writing a complete research paper and in identifying the correct theories for research. Also, they were average in terms of choosing the best research method for a study and managing time effectively for research tasks. Lastly, they were average in terms of understanding and using research tools and evaluating the quality of research work.

While nurses are encouraged to engage in continuing professional education activities, research capability appears to be common only in educational institutions. In most cases nurse engage in continuing professional development activities that allows them to gain competence in nursing care and keeping themselves abreast with the latest trends in nursing practice. Nurses would only partake in individual capabilities on research when they are required to do so but for as long as research is not required, then they remain passive about it and therefore this explains why such finding is only average.

Contrary to the findings, almost all nurses surveyed rated their research skills and success as low. At individual level, nurses generally reported most skill in finding and critically reviewing literature, and least skill in securing research funding and submitting for ethics approval (Rey et al., 2022).

Collective Capabilities. This was rated as average. Supporting this finding, the respondents were capable of collaborating effectively with other researchers, encouraging others to participate in the research project, solving problems together as a research team, keeping everyone in the team motivated and engaged, and sharing research responsibilities somewhat with team members. However, they were only average in terms of leading a research team successfully, working well with stakeholders in the research process, communicating with the public about research findings, building professional solid networks for future research, and managing research projects with different partners or institutions.

The recent trends in research requires collaborative research. Research can be done interdepartmental or intradepartmental. Perhaps these nurses do not see the importance of research as a collective effort since different research capabilities activities are conducted in higher education institutions and not in hospitals.

There are only a few hospitals that require research as a deliverable among nurses. There are only a few hospitals that promote collaborative research as well. Not unless research becomes a mandatory deliverable among nurses, then nurses would gain interest and be motivated to engage in collective capabilities activities.

Contrary to the findings, almost all nurses surveyed rated their research skills and success as low. At team level, the overall research success and skill reported for all domains was low except for ‘planning guided by evidence’ (Rey et al., 2022).

Cognitive Capabilities. This was rated as average. Supporting this finding, the respondents were capable of recognizing the strengths and weaknesses of research and evaluating the impact of research findings. However, they were only average in terms of conducting research across different subjects or fields, using new tools or methods for research, understanding complex research ideas, applying knowledge to new research situations and designing research studies based on objectives. Also, they were average in terms of thinking critically about research process, adapting research approach when needed, and finding creative solutions to research challenges.

Contrary to the findings, the results in the study of Hu et al. (2019), indicated that most of the nurses self-assessed that their research capacity was relatively low. Most of the nurses expressed the need for training in research. Linear regression analysis showed participation in nursing research practices and pursuing a higher degree could improve nurses' research capacity.

Research competence appears to be a characteristic that is only found in educational institutions, despite the fact that nurses are strongly encouraged to participate in activities that are part of continuous professional education. The majority of the time, nurses participate in activities that are considered to be ongoing professional development. These activities enable nurses to acquire expertise in nursing care and to stay current with the most recent developments in nursing practice. However, as long as they are not obliged to participate in research, nurses will remain passive about it. This is the reason why such findings are merely average. Nurses will only participate in individual capacity on research when they are required to do so.

Table 3 Research Engagement of the Nurses

Dimensions	Mean score	SD	Interpretation
Participation in research activities	3.17	0.653	Moderately engaged
Promotion of research activities	3.00	0.667	Moderately engaged
Application of Research in Practice	3.33	0.687	Moderately engaged
Grand mean	3.17	0.614	Moderately engaged

Note: $n=100$.

Legend: 4.21 - 5.00 is Highly engaged, 3.41 – 4.20 is Engaged, 2.61 - 3.40-Moderately engaged, 1.81 – 2.60 is Less engaged, and 1.00 – 1.80 is Not engaged.

Overall, there was a moderate research engagement among respondents. There appears to be a connection between this finding and the findings presented in the table that came before it, which indicated that respondents only possessed average research ability. Considering that their research capabilities are merely average, it is reasonable to assume that their level of research participation is equally moderate. Contrary to the finding, the findings in the study of Ndubuisi et al. (2021) revealed that 71.1 percent of the respondents had been involved in research activity; however, only 16.6 percent had participated in a research study after school. The result also revealed that only 23.6 percent of the respondents had been involved in health policy decision-making in the hospital.

Participation in Research Activities. Respondents moderately engaged in participation in research activities. They believed that they moderately engaged in formulating research topics within the department setting up research teams for projects, writing research funding proposals to secure financial support, and participating in

collaborative research with experts inside the facility. Also, they moderately engaged in participating in collaborative research with experts outside the facility, reviewing and appraising journals and studies related to the research topic, and peer-reviewing articles for journals. Lastly, they moderately engaged in attending workshops, seminars, or meetings focused on research, participating in research conferences and presentations, and engaging in professional development opportunities related to research.

There appears to be a connection between this finding and the findings presented in the table that came before it, which indicated that respondents only possessed average research capabilities. Considering that their research capabilities are merely average, it is reasonable to assume that their level of research participation is equally moderate. Supporting the findings, in the study of Amicucci et al. (2022), overall, data were analyzed, of which about 21 percent reported participating in a research project, while 33 percent had attended a scientific conference as a speaker, and 11 percent had written at least one scientific paper.

Promotion of Research Activities. Respondents had a moderate engagement in promotion of research activities. This is supported by the findings that nurses moderately engaged in presenting research at conferences or public forums, writing or contributing to publications in research journals, and promoting the department's research initiatives to external stakeholders. They also moderately engaged in encouraging colleagues to engage in research activities, sharing research findings with the broader community, and promoting research as a valuable activity within the healthcare facility. Further, they moderately engaged in creating awareness about available research funding opportunities, advocating for research resources and support within the department, promoting cross-disciplinary collaborations to enhance research efforts, and organizing events or forums to highlight research findings.

This finding is somehow associated with the results of the preceding table, which indicated that respondents' research capabilities were only average. Their promotion of research activities is moderate due to their average research capabilities. Contrary to the findings, in the study of Drury et al. (2024), three hundred and sixty-six nurses responded, of whom 15 percent had previously been involved in research. Nurses reported moderate to high research knowledge, attitudes, and practice scores.

Application of Research in Practice. Respondents moderately engaged in application of research in practice. Supporting this finding, the respondents engaged in using research results to improve nursing practices and patient care and engaged in mentoring junior staff or colleagues on applying research findings. They were also engaged in using research to advocate for better healthcare practices and in using evidence-based research to guide decisions in clinical settings. However, respondents were moderately engaged in implementing research findings into practice or policy, developing new research initiatives based on previous findings, collaborating with other departments to apply research in the hospital, and going to the community to apply research findings for extension purposes. They also moderately engaged in being involved in applying research results in health programs or services and integrating research outcomes into nursing education and training programs.

This finding can be linked to the previous table where nurses had average research capabilities. Since their research capabilities is average it also follows that their application of research in practice is moderate also. In the study of Rojaye and Netangaheni (2023), all participants agreed on the low number of nurses engaging in healthcare research development, particularly human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS) research. Participants said that nurses do not consider healthcare research and policy formulation a nursing duty; instead, they believe that nurses exclusively care for their patients and that everything beyond the bedside is not their responsibility. Although participants agreed that each nursing function had various duties, the fundamental objective of a professional nurse remains the same to be the client's champion and deliver the best care based on scientific data.

Table 4 Relationship between Demographic Characteristics and Research Capabilities

Variables	chi value	p value	Cramer's V value	Decision	Interpretation
Age	88.528	.999	--	Failed to reject Ho	Not significant

Sex	31.034	.930	--	Failed to reject Ho	Not significant
Educational attainment	75.585	.825	--	Failed to reject Ho	Not significant
Position	1.754E2	.007	.765	Reject Ho	Significant
Years of service	2.284E2	.335	--	Failed to reject Ho	Not significant
Number of research	44.583	.447	--	Failed to reject Ho	Not significant

Legend: Significant if p value is $< .05$. Dependent variable: Research Capabilities.

Overall Research Capabilities. The p value for position was lesser than the significant value of $.05$. This value was interpreted as significant which led to the decision of rejecting the null hypothesis. This means that position was significantly correlated with overall research capabilities. The higher the position, the higher the level of research capabilities. The correlations were very strong and positive. In the Philippines to become a nurse supervisor one must have a masteral units or even a master's degree, all the more with becoming a chief nurse, one is required to have a master's degree and gaining a master's degree requires a research output.

The professional profile also influences the engagement of nurses in research activities. Nurses in higher-level positions, such as those with greater authority and autonomy, are more likely to engage in research activities because they can allocate time and resources more effectively (Cathcart et al., 2018).

However, the p values for age, sex, educational attainment, years of service, and number of research were greater than the significant value of $.05$. These values were interpreted as not significant which led to the decision of failing to reject the null hypothesis. This means that age, sex, educational attainment, years of service, and number of research were not significantly correlated with overall research capabilities. No matter what age, sex, educational attainment, years of service, and number of research there can still be a high level of overall research capabilities.

It is required of nurses that they actively participate in research. Because the findings of research play such an important part in evidence-based practice, they are unable to ignore scientific study. Hospitals are gradually establishing the practice of doing research among many professions, and it has become one of the essential deliverables among those working in the healthcare industry. Therefore, regardless of the demographic features that they possess, they are unable to disregard the importance of research participation, and they are required to participate in research since it is obligatory. And first, they have to participate in capacitating themselves about research.

Relationship between Demographic Characteristics and Research Engagement

Table 5 is the presentation of the data on the relationship between demographic characteristics and research engagement.

Table 5 Relationship between Demographic Characteristics and Research Engagement

Variables	chi value	p value	Cramer's V value	Decision	Interpretation
Age	1.508E2	.333	--	Failed to reject Ho	Not significant
Sex	43.818	.645	--	Failed to reject Ho	Not significant
Educational attainment	89.026	.680	--	Failed to reject Ho	Not significant
Position	1.587E2	.191	--	Failed to reject Ho	Not significant

Years of service	2,355E2	.571	--	Failed to reject Ho	Not significant
Number of research	53.542	.270	--	Failed to reject Ho	Not significant

Legend: Significant if p value is $< .05$. Dependent variable: Research Engagement. Cramer's V values: A value of >0.25 is very strong, >0.15 is strong, >0.10 is moderate, >0.05 is weak, and >0 is no association.

Overall Research Engagement. The p values for age, sex, educational attainment, position, years of service, and number of research were greater than the significant value of $.05$. These values were interpreted as not significant which led to the decision of failing to reject the null hypothesis. This means that age, sex, educational attainment, position, years of service, and number of research were not significantly correlated with overall research engagement. No matter what age, sex, educational attainment, position, years of service, and number of research there can still be a high level of research engagement.

In the study of Rojaye and Netangaheni (2023) participants highlighted the need for more nurses to be engaged in research development, research development problems and recommended solutions. The critical requirement was that research has a direct impact on clinical practice. The results from this study show that research development allows nurses to participate in research relevant to their practice and objectives. More focus should be placed on developing and implementing context-specific nursing research agendas and implementation research skills.

It is required of nurses that they actively participate in research. Because the findings of research play such an important part in evidence-based practice, they are unable to ignore scientific study. Hospitals are gradually establishing the practice of doing research among many professions, and it has become one of the essential deliverables among those working in the healthcare industry. Therefore, regardless of the demographic features that they possess, they are unable to disregard the importance of application of research in practice, and they are required to participate in research since it is obligatory. In the study of Otid-Vallescas et al. (2023), the research engagement of the respondents did not have significant difference when grouped according to their profile such as age, sex, length of years in the service, and grade level handled. Further, position, highest educational attainment, research trainings attended, number of research activities done had significant relationship with research engagement. Additionally, lack of time and resources were the most common barriers and challenges they encountered in conducting action research.

Nurses are required to really engage in research. Result of research plays a vital role in evidence-based practice thus, they cannot ignore research. Hospitals are slowly introducing the conduct of research among different professions and it has become one of the necessary deliverables among healthcare professionals. Thus, no matter what their demographic characteristics, they cannot ignore research engagement and they have to engage in research because it is mandatory.

Table 6 Relationship between Research Capabilities and Research Engagement

Variables	chi value	p value	Decision	Interpretation
Individual capabilities	.649	.000	Reject Ho	Significant
Collective capabilities	.614	.000	Reject Ho	Significant
Cognitive capabilities	.758	.000	Reject Ho	Significant
Overall research capabilities	.730	.000	Reject Ho	Significant

Legend: Significant if p value is $< .05$. Dependent variable: Research Engagement. Pearson r interpretation: A value greater than $.5$ is strong (positive), between $.3$ and $.5$ is moderate (positive), between 0 and $.3$ is weak (positive), 0 is none, between 0 and $-.3$ is weak (negative), between $-.3$ and $-.5$ is moderate (negative), and less than $-.5$ is strong (negative).

Overall Research Engagement. The p values for the individual capabilities, collective capabilities, cognitive

capabilities, and overall research capabilities were lesser than the significant value of .05. These values were interpreted as significant which led to the decision of rejecting the null hypothesis. Thus, individual capabilities, collective capabilities, cognitive capabilities, and overall research capabilities were significantly correlated with overall research engagement. The correlations were strong positive. Therefore, the higher the individual capabilities, collective capabilities, cognitive capabilities, and overall research capabilities, the higher the research engagement also.

It is important to note that research capability is a prerequisite for research engagement. It is necessary to complete a variety of research capacities, including as trainings, seminars, and workshops, before one may begin to participate in research activities. Following the completion of the components pertaining to knowledge, attitude, and abilities, the individual is then prepared to participate in research activities. However, research capabilities were correlated with challenges and not with research engagement. The results in the study of Amenabar and Pontillas (2024) indicated a moderate correlation between teachers' research capabilities and challenges, emphasizing that as capabilities improve, so do challenges. Variances in research capabilities were noted based on factors like educational attainment, underlining the significance of advanced education in nurturing research skills.

Research engagement is preceded by research capability. Prior to participating in research activities, it is necessary to complete various research capabilities, including seminars, workshops, and trainings. The individual is prepared to promote research activities once the knowledge, attitude, and skills components have been addressed. According to Mbimbi et al. (2025), strengthening individual research capacities, establishing dedicated research infrastructure and resources, and enhancing the communication and dissemination of research findings will foster a research-oriented culture and facilitate the utilization of clinical research.

Research capability acts as a forerunner to research involvement. Prior to engaging in research activities, various research competencies, including training sessions, seminars, and workshops, must be completed. When the components of knowledge, attitude, and skills are adequately handled, the individual is prepared to apply research in practice.

Contrary to the findings, nurses' participation in clinical research was shown to be associated with their perception of benefit of research to practice as well as their understanding of time as a factor for them engaging in reading scientific articles. In addition, barriers associated with nurses' integration of research findings into the daily practice was their perceived lack of support from the collegium and their perception of research as not part of the nursing role (Nkrumah et al., 2018).

Research capability serves as a precursor to research engagement. Before one can engage in research activities, different research capabilities such as trainings, seminars, and workshops should be accomplished. Once the knowledge, attitude, and skills components are being addressed, then the person is ready to engage in research activities. Similarly, results from the analysis of the study of Hero (2023) revealed that senior high school teachers possessed a moderate level of skills and capabilities towards research. It showed that there is a significant relationship between research skills and capabilities of respondents. Thus, it is important that hospital administration should look into the first step of capacitating their nurses on research for them to be able to engage in research activities.

Table 7 Perceived Challenges on Research Capabilities and Engagement

Challenges	<i>f</i>	%	Rank
Lack of interest or motivation among nurses	63	63.00	3
Insufficient funds or budget for research activities	73	73.00	2
Limited access to academic training or professional development opportunities	46	46.00	6
Shortage of trainers, mentors, or research advisors	53	53.00	4
Lack of “protected” or dedicated time for writing and conducting research	47	47.00	5

Minimal support or encouragement from the department or administration	32	32.00	9
Absence of skilled individuals to collaborate with on research projects	39	39.00	8
Inadequate resources, such as equipment or technology	44	44.00	7
Limited access to reading materials or online references	19	19.00	10
Heavy workload and clinical responsibilities as a nurse	79	79.00	1

Note: $n=100$.

The table shows that having a heavy workload and clinical responsibilities as a nurse came out as the number one challenge in research capability and engagement. When workload is too much there will be no time for other things. Nurses' focus and priority will always be patient care thus, doing research will be put aside and will not be a priority for nurses.

The biggest reported barrier to research involvement was the work role taking priority, followed by lack of time. Nearly half cited lack of suitable backfill and inadequate research funding. Lack of managerial and administrative support were also perceived barriers, as were lack of: research equipment, research software and internet/library access. Only one nurse reported no interest in research. Many nurses cited lack of research skills, with others feeling intimidated by research language and a fear of getting it wrong. A desire for work–life balance along with personal commitments were also barriers for some (Rey et al., 2022).

The heavy workload is then followed by insufficient funds or budget for research activities. Research has been gaining popularity nowadays among healthcare institution. The advent of evidence0based practice calls for the use of new research findings, thus, research becomes essential. However, doing research requires budgetary requirements and appropriate budget should be allocated properly for nurses to be motivated to do research.

According to the study of Janerka et al. (2024), top barriers for research involved lack of time and backfill, and other work roles taking priority, whilst top enablers were skill development, job satisfaction, and addressing identified problems. The results appeared similar across the two services.

Third challenge is the lack of interest or motivation among nurses followed by the shortage of trainers, mentors, or research advisors. When one does not have an interest over something, naturally he or she will be passive about it. There should be proper training and capability activities and that there should be mentors and advisers who can be consulted when undertaking research. But first things first, trainings should be done to capacitate nurses first.

Major challenges affecting the development of research skills have been identified including lack of time for research, high teaching loads, and need to balance this work with administrative and clinical responsibilities, Lack of funding, shortage of skilled personnel, and absence of research infrastructure. Some of the skills identified in the literature for augmenting research capacity, i.e., infrastructure development, promotion of research cultures and environments, and facilitation of training (Rani et al., 2024).

The fifth challenge is the lack of “protected” or dedicated time for writing and conducting research followed by the limited access to academic training or professional development opportunities. Very true, research requires not just effort but also time. A great amount of time is needed to accomplish a research work. And for nurses to be able to do research, first and foremost, they must be able to join research trainings and other capacity building activities. There might just be a need to review and revised staff development plans to include research trainings in the activities for nurses.

Similarly, organizational support, availability of resources, and time constraints are significant factors influencing research engagement (Khalili et al., 2020). Research engagement is also shaped by leadership support, workload, and institutional culture (Khalili et al., 2020; Duffield et al., 2014).

Seventh in rank is the inadequate resources, such as equipment or technology followed by the absence of skilled individuals to collaborate with on research projects. Research can be conducted in several ways, the use

of equipment or technology may be required if one conducts and experimental research, however, there are several methodologies that only requires limited resources like the internet. Very true experts are really needed in the conduct of research especially if nurses are just new to it. Experts can act as consultants that can guide nurses in conducting research.

Ninth in rank in the challenges is the minimal support or encouragement from the department or administration followed lastly, by the limited access to reading materials or online references. Administration should lead the way, without their support, nurses will feel that they are not being supported and this can demotivate them to conduct research. Similarly, nurses just have to be resourceful, a lot of resources are already available in the internet, it is just a matter first gaining the knowledge on how to access specific sites that will greatly contribute to research. Online access is for free and are just ready to be explored. The availability of support, mentorship, and professional development opportunities within the healthcare institution further enhances research engagement (Khalili et al., 2020).

CONCLUSION AND RECOMMENDATIONS

Conclusion

In conclusion, research capabilities and engagement are not influenced by personal characteristics, which means that no matter what the personal characteristics of the nurses, research capabilities and engagement can still be high.. Further, research engagement is influenced by research capabilities. The higher the capabilities in research, the higher the engagement in research. The implementation of research capabilities and engagement also is faced by several challenges and the number one challenge was the heavy workload faced by nurses. The moderate levels of research capabilities and research engagement were affirmation of self-efficacy among nurses as explained in the Social Cognitive Theory. Also, the moderate levels of nurses engaged in research offers opportunities for concrete experience, which can be followed by reflective observation and the development of new ideas and approaches, allowing nurses to continually improve as explained by Experiential Learning Theory. The nurses' moderate engagement in research is confronting evidence that challenges their beliefs can lead to transformative changes in how they approach patient care which allows them to do critical reflection on research findings allowing them to adopt evidence-based practices, replacing traditional methods with more effective, research-driven approaches as explained by the Transformative Learning Theory. To address the findings of the study, a research training plan was proposed.

Recommendations

The following are recommended based on the findings of the study, to wit:

Nursing Practice. It is hereby recommended that the research training plan be adopted in the institutions where the study was conducted. Also, the study will be presented to the hospital administrators to gain insights into the research capabilities and engagement of nurses to make sure that the research training plan will be adopted and may call for the review and revision of the already established strategic, operational, and staff development plans of the institution.

Nursing Policy. Internal policies may be crafted where research being identified as one of the key result areas in the strategic and operational plans. Policies in relation to the production of research outputs may also be crafted along with the creation of a standard operating procedure and policies requiring research production and publication among nurses and other healthcare professionals.

Nursing Education. This study can serve as an educational material in discussing concepts related to research capabilities and engagement among nurses. The paper itself can serve as a sample or guide in making a research paper along with discussions in both the undergraduate and graduate programs in nursing in relation to research, ethics in research, and even statistical treatment of data. The study findings can also be replicated utilizing a more expansive environment.

Nursing Research. It is recommended that the study will be submitted for publication in a refereed local or

international journal. It is also recommended that the study will be submitted for oral or poster presentation in any local or international research congress. The following research titles are also recommended for future research studies:

- Exploring the lived experiences on research capabilities and engagement among nurses;
- Validation of the findings on the correlation between research capabilities and engagement through a predictive design; and
- Mixed methods research on the research capabilities and engagement of nurses.

RESEARCH TRAINING PLAN

Rationale

It is essential for individuals and organizations to possess research talents because these capabilities enable them to successfully obtain, evaluate, and interpret information, which in turn fosters critical thinking, problem-solving, and informed decision-making. They are beneficial in a variety of contexts, ranging from academic endeavors to professional professions, and they contribute to both personal and professional development. The participation of research participants is essential for the development of a more profound comprehension of the research process and its effects, which ultimately results in enhanced research quality, heightened public awareness, and improved decision-making decisions. In the end, it is beneficial to both research and society since it develops partnerships between scholars, communities, and institutions. Findings of the study revealed moderate levels of research capabilities and research engagement among nurses. It is important that research capabilities and engagement should be maximized to achieve the greatest potential of nurses as these are important in evidence-based practice. Thus, the creation of this research training plan.

General Objectives

The main objective of this research training plan is to improve and sustain a high level of research capabilities and research engagement among nurses.

Specific Objectives

Specifically, this plan aims to achieve the following specific objectives:

- To increase the moderate research capabilities to a high level among nurses;
- To increase the moderate research engagement to a high level among nurses; and
- To increase and sustain high levels of research capabilities and engagement among nurses.

Concern	Specific Objectives	Activities	Persons Responsible	Resources	Time Frame	Success Indicators
Moderate level of research capabilities	To increase the moderate research capabilities to a high level among nurses.	Personally-initiated activities: - Read articles or view videos online on topics relating to research. - Attend seminars or webinars or even trainings on research capabilities. Hospital initiated activities: - Conduct a seminar or webinar on the	- Staff Nurses - Nurse Supervisors - Chief Nurse - Hospital Administrators	- Internet connectivity. - Desktop, laptops, android phones and tablets - Budget for seminar or training or workshops (Php 10,000.00 / activity). - Instrument to	Second quarter of 2025	- Saved articles and videos. - Certificates of participation in the seminars or webinars. - Minutes of meetings. - Survey result – high levels of research capabilities

		following: • <i>Making Research the Easy Way.</i> • <i>Publishable Format</i> • <i>Ethics in Research</i> • <i>Artificial Intelligence (AI) in research</i> • <i>Quantitative and Qualitative Research Designs</i> • <i>Mixed Methods Research</i> • <i>Sampling Design</i> • Provide an orientation on the research format of the hospital. • Conduct periodic meetings. • Re-assess the level of research capabilities six months following the implementation of the plan.		measure research capabilities.		.
Moderate level of research engagement	To increase the moderate research engagement to a high level among nurses.	Personally-initiated activities: • Read articles or view videos online on topics relating to research. • Attend seminars or webinars or even trainings on research capabilities. Hospital initiated activities: • Craft a policy on research incentives (publication incentives and incentives on research production) • Incorporate in the strategic and operational plan	• Staff Nurses • Nurse Supervisors • Chief Nurse • Hospital Administrators	• Internet connectivity. • Desktop, laptops, android phones and tablets • Budget for seminar or training or workshops (Php 10,000.00 / activity). • Budget for the Research Congress (Php 50,000.00) • Strategic and Operational Plans.	Second quarter of 2025	• Saved articles and videos. • Certificates of participation in the seminars or webinars. • Approved budget for the Research Congress. • SOPP for the Research incentives. • Updated Strategic and Operational Plans. • Minutes of

		a Key Performance Indicator in Research Publication. • Conduct a hospital-wide research congress to allow nurses present orally or through poster presentation their research outputs. • Conduct periodic meetings. • Re-assess the level of research capabilities six months following the implementation of the plan.		• Instrument to measure research engagement.		meetings. • Survey result – high levels of research engagement
Research Capabilities correlated with research engagement	To increase and sustain high levels of research capabilities and engagement among nurses.	Note: All activities cited in the first two concerns are applicable here.	• Staff Nurses • Nurse Supervisors • Chief Nurse • Hospital Administrators	Note: All resources cited in the first two concerns are applicable here.	Second quarter of 2025	Note: All success indicators cited in the first two concerns are applicable here.

REFERENCES

1. Alasad, J. A., & Ahmad, M. M. (2016). Barriers and facilitators to research utilization among nurses in Jordan. *Journal of Nursing Scholarship*, 48(4), 368–374. <https://doi.org/10.1111/jonm.12347>
2. Amenabar, A. A., & Pontillas, P. (2024). Action research capabilities and challenges: Basis for research enhancement plan. *American Journal of Arts and Human Science*, 3(3), 150–170. <https://doi.org/10.54536/ajahs.v3i3.3086>
3. Amicucci, M., Dall'Oglio, I., Biagioli, V. et al. (2022). Participation of nurses and allied health professionals in research activities: a survey in an academic tertiary pediatric hospital. *BMC Nursing*, 21, 159 (2022). <https://doi.org/10.1186/s12912-022-00922-1>
4. Cathcart, E., et al. (2018). Nurses: Authority and impact on organizational policies. *Healthcare Management Review*, 43(3), 32-45. <https://doi.org/10.1097/HMR.0000000000000195>
5. Carrick-Sen, D., Vickers, L., & Adams, R. (2016). Enhancing nurses' role in research and evidence-based practice. *Journal of Advanced Nursing*, 72(9), 2119–2130. <https://doi.org/10.1111/jonm.13480>
6. Drury, A., Fessele, K. L., Robson, P., Law, E., Barton-Burke, M., & Thom, B. (2024). Exploring research engagement among nurses in a Magnet®-recognized cancer center: An analysis of knowledge, attitudes, practices, and influencing factors. *Asia-Pacific Journal of Oncology Nursing*, 11(8), 100545. <https://doi.org/10.1016/j.apjon.2024.100545>
7. Duffield, C., et al. (2018). Research in nursing: From policy to practice. *Journal of Advanced Nursing*, 74(7), 1730-1739. <https://doi.org/10.1111/jan.13676>
8. Haleem, M. (2020). The role of nurses in promoting evidence-based practice. *Nursing Clinics of North America*, 55(2), 123–133. <https://doi.org/10.1016/j.cnur.2020.01.004>

9. Halm, M. A. (2018). A new model for evidence-based practice in nursing. *Journal of Nursing Administration*, 48(3), 138–142. <https://doi.org/10.1097/NNA.0000000000000602>
10. Hero, J. (2023). An assessment of the research skills and capabilities of senior high school teachers towards the development of research capacity building program. *Psychological Education*, 15(3), 207–213. <https://doi.org/10.5281/zenodo.10154833>
11. Hu, H., Yu, X., & Tang, Z. (2019). Research capacity and research training needs of clinical nurses in Suzhou, China. *The Journal of Continuing Education in Nursing*, 50(9), 423–432. <https://doi.org/10.3928/00220124-20190814-09>
12. Indeed Editorial Team (2024). What is evidence-based practice (Importance and elements) <https://ca.indeed.com/career-advice/career-development/what-is-evidence-based-practice#:~:text=Comprehensive%20research%20helps%20health%20care,to%20produce%20the%20desired%20outcome>.
13. Janerka, C., Leslie, G. D., Gallagher, O., Mellan, M., Lane, M., & Gill, F. G. (2024). Understanding research capacity and culture of nurses and midwives in two health services in Western Australia. *Collegian*, 31(3), 137–143. <https://doi.org/10.1016/j.colegn.2024.02.001>.
14. Khalili, H., et al. (2020). Enhancing research capabilities in nursing. *Journal of Clinical Nursing*, 29(3–4), 395–406. <https://doi.org/10.1111/jocn.15156>
15. Mbimbi, M. K., Lifalaza, A., & Ashipala, D. O. (2025). Factors affecting registered nurses' participation and utilisation of clinical research in Namibia. *Curationis*, 48(1). https://hdl.handle.net/10520/ejc-curationis_v48_n1_a2695
16. Melnyk, B. M., & Fineout-Overholt, E. (2018). Evidence-based practice in nursing & healthcare: A guide to best practice (4th ed.). Wolters Kluwer.
17. Ndubuisi, I., Okoronkwo, I. L., Mbadugha, C., Maduakolam, I., & Nwodoh, C. (2021). Assessment of nurses' involvement in health research and policy development at a federal teaching hospital in South East Nigeria. *International Journal of Medicine and Health Development*, 26(3), 163–169. https://doi.org/10.4103/ijmh.IJMH_38_20
18. Nkrumah, I., Atuhare, C., Priebe, G., & Cumber, S. N. (2018). Barriers for nurses' participation in and utilisation of clinical research in three hospitals within the Kumasi Metropolis, Ghana. *PanAfrican Medical Journal*, 30, 24. <https://doi.org/10.11604/pamj.2018.30.24.15230>
19. Otid-Vallescas, A., & Oted, J. O. (2023). Research capability and engagement among public elementary teachers. *International Journal of Social Science and Education Research Studies*, 3(10), 2086–2097.
20. Pascua, P. M., Pineda, M. E., & Mercado, P. R. (2020). Nursing research in the Philippines: Challenges and barriers to progress. *Asian Pacific Journal of Nursing*, 7(1), 22–30.
21. Rani, M., Podder, L., & Bhardwaj, G. (2024). Augmenting the spirit of research among nursing personnel: A narrative review. *Journal of Family Medicine and Primary Care*, 13(1), 10–14. https://doi.org/10.4103/jfmprc.jfmprc_77_23
22. Rojaye, J. O., & Netangaheni, R. T. (2023). Participation of nurses in research development. *Health SA*, 28, 2360. <https://doi.org/10.4102/hsag.v28i0.2360>