

Short Paper

Attitude of Staff Nurses Toward Hospital Information System in Nursing Practice at a Selected Tertiary Hospital in Malolos, Bulacan, Philippines

Jonell L. Eusebio La Consolacion University Philippines, Philippines jonell.eusebio@email.lcup.edu.ph (corresponding author)

Andrea Nica A. Cabanatan La Consolacion University Philippines, Philippines

Allan M. Manaloto La Consolacion University Philippines, Philippines Bulacan State University, Philippines

Joseph Erol T. Cuevas La Consolacion University Philippines, Philippines

Edward C. Gernalin La Consolacion University Philippines, Philippines

Rheasol U. Cruz La Consolacion University Philippines, Philippines

Mauricio S. Capeding III La Consolacion University Philippines, Philippines

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Abstract

Purpose – It is evident that the nursing profession is being impacted by the rising usage of computer technology in the healthcare settings. This study aimed to identify the attitude of staff nurses toward Hospital Information System in nursing practice in a selected hospital in Malolos, Bulacan.

Method – This research utilized a descriptive-correlational design and 50 staff nurses responded using total population sampling method. The attitude of staff nurses toward computers in healthcare was measured using the P.A.T.C.H. (Pretest for Attitudes Toward Computers in Healthcare) Assessment Scale v. 3. Spearman correlation test was used to determine the relationship between the variables.

Results – This study confirmed that there was a significant relationship (Rs = 0.280, p = 0.040) between the educational attainment of staff nurses and their attitude toward computer applications in nursing practice. As educational attainment increased, so did the positive attitude toward using computer applications in nursing practice. However, there was no significant relationship between Gender (Rs = -0.015, p = 0.913), Age (Rs = -0.083, p = 0.549), Marital Status (Rs = 0.042, p = 0.761), and Computer Experience (Rs = 0.196, p = 0.156) of the staff nurses and their attitude toward computer application in nursing practice at 0.05 level of significance.

Conclusion – These findings underscored the importance of educational background in shaping nurses' attitudes and their preparedness to adopt computer technologies in their practice.

Recommendations – This suggested a need for more significant investment in educational programs that focus on computer literacy and technology integration in nursing practice.

Research Implications – To gain a more comprehensive understanding, further research could investigate additional factors that may influence attitudes toward computer applications in nursing practice.

Keywords – nurse, hospital information system, attitude of staff nurses, computers, nursing practice

INTRODUCTION

Throughout the past few decades, technological advancements in healthcare systems have dramatically increased. Due to the vast amount of information created and the variety of information available, the health and treatment industry has also benefited from these technological innovations. Technological innovations, such as Industry 4.0,

have profoundly impacted the healthcare industry by introducing transformative trends and technologies. These advancements include using communication tools between patients and medical teams, and leveraging artificial intelligence, telemedicine, smart devices, and robotics to streamline healthcare processes (Papulová et al., 2022). Additionally, the integration of Internet of Things (IoT) technology has led to the development of remote treatment systems, utilizing sensors and Node MCU to monitor patients' conditions and transmit emergency alerts, resulting in improved monitoring, reduced risks, and lowered infrastructure costs (Rajasekhar et al., 2023). Furthermore, technological strategies like digital livestock systems and probiotic mixtures have been employed in the farm animal industry to enhance animal health and production, while real-time healthcare monitoring using smart systems, incorporating sensor-enabled IoT and artificial intelligence, enables continuous patient monitoring and optimized healthcare services (Park & Seo, 2023; Bhatt & Chakraborty, 2021). The growing understanding of the importance of food quality in human health has prompted food manufacturers to develop improved products and procedures, including new additives and auxiliary agents, which necessitates intensified interdisciplinary cooperation and the application of generic technologies (Lovrić, 2021).

Furthermore, one of the developments has been the shift toward the use of Hospital Information Systems (HIS) and other computerized technologies in nearly every aspect of healthcare. The traditional paper-based health record is being replaced by an electronic-based documentation system in many hospitals around the world. This shift toward technology-driven healthcare is driven by the need for improved efficiency and effectiveness in healthcare delivery, as well as the growing prevalence of chronic illnesses and the rising demand for health and social care (Jacobs et al., 2017; Khezr et al., 2019). Blockchain technology has emerged as a promising innovation in the healthcare industry, offering secure and reliable data sharing and management capabilities (Khezr et al., 2019; Siyal et al., 2019).

By integrating real-time clinical data into a secure healthcare setup, blockchain technology has the potential to revolutionize personalized and authentic healthcare. However, challenges related to regulations, legal issues, interoperability, and scalability must be addressed for successful implementation (Siyal et al., 2019). In general, the aim of the HIS is to use computers and communicational instruments to gather, save, process, and extract patient data and to create a link between the caring and management information of patients (Ahmadian et al., 2014). Nurses and other healthcare professionals rely on this technology as an integral part of their daily workflow, encompassing the assessment, diagnosis, planning, implementation, and evaluation processes (Pereira et al., 2022; Karitis et al., 2021; Handayani et al., 2013). By incorporating technology into these essential stages of patient care, healthcare professionals can enhance their practices' accuracy, efficiency, and effectiveness.

Utilizing technology in these processes enables seamless data management, decision support, and communication, ultimately contributing to improved patient

outcomes and quality of care. As a result, competence with computerized systems is now said to be a requirement and a necessity in healthcare settings, particularly in hospitals. The use of newer systems, for example, the HIS, in the nursing field greatly helps nurses to provide higher-quality treatment. The HIS is designed to manage all aspects of care, including its financial, administrative, and clinical. The benefits of these systems include easy access to information, improving the quality of documentation, reducing errors, especially medical errors, improving the quality of patient care, enhancing information integration, reducing hospitals costs, extending the database, and improving hospital management (Salehi Nejad et al., 2014). This innovation practically conserves resources like labor, cash, materials, and time.

As we are now living in the computer age, the nursing profession is expected to adapt the current shift. There are now computers everywhere in the world. This technology is essential to the more sustainable implementation of national healthcare policies and strategies in order to enable this expansion (Obermann et al., 2018). Healthcare organizations have devoted financial resources to a variety of technology-enabled solutions in order to achieve a more effective medical system centered on patient care (Beltran, 2018). Despite the benefits of the electronic health information system, this system has not been used widely and also, users are unable to use them easily (Or et al., 2014). Healthcare providers have been sluggish in adopting these technologies despite their promise of streamlined, enhanced business procedures (Ahmadi et al., 2017).

In recent decades, the role of the nurse as a HIS user has been changed from a passive to an independent and determinant form (Kahouei et al., 2014). Enhancing the nurses' responsibilities is implied having high knowledge and skills and also to be able to make decisions. The role of nurses in patient care is too extensive. Working conditions such as long night shifts and unpredictable working issues, and emergencies increase the likelihood of fatigue and physical inactivity and subsequently raise the risk of working errors. Management of medical prescriptions is the main function of nurses and an important part of the treatment process and patient care. Hence, any medication errors can cause serious problems in the healthcare system and is considered as a threat to patient safety (Alsulami et al., 2013).

This study aimed to identify the attitude of staff nurses toward Hospital Information System in nursing practice in a selected hospital in Malolos, Bulacan. Therefore, the researchers sought answers to the following questions:

1. How may the demographic profile of hospital nurses be described in terms of:

- 1.1. gender
- 1.2. age
- 1.3. marital status
- 1.4. highest educational attainment and
- 1.5. and years of experience in using computers?

2. How may the attitude of staff nurses towards computer applications be

described?

3. Is there a significant relationship between the socio-demographic profile of the staff nurses and their attitude toward computer application in nursing practice?

LITERATURE REVIEW

The Technology Acceptance Model is an information systems theory that explains computer use behavior and was developed by Davis (1989). In the TAM, information technologies' adoption and implementation are determined by personal behavioral intention. The model is composed of six main constructs: external variables, perceived usefulness, perceived ease of use, attitude toward use, behavioral intention to use, and actual system use. The model also states that users' acceptance of a specific information system is believed to be determined by their experiences and perceptions of use and postulates that perceived usefulness and ease of use are the two major beliefs that explain variance in user intentions. In the context of nursing informatics, the literature verified that both factors provide valid and reliable measures that predict nurses' implementation and acceptance of healthcare information technologies. Therefore, this study proposed that the perceived usefulness and perceived ease of use of TAM are a representation of human factors in the activities of human- computer interactions with electronic health information system use. In this study, perceived usefulness and ease are collectively defined as the nurses' attitude towards usage of the electronic health information system and their subjective evaluations of whether using the system will require much effort and will improve their work performances.

Socio-Demographic Profile of Staff Nurses

Variations in nurses' demographic and individual characteristics are significant factors determining attitudes toward computer use (Ifinedo, 2016). Salameh et al. (2019) conducted an integrative literature review and they classified the factors that influence computer use into three main categories: a) characteristics of the nurses, b) characteristics of the technology used, and c) characteristics of the organizational environment. The existence of numerous elements that could influence nurses' attitudes regarding computer use is a key finding of their work. One of these elements has been the amount of the experience that nurses have. It was reported in the study that the more experienced nurses have more positive attitudes toward using technology than less experienced nurses (Salameh et al., 2019).

Staff Nurses' Attitude Toward Hospital Information System

Learning the skills required to use computerized systems depends critically on the nurses' attitudes toward using computers (Salameh et al., 2019). Nurses' acceptance of electronic health information system is very important and should not be underestimated. It can be the reason for success or failure of electronic health record implementation

(Yontz et al., 2015). If nurses accept the technology, they will continue to use it and over time will learn about all of its strengths and maximize its use. However, if they do not accept it, they will either not use it or incorrectly use it which will in return decrease the quality of their work rather than improve it. Also based on their acceptance of the technology, they might be more likely to either encourage others to use it or influence others not to use it. Moreover, sometimes the main reason why an electronic health information system has not been implemented yet is because nurses simply refuse to use it. They feel like this change has been forced on them without being consulted about it. Before implementing an electronic health information system, hospital and system administrators should ensure that nurses are at the table from the beginning when nursing-related technology is discussed (Lavin et al., 2015). This should not be a mere consultation with nurses. Instead, nurses need to be key decision- makers, as they make up the majority of end users. Full inclusion in the process from the beginning can increase the chance of full and timely adoption of the technology. In summary, we found that most nurses are accepting of, and positive about usage of EHRs. In addition, proper training and support increased level of acceptance (Abell et al., 2015).

METHODOLOGY

Research Design

This study utilized the descriptive-correlational research design. According to McCombes (2022), descriptive research aims to accurately and systematically describe a population, situation or phenomenon. It can answer what, where, when, and how questions, but not why questions. Unlike in experimental research, the researcher did not control or manipulate any of the variables, but only observed and measured them. Descriptive research is an appropriate choice when the research aim is to identify characteristics, frequencies, trends, and categories. Whereas, as discussed by Bhandari (2022), a correlational research design aims to investigate the relationships between variables without the researcher controlling or manipulating any of them. A correlation reflects the strength and/or direction of the relationship between two (or more) variables. The direction of a correlation can be either positive or negative. This study aimed to describe the socio-demographic information and the attitude toward Hospital Information System in the nursing practice of the staff nurses in a selected hospital. The study also aimed to identify the correlation between the two aforementioned variables.

Research Locale

The research was conducted in a selected hospital located in Malolos, Bulacan, Philippines. Renowned for its exceptional healthcare services, the hospital boasts a substantial 172-bed capacity, ensuring ample resources to cater to diverse medical needs.

Respondents of the study

The researchers used the Total Population sampling method. It is a type of purposive sampling technique where you choose to examine the entire population that has a particular set of characteristics. The participants of the study were 50 staff nurses in a selected private hospital, irrespective of their employment status, specialization, and area assignment. This sampling technique was used for better representation of the whole or entire population.

Data Collection Instruments

In this study, two separate tools were used. Both instruments were in an online format via Google Form. The first variable which was the socio-demographic information of the staff nurses were gathered by researchers' self-made questionnaire specifically and simply asking the gender, age, marital status, highest educational attainment, and years of experience using computers. The second variable was measured using the P.A.T.C.H. (Pretest for Attitudes Toward Computers in Healthcare) Assessment Scale v. 3 which was created by June Kaminski. This tool was rated using a five-point Likert-type format, ranging from 1 to 5 wherein 1-agree strongly, 2-agree, 3-not certain, 4-disagree, 5-disagree strongly. This tool was comprised of 50 statements wherein the nurses selected a response, between 1-5, that most closely related to their attitude towards computers in healthcare.

Data Collection Process

The researchers wrote a permission letter to the Chief Nurse, Assistant Chief Nurse and HR Manager of the hospital asking permission for data collection. The researchers also composed a consent letter included in the first part of the online questionnaire in order to gain the cooperation of the participants. The collection of the data was conducted online. The data collection lasted for one week.

Data Analysis

After collecting data, the researchers submitted the results to summarization and statistical procedures. The researchers used the following procedures to treat the data that have been collected. To present the socio-demographic profile of the respondents, Frequency Distribution and Percentage calculations were used. To answer research problem about the significant relationship between the socio-demographic profile of the staff nurses and their attitude toward computer application in nursing practice, the Spearman Correlation Test was used.

RESULTS

A total of 50 staff nurses voluntarily participated in the conducted electronic-based survey, which was 100% of the target respondents.

Socio-demographic Profile of the Respondents in Terms of Gender

Table 1 shows the gender of the respondents. Based on the results, Female respondents are 41 or 75.93% while Male respondents are 13 or 24.07%. It reveals that the majority of the respondents are Female. This indicates that the majority of the respondents were female, further supporting the observation that there were more female respondents compared to male respondents in the study.

Table 1. Gender			
Gender Count Perce			
Female	41	75.93%	
Male	13	24.07%	
Total	54	100%	

Socio-demographic Profile of the Respondents in Terms of Age

Table 2 reflects the age of the respondents. Young Adult (18-35) respondents are 38 or 70.37% while Middle-Aged Adult (36-55) respondents are 16 or 29.63%. It reveals that the majority of the respondents are Young Adults (18-35).

Table 2. Age			
Age	Count	Percent	
Young Adult (18-35)	38	70.37%	
Middle-Aged Adult (36-55)	16	29.63%	
Total	54	100%	

Socio-demographic Profile of the Respondents in Terms of Marital Status

Table 3 indicates the marital status of the respondents. Based on the results, Single respondents are 32 or 59.26% while Married respondents are 22 or 40.74%. Majority of the respondents are Single.

Table 3. Marital Status			
Marital Status	Count	Percent	
Single	32	59.26%	
Married	22	40.74%	

Socio-Demographic Profile of the Respondents in Terms of Highest Educational Attainment

Table 4 reflects the highest educational attainment of the respondents. There are 46 college graduates or 85.19%, Master's Degree with units earned are 6 or 11.11% while the number of respondents with completed Master's Degree (MAN/MSN/MN) is 2 or 3.70%. The data suggest that the highest educational attainment of the respondents is primarily college graduates.

Table 4. Highest Educational Attainment		
Highest Educational Attainment	Cou	Percent
	nt	
College Graduate	46	85.19%
Master's Degree with units earned	6	11.11%
Master's Degree (MAN/MSN/MN)	2	3.70%
Total	54	100%

Socio-demographic Profile of the Respondents in terms of Years using Computer/Computer Experience

Table 5 reveals the years using computer/computer experience of the respondents. Respondents with Less than 2 years of computer experience account for 7.41%, 3 - 5 years are 4 or 7.41% while 6 years and above are 46 or 85.19%. It reveals that the majority of the respondent's Years of using a computer are 6 years and above.

Table 5. Years using Computer/ Computer Experience			
Years using Computer/ Computer Count Percen			
Experience			
Less than 2 years	4	7.41%	
3-5 years	4	7.41%	
6 years and above	46	85.19%	
Total	54	100%	

Nurses' Attitude Towards Computer Application

Table 6 reveals the interpretation of PATCH assessment of the respondents. Based on the results, the number of respondents is moderately comfortable in using computers as reflected by 7.41%. Those who feel comfortable using user-friendly computer applications are 13 or 24.07%, Confident in their ability to use a variety of computer programs are 31 or 57.41% while those very confident that they can learn to use a computer are 6 or 11.11%. it further indicates that the majority of the respondents answered confident of their ability to use a variety of computer programs. This indicates that the majority of the respondents have significant experience using computers.

Interpretation	Count	Percent	
Moderate comfort in using computers	4	7.41%	
Feels comfortable using user-friendly computer applications	13	24.07%	
Confident of ability to use a variety of computer programs	31	57.41%	
Very confident that they can learn to use a computer	6	11.11%	
Total	54	100%	

Table 6. Nurses' Attitude Toward Computer Application

Significant Relationship between the Socio-demographic Profile of the Staff Nurses and Their Attitude Toward Computer Application in Nursing Practice

Table 7 shows that W-stat = 0.930 with p-value = 0.004. Since p-value is less than the significance level of 0.05, the researchers will reject Ho and conclude that the data is not normally distributed, thus non-parametric test will be utilized – Spearman Correlation.

Table 7. Shapiro-Wilk Test		
Attitude		
W-stat	0.930	
p-value	0.004	
alpha	0.05	
normal	no	

The data suggest that the null hypothesis (Ho) of the data being normally distributed is rejected. The researchers have concluded that the data is not normally distributed. Consequently, they have decided to use a non-parametric test, specifically the Spearman correlation, which is appropriate for analyzing relationships between variables when the data is not assumed to be normally distributed.

Table 8 indicates that Education (Rs = 0.280, p = 0.040) has p-value less than the

significance level of 0.05, thus Ho is rejected. Therefore, there is a significant relationship between educational attainment of the staff nurses and their attitude toward computer application in nursing practice. Hence, as the educational attainment of the staff nurses increases, the attitude toward computer application in nursing practice also increases.

Table 6. Correlation Analysis					
Relationship between attitude toward computer application on the following:	Rs	p- value	Interpretatio n	Decision	Remarks
Gender	-0.015	0.913	No	Do Not	Not
			Relationship	Reject Ho	Significant
Age	-0.083	0.549	No	Do Not	Not
			Relationship	Reject Ho	Significant
Marital Status	0.042	0.761	No	Do Not	Not
			Relationship	Reject Ho	Significant
Education	0.280	0.040	Weak	Reject Ho	Significant
Computer Experience	0.196	0.156	No	Do Not	Not
			Relationship	Reject Ho	Significant

Table 8. Correlation Analysis

Reject Ho if p < 0.05; significant

However, there is no significant relationship between Gender (Rs = -0.015, p = 0.913), Age (Rs= -0.083, p = 0.549), Marital Status (Rs = 0.042, p = 0.761), and Computer Experience (Rs = 0.196, p = 0.156) of the staff nurses and their attitude toward computer application in nursing practice at 0.05 level of significance. This data suggests that there is a significant relationship between the educational attainment of staff nurses and their attitude toward computer application in nursing practice. As educational attainment increases, the attitude toward computer application in nursing practice also increases. On the other hand, data suggest that there is no significant relationship between gender, age, marital status, and computer experience of staff nurses and their attitude toward computer application in nursing practice.

DISCUSSION

The main objective of the study was to investigate how the socio-demographic characteristics of staff nurses relate to their attitude toward using computer applications in nursing practice. The data was collected through an electronic survey with 50 staff nurses from a selected private hospital, all of whom participated voluntarily. Most respondents were female, accounting for 75.93% (41 out of 54). The remaining 13

respondents were male, making up 24.07% of the sample. The results indicate a higher representation of female respondents compared to males.

Regarding age, the majority fell into the Young Adult category (18-35), representing 70.37% of the total (38 out of 54). The Middle-Aged Adult category (36-55) accounted for 29.63% of the sample, with 16 respondents. This shows that most of the respondents were young adults. Regarding marital status, most were single, comprising 59.26% of the total (32 out of 54). Married respondents made up 40.74% of the sample, with 22 respondents. These findings suggest that most respondents were unmarried or single. Regarding educational attainment, most were college graduates, representing 85.19% of the total (46 out of 54). Six respondents (11.11%) had earned a Master's Degree with units, and two respondents (3.70%) had completed a Master's Degree (MAN/MSN/MN). This indicates that most respondents had six years or more of experience, accounting for 85.19% of the sample (46 respondents). Four respondents (7.41%) had less than two years of experience, and another four (7.41%) had 3-5 years of experience. This data suggests that most respondents had extensive experience using computers.

Next, the researchers examined the significant relationship between the sociodemographic profile of the staff nurses and their attitude toward computer applications in nursing practice. They utilized the Spearman Correlation, a non-parametric test, as the data was found to be not normally distributed. The results indicated a significant relationship between educational attainment and attitude toward computer applications in nursing practice (Rs = 0.280, p = 0.040). As the level of education increased, the attitude towards using computer applications in nursing practice also increased. This finding was supported by a study where it also found out that nurses with advanced educational degrees, faculty positions, or leadership roles usually use internet-based health databases more frequently than other nurses.

The likelihood of using all internet-based health resources was higher for nurses with doctoral degrees than for those with bachelor's degrees. Compared to nurses with a bachelor's degree, those with a master's degree were more likely to access and use web portals, online databases, and electronic health systems. In contrast, nurses with a technical school degree were less likely than those with a bachelor's degree to use web portals, online databases, and electronic health systems (Weng et al., 2013). Compared to nurses without academic degrees, nurses with academic education use the online-based health system more readily (Kushnir et al., 2010). Another study demonstrated that education plays a role in determining a more positive attitude toward Health Information System (HIS), particularly for workers with higher levels of education who have a more positive attitude toward computerization (Kipturgo et al., 2014). In the study of Manaloto (2020) with Ph.D. in nursing, it was revealed by the participants that every process involved in their doctoral degree provides learning experiences to them that are relevant in their field, either inside or outside the classroom, face-to-face or blended learning.

While on the other side, no significant relationship was found between gender (Rs = -0.015, p = 0.913), age (Rs = -0.083, p = 0.549), marital status (Rs = 0.042, p = 0.761), and computer experience (Rs = 0.196, p= 0.156) of the staff nurses and their attitude towards computer applications in nursing practice. The mentioned results were supported in a study of Kipturgo et al. (2014) where it was found that gender has no effect on nurses' attitudes toward computerization. No statistically significant difference was found between the nurses' status in using the nursing information systems and their age, marital status, income level, and graduated school (Ceyhan et al., 2021).

Research work by Chan et al. (2004) also did not demonstrate that a person's age had any bearing on how they view the application of the Health Information System (HIS) in the healthcare system. However, the aforementioned finding was in contrast to other research findings, such as the work of Brumini et al. (2005), which showed that younger nurses tend to have a more positive attitude toward hospital information systems, or the work of Vozikis et al. (2010), which showed that younger employees, probably due to their higher degree of familiarization with new technologies, have a more positive attitude towards HIS as well as a study conducted in Kenya by Kipturgo et al. (2014).

Generally, this study suggested a significant relationship between the educational attainment of staff nurses and their attitude toward computer applications in nursing practice. As educational attainment increased, so did the positive attitude toward using computer applications in nursing practice. However, no significant relationship was found between the gender, age, marital status, and computer experience of staff nurses and their attitude toward computer applications in nursing practice. These findings underscored the importance of educational background in shaping nurses' attitudes and their preparedness to adopt computer technologies in their practice. To gain a more comprehensive understanding, further research could investigate additional factors that may influence attitudes toward computer applications in nursing practice.

CONCLUSIONS AND RECOMMENDATIONS

Based on the study's results, educational attainment significantly influences the attitude of staff nurses toward computer application in nursing practice. As the level of educational attainment increases, the attitude toward computer application in nursing practice also increases. However, no significant relationship was found between the gender, age, marital status, and computer experience of staff nurses and their attitude toward computer application in nursing practice. These findings emphasize the importance of providing educational programs and opportunities for nurses to enhance their knowledge and skills in using computer technologies in their practice. By investing in educational initiatives, healthcare institutions can promote a positive attitude among nurses and facilitate the adoption of Hospital Information Systems, leading to improved healthcare service delivery.

The study contributes to the enhancement program regarding nursing practice and institutional processes, as it provides insights into the factors that influence nurses' attitudes toward computer applications. This information can guide healthcare institutions in developing strategies and interventions to promote the effective implementation and utilization of computer technologies in nursing practice. By addressing nurses' educational needs and potential barriers, healthcare organizations can foster a technology integration culture and improve healthcare service delivery. Further research could explore factors influencing attitudes toward computer application in nursing practice, such as organizational support, training opportunities, and technological infrastructure. By considering these factors, healthcare institutions can design comprehensive interventions to optimize nurses' attitudes and facilitate the successful integration of computer technologies in nursing practice.

IMPLICATIONS

The implications of this study have far-reaching effects on healthcare institutions and nursing practice. There is a need for more significant investment in educational programs that focus on computer literacy and technology integration in nursing practice. By empowering nurses with the necessary knowledge and skills to effectively utilize computer technologies, healthcare organizations can improve patient care and outcomes. Additionally, institutions must allocate resources to support educational programs and technological infrastructure, ensuring that nurses have access to the necessary tools and training to embrace computer applications in their daily work.

Creating a supportive organizational culture is also essential, with policies and procedures in place to promote and encourage the use of computer applications. Ongoing support and training opportunities should be provided to address any challenges or concerns that nurses may have, allowing for a smooth transition to using computer technologies in their daily work. Further research is needed to explore factors influencing nurses' attitudes toward computer applications, such as organizational support and technological infrastructure. By addressing these implications, healthcare institutions can improve patient care and contribute to better healthcare service delivery.

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DECLARATIONS

Conflict of Interest

All authors declare no conflict of interest.

Informed Consent

Informed consent was obtained from all individual participants included in the study.

Ethics Approval

This research involved human participation through the distribution of online survey forms to staff nurses. Measures were observed to ensure the privacy, confidentiality, autonomy, and integrity of respondents, adhering to relevant guidelines, regulations, and standards in accordance with the Philippine Data Privacy Act and the Philippine Health Research Ethics Board.

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Author's Biography

Jonell L. Eusebio is currently taking Master of Arts in Nursing with a Major in Nursing Administration and is a graduate of a Bachelor of Science in Nursing. He is a Registered Nurse (RN) both here in the Philippines and in the United States of America. He is currently using his licenses and is practicing as an offshore Medical-Utilization Reviewer.

Andrea Nica A. Cabanatan is currently taking a Master of Arts in Nursing with a Major in Administration and is a graduate of a Bachelor of Science in Nursing. She is a Registered Nurse (RN), and currently she is the Clinical Training Head at La Consolacion University Philippines' College of Allied Medical Professions Nursing Programme. She is also a part-time Clinical Instructor at Bulacan State University College of Nursing.

Allan Manaloto is a graduate of Doctor of Philosophy in Nursing Education, Master of Arts in Nursing, and Bachelor of Science in Nursing. He is both a Registered Nurse (RN) and Licensed Professional Teacher (LPT). Currently, he is an Assistant Professor at Bulacan State University-Main Campus in the College of Nursing and a part-time professorial lecturer in the Graduate Studies (MAN program) at LCUP.

Joseph Erol Cuevas is a Graduate of Doctor of Philosophy in Educational Leadership and Management. He is a Registered Nurse, and currently, he is the Officer in Charge at La Consolacion University Philippines College of Allied Medical Professions and a Full-time Graduate Studies Professor at LCUP.

Edward C. Gernalin is a graduate of Bachelor of Science in Physical Therapy and Bachelor of Science in Nursing. He is both a registered nurse and a licensed professional teacher. Currently working as department head at Fernandez College of Arts and Technology, Program consultant of Dr. YANGA College Inc. and an accredited competency assessor of TESDA.

Rheasol U. Cruz is currently taking a Master of Arts in Nursing with a major in Nursing Administration and is a graduate of a Bachelor of Science in Nursing. She is a Registered Nurse (RN) and currently working as Head Nurse at Ace Malolos Doctors. She also works as a part-time Clinical Instructor at Our Lady of Fatima University.

Mauricio S. Capeding III is a graduate of Bachelor of Science in Nursing at Metropolitan Medical Center of Arts Science and Technology. He is a Registered Nurse (RN) and currently working as Staff Nurse at Ace Malolos Doctors. He also works as a part-time Clinical Instructor at La Consolacion University Philippines' Nursing Program.