KNOWLEDGE AND ATTITUDE OF TRADITIONAL MEDICINE AMONG STAFF NURSE IN HOSPITAL UNIVERSITI SAINS MALAYSIA (HUSM)

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by

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Dissertation submitted in partial fulfilment of the requirement for the degree of Bachelor in Nursing with Honours

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CERTIFICATE

This is to certify that the dissertation entitled “Knowledge and Attitude of Traditional Medicine Among Staff Nurse in Hospital Universiti Sains Malaysia” is the research work done by Ms “Nur Aishah Eliza binti Affendy” during the period from October 2023 until June 2024 under my supervision. I have read this dissertation and in my opinion it conforms to acceptable standards of supervision of scholarly presentation and is fully adequate, in scope and quality, as a dissertation to be submitted in partial fulfilment for the degree of Bachelor of Nursing (Honours).

DECLARATION

I hereby declare that this dissertation is the result of my investigations, except where otherwise stated and duly acknowledged. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at Universiti Sains Malaysia or other institutions. I grant Universiti Sains Malaysia the right to use the dissertation for teaching, research and promotional purposes.

ACKNOWLEDGEMENT

I owe a deep debt of gratitude to the medications that have been my steadfast companions throughout the arduous journey of writing my thesis. Quetiapine 300mg has played a crucial role in maintaining my mental equilibrium, offering me the stability and clarity of mind needed to navigate through complex research and articulate my findings coherently. Its calming effects have been instrumental in warding off the overwhelming stress that often accompanies such a demanding task, allowing me to approach each chapter with a sense of composure and focus.

Similarly, Xanax 1mg deserves profound acknowledgment for its role in alleviating moments of acute anxiety. By keeping panic at bay, especially during critical phases and even at the eleventh hour, Xanax has ensured that I could work diligently and effectively without succumbing to overwhelming apprehension. Its ability to provide tranquility has been indispensable in maintaining my productivity and ensuring that I can meet deadlines with a clear mind and steady nerves.

Other than everything that keeps me sane, I would like to thank my supervisor Sir Ali for their support and guidance. Finally, I'd like to thank my pals, especially Ain, for always checking on me. The one who always has my back. Even though we are not related by blood, she is someone I feel at ease with. Syahida is the other buddy who spared me from dying; I am grateful for her generosity that I am still here today. I can be myself with her, and I can disclose everything without fear of being judged. Also, a particular thank you to someone who was once in my life but is no longer there, for the important time you spent with me. I'm not going to forget Ainan and Nana, who were always there for me during my final semester.

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LIST OF ABBREVIATION

TM	Traditional Medicine
HUSM	Hospital Universiti Sains Malaysia
CAM	Complementary and Alternative Medicine
WHO	World Health Organisation
MM	Modern Medicine
NHS	National Healthcare System
HBM	Health Belief Model
TMM	Traditional Malay Medicine
TCM	Traditional Chinese Medicine
TIM	Traditional Indian Medicine
IMP	Islamic Medical Practice

PENGETAHUAN DAN SIKAP TERHADAP PERUBATAN TRADISIONAL DI KALANGAN JURURAWATAN DI HUSM

ABSTRAK

Kajian ini menyiasat tahap pengetahuan dan sikap terhadap perubatan tradisional di kalangan jururawat di Hospital Universiti Sains Malaysia (HUSM). Menggunakan reka bentuk keratan rentas, penyelidikan Ini melibatkan jururawat dari pelbagai jabatan untuk memberikan gambaran menyeluruh mengenai persepsi mereka. Penemuan mendedahkan bahawa walaupun majoriti jururawat (59.6%) memegang sikap positif terhadap perubatan tradisional, sebahagian besar (51.1%) menunjukkan pengetahuan yang kurang baik mengenai sikap ini. Analisis statistik menunjukkan hubungan yang signifikan antara tahap pengetahuan dan sikap terhadap perubatan tradisional, serta faktor sosiodemografi seperti umur, jantina, pengalaman berkerja, dan pendapatan. Keputusan ini menunjukkan keperluan untuk program pendidikan kesihatan yang disasarkan untuk meningkatkan pemahaman jururawat tentang perubatan tradisional dan menangani jurang dalam pengetahuan mereka. Kajian ini menekankan kepentingan menggabungkan Pendidikan perubatan tradisional ke dalam kurikulum kejururawatan untuk memupuk pendekatan yang lebih holistik terhadap penjagaan pesakit. Penyelidikan di masa hadapan boleh memberi tumpuan kepada kajian membujur untuk mengesan perubahan dari masa ke masa dan meneroka kesan intervensi pendidikan terhadap pengetahuan dan sikap jururawat terhadap perubatan tradisional.

KNOWLEDGE AND ATTITUDE TOWARD TRADITIONAL MEDICIINE AMONG STAFF NURSE IN HUSM

ABSTRACT

This study investigates the levels of knowledge and attitudes towards traditional medicine (TM) among staff nurses at Hospital Universiti Sains Malaysia (HUSM). Utilizing a cross-sectional design, the research included nurses from various departments to provide a comprehensive overview of their perceptions. The findings revealed that while a majority of the nurses (59.6%) held positive attitudes towards TM, a significant portion (51.1%) exhibited poor knowledge about these practices. Statistical analysis demonstrated a significant association between the level of knowledge and attitudes towards TM, as well as with sociodemographic factors such as age, gender, years of experience, and income. These results highlight the need for targeted health education programs to enhance nurses' understanding of TM and address the gaps in their knowledge. The study underscores the importance of incorporating TM education into nursing curricula to foster a more holistic approach to patient care. Future research should focus on longitudinal studies to track changes over time and explore the impact of educational interventions on nurses' knowledge and attitudes towards traditional medicine.

CHAPTER 1
INTRODUCTION

1.1 Background Of Study

Complementary and alternative medicine (CAM), called as Traditional Medicine (TM), has long been an essential aspect of healthcare systems worldwide. A wide range of therapies, such as herbal therapy, acupuncture, Ayurveda, traditional Chinese medicine, and numerous traditional treatments, are included in these healing practices. Because of its strong cultural and historical roots, traditional medicine is frequently used alongside standard medical care. Examining the knowledge and attitude of healthcare professionals, especially staff nurses, about TM should be considered important because staff nurses are responsible for educating patients before discharge from the hospital. According to World Health Organization (WHO), over 88% of the population in developed and developing nations use traditional and complementary medicine (WHO, 2023). The prevalence of TM in Malaysia was 69.4% (Siti et al., 2009).

Traditional medicine has been an essential component of healthcare systems worldwide for decades because of its varied practices and rich historical background (Ong et al., 2005). Due to its cultural relevance and ability to supplement contemporary medical practises traditional medicine has seen an increase in attention in recent years. Staff nurses' knowledge and attitudes towards TM can greatly impact patients' treatment choices and health care. (Adams et al., 2013). Therefore, this research project aims to examine staff nurses' perspectives on traditional medicine and their level of knowledge in this area.

The knowledge and attitude of TM among staff nurses were accessed. This was due to past research that showed poor knowledge regarding the preparation source (Gari et al., 2015). In the United Kingdom, at least 1 in 10 physicians practiced TM (Babar et al., 2012). In Canada, 89% of pharmacies sold herbal medications, and 31% of Canadians reported using herbal preparations (Kalaria, 2003). This indicated that people were interested in getting TM as one of the treatments despite Modern Medicine (MM).

Nurses had several roles, including patient education and support (Paharia, 2022). Patient education included health education before discharge, health education in the community, and ensuring the patient fully understood their health. Staff nurses needed to know about TM because they were responsible for educating patients about TM (Gunaydin, 2018). TM was more about cultural remedies, so staff nurses had to be knowledgeable regarding TM and what to advise the patient.

1.2 Problem Statement

The study in 2020 explored the knowledge, attitude and practice of the general population toward CAM in relation to health and quality of life in Sungai Petani, Malaysia (Mohiuddin et al., 2020). While this study provided valuable insights into the perceptions and usage of traditional medicine among the local population, there remains a gap in understanding the knowledge and attitude of traditional medicine among healthcare professionals, specifically staff nurses.

In the process of healthcare, staff nurses are essential for both patient education and healthcare decision-making. Their knowledge and attitudes towards TM may greatly impact patient care and treatment decisions. On the other hand, nothing is known about the knowledge and attitude of staff nurses towards traditional medicine, and whether or not they are different from the general population.

This knowledge gap is especially significant since, in numerous locations, traditional medicine coexists with modern medical practices. Through increasing awareness of healthcare professionals' perspectives, traditional and modern healthcare systems can work together more effectively. In order to gain a thorough understanding of the role of traditional medicine in the local healthcare landscape and to inform strategies for healthcare integration and patient education, this study aims to investigate the knowledge and attitude of traditional medicine among staff nurses in HUSM, regarding the previously conducted study (Gari et al, 2014).

The previous study focused more on pharmacy students regarding TM (Jamshed et al., 2016). This study shows that most pharmacy students lack knowledge towards TM. Another study also includes pharmacy students regarding understanding, perception, and

self-use of TM and shows that half of the students use TM daily (Hasan et al., 2011). Also, one study in Malaysia shows the general population in Sungai Petani, Kedah that evaluates knowledge, attitude and practice of TM shows that knowledge should be spread throughout the community to increase general health and quality of life in Malaysia (Mohiuddin et al., 2020).

1.3 Research Question

I. What is the level of knowledge of Traditional Medicine among staff nurses at Hospital Universiti Sains Malaysia ?

II. What is the level of attitude toward Traditional Medicine among staff nurses at Hospital Universiti Sains Malaysia ?

III. Is there any association between knowledge and attitude of Traditional Medicine among staff nurses at Hospital Universiti Sains Malaysia ?

IV. What is the association between demographic factors (age, gender, level of education, and household income) and knowledge toward traditional medicine among staff nurses in Hospital Universiti Sains Malaysia ?

V. What is the association between demographic factors (age, gender, level of education, and household income) and attitude toward traditional medicine among staff nurses in Hospital Universiti Sains Malaysia ?

1.4 Research Objective

1.4.1 General Objective

To identify the level of knowledge and attitude of Traditional Medicine among staff nurse in Hospital Universiti Sains Malaysia.

1.4.2 Specific Objective

I. To determine the level of knowledge of Traditional Medicine among staff nurses in Hospital Universiti Sains Malaysia.

II. To determine the level of attitude of Traditional Medicine among staff nurses in Hospital Universiti Sains Malaysia.

III. To examine the association between knowledge and attitude of Traditional Medicine among staff nurses in Hospital Universiti Sains Malaysia.

IV. To determine the association between demographic factors (age, gender, level of education, and household income) with knowledge of Traditional Medicine among staff nurses in Hospital Universiti Sains Malaysia.

V. To determine the association between demographic factors (age, gender, level of education, and household income) with attitude of Traditional Medicine among staff nurses in Hospital Universiti Sains Malaysia.

1.5 Hypothesis

Hypothesis 1

Hypothesis H_0 : There is no significant association between knowledge and attitude of Traditional Medicine among Hospital Universiti Sains Malaysia staff nurses.

Hypothesis H_1 : There is a significant association between knowledge and attitude of Traditional Medicine among Hospital Universiti Sains Malaysia staff nurse.

Hypothesis 2

Hypothesis H_0 : There is no significant association between demographic characteristics and knowledge of Traditional Medicine among Hospital Universiti Sains Malaysia staff nurses.

Hypothesis H_1 : There is a significant association between demographic characteristics and knowledge of Traditional Medicine among Hospital Universiti Sains Malaysia staff nurse.

Hypothesis 3

Hypothesis H0 : There is no significant association between demographic characteristics and attitude of Traditional Medicine among Hospital Universiti Sains Malaysia staff nurses.

Hypothesis H1 : There is a significant association between demographic characteristics and attitude of Traditional Medicine among Hospital Universiti Sains Malaysia staff nurses.

1.6 Conceptual And Operational Definitions

Item	Conceptual Definition
Knowledge	Knowledge refers to information, facts, and skills acquired through experience, education, or observation. It encompasses the awareness and understanding of concepts, principles, or data related to a particular subject or domain. Knowledge is a cognitive resource that enables individuals to interpret and make sense of the world around them (Fisher, R., & Scriven, M. 1997)
Attitude	Attitude represents a person's evaluation or feelings toward a particular object, idea, person, or situation. It encompasses an individual's emotional, cognitive, and behavioral response to stimuli. Attitudes can be positive, negative, or neutral influencing a person's choices and actions (Eagly, A. H., & Chaiken, S. 1995).
Traditional Medicine	Traditional medicine, also known as indigenous or folk medicine, refers to a broad range of healing practices and

	remedies passed down through generations within a specific culture or community. These practices often involve the use of natural substances, rituals, and knowledge deeply rooted in a particular society's traditions and beliefs. Traditional medicine includes herbal remedies, acupuncture, spiritual healing, and various other therapeutic approaches.

Table 1: Definitions

1.7 Significance of Study

The study on the knowledge and attitude of traditional medicine among staff nurses holds significant importance in the healthcare sector. The understanding and point of view that nurses have regarding traditional medicine significantly affect patient treatment, as they are an essential component of the healthcare system. This study can provide knowledge on whether nurses are prepared to offer patients holistic care alternatives and how much traditional medicine is incorporated into nursing practice by examining their expertise. In addition, assessing how people feel about conventional medicine can reveal any prejudices or misunderstandings that could lower the standard of care they offer.

Developing evidence-based practices that use conventional and modern medical techniques can also benefit from an understanding of staff nurses' attitudes and knowledge of traditional medicine. By allowing a more thorough and patient-centered approach, this hybrid approach to healthcare can improve the integration of traditional medicine with complementary and alternative therapies. To ensure that staff nurses are capable of making knowledgeable decisions and suggestions regarding the use of traditional medicine

in patient care, it can also assist in identifying areas in which they might benefit from more training or education.

Additionally, this research may help address patient satisfaction and cultural competency. Patients with various of ethnic origins may intensely desire traditional medical treatments. Healthcare providers can better meet the needs and desires of their patients by improving the knowledge and attitudes of staff nurses in this area. Ultimately, this research may enhance patient care, close gaps in the field, and raise the standard of healthcare delivery.

CHAPTER 2
LITERATURE REVIEW

2.1 Introduction

Healthcare workers' practices and beliefs are shaped by the coexistence of traditional and contemporary medicine, especially staff nurses. Diverse healing techniques passed down through the ages and are frequently founded in cultural and historical traditions are included in Traditional Medicine (TM), whereas evidence-based, technologically enhanced therapies define modern medicine (Adams et al., 2019). In order to effectively navigate the dynamic interplay between these two paradigms, staff nurses are essential members of the healthcare profession. Because it affects patient care, treatment choices, and ultimately healthcare results, staff nurses' perceptions of, integration with, and occasionally disagreement with traditional and modern medicine are crucial to understand. This study aims to clarify this complex relationship and its consequences for patient-centered care by investigating staff nurses' views and knowledge about traditional medicine.

2.2 Traditional Medicine and Modern Medicine

Modern and traditional medicine are two separate approaches to healthcare, each with advantages and disadvantages. Modern medicine (MM), sometimes known as Western or allopathic medicine, is distinguished by a significant emphasis on evidence-based practices, pharmaceutical medications, and advanced medical technologies. Creating and evaluating therapeutic procedures relies on rigorous scientific research and clinical trials. The World Health Organisation (WHO) reports that modern medicine has progressed tremendously in preventing, detecting, and treating various health disorders. It has significantly increased life expectancy and helped to control and eradicate several infectious diseases (WHO, 2022).

Traditional medicine, also known as complementary or alternative medicine, on the other hand, comprises a wide range of healing practices and therapies passed down through generations in various cultures. Natural remedies, herbal medicines, acupuncture, and other unconventional procedures are frequently used in traditional medicine. It emphasises whole-person health and personalised care. While traditional medicine lacks the rigorous scientific validation of modern medicine, it is frequently praised for its emphasis on disease prevention and treatment. Many people worldwide continue to use traditional medicine, and the WHO recognises its value in meeting healthcare requirements, particularly in low-resource contexts (Fokunang et al., 2011).

March, 2021, marked a significant milestone in Malaysia's healthcare system, with the introduction of CAM into the National Healthcare System (NHS). The Malaysian government has implemented policies to institutionalize CAM and enforce regulatory measures for practitioners and services. This has led to significant changes in the NHS, particularly in the relationship between MM and CAM and primary health care. The WHO recognizes CAM's contribution to universal health coverage and encourages integration. However, countries with cultural, political, or economic diversity may struggle to follow the experiences of countries like South Korea and China. With its multiethnic and multicultural character, Malaysia CAM's has various modalities coexisting. The types of CAM recognised by the Minister of Health Malaysia are Traditional Malay Medicine (TMM), Traditional Chinese Medicine (TCM), Traditional Indian Medicine (TIM), Homeopathy, Chiropractic, Osteopathy, and Islamic Medical Practice (IMP) (Park et al., 2022).

The comparison of modern and traditional medicine emphasizes the importance of an integrative approach to treatment. While contemporary medicine excels in acute care and

has made significant progress in many medical domains, traditional medicine can provide essential insights and alternative treatment choices, notably managing chronic illnesses and promoting overall well-being. Many people combine components of both systems to get the best of both worlds for their healthcare requirements and preferences. Collaboration in research and initiatives to bridge the gap between these two paradigms can result in a more complete patient-centered healthcare system.

2.3 Important Of Modern Medicine

Seeking MM first is essential in many medical situations due to its evidence-based approach, rigorous testing, and proven efficacy. When appropriate, integrating modern medicine with traditional or alternative therapies, can lead to comprehensive and effective healthcare.

First, there are emergency and life-threatening situations. Rapid access to modern medication is crucial in emergencies situations or life-threatening medical disorders. Modern medicine delivers urgent, scientifically confirmed therapies that can save lives, such as surgeries, trauma care, and pharmaceutical treatments. In such cases, delaying or refusing MM care might have disastrous implications (American College of Emergency Physicians, 2020).

Following that are Evidence-Based Treatments. Modern medicine relies on rigorous scientific research and clinical trials to create and validate treatment procedures,. This evidence-based approach guarantees that therapies are safe and effective, giving patients the highest chance of success. Traditional or complementary therapies, on the other hand, may not always have the same level of scientific validation (National Centre for Complementary and Integrative Health, 2019).

While traditional medicine and alternative therapies have a place in healthcare, especially for complementary or holistic methods, it is critical to prioritise modern medicine when dealing with significant health problems. Modern medicine is the dominant choice for guaranteeing the best possible outcomes in many medical circumstances due to its proven track record, research-backed treatments, and immediate care for emergencies.

2.4 Traditional Medicine And Health Care Workers

Healthcare staff play an important role in meeting the needs of patients, especially those who seek CAM in addition to standard therapies. TM expertise is required for healthcare practitioners to give educated and comprehensive care. Herbal medicines, traditional healers, and other supplementary approaches which is based on cultural practises and local expertise, are frequently used in TM. Understanding these characteristics can help patients trying CAM communicate and collaborate more effectively.

Healthcare workers must understand TM's potential benefits and limitations. Traditional remedies relieve from various medical ailments ; certain herbal medicines have shown therapeutic capabilities. According to a study published in the Journal of Ethnopharmacology (He et al., 2015), traditional Chinese herbal medicine has the potential to help manage some chronic conditions. However, healthcare providers must be aware of the lack of standardised dosing, potential interactions with modern medications, and, in certain cases, poor scientific confirmation. This information enables them to talks openly and courtneuosly with patients and make informed treatment plan decisions.

In addition, healthcare providers should be aware of the cultural and socioeconomic variables that influence patients' decisions about traditional medicine. Patients may prefer traditional practices due to cultural values, familiarity, or a preference for more holistic

treatments. According to a study published in the International Journal of Qualitative Studies on Health and Well-being (Johannessen et al., 2018), it is critical to acknowledge patients' cultural perspectives and values in healthcare interactions. Healthcare professionals who approach these conversations with empathy and respect can foster trust and create an environment where patients feel at ease discussing their healthcare options.

To summarise, healthcare staff should be familiar with traditional medicine to successfully support and collaborate with patients seeking alternative or complementary therapies. Understanding traditional medicine's possible benefits, limitations, and cultural components enables healthcare providers to deliver patient-centered care, create trust, and make informed treatment plan decisions, eventually promoting improved health outcomes.

2.5 Theoretical And Conceptual Framework

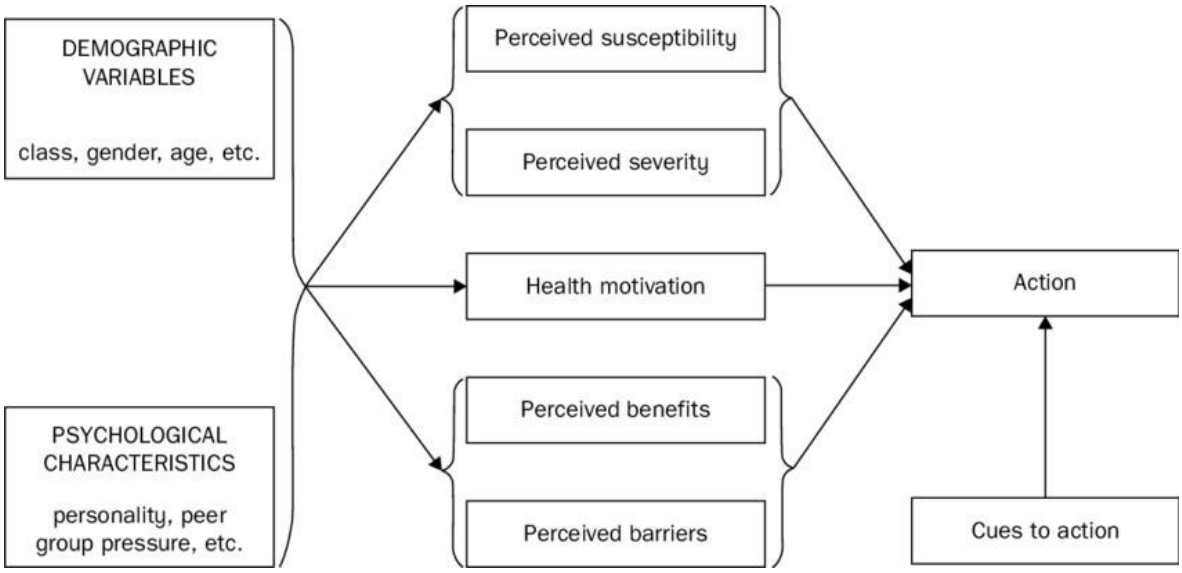

Figure 1:The Health Belief Model

The Health Belief Model (HBM) is a widely accepted theoretical framework in health-related research used to understand and predict health-related behaviours. According to the HBM, an individual's participation in health-related behaviours is influenced by their

perceptions and beliefs about a health hazard, the rewards and barriers to action, self-efficacy, and cues to action. When using the HBM for a research project, the theoretical and conceptual framework usually explains these main components to analyse and explain health behaviours.

A study by Champion and Skinner (2008), used the HBM to evaluate breast self-examination behaviours in women, is an example of this application. They examined perceived vulnerability to breast cancer, perceived severity, perceived benefits of self-examination, perceived barriers, and cues to action within the framework of the HBM. They wanted to know how these characteristics influenced women's self-examination behaviours. This study exemplifies how the HBM's theoretical and conceptual framework may be effectively used to investigate and explain health-related behaviours. It also demonstrates the efficacy of treatments and approaches targeted at improve public health.

In conclusion, the Health Belief Model provides an important theoretical and conceptual framework for health-related research. It enables researchers to investigate individuals' perceptions and beliefs about health hazards, advantages, barriers, self-efficacy, and cues to action, resulting in a more thorough understanding of the elements driving health behaviours. The study by Champion and Skinner is only one example of how the HBM can be used to explore and explain health-related behaviours, providing insights into the efficacy of treatments and policies to improve public health.

CHAPTER 3

METHODOLOGY AND METHODS

3.1 Research Design

There will be a cross-sectional study design.

3.2 Research Location

This study is located at Hospital Universiti Sains Malaysia (HUSM) and will be covered all of the ward and clinics.

3.3 Research Duration

The research will be conducted from January 2024 until August 2024.

3.4 Research Population

This study's target population is staff nurse working at Hospital Universiti Sains Malaysia and fulfiling the inclusion and exclusion criteria.

3.5 Subject Criteria

3.5.1 Inclusion Criteria

Specific requirements for eligibility in this study of each subject must be:

- Staff nurse at HUSM.
- Aged 23 years old and above.
- Able to understand, speak, and write Malay or English.

3.5.2 Exclusion Criteria

The subject is excluded from this study if they:

- Have working experience less than 1 year.
- Staff nurses who have a significant conflict of interest that may compromise the integrity of the study such as financial problem or personal relationship.

3.6 Sampling Plan

3.6.1 Sample Size Estimation

The single proportion is used in sample size estimation for the first and second objectives.

$$n = (\frac{z}{x})^2 \, p(1-p)$$

n = required sample size

z = confidence interval, 95% = 1.94

x = desired level of precision, 0.05

p = estimated proportion of an attribute that is present in the population, 0.5

The first objective is determining the knowledge level of Traditional Medicine among staff nurses at Hospital Universiti Sains Malaysia in HUSM.

z = 1.96,

x = 0.05,

p = 37.1% (Mohiuddin et al., 2020)

$$n=(\frac{z}{x})^2 (0.371)(1-0.371)$$

$$n=\frac{1.96^2}{0.05}(0.371)(1-0.371)$$

= 359 Respondents

The minimal sample size was 359, after considering 10% dropout, the calculated sample size is 395.

The second objective is determining the attitude level of Traditional Medicine among staff nurses at Hospital Universiti Sains Malaysia.

z = 1.96

x = 0.05,

p = 14.3% (Mohiuddin et al., 2020)

$$n=\left(\frac{z}{x}\right)^2 (0.143)(1\text{-}0.143)$$

$$n=\frac{1.96^2}{0.05}(0.143)(1\text{ -}0.143)$$

= 188 respondents

The minimal sample size was 188, and after considering 10% dropout, the calculated sample size is 207.

The bigger sample size of 395 is taken as a larger sample size to help create a more significant result.

3.6.2 Sampling Method

The study will use a systematic random sampling method to collect data in the clinic and ward. This method is used to select random people from the larger population. Systematic random sampling helps ensure that the selected sample is representative of the entire population. By following a systematic approach, every element in the population has an equal chance of being included, contributing to a more unbiased and accurate representation. The nurse will receive a questionnaire sheet and consent form to read before deciding whether to participate. They will be given the questionnaire on paper and will be able to ask questions if they have any difficulty answering it. The questionnaire will take roughly 15-20 minutes to complete. The questionnaire will be collected after it has been completed.

3.7 Research Instrument

In this study, data will be collected from the respondents by using a structured, self-administered questionnaire.

3.7.1 Questionnaire

The staff nurse will receive one set of questionnaires to obtain knowledge and attitudes regarding traditional medicine. This questionnaire was adopted and adapted from (Mohiuddin et al., 2020), and permission was taken (Refer to Appendix B). The questionnaire is divided into three parts as below :

Part I: Sociodemographic Data

Part I of the questionnaire is about socio-demographic data including sex, age, marital status, ethnicity, religion, education status, income, and year of experience.

Part II: Knowledge of Traditional Medicine

Part II of the questionnaire to assess knowledge about Traditional Medicine consist of 10 questions. All of the questions are Yes-or-no questions.

Part III: Attitude of Traditional Medicine

Part III of the questionnaire is about the attitude of staff nurses towards TM There are 10 questions about TM and MM.

3.8 Translation

The questionnaire utilised in this study was originally in English (Mohiuddin et al., 2020). There was a back-and-forth translation from English to Malay and back to English. The Malay translation of the questionnaire was done to make it compatible with the native tongue that most Malaysians speak. Experts in translation from Pusat Pengajian Bahasa, Literasi dan Terjemahan Universiti Sains Malaysia, Kubang Kerian, Kelantan, validated and completed the translation process.

3.9 Validity And Reliability

Three nursing specialists will be assessing the instrument's content validity who are lecturers from Nursing Program at Universiti Sains Malaysia. The index of content validity will be determined. It will be considered to have good value if the index is more than 0.80. Pilot research will be conducted before the main study to assess the instrument's simplicity, clarity, and applicability. The pilot experiment will take place in the clinic or ward. Ten respondents who meet similar inclusion standards will receive the questionnaire to ensure that the questions are appropriate and relevant. The ten respondents from the pilot study will not be included in the main study. The reliability test will be computed using SPSS version 27, the statistical package for social science. A Cronbach's alpha range of 0.70 to 0.88

indicated acceptable dependability.

3.10 Variables

3.10.1 Variable Measurement

Dependent Variable	Knowledge and attitude among staff nurse
Independent Variable	Sociodemographic factor : age, gender, level of education, and household income

Table 2 : Variables

3.10.2 Variable Scoring

A score of 0 was awarded to each wrong question, whereas a score of 1 was awarded to each correct answer. The scoring criteria were taken from a former study performed in Malaysia by Abdullahi et al. and Aziz et al. and in India by Gawde et al. The scoring criteria were 0–5 correct answers (<59%), which was considered poor knowledge and attitude, 6–7 correct answers (60%–79%), which was considered as moderate knowledge and attitude, 8–10 correct answers (≥80%), which was considered as good knowledge and attitude.

3.11 Data Collection

Data for this study will be collected after obtaining ethical approval from the Human Research Ethical Committee (HREC). Permission to carry out this study in HUSM will be obtained from the Director of Hospital USM. The researcher will approach selected nurses and brief them regarding the study. The nurse will receive information sheet and consent for them to read and decide whether to participant. The questionnaire will be given on paper to them, and they can ask question if they have difficulties answering. The questionnaire will be completed approximately 15-20 minutes. The questionnaire will be collected after it is completed.

3.12 Study Flowchart

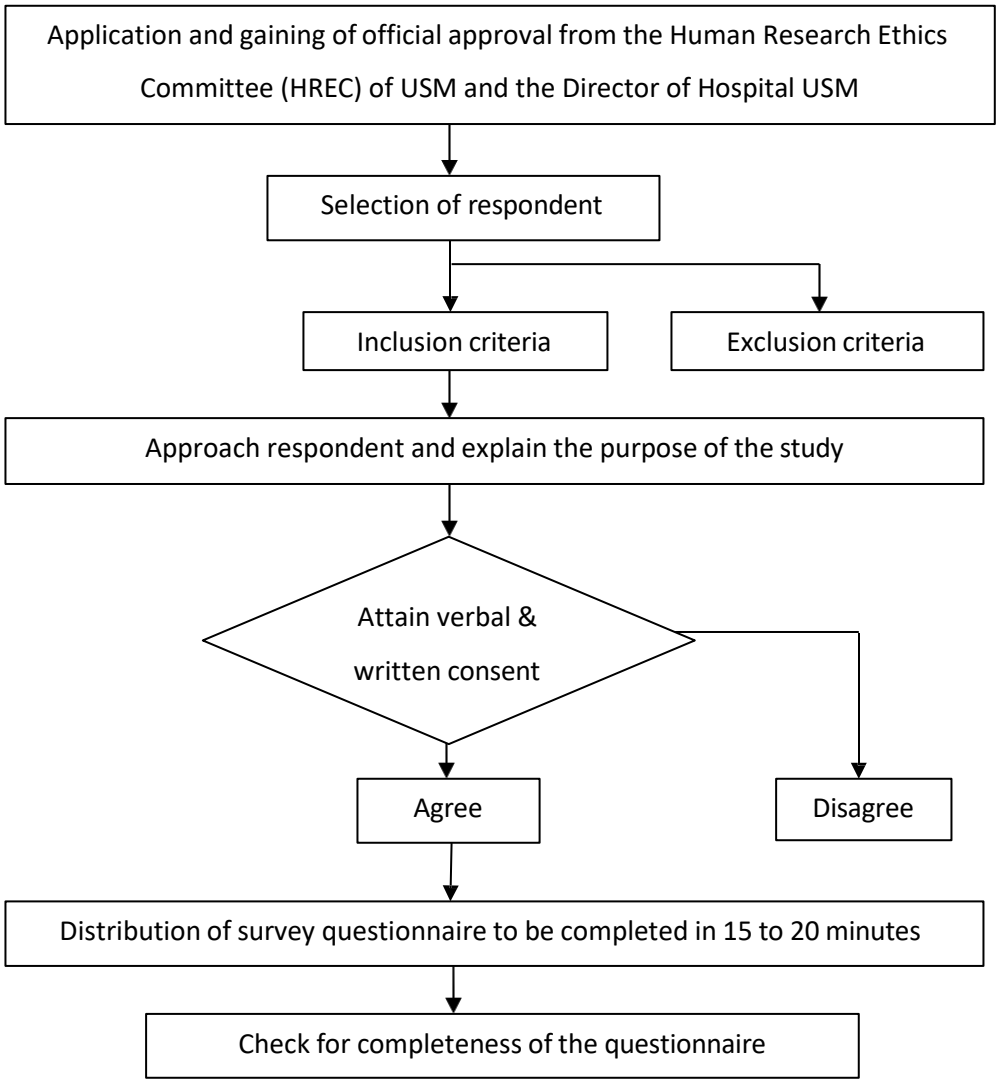

Figure 2: *Study Flowchart*

3.13 Data Analysis

The data will be collected and computerised for analysis using SPSS version 27.0 for Windows. The data will be screened and checked for accuracy, data errors, outliers, and inconsistencies prior to analysis. Frequency tables will be used to show the sample distribution according to knowledge and attitude of Traditional Medicine among staff nurses. All the data will be presented as frequency, percentage, mean, and standard deviation. For Objective 1, descriptive statistics analysis will be used to describe the level of knowledge of Traditional Medicine among staff nurses. For Objective 2, descriptive statistics analysis will describe staff nurses' attitude towards Traditional Medicine.

3.14 Expected Outcome of The Study

The study will be expected to provide valuable data about staff nurses' attitudes towards traditional medicine and their current knowledge levels. The study may reveal their level of exposure to traditional healing methods as well as their general opinions regarding the effectiveness and cultural importance of traditional treatments. Informed rules and educational interventions that can improve staff nurses' competency in providing patient-centered care and accommodating patients' choices related to traditional medicine can be developed, which may also highlight potential obstacles, opportunities for integration, and educational needs. This will ultimately improve patient-provider interactions and healthcare outcomes.

3.15Ethical Consideration

The study would proceed upon permission from the Human Research Ethics Committee of Universiti Sains Malaysia. In addition to their rights as voluntary volunteers and the ability to withdraw from the study without incurring fees or losing any benefits to which they would otherwise be entitled, the participants will be informed of the hazards involved (Appendix C). After being apprised of all procedures and consenting to participate in the study, each subject will give written informed permission (Appendix C).

3.16Subject Vulnerability

The participant in the study who has been approached is offered the choice to accept or reject voluntary participation. Additionally, they are free to stop the research whenever they choose without facing any repercussions or loss of rewards. If a participant looks perplexed, the researcher will explain everything in clear, intelligible language before they consent to participate in the study. Furthermore, there will be no risks of biological or physical harm to any of the study participants.

3.17Conflict of Interest

No conflicts of interest or unrelated factors influenced the researchers' professional judgement in this study. There won't be any payment or other advantages for participating in this study