

A Review of Nursing Research: Case Study of a Thai University

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Extended Abstract

Reviews of nursing research contribute to identifying the research direction of the institution and benefiting the development of knowledge in caring for people and the advancement of the nursing profession. This article aimed to review nursing research according to research vision, research design, nursing roles, and nursing fields, as well as the outcomes, at the Faculty of Nursing, Thammasat University, Thailand.

The keyword search included four visionary research domains: palliative care, geriatric care, family health and health promotion, and education and innovation. Research studies were conducted by graduate-level students, faculty members, and researchers within the faculty during the period of 2005 to 2022. The data retrieval process involved accessing electronic records through the Nursing Faculty's research unit's computers, supplemented by searches for author names with publications in databases such as PubMed Central (PMC), Science Direct, Springer Link, Wiley Online Library, Mosby's Nursing Consult, and Thai Journal Online through the one-search feature in Google Scholar within the Scopus database.

The search results yielded a total of 354 research studies, categorized according to the faculty's research vision, as follows: family health and health promotion (72%), education and innovation (15%), geriatric care (9%), and palliative care (4%). When classified by research design, it was found that quasi-experimental research constituted the majority (50.8%), followed by descriptive correlational research (30.0%), research implementation (7.3%), mixed-methods research (5.4%), qualitative research (5.1%), and randomized controlled trials (1.4%). When considering nursing roles, the most prevalent were health promotion and prevention (44.4%), followed by care provision (32.8%), integrative role (18.6%), rehabilitation (2.8%), and therapeutic role (1.4%). By nursing fields, the predominant focus was on adult nursing (35%), followed by psychiatric and mental health nursing (27%), community health nursing, education, and innovation (19%), maternal and child nursing (7%), pediatric and adolescent nursing (7%), and geriatric nursing (5%), respectively. Upon evaluating the outcomes, it was noted that the research articles were published in the Scopus database journals at a rate of 29.38%, and were cited within international journals in the Scopus database at a rate of 15.82%. The findings of this research review serve as a guide for aligning nursing research development with the research vision and achieving positive outcomes.

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การทบทวนงานวิจัยทางการแพทย์: กรณีศึกษามหาวิทยาลัยไทยแห่งหนึ่ง

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บทคัดย่อขยาย

การทบทวนงานวิจัยทางการแพทย์ช่วยในการกำหนดทิศทางการวิจัยของสถาบัน และเป็นประโยชน์ต่อการพัฒนาองค์ความรู้ในการดูแลประชาชนและการพัฒนาวิชาชีพการพยาบาล บทความนี้มีวัตถุประสงค์เพื่อทบทวนงานวิจัยทางการแพทย์ตามวิธีทัศน์การวิจัย แบบวิจัย บทบาทการพยาบาล และสาขาทางการแพทย์พยาบาลรวมทั้งผลลัพธ์ของงานวิจัย คณะพยาบาลศาสตร์ มหาวิทยาลัยธรรมศาสตร์

การสืบค้นใช้คำสำคัญคือกลุ่มวิจัยตามวิธีทัศน์ 4 กลุ่ม ได้แก่ การพยาบาลแบบประคับประคอง การพยาบาลผู้สูงอายุ การพยาบาลครอบครัวและส่งเสริมสุขภาพ และการศึกษาและนวัตกรรม ที่ดำเนินการโดยนักศึกษาระดับบัณฑิตศึกษา อาจารย์และนักวิจัยของคณะ ในช่วงปี พ.ศ. 2548 - 2565 สืบค้นข้อมูลจากบันทึกอิเล็กทรอนิกส์คอมพิวเตอร์หน่วยวิจัยคณะพยาบาลศาสตร์ ร่วมกับสืบค้นชื่อผู้แต่งที่ได้รับการตีพิมพ์ในฐาน PubMed Central (PMC), Science Direct, Springer Link, Wiley Online Library, Mosby's Nursing Consult, and Thai Journal Online โดยใช้เครื่องมือ one search Google scholar ในฐานข้อมูล Scopus

ผลการสืบค้นพบงานวิจัยจำนวน 354 เรื่อง แบ่งกลุ่มตามวิธีทัศน์การวิจัยของคณะ ได้แก่ สุขภาพของครอบครัวและการส่งเสริมสุขภาพ (ร้อยละ 72) การศึกษาและนวัตกรรม (ร้อยละ 15) การดูแลผู้สูงอายุ (ร้อยละ 9) และการดูแลแบบประคับประคอง (ร้อยละ 4) แบ่งตามแบบวิจัยพบว่าเป็นการวิจัยแบบกึ่งทดลองมากที่สุด (ร้อยละ 50.8) รองลงมาคือ การวิจัยเชิงพรรณนาเพื่อวิเคราะห์ความสัมพันธ์ (ร้อยละ 30.0) การใช้ประโยชน์จากงานวิจัย (ร้อยละ 7.3) การวิจัยแบบผสม (ร้อยละ 5.4) การวิจัยเชิงคุณภาพ (ร้อยละ 5.1) และการวิจัยเชิงทดลองแบบสุ่ม (ร้อยละ 1.4) แบ่งตามบทบาทการพยาบาลพบว่าเป็นการสร้างเสริมสุขภาพและป้องกันโรคมากที่สุด (ร้อยละ 44.4) รองลงมาคือ การดูแล (ร้อยละ 32.8) บทบาทเชิงบูรณาการ (ร้อยละ 18.6) การฟื้นฟูสุขภาพ (ร้อยละ 2.8) และการบำบัดรักษา (ร้อยละ 1.4) และเมื่อแบ่งตามสาขาทางการแพทย์ พบว่าส่วนใหญ่เป็นการวิจัยสาขาการพยาบาลผู้ใหญ่ (ร้อยละ 35) รองลงมาคือ สาขาการพยาบาลจิตเวชและสุขภาพจิต (ร้อยละ 27) สาขาการพยาบาลอนามัยชุมชน การศึกษาและนวัตกรรม (ร้อยละ 19) สาขาการพยาบาลมารดาและทารก (ร้อยละ 7) สาขาการพยาบาลเด็กและวัยรุ่น (ร้อยละ 7) และสาขาการพยาบาลผู้สูงอายุ (ร้อยละ 5) ตามลำดับ เมื่อพิจารณาผลลัพธ์พบว่า เป็นการตีพิมพ์เผยแพร่ในฐานข้อมูลนานาชาติ Scopus ร้อยละ 29.38 และมีการนำไปอ้างอิงในวารสารนานาชาติฐานข้อมูล Scopus ร้อยละ 15.82 ผลการทบทวนงานวิจัยครั้งนี้เป็นแนวทางในการวางแผนพัฒนาการวิจัยทางการแพทย์ให้สอดคล้องกับวิธีทัศน์การวิจัยและมีผลลัพธ์ที่ดี

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Introduction

Research embodies a systematic, ongoing, and replicable scientific endeavor aimed at comprehensively studying and exploring new knowledge within dynamic phenomena.¹ It represents the acquisition of contemporary and applicable knowledge, with the ultimate goal of advancing societal development, particularly within the nursing disciplines.²

Nursing practice relies on research-based knowledge that fosters improvements in quality of life, safety, and favorable outcomes.³ The foundation of evidence-based practice is solidified through rigorous research methodologies,⁴ ensuring the generation of robust evidence.⁵ This process, encompassing various research designs,⁶ contributes to the evolution of evidence-based practice.⁷ Nursing practice guidelines include the fundamental principles of the four core tenets of nursing practice: prevention, promotion, care with treatment, and health rehabilitation.⁸ These principles apply across all age groups, spanning from pregnancy, birth, childhood, and adolescence to adulthood and the elderly stage of life. This procedure is applicable across various health states, including normal conditions, mild illness, severe illness, palliative and end-of-life care. As a result, it leads to a comprehensive nursing research approach that seamlessly combines health and social sciences.⁹ This integration encompasses observable and quantifiable physical behaviors, adaptations, as well as less apparent cognitive and emotional mental behaviors. Therefore, the development of both physical and psychological instruments

becomes imperative for assessing diverse aspects within the context of society and the environment. In the current era of technological advancement, these phenomena provide a compelling rationale for delving into nursing faculty research.¹⁰ Such exploration aims to uncover how this research has evolved in tandem with the technological landscape, encompassing media, programs, and research tools.

The Faculty of Nursing serves as the foundational hub of a nursing education institution, taking on the crucial role of imparting knowledge and facilitating learning through academic services that extend to the community and society. This consists of a holistic approach that harmonizes with the faculty's educational mission and research pursuits. Previously, research knowledge was often confined to the researcher's individual interests, lacking a clear analysis into specific categories. This practice remains relatively uncommon, particularly within the faculties of nursing in Thai universities. However, over the past 17 years, the Faculty of Nursing at Thammasat University has undergone a transformative evolution, aligning its vision with the evolving needs of an aging Thai society, the challenges posed by incurable illnesses, the promotion of family health, and innovations in education.¹¹

This study endeavors to comprehensively review the extracted information originating from the faculty's research vision, as well as knowledge derived from the professional nursing educational discipline and the findings encompassed within the

research scope. Consequently, the information gathered holds the potential to significantly contribute to the advancement of research capabilities within each nursing university in Thailand, propelling them to a prominent global standing.

Objective

The aim of this review was to classify nursing research publications within the Faculty of Nursing

at Thammasat University, according to four research areas based on the faculty's research vision, research design, nursing roles, and nursing fields, as well as resultant outcomes including international publications and citations.

The conceptual framework

The conceptual framework of this review was shown in Figure 1.

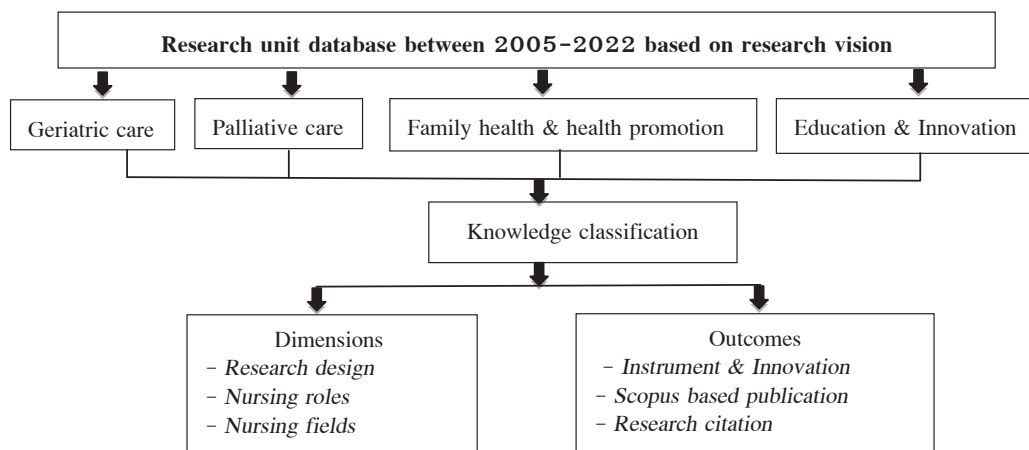


Figure 1 Conceptual Framework of the review

Methods

A comprehensive literature search was conducted across four research domains focusing on vision-based topics, namely: 1) palliative care, 2) geriatric care, 3) family health and health promotion, and 4) education and innovation. The search included following databases: PubMed Central (PMC), Science Direct, Springer Link, Wiley Online Library, Mosby's Nursing Consult, and Thai Journal Online, utilizing the Google

Scholar tool within the Scopus database. The data extraction spanned the time period between January 2005 and June 2022, encompassing the digital records of the Research Unit within the Faculty of Nursing. The outcomes yielded publications from the Scopus database, research citations derived from included studies by authors, and data categorized by nurse roles, nursing science specialization, and achieved outcomes.

Results and Discussion

The search yielded a total of 354 studies, which were subsequently classified based on research vision including Family Health and Health Promotion constituted the largest portion (72%), followed by Education & Innovation (15%),

Geriatric care (9%), and Palliative Care (4%) as described in Figure 2. These findings highlight the major focus of faculty research during the past 17 years on family health and health promotion, emphasizing their significance across all phases of human development.

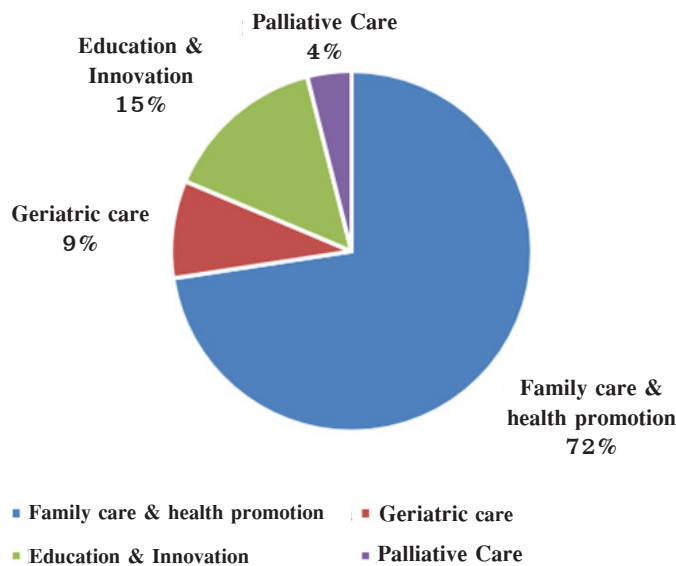


Figure 2 Classification of research by research vision (n=354)

Classification of research by research vision and research design was described in Table 1. The quasi-experimental design was the most frequently employed (50.8%), followed by descriptive correlational design (30.0%), research utilization (7.3%), mixed methods research (5.4%), and qualitative research (5.1%). This observation can be attributed to the congruence between the data and the roles and responsibilities of nursing faculty, who consistently attempt to enhance the patient care efficiency and advance public health

through disease prevention. The least frequently encountered research approach was the randomized controlled trial (RCT) (1.4%), notable for its demand for stringent variable control, which can pose challenges within nursing education contexts. However, a noteworthy development is that within the categories of palliative care, geriatric care, and family health & health promotion, a combined total of five RCTs were conducted, indicating promising opportunities for future research.

Table 1 Classification of research by research vision and research design (n=354)

Groups/Study Design	RCT*	Quasi-Experimental	Mixed Methods	Descriptive Correlation	Qualitative Research	Research Utilization	Total n (%)
Palliative Care	2	2	–	5	5	–	14 (3.9%)
Geriatric Care	1	18	2	7	1	2	31 (8.8%)
Family health & Health promotion	2	148	9	78	11	9	257 (72.6%)
Education & Innovation	–	12	8	16	1	15	52 (14.7%)
Total, n (%)	5 (1.4%)	180 (50.8%)	19 (5.4%)	106 (30.0%)	18 (5.1%)	26 (7.3%)	354 (100%)

*Randomized Controlled Trial

Research focusing on nursing roles in health promotion and prevention constituted the most frequently employed approach (44.4%), followed by care provision (32.8%) and the integrative role (18.6%). On the other hand, the least explored role in research related to rehabilitation (2.8%) as well as therapeutic role (1.4%) (Table 2). This finding is in line with the healthcare continuum, which considers the disease severity and nature

alongside the nursing profession's focusing on health prevention.^{12–14} Rapid symptom screening is vital to ensure timely patient care, potentially alleviating treatment costs and aligning with a physician's direct involvement. If the patient continues to experience persistent pathology, the nurse's involvement in facilitating health recovery becomes crucial.

Table 2 Classification of research by research vision and nursing roles (n=354)

Groups/Nursing Roles	Prevention & Promotion	Care	Therapeutic	Rehabilitation	Integrative roles	Total n (%)
Palliative Care		11		3	–	14 (3.9%)
Geriatric Care	13	10	2		6	31 (8.8%)
Family health & Health promotion	121	70	3	10	53	257 (72.6%)
Education & Innovation	23	25			4	52 (14.7%)
Total, n (%)	157 (44.4%)	116 (32.8%)	5 (1.4%)	10 (2.8%)	66 (18.6%)	354 (100%)

Figure 3 illustrated the classification of research across nursing fields, namely adult nursing (35%), psychiatric and mental health nursing (27%), community health nursing, innovation & education (19%), maternal and child nursing (7%), pediatric nursing (7%), and gerontological nursing (5%). Results demonstrated that research focusing on adult nursing may be intertwined with older adults, contributing to the largest number.

Gerontological nursing is also addressed within psychiatric and mental health nursing ($n = 15$) as well as physical health ($n = 17$). Remarkably, research concerning non-communicable diseases in older adults included 63 studies, accounting for 50.4% of studies in adult field. Primarily, these studies put an emphasis on prevention and health promotion, quality of life, health service delivery,¹⁵ and chronic disease management.

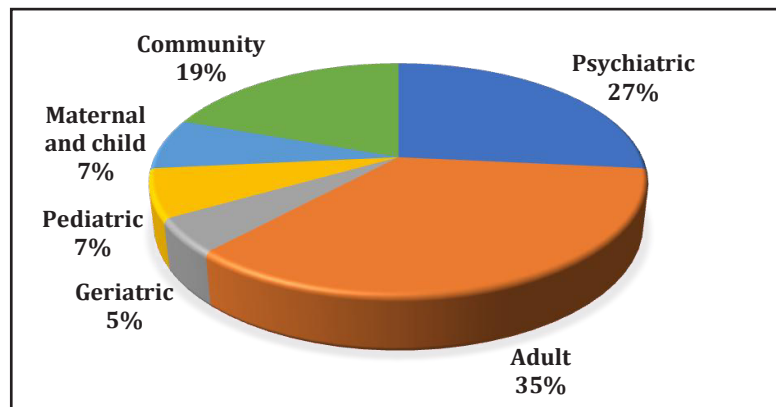


Figure 3 Classification of research by nursing fields ($n=354$)

Research settings mainly centered around hospitals and various community areas, with adult and older populations serving as the primary participants. Research topics involve a wide array of themes including 20 studies related to health promotion and disease prevention, 15 studies on cancers, 12 on stroke,^{16,17} nine on chronic obstructive pulmonary diseases and asthma, eight on metabolic diseases, seven on diabetes, seven on cardiovascular diseases, seven on infectious diseases, and four on hypertension.^{18,19} Additionally, there were two studies on palliative care,^{20,21} one on asthma, and

34 studies exploring areas such as eye diseases, kidney diseases, tracheal intubation patients, postoperative patients, infection prevention, and wound healing promotion.

The entire 354 research articles, serving as exemplars of the research vision, involve empirical evidence such as, a breakdown reveals 81 studies on research program development. Further exploration reveals the incorporation of 26 self-management programs, 22 self-efficacy programs, 24 health promotion or rehabilitation initiatives, and 9 biofeedback training programs. These findings

signify the multifaceted scope of progress and innovation within the nursing fields. In addition, seven measurement developments such as Measurement Development and Structural Validity Testing of Depression Scales for Thai Depressed Elderly,²² Suicidal Ideation Scale,²³ An Impact and Burden of Care for Primary Care Patients in Schizophrenia with Methamphetamine Use,²⁴ and Family Resilience Assessment of Family Undergoing Flood.²⁵

In total, 42 studies were exclusively dedicated to the development of media and manuals, with each of them being published in international journal databases. Moreover, eight innovative endeavors have been granted petty patents such as a pant for cervical cancer screening, a cervical cancer screening gown, a pressure sore model, and a portable adult arm manikin for venipuncture practice among nursing students have been developed.²⁶ These innovative research endeavors can be further expanded to benefit patients within the broader community and society. Notable examples encompass the prosthetic anus model, a solution-containing urethral catheter model, an electric turn-down bed with handrails, an eight-section mattress, and the development of an innovative bed designed to reposition patients for pressure sore prevention.^{27,28}

Regarding the findings of this review, the research outcomes were drawn from research articles published in Scopus-indexed journals, with a total of 104 articles (29.38%). Among the 354 articles, 56 articles (15.82%) were cited in Scopus-indexed journals. Moreover, certain research articles^{30,31}

gathered substantial attention, as evidenced by the highest average citation count falling within the range of 71 to 75 times. These were linked with mental health and other chronic illnesses, crises, or terminal illnesses,^{29,30} as well as older adults and family caregivers.³¹⁻³⁵

Qualitative research articles addressing contemporary societal public health concerns include: 1) Strategies to prevent pregnancies during adolescence,³⁶ 2) Experience of well-being and happiness: Insights from older adults in the community,³⁷ and 3) Healthcare service systems in Thailand: Accessibility of dependent elders.³⁸

Illustrative instances of research articles pertaining to the application and development of communication technology include: 1) Effects of the counseling program on strengthening mental-crisis management to strengthen adolescent life crisis awareness³⁹ and 2) Effectiveness of the program of enhancing the imagination by use of a Mobile App on easing nursing-student stress loads.⁴⁰

Summary

The search included the nursing research vision conducted within the Faculty of Nursing, Thammasat University, over the past 17 years, yielding a total of 354 research studies including 230 studies conducted by graduate and PhD. students and 124 studies conducted by faculty members and researchers. The data collection endeavors mentioned above have resulted in the development of new instruments, new knowledge, and health promotion research initiatives. This wealth of information holds the potential to

forecast future trends in nursing research and contribute to the improvement of empirical evidence within the realm of nursing research.

Recommendation

Firstly, it is worth noting that while the Faculty of Nursing at Thammasat University has a history spanning 27 years since 1995, the accessible research data captured in a modern computer system spans 17 years (2005 – 2022). Despite this temporal constraint, the current review holds promise as a prospective blueprint for undertaking scoping reviews of nursing research not only within the Faculty of Nursing but also across diverse academic institutions.

Next, it becomes crucial for researchers and nursing professionals to support proactive and innovative research initiatives. Furthermore, emphasis should be placed on publishing research articles in Scopus-indexed journals across quartiles (Q1–Q4), with citations serving as evidence of the global recognition.

Lastly, it is vital to effectively harness the capabilities of both faculty members and graduate students in order to authentically address the needs of the population. To achieve this, it is essential for nursing research to align with the institution's research vision, thus effectively tackling pertinent health and social issues. A recommendation is made to enhance research outcome while simultaneously elevating the quality and evidence-based practices within the Faculty of Nursing.

Conflict of Interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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