

# 1 The History of Nursing Research

Nursing research has not always had the prominence and importance it enjoys today, but its interesting history portends a distinguished future. Table 1.1, which also appears in the textbook, summarizes some of the key events in the historical evolution of nursing research.

## THE EARLY YEARS: FROM NIGHTINGALE TO THE 1960s

Research in nursing began with Florence Nightingale, a British nurse. Her landmark publication, *Notes on Nursing* (1859), described her early interest in environmental factors that promote physical and emotional well-being.

Her most widely known research contribution involved an analysis of factors affecting soldier mortality and morbidity during the Crimean War. Based on her skillful analyses, she was successful in effecting some changes in nursing care and, more generally, in public health (see Box 1.1 for highlights from Florence Nightingale's contribution to statistics).

### Early Research Focus

Most studies in the early 1900s concerned nurses' education. For example, in 1923, a group called the Committee for the Study of Nursing Education studied the educational preparation of nurse

teachers and administrators and the clinical experiences of nursing students. The committee issued the Goldmark Report (for its author, Josephine Goldmark), which identified educational inadequacies and concluded that advanced educational preparation was essential. As more nurses received university-based education, studies concerning nursing students—their characteristics, problems, and satisfactions—became more numerous.

### Early Research Funding

Funding for independent research was all but nonexistent in the early years. However, signaling its enduring commitment to research, the nursing honor society Sigma Theta Tau (which became Sigma Theta Tau International in 1985) was the first organization to fund nursing research in the United States, awarding a \$600 grant to Alice Crist Malone in 1936.

During the 1940s, government-initiated studies of nursing education continued, spurred on by the high demand for nursing personnel during World War II. For example, Brown (1948) reassessed nursing education in a study initiated at the request of the National Nursing Council for War Service. Brown recommended that nurses' education occur in collegiate settings. Many studies about nurses' roles and attitudes, hospital environments, and nurse–patient interactions stemmed from the Brown report.

**TABLE 1.1 • Historical Landmarks in Nursing Research**

YEAR	EVENT
1859	Nightingale's <i>Notes on Nursing</i> is published.
1900	<i>American Journal of Nursing</i> begins publication.
1923	Columbia University establishes first doctoral program for nurses. Goldmark Report with recommendations for nursing education is published.
1936	Sigma Theta Tau awards first nursing research grant in the United States.
1948	Brown publishes report on inadequacies of nursing education.
1952	The journal <i>Nursing Research</i> begins publication.
1955	Inception of the American Nurses Foundation to sponsor nursing research.
1957	Establishment of nursing research center at Walter Reed Army Institute of Research.
1963	<i>International Journal of Nursing Studies</i> begins publication.
1965	American Nurses Association (ANA) sponsors nursing research conferences.
1969	<i>Canadian Journal of Nursing Research</i> begins publication.
1972	ANA establishes a Commission on Research and Council of Nurse Researchers.
1976	Stetler and Marram publish guidelines on assessing research for use in practice <i>Journal of Advanced Nursing</i> begins publication.
1982	Conduct and Utilization of Research in Nursing (CURN) project publishes report.
1983	<i>Annual Review of Nursing Research</i> begins publication.
1985	ANA Cabinet on Nursing Research establishes research priorities.
1986	National Center for Nursing Research (NCNR) is established within U.S. National Institutes of Health.
1988	Conference on Research Priorities is convened by NCNR.
1989	U.S. Agency for Health Care Policy and Research (AHCPR) is established.
1993	NCNR becomes a full institute, the National Institute of Nursing Research (NINR). The Cochrane Collaboration is established. Magnet Recognition Program makes first awards.
1995	Joanna Briggs Institute, an international EBP collaborative, is established in Australia.
1997	Canadian Health Services Research Foundation is established with federal funding.
1999	AHCPR is renamed Agency for Healthcare Research and Quality (AHRQ).
2000	NINR's annual funding exceeds \$100 million. The Canadian Institute of Health Research is launched. Council for the Advancement of Nursing Science (CANS) is established.
2006	NINR issues strategic plan for 2006–2010.
2011	NINR celebrates 25th anniversary and issues a new strategic plan.
2014	NINR budget exceeds \$140 million.

## Early Growth in Nursing Research

Several forces in the 1950s put nursing research on a rapidly accelerating upswing in the United States. An increase in the number of nurses with advanced degrees, the establishment of a nursing research center at the Walter Reed Army Institute of Research, increased availability of funding, and the inception of the American Nurses Foundation—which

is devoted to the promotion of nursing research—provided the impetus to nursing research during this period.

Until the 1950s, nurse researchers had few outlets for reporting their studies. The *American Journal of Nursing*, first published in 1900, began to publish a few studies in the 1930s. A surge in the number of studies being conducted in the



1950s, however, created the need for a new journal; thus, *Nursing Research* came into being in 1952. As shown in Table 1.1, dissemination opportunities in professional journals grew steadily thereafter.

In the 1960s, nursing leaders began to express concern about the dearth of research in nursing practice. Several professional nursing organizations, such as the Western Interstate Council for Higher Education in Nursing, established research priorities during this period, and practice-oriented research on various clinical topics began to emerge in the literature.

#### Example of Nursing Research Breakthroughs in the 1960s:

Jeanne Quint Benoliel began a program of research that had a major impact on medicine, medical sociology, and nursing. She explored the subjective experiences of patients after diagnosis with a life-threatening illness (Quint, 1967). Of particular note, physicians in the early 1960s usually did not advise women that they had breast cancer, even after a mastectomy. Quint's (1962) seminal study of the personal experiences of women after radical mastectomy contributed to changes in communication and information control by physicians and nurses.

## NURSING RESEARCH IN THE 1970s

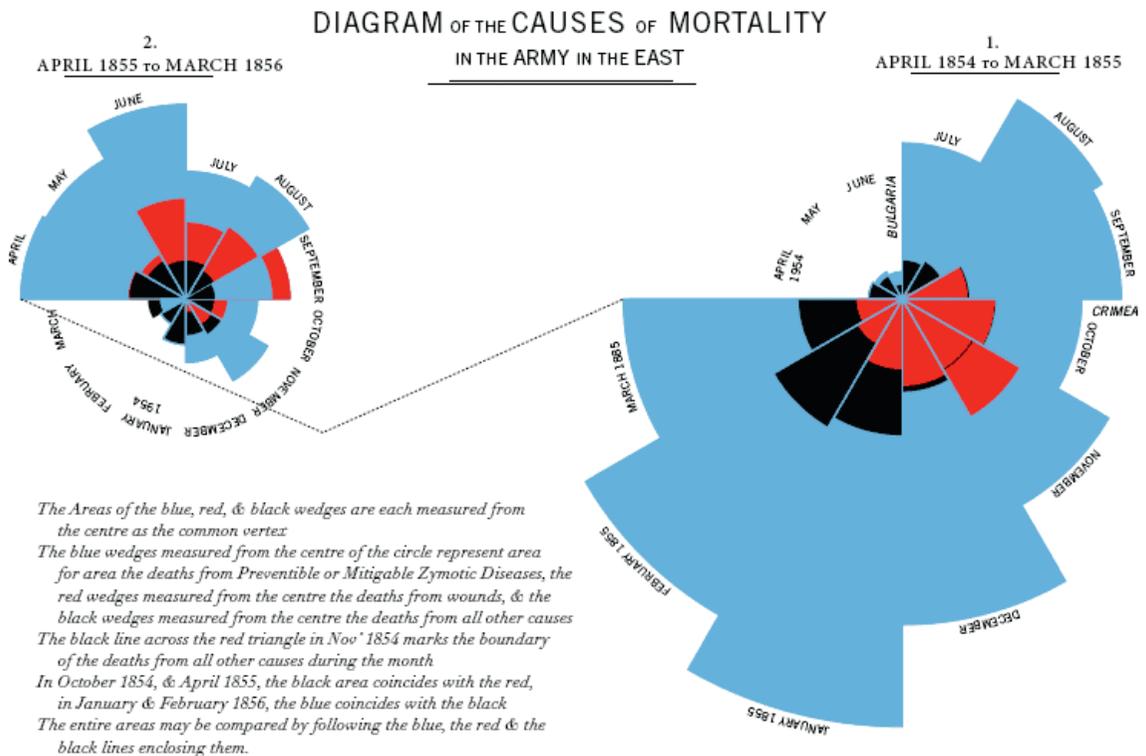
By the 1970s, the growing number of nursing studies and discussions of theoretical and contextual issues created the need for additional communication outlets.



### BOX 1.1 Florence Nightingale's Contributions to Statistics

From an early age, Florence Nightingale showed a gift for mathematics, excelling in math under her father's tutelage. As an adult, she promoted the idea that social and health phenomena could be objectively measured and analyzed. She was an innovator in the collection, tabulation, interpretation, and visual presentation of health data. She was one of the first to use pie charts, which had first been developed in 1801. Pie charts are used routinely now, but in the mid-1800s, they were a novel method of presenting data—yet highly attractive for presentations to lay audiences.

In fact, Nightingale is credited with developing a special form of pie chart that is occasionally called *Nightingale's rose diagram* (now called a polar area diagram), see Figure 1.1. She used rose diagrams to illustrate monthly variation in patient mortality in the military field hospital she managed during the Crimean War. She made extensive use of these rose diagrams to present information on the nature and magnitude of medical care in the Crimea to Members of Parliament and government workers who might otherwise have been "turned off" by traditional statistical tables or summaries. In her later life, Nightingale undertook a comprehensive statistical study of sanitation in rural areas of India and was a prominent figure in introducing improved medical care in India. In 1859, Nightingale became the first woman elected as a member of the Royal Statistical Society. She was later elected as an honorary member of the American Statistical Association.



**FIGURE 1.1** Example of a Nightingale rose diagram: “Diagram of the causes of mortality in the army in the East” by Florence Nightingale.

Several journals that focus on nursing research were established, including *Advances in Nursing Science*, *Research in Nursing & Health*, and the *Western Journal of Nursing Research*.

There was also a change in emphasis in nursing research from areas such as teaching and nurses themselves to improvements in client care—signifying a growing awareness by nurses of the need for an evidence base from which to practice. Nurses also began to pay attention to the clinical utilization of research findings. A seminal article by Stetler and Marram (1976) offered guidance on assessing research for application in practice settings.

In the United States, research skills among nurses continued to improve, and the cadre of nurses with earned doctorates steadily increased. Nursing research also expanded internationally. For example, nurse researchers in Europe began efforts at greater collaboration. The Workgroup of European Nurse Researchers was established in 1978 to develop greater communication and opportunities

for systematic partnerships among the 25 European national nurses associations involved.

### Example of Nursing Research Breakthroughs in the 1970s:

Kathryn Barnard’s research led to breakthroughs in the area of neonatal and young child development. Her research program focused on the identification and assessment of children at risk of developmental and health problems, such as abused and neglected children and failure-to-thrive children (Barnard, 1973, 1976; Barnard & Collar, 1973). Her research contributed to early interventions for children with disabilities and to the field of developmental psychology.

## NURSING RESEARCH IN THE 1980s

The 1980s brought nursing research to a new level of development. An increase in the number of qualified nurse researchers, the widespread availability of computers for the collection and analysis

of information, and an ever-growing recognition that research is an integral part of professional nursing led nursing leaders to raise new issues and concerns. More attention was paid to the types of questions asked, the methods of collecting and analyzing information, the linking of research to theory, and the utilization of research findings in practice.

Of particular importance in the United States was the establishment in 1986 of the National Center for Nursing Research (NCNR) at the National Institutes of Health (NIH) by congressional mandate. It was established despite a presidential veto that was overridden largely as a result of nurse-scientists' successful lobbying efforts. The purpose of NCNR was to promote and financially support research projects and training related to patient care. Funding for nursing research also became available in Canada in the 1980s through the National Health Research and Development Program (NHRDP) and the Medical Research Council of Canada.

Several nursing groups developed priorities for nursing research during the 1980s. For example, in 1985, the American Nurses Association Cabinet on Nursing Research established priorities that helped focus research more precisely on aspects of nursing practice. Nurses also began to conduct formal projects specifically designed to increase research utilization, such as the Conduct and Utilization of Research in Nursing (CURN) project, which is discussed in the textbook in Chapter 2.

Several forces outside of nursing in the late 1980s helped to shape today's nursing research landscape. A group from the McMaster Medical School in Canada designed a clinical learning strategy that was called evidence-based medicine (EBM). EBM, which promulgated the view that research findings were far superior to the opinions of authorities as a basis for clinical decisions, constituted a profound shift for medical education and practice, and has had a major effect on all health care professions.

In 1989, the U.S. government established the Agency for Health Care Policy and Research (AHCPR). AHCPR (which was renamed the Agency for Healthcare Research and Quality, or AHRQ, in 1999) is the federal agency that has been charged with supporting research specifically designed to improve the quality of health care, reduce health costs, and enhance patient safety, and thus

plays a pivotal role in the expansion of evidence-based practice (EBP) ([www.ahrq.gov](http://www.ahrq.gov)).

### Example of Nursing Research Breakthroughs in the 1980s:

A research team headed by Dorothy Brooten conducted studies that led to the testing of a model of site transitional care. Brooten and her colleagues (1986, 1988, 1998), for example, conducted studies of nurse-managed follow-up services for very low birth weight infants who were discharged early from the hospital and demonstrated a significant cost savings, with comparable health outcomes. Brooten and colleagues (1994) expanded their research to other high-risk patients. The site transitional care model has been used as a framework for patients who are at health risk as a result of early discharge from hospitals, and it has been recognized by numerous health care disciplines.

## NURSING RESEARCH IN THE 1990s

Nursing science came into its maturity in the United States during the 1990s. For example, nursing research was given more national visibility when NCNR was promoted to full institute status within the NIH. In 1993, the National Institute of Nursing Research (NINR) was launched. NINR has helped put nursing research into the mainstream of research activities enjoyed by medicine and other health disciplines. Funding for nursing research has also grown. In 1986, NCNR had a budget of \$16 million, but by fiscal year 1999, the budget for NINR had grown to about \$70 million. Funding opportunities for nursing research expanded in other countries as well. For example, the Canadian Health Services Research Foundation (CHSRF) was established in 1997 with an endowment from federal funds, and plans for the Canadian Institute for Health Research got underway.

Several journals were established in the 1990s in response to the growth in clinically oriented research and interest in EBP, including *Clinical Nursing Research* and *Journal of Clinical Nursing*. Another new journal, *Qualitative Health Research*, signaled the emergence of in-depth studies using different methodologies than had typically been used in earlier research.

Major contributions to EBP occurred near the turn of the century. Of particular importance,

the Cochrane Collaboration was inaugurated in 1993. This collaboration, an international network of institutions and individuals, maintains and updates systematic reviews of hundreds of clinical interventions to facilitate EBP ([www.cochrane.org](http://www.cochrane.org)). In Australia, another international network devoted to the evaluation of evidence in health disciplines was established in 1995: The Joanna Briggs Institute has collaborating centers worldwide (<http://joannabriggs.org/>). International cooperation around the issue of EBP in nursing also began to develop in the 1990s. For example, Sigma Theta Tau International sponsored the first international research utilization conference in Toronto in 1998, and a few years later, it launched the journal *Worldviews of Evidence-Based Nursing*.

### Example of Nursing Research Breakthroughs in the 1990s:

Many studies that Donaldson (2000) identified as *breakthroughs* in nursing research were conducted in the 1990s. This reflects, in part, the growth of **research programs** in which teams of researchers engage in a series of related studies, rather than discrete, unconnected studies. For example, several nurse researchers had breakthroughs in the area of psychoneuroimmunology, which has been adopted as the model of mind–body interactions. Swanson and Zeller, for example, conducted studies relating to HIV infection and neuropsychological function (Swanson, Cronin-Stubbs, Zeller, Kessler, & Bielauskas, 1993; Swanson, Zeller, & Spear, 1998), which led to discoveries in environmental management as a means of improving immune system status.

The future of nursing research in the 21st century looks bright and promising—there will be numerous breakthroughs in research that will help to shape how nursing is practiced.

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\*A link to this open-access journal article is provided in the Toolkit on thePoint™ for this chapter in the accompanying Resource Manual. 