

Intuition: A neglected hallmark of nursing knowledge

Intuition as a hallmark of nursing knowledge was traced through an analysis of literature published in the *American Journal of Nursing* between 1900 and 1985. Three questions were addressed: Does the concept appear in the literature; if so, what are its attributes; and how did they evolve through time? Titles of articles ($n = 14,971$) were examined and from this population only 51 were found to contain intuition or related terms. From analysis of the paucity of literature containing the concept it is concluded that intuition as an essential component of complex decision making is neglected in the professional literature.

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PROFESSIONAL NURSES in the 1980s are required to make multiple decisions related to clinical practice. A differentiation between complex and simple decisions can be made on the basis of the quality of data present prior to the decision. Complex decisions are made on the basis of, or in spite of, inadequate or ambiguous data. If the data are adequate and clearly presented, decisions arrived at through an analytical process are inexorable by virtue of deductive reasoning. Likewise, if data derived from objective and observable evidence of the senses are sufficient, decisions based on inductive reasoning are similarly persuasive. What is it, then, that enables correct decisions to be made in the face of ambiguous or meager data? Is it no more than luck? Is it solely experiential? As argued by Medawar,¹ winner of the Nobel Prize for medicine in 1960, deductive and inductive processes are inadequate for scientific reasoning. Rather, intuition is fundamental and enables the

scientist to generate hypotheses that can then be subjected to logical analysis. In a plea to elevate the status of intuitive thinking in education, Bruner² emphasizes that intuition is explicitly acknowledged in the scientific disciplines of mathematics and physics where the products of deductive and inductive processes are favorably evolved. This article postulates the continuing presence of intuition as an essential component of the decision-making process and discusses the neglect, willful or unconscious, that the intuitive process has suffered in the professional development of nurses.

The current environment of diagnostic decision making is marked by an abundance of data. Bringing coherency and meaning to the data has driven nursing curricula and the profession to a state of formalized scholarliness not equaled in the past. This has produced several side effects, not the least of which is the loss of credibility about information that is gained in the closeness of the nurse-patient relationship. The importance and cogency of this information must not be underestimated in the diagnostic reasoning process. It can perform an integrative function in the analysis of apparently disparate data and may become the basis of an intuitive link that enables correct complex decisions to be made.

Intuition is recognized as a component of the perceived view of science and a legitimate way of knowing in nursing.³⁻⁵ Professional nurses in clinical practice refer to their reliance on intuition as a component of the decision-making process. However, because of difficulty articulating steps of this process, many have discounted the importance of this cognitive

skill. In differentiating the novice from the expert nurse in clinical practice, Benner^{6,7} acknowledges the "intuitive grasp" of the critical care practitioner as essential in managing highly complex clinical situations.

Moreover, nurse researchers using qualitative methods of inquiry in the 1980s, including transcendental phenomenology, proclaim that intuition is an esteemed resource employed throughout the phases of the research process. In an analysis of the concept of intuition, Rew⁸ indicates that intuition is an important cognitive tool that can be used by individuals and groups alike in finding solutions to complex problems.

One way of understanding the current environment of complex decision making in nursing is to examine the manner in which it grew and evolved. It is assumed that the growth and development of the nursing profession is accurately reflected by the literature generated by the profession through time. Furthermore, it is assumed that the frequency with which a topic appears in the professional literature is an accurate reflection of the importance of that topic. Additional understanding of the application and utility of the topic is gained through an examination of the content of the literary material.

SPECIFIC GOALS

In order to trace the growth and development of this hallmark of nursing knowledge, a literature search was conducted to test these assertions and to establish a baseline for prospective recommendations. The investigators attempted to find references to the concept of intuition and its

role in the diagnostic reasoning process, formal nursing education, and the development of generalized goals for the nursing profession. Three questions were specifically addressed:

1. Is the concept of intuition present in the nursing literature from 1900-1985?
2. What are the defining attributes of concepts related to intuition identified in the nursing literature from 1900-1985?
3. How have the concepts, attributes, and utility of intuition in nursing evolved through time?

CONTEXTUAL FRAMEWORK

The contextual framework for this analysis of nursing literature is based on the assumption that nursing knowledge, including applications of deductive and inductive analyses and intuition, has evolved through time in a manner parallel to the evolution of nursing as a profession. Furthermore, the evolution of the profession is recorded in the literature of the discipline. Although several alternatives for a contextual framework could be supported, such as history of philosophy of science, history of American education, or history of psychology, the investigators selected the history of nursing as recorded

in *The American Journal of Nursing (AJN)* as a background against which to focus on the legitimization of intuition as an essential component of complex decision making in nursing. The *AJN* was selected as it represents a continuous record of nursing literature contributed by a variety of resources and affecting a broad spectrum of readers within the discipline. The material selected in *AJN* is representative of the salient issues and milestones in the development of the nursing profession. The period 1900-1985 was chosen as a time span sufficient to document evolutionary changes in the profession.

The first professional journal of nursing, *AJN* was published in 1900 as a medium for the professional organization of American nurses to exchange ideas. According to the editor-in-chief, a major motivation for establishment of the journal included the "absolute necessity for some preparatory knowledge of the theory of nursing."^(p5) This stated motivation provides a basic framework for selecting *AJN* as the periodical designated to focus on the development of a professional discipline with theoretical underpinnings. Issues addressed in the first journal include qualities and attributes of the successful nurse and methods of instruction for the trained nurse. Various case studies and reports of travel comprise the subject matter of the first volumes. From the literature contained within these first volumes there is evidence that this periodical is devoted to a synthesis of empirical and practical knowledge for those within the profession.¹⁰

AJN: Early history

The first decade of publication of *AJN* documents the development of two

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national nursing organizations, the American Nurses' Association (ANA) and the National League of Nursing Education. Attention to professional education is apparent in the frequent entries devoted to the hospital economics course at Nurse's College at Columbia University in New York City. Additionally, establishment of the American Red Cross Nursing Service, visiting nurses associations, and the navy and army nurse corps were recorded as significant milestones in the growth of the discipline. Further progress in providing foundations for the development of nursing as a profession was reported as nurse practice acts were written, state registration and professional associations were formed, and the first university school of nursing was inaugurated.

World War I was a dominant theme of much of the nursing literature during the second decade of publication. The American Red Cross was concerned with educating nurses for foreign service and much of the literature was devoted to accomplishment of this goal. On American soil Lillian Wald was leading the way to bring health care to the poor by expanding the Henry Street Settlement she had established before the turn of the century. Wald was further instrumental in the development of public health nursing in general and of the Children's Bureau and the Town and Country Nursing Service in particular. In conjunction with increased awareness of social problems of poverty related to health there was a heightened interest in issues of social morality related to sexual conduct. Many articles addressed the nurse's role in teaching to prevent sexually transmitted diseases and editorials urged nurses to become informed for the pur-

poses of teaching birth control and sex hygiene.¹¹ This decade was further characterized by activity directed toward broadening the educational base of nurses beyond the geographical confines of their initial training (EML Crowder, interview, February 1987).

The economic roller coaster endured by the American public in the decade following World War I was evident in articles published in the journal from 1920-1930. While many American nurses remained after the war and assisted in the refinement of nursing education in Europe, at home there was a shortage of students, faculty, and practitioners. Appeals to altruistic roles in nursing were a dominant theme. Further awakening of nursing's attention to public health and psychology was apparent as nurses struggled to care for problems presented by servicemen returning from the war. Attempts to include these subjects in nursing curricula are manifest in the literature. Late in this decade the Great Depression took its toll on nursing and unemployment became a major problem. The federal government provided funds to place graduate nurses in public health departments and into hospitals as staff nurses. This represented a major initiative to staff American hospitals with professional nurses rather than nursing students (EML Crowder, interview, February 1987).

During this time and into the following decade, 1930-1940, further efforts were under way, once again, to clarify the professional status of nursing. Endowments to Yale University in New Haven, Connecticut, and the Frances Payne Bolton School of Nursing in Cleveland, Ohio, as well as expansion of Teacher's College at Colum-

bia University provided essential groundwork for accomplishing the educational standards associated with meeting this objective.¹² Furthermore, reports about the Committee on the Grading of Nursing Schools, originated in 1926 to strengthen good schools and close down poorer ones, became a regular feature of the journal as self-evaluation and improvements in nursing education were vigorously pursued.

World War II through the 1960s

World War II resulted in drastic changes in nursing that were to have long-ranging effects on the maturation of the profession. The hierarchical rank of nurses, their individual and collective power, and income were issues that affected the supply of American nurses.¹³ Nurses at home and abroad made significant contributions to health care delivery and became vital participants of interdisciplinary team efforts in public health. Unfortunately, while nurses in the armed services enjoyed high status and were given credit for their knowledge and skills, this respect was not forthcoming in hospital positions at home (EML Crowder, interview, February 1987). Furthermore, nurses recognized their own need for more knowledge; the modest origins of baccalaureate education have been traced to this period. Textbooks written by and for nurses of this era referred to nursing arts that included acknowledgement of intuitive powers.¹⁴ The journal provided a forum for nurse educators and other health professionals to contribute expertise of diverse backgrounds to the expanding knowledge essential to the modern nurse. Rudimentary synthesis of biological, psychological, and social sciences began.

The 1950s began with reports of analyses of nursing needs created by shortages of the postwar era.¹⁵ The shortage of nursing was further complicated by political struggles in nonprofit hospitals that paid little for the expertise required of professional nurses. The discipline of psychology raised the awareness of nursing faculty and practitioners alike and the American Nurses' Association responded with an ethical code. The interpersonal process between nurse and patient became a focus of educational import while nurses receiving baccalaureate degrees increased in number. This decade was also marked by the entry of two major professional journals, *Nursing Research* and *Nursing Outlook*. While the former was created to encourage and disseminate research findings in nursing, the latter was geared more toward the practical ideas useful to the clinician.

Professional status of nursing gained stature in the 1960s as registered nurses took their places beside sociologists, psychologists, and physicians in the research process. Innovations in nursing education developed, including a mushrooming of associate degree programs in junior colleges begun modestly in the 1950s. Use of modern electronic technology to teach via television and to improve patient care in hospitals was the subject of interest to contributors to the journal. With the shortage of nurses behind it, the profession began to focus concern on concepts such as comprehensive care and quality care. As technology and communication skills improved, vulnerability of nursing to the interpretation of law also became an issue of concern. The interest of nursing in outcomes for the public health was apparent when the profession took the lead in

favoring bills for Medicare and Medicaid. The feminist movement had little significant impact on the literature of the decade as nursing struggled with internal issues related to the entry level for professional practice, which culminated in ANA's position paper of 1965.

Recent focus

The 1970s were characterized by increased emphasis on communication, including verbal and nonverbal behavior, and the proliferation of information. Graduate education leading to master's and doctoral preparation in nursing gained momentum and attention to development of conceptual models to guide research and practice began. The role of the clinical nurse specialist emerged from its infancy in the 1960s, and expanded roles in pediatrics and critical care were refined. Crisis intervention was an acceptable method in handling nursing problems that were no longer confined only to medical diseases and surgeries. Career ladders, health maintenance organizations, and ecology were subjects of interest to nurses across the continent. The research dissemination of Elizabeth Kubler-Ross's work sparked the nation's interest in death and dying. The role of stress in illness was also addressed with great interest as the nation enjoyed more prosperous times.

The history of the 1980s is still in the making. Economic pressures across the nation, diagnosis related groups, the outbreak of acquired immune deficiency syndrome, and a recurrent theme of shortages in nursing are reflected in the literature published to date. But nursing knowledge is expanding exponentially. The number of

specialized journals, graduates of master's and doctoral programs, and nursing research projects are but a few of the sources that attest to this phenomenon. The issue of entry level for professional practice shows evidence of progress toward this goal. Nursing is once again demonstrating leadership and concern for public health by establishing and administering a variety of home health services and agencies. Feminism is changing the way nurses think and practice, resulting in a burgeoning of innovative entrepreneurial ventures.

Relevant themes

From this contextual framework several themes are apparent and germane to the investigation. Concerns about legitimizing nursing as an autonomous profession through education, organization, and service are profoundly evident. Emphasis on professional education grounded in solid scientific theory and representing consistency of preparation is obvious. The evolution of an ethical code to support the public health is self-evident. Social and political issues related to feminism are less conspicuous, but the profession remained dominated by women throughout the historical period addressed, so this phenomenon should not be discounted. As Ashley concludes, the pre-World War I feminist movement failed and nurses overlooked their own secondary status because "nurses were among the most conservative of the conservatives."¹⁶(p1465) Finally, nursing's willingness to generate its own research and to develop a unique body of knowledge in order to justify its status as a profession is noteworthy. Regrettably, this research is

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rarely based on the rich history of nursing experience and knowledge and has resulted in a dearth of knowledge about nursing's unique characteristics, one of which is the application of intuitive skills, an area that merits investigation.

METHODS

All volumes of *AJN* originally published between October 1900 and December 1985 were examined for extraction of titles. Titles of all articles published by *AJN* between 1900 and 1985 were included in the population. Specifically excluded were regular or specialized columns such as editorials, letters to the editor, foreign news, announcements, book notices, hospital and training school items, changes in the army and navy nurse corps, and records of proceedings. It is asserted that articles submitted for publication reflect a broader base of concern for the issues affecting the nursing profession than book notices, changes in the army and navy nurse corps, and so forth. It is further asserted that editorials, announcements, and other regularly occurring material had too narrow a base for inclusion in this study. A total of 14,971 titles comprised the population. Bibliographical abstracts of early articles were not available for extraction of items of interest and, therefore, it was assumed

that titles accurately reflected the content of the articles.

Titles were inspected for presence of the concept of major interest, intuition. Because of concern that vocabulary changes over time and the assumption of the investigators that relevant material might be found under terms often used synonymously with intuition, related terms were also sought. The additional terms sought were cognition, creativity, empathy, instinct, knowledge, nursing arts, perception, philosophy, psychology, and spirit. Inclusion of any one of these key words in a title provided the impetus to scrutinize the article as a whole to determine if it contained reference to the concept of intuition or its defining attributes. The senior investigator and two research assistants examined only primary sources. Evidence of interrater reliability in collection of data was determined by each assistant and investigator finding the same number of titles for one complete volume of the journal.

An instrument was designed to facilitate data collection and consisted of a spreadsheet containing columns for tallying the dates of publication, journal volume numbers, the total number of appropriate titles within each volume, and 11 columns under headings for the concepts of interest. This instrument was used to tabulate all titles comprising the population of articles examined and was collapsed to present the findings in Table 1.

All articles with titles containing one of the terms related to the concept of intuition were summarized and analyzed by both investigators for themes and content related to the research questions. Although beyond the scope of this article, an anno-

Table 1. Frequency of occurrence in *AJN* of terms related to intuition

Publication dates	Number of titles reviewed	Int	Cog	Cre	Emp	Ins	Kno	NA	Per	Phi	Psy	Sp
1900-1910	1,077	0	0	0	0	0	0	1	0	0	2	0
1911-1920	944	0	0	0	0	0	0	0	0	0	4	0
1921-1930	1,365	0	0	0	0	0	2	0	0	0	3	3
1931-1940	2,087	0	0	1	0	0	1	0	0	0	1	1
1941-1950	2,509	0	0	1	0	0	0	1	0	0	2	2
1951-1960	2,172	0	0	2	0	0	1	0	0	0	2	0
1961-1970	2,036	1	0	1	0	0	0	1	1	1	0	0
1971-1980	2,076	0	0	1	8	0	0	0	1	1	3	0
1981-1985	705	0	0	0	0	0	0	0	0	0	2	0
Total titles reviewed	14,971											
Total occurrence	51	1	0	6	8	0	4	3	2	2	19	6

Key: Int = intuition; Cog = cognition; Cre = creativity; Emp = empathy; Ins = instinct; Kno = knowledge; NA = nursing arts; Per = perception; Phi = philosophy; Psy = psychology; Sp = spirit.

tated bibliography of 51 articles, hereafter referred to as the Intuitive Concepts Population Set, containing one of the 11 terms related to intuition, was created and is available from the senior author.

In a preliminary test of the methodology it became obvious that even an expanded vocabulary of key words yielded a very small return. To preclude the possibility that the vocabulary alone was causing the small yield, a random sample of the literature was also taken. This sample provided the investigators the opportunity to determine if other key words or phrases would yield further references to the concept of intuition.

A sample of 50 articles was generated through use of a table of random numbers for year of publication, issue number, and order of appearance of the article within the issue. The investigators analyzed these articles for themes and content related to the research questions. A second annotated bibliography, the Intuitive Concepts Ran-

dom Set, was created and is available from the senior investigator.

For purposes of answering the second and third research questions, contents of all articles containing one of the 11 terms related to the concept of intuition and all 50 sample articles were analyzed for the following references to defining attributes of intuition as suggested by Rew:

- "knowledge of a fact or truth, as a whole;
- immediate possession of knowledge; and
- knowledge independent of the linear reasoning process."^{8(p23)}

Agreement of both investigators on the salience of 90% of the Intuitive Concepts Random Set was achieved.

FINDINGS

In answer to the first research question, the concept of intuition is present in the nursing literature from 1900-1985, but the

term itself appears in only one of the total population of 14,971 titles. Similarly, related concepts also appear infrequently, as summarized in Table 1. Including the 11 key words of concepts related or synonymous to intuition, only 51 titles emerged from the population. This number represents less than one per cent (actual ratio of titles containing key concepts to total titles = 0.0034) of the nursing literature published in this journal over a span of 85 years of professional development.

Appearance of intuition and related concepts in nursing literature

Concepts related to intuition, nursing arts and psychology, were found in titles published during the first decade of *AJN*'s history. The concept of nursing arts, initially discussed by Sewall,¹⁷ refers to the nurse's artistic ability to take action guided by instinct rather than by scientific principle. The concept of psychology enjoyed not only the highest frequency but also the longest duration of occurrence within the population of titles examined. Earliest articles concerning psychology were concerned with reflections on nursing as a combination of art and science. Later manuscripts referred to the nurse's insight into the lives of students and patients as an important component in making judgments where not all is seen.¹⁸ More recently, emphasis was placed on the importance of psychology to the nurse who frequently needed to find creative solutions, which were the result of experience, imagination, previous knowledge, instinct, and awareness of patients' feelings.

Neither of the terms cognition or instinct was found in the population of

titles. However, both terms were contained within the bodies of several articles comprising the population.

Articles containing the term spirit in the title were found to be only peripherally related to the concept of interest. The heroines of these references were nurses who responded to the poor, the wounded, and other unfortunate. Similarly, the spirit of nursing was associated with missionary zeal and admonitions to the nurse to develop character as well as skills.¹⁹

Early essays on knowledge were usually related to the knowledge needed by nurses to manage patients who had various communicable diseases such as tuberculosis and scarlet fever. These submissions were often written by physicians emphasizing the scientific knowledge needed by the nurse.

The nursing literature reviewed contained only two articles directed at perception and both of these were written after 1965. Contents of these two articles provided no evidence of the concept of intuition and dealt with perception limited to the five senses.

Similarly, writings concerned with philosophy addressed the narrow meaning of the term as it pertains to one's approach to living, dying, and working. Only two references with this concept in the title were obtained.

Empathy was the last concept to appear in the literature, first appearing in 1973. Again, this term was found to yield information only obliquely related to intuition. Kalisch²⁰ defined the term as the ability to accurately perceive the feelings and meanings of situations to patients. Others reported on methods to improve this

capacity in the student and professional nurse.

Creativity first appeared in a title in 1931 and provided some evidence of its relation to the concept of intuition. Sellew²¹ notes that nursing requires two kinds of thinking, which are reflexive, based on past experience, and creative, involving responses to new situations. Other references to creativity as instances of abstract thinking and imagination were also obtained.

Finally, intuition itself was located in only one title. This title urged the nurse to use formalized assessment, not intuition, in clinical practice. It is of interest to note that within the article McCain²² claims that nursing practice and education in the 1960s were mainly intuitive in nature and that a more scientific approach was in order. However, her comments tend to contradict her title somewhat as she asserts that creativity as well as sufficient data are needed to make accurate assessments and diagnoses.

Data analyzed from the Intuitive Concepts Random Set yielded no new terms relevant to the inquiry. Of the 50 articles reviewed, only one directly referred to an intuitive approach to nursing. Several articles contained a few related concepts such as woman's instinct, creativity, and quick perception. These findings support the assumption of the investigators that selection of the key words did not distort the findings.

In summary, the findings indicate that the concept of intuition is present in the nursing literature from 1900-1985. Furthermore, these findings reveal that, although references to this concept exist, there is a paucity of explicit testimonials to this

hallmark of nursing knowledge. In the one instance where intuition is explicitly contained in the title, the importance of this mode of thought is challenged and denigrated.

Appearance of attributes of intuition

In answer to the second research question, each of the three attributes of intuition as delineated in the methods for this investigation was found. The term "insight," which is defined as "the ability to see and understand clearly the inner nature of things, especially by intuition,"^{23(p314)} was found in three articles within the population and three articles from the sample. The phrase "understand clearly . . . by intuition" is interpreted as referring to all three attributes, knowledge as a whole, immediate possession of the knowledge, and acquisition of knowledge without formal reasoning.

Instinct, knowledge gained without formal reasoning, was also found in a few of the articles in both population and sample. Intuition was linked with references to creativity and the ability to foresee the future (knowledge as a whole and immediate possession of knowledge) in articles from the population. In the sample, three sources alluded to intuition as a feminine attribute.²⁴⁻²⁶ These references were all published prior to 1950 and dealt with the phenomenon as knowledge gained as a whole, immediately, and without the analytical reasoning process.

The qualitative data acquired to answer the third question can be interpreted as falling into two broad categories, those characteristics, attributes, and goals of

good nursing associated with the concept of intuition that have been sustained through time and those that have varied through time.

The first category stresses the importance of intangibles in nurse-patient and nurse-physician relationships. References to understanding the whole patient by understanding the psychology of sickness were found as far back as the first decade of the 1900s.²⁷ References to the scientific, analytical role of the physician and the nonscientific, judgmental role of the nurse were found in the second decade of literature.¹⁸

The second category required analysis on the basis of both absolute and relative change. As an example of absolute change, the concept of nursing as an art appears to diminish and die out over the first 30 years of the journal, emerging, disappearing again, and finally making another appearance after yet another 20 years.^{17,28,29} This presents an immediate contradiction to common sense as nursing arts are certainly alive and well in 1987. However, the meaning or usage of the word has shifted through time. Early in this century, a nurse's artistic ability was associated with her instinct.¹⁷ Present usage associates art with a certain desirable elegance in craft, an extension of formal training that occurs primarily through experience.

Relative change is highlighted by comparing the random sample of articles with the articles found in the key word search. The most fundamental example is the virtual explosion of scientific information relating to disease entities since 1900. Other aspects of nursing that remained constant in an absolute sense would appear

to diminish when compared to this phenomenon.

With these two perspectives in mind, several qualitative findings are evident.

- A significant portion of successful nursing depends on nonquantifiable aspects of the nursing process. These aspects are often presented under the guise of psychology, creative thinking, or very generalized knowledge of the patient's circumstances.
- Nurses are busy with the basics of patient care, but time taken to absorb the complete context of the patient's situation will provide positive contributions to prognosis.
- Nurses have been required to learn increasing amounts of factual information dealing with patient care, including etiology of disease, action and side effects of medications, and the operation of complex technical equipment. This knowledge has outstripped and tends to displace a broader understanding of the patient as a human being.
- The patient's attitude is affected by the quality of nursing and that attitude can have a profound effect on recovery.
- A quality exists in good nursing that forms the basis for insights not available through the analysis of factual data. This quality is desirable, but cannot necessarily be taught.
- Nurses do not directly articulate nonquantifiable aspects of their work in an effective way. These aspects are found in a derivative step from articles that describe concrete events surrounding specific case studies.

IMPLICATIONS AND CONCLUSIONS

During the time portrayed by this literature search, authors in many disciplines (primarily scientific philosophers, psychologists, and psychiatrists) offered definitions of intuition. It is not the intent here to become bogged down by semantics, but to deal with the functional prospects of certain nonquantifiable aspects that compose a significant contribution to effective nursing. In that regard, the defining attributes delineated by Rew⁸ and the types of intuition defined by Loye are useful. Loye asserts that intuition consists of three types: cognitive inference, gestalt intuition, and precognitive function. Each type accomplishes closure to a correct decision based on fewer and fewer environmental cues, with precognitive function operating at a level in the complete absence of cues and cognitive inference accounting for those instances in which visual and verbal cues are observed so quickly and subliminally that they are virtually forgotten as contributing to the final decision.³⁰

Nursing literature shies away from the use of the word intuition, but nonetheless describes characteristics that definitionally meet the requirements of at least Loye's first two types. When physicians query nurses about a patient's status, nurses determine their answers by knowledge, insight, and judgment.¹⁸ The necessity for both experience and imagination is present in nursing curricula and in daily experience.³¹ Thought is reflexive, drawing on past experiences, or it is creative, responding to new situations not found in past experience. Nursing requires that both types of thought be taught.²¹ A good nurse

is not only devoted, sincere, and courageous, he or she is also intelligent, sympathetic, and understanding.³² Prerequisites to doing creative work include natural curiosity, imagination, abstract thinking, and drive.³³

Few of these characteristics have changed through time. The vocabulary has changed, as exemplified by the word "art" noted above. But the contextual meaning of the vocabulary has remained very stable. In the past 15 years nurses have appeared to empathize rather than sympathize with patients. However, the value of the nurse-patient relationship, grounded in knowledge of the patient not gained from his or her medical record, is still highly regarded. Literature appearing in the 1980s attests to this value. Ethical dilemmas, expert nursing care, and the ability to predict behavior based on inadequate or ambiguous data all require applications of intuitive knowledge.³⁴⁻³⁶

These observations lead to the conclusion that the role of intuition in nursing needs to be explicitly acknowledged. It may be a feature of patient care that is unique to the historical role played solely by nurses. Certainly, over the years the value of insight gained by nurses in the development of the nurse-patient relationship has been held in high esteem.

If that is the case, arguments are well supported to include intuition as a part of the development of nursing theory. The

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interdisciplinary nature of environmental cues argues in favor of further research into the benefits gained from improving nurse-patient and nurse-physician communications set against a background of education, psychology, sociology, and philosophy, as well as medicine. In an age when nurses, patients, and physicians alike are inundated by data, further research into the role intuition can play in making sense of the data may be the best way to bring credibility to an area of nursing that has historically played a valued part in patient care but has, until recently, been tragically neglected. The special mindset needed to

remain open to implications not directly deducible from explicit data creates a requirement to evaluate the place intuition has in formal and informal nursing education.

Nurses are constantly called upon to meet the unexpected. The old expression, "a nurse's intuition," was based on her ability to foresee what was about to take place At the present [1931] there is too little attention paid to reflexive thought and none to creative thinking in nursing education.^{21(p189)}

Can the profession of nursing afford to permit this neglect to go unnoticed?

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