



NURSING PAPERS

JULY 1972

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A COMPARISON OF BLOOD PRESSURE READINGS
TAKEN SIMULTANEOUSLY BY FACULTY AND
STUDENTS

Volume 4, No. 1



Nursing Papers is a publication of the School for Graduate Nurses,
McGill University. Address all materials and enquiries to
MOYRA ALLEN, 3506 University Street, Montreal.

*Subscription rate: \$1.00 per issue, \$2.00 — one year,
\$4.00 — two years.*

EDITORIAL



One often speculates how papers come into being. After having had a vivid experience, one may think how a paper could logically develop. Sometimes such exercises prove to be a stimulating beginning. When members of faculty test nursing theories and concepts, this process provokes questions and ideas to be explored further. The need to respond to this thinking in a concrete form arises and those involved write a process of their reactions. From this, there may develop what is seen as the framework for a paper. Many worthwhile efforts begin in this way. It seems to me that the reason for the research-teaching component in nursing practice is to develop this skill that precedes the research report. This may well be one of the best sources from which articles on nursing practice arise.

To write, one may need certain incentives. One requires enough time to mull over writings, develop further the thoughts that have arisen from this, do more library research and then add concepts that when tested will bring forth a new combination of ideas. If at this point a paper is written and submitted to a periodical it may be accepted. This depends on the needs of that issue for that subject material and the focus of the paper as it is related to current trends. Some writers do well to have an audience to try out their ideas. This gives needed encouragement. Others, born out of their experience, know their own needs and work best alone. Writers cognizant of their own needs and their own work habits capitalize on these themselves to produce the desired results of quality for a publication. Whatever the case is, the writer is well advised in his initial endeavors to allow sufficient time to explore the ways in which he works best.

There are, of course, other factors that move writers into action. Besides the desire to capture and express ideas, there is the sincere commitment to share with others. The less attractive motivating factor is that of the printer's deadline date. Whether most of us like it or not, with that date on the horizon most writers function with increased efficiency and speed. Some are helped by reading further afield and enjoying periods of reflection following practice. Others find it fruitful to let materials settle before finalizing the work. This latter step yields necessary polish to the paper.

Faculty members realize the human tendency to file writings away in the desk drawer for further perusal when other pressures and commitments give this endeavor less priority. That is a self imposed choice. Since this situation exists, one wonders about the hidden fruits of such labors that lie in files and in desk drawers across Canada. Readers need the thinking of their colleagues and the stimulus this brings.

As *Nursing Papers* begins to receive more manuscripts from its newly appointed ambassadors in University Faculties of Nursing, authors will be encouraged to write and to share. The ambassadors might be well advised to look into facilities available on their campuses this summer that will be supporting structure for their faculty efforts. What are the facilities for typing manuscripts, for editing, for taking courses that could assist the writers of papers that should be published here?

This group of papers from The University of Western Ontario represents a component in nursing, teaching and research. We at The University of Western Ontario have come this far in 1971-1972. Take up the challenge! It's your turn!

Ethel M. Horn
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CREATIVITY AND THE INDIVIDUAL

*There is a vast distinction
between creative thought and
action and merely knowing how
to do it.*

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*That sir, which serves and seeks for gain,
And follows but for form,
Will pack, when it begins to rain,
And leave thee in the storm.¹*

IN any organization there will be people who fit this description, as spoken by the Fool in *King Lear*. They are not committed to the future of the organization, but are there because it meets their present need for a job, and money in their pocket.

*It suck'd me first, and now sucks thee, and in this
flea, our two bloods mingled bee.²*

An organization, however, does not want such complete union with the employee as is conjured up in one's mind by this conceit of the 17th century poet John Donne. For vested interests may then become so great that any change becomes a threat. The organization may be rendered as ineffective by those who see their life and job as one, as by individuals who see it only as a necessary evil.

The above two quotations are from the works of men whose contributions have survived the test of time; they were creative in that their writing shows originality of thought, expression, and form. Creativity has frequently been reserved in its use to refer to the great men in the arts or science when their books, paintings or discoveries received world acclaim.

Creative ability, like most human traits, is found in the population on a continuum. There is some originality in everyone and the ability to produce original ideas can be measured.³ This was an assumption made by Wilson, Guilford, and Christensen when they set up a battery of tests to measure originality. They "regarded originality in turn as meaning 'uncommon,' 'remote,' and 'clever.'"⁴ Five of their seven tests, used to measure originality, showed significant interrelationships.⁵ Their findings indicated that there was a factor common to the three definitions, which the authors tentatively named originality.⁶ Taylor, discussing creativity, says that to date school grades, traditional intelligent tests, or sheer accumulation of knowledge are not valid measures of creative performance.⁷ Thus, The Fool in King Lear was the one who predicted the desertion of the royal supporters. Shakespeare in his works often hides the creative thinker behind the mask of apparent dullness. Donne, on the other hand, liked to shock people by the use of remoteness (the flea and love).

To return to organizations, a company is made up of many individuals; some will work to a satisfactory level, but contribute little in original thought, others will be so anxious for security that they will resist company growth if it means change. Others will see the dangers of both approaches, not only to the company, but also to themselves. For as Beck says, one of the most treasured possessions of the individual is his creativity, and only by guarding it closely can one "control events and . . . avoid being controlled by them in a crushing and toilsome routine."⁸

SECURITY VERSUS CREATIVITY

Beck's words above suggest that you cannot have security without using creative ability. If events are the controlling force in one's life, then one gives up the human rights — to make decisions, to question, and to introduce change. Social organization frequently makes it difficult not to see conflict arising from these two concepts; many individuals see creativity in others as a source of danger to their security as Machiavelli wrote in the early 16th century:

*. . . the reformer has enemies in all those who
profit by the old order, and only lukewarm de-*

*fenders in all those who would profit by the new order, this lukewarmness arising partly from fear of their adversaries, who have the law in their favour; and partly from the incredulity of mankind, who do not truly believe in anything new until they have actual experience of it.*⁹

The leadership given to a group frequently will determine the direction it will go. An excerpt from a book by Walker and Heyns gives a formula for producing conformity:

*Manage to arouse a need or needs that are important to the individual or to the group. Offer a goal which is appropriate to the need or needs. Make sure that conformity is instrumental to the achievement of the goal and that the goal is as large and as certain as possible. Apply the goal or reward at every opportunity.*¹⁰

The result of working in a conformity-bound environment is one that will be avoided by the individual who wants to have a lifetime of growing. As Barzum significantly states it:

*If we must all suffer, agree, worry, partake in unison, under pain of reproof, then the world is no longer a stage peopled by distinguished actors, . . . there is only a tribe milling under a tent.*¹¹

Security without growth shortens the life of the individual, not in years necessarily but in satisfaction in seeing what he can contribute to life; his own, his family's, his friends, society. Parents' satisfaction is increased when they see the child they created grow physically and mentally. The growing child is keenly interested in how tall he is in relation to his friends and excited when he learns or makes something new. Why, then, does this interest in growth often stop? It is a powerful motivator, but it must be seen as a goal that is worthy of attainment and acceptable to others.

Height of individuals in society is on a continuum, thus one individual may be 5'4", another 5'10" and another 6'4". This is also true of creative ability. Not everyone is capable of being the creator of a great work of art, or of being a research scientist. Selye gives an outline of the characteristics of the original thinker, the great scientific discoverer. He states it thus:

The power of original, creative thought, reflects on independent freshness of aspect. By independ-

*ence of thought I mean particularly initiative and resourcefulness in taking the introductory step. This, in turn, depends upon imagination, the power to form a conscious idea of something not previously perceived in reality. It requires vision, the discernment and foresight of what is important at a time when importance is not yet obvious.*¹²

The individual described by Selye would of necessity be one who was secure within himself, with risk-taking a strong personality trait. That is, he would have to be willing to expose himself to situations with uncertain outcomes. It is of interest that when the faculty of a school of nursing was asked to rank-list the fifteen personality traits measured by the Edwards Personality Preference Schedule, in the order they felt would be desirable traits in graduates of basic baccalaureate program, they ranked fourth "Change — desire for attempting new and different things, and experience of novelty and change."¹³ The rank-listing of students' mean scores placed change fourth for seniors and 5.5 for sophomores. Another study done by Smith compared the results of entrance personality tests given to 219 students in a hospital diploma school, who had successfully completed their program, with those of 45 students who left the program before graduation.¹⁴ In this study on the Edwards Personality Preference Schedule "Change" ranked fifth for the successful students and fourth for the unsuccessful students. The other personality test administered to these students was the Cattrell 16 Personality Factor Questionnaire. The unsuccessful students mean score on Q_1 , where "a high score indicates radicalism in attitudes and temperament as opposed to conservatism,"¹⁵ was higher than the mean score for the successful students; the significance of the difference between means was at or beyond the .05 level.¹⁶

Torrance carried out another study in a diploma school of nursing in the United States using the Minnesota Test of Creative Thinking and her results indicated "that nursing education does not necessarily reduce the creativity of its students and eliminate the most creative students."¹⁷

The researchers in these instances all cautioned against generalizing from their findings, but they do indicate by their areas of study that in nursing there is an interest in reasearching the relationship between security and some factors related to creativity. However, the frequent stress placed on step by step procedures in teaching and practice, servant relationships to doctors and administrators, and autocratic administration should not be discounted as causes for

drop-outs from nursing schools and reasons why some nurses leave nursing in search of jobs where it is easier to grow and where tradition is not as strong a dictator of practice.

DEVELOPMENT

As a person looks about he can see that there is little growth without attention. The plant without water dies, the play without an audience is forgotten, the product without a user disappears from the shelf. Creativity as a potential in all individuals will rarely flourish unless the environment, through the many phrases of life, is conducive to its growth. The child whose parents say, though often only by action, I will love you if you are good, or, do as I say, is being taught conformity, not creativity. If the exploring instinct leads to punishment or loss of love, it is going to be used as a motivator of behavior with greater hesitation. If in school the teacher expects the student to listen, and if examination results depend on how much can be memorized, or if the student can reproduce what he knows the teacher wants, then where is the incentive to try something new? Where is the stimulus to read the book not on the bibliography, to write the paper that is different, to try the experiment just to see what the results may be? In an environment where conformity is rewarded; the knowledge that experimentation is part of learning may take the individual years to discover — for many the realization may never come.

The environment of a school at any level should be evaluated not by the philosophy on paper, but on how it is communicated to and by the teachers. The words of Sir Arthur Currie as quoted by Kidd suggest an environment where stimulation of creative potential would be a primary goal:

We do not want you to be the echoers of a thousand platitudes but originators of new and larger ideas . . . The task of education is to make men alive, to send them out alive at more points, alive on higher levels, alive in more effective ways .¹⁸

The learner at all points in life must be aware of using his many capabilities, and be anxious to experiment with new and different ways of utilizing them. In his path of discovery he may well initiate something, though small, that will change the pattern of work, play, or living of many others. If, however, he never tries, no one will know what has been lost. This is the intangible part of discovery: if it does not work, many will be anxious to criticize, but if it had not been tried, the fact it would not work would never be known. Yet

out of the mistake may come another idea that may change many patterns. Development takes time in an environment where there is room to move. A leader can create an environment in which conformity or creativity is fostered. If creativity is accepted as a major motivator to better performance, then an organization should consider these words of Mayer:

... to enable the modern working man to attain high levels of performance together with inner satisfaction, one must create for him in the organization of his work ample space for personal development, possibilities of individual initiative and the self-responsibility and freedom in which he is required and challenged to utilize his knowledge and his ability. It is within this realm that such personal self-realization is developed with an accompanying high level of material production.¹⁹

In nursing there are many questions that must be answered. Is the education realistic in baccalaureate or diploma schools, realistic in the light of the work environment after graduation? How can we create an environment in the schools and the service area where growth will be seen as a life long process? For example, there is something very wrong, where in the educational setting the student is encouraged to acquire skills in interpersonal relationships and problem-solving techniques, and then finds when she moves into the work environment she is "on medications." It is likely to be a full-time job when done functionally, so her contact with the patients is when she administers the drugs — not before to assess need — not after to assess effect. She is following an order in a system. If she stays in the job because it is convenient, she must give up part of herself, or transfer that part away from the job. Development has reached a turning point and growth through learning endangered.

The answer to the challenge of how to promote growth of employees is not simple. Some nursing departments may find the answer if they are willing to experiment, some may have answers thrust upon them from outside, and others because of fear of change will continue to impede the growth of those who come to them for employment.

CREATIVE PROCESS

Crosby suggests four steps that are involved in the creative process: preparation, incubation, illumination, verification.²⁰ Preparation involves recognizing that there is a problem, setting limits, and

gathering information.²¹ The danger at this point is to look for a solution in the context of familiar patterns; the creative thinker will look for analogies.²² Incubation is that period when no solution seems evident, or no line of attack open. Then the thinker goes off about some other business and suddenly a solution, method of attack, or partial solution presents itself.²³ Illumination is "the object of all preceding effort in the crucial event which has been called illumination or insight."²⁴ Verification is when the evaluation of the solution is carried out by the creator and his colleagues.²⁵ De Bono in a description of what he calls lateral versus vertical thinking suggests many of the same ideas. He describes vertical thinking as digging the same hole deeper.²⁶ This is similar to Crosby's warning associated with looking to familiar patterns for solutions to new problems. Lateral thinking, on the other hand, is similar to the idea of looking for analogies, for "lateral thinking is thinking sideways: not developing a pattern but restructuring a pattern."²⁷ However, de Bono strongly disagrees with the idea that creative thinking necessarily follows steps, but believes rather that it "proceeds by any means whatsoever, so long as change is brought about."²⁸ The creative process is more than problem solving; while in many instances progress toward change is facilitated by following a pattern, creativity implies freedom from conformity. The creative idea may well come before the problem is recognized; still the organization will be better for it.

De Bono throughout his article stays away from the use of the word creative and gives the following reason:

*I have deliberately avoided using the word 'creativity' in connection with lateral thinking because I think it too glibly fashionable.*²⁹

This is a warning about the pedantic trap similar to the warning of an educator who says:

*Teaching only facts is beginning to have a pernicious sort of connotation in the minds of some of our highly-placed Canadian educators these days, so they use high-sounding words instead of 'facts', words like understanding generalization, concepts, or even principles.*³⁰

This is no different than the trap created by fear; the fear that prevents people from being themselves willing to admit their own leanings and beliefs. As a nurse educator says:

With constant emphasis being placed on democra-

tic values in all administrative literature, hardly an administrative literature, hardly an administrator, and certainly not a nurse administrator, dares to admit to autocratic leanings.³¹

Creativity, principles, democracy are only words; what they mean can be found in the dictionary; interpretation of them appears in the literature of many disciplines. The environment where they can be behaviorally implemented must be created by people.

SUMMARY

Creativity is a potential of each individual, but this does not mean everyone can create or discover something that will receive world acclaim. This is not the goal the organization should expect. The responsibility, however, of parents, schools, businesses, and society is to encourage the growth of natural experimental instinct.

When leadership can give equal consideration to ideas in conflict as to ideas in accord, propagators of ideas will become self-directed and self-responsible. Then leadership becomes an inventive process, rather than a directive one, and encourages the worker to evaluate his ideas so that ideas have a sense of timeliness and purpose.³²

The responsibility of nursing leaders is to create an environment where the neophytes and practitioners can grow to their full potential as individuals. They must encourage the development of problem-solving skills so that self education continues as a life-time goal. They must communicate verbally and nonverbally their acceptance of change. If the environment is one where new approaches are discussed, tried, and evaluated, needed changes will be made and accepted.

In this atmosphere there will be less stress placed on knowing "how-to-do-things" and more on understanding and adapting to meet the individuality of situations. Hilliard puts the question of creativity to nurses in this way:

The artist can elect to work on a numbered painting. This will not tax his creative energies; yet he will end up with a finished picture. Or he may choose to do an original oil. He will paint, stand back and assess, add color here and subdue a shadow there. When he is finished, he will be able

to say, 'Here is an original work.' But with the numbered painting, he can only say, "I've done this according to a preconceived pattern and it is passable."³³

She follows this picture by asking, does the patient not deserve the "oil painting" approach? In many hospitals the "numbers" approach is often the case. Nursing must ask why. It is not good enough to say there is a shortage of nurses, that nurses are required to spend too much time on non-nursing duties, or that institutions require conformity. The individual nurses must be encouraged to be responsible for expressing their views without fear, and helped to see that to keep their own originality, they must guard the right to provide creative care for patients.

References

1. Shakespeare, William. *The Tragedy of King Lear*. Edited by Russell Fraser, New York. The New American Literature, Inc. (Signet Classics), 1963, p. 93.
2. Grierson, H. J. C. (ed.) *The Poems of John Donne*. London, 1929, p. 36, vv. 3-4.
3. Wilson, R. C., J. P. Guilford, and P. R. Christensen. "The Measurement of Individual Differences in Originality," *Contributions to Modern Psychology*. New York: Oxford University Press, 1963, p. 206.
4. *Ibid.*, p. 206.
5. *Ibid.*, p. 213.
6. *Ibid.*, p. 213.
7. Taylor, Calvin W. *Creativity: Progress and Potential*. McGraw-Hill Book Company, 1964, p. 17.
8. Beck, Frances. *Basic Nursing Education*. London: The International Council of Nurses, 1958, p. 72.
9. Machiavelli, Niccolo. "The Difficulty of Change," *Human Relations and Organizational Behavior: Readings and Comments*, Scott and Davis (comp.). New York: McGraw-Hill Book Company, 1969, p. 284.
10. Walker, Edward L., and Roger W. Hayns. "How To Do It," *Human Relations and Organizational Behavior: Readings and Comments*, Scott and Davis (comp.). New York: McGraw-Hill Book Company, 1969, p. 284.
11. Barzum, Jacques. *The House of Intellect*. New York: Harper & Brothers, 1959, p. 86.
12. Selye, Hans. *From Dream to Discovery*. New York: McGraw-Hill Book Company, 1964, p. 42.
13. Schulz, Esther D. "Personality Traits of Nursing Students and Faculty Concepts of Desirable Traits," *Nursing Research*, 14:263, Summer, 1965.
14. Smith, Gene Marshall. "The Role of Personality in Nursing Education," *Research Process in Nursing*, Fox and Kelly (comp.) New York: Appleton-Century-Crofts, 1967, p. 178.
15. *Ibid.*, p. 182.
16. *Ibid.*, p. 179.
17. Torrance, Pansy Nigh. "Does Nursing Education Reduce Creativity," *Research Process in Nursing*, Fox and Kelly (comp.). New York: Appleton-Century-Crofts, 1967, p. 241.

18. Kidd, J. Robbins. *The Implications of Continuous Learning*. Toronto: W. J. Gage Limited, 1966, p. 71.
19. Mayer, Arthur. "'New Man': His Place in Personnel Administration," *Notes & Quotes*. Hartford, Connecticut: Connecticut General Life Insurance Company, 365:1 (excerpts from an article in *The Personnel Administrator*, Sept.-Oct., 1969)
20. Crosby, Andrew. *Creativity and Performance in Industrial Organization*. London: Tavistock Publications, 1968, pp. 47-48.
21. *Ibid.*, pp. 52-54.
22. *Ibid.*, p. 55.
23. *Ibid.*, p. 61.
24. *Ibid.*, p. 61
25. *Ibid.*, p. 62
26. de Bono, Edward. "The Virtues of Zigzag Thinking," *Notes & Quotes*. Hartford, Connecticut: Connecticut General Life Insurance Company, p. 2. (Reprint of an article in *Think*, May-June, 1969)
27. *Ibid.*, p. 2.
28. *Ibid.*, p. 3
29. *Ibid.*, p. 6.
30. Wees, Wilfred R. *The Way Ahead*. Toronto: W. J. Gage Limited, 1967, p. 25.
31. Young, Lucie S. "The Modern Nurse Administrator," *The Journal of Nursing Education*, 8:20, August, 1969.
32. Nishio, Karen. "This I believe," *Nursing Outlook*, 16:20, December, 1968.
33. Hilliard, Mary E. "A Viewpoint on the Primary Focus of Nursing," Papers presented at the 23rd Conference of Council of Member Agencies of the Department of Baccalaureate and Higher Degree Programs. New York: National League for Nursing, 1967, pp. 7-8.

COLLECTIVE ACTION FOR CONTINUING EDUCATION

The experience of one group of health professionals who worked together for two and a half years in order to launch a program in intensive care nursing. Cooperation of many segments of the community is demonstrated by descriptions of the multi-faceted activities undertaken by the community project committee. The author, who chaired the project committee, suggests the utility of such a model for collective action in a complex and rapidly changing world.

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ALL SEGMENTS of society are vulnerable to change and the pressure to change increases steadily as the world becomes more complex. Individual segments become more and more interdependent and changes in one segment influence and are influenced by changes in other segments.

The wide-scale emergence of intensive care units exemplifies one response to the continuously and rapidly changing care of the acutely ill patient. The emergence of the unit as a response to advances in medical knowledge and changes in health care technology and delivery has now become a pressure point making demands for change upon other segments of the health care delivery system. The educational subsystem, in particular, is being required to respond creatively if these advances are to be translated into means for improved patient care.

Programs in basic nursing education are designed to prepare generalists, not specialists. As Murray has noted, the diploma schools simply do not have the time to provide instruction in much more than basic general duty nursing.¹ This is in contrast to the needs of intensive care unit nurses who require a sound base of specialized knowledge

and technical expertise as well as a capacity for high level clinical performance in crisis situations.

One way to meet complex situations is to band together and combine resources with others who have similar problems, interests and goals. What, then, is the way in which all concerned segments can most effectively be brought together to serve the immediate needs, as well as keeping pace with the changes that are certain to come? It is the premise of the author that the nursing community could, in many instances, provide the initial thrust that brings together the component segments. This paper documents one such response and in doing so, offers one model for use by others in similar situations.

Nurses working in intensive care units sought to improve patient care by upgrading their clinical competency. The means chosen was the development of a post-diploma intensive care nursing program. The combined efforts of nurse-practioners, nurse-administrators, nurse-educators and their medical colleagues was necessary to achieve this goal. Consultant services were provided throughout the two and a half year project by the Registered Nurses' Association of Ontario. Support and assistance were given by local health agencies and educational institutions, the Ontario Medical Association, and the Ontario Hospital Association at various points in the development of the project.

A summary of the various stages of the project is present in Figure I. A detailed discussion of each phase follows the summary.

FIGURE I

STAGES OF THE PROJECT

- I. INITIAL IDENTIFICATION OF NEED
 - a. preliminary discussions at the grass roots level
 - b. preparation and presentation of areas of concern and unanswered questions by community agencies to the university
 - c. preparation of application for grant to examine the feasibility of developing a program in intensive care nursing
 - d. acquisition of funding to undertake the investigation
- II. FORMATION OF INTENSIVE CARE NURSING PROJECT COMMITTEE
 - a. appointment of a research assistant
 - b. selection of committee members
- III. PROJECT INVESTIGATION
 - a. identifying areas of focus
 - b. determining information requirements for program planning
 - c. developing tools and methodology of investigation
 - d. gathering and analyzing the data
 - e. preparation of the final report
- IV. .PRESENTATION OF RECOMMENDATIONS AND FINAL REPORT TO THE PROJECT COMMITTEE
- V. PRESENTATION OF PROPOSAL FOR THE PROGRAM TO APPROPRIATE GROUPS

INITIAL IDENTIFICATION OF NEED

Discussions by local nurse-administrators and nurse-practitioners focused on their concern about the high demands for clinical competency required of the intensive care staff nurse—requirements for which she had not been prepared in her basic nursing education. Their deliberations culminated in the decision that a formal post-diploma course in intensive care nursing was one solution to their problem. Where and how such a course should be given and to what degree it might and would be supported beyond the local area were major questions to be answered.

A document was prepared outlining the group, its concerns and areas needing investigation. This document was then presented to the Faculty of University at the university with a request for assistance in planning further action.

A research proposal and request for funds, co-signed by the representatives of the agencies and the Faculty of Nursing, was presented to a private foundation. In response, the Richard Ivey Foundation provided a three thousand dollar grant for a three-month investigation. A member of the Faculty of Nursing was assigned to the project. A staff nurse from a local intensive care unit was released from her staff duties to undertake the investigation as a research assistant. Her qualifications included a nursing degree as well as experience in teaching and intensive care nursing. Salary for the research assistant was provided by the grant and the employing hospital maintained this worker's usual fringe benefits. Consultant services in research methodology were provided by members of the university community. This style of cooperative arrangement on the part of all concerned groups became the prototype for the development of the remainder of the project.

FORMATION OF THE INTENSIVE CARE NURSING PROJECT COMMITTEE

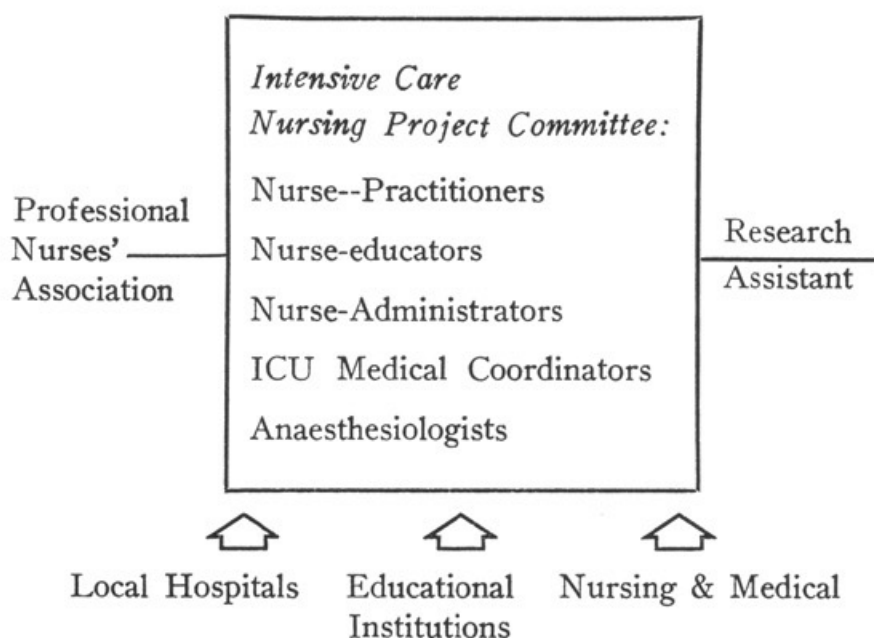
A formal committee was developed to ensure that all interested persons in the community could contribute to the planning. Included were representatives from the Faculty of Medicine, the Faculty of Nursing and the local College of Applied Arts and Technology where courses in respiratory technology and anatomy and physiology for diploma schools of nursing are offered. In the latter case it was felt that these subject areas would be an integral part of any proposed program in intensive care nursing and involvement of the College at the beginning of the project would be important for program planning.

Representatives of the local hospitals who sat on the project committee provided information relating to staff needs as well as their expertise and experience in intensive care nursing. Since these same hospitals would also provide the clinical practice settings, their involvement from the outset of the project allowed a realistic assessment of available resources and how they might best be used.

Figure II shows the relationship between the Intensive Care Nursing Project Committee and concerned community groups, the research assistant, and the professional nurses' association.

FIGURE II

RELATIONSHIP OF THE INTENSIVE CARE NURSING PROJECT COMMITTEE TO CONCERNED GROUPS



The project committee became the vehicle for bringing together many elements in the community who normally worked in more isolated settings, thus giving all participants experience in joint planning for health education.

PROJECT INVESTIGATION

The purpose of the three-month investigation was first, to determine the need for a formal educational program in intensive care nursing for registered nurses and secondly, to determine how best it might be developed.

The local community had already indicated its support for such a program and provincial association representatives suggested that

the majority of Directors of Nursing felt such a course was desirable. Since this general evidence was supportive the decision was reached to focus primarily on matters relating to the methodology of organizing the program. At the same time data gathering could include additional information on the specific nature of the need. The design was such that if the earlier evidence of need was not supported by this investigation, these findings would be available early enough to halt the progress of the project before too much energy was expended.

The first task became one of identifying all major information sources which could provide valuable input and supply readily available data. In addition, they offered procedural guides to course development and suggested the broad constraints under which any program would have to function. Figure III outlines the type of information requirements deemed necessary for program planning.

FIGURE III
INFORMATION REQUIREMENTS FOR PROGRAM
PLANNING



Four areas were selected for investigation: verification of the nature of the need for the course; selection of the appropriate educational setting for the program; identification of the most appropriate methods of program organization; definition of theoretical and clinical course content relevant to meeting the needs of both intensive care patients and the nursing staff who care for them.

A variety of tools were utilized in gathering data relevant to making decisions about each of the above areas. These are summarized below.

1. Development of a four-part questionnaire to ascertain answers to specific questions relating to determining the need and manner of organization of an intensive care nursing course. Guidelines developed by the Registered Nurses' Association of Ontario^{2 3 4 5 6} were utilized as a basis for determining questions about the organization and curriculum content which would be needed. Selected nursing staff in all hospitals within a 60 mile radius of the target area and with medical-surgical units of more than fifty beds were surveyed by use of a questionnaire. Of the 29 hospitals in the area who agreed to participate, 17 of these had intensive care units, and the hospitals varied in size from 101 to 1,000 beds. The respondent group included the 29 Directors of Nursing, 16 Supervisors of intensive care units and 174 intensive care unit staff nurses. Information relating to need, organization and course content was sought from all individuals.
2. A list of "ideal" criteria was established for choosing the setting in which the course should be developed. A list of possible agencies was established and then each institution was investigated and rated against the criteria.
3. An on-site assessment of clinical and physical facilities available in each of four participating hospitals who would provide clinical practice settings was undertaken. This included an assessment of what clinical experiences were available in each institution, and establishment of the number of students who could be placed in the facility at any given time.
4. Through a questionnaire, a list of potential part-time clinical faculty for clinical nursing supervision was compiled.
5. A pool of medical doctors for teaching selected content was compiled through a survey done by the medical representatives on the project committee.

6. A draft job description for the Project Director was devised and circulated among committee members prior to the development of a job description subsequently used for hiring purposes. This position was advertised in the press and hospitals across Canada.
7. Conditions under which financing could be obtained were determined at a project committee meeting with the representatives of the funding agency.
8. Data about current courses in intensive care nursing in Canada were compiled and analyzed for their relevance to program planning.

CONCLUSION OF THE PROJECT

A final report⁷ was prepared in which the findings and recommendations from the investigation were detailed. The earlier identification of the need for the course was supported by the data provided from the questionnaires. Fanshawe College of Applied Arts and Technology was selected as the appropriate site, and the approval from the governing body to undertake the course was obtained. A basic core curriculum was developed using the findings of the questionnaires combined with the guidelines established by the Registered Nurses' Association of Ontario.^{8 9 10} Clinical facilities were secured which would allow the faculty to meet the stated objectives of the program. A well-qualified person who was prepared to take the position of project director had been selected. Funding for a series of short courses of four, six, and eight weeks duration, to be given over a two-year experimental period, was provided by the Physician's Services Incorporated Foundation. A proposal for evaluation was written into the final report to assure that money would be available to conduct an investigation which would attempt to measure the effect of the program on the nurses' performance in their first positions following completion of the course.¹¹

The final step was the presentation of the proposal for approval to the local health sciences coordinating committee and then to the provincial government. Approval was obtained and the first course commenced in October, 1972.

Figure IV summarizes the activities undertaken by the various project committee members during the investigation.

FIGURE IV

PROJECT COMMITTEE ACTIVITIES

Chairman of Project Committee	Guidance of Investigation
	Negotiations with the selected educational institution
	Preliminary consultation with funding agency
	Preparation of summary report of investigation
	With representative from the educational institution — interviews with candidates for project director — preparation and presentations of final proposal
Research Assistant	Development of tools and methodology of investigation
	Carrying out of investigation
	Preparation of final report of investigation
Project Committee Members	Support to research assistant — access to clinical or educational facilities for purposes of assessment — critiquing of questionnaires and tools developed — securing sample for pre-testing tools
	Negotiations with funding agency
	Final selection of location of course
	Development of job description and qualifications for Project Director
	Ratification of appointment of selected candidate for Project Director
	Ratification of recommendations of the investigation
	Approval to proceed with final proposal

CONCLUSION

This paper documents the experience in one community where diverse groups of health professionals set about solving a problem related to the delivery of health care. Group action is not without problems, as each individual in the group must have the ability to compromise if the overall goal is to be achieved. That such action can be effective is evidenced here by the successful launching of a series of short courses in intensive care nursing for registered nurses. The experimental nature of the project with its built-in evaluative component suggests a possible model for nursing education as it moves into the area of continuing education for the registered nurse.

References

1. Murray, V. V. *Nursing in Ontario, A Study for the Committee on the Healing Arts*. Toronto: The Queen's Printer, 1970, p. 238.
2. Registered Nurses' Association of Ontario. *Statement on Post-Diploma Programs for Registered Nurses in Special Areas of Clinical Nursing Practice*. Draft Copy. Toronto, January, 1971.
3. ——. *Guidelines for Developing and Conducting Clinical Programs for Registered Nurses*. Draft Copy. Toronto, June, 1970.
4. ——. *Statement on Intensive Care Unit Nursing*. Draft Copy. Toronto, January, 1971.
5. ——. *Guidelines for a Post-Diploma Program in Intensive Unit Nursing*. Draft Copy. January, 1971.
6. ——. *Suggested Topics for a Post-Diploma Program in Intensive Care Unit Nursing*. Draft Copy. January, 1971.
7. Marsh, C. "Report of the Study to Examine the Feasibility and Methodology of Developing a Program in Intensive Care Nursing in London, Ontario," June, 1971. (Not available for distribution).
8. Registered Nurses' Association of Ontario. *Statement on Intensive Care Unit Nursing*.
9. ——. *Guidelines for a Post-Diploma Program in Intensive Unit Nursing*.
10. ——. *Suggested Topics for a Post-Diploma Program in Intensive Care Unit Nursing*.
11. Tools for the evaluation of the post-course performance of the program graduates are being developed by Roberta Rivett, graduate student, The University of Western Ontario. The reader may wish to read the thesis report describing the development of these tools which should be available from the Health Services Library, The University of Western Ontario in early 1973.

STUDENT TERMINATION: SAYING GOODBYE

Students experience many feelings saying goodbye to patients. It is a faculty responsibility to assist students with this process.

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AND how do I say goodbye?" This is the vibrant, intense question that is posed each year by alert and caring nursing students, who must leave their patients because of academic requirements. In the clinical facility, the student has experienced a variety of feelings and reactions within herself: giving of the facts and nothing but the facts; experiencing endless strands of feeling which almost obscures the facts; plunging herself into an interaction without any visible scaffolding to support her; spending so long on the fundamental foundations of the relationship that she wonders if she can tell a straightforward chain of events; and finally, endless periods of examining intricate symbolic behaviors.

Now this must end. Yet saying goodbye is a human process. The concrete problem of individual relationships is one of meeting, separating, and re-establishing relationships. This is a process of change, yet the process itself remains identical. Saying goodbye is a symbol of our limited ability to control our interpersonal relationships with others, including our own final separation from others.

Saying goodbye evokes many behaviors: the anxiety of separation, sadness at future loss, angry frustration at mutual helplessness, a sense of closeness and of distance, and a fear of change.¹ It is bound up always in the quality of feeling evoked. As the merit of the intensive one-to-one nurse-patient relationship gains in acceptance as one of the commonalities of nursing practice, students are faced with the termination phase of this relationship necessitated by the academic

requirements of their program.² Psychiatric nursing educators are aware that termination is an inherent part of the learning experiences of students.³ Termination is primarily considered to be an ending, but the ending is the face-to-face encounter. The depth of feeling evoked by this experience remains.⁴

A therapeutic, interpersonal, and effective use of self is the very basis of nursing.⁵ Psychotherapeutic nursing involves those interventions which nurses use to assist the patient to develop healthy behavior patterns in a consistent manner. This permits patients to develop less anxiety-provoking, more satisfactory relationships, and allows opportunities for less threatening relationships with others.⁶

The concept of separation anxiety, introduced by Freud, begins with the impending departure of a significant person.⁷ The permanence of the separation initiates the mourning process which follows the loss of a significant person.⁸ These two processes come to pass when any human relationship terminates.⁹ With the loss of a significant, dependable person, there is an impact of much distress, unless there has been preparation for this event.¹⁰

PROCESS OF TERMINATION

Nevertheless, even if everything cannot be known explicitly, something can be known about this process. It is necessary to cull and examine the process, the participants, and their behaviors carefully. One of the most significant aspects of the termination phenomenon is the student, who, while saying goodbye to her patient, is often leaving much more. In our program, psychiatric nursing is scheduled in the final year of her program. She is leaving her student days; saying goodbye to friends, teachers, classmates; leaving a familiar, structured environment; facing uncertainty and change; and in addition, must say goodbye to patients whom she has come to know well.¹¹ The student must come face-to-face with realities she would sooner put behind her.

Although nursing faculty and administration do give careful consideration to the frequency, impact, and effect of patient transfers, yet termination must occur, because people, in their professional and personal lives, inevitably must leave one another. This is the very essence of life which develops through struggle and change.

Before the actual loss, separation anxiety is the shared feeling. At the time of the final goodbye, the feeling is one of displeasure because personally satisfying behavior patterns must cease. The feeling is now a mourning for the loss because of this void in future

interests and satisfaction.¹² Examination and consideration of the process in relation to the three participants and their behavior responses gives us some insight and discovery into the subtlety of the process.

THE PATIENT'S BEHAVIORS

The broad, full-face meaning of the situation evokes varied behavioral contrivances and has a variety of significances. Reaction to this loss covers the full scope of human behavior. Intensity is not equated with precision at this time of the nurse-patient relationship. The patient may exhibit the emotional forces of sadness, guilt, jealousy, helplessness, relief, disintegration, anger, gratefulness, and anxiety. The last behavior is the most frequently experienced.¹³

The behavioral devices frequently used by patients are denial, suppression, withdrawal, and regression. The patient's first response is to deny or suppress the impending loss. The fundamental recognition, by the patient through appropriate nursing intervention, will help him to be able to handle separation anxiety. When denial is resolved, then the significance of the loss must be worked through.¹⁴ Should withdrawal occur, the patient brings on precipitate termination by absenting himself from the anxiety of the situation. Similarly, if the familiar regression behavior occurs, both behaviors require the nurse to assist the patient mobilize those healthier aspects of his behavior with a courageous realism. A satisfying way is for the patient and student to discuss their memories of the experiences and feelings they have shared together.¹⁵

THE STUDENT NURSE'S BEHAVIORS

Other parallels are also occurring because the student is experiencing the human feelings of anxiety, guilt, sadness, anger, relief, apathy, and somatic woes.¹⁶ It is imperative that the student recognize with perspicacity the appropriateness of her behaviors. If there is not emotional feeling at this time, but only a toleration of this experience, then it is my own personal opinion there has been little professional growth. The student must not only look at this process, but must be involved in it as well.

Termination is instituted at the first meeting as the student determines with the patient the length of the nurse-patient relationship. At this time, termination seems very far in the distance, but the student must force the issue by reminding the patient of termination at intervals. The patient and student can then begin to work through the phenomenon rather than accept it as a mechanistic process. The focus

of nursing intervention must be directed to awareness of anxiety and the sense of impending loss by confrontation rather than to permit denial.

The behavior of the student at this time becomes part of the behavior of the patient. If the termination is precipitate, the patient feels abandoned. If the termination is denied, the patient feels angry. If the termination is not realistically worked through, but prolonged, then the patient's fantasies of escapism, wishful thinking, and unrealism continue.

Therapeutically, the process must be worked through to completion utilizing the defense mechanisms which have been helpful previously for the participants. Gradually they draw and accept the reality of this event and the impending date of separation. The many feelings are expressed and the sadness is shared. In the final stage, the participants separate and accept their shared loss retaining their own poignant memories. The relationship they have built together ends at this final intense goodbye.

Understanding her own feelings and with appropriate faculty supervision, the student is able to grow professionally from this experience and should then be able to transfer to similar experiences. She also achieves her primary objective of helping the patient to maintain his healthier behaviors through this human experience. It is basically the need of all human beings to become, through acting together, more fully human.

THE FACULTY ADVISER'S BEHAVIORS

The faculty adviser, who supervises the professional practice of the student, is also an integral part of this experience. This is not a new experience for her as the termination phenomenon is repeated yearly with students. Nor are the students' achievements on the same scale in this experience. The faculty adviser is able to assist students to examine their own human feelings and to realize this is an experience which will reoccur many times during their professional and personal lives.

Faculty, who absent themselves from this process by assailing the student with her weaknesses, is actually remaining apart from the process. The student then picks up this behavior and acts in a similar way with her patient. The involvement of faculty benefits everyone, but when faculty avoids the experience, there is interference with student learning, and the patient is also denied therapeutic learning. Faculty can, therefore, interfere with a complete and satisfying experience. Faculty, who find this a difficult experience, are able to

receive mutual support by sharing their feelings with other members of the psychiatric nursing faculty. With the involvement of all three participants, the student is supervised experientially.¹⁷ She is then able to share with her patient the feelings of sadness at this termination experience.

CONCLUSION

The real criterion of saying goodbye is the human experience. The student must deal with it in this manner. Mini-termination experiences occur for students at the Christmas holiday or break week periods. Students then have a beginning opportunity to look at the phenomenon and to realize the significance for the patient as well as for themselves. They also can begin realistic planning for termination at the end of their academic term.

Too often this experience is oversimplified. The subtle suggestion is that the cards are stacked or the complacent rationalization is that patients naturally act this way and that students must be stoic.¹⁸ This results in the withdrawal, suppression, or denial behaviors of the student as well as the withdrawal suppression, denial, and regression behaviors of the patient. Separation anxiety and mourning for the loss occurs for both participants but growth enlarges their ability to relate to others through their gained insight into this particular phenomenon.

The opportunity to understand this experience as a human reaction will permit them to repeat similar termination experiences with others appropriately in the future. Termination is a life-communication experience.

*"Goodbye," said the fox. "And now here is my secret, a very simple secret: It is only with the heart that one can see rightly; what is essential is invisible to the eye."*¹⁹

References

1. Glenn, M. "Separation Anxiety: When the Therapist Leaves the Patient." *American Journal of Psychotherapy*, July, 1971, p. 445.
2. Kelly, H. "The Sense of Ending." *American Journal of Nursing*, Nov. 1969, p. 2378.
3. Hale, S., and Richardson, J. "Terminating the Nurse-Patient Relationship." *American Journal of Nursing*, Sept. 1963, p. 117.
4. Phillips, B. "Terminating a Nurse-Patient Relationship." *American Journal of Nursing*, Sept. 1968, p. 1941.
5. Peplau, H. *Interpersonal Relations in Nursing*. New York: G. P. Putnam & Sons, 1952, p. 40.

6. Fagin, C. "Psychotherapeutic Nursing." *American Journal of Nursing*, Feb. 1967, pp. 298-303.
7. Freud, S. *Complete Introductory Lectures on Psychoanalysis*. Translated and edited by James Strackey. New York: W. W. Norton & Co., 1966, p. 551.
8. Lindemann, E. "Symptomatology & Management of Acute Grief," in Fulton, R. L. (ed.) *Death & Identity*. New York: John Wiley & Sons, 1965, pp. 187-199.
9. Glenn, M. "Separation Anxiety," p. 437.
10. Evans, F. *Psychosocial Nursing*. New York: Macmillan Co., 1971, p. 123.
11. Glenn, M. "Separation Anxiety," p. 438.
12. Schultz, F. "The Mourning Phase of Relationships." *Journal of Psychiatric Nursing*, Jan. 1964, pp. 37-42.
13. Glenn, M. "Separation Anxiety," pp. 440-441.
14. Nehren, J., and N. Gillian, "Separation Anxiety." *American Journal of Nursing*, Jan. 1965, pp. 110-111.
15. Sene, B. "Termination in the Student-Patient Relationship." *Perspectives in Psychiatric Care*, 7:43, 1969.
16. Glenn, M. "Separation Anxiety," p. 441.
17. *Ibid.*, p. 444.
18. *Ibid.*, p. 445.
19. Saint-Exupéry, A. *The Little Prince*. New York: Harcourt, Brace & Co., 1943, p. 70.

THE LANGUAGE OF SPACE: A SILENT COMPONENT OF THE THERAPEUTIC PROCESS

The concept of space as a silent message in communication and its relevance to the therapeutic process — the author suggests that nurses must be sensitive to the spatial needs and cues of patients, and should be certain that their own spatial cues convey a message congruent with the intended communication.

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'When I use a word,' Humpty Dumpty said in a rather scornful tone, 'it means just what I choose it to mean — neither more nor less.'

'The question is,' said Alice, 'whether you CAN make words mean so many different things.'

'The question is,' said Humpty Dumpty, 'which is to be master — that's all.'

*Lewis Carroll
Through the Looking Glass*

ALTHOUGH Humpty Dumpty went on to boast that he could manage all words, Alice remained baffled by what he was saying and termed her encounter with Humpty Dumpty unsatisfactory. Humpty Dumpty managed the words and Alice heard them, but the information gathered by Alice's ear did not reveal to her *what* Humpty Dumpty had chosen the words to mean. How often do we like Humpty Dumpty fail to communicate the message we intended our words to convey? Why, we frequently ask, are our words not understood as we intended? Not only are there a variety of semantic interpretations for words, but also accompanying

our verbal communication is a host of other cues conveyed by our tone of voice, our manner, body movements and gestures, and how we position ourselves in relation to the other person or persons.

Intimately involved in the decoding of the message is the recipient's perception of our communication. Perception may be defined as a process of selecting, organizing, and interpreting sensory data. Why, when there are human beings whose sensory apparatus and its arrangement are similar, and who are exposed to the same experience — that is, virtually the same data are available to be fed into their sensory systems — does the response of each tend to be different? Do some misperceive? Taguiri noted that the process of perception involves three major elements: the situation in which the person to be judged is imbedded; the person apart from the situation; and the perceiver himself.¹ Each of these elements of the process of perception as well as the component parts of the process, selecting, organizing, and interpreting, provides a potential source of variation. The idiosyncratic interpretation of a situation, according to Heider, is the result of perceptual style, rather than errors in perception.² Each person tends to develop a characteristic or distinctive mode of perceiving. One of the determinants of an individual's perceptual style is culture,³ and one of the ways in which culture affects the perceptual process is through an individual's culturally learned use of space and spatial cues. Physical space is a culturally learned symbol and as such interposes a nonverbal message into the process of communication.⁴ It is to the concept of space, man's culturally acquired need and use of it, and its relevance to perception, communication and the therapeutic process that the remainder of this discussion is directed.

Most of what has been written about man's spatial needs and his use of space as a silent communicator has been based on the studies and writings of anthropologist, Edward T. Hall, and psychologist, Robert Sommer.^{5 6} It is only recently, noted Hall, that much attention has been given to the idea that man's boundary does not begin and end with his skin. But, he has around him as extensions of his personality a series of expanding and contracting fields which provide information of many kinds. Man's perception of space is dynamic, being related to what he can do in a given space. The disposition of people toward each other is a crucial determinant in how space or distance relative to one another is used.⁷

Hall, who had studied the relationship between culture, space, and communication, has coined the term "proxemics" to refer to "the interrelated observations and theories of man's use of space as a specialized elaboration of culture."⁸ From observations of, and interviews

with, healthy middle-class Americans, Hall has identified four distance zones which are learned in childhood and maintained throughout life in social situations. Each distance zone has a near and a far phase. These four distance zones are: (1) Intimate Distance: the near phase in the distance of love making and wrestling, comforting and protecting. The far phase extends from six to eighteen inches. Within this distance zone the presence of persons other than with whom they are intimately involved is experienced as discomforting by Americans. It is not considered proper to use this distance in public. In crowded situations, such as public transportation and elevators, intimate distance is tolerated, but is countered by special behavior which threatens others as nonpersons. The individual remains rigid, withdrawing and pardoning himself if he touches another person. His eyes are lowered or focused on an inanimate object, allowing no more than a passing glance at any unknown person. (2) Personal Distance: this is like a "protective bubble" that person maintains between himself and others, keeping all but close personal contacts outside. The near phase is one and a half, to two and a half feet. A wife, but not another female, may stay within her husband's personal distance zone with impunity. The far phase, extending from two and a half, to four feet, represents the limit of physical domination — beyond this distance no one touches or expects to be touched without some special effort. (3) Social Distance: the near phase, from four to seven feet, tends to be used by people who work together. Impersonal business takes places at this distance. To stand and look down at a person from this distance has a domineering effect. Conversation conducted from the far phase, extending from seven to twelve feet, conveys a more formal character. The voice has to be raised, and at this distance it is more important to maintain eye contact than at a closer distance. To fail to do so shuts the other person out and halts the communication. A special feature of this far phase of social distance is that it can be used to insulate or screen people from each other. People can be in the same room at this distance and remain uninvolved without appearing rude. (4) Public Distance: this distance is well outside the circle of involvement. The near phase is from twelve to twenty-five feet. If threatened, an alert person can take evasive action at twelve feet. The far phase is twenty-five feet or more. Details of facial impression, movement, and the normal voice are lost, and must be exaggerated or amplified at this distance. The distance automatically set around important public persons is thirty feet.⁹

Sommer uses the term "personal space" to describe the area surrounding a person's body from which intruders are excluded. "Per-

sonal space" incorporating the concepts which Hall has indicated is encompassed within the personal distance zone. But, in addition to referring to the emotionally charged zone around each person, Sommer uses "personal space" to refer to the "processes by which people mark out and personalize spaces they inhabit."¹⁰ Like Hall, Sommer did not regard "personal space" as absolute, but saw it varying with the relationship of the persons, the location of others in the situation, and bodily orientation of those involved relative to each other. According to Sommer, personal space does not extend equally in all directions: a stranger can be tolerated closer to the side than directly in front of a person.

Sommer conducted a series of studies of invasion of personal space.¹¹ Individual's privacy or personal space was intentionally encroached upon by investigators who seated themselves close to the selected subjects. The usual reactions to this intrusion initially were subtle indications of discomfort, tapping, restlessness, shifts in posture, and invariably the subject would subsequently remove himself physically from the area. Sommer concluded that invasion of personal space has a "disruptive effect and can produce reactions ranging from flight at one extreme to antagonistic display at the other."¹² Personal space is analogous to a "portable territory" being carried with the individual wherever he goes. It is very closely related to an individual's sense of self, and invasion of a person's space is intrusion into his self boundaries.^{13,14} In ascertaining if spatial invasion has occurred, proposed Sommer, it is essential to determine if the persons involved perceive each other as persons. Personal space cannot be invaded by a nonperson.¹⁵

How one uses space is a culturally acquired phenomenon, and within a culture, personality and environmental factors affect spatial needs and use. Introverts place a greater distance between themselves and others than do extroverts. A high noise level, low illumination, and shared fear tend to reduce distance, while fear of rebuke tends to increase it.^{16,17}

Crowding or cramped situations may force persons into behavior or relationships that are overly stressful. As stress increases, people become more sensitive to crowding. Thus, a vicious circle is begun. As people experience increasing stress as less and less space becomes available, more and more space is required. It is extremely important to recognize the various zones of involvement and the activities, relationships and emotions associated with each. Proxemic patterns indicate some of the basic differences between people, and they are differences, noted Hall, which can only be ignored at great risk.¹⁸

This concept of space, man's needs and use of space, carries with it implications for those involved in therapeutic endeavors. The patient's or client's perception of his physical and social environment will be mediated by his spatial needs and the spatial cues he receives.

In planning for the care of a hospitalized patient, do we consider his need for space and a place of his own? Moore and Garbe base their discussion of the hospital environment and spatial needs of patients on Hall's work.¹⁹ An individual entering hospital is usually under stress which increases his sensitivity to crowding. Rooms should, therefore, be adequately large and arranged so that the patient does not perceive invasion of his personal space. Can he move around in bed or in the room without bumping into equipment or furniture? "Space in which the arms could be outstretched without overlapping the furnishings," is the unconscious requirement.²⁰ The space should permit placement of the visitor's chair at the "correct" distance, depending on the relationship of the visitor.

Is the arrangement of the furniture in patient waiting rooms or lounge areas flexible enough to facilitate visiting with relatives, friends, or other patients? Is it arranged around the periphery of the room tending to keep them apart, rather than in groupings which is more likely to bring people together and allow some privacy in conversation?

Do we allow a hospitalized patient personal space, his portable territory or do we make it evident that he is an intruder in our "territory" by invading his space unannounced, and arranging furniture and equipment for the convenience of nurses and physicians without consideration of the patient? If we violate the personal space of the patient and he is in a position where he cannot escape, then he may be expected to experience discomfort and stress. The nurse, and other hospital personnel, could relinquish at least part of their hospital territory to the patient by "knocking at his door, by introducing herself by asking his preference, by addressing him by name, or even by letting him chart his own medication."²¹

Are we sensitive to the interaction of our own personal spatial needs with those of the patient or client? Do we because of our own spatial needs refrain from coming too close to a patient or touching him, conveying an aloofness, or do we remain too close causing him to feel uncomfortable? Do we consider his emotions? When he is afraid, because of pain or the unknown situation, do we remain closer to him? When we carry on a conversation from the foot of the bed or at a distance, looking down on him, we are probably silently implying our dominance over the patient. When we stand at the

bedside or within hearing distance of the patient discussing his condition with another nurse or doctor without including the patient, treating him as an object or part of the background, we are conveying to him that he is a non-person; a nonhuman being. The substance of a conversation can demand special handling of space. Do we stand at the door of the room or at the other end of an intercom expecting a patient to communicate a message which may require closer distance?

The spatial cues of the situation, those emanating from the person, and the spatial needs of the perceiver all interact to affect the process whereby the perceiver selects, organizes and interprets the sensory input. If we wish the input to be therapeutic, then we must learn to read the silent communication as well as the spoken ones. It is essential that we become sensitive to the spatial needs of each patient or client as an individual with a culturally learned pattern, and who is now in a particular emotional state. We need to be aware of our own concept of space and how we make use of spatial cues — what are the silent messages we convey? Are they congruent with the intended messages and aimed at assisting the patient to regain or maintain his health? We must be certain, as was Humpty Dumpty, that the words and message mean to the patient what we choose them to mean.

References

1. Tagiuri, Renato. "Introduction," *Perception and Interpersonal Behavior*, Renato Tagiuri and Luigi Petrullo, editors. Stanford, California: Stanford University Press, 1958, p. xiv.
2. Heider, Fritz. "Perceiving the Other Person," *Current Perspectives in Social Psychology*, E. P. Hollander and Raymond G. Hunt, editors. New York: Oxford University Press, 1963, p. 323.
3. King, Stanley H. *Perceptions of Illness and Medical Practice*. New York: Russell Sage Foundation, 1962, pp. 65-69.
4. Pluckhan, Margaret L. "Space: The Silent Language," *Nursing Forum*, VII:393, 1968.
5. Hall, Edward T. *The Silent Language*. New York: Fawcett World Library, 1959.
6. ——. *The Hidden Dimension*. Garden City, New York: Anchor Books, Doubleday & Company Inc., 1969.
7. *Ibid.*, pp. 114-115.
8. *Ibid.*, p. 1.
9. *Ibid.*, pp. 116-125.
10. Sommer, Robert. *Personal Space*. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1969, p. 109.
11. Sommer, Robert, and Nancy Jo Felipe. "Invasions of Personal Space," *Social Problems*, 14:206-214, Fall, 1966.
12. *Ibid.*, p. 211
13. Hall, Edward T. *The Hidden Dimension*, p. 63.
14. Sommer, Robert. *Personal Space*, p. 27.
15. *Ibid.*, p. 37.
16. Hall, Edward T. *The Hidden Dimension*, p. 116.
17. Sommer, Robert. *Personal Space*, p. 69.
18. Hall, Edward T. *The Hidden Dimension*, p. 129.
19. Moore, Ruth, and Raymonde W. Garbe. "Healing Space Can Help Healing Arts," *The Modern Hospital*, 108:104-107, Feb. 1967.
20. *Ibid.*, p. 106.
21. Minckley, Barbara Blake. "Space and Place in Patient Care," *American Journal of Nursing*, 68:515, March, 1968.

A COMPARISON OF BLOOD PRESSURE READINGS TAKEN SIMULTANEOUSLY BY FACULTY AND STUDENTS

This research paper has implications for further study by teachers in the clinical area.

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IN THE clinical setting, judgmental decisions based upon collected physiological and psychological data cannot be expected to be better than the accuracy of these data."¹ This study concerns the accuracy of blood pressure readings taken by students in the second year of a four-year generic nursing program when compared to simultaneous readings made by a member of the school faculty.

The problem for this study was, therefore, how do blood pressure readings taken simultaneously by a student and her instructor compare. Gunn, Sullivan and Glor reported no significant differences between observer recordings of simultaneous blood pressure readings using either simultaneous anticubital or brachial procedures.² They, however, stated that "Because these studies used only two observers, the findings are merely suggestive and should be confirmed using multiple observers."³ In a study designed to test inter-observer reliability of blood pressure readings Glor, Sullivan and Estes found that there was no significant difference in either the systolic or diastolic measurements recorded by registered nurses, non-professional nursing attendants and student nurses.⁴

Putt, in a study designed to look at how blood pressure measurements taken by palpation of the brachial artery compare with readings obtained by auscultation of the same vessel,⁵ found that the mean dif-

ference in readings obtained on fifty patients by two independent observers both for simultaneous auscultation and palpation were well within "the mean error of 8.00 mm. of mercury that the American Heart Association states may be expected for individual readings of systolic and diastolic pressures in normal persons."⁶

OBSERVERS

The participating students were all completing their second year of a four-year baccalaureate nursing program. They had all received instruction in the physiology related to blood pressure measurement and the procedure to be followed when obtaining this particular data for assessment of patients' well being. During the year, students were provided with experience in caring for mothers during the maternity cycle. As a blood pressure record is one of the ways of assessment of physiological and psychological response of the mother to pregnancy, labour and delivery, it was a technical skill that the students were able to practice in a number of settings; doctor's office, labour and post-partum units. A limitation of this study, however, was that the amount of practice or previous difficulty experienced by individual students during the year may have differed and for this no control was provided.

The second observer in all cases was a faculty member from the university working with the student in the clinical area.

Twenty students and three instructors participated. This is another limitation of the study for observer control might have been greater if one instructor had participated throughout. However, this study had as its major objective stimulation of student interest in analysis of their own skills and, therefore, does not meet criteria in a number of areas that might be anticipated if it had been designed as a tightly controlled research project.

METHODOLOGY

All blood pressure readings were taken on patients in the first stage of labour to whom a student had been assigned. Using the auscultation method, blood pressure was measured indirectly using a mercury sphygmomanometer and dual stethoscope. Two simultaneous recorded blood pressures were obtained on the same subject, with one inflation of the cuff. Readings of each observer were recorded independently.

Hochberg and Westhoff reporting a study where simultaneous bilateral blood pressure readings were recorded, stated: "A majority of the population did not reveal large differences — that is, over 10

mm. Hg.”;⁷ however, the mean difference between the two arms for the systolic readings was 7.4 mm. Hg. and the diastolic 9.3 mm. Hg. It was felt that for the present study the use of the dual stethoscope would allow for simultaneous readings on the same arm thus negating this as a difference in readings.

Twenty paired observations were made in a two-week period on twenty different patients.

RESULTS

Tables 1 and 2 show the blood pressure readings as recorded by the observers and the frequency distribution of deviations. The deviations in systolic blood pressure readings ranged from +32 to -18 mm. of Hg. and the diastolic from +8 to -22 mm. of Hg. These findings are similar to those reported by Putt where deviations in blood pressure measurements taken simultaneously by auscultation and palpation ranged from +24 to -20 mm. of Hg. systolic and +30 to -22 mm. of Hg. diastolic, but are somewhat higher than she reported for simultaneous auscultation where the range for both systolic and diastolic measurements was +20 to -14 mm. of Hg.⁸

A comparison of the twenty paired blood pressure readings obtained simultaneously on twenty patients by students and faculty utilizing a dual stethoscope yielded a mean difference for systolic readings of 5.2 and for the diastolic readings of 5.95 mm. of Hg. These figures are well below the mean error of 8mm. of Hg. that the American Heart Association stated in 1951 may be expected in individual readings of systolic and diastolic pressures.⁹

TABLE 1

SIMULTANEOUS BLOOD PRESSURE READINGS TAKEN ON PATIENTS IN LABOUR
BY FACULTY MEMBERS AND STUDENTS

Systolic				Diastolic		
Subject	Faculty	Student	Deviation	Faculty	Student	Deviation
1	120	110	10	88	80	8
2	110	110	0	74	80	-6
3	178	175	3	100	100	0
4	134	134	0	88	88	0
5	116	115	1	80	80	0
6	118	105	13	70	80	-10
7	126	128	-2	86	88	-2
8	124	120	4	78	70	8
9	142	110	32	72	72	0
10	146	145	1	110	110	0
11	110	112	-2	80	95	-15
12	108	100	8	64	68	-4
13	120	120	0	86	82	4
14	110	110	0	62	68	-6
15	130	130	0	100	100	0
16	90	84	6	60	72	-12
17	90	92	-2	56	58	-2
18	108	126	-18	76	86	-10
19	108	110	-2	76	86	-10
20	108	108	0	68	90	-22
Total	2396	2344	+52	1574	-119	1653

TABLE 2
FREQUENCY DISTRIBUTION OF DEVIATION
OF BLOOD PRESSURE READINGS TAKEN
SIMULTANEOUSLY BY FACULTY MEMBERS
AND STUDENTS

Systolic	Deviation	Diastolic
1	+32	
1	+13	
1	+10	
1	+ 8	2
1	+ 6	
1	+ 4	1
1	+ 3	
2	+ 1	
6	0	6
4	- 2	2
	- 4	1
	- 6	2
	-10	3
	-12	1
	-15	1
1	-18	
	-22	1
N 20		N 20

The standard deviation for the systolic readings was 7.8 mm. of Hg. and for diastolic readings 5.85 mm. of Hg. indicating somewhat greater variability in deviations than in Putt's study where the systolic standard deviation was 5.77 mm. of Hg. and for the diastolic readings 4.23 mm. of Hg.

A t- test for paired data was calculated and was significant beyond the .05 level for both systolic and diastolic readings, indicating that there was a significant difference in mean for both systolic and diastolic measurements recorded by faculty and students.

A nonparametric sign test was also calculated and at the .05 level of significance there was no significance in the direction of difference $Z = 0.8$ for the systolic readings. For the diastolic readings, however, $Z = -2.41$ was significant at the .05 level, the faculty getting a significant number of readings that were lower than the students recorded.

TABLE 3
COMPARISON OF SIMULTANEOUSLY OBTAINED
BLOOD PRESSURE READINGS TAKEN BY
AUSCULTATION OF THE BRACHIAL ARTERY

	Systolic	Diastolic
Simultaneous Auscultation N = 20		
Mean difference	5.2	5.95
Standard deviation	7.8	5.85
t-test	2.91 p < .05	4.44 p < .05
sign test	0.8 p > .05	-2.41 p < .05

IMPLICATIONS FOR NURSING PRACTICE

The mean difference in blood pressure readings between observers fell well within the mean error that the American Heart Association suggested was acceptable; however, 4 of the 20 systolic readings were outside the limits of 8 mm. of Hg. and 6 of the diastolic readings. In the case of the diastolic readings there was a significant tendency for the students to have higher readings than the faculty observer. Further exploration of their understanding of the measurement of diastolic blood pressure should be carried out with the students. Periodic checks using the dual stethoscope might be initiated to determine difficulties.

SUMMARY

A comparison of blood pressure readings obtained simultaneously by auscultation of the brachial artery on twenty patients in first stage labour by two observers, one of a faculty member and the other a student in the second year of the four-year generic program, yielded a mean difference of 5.2 mm. of Hg. for systolic readings and 5.95 mm. of Hg. for the diastolic readings. The standard deviations were systolic 7.8 mm. of Hg. and diastolic 5.85 mm. of Hg. The t-test, for testing difference between means for paired data, was significant at the .05 level for both systolic and diastolic measurements.

The sign test showed a $z = 0.8$ for the systolic reading and -2.41 for the diastolic readings. The standard score was significant at the .05 level for the diastolic readings but not significant for the systolic readings.

The statistical analysis showed a significant difference between the readings of faculty and students, but the mean differences were within the $\pm 8\text{mm. of Hg.}$ considered acceptable by the American Heart Association.

References

1. Gunn, Ira P., Elenore Sullivan, and Beverly Glor. "Blood Pressure Measurement as a Quantitative Research Criterion." *Nursing Research*, 15:4, Winter 1966.
2. *Ibid.*, p. 10.
3. *Ibid.*, p. 11.
4. Glor, Beverly, Elenore Sullivan, and Zane E. Estes. "Reproducibility of Blood Pressure Measurements: A Replication." *Nursing Research*, 19:171-172, March-April, 1970.
5. Putt, Arlene M. "A Comparison of Blood Pressure Readings by Auscultation and Palpation." *Nursing Research*, 15:311, Fall 1966.
6. *Ibid.*, p. 316.
7. Hochberg, Anita, and Mary Elizabeth Westoff. "Simultaneous Bilateral Blood Pressures." *ANA Clinical Conferences*, American Nurses' Association, Minneapolis/Atlanta, 1969. New York: Appleton-Century, Crofts, 1970, p. 223.
8. Putt, *op. cit.*, p. 312-313.
9. American Heart Association, Committee to Revise Standards of Blood Pressure Readings. "Recommendations for Human Blood Pressure Determinations by Sphygmomanometers." *Journal of American Medical Association*, 147:632.



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