

159

A SURVEY OF INSERVICE EDUCATION
IN MONTANA HOSPITALS

by

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ABSTRACT

The purposes of this study were to survey the degree of formalization of inservice education programs in Montana hospitals; to secure information regarding the nature, content and scope of existing programs; to relate aspects of existing programs to size of hospital, and, independently, to overall quality of such programs; and, to evaluate inservice education in each hospital.

The study was based on a survey conducted by sending questionnaires to Directors of Nursing Service in all licensed hospitals in Montana.

The results of the survey indicated that most hospitals in Montana are making some attempt to provide inservice education for their personnel although the degree of formalization varies. Content of most programs seemed to consist primarily of orientation and skill training while leadership and management development and continuing education were offered by few institutions.

CHAPTER I

STATEMENT OF THE PROBLEM

A. Introduction

The need for education beyond the formal, basic preparation has become increasingly important in our complex, modern world. With the profound growth in knowledge and rapidity of change, an individual can acquire only fundamental information in the usual number of years that he attends school. This fact led a recent conference of educators from schools of medicine, law, engineering and other professions to the following consensus:

There is now so much to know about medicine, or law, or engineering, that we cannot possibly teach a man to be a doctor, a lawyer or an engineer in the years we have to work with him. From now on what we must do instead is to teach him to think like a doctor, a lawyer or an engineer, and rely on him to learn as he goes along.¹

These circumstances apply also to the situation in today's hospitals, which are faced with the responsibility of providing well-trained personnel to give safe, competent nursing care in a complicated, ever-changing environment. Regarding staff's request for more "information", Esther Lucile Brown has stated:

¹S. F. Teele, "Your Job and Mine--What Change Is Doing to Them," Harvard Business School Bulletin, 36:13, August, 1960.

What staff are chiefly asking for when they say they want more information is a wider knowledge of the context in which they work and the meaning of what they are doing. . . . Some want more information because their training and experience have been inadequate for what is expected of them. Others want more just because they are farther advanced and with each increment of knowledge or understanding questions arise.²

Since the safety and well-being of any patient depends on the competency of the staff, it seems evident that a hospital cannot afford not to provide continual education for its employees in order to prepare them for the jobs they must do.

At the annual meeting of the Montana League for Nursing, April, 1963, Anne Pirnie gave five reasons for inservice education: rapidity of change; scientific advances and growth of technology; specialization; supervision and complexity of human relations; and the turnover of personnel.³ In regard to rapidity of change, she said:

Nurses as individuals and in their associations and organized activities have had to learn to live with change. The job of inservice education is to help nursing personnel to understand and deal with these changes, to discover resources which are available to them, and to find a way to solve their problems and reach their goals under current circumstances. The ever-changing requirements of the rapidly growing health sciences continue to show up lacks in knowledge and skills of people. It becomes our responsibility to

²Esther Lucile Brown, Newer Dimensions of Patient Care (New York: Russell Sage Foundation, 1962), p. 124.

³Anne Pirnie, "Why, What, and How of Inservice Education," Nursing Outlook, 12:47, January, 1964.

make available opportunities to fill these gaps.⁴

Scientific advances and growth of technology present another implication for the development of inservice education. Personnel must be trained in new technical and procedural skills required to operate such equipment as the artificial kidney, pacemaker, cardioscope and automatic monitoring devices. Kuehn emphasizes that patterns of nursing must change along with factors affecting the advance in science and technology. She also states: "Nurses working in hospitals must be prepared to function effectively in the changing complex health organization presently evolving in the Western world."⁵

Specialization is another result of the growing complexity in the health field. In order for nurses to have an opportunity to develop their knowledge and capabilities to qualify as experts in a particular field, it has become necessary to narrow the scope to smaller areas of specialty. Some of these areas are: intensive care units, neurosurgery, psychiatry, or, in a larger sense, nursing education, nursing service administration, and public health nursing. However, to achieve the goal of optimal care of patients, it is

⁴Ibid.

⁵Ruth P. Kuehn, "Continuing Education Nursing," Hospitals, 39:65, July 1, 1965.

evident. Also contributing to the need for more solid orientation and educational programs is the influx of nurses from a variety of educational backgrounds. Associate degree, diploma, and baccalaureate programs are all very different and the experience of their graduates is so varied that hospitals must accept the responsibility of helping them make the adjustment to the positions for which they are employed. Instructors of associate degree programs especially are quite frank in stating that they are preparing nurses for technical practice which implies adequate supervision. Too frequently, an already over-burdened staff has been the recipient of this task of supervising new personnel, and, unfortunately, has neglected it due to lack of sufficient time.

An employee's initial orientation to his position may have a long-lasting effect on his future job satisfaction.

As Esther Lucile Brown points out:

Even highly experienced persons often have anxiety about procedures new to them; many of these persons do not feel free to admit their inadequacies. Hence provision for extensive assistance during the early weeks might pay rich dividends in the competence and comfort of new staff.⁷

B. The Problem Area.

Since 1960, there seems to have been an increased interest in the development of inservice education in Montana.

⁷Brown, op. cit., p. 128.

The College of Great Falls sponsored an institute for graduate nurses on "Inservice Education for Improvement of Patient Care" in March of 1960. This institute was conducted by Mary Annice Miller, Inservice Education Consultant of the National League for Nursing. In 1963, Anne Pirnie read a paper on the "Why, What, and How of Inservice Education" to the annual meeting of the Montana League for Nursing.

Considering these two meetings and the increased amount of literature on the subject emphasizing the desirability and need for inservice education, this study was done to try to determine if hospitals in Montana are providing inservice education for their employees.

C. The Purposes of this Study were:

1. To survey the degree of formalization of inservice education programs in Montana hospitals.
2. To secure information regarding the nature, content and scope of existing programs.
3. To relate aspects of existing programs to size of hospital, and, independently, to overall quality of such programs.
4. To evaluate inservice education in each hospital using standards set forth in Inservice Education for Hospital Nursing Personnel by Mary Annice Miller, Consultant, Inservice Education, National League for Nursing, and other authoritative sources.

D. Limitations

Since this study was conducted by means of a

questionnaire, the data obtained were influenced by the effectiveness of the questionnaire in eliciting the desired information and by the number of the target population who returned completed forms.

E. Definitions of the Terms Used

Inservice education referred to the continuous learning experiences provided for all nursing personnel with consideration given to the varying abilities, degrees of knowledge and adopted attitudes they bring to the job. These learning experiences should help develop the person as an individual, enhance job satisfaction, as well as improve the quality of nursing care given to patients.⁸

Hospital nursing personnel referred to all levels of staff giving nursing care; including both professional and nonprofessional workers (i. e., registered nurses, licensed practical nurses, aides, and orderlies).

F. Organization of the Remainder of the Study

The remainder of this study was arranged into four chapters. Chapter II consists of a review of literature related to the field of inservice education in nursing. Chapter III presents the methodology and scoring system used in the evaluation and ranking of programs in the hospitals

⁸Montana Nurses Association, Guidelines for Inservice Education (Helena, Montana), p. 1.

CHAPTER II

REVIEW OF THE LITERATURE

Recognition of education as the major vehicle for helping the individual adjust to changes can be demonstrated by noting the increased interest in literature and research in this field. For example, in 1965, the Hospital Research and Education Trust of Chicago, received a \$1.3 million, five-year grant from the W. K. Kellogg Foundation to study and expand opportunities for continuing education in the hospital field. The grant provides for the simultaneous development of a number of sub-projects; one of which is the assistance to inservice education. The initial aim of this sub-project is to "distill for use by individual hospitals the knowledge accumulated during the last fifteen to twenty years in the development and conduct of training programs in other fields,"⁹

In a summary of the first year's progress, the authors report that a resource book is being written that will include procedures and tools for needs determination, directions for realistic definitions of learning objectives, descriptions

⁹Daniel S. Schechter and Thomas M. O'Farrell, "Continuing Education for Hospital Personnel--A Progress Report," Hospitals, 39:65, June 16, 1965.

of elements of program materials for conducting various kinds of programs, as well as suggestions regarding existing outside resources to draw upon for teaching or materials aid. Particular attention is being paid to the educational problems faced by the smaller hospital.¹⁰

Problems associated with the establishment and operation of inservice education programs are not new but as the importance of continuing education has been perceived, deficiencies in meeting the needs of hospital employees have become more clearly recognized. Even in institutions which claim to be giving their personnel inservice education, there is frequently a lack in providing a well-rounded agenda that includes all of the areas that have been recognized as constituting an adequate educational program.

Content of Inservice Education

In order to define content of inservice education programs, it seems advisable to cite some definitions of inservice education by authorities in the field.

The Veterans Administration Program Guide, Inservice Education Activities in Nursing Service, states the following definition:

Those activities intended to result in new learnings and behavior changes, planned in a structured way to meet

¹⁰Ibid., p. 66.

carefully defined objectives, and presented in such a way that they will have meaning for all nursing team members.¹¹

Three basic justifications are: (1) promotion of improvement in nursing care to patients; (2) to keep all members of the Nursing Service apprised of new knowledges; and, (3) the release of creative abilities of employees.¹²

Shanks and Kennedy define inservice education as:

... one form of adult education. It is an on-the-job approach to learning directed toward producing greater staff competence and toward expanding interest in and understanding of patients. It is a means of keeping abreast of the rapid advances in medicine, in nursing, and in the contributing disciplines.¹³

Jensen states that the main purposes of staff education are to develop better nursing care for every patient and to develop each worker to her greatest capacity.¹⁴

Hullerman defines inservice training as education or training which a hospital formally plans and conducts for its permanent personnel to enable the individual to do a

¹¹Veterans Administration Program Guide, Inservice Education Activities in Nursing Service (Washington, D. C.: Government Printing Office, 1963), p. 1-2.

¹²Ibid.

¹³Mary D. Shanks and Dorothy A. Kennedy, Theory and Practice of Nursing Service Administration (New York: McGraw-Hill, 1965), p. 251.

¹⁴Deborah M. Jensen, Ward Administration (St. Louis: C. V. Mosby Co., 1952), p. 201.

better job of service to the hospital. He also lists three goals: (1) to increase the employee's ability and skills on the job; (2) to increase the employee's desire to do a better job; and, (3) to increase the employee's capacity to adjust comfortably to his associates and to his environment.¹⁵

The philosophy underlying all of the definitions cited above seems to be the improvement of nursing care and the increase of worker satisfaction and capabilities. In a private communication to Esther Lucile Brown, Marjorie M. Howard has commented:

I believe staff development is a prerequisite to improve patient care. However, the glaring need in nursing as I view it today is to embrace inservice education as a way of life rather than a "thing" which, when superimposed on an existing situation, is expected to work wonders. Assisting nurses toward internalization of this concept is the challenge which those of us in educational roles have not always successfully met. It must be met before the following can be accomplished: viewing every worker as a person, making maximum use of each worker's potential, providing instruction that is patient-centered rather than procedure-centered.¹⁶

Discussion of Items Comprising the Evaluation Scale

Item A. The Coordinator. One of the frequent recommendations made by most authorities is that there be a coordinator or director in charge of the inservice program.

¹⁵Hugo Hullerman, "Seven Tests for an Inservice Training Program," Hospitals, 30:49, November 16, 1956.

¹⁶Brown, op. cit., p. 129.

In the Montana Nurses Association Guidelines to Inservice Education, it is stated:

Responsibility for the coordination of the inservice program should be delegated by the administration to a qualified employee who has the time to adequately plan and produce an effective program.¹⁷

The Veterans Administration Program Guide also states:

All authorities are agreed that in order for an inservice program within a nursing service to be effective one professional nurse should be given responsibility for its overall planning and implementation.¹⁸

One of the primary difficulties has been the short supply of qualified and prepared personnel. Few universities as yet provide specific preparation in this field.¹⁹ Esther Lucile Brown states that ". . . inservice training should be at least as carefully devised and the quality of instruction as adequate as training now given to student nurses in the typical hospital school."²⁰

Occasionally, short-term work-shops are held in various parts of the country for those who are responsible for or who are anticipating a position in inservice education.

¹⁷Montana Nurses Association, op. cit., p. 2.

¹⁸Veterans Administration, op. cit., p. 2-1.

¹⁹Mary Annice Miller, Inservice Education for Hospital Personnel, Department of Hospital Nursing (New York: National League for Nursing, 1958), p. 12.

²⁰Esther Lucile Brown, Nursing for the Future (New York: Russell Sage Foundation, 1948), p. 71.

Item B. The Formal Program. The value of a formal program has been emphasized by a number of authorities.

Knowles states:

The importance of program design is emphasized by the . . . realization . . . that the design not only establishes a common core of expectations as to outcomes, but also contributes to establishing the "climate" for the entire experience.²³

The Montana Nurses Association Guidelines also emphasizes that the coordinator will ". . . formulate a written agenda for formal and informal inservice programs for all personnel."²⁴

Miller points out that: "Efficient inservice activities are more likely to result from a written plan than from just 'thinking' a plan."²⁵ She provided a valuable resource for all types and sizes of hospitals in her book, Inservice Education for Hospital Personnel, written while she was Inservice Education Consultant with the National League for Nursing. This publication defines inservice education, outlines the responsibilities of personnel for inservice education activities, suggests some approaches and presents some useful methods and tools. Since it

²³M. S. Knowles, Handbook of Adult Education in the United States (Chicago, Ill.: Adult Education Association of the United States, 1960), p. 6.

²⁴Montana Nurses Association, op. cit., p. 2.

²⁵Miller, op. cit., p. 41.

synthesizes the concepts and principles of continuing education, it was used in this study as a guide in construction of the questionnaire and provided the primary source for developing the items used in the evaluation and comparison of the various programs in Montana hospitals.

Miller designates four areas of personnel needs. They are: (1) their needs for an introduction to their jobs; (2) for training in both the manual and behavioral skills associated with their jobs; (3) for development of leadership and management abilities; and, (4) for continuing investigation of the real potentialities of their jobs. For sake of simplicity, these areas are referred to as: orientation, skill training, leadership and management development, and continuing education.²⁶ The Montana Nurses Association Guidelines also designate these four areas as essential parts of the plan.²⁷

Pirnie lists these objectives for developing an in-service program: "(1) determine the learning needs of the staff; (2) enlist their participation in planning; (3) formulate clear objectives; (4) design a program plan; (5) plan and carry out a system of evaluation."²⁸

²⁶Miller, op. cit., p. 1.

²⁷Montana Nurses Association, op. cit., pp. 1-2.

²⁸Pirnie, op. cit., pp. 48-49.

Item C. Orientation. As indicated above, an orientation program is one of the essential components of inservice education. It is a means of helping the employee adjust to the new organization, environment, and duties through a planned introduction.²⁹

Item D. Leadership and Management Development. Again citing Miller regarding areas of inservice education:

The growing complexities of hospital staffing today make it imperative for many people to have skills in leadership and management in order to guide a diverse staff in carrying out patient care responsibilities.³⁰

Item E. Encouragement of Out-service Education. Out-service education, such as workshops or special meetings outside the hospital are not considered inservice education. The investigator, however, felt that an institution which encouraged participation in such activities did reflect its desire to educate its personnel and that this indicated a realization of the benefits of continuing education. This could be one means or attempt of a smaller hospital to partially fulfill its obligation of providing an opportunity for upgrading its employees in the absence of a formal inservice program and coordinator. For these reasons it was considered an important indicator of an environment that

²⁹Montana Nurses Association, op. cit., p. 1.

³⁰Miller, op. cit., p. 5.

promoted continuing education.

Miller, too, signified the importance of this area:

Out-service educational activities (sometimes called 'staff development') are encouraged and at times subsidized in time or money by the hospital. These are considered additional segments of the hospital's total personnel preparation program. . . A balance between inservice and out-service education is always desirable.³¹

Item F. Resources for Inservice Programs. Another indication of an environment that promotes continuing education is the availability of resource material in the form of libraries, information packets, manuals, and written personnel policies and job descriptions.

Quoting Miller:

As inservice programs develop, there will be need for more and more library work. . . Building a special inservice collection may start with magazines and pamphlets on a ward or a few books in someone's office. . . Packets of informational materials about the hospital, its policies, rules and regulations, objectives, and about the community are useful in orientating the new employee. . . A number of manuals may be used--hospital-wide manuals; those of the nursing department; manuals in specialized nursing units. They may be manuals of operating policies, nursing procedures, personnel policies. Manuals serve as references and supplementary sources of information in connection with orientation and on-the-job training programs; as guides, along with job descriptions, to plan content as a standard of practice upon which skill training programs may be based to achieve uniformity in procedures and methods.³²

Item G. Statement of Long- and Short-term Goals.

³¹Ibid., p. 8.

³²Ibid., pp. 42-43.

Inservice education should be designed to meet constant needs induced by change. To meet these needs, plans should have both long- and short-term goals.³³

Miller points out that the program blueprint is the tool that will initiate the inservice program and that the outline of a written program will usually contain the following essentials:

This is the need.

This we believe.

Therefore, this we will work toward.

This is what we can do in the immediate future.

This is how we will know whether we have achieved what we set out to do.³⁴

Item H. Planned Program for Training Nurse Aides. In the American Nurses Association Statement regarding auxiliary personnel in nursing service, specific recommendations are made as to the preparation of individuals for these positions: (1) the program should be well-organized, including classroom instruction, demonstration and supervised practice; (2) the aim of the training should be to develop a program that is safe for the patient and practical for the nursing service; (3) a professional nurse instructor should be appointed for effective on-the-job training;

³³Russell C. Swansburg, "A Design for an Inservice Education Program," Nursing Outlook, 13:41, March, 1965.

³⁴Miller, op. cit., p. 41.

and, (4) evaluation should be an on-going process.³⁵

Item I. Staff participation in Planning. One means of involving the staff in a program of continuing education is by enlisting their assistance in the planning. Mima Marshall states:

To get a program started on the ward, you need the assistance of nurses on the ward. Encourage their discussion of ideas, and plans for starting. Discuss the plan with all levels of personnel.³⁶

Miller also advocates this approach:

Making people feel that they are really taking part instead of just coming to meetings to "listen" will perk up their appetite for inservice education. Ask them to serve on committees planning and developing programs. . . .³⁷

Item J. Evaluation. Perhaps one of the most important areas that receives attention in any literature regarding inservice is evaluation. In the MNA Guidelines, it is stated that the coordinator will "periodically evaluate the effectiveness of the programs through the use of questionnaires, attitude surveys, rating scales, performance evalu-

³⁵American Nurses Association, "Auxiliary Personnel in Nursing Service," American Journal of Nursing, 62:73, July, 1962.

³⁶Mima Marshall, "Inservice Programs Require Effective Follow-up," Nursing Outlook, 12:43, August, 1964.

³⁷Miller, op. cit., p. 17.

ation, discussion and verbal opinions."³⁸

Miller summarized the basic principles, when she said:

Evaluation is an integral part of the program plan for inservice education; it should not be an afterthought. . . . Evaluation may be done at periodic intervals or be an on-going process. . . . Many kinds of tools with as many variations exist for testing purposes. . . . Each has advantages and disadvantages.³⁹

In short, evaluation must be included in the basic plan, and must be based on a comprehensive and continuous measurement using a variety of the technics mentioned.

These ten items were selected by the investigator and were used in the development of the scale for the purpose of evaluating and ranking inservice education in the hospitals studied.

³⁸Montana Nurses Association, op. cit., p. 2.

³⁹Miller, op. cit., p. 60.

CHAPTER III

METHODOLOGY

The survey method was used to conduct this study. Questionnaires were mailed to Directors of Nursing Service in all hospitals in Montana (67) excluding state-owned and operated institutions and the medical infirmaries at the state universities. Four weeks after the sending of the questionnaires, a follow-up letter was sent to those who had not responded. Of the seventy-five per cent returned, eight respondents simply stated they had no inservice education program. These questionnaires were not included in the statistical analysis.

The questionnaire consisted of thirty-four items. Twenty-six were answerable by a check mark (✓); four were to be filled in by the respondent; and four required a check mark plus a written completion. A list of programs presented from July 1, 1966, to June 30, 1967, and a copy of the orientation schedule also were requested, plus suggestions or comments regarding special problems of establishing or operating an educational program in that particular size and type of institution.

A system of evaluating each hospital according to its environment and opportunities for inservice education was developed utilizing recommendations for establishment

of programs stated by various authorities in the field.

The basic resource used was Inservice Education for Hospital Personnel by Mary Annice Miller. Literature of other authors was also investigated and cited to substantiate and add to the recommendations made by Miller. Ten items were selected and defined as important indications of the existence of inservice education in the hospitals studied.

Thirteen of the thirty-four items provided the data used in the evaluation scale. These items are indicated by an asterisk (*) on a copy of the questionnaire, which has been placed in Appendix A. The remaining items were not used directly in the evaluation but provided general information regarding the administration of inservice education in the various hospitals. A summary of the exact figures for these items is found in Appendix B.

A one-hundred point scale composed of the ten items was devised. The following is a list of the items, their values, and the questionnaire items which provided the data:

- | | |
|--------------------------------------|---------|
| A. Coordinator | Item 1 |
| Full-time - 10 | |
| Part-time - 5 | |
| B. Formal program of inservice | Item 3a |
| Formal program - 10 | |
| Occasional films, lectures, etc. - 5 | |
| C. Orientation program - 10 | Item 30 |
| D. Leadership and management - 10 | Item 21 |

- E. Out-service education Item 22
 - Expenses fully paid - 10
 - Expenses partially paid - 7
 - Attendance encouraged - 5
- F. Resources for inservice education Items 25,26
 - Libraries - 2.5 Item 26
 - Procedure manuals - 2.5 Item 31
 - Job descriptions - 2.5 Item 32
 - Personnel policies - 2.5
 - Job descriptions and personnel policies in the process of being written - 1
- G. Statement of long- and short-term goals Item 9
 - Long-term goals - 5
 - Short-term goals - 5
- H. Planned program of training nurse aides Item 20
 - With classroom teaching - 10
 - Without classroom teaching - 5
 - Through adult education classes - 5
- I. Staff participation in planning - 10 Item 27
- J. Evaluation - 10 Item 34
 - Each method used - 1

in which X represents the $\log_{10}$ number of beds in a given hospital and Y' is the predicted score of a hospital of size X .⁴¹ The difference then, between the actual score (Y) for a given hospital and the predicted score (Y') represents variation in a score that is unrelated to hospital size.

The first step in the analysis of the scale was to correlate each item with the total score less the contribution of that item. The results of this analysis are shown in Table I, page 27. For this purpose, fourfold point correlation was used (phi coefficients).⁴²

Inasmuch as all of the correlations were positive, there was indicated an appreciable degree of homogeneity of the scale. It should be noted in this analysis, however, that items: (D) Leadership and management development; (E) Out-service education; (F) Resources; (I) Staff participation; and, (J) Evaluation, correlated to a rather low degree with the remaining items.

The correlations of the ten items with the total scores, predicted scores, and difference scores determined by point biserial correlation coefficients are shown on

⁴¹Ibid., p. 415.

⁴²Quinn McNemar, Psychological Statistics (New York: John Wiley and Sons, Inc., 1949), p. 202.

TABLE I

CORRELATIONS BETWEEN ITEMS AND
THE SUBTOTAL (TOTAL SCORE
LESS THE CONTRIBUTION
OF THE ITEM)

Item	Correlation
A. Coordinator	.406
B. Formal program	.526
C. Orientation program	.534
D. Leadership and management development	.221
E. Out-service education	.211
F. Resources	.277
G. Statement of goals	.447
H. Planned aide training	.431
I. Staff participation	.192
J. Evaluation	.092

Table II, page 29.⁴³ In this analysis, it will be noted that relatively high correlations with total score (above .500) exist for all items except (F)Resources, (I) Staff participation, and (J) Evaluation. The low correlations of these items would seem to show that these factors are less accurate indicators of the overall quality of an inservice education program. When comparing the ten items with the two component scores (predicted score and difference score), there is little difference in the values of the correlations except in the cases of (A) Coordinator and (C) Orientation program. Considering that predicted scores are related to hospital size and that difference scores are related to extraneous factors, it can be noted that the presence or absence of a coordinator is largely a function of hospital size, while presence or absence of an orientation program is not related to hospital size but is related to other factors of inservice education excellence.

Table III, on pages 30 and 31, shows the actual, predicted and difference scores by hospital. The difference score represents an evaluation of inservice education independent of hospital size (i. e., a positive score

⁴³Ibid., p. 196.

TABLE II
CORRELATIONS OF INDIVIDUAL ITEMS WITH THE
TOTAL SCORE AND EACH OF THE
COMPONENTS OF WHICH IT
IS COMPRISED

Item	Total score	Predicted score	Difference score
A. Coordinator	.624	.593	.304
B. Formal program	.650	.500	.425
C. Orientation	.692	.285	.675
D. Leadership and manage- ment development	.538	.363	.396
E. Out-service education	.500	.331	.374
F. Resources	.300	.112	.304
G. Statement of goals	.670	.504	.448
H. Planned aide training	.625	.439	.444
I. Staff participation	.387	.298	.252
J. Evaluation	.265	.242	.138

TABLE III

ACTUAL SCORES, PREDICTED SCORES AND DIFFERENCE SCORES
 OF INSERVICE EDUCATION PROGRAMS
 IN MONTANA HOSPITALS

Actual bed size	Log ₁₀ number of beds	Actual score	Predicted score	Difference score
212	2.3	82	74	+ 8
210	2.3	85	74	+11
194	2.3	85	74	+11
190	2.3	63	74	-11
185	2.3	95	74	+21
142	2.1	64	67	- 3
136	2.1	58	67	- 9
102	2.0	60	64	- 4
90	2.0	73	64	+ 9
80	1.9	43	60	-17
75	1.9	91	60	+31
75	1.9	73	60	+13
73	1.9	45	60	-15
73	1.9	51	60	- 9
70	1.8	65	56	+ 9
58	1.8	32	56	-24
54	1.7	81	53	+28
52	1.7	45	53	- 8
49	1.7	14	53	-39
44	1.6	36	49	-13
38	1.6	20	49	-29
36	1.6	20	49	-29
35	1.6	60	49	+11
32	1.5	56	45	+11
32	1.5	31	45	-14
30	1.5	55	45	+10
27	1.4	46	42	+ 4
25	1.4	47	42	+ 5
23	1.4	35	42	- 7
22	1.3	53	38	+15
22	1.3	31	38	- 7
22	1.3	26	38	-12
20	1.3	56	38	+18

TABLE III (continued)

Actual bed size	Log ₁₀ number of beds	Actual score	Predicted score	Difference score
19	1.3	63	38	+25
17	1.2	16	34	-18
16	1.2	35	34	+ 1
16	1.2	50	34	+16
14	1.1	43	31	+12
12	1.0	35	27	+ 8
10	1.0	15	27	-12
9	1.0	32	27	+ 5
9	1.0	28	27	+ 1

suggests that the program is superior to what would be predicted on the basis of size of the hospital; a negative score suggests the opposite).

Questionnaire items not used directly in the evaluation provided general information regarding administration of inservice education in the various hospitals.

In the sixteen hospitals which had Inservice Education Coordinators, the position had existed for periods of from one month to five years with approximately half of these less than two years old. Ten of the coordinators had at least a bachelor of science degree in nursing; eleven had previous teaching experience; and seven had taken special courses or training in administration of inservice education --five of these within the past five years.

In hospitals without coordinators, the educational program was in most cases conducted by the Director of Nursing Service, while orientation was generally done by the director and staff nurses.

Meetings were held on the average of once a month and planned most often from one to three months in advance. The most frequent time of programs was in staggered sessions to overlap shifts; they were held more than once in sixty per cent of the cases. Although a record of attendance was kept in thirty-six of the institutions, only twenty-four required attendance. Of those requiring attendance, ten provided compensation in pay or time off.

In thirty-two of the hospitals, meetings were planned for attendance by all nursing personnel; however, separate meetings of professional and nonprofessional staff were held by thirty-one of the institutions when the topic of the program was pertinent to only one of the two groups. Meetings of individual nursing units were held in almost half of the cases, primarily in the larger hospitals as in the smaller facilities the staff is frequently all of one unit.

Seventy-five per cent of the respondents stated that continuing education and membership in professional organizations were encouraged.

Twenty-six respondents gave definitions of inservice education. The most frequent aspect mentioned (by twenty-one individuals) was that of upgrading personnel through improvement of skills and by providing education in various technics and procedures. Improved patient care and planned, on-the-job training was specified by ten and orientation was mentioned specifically by six. That all nursing service personnel should be included was indicated by five and improved job satisfaction was mentioned by seven.

In regard to the resource material used in the organization and administration of inservice education, the most frequently-mentioned were the Montana Nurses Association Guidelines to Inservice Education (by fifteen respondents) and Miller's Inservice Education for Hospital Nursing Personnel (by eight respondents). Literature from the American Hospital Association, Catholic Hospital Association, Nursing Outlook, and American Journal of Nursing also were indicated as helpful sources of information.

Since only eighteen respondents returned schedules of programs presented during the past year, it was difficult to determine exactly what type of material was being included. However, Questions Twenty-eight, Twenty-nine, and Thirty-four did provide some information regarding the nature of content the coordinators (or directors)

considered important. Fifty per cent stated they attempted to follow a particular theme for a series of programs, and fifty-five per cent indicated that human relations and communication were topics included during the past year. Question thirty-three consisted of two parts. In the first, the respondent was asked to indicate which areas she thought should be part of inservice education; and in the second, to rank the first ten in order of importance. Demonstration of new equipment and new procedures received first and second rankings in both parts of the question. In decreasing order of importance were: new medications; participation in inservice education; patient conferences; planning inservice; job description; trends in nursing; interpersonal relations; and interdepartmental relations. Judging from this ranking, it seems as though skill training receives primary emphasis, although the interest exhibited in interpersonal relations and patient conferences would seem to indicate a concern for better nurse-patient relationships and patient-centered, rather than only procedure-centered nursing practice.

Only two respondents returned copies of the orientation schedule in their institutions so no attempt was made to evaluate or compare orientation programs of any of the hospitals.

In response to the question regarding particular problems of conducting inservice education, the most frequent complaint was that in the absence of a coordinator, the Directors of Nursing Service stated that they found insufficient time to plan and present an adequate program. Several stated, however, that they did recognize the need and did attempt to provide at least some type of educational opportunities for their personnel.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The purposes of this study were: (1) to survey the degree of formalization of inservice education programs in Montana hospitals; (2) to secure information regarding the nature, content and scope of existing programs; (3) to relate aspects of existing programs to size of hospital, and, (4) to evaluate inservice education in each hospital using standards set forth in Inservice Education for Hospital Nursing Personnel by Mary Annice Miller, Consultant, Inservice Education, National League for Nursing, and other authoritative sources.

The survey method was selected for the investigation and a questionnaire was used to collect the data. Questionnaires were sent to Directors of Nursing Service in all licensed hospitals in Montana excluding state-owned and operated institutions and medical infirmaries at the state universities.

A scale composed of ten factors considered important to an inservice education program was developed for the purpose of evaluating and comparing programs in the hospitals studied. An item analysis revealed that the scale was homogeneous in that all correlations were positive,

although Items (D) Leadership and management development, (E) Out-service education, (F) Resources, (I) Staff participation, and (J) Evaluation, correlated to a lesser degree with the remaining items.

Scores were calculated for each institution and these values were then correlated with hospital size. Transformation of the predictor variable, number of beds, to common logarithms was performed in order to obtain a linear relationship between the variable. On this basis, it was possible to determine a score for each hospital that was independent of the size of the institution (i.e., a positive score suggested that a program was superior to what would be predicted on the basis of size and a negative score suggested the opposite).

High correlation of the individual items with the total score were found for all categories except (F) Resources, (I) Staff participation, and, (J) Evaluation. This would seem to indicate that these factors are less accurate predictors of the excellence of an inservice education program.

In the comparison of the ten items with the two component scores (predicted score and difference score), little difference was found in the values of the correlations except in the cases of (A) Coordinator and (C) Ori-

entation program. This showed that the presence or absence of a coordinator is largely a function of hospital size, while presence or absence of an orientation program is related to extraneous factors.

In regard to the nature, content and scope of existing programs, it was found that orientation and skill training receive primary emphasis. Leadership and management development and continuing education were areas mentioned by only a small number of respondents.

The principle conclusions of this study are as follows:

1. Most hospitals in Montana are making some attempt to provide inservice education for their personnel although the degree of formalization varies.
2. Presence or absence of a coordinator is largely, if not entirely, a function of hospital size.
3. Presence of an orientation program appears to be relatively unrelated to hospital size.
4. Orientation and skill training receive primary emphasis in most programs.
5. Leadership and management development and continuing education should be encouraged in more institutions in order to provide well-rounded inservice education programs.
6. Smaller hospitals have special problems in that they are unable to employ coordinators of inservice education and they frequently lack adequate professional nursing personnel who have the time to devote to this area.

Further study of inservice education could be of

considerable value. Smaller hospitals especially need assistance in organizing and administering educational programs that would be particularly suited to their circumstances. Obviously, they find it difficult to employ full-time coordinators so they could profit by studies which would investigate ways and means of dealing with their problems.

Since most institutions seem to be deficient in continuing education and leadership and management development, studies which would investigate organization and presentation of content in these areas could be very beneficial.

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APPENDIX A

204 South Willson
Bozeman, Montana
September 7, 1967

Mona Bone, R. N.
Director of Nursing Service
Carbon County Memorial Hospital
Red Lodge, Montana

Dear Mrs. Bone:

I am a graduate student at Montana State University, Bozeman. As part of the requirements for the degree of Master of Nursing, I am attempting to make a survey of inservice education programs in all hospitals in Montana. To collect information about these programs, I have constructed the enclosed questionnaire which I shall be most grateful to have completed by the Coordinator of Inservice Education. If there is no position of Coordinator, I would appreciate your completing it for me. Names of specific hospitals or people answering the questionnaire will not be mentioned in the study.

I would appreciate having the questionnaire returned to me by September 20, 1967. A stamped envelope is included for this purpose.

Thank you for your cooperation. Without your help, it is impossible to complete my study.

Sincerely yours,

(Mrs.) Donna Loy Ritter
Graduate Student
Montana State University
School of Nursing

The faculty and staff from Montana State University School of Nursing appreciate your assistance with this study.

Mrs. Laura Walker, R.N., Ph.D.
Director, School of Nursing

522 West Hayes
Bozeman, Montana
October 2, 1967

Mona Bone, R. N.
Director of Nursing Service
Carbon County Memorial Hospital
Red Lodge, Montana

Dear Mrs. Bone:

During the early part of September, I mailed a questionnaire regarding inservice education to you. I had asked that it be returned to me by September 20, but I realize this was probably a busy time and may have conflicted with your vacation and other duties. I would be very grateful if you could complete and return it to me as soon as it is convenient for you.

Thank you very much.

Sincerely yours,

(Mrs.) Donna Loy Ritter
Graduate Student
Montana State University
School of Nursing

QUESTIONNAIRE TO DIRECTORS OF NURSING SERVICE
REGARDING INSERVICE EDUCATION PROGRAMS

Title of person completing questionnaire _____

- 1.* Is there a position of Coordinator of Inservice Education in your hospital? _____ yes _____ no

_____ Full time

_____ Part time

2. How long has this position existed? _____

3. If there is no position of Coordinator of Inservice Education,

(a)* Is there a formalized program of inservice education? _____ yes _____ no

(b) Who is responsible for selection, organization, and presentation of programs? _____

(c) Who is responsible for the orientation of new personnel? _____

4. What is the educational preparation of the person responsible for inservice education?

_____ Diploma in Nursing

_____ Bachelor of Science in Nursing

_____ Master of Science in Nursing

_____ Other (please specify) _____

5. Has the person responsible for inservice had any special training or taken courses in the administration of inservice programs? _____ yes _____ no

Where

When

6. Has the person responsible for inservice had any previous teaching experience? _____ yes _____ no
7. In the left column, please check the resource material used in organizing and operating the present program. In the column on the right, please check those you feel are most useful.
- | | |
|---|-------|
| _____ <u>Montana Nurses Association Guidelines to Inservice Education</u> | _____ |
| _____ <u>Inservice Education for Hospital Nursing Personnel</u> by Mary Annice Miller | _____ |
| _____ _____ | _____ |
| _____ _____ | _____ |
8. How would you define inservice education?
- _____
- _____
- 9.* Is there a written statement of the (a) _____ long-term goals and (b) _____ short-term goals of the inservice program? _____ yes _____ no
10. How far in advance are programs planned?
- _____ one month
- _____ three months
- _____ six months
- _____ one year
11. How often are meetings held?
- _____ every two weeks
- _____ every month
- _____ every two months
- _____ when necessary; approximately _____ yearly

19. Do individual nursing units regularly conduct any classes or sessions for their own personnel?

_____ yes _____ no

How often do they meet?

_____ weekly

_____ every two weeks

_____ monthly

_____ when necessary; approximately _____ times per yr.

- 20.* Is there a planned program for training nurse aides? _____

Is classroom teaching included? _____ yes _____ no

Who does this teaching? _____

- 21.* Is there a planned program for the purpose of developing personnel for leadership positions - for example, special training of staff nurses for head nurse positions? _____ yes _____ no

- 22.* Are nursing personnel encouraged to attend special meetings or workshops given in the state? (e.g., Heart Association meetings) _____ yes _____ no

Are their expenses paid? _____ yes _____ no

Is their salary continued while attending?

_____ yes _____ no

What methods are used to implement learning gained?

_____ oral report to supervisor

_____ written report

_____ oral report and discussion with personnel on unit

_____ presentation of inservice program to all staff

_____ other (please specify) _____

23. Are personnel encouraged to be members of

- ☐ American Nurses Association
- ☐ National League for Nursing
- ☐ other organizations (please specify) _____

24. Are personnel encouraged to

- ☐ participate in continuing education courses
- ☐ take college or university courses
- ☐ attend special conferences (e.g., WCHEN sponsored)

25.* Is there a central library in the hospital for use by personnel? ☐ yes ☐ no

Please check periodicals currently received:

- ☐ American Journal of Nursing
- ☐ Nursing Outlook
- ☐ Nursing Research
- ☐ Registered Nurse
- ☐ others (please specify) _____

26.* Is there a library on each ward? ☐ yes ☐ no

Please check which of the following are included in each ward library:

- ☐ procedure manual
- ☐ copy of hospital personnel policies
- ☐ copy of job descriptions for each level of employee
- ☐ textbooks related to general type of patient cared for on that particular ward

- ☐ diet therapy manual
☐ manual or kardex listing preparation required
 for specific laboratory tests or x-ray procedures
☐ general dictionary
☐ medical dictionary
☐ others (please specify) _____

27.* Who decides the content of inservice programs?

- ☐ Director of Nursing Service
☐ Coordinator of Inservice Education
☐ Committee (of whom and how chosen?) _____

☐ Staff nurses
☐ Head nurses and supervisors
☐ Licensed practical nurses
☐ Aides and orderlies
☐ Other (please specify) _____

28. Is an attempt made to follow a particular theme for a series of programs? (e.g., disaster or emergency nursing) _____ yes _____ no

29. Have any sessions on human relations or communications been presented in the past year? _____ yes _____ no

30.* Is there a planned program for the orientation of new personnel? _____ yes _____ no

31.* Are there written job descriptions for:

- ☐ supervisors
- ☐ head nurses
- ☐ staff nurses
- ☐ licensed practical nurses
- ☐ aides
- ☐ orderlies
- ☐ ward clerks

32.* Are there written hospital personnel policies?

- ☐ yes ☐ no

33.* Please check which methods have been used to evaluate your inservice education program:

- ☐ attendance records
- ☐ opinionnaires or questionnaires completed by personnel
- ☐ personal interviews with personnel
- ☐ interviews with head nurses regarding their impressions of the effect of inservice programs in improving patient care and/or improvement of working relationships on the unit
- ☐ patient surveys
- ☐ medical staff surveys
- ☐ written examinations
- ☐ performance evaluations
- ☐ rating scales
- ☐ records (e.g., turnover, absenteeism, errors, etc.)
- ☐ others (please specify) _____

34. Column 1: Check if you think the following are a part of inservice education.

Column 2: Rate your first ten choices (1 being what you consider most valuable; 2, the next; etc.)

	1	2
a) Job descriptions	_____	_____
b) Interdepartmental relations	_____	_____
c) Public relations	_____	_____
d) New medications	_____	_____
e) Meetings to clear grievances	_____	_____
f) Field trips	_____	_____
g) Demonstration of new equipment	_____	_____
h) Interpersonal relations	_____	_____
i) Trends in nursing	_____	_____
j) Ward conferences	_____	_____
k) Reporting on and off duty	_____	_____
l) Planning inservice education	_____	_____
m) Community resources	_____	_____
n) Active participation in the planning of inservice	_____	_____
o) Patient-centered conferences	_____	_____
p) Interdepartmental problems	_____	_____
q) Demonstration of new or altered procedures	_____	_____
r) _____	_____	_____
s) _____	_____	_____

I would appreciate any further suggestions or comments regarding special problems you have encountered--especially those peculiar to your size and type of institution. I would also be very grateful if you would send me a list of the inservice programs presented during the period of July 1, 1966, to June 30, 1967, and a copy of the content of the orientation program.

Thank you very much for your cooperation.

APPENDIX B

SUMMARY OF DATA NOT USED IN THE SCALE OF
EVALUATION AND RANKING OF
INSERVICE EDUCATION
IN THE HOSPITALS
STUDIED

Item 2. Length of time position of Coordinator of Inservice Education in existence:

One month - 1
Nine months - 2
Ten months - 1
Twelve months - 1
Fifteen months - 1
Eighteen months - 1
Two years - 2
Three years - 1
Four years - 2
Five years - 2
No response - 2

Item 3b. Without a coordinator, person responsible for selection, organization and presentation of programs:

Director of Nursing Service - 2
Chairman of Inservice Education Committee - 1
Supervisor - 1
Head Nurse - 1

Item 3c. Without a coordinator, person responsible for orientation of new personnel:

Director of Nursing Service - 9
Director and supervisor - 1
Director and administrator - 1
Director and staff nurses - 4
Supervisor - 1
Administrator - 1
Staff nurses - 2
Head nurse - 2
Head nurse and supervisor - 1
Administrator and supervisor - 1

Item 4. Educational preparation of coordinator:

Diploma in Nursing - 6
 Bachelor of Science in Nursing - 7
 Master of Science in Nursing - 3

Item 5. Special training in administration of inservice:

Of coordinators - 7 (Five within the past five years)
 Of directors - 3

Item 6. Previous teaching experience:

Of coordinators - 11
 Of directors - 6

Item 7. Resource material used:

Montana Nurses Association Guidelines to Inservice Education - 15
 Miller: Inservice Education for Hospital Nursing Personnel - 8
 Spaulding: Professional Nursing - 1
 Catholic Hospital Association: Inservice Education Manual - 2
Inservice Education Manual for Nursing Service - 1
 Kron: Team Nursing - 1
 American Journal of Nursing: articles on inservice
 Nursing Outlook: articles on inservice
 Literature from American Hospital Association - 2
 Abdellah: Nurse Aide Study Manual and Teacher's Guide - 1
Training the Nurse Aide - 1
 Price: Handbook and Charting Manual for Student Nurses - 1
 Education textbooks (regarding philosophy and objectives) - 1
 Information from various hospitals - 1

Item 10. Advance planning of programs:

One month - 18
 Three months - 12
 Six months - 1

Item 11. Frequency of meetings:

Every two weeks - 5
 Every month - 25
 When necessary - 16
 (Range from two to three times per year to twenty-five to thirty times per year)

Item 12. Time meetings held:

Off-duty time - 13
 On-duty time - 19
 Alternately on different shifts - 6
 Staggered sessions to overlap shifts - 21
 During lunch hours or extended coffee breaks - 3
 Specific afternoon or evening - 3

Item 13. Reptition of programs:

Once only - 18
 Repeated for each shift - 13
 Repeated again during the week for those who did not attend the first session - 13
 Available on tape - 1

Item 14. Attendance required:

Yes - 24
 No - 15
 No response - 2

Item 16. Compensation for attendance on off-duty time

Time off - 2
 Overtime pay - 8

Item 17. Programs for entire staff:

Yes - 31
 No - 7
 No response - 4

Item 18. Separate meetings for professional and nonprofessional staff:

Yes - 31
 No - 10
 No response - 1

Item 19. Meetings of individual units:

Yes - 20
No - 18
No response - 4

Frequency of unit meetings:

Weekly - 3
Every two weeks - 2
Monthly - 4
When necessary - 13

Item 23. Encouragement of membership in professional organizations:

Yes - 31
No - 4
No response - 7

Item 24. Encouragement of continuing education:

Yes - 32
No - 4
No response - 6

Item 28. Attempt to follow a particular theme for a series of programs:

Yes - 21
No - 11
No response - 10

Item 29. Sessions on human relations or communications during past year:

Yes - 23
No - 16
No response - 3

Item 34. Column I. Areas considered by respondents to be part of inservice education and number of times each area checked:

Demonstration of new equipment	27
Demonstration of new or altered procedures	26
Ward conferences	24
New medications	23
Trends in nursing	22
Interpersonal relations	20
Job descriptions	19
Patient-centered conferences	19
Active participation in the planning of inservice education	18
Public relations	16
Planning for inservice	16
Meetings to clear grievances	11
Interdepartmental problems	10
Community resources	9
Reporting on and off duty	6
*Leadership development	2
Field trips	1
*Policy and procedure manuals	1
*Skill training (nurse aides)	1
*Orientation	1
*Evaluation	1
*Preparation for lab and x-ray procedures	1
*Rehabilitation; long-term care	1
*Workshops and advanced education	1

* = Choices written in by respondents

Item 34. Column II. Ranking of areas by respondents:
NUMBER OF TIMES EACH AREA WAS SELECTED BY RESPONDENTS IN CHOICES
ONE TO TEN AND THE AVERAGE WEIGHT DERIVED FROM ALLOCATING
A WEIGHT OF 10 FOR FIRST CHOICE, 9 FOR SECOND

Areas for inservice education	Choices: 1	2	3	4	5	6	7	8	9	10	Total weight
Weight:	10	9	8	7	6	5	4	3	2	1	
Job description	40	9	16	0	18	15	4	9	0	2	113
Interdepartmental relations	0	18	16	7	18	10	4	9	6	1	89
Public relations	20	9	16	7	6	5	4	15	0	2	84
New medications	0	63	16	0	12	10	16	3	8	1	129
Meetings to clear grievances	10	0	0	7	6	0	4	3	6	3	39
Field trips	0	0	0	0	0	0	0	0	0	1	1
Demonstration of new equipment	10	154	56	21	12	20	4	6	2	0	185
Interpersonal relations	20	0	16	28	6	0	20	3	8	1	102
Trends in nursing	20	9	40	7	6	5	8	6	6	4	111
Ward conferences	10	0	16	0	18	15	8	0	3	2	72
Reporting on and off duty	0	0	0	28	6	0	0	0	2	0	36
Planning inservice education	70	0	8	0	18	10	4	3	0	1	114
Community resources	0	0	0	7	0	5	8	3	0	4	27
Participation in inservice	30	45	0	28	6	0	7	0	4	2	122
Patient conferences	30	18	0	14	18	25	4	6	0	0	115
Interdepartmental problems	0	0	8	7	6	10	4	3	6	1	45
Demonstration of new procedures	30	36	8	28	0	25	12	12	2	1	154