A SURVEY OF OPINIONS OF REGISTERED NURSES TOWARD THE USE OF A SPECIALIZED INTRAVENOUS NURSE

by

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A paper submitted to the Faculty of the School of Nursing in partial fulfillment of the requirements for the degree of

MASTER OF NURSING

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MONTANA STATE COLLEGE
Bozeman, Montana

April, 1962
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>A. Statement of Problem</td>
<td>4</td>
</tr>
<tr>
<td>B. Purpose of Study</td>
<td>5</td>
</tr>
<tr>
<td>C. Definition of Terms</td>
<td>5</td>
</tr>
<tr>
<td>D. Method of Research</td>
<td>6</td>
</tr>
<tr>
<td>E. Assumptions</td>
<td>6</td>
</tr>
<tr>
<td>F. Limitations</td>
<td>7</td>
</tr>
<tr>
<td>G. Hypothesis</td>
<td>9</td>
</tr>
<tr>
<td>H. Overview of Remainder of Study</td>
<td>10</td>
</tr>
<tr>
<td>II. METHODOLOGY AND TOOL EMPLOYED</td>
<td>11</td>
</tr>
<tr>
<td>A. Composition of Questionnaire</td>
<td>12</td>
</tr>
<tr>
<td>B. Selecting the Sample</td>
<td>13</td>
</tr>
<tr>
<td>III. RETURNS FROM QUESTIONNAIRE</td>
<td>15</td>
</tr>
<tr>
<td>IV. SUMMARY OF STUDY</td>
<td>26</td>
</tr>
<tr>
<td>A. Conclusions</td>
<td>27</td>
</tr>
<tr>
<td>B. Recommendations for Further Study</td>
<td>28</td>
</tr>
<tr>
<td>APPENDIX A</td>
<td></td>
</tr>
<tr>
<td>A. Letter Accompanying Questionnaire</td>
<td>32</td>
</tr>
<tr>
<td>B. Questionnaire</td>
<td>33</td>
</tr>
<tr>
<td>LITERATURE CONSULTED</td>
<td>36</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Representation of Responses Relating to Hypothesis Two.</td>
<td>20</td>
</tr>
<tr>
<td>II. Representation of Responses Relating to Hypothesis Four.</td>
<td>22</td>
</tr>
<tr>
<td>III. Representation of Responses Relating to Hypothesis Three.</td>
<td>24</td>
</tr>
</tbody>
</table>
ABSTRACT

This study proposed to examine the opinions of twenty registered nurses toward the use of a registered nurse in the role of a specialized intravenous nurse.

The data was obtained through the use of questionnaires sent to a sample of registered nurses who had begun their clinical portion of nursing education at Montana State College in September, 1955, at Montana Deaconess Hospital in Great Falls, Montana and Billings Deaconess Hospital in Billings, Montana.

The results of the survey indicated that in nearly all instances the respondents favorably viewed the use of a specialized intravenous nurse. They further indicated that they believed the specialized nurse possessed the ability to perform the mechanics of venipuncture more effectively than the non-specialized nurse, that she added to hospital efficiency and that the patient benefited through the use of the specialized intravenous nurse's services.
CHAPTER I

INTRODUCTION

The field of medicine was, is, and will always be in a constant state of change; consequently all occupations connected with this field are in a transitional state. The professional nurse's role is no exception to this condition. The change has given the nurse new responsibilities to assume; responsibilities formerly held by physicians. Assumption of these responsibilities has involved learning new techniques and furthering of the nurse's knowledge and judgments.

"As therapy became broader and more complex we were expected to prepare ourselves to undertake broader responsibilities, to assist in more difficult methods of treatment."¹ So stated Lucile Petry Leone. Mrs. Leone further stated, "Nurses today and in the years ahead must keep abreast of the new body of knowledge contained in the expanding health program—and, above all, of the expanding needs of the patient. Many of the procedures now done by nurses were formerly in the province of the doctor,—blood pressure, intravenous, intramuscular administration of medication, for example."²

The technique of venipuncture has been delegated to professional nurses. This was probably one of the most recent techniques that was moved from the area of physician's duties to that of the nurse. There

²Ibid., p. 12.
were many hospitals in which nurses necessarily assumed responsibility for the technique. Ann H. Shank says, "This is particularly true in small hospitals which have neither interns or (sic) residents on the staff. In larger hospitals nurses are providing this service because the use of intravenous therapy is increasing at the same time that increased demands are being made on the medical staff." The development of the specialized intravenous nurse in hospitals evolved from this change of responsibilities for venipuncture.

In the April, 1957, issue of Modern Hospital, it was stated, "Most hospitals today have specially trained nurses or nurse teams administering routine intravenous injections." The specialized nurse is an integral part of the group of individuals which care for the patient in many hospitals. To function effectively for the most benefit for the patient this nurse must have capabilities realized by her co-worker, the non-specialized nurse, as well as by other members of the health team. With the alleged shortage of nurses it may be necessary for the supervisor or administrator to further examine the specialized intravenous nurse's usefulness and attempt to utilize her abilities to a different advantage. (Hereafter, the intravenous nurse shall be referred to as the i.v. nurse.)

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4 Small Hospital Questions," Modern Hospital, April, 1957, p. 47.
Because of the use of the I.V. nurse in hospitals it would appear that there had been a recognized need for this type of skilled service. Nevertheless, the development of a specialized nurse as an I.V. nurse does not necessarily mean that the need requirements have been met as they are recognized by other nurses.

A survey of available literature revealed very little information about the use of the specialized I.V. nurse. There were articles about the teaching of techniques of intravenous therapy to nurses, both student and graduate, on legality of venipuncture, and very few articles on development of a specialized nurse program of administering parenteral fluid therapy. No literature was found regarding the professional abilities of the specialized I.V. nurse as recognized by the non-specialized nurse. A recent professional periodical did give a report of the hospital's development of an Intravenous team and the report concluded, "The plan of using an intravenous team has proved satisfactory from everyone's point of view. Patients benefit from prompt service. It has satisfied the nursing staff, doctors, and laboratory technicians." This team consisted of registered nurses whose specialized function it was to start intravenous therapy as ordered by physicians.

An effective I.V. nurse must possess certain qualities that make her such. Ann Shank includes good training, technical competency, ability to organize duties effectively, alertness, observance, good

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judgment, and the ability to inspire the patient's confidence in the qualities that she considers to be important in a specialized I.V. nurse. 6

Through the examination of the opinions of registered nurses by requesting statement of their feelings toward the abilities of the specialized I.V. nurse criteria may result which may assist those in administrative positions to determine need or desirability of the use of the specialized I.V. nurse in their own particular institution.

A. Statement of problem

Because of the establishment of the use of the specialized I.V. nurse in hospitals the problem of determination of their recognized usefulness emerged. Involved in this problem were the determination of feelings of non-specialized registered nurses toward the professional abilities of the specialized I.V. nurse. Specifically, did the nurses feel the specialized nurse could complete the procedure with less discomfort to the patient? Did nurses feel she filled a need in the hospital? Did they feel she was more efficient than the non-specialized nurse in execution of the procedure? Did they feel she possessed specific skills beyond the non-specialized nurse?

B. Purpose of study

The purpose of this study was to determine opinions of twenty registered nurses toward the professional abilities of the specialized I.V. nurse in order to present a possible justification for the use of a registered nurse in this specialized capacity.

C. Definition of terms

1. Value: "The desirability or worth of a thing as compared with the desirability of something else." 7

2. Specialized intravenous nurse: A registered professional nurse whose specialized function is the administration of parenteral fluid therapy. She is also referred to in this paper as I.V. nurse, specialized I.V. nurse, or specialized nurse.

3. Parenteral therapy: "Introduction of a substance... into the body by means other than the intestinal tract." 8

4. Opinion: "A formal or professional judgment expressed." 9

5. Ability: "Power or capacity to do or act in any relation." 10

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10 Ibid, p. 3.
6. Feeling: "A sentiment; opinion." The terms "opinion" and "feeling" are equated in the remainder of this paper.

D. Method of research

In line with the purpose of this study the method of research employed was the descriptive or survey method. This method is "a way of obtaining exact facts and figures about a current situation." The tool employed for collection of data in the study was the questionnaire. The sample selected for the study consisted of twenty professional registered nurses who received their basic clinical experience of the baccalaureate program of Montana State College School of Nursing at Montana Deaconess Hospital in Great Falls, Montana, and at Billings Deaconess Hospital in Billings, Montana. They entered these units in September, 1955.

E. Assumptions

Registered nurses having worked with a specialized intravenous nurse will have developed certain feelings about her professional abilities. In their basic educational program emphasis is placed on the importance of understanding themselves. This is stressed as being important in all phases of nursing. Because of this philosophy, it is

11 Ibid, p. 443.

assumed that the non-specialized nurse will be able to recognize her opinions about the specialized nurse and be able to express them truthfully in either a positive or negative manner.

With the current trend of medicine the registered nurse has had frequent contact with parenteral fluid therapy and most nurses have been instructed in the techniques of administration. It is assumed that the population has been engaged in some administration of the therapy themselves.

F. Limitations

Conflicting methods of patient care employed by the hospitals in which the population received basic instruction and were employed constituted a limitation of this study. The primary types of nursing care employed by hospitals are the functional method, the team method, and the patient or case method.

The patient method or case method of assignment means that the nurse is expected to give complete nursing care to one or more patients including general nursing measures, treatments, medications, taking temperature, pulse, and respiration, serving nourishments, and giving health instruction. This method prevents a nurse from specializing in one particular activity in patient care. The nurse caring for the patient carries out all nursing procedures that the patient requires.

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The team method of assignment is newer. In this method two or more members of the nursing staff, one being designated as leader, are assigned to work together in giving care to a group of patients. The team performs all nursing care procedures for a particular group of patients.

In the functional method of assignment the nurses are assigned to specific functions in the ward, such as giving medications or treatments to all patients, taking the temperatures of all, or giving general nursing care to a group of individuals. This is the only method of patient care which would readily lend itself to the use of the specialized I.V. nurse. This method is not employed in all hospitals and therefore in itself, limits the use of the I.V. nurse.

This study was further limited by the fact that there is question of legality of venipuncture as performed by registered nurses in some states. Performance of this procedure requires that the nurse pierce or sever human tissue. This procedure must have a statute cover it or the nurse may be held liable in the courts of law if there was an adverse affect on the patient. Consequently, there are some states in which nurses are not allowed to perform the procedure. The question of legality was not considered in this study.

The personality of both the respondent and the I.V. nurse would

\[14\text{ibid p. 247.}\]
\[15\text{ibid p. 246.}\]
affect the objectivity of the responses and would therefore limit the kind and amount of generalizations that could be made from the study therefore, this area was not examined.

The study dealt with determination of opinions through the respondent's statement of her feelings regarding the professional abilities of the I.V. nurse. There is no accurate method to determine true "feelings" of an individual. Different people place different values on the same thing and thusly develop different "feelings" about the same thing.

The tool employed, the questionnaire, is in itself another limiting factor in the study. Because of indiscriminate use of questionnaires, much of the public has a reaction against receiving a questionnaire which is time consuming to answer and which may seem to them to be an unwarranted attempt to meddle in their affairs. These limiting factors were kept at a minimum through careful construction of the questionnaire itself and by carefully constructing an accompanying letter. A further limiting factor in the study also concerned the tool and type of questions included in the tool. Answers received from the questionnaire could not be extended for the investigator's clarity of the answer.

G. Hypothesis

It was hypothesized that results of the questionnaires would indicate: 1) That the respondent favorably viewed the use of a registered nurse in the capacity of a specialized I.V. nurse. It
was hypothesized that respondents would reply that: 2) the I.V. nurse possesses an ability to perform the mechanics of venipuncture more effectively than the non-specialized nurse, 3) that the I.V. nurse adds to hospital efficiency and, 4) that the respondent believes the patient is benefited from the I.V. nurse's available services.

H. Overview of remainder of study

The second chapter of the study contains further definition of the methodology and sample used in the study and the construction of the questionnaire. The third chapter presents interpretation of the data received from the questionnaires. The fourth presents a summary of the study and conclusions and recommendations for further study in the area of usage of a specialized I.V. nurse.
CHAPTER II

METHODOLOGY AND TOOL EMPLOYED

A questionnaire was chosen as the most effective tool for the descriptive type research because of the nature of the population and the nature of the investigation itself. The population selected was scattered over much distance which in itself limited the type of tool which could be used effectively. The investigation was limited to investigation of personal feelings regarding the abilities of the specialized I.V. nurse and it appeared that a carefully constructed questionnaire would elicit the desired information and would preserve anonymity.

The questionnaire was tentatively constructed in two parts. The first part was concerned with the amount and kind of contact the nurse had had with the specialized I.V. nurse in her past experience. The second part was to be answered by those who had worked with the specialized I.V. nurse at any time. This form was submitted to a group of graduate students in nursing at Montana State College for a pilot study. The original form was kept except for several minor changes in wording to increase clarity of the statements and questions and to further clarify directions on the questionnaire.

The final questionnaire consisted of five questions to which yes or no answers were to be checked; two questions which were to have free-response answers; and four pairs of statements describing the I.V. nurse. The last group of questions were to be answered only by
those who had worked with the specialized nurse. The questionnaire was constructed so there was space for frequent comments concerning the question itself or to further clarify the answer. These comments were encouraged in the letter of explanation enclosed with each questionnaire. This contained instructions and approval from Montana State College School of Nursing faculty, and a self-addressed stamped envelope. See Appendix B.

A. Composition of questionnaire

Question one was a "yes or no" item concerning whether or not the nurse had received clinical experience as a basic student in a hospital which had an I.V. nurse. The next question asked what feelings the nurse had regarding the specialized I.V. nurse's abilities and value if they had worked with her in their undergraduate clinical experience. Item three asked if they had been employed in hospital nursing since graduation. Item four asked if any of these hospitals had employed a specialized I.V. nurse. The next item asked for their feelings about her professional abilities and value. Item six asked if they believed the specialized I.V. nurse possessed skills beyond the non-specialized nurse and asked for a listing of these skills. The last item in the first part of the questionnaire asked those whom had never worked with a specialized I.V. nurse if they believed the patient would benefit from her utilization.

Part two consisted of pairs of statements, one of which was to be checked by those having worked with the specialized I.V. nurse.
Again, there was space left for comment after each statement. The first statement described the l.V. nurse as possessing the ability to carry out parenteral therapy techniques with less discomfort for the patient. The opposing statement stated that patient discomfort was not decreased by the use of the specialized l.V. nurse. Statement two described her services as adding to hospital efficiency and its counterpart stated that hospital efficiency was not increased through her use. Statement three described her as being more efficient than the non-specialized nurse and the negative statement described her as being no more efficient than the non-specialized nurse in the completing of the procedure. The last statement in part two consisted of the statement that the patient benefited from the use of the specialized l.V. nurse and the other item said that the patient did not necessarily benefit from her services.

B. Selecting the sample

The sample selected for participation in the study was a group of twenty registered nurses which, as students, entered Billings Deaconess Hospital in Billings, Montana, and Montana Deaconess Hospital in Great Falls, Montana, for the clinical portion of their nursing education in September, 1955. These groups were selected for two primary reasons. One group had had experience with the specialized l.V. nurse during basic clinical experience and the other group had not. The other reason for their selection was the fact that they had graduate nurse status for a period of time long enough so they had had ample
opportunity for nursing experiences beyond their basic clinical experience. Limiting the sample to graduate nurses tended to give a wider geographical representation. After obtaining addresses of individuals in these groups, the questionnaire, enclosed letter of explanation, and the self-addressed, stamped envelope were mailed.
RETURNS FROM QUESTIONNAIRE

Within a period of one month sixteen or 80% of the questionnaires sent were completed and returned to the investigator.

The first question asking whether there was an I.V. nurse in the hospital in which the respondent received her clinical experience was answered with eight (50%) replying that there had been a specialized I.V. nurse and eight (50%) replying that there had not been an I.V. nurse in the hospital. Of those eight individuals who had not had experience with an I.V. nurse during basic clinical experiences three commented that they felt there had been a need for her services. One qualified her comment by stating she believed it would have been a time-saving factor only. She believed that the nurse who had contact with the patient throughout his entire treatment could give more understanding and support to the patient. The other two felt it would be a time-saving factor, the patient would have benefited by “receiving the I.V. on time,” “she could have prevented much of the trauma which occurred to patients,” and that there would have been benefit in teaching student nurses.

Of the eight persons answering “yes” to the first question, five commented on the question. Two listed the specialized nurse’s hours on duty and explained that non-specialized nurses were responsible for I.V. therapy at other times. Three explained the type of experience they received under her supervision as student nurses. Two described her as being “valuable” in teaching the procedure--that she could give
"pointers ... we may not have gotten otherwise."

Of those having had experience with the I.V. nurse in their basic clinical experience, all were able to express their opinion about her professional abilities and value. All these feelings expressed were very positive in their opinion of her abilities and value. Words used to describe her abilities included: "cracker-jack at I.V. therapy;" calm and collected; very dependable; of great value to the staff; accurate; capable; definite advantage to the patient, doctor, and charge nurse; good knowledge of I.V. solutions and medications; efficient; assisted other nurses in recognition of untoward effects; more capable than the average non-specialized nurse in starting therapy; accepted responsibilities well; had respect of co-workers; made effort to keep abreast of new I.V. drugs and techniques; very good; especially valuable to the patient by saving them from trauma. One person in the group of respondents who had not had experience with the I.V. nurse in her basic curriculum commented that she believed that had there been a specialized I.V. nurse she would have received better instruction in this area. It must be noted here that all those having had contact with the I.V. nurse during basic curriculum all had contact with the same particular nurse.

Fifteen (93.75%) of the respondents had done hospital nursing since their graduation from the basic curriculum and one (6.25%) had not.

Of those individuals having had hospital nursing experience since graduation six (40%) had had experience with an I.V. nurse and nine
(60%) had not. Of those individuals not having had experience in the basic curriculum with the I.V. nurse only 25% obtained experience with an I.V. nurse after graduation. Of those having had experience with the I.V. nurse in the basic curriculum 50% had had experience with the specialized nurse since graduation. The fact that more of the group having had experience with the I.V. nurse in basic curriculum had experience with one after graduation was apparently because some of them continued to work in the hospital in which they received their basic experience.

Comments of the group not having experience with the I.V. nurse since graduation included that the I.V.'s were started by physicians; the hospital was small and only one registered nurse was on duty on any one shift so she was responsible for all I.V.'s except those which the physicians preferred to care for. One stated that many of the nurses employed were unable to start I.V.'s and after several attempts were forced to ask assistance causing discomfort for the patient which was also "hard on the busy nurse." Another commented that most of the nurses could not start I.V.'s forcing the supervisor to complete the procedure.

The question asking for opinions regarding the professional abilities and value of the specialized I.V. nurse or nurses employed in hospitals in which they had worked since graduation was apparently unclear for one-third of the group not having experience with the I.V. nurse since graduation commented. These comments included that she was valuable, but if a nurse who worked in a situation having the
specialized nurse, she might have a very trying time if she were forced
to move into a situation not having the I.V. nurse because of her lack
of experience in this area. Another stated that the specialized I.V.
nurse was of value because the shortage of nurses did not allow suffi-
cient time to assemble the equipment and start the therapy. The
third nurse stated that she felt that the values of comprehensive
patient care would be lost if one nurse started all the I.V.'s. In
addition, she believed that the patient developed confidence in one
nurse for this particular procedure and lost confidence in the nurse
who could not perform these skills. The one nurse who had not done
hospital nursing since graduation commented that she felt the special-
ized I.V. nurse could reduce inefficiency and provide other nurses with
more much-needed time.

Of those individuals having had experience with the specialized
I.V. nurse since graduation comments included: She felt the special-
ized nurse was more adept in performing the procedure than the non-
specialized nurse, but that a few of them did not have enough knowledge
of different I.V. solutions and medications; that she was valuable to
the hospital as a time-saving factor; that she was good at starting
I.V.'s, but slow to come when needed, and often "grumpy to work with;"
that she seemed fully aware of the dangers in the therapy and attempted
to instill the habit of constant checking to prevent accidents and
errors in others; that she possessed a skill that many older graduates
liked to depend upon her for; that she was able to teach student nurses;
and that in hospitals which did or did not have a specialized I.V.
nurse there was "definitely an attitude of appreciation for this specialized nurse." Another commented that she was a definite asset to nursing because she was more efficient and skillful and was adding to better service to the patient.

One (5.5%) did not answer the question asking if the nurses believed that the specialized I.V. nurse possessed certain skills beyond the non-specialized nurse. Fifteen (94.5%) did answer the question. Of these persons two (11.8%) answered negatively and commented that they believed any registered nurse could become skilled in this area if she had "sufficient opportunity" and that any additional skills possessed by the specialized nurse are those that would come to any nurse from repetition of execution of the procedure. One (5.9%) answered the question with a "yes and no." Comments from this respondent were that the more practice a nurse had in this area the more skillful she became. Further comments included that a small hospital should not employ someone as specialized as this, but that each ward should be responsible for their own I.V. therapy so they would be able to "follow through with their patients." Twelve (82.3%) answered the question positively and the skills which they specifically listed were: More knowledge about parenteral therapy and its effects; faster; more efficient; more skillful in the mechanics of the procedure; instilled more patient confidence; more skillful in leaving the patient comfortable while the therapy was being completed. Of this group 55% stated that these skills beyond the non-specialized nurse were obtained through her additional experience in the particular procedure. (See Table 1)
TABLE I

REPRESENTATION OF RESPONSES
RELATING TO HYPOTHESIS TWO

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
<th>YES AND NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you believe the specialized I.V. nurse possesses certain skills beyond the non-specialized nurse?</td>
<td>82.3%</td>
<td>11.8%</td>
<td>5.9%</td>
</tr>
<tr>
<td>The specialized I.V. nurse could carry out techniques of parenteral therapy with less patient discomfort.</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The specialized I.V. nurse appeared more efficient than the non-specialized nurse in carrying out procedure.</td>
<td>93.8%</td>
<td>6.2%</td>
<td></td>
</tr>
<tr>
<td>Hypothesis Two: The I.V. nurse possesses an ability to perform the mechanics of venipuncture more effectively than the non-specialized nurse.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N=16</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Of those individuals (6) who had neither worked with an I.V. nurse during their basic clinical experience nor during work since graduation four (67%) stated that they believed that the patient would benefit from her services. Their comments included that the specialized nurse would eliminate the time which patients often wait for the treatment and through experience she would lessen discomfort caused by the mechanics of the therapy. One (16.5%) stated that she did not think that the patient could receive more support during his therapy from the nurse who had constant contact with him. She also felt that "only nurses benefit from specialized nurses because they save them time." One (16.5%) did not answer the question. (See Table 11)

Ten (100%) of the respondents answering the second part of the questionnaire checked the affirmative statement that the techniques of parenteral therapy could be carried out with less discomfort to the patient with the use of a specialized I.V. nurse. (See Table I) Comments included: This was the greatest asset of a specialized I.V. nurse; rarely had to attempt the procedure more than once; fewer incidents of fluid infiltration into tissue; skillful in diminishing pain for patients. One stated she felt this was true only because of the frequency with which the I.V. nurse performed the procedure. Another commented that she was not sure that the I.V. nurse could actually perform the procedure with less discomfort to the patient, but that the I.V. nurse's confidence relieved much patient anxiety regarding the procedure.

Eight (93.8%) checked the affirmative statement that they
**TABLE II**

REPRESENTATION OF RESPONSES
RELATING TO HYPOTHESIS FOUR

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
<th>NO ANSWER</th>
</tr>
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<tbody>
<tr>
<td>If you have never worked with a</td>
<td>67%</td>
<td>16.5%</td>
<td>16.5%</td>
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<tr>
<td>specialized I.V. nurse, do you be-</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>lieve the patient would benefit with</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>her services?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The patient benefits from the I.V.</td>
<td>93.8%</td>
<td>6.2%</td>
<td></td>
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<tr>
<td>nurse's services. (Answered by</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>those having worked with a special-</td>
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<td></td>
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<td>ized I.V. nurse)</td>
<td></td>
<td></td>
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<tr>
<td>Hypothesis Four:</td>
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<td></td>
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<tr>
<td>The patient benefits from the I.V.</td>
<td></td>
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<td>nurse's available services.</td>
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N=16
believed the specialized I.V. nurse’s services added to hospital efficiency. Their comments included: Non-specialized nurse takes more time in executing the mechanics of the procedure; the I.V.’s were started more on a planned schedule thus enabling the bedside nurse to plan her day accordingly; starting the I.V.’s made the doctors happier; using the specialized nurse relieved other nurses of the duty and gave them more time for "other things;" relieved other nurses so they had more time to "do the many other things they had to do, including spending more time talking to their patients." One commented that the I.V. nurse’s services generally added to hospital efficiency, but that occasionally the procedure would have been done without the floor nurses being aware of it and they were not able to watch for stoppage or infiltration. Another qualified the statement by saying that the specialized nurse added to hospital efficiency in a large hospital only, but that in a small hospital it would be "a waste of time."

One (6.2%) felt that hospital efficiency was not increased through the use of the I.V. nurse because they were often busy and unable to start the I.V.’s when requested and that caused other nursing procedures and floor routines to be upset. (See Table III)

Nine (93.8%) checked the statement that the specialized I.V. nurse appeared more efficient than the non-specialized nurse in carrying out the procedure. Comments under this statement included that she appeared more efficient than most nurses, but that there were non-specialized nurses who were also quite capable in this area.
**TABLE III**

REPRESENTATION OF RESPONSES RELATING TO HYPOTHESIS THREE

<table>
<thead>
<tr>
<th>Statement</th>
<th>YES</th>
<th>NO</th>
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<tbody>
<tr>
<td>The I.V. nurse's services add to hospital</td>
<td>93.8%</td>
<td>6.2%</td>
</tr>
<tr>
<td>efficiency.</td>
<td></td>
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<td>Hypothesis Three:</td>
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<tr>
<td>The I.V. nurse adds to hospital efficiency.</td>
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N=16
Several attributed this efficiency to her experience. One stated that in many cases there was no comparison as many non-specialized nurses were young graduates, graduates of schools of nursing in foreign countries, or graduates of schools where the procedure was not taught. Another commented that the I.V. nurse seldom forgot any necessary equipment. (See Table I)

One (6.2%) of the respondents did not check either statement in the last two pairs of statements in part two. These were therefore not included in the final analysis.

Nine (93.8%) of the respondents checked the statement saying that the patient benefited from the I.V. nurse's available services. One qualified the statement by saying that the wait for the services might outweigh the positive advantage of lessening pain for the patient. Another commented that the I.V. nurse had more time to observe I.V.'s to see that they were running properly. Another stated that the I.V. nurse relieved the floor nurses of time that they could better use in fulfilling other patient wants and needs. (See Table II)
SUMMARY OF STUDY

This study proposed to examine opinions of registered nurses toward the professional abilities of the specialized I.V. nurse. One factor which helped identify this problem was the fact that a survey of available literature revealed very little information about the use of the specialized I.V. nurse, particularly about how members of the health team, particularly the non-specialized nurse, view the use of a specialized nurse.

It was hypothesized that the sample selected for participation in the study would favorably view the use of the specialized I.V. nurse, that they believed the I.V. nurse could perform the mechanics of venipuncture and could secure the equipment used in the procedure more effectively than the non-specialized nurse, that she added to hospital efficiency, and that the patient was benefited by her services.

The survey method was selected for collection of the data with the questionnaire as the tool of choice. Questionnaires which consisted of open-end and positive-negative response questions were mailed to twenty registered nurses. These nurses constituted the groups of student nurses which entered Billings Deaconess Hospital and Montana Deaconess Hospital, both units of Montana State College School of Nursing, to receive their basic clinical experience in September, 1955. One reason for selection of these groups was because they had graduate nurse status for a long enough period of time.
so they had ample opportunity for nursing experience beyond their clinical experience as student nurses. The other reason these groups were selected was because a portion of them had had experience with the specialized I.V. nurse during their basic clinical experience. After a period of one month there was 80% return of completed questionnaires which were used in the analysis.

Analysis of the data revealed that one-half the total number of respondents had contact with the specialized I.V. nurse in their basic clinical experience. Since graduation less than half of the total number of respondents had contact with a specialized nurse. A majority of the group which had never worked with the specialized nurse felt that the patient would benefit from the use of the I.V. nurse. Somewhat more than eighty per cent of the respondents who had worked with the specialized nurse believed that she had skills beyond the non-specialized nurse, that she was able to decrease patient discomfort, that her services added to hospital efficiency, that she was more efficient than the non-specialized nurse in carrying out techniques of I.V. therapy, and that the patient benefited from her services.

A. Conclusions

1. The non-specialized nurse in the sample views with value the use of a specialized intravenous nurse. She believes this value is to herself as a non-specialized nurse, to physicians, and to patients.

   a. The value of the specialized intravenous nurse is dependent upon the size of the institution in which she is employed.
with her value decreasing as hospital size is decreased.

b. The value of the specialized intravenous nurse is dependent upon the philosophy of patient care employed in the institution with the value decreasing with the use of the case method and team method of patient care.

2. The specific skills which the sample attributed to the specialized I.V. nurse to make her most useful were believed to be due to the frequency with which the specialized intravenous nurse was able to perform these skills in her particular area.

3. The I.V. nurse adds to hospital efficiency because of the rapidity with which she can perform the procedure and because she relieves the non-specialized nurse of this function so she may have more "time for other things."

4. The patient benefits from the use of an I.V. nurse primarily because of the lessening of discomfort from the performance of the procedure and because she instills confidence in the patient.

B. Recommendations for further study

Recommendations for further study in the light of analysis of the data received from this study were:

1. A study to determine patients' opinions of the usefulness of the specialized I.V. nurse.

2. A time and motion study of a non-specialized nurse and the specialized I.V. nurse in the performance of venipuncture procedures.

3. Determination of physician's opinions of the use of a spec-
ialized registered nurse in the area of intravenous therapy.

4. Further study and clarification of legality of venipuncture in Montana.
APPENDIX
Dear

As you may know, I am currently engaged in further study in nursing at Montana State College. As part of the requirements, I am working on a project dealing with feelings of registered nurses toward a specialized type of nurse—namely the intravenous nurse (I.V. nurse) as she is commonly called. By this, I mean the registered nurse whose duty is to begin parenteral fluid therapy as prescribed by the physician.

To discover how nurses feel toward the services of this specialized nurse I need your help. I am enclosing a questionnaire I would appreciate your completing within three days and returning to me. Instructions for the questionnaire are on the questionnaire itself. I have enclosed a self-addressed stamped envelope for your reply. It is not necessary that you sign your name on the questionnaire, but if you wish to do so your name will not be used in the report.

It is only through your help that I will be able to complete the project. I greatly appreciate your assistance. Thank you so much.

Sincerely,

Jo Ann Phillips

JAP/blh
Enc.

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

Anna Pearl Sherrick, R.N., Ed.D.
Director, School of Nursing
QUESTIONNAIRE

1. Was there a specialized intravenous (I.V.) nurse, or nurses, in the hospital in which you received your basic clinical experience? Yes____ No____
Comment:

2. If so, what feelings had you about her professional abilities and value?

3. Have you done hospital nursing since graduation? Yes____ No____

4. If so, was there a specialized I.V. nurse, or nurses, employed in any of these hospitals? Yes____ No____
Comment:

5. What feelings have you regarding her professional abilities and value?

6. Do you believe the specialized I.V. nurse possesses certain skills beyond the non-specialized nurse? Yes____ No____ If so, what are these skills?

7. If you have never worked with a specialized I.V. nurse, do you think the patient would benefit from her services? Yes____ No____
Comment:

The following statements are to be answered by those having worked with the specialized I.V. nurse. Please check one statement in each of the following pairs of statements which in your opinion applies to the specialized I.V. nurse. Any additional comments you wish to make will be greatly appreciated.
1. **a.** Could carry out the techniques of the parenteral therapy with less discomfort to the patient than could the non-specialized registered nurse.
   **Comment:**

   **b.** Patient discomfort due to techniques of the procedure was not decreased by the I.V. nurse.
   **Comment:**

2. **a.** Her services added to hospital efficiency.
   **Comment:**

   **b.** Hospital efficiency was not increased through the use of an I.V. nurse.
   **Comment:**

3. **a.** Appeared more efficient than the non-specialized registered nurse in carrying out the procedure.
   **Comment:**

   **b.** No more efficient than the non-specialized registered nurse in carrying out the procedure.
   **Comment:**

4. **a.** The patient is benefited from her available services.
   **Comment:**

   **b.** The patient does not necessarily benefit from her services.
   **Comment:**
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Small Hospital Questions," Modern Hospital, April, 1957, p. 47.

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