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A study to identify the problems encountered by students in giving injections to children.

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Boston University
A STUDY TO IDENTIFY THE PROBLEMS ENCOUNTERED
BY STUDENTS IN GIVING INJECTIONS TO CHILDREN

By

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CHAPTER I
INTRODUCTION

Since the beginning of educational programs in nursing there has been a gradual increase in the number and complexity of learning experiences provided for students. Therefore it seems that there should be a proportionate increase in problems encountered by students. In addition to the probable increase in problem situations many students are now spending less time in the clinical area. Collegiate programs in particular have reduced the number of hours allotted to the clinical laboratory experience, consequently, it would seem that the student may find it necessary to adjust to increasingly complex situations in fewer hours of clinical practice than her counterpart of previous years. It is desirable that instructors who are responsible for guiding the learning activities of nursing students be able to anticipate areas which may present problems to students. Experts from the fields of psychology, education, and guidance have helped us to become increasingly aware of the effect of problem situations on the student's learning and development. The detection of problem situations which may inhibit the learning process is a responsibility of all persons concerned with the education of nursing students.

The aim of this study is twofold: (1) to identify the
problems recognized by students in giving injections to children, and (2) to increase the nursing instructor's knowledge of these problems with the hope that awareness of these problems will permit the instructors to be of greater help to the students.

I. THE PROBLEM

Statement of the problem. This study is an attempt to elicit from nursing students problems which they have experienced when giving injections to children in a pediatric unit.

Justification of the problem. As a result of changes in the nursing curriculum students are being offered the experience in nursing of children earlier in their program. In some schools, students are beginning the clinical portion of their program in the area of Maternal and Child Nursing. As a result of this kind of curriculum change, proportionate changes in problems may evolve. If the establishment of child-nurse relationships is a major objective in the nursing of children, then it seems that this is the area in which to begin with the identification of problems. Realizing that there are many situations in which problems might be identified, the writer has focused on the giving of injections for two reasons: (1) this is a situation which causes pain to the child, and (2) the child is not always able to understand
the reason for the pain. In her recent play interviews with four year old hospitalized children Erickson concluded that children interpreted the hypodermic syringe as an instrument of punishment or violence. Assuming this to be true, the writer felt that there was justification in a study which aimed to identify related problems in the student who inflicts this "punishment." Because it is the responsibility of the instructor to plan learning experiences there is a need for her to be cognizant of the problems which a student encounters.

II. SCOPE OF THE STUDY

The participating group was composed of thirteen nursing students from one basic collegiate program who were currently in the nursing of children portion of their Maternal and Child Nursing experience. These students had an eight week experience in one pediatric hospital which was a part of a medical center in a large Eastern city.

III. LIMITATIONS OF THE STUDY

The recognized limitations of this study were as follows:

1. The problems were identified on the basis of a limited sample of students.

2. The study did not identify problems unrecognized by the students.

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3. There was a variation in the number of weeks' experience of the students when interviewed and it was possible that there was a relationship between length of experience and difficulties encountered. However, this relationship was not examined.

IV. DEFINITION OF TERMS

A problem is the occurrence of a felt difficulty.²

V. PREVIEW OF METHODOLOGY

The method used to investigate the problem involved the following activities:

1. Formulation of an interview guide to identify problems.
2. Interview of students.

VI. SEQUENCE OF PRESENTATION

The remainder of the study is divided into the following chapters:

Chapter II - presents a review of the literature, bases of hypothesis, statement of hypothesis.

Chapter III - explains the methodology of the study and procurement of data.

Chapter IV - includes the presentation and discussion of data.

Chapter V - contains the summary, conclusions and recommendations.

The appendix contains a history of actual statements of the students during the interview.
CHAPTER II
THEORETICAL FRAMEWORK OF THE STUDY

I. REVIEW OF LITERATURE

In recent years those engaged in nursing and other related disciplines have become increasingly aware of the emotional implications of illness. In relation to the sick child many of the emotional components of illness may be attributed to maternal deprivation. This subject has been explored in the literature as an attempt to gain increased understanding of behavior patterns.

In reviewing the literature relevant to the problem with which this study is concerned, the writer focused on two types of individuals at different age levels - the patient who is a young child, and the nurse, who is a late adolescent. These two age levels were studied in relation to: (1) the response of the child to pain and, (2) the reaction of the student when, of necessity, she must perform a procedure which involves pain for the child.

Some of the most recent and valuable information about children's reactions to pain has been obtained through play interviews with children. Erickson, in observing the play of twenty-two children found their terminology indicated that the hypodermic syringe was interpreted by them as an instrument of punishment or violence. "They equated it with a gun, used
it like a knife, a dagger, and a bomb. It was described as a shot, a pin, a pincher, hurt thing, a needle and a sticker.\textsuperscript{3}

One way of understanding the response of the child to pain associated with injections is to try to visualize the procedure from the recipient's point of view. Imagine seeing for the first time a number twenty needle on a syringe intended just for you. To the child, with his limited perspective of the size of objects, that syringe may be as large as the nurse's hand! For this reason Frank asks, "How can we possibly explain to a child that that needle and syringe are essential to his well being?"\textsuperscript{4} Explanations can be ineffective, even to a school-age child, despite the fact that they may be made by a person whom the child knows. The young child is unable to distinguish between the suffering he feels as a result of his illness and that which has been necessarily imposed on him for therapeutic reasons. The anxiety which has been attributed to painful procedures is but one factor in the complex pediatric nurse-patient relationship.

\textsuperscript{3}Florence H. Erickson, \textit{Play Interviews for Four-Year Old Hospitalized Children} (Lafayette: Child Development Publications, 1958), pp. 21-64.

Few adults who have adequate innervation will deny that intramuscular injections are painful and therefore must be frightening to the vast majority of children. In their discussion of intramuscular injections Benz, Blake, and Wallinger, agree that a lowered pain and fear threshold may account for much of the trauma the child experiences. Jessner and Kaplan, and Freud also found that children's reactions are many times out of all proportion to the pain of procedures. This calls for empathy on the part of the nurse so that she can adapt her manner to the child's needs. This could also be the basis for the belief of many nurse educators that whenever possible the nurse should herself experience the procedures so that she may answer the child's question, "will it hurt?"

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Toddlers and pre-school children have the greatest difficulty in accepting the trauma accompanying intramuscular medicinal therapy. Characteristically, the pre-school period includes more numerous and pronounced fears, which are difficult for the child to handle. It is impossible for the child to understand the reason for pain associated with intramuscular therapy at this age level.

One of the factors related to the child's discomfort which is still being investigated is maternal deprivation. Robertson explains this concept in relation to age level. It is assumed that the pre-school child does not reason; he feels and he needs, and the mother he needs so intensely, the mother who should respond to his cries, is not with him. This causes the child to be angry toward those who, in his opinion, have let him down. This anger and fear of abandonment may be further complicated by the fact that many children have been threatened with hospitalization and the accompanying discomforts as punishment for misbehavior at home. The consequences to the hospitalized child and those responsible to his care are all too familiar.


11 Ibid.

The reactions of anger, crying, and aggression which the young child demonstrates when threatened with bodily pain are not only normal but also a necessary outlet. Bowlby,\(^{13}\) points out that the inexperienced nurse may welcome the passive child who considers one adult as good as another and criticize the spoiled child who reacts violently. All evidence suggests that the violent reaction is more normal, and the apathetic resignation a sign of pathological development.\(^{14}\)

In addition to considering the reaction of children to painful procedures, consideration was given to how nursing students feel about being responsible for inflicting pain upon children who are too young to understand the reason for the inflicted pain. First, the student is a human being with limitations as well as strengths. In spite of her limitations she must frequently cope with frightened, angry, and grief-stricken children. She naturally reacts to a child’s temper tantrum or his feeling of aggression or hate. It is equally natural for her anxiety to gain momentum when she is faced with a panic-stricken child. Both Benz\(^{15}\) and Blake\(^{16}\)


\(^{14}\)Ibid p. 24.


refer to psychological problems encountered by nursing students as possible causes for their ineffectiveness in coping with the behavior of young children and establishing rapport with them. Students of nursing require continual guidance and assistance during their nursing program because they are in the process of growth; and they, too, have emotional and social needs. The nursing student will not find it easy to give assistance when her own needs have not been met.\(^\text{17}\) The student, says Heidgerken, "brings with her to the school her own inner life, her feelings and her difficulties."\(^\text{18}\)

Because the nursing student often falls in the category of late adolescence, research which has been done on this level of development was reviewed in order to better understand her difficulties. In his work with late adolescence, Gesell,\(^\text{19}\) found that many who verbalized said that if they had difficulty, they "tried not to show it" or they "suffered in silence." This raises the question of whether the student who is unable to verbalize feelings about inflicting "punishment" upon a child might also be "suffering in silence."

\(^{17}\)Ibid p. 208.


\(^{19}\)Arnold Gesell, Youth, the Years from Ten to Sixteen (New York: Harper & Bros., 1956), p. 340.
Because the student is not too far removed from her own childhood, there is a possibility that she may be identifying with her own childhood experiences or the residual child in her which has been surfaced by anxiety provoking situations. Godbout and Petrick, as a result of their interviews with students during their experience with emotionally disturbed children found similar identification. A frequent response was, "these emotionally disturbed children bring out the child in me, and I don't like the child I see in myself."²⁰

The nursing student characteristically enters the school embued with enthusiasm. She usually likes people and is eager to learn how to care for them. She has a sincere desire to help, but not to hurt. Brown,²¹ explains that the initial hospital experience of the student will be more satisfying if she knows that she is able to do the learning task assigned and is not harming the patient in the process.

Young women in schools of nursing have goals which may be conflicting at times. Gordon, Densford, and Williamson²²

describe this conflict by explaining that some students have not yet rationalized and emotionally accepted the stresses and strains which sometimes come to those who begin career training early in life. This situation may be further complicated when the student realizes that the same instincts and desires to help people which may have originally motivated her to study nursing become a source of anxiety when nursing care includes painful procedures.

One should give consideration to how the fears of hospitalized children and the anxieties of nursing students affect the nurse-patient relationship. How the nurse feels toward the child is directly related to her success or failure in meeting his needs. Peplau,\textsuperscript{23} concludes that the infant feels what others feel as they relate to him. If the students' attitudes reward the child's crying and if they communicate that they share in his satisfaction, the child knows and is relieved. On the other hand anxiety is likewise communicated. He knows equally well when others do not share his satisfaction.

Cognizant of the fact that the nurse has been associated with procedures which parents and professional people consider

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the most traumatizing aspect of hospital experience for children, it would not be surprising to find the nursing student expressing "felt difficulty."

II. BASES OF HYPOTHESIS

The following factors which contribute to the hypothesis of this study are derived from the review of the literature, and the writer's personal experience: (1) children respond to pain according to their level of development and understanding, (2) nursing students are late adolescents with needs corresponding to that age group and, (3) the nature of the nursing student and the reaction of the young child to pain arouses sufficient anxiety to make the nurse-patient relationship difficult.

III. STATEMENT OF HYPOTHESIS

Students of nursing do encounter problems in administering injections to children.

CHAPTER III
METHODOLOGY

This study is based upon two questions, namely:

(1) Do students of nursing have problems in giving injections to hospitalized children?

(2) If so, can these problems be identified?

Since this study concerned one of the experiences encountered by nursing students in their work with children, students currently in the Maternal and Child Nursing portion of their program were selected as the study group.

A personal interview was the technique selected for collecting the data. This decision was based on the writer's belief that a personal interview would give each student an opportunity to express verbally the problems she had encountered in giving injections to children. The interview was planned to include kinds of problems noted in the review of the literature, and the kinds of problems the writer had personally identified in her experience in assisting students with giving injections.

I. SELECTION OF THE NURSING STUDENTS

The participating group was composed entirely of students from one basic collegiate program which is part of a New England University. The concurrent theory and practice for
these students is provided in a pediatric hospital which is part of a medical center in a large Eastern city. During this eight week experience the students spend ten hours a week on the wards. Thirteen students participated in the study. Of these thirteen, seven were interviewed during the last two weeks of their experience, and six were interviewed one month following the completion of the experience. The time available for the study did not permit all of the students to be interviewed at the same stage of their experience. All thirteen students were in the third year of their four year nursing program. Seven of these students had had clinical experience in Maternity Nursing and all had previous Medical and Surgical Nursing experience.

II. THE INTERVIEW PLAN

On the basis of the review of related literature, discussion with other pediatric nursing instructors, and the writer's personal experience in observing students, eight possible problem areas were selected to be explored with each student. The following questions were raised in regard to these problem areas:

(1) How did the student feel about giving injections to children?

(2) Were her feelings in relation to injections typical of the way she felt about other procedures which involved pain for the child?

(3) Did the age of the child affect her feelings?
(4) Did the type of illness of the child influence her feelings?

(5) Did she feel at ease when performing the procedure?

(6) Was sufficient time available for satisfactory performance of the procedure?

(7) Was her technical skill related to her feelings about this procedure?

(8) Did this experience affect her subsequent relationships with the child?

The first encounter with the student was made by telephone to orient her to the problem and to arrange for the writer to interview the student on the campus of the school. It was explained that the interview required approximately one-half hour and would be concerned with the student's experience in giving injections to children. The writer identified herself by name and as a graduate student in the Maternal and Child Nursing program.

Although the interview was somewhat structured, the students were free to discuss any problems they felt related to giving injections. Effort was made by the interviewer to keep the interview as permissive and non-directive as possible. Though interview content was recorded during the interview, the writer did not observe any inhibitory influence on the student's ability to verbalize feelings. In many instances, the students spontaneously related their opinions, while at other times it was necessary to use a more direct approach.
The nursing students' interest in the problem and their capacity for empathy was evident from the kind of cooperation the writer received from them. There was not one refusal or broken appointment from the entire group. When thanked for their contribution to the study, they replied, "I know how I would feel if I were doing the study."
CHAPTER IV
PRESENTATION AND DISCUSSION OF DATA

The responses to the questions asked of students during a personal interview are presented as the findings of the study. The problems expressed will be discussed in order of frequency and under the same general categories that were explored. The interviews for the collection of data were arranged by telephone. Students were informed that the interview would be concerned with their feelings about giving injections to children. During the interview students reacted spontaneously when questioned as to how they felt about giving injections to children. Whether this spontaneity was due to the fact that students were informed of the nature of the interview is uncertain. If the students were reluctant to express their feelings, it was not apparent to the interviewer.

Question I. "How do you feel about giving injections to children?"

Of the thirteen students interviewed ten expressed that they had difficulty giving injections to children. The three students who stated that they did not have difficulty had each given "very few" injections during their Maternal and Child Nursing experience. One student had given a total of five injections to infants under five months of age; the second had given two injections during her experience - one
to a newborn baby and another to an infant nineteen months of age - and the third student had not given an injection to any patient beyond three years of age.

Further comments of these same three students were that they did not find it any more difficult to give injections to children than to adults, and that they had not encountered a situation where the child was frightened because of the injection. It is interesting to note that none of these students had given an injection to a toddler, which is the age group where other students had encountered the most difficulty. One student stated her reason for not experiencing difficulty was that since early childhood it has been necessary for her to receive hay fever injections every two weeks and that she had not "minded" the injections. She assumed that the feelings of pediatric patients would be similar to her own. A second student appeared to digress from her own feelings by informing the interviewer of a painless method of giving injections. Though this student denied difficulty, one could wonder whether this digression was possibly an attempt to prevent exposure of unrecognized difficulty.

Seven students associated personal experience with the difficulty they felt regarding injections, indicating that identification with the patient was a factor. These students explained that they now have feelings of fear which resemble
their childhood fear of needles. One student said "as a child I had to get them every week, and didn't like it. I must project this on the child." The ten students who expressed difficulty explained that they knew injections were painful and consequently hurt the child. Nine of these students did not want to be associated personally with hurting a child.

Though the students understood that injections were a necessary factor in the treatment and recovery of some children, they could not dissociate the fact that they are painful procedures. The fact that the child cannot understand the reason for the pain makes it more difficult for the student. Such responses as, "They are small and helpless, and I feel as if I am taking advantage of them," tended to indicate feelings of guilt.

Four other students indicated that their difficulty was based on the conflict between their original motivation for entering nursing to help people and the subsequent realization that they must sometimes "hurt to help." "I like pediatrics and I like children but I hate to hurt them."

Question Two: "Is this typical of the way you feel about other kinds of care which involve pain for the child?"

Ten students found their response to giving injections typical of the way they felt about other kinds of care which involved pain for the child. Typical comments were:
"I don't like any procedure which is painful for the child." and

"He doesn't understand the reason for any hurt."

Though one student expressed her reaction to giving injections as typical of other care involving pain she found the task of injections most difficult. She explained this on the basis of personal experience with needles and felt that she identified with the child. Another student stated that this procedure gave her more trouble than dressings or tearing tape. The one student mentioned previously who had personal experience over a period of years with injections and who had stated that "needles don't bother me," considered some dressing changes more painful to the child. Another student who did not consider her reaction typical stated that she thought the child had a lower pain threshold for injections than other kinds of pain.

The response to this question reinforced the findings regarding identification with the patient for here again three students repeated that they did not want to be personally associated with pain in a child too young to understand. Other students repeated that their difficulty was related to the fact that the child did not understand the reason for being hurt and the only reason they were able to give for justifying pain was the fact that it prevented greater pain.

The reaction of the student to the crying child was a factor which, though not intentionally explored, was elicited
in response to the second question. Eight of the students explained that the difficulty they experienced with injections was typical of any procedure which caused the child to cry. They did not want to be associated personally with any procedure which caused the child to cry. These eight students had already stated in reply to the first question that they did not want to be associated with pain. One student distinguished between crying before, and crying after the injection. This student found it easier to have the child cry after the injections because then she felt she could do something about it. She found it more difficult to comfort the child upon whom she would be inflicting pain momentarily.

Question Three: "Do you think the amount of technical skill you have acquired is related to the way you feel about the procedure?"

Ten of the thirteen students interviewed expressed a relationship between technical skill and the way they felt about injections. Four of these ten considered themselves skilled in giving injections although three of the group expressed that they had limited experience. One student had not given an injection to any child over two years of age. Another student had not given injections to patients beyond three years of age. Two students attributed their skill in administering injections to the practice they received during their experience in Medical-Surgical Nursing. Because the number of students who expressed they had difficulty was greater than the number stating that they lacked skill the
writer feel that technical skill does not insure satisfaction for the nurse. The psychological factor of being associated personally with the procedure seems equally significant to the nursing student. Following are the comments made by students who did not consider themselves skilled in administering injections:

"Skill comes with practice. It should be easier after we have done more."

"I don't feel skilled even though I have given more than I can count."

"Even though I found it difficult to give injections I don't think I would have been able to try if I hadn't had some practice in Medical-Surgical Nursing."

The responses to this question compared with the experience of the students seem to indicate that the more experience students have, the more cognizant they become of a need for improved technical skill. The students with the most experience expressed the greatest recognition of a need for more practice with injections as a means of attaining the desired technical skill.

An additional finding indicates that students feel they should have Medical-Surgical Nursing experience with adults before their experience with children. Ten students stated it was desirable then that Medical-Surgical Nursing experience precede pediatrics. The following comments are typical of the reactions of these ten students:

"Practice in Medical-Surgical Nursing helped."
"You should give injections to adults first. It would be hard to start with a child. Not that I enjoy giving them to adults but it is easier."

These ten students felt the experience in Medical-Surgical Nursing would enable them to improve their technical skill in giving injections to adult patients who can "understand the reason for the pain."

Responses to this question also showed that students want to have the instructor with them the first few times they give an injection to a child. Ten of the thirteen students interviewed expressed a desire to have the instructor with them. These students appreciated the fact that the instructor told them what reaction they could expect from the child. They found that having the instructor with them the first few times reassured them that they were performing the procedure satisfactorily and reinforced their confidence:

"To have someone with you in case you need them gives you confidence."

"I need help the first few times to reassure me I am doing right."

The students felt that the instructor would be better able to understand the problems they discussed with her if she accompanied them during their initial experiences with injections.

The fact that nine of the ten students who wanted the instructor to accompany them had previously stated they did not want to be personally associated with pain caused the writer to question whether these students wanted another adult with them in order to share the associated pain. Is it
possible that these students who ask for technical assistance may be unconsciously asking for someone to share the blame?

Question Four: "Did this experience affect your subsequent relationships with the child?"

Nine of the thirteen students interviewed felt that giving injections affected subsequent relationships with the child. Of these nine students, five felt that subsequent relationships with the child could be enhanced or hindered by the time they spent with the child and the manner in which they comforted the child after the injection. Typical comments were:

"I try to make other pleasant and satisfying contacts with the child so that he can associate me with pleasure as well as pain."

"They aren't as friendly toward me afterward. They are hostile toward me and yell. I sort of feel like I have lost a friend who no longer trusts me."

"I'm always afraid the child will resent me, hate me or not like me. This is human. You need to have them like you to cooperate."

Throughout the interviews the writer noted the students' predominant need to be accepted by the child. The above comments seem to illustrate a fear of being rejected by the child and to indicate their need to be accepted by the patient for personal satisfaction and the continued assurance of the child's cooperation. The fact that these nine students represent the same group who did not want to be associated personally with pain may indicate the reason for their previous response.
All of these students felt a need to repair the damage but felt that the relationship could not always be re-established. One student used the word "alone" in describing this need for repairing damage. These students felt they had violated the child's trust and had given him reason to reject them.

The four students who replied that this experience did not affect subsequent relationships with the child gave the following two reasons:

"They forget quickly and we do good things for them too."

"He knows you have hurt him, yet he looks to you for support. I think I can be the same person, to hurt, yet give support."

Question Five: "Did the age of the child affect your feelings?"

Seven of the thirteen students felt that the age of the child influenced the way they felt about giving injections. Of these seven, for whom age was a factor four had had experience giving injections to toddlers and considered this age level the most difficult. The experiences of the other three were limited to infants. However, they anticipated that it would be more difficult to give an injection to a toddler because a toddler "just hurts and doesn't know why."

Of the six students for whom age was not a factor, four of them stated that their experiences were limited to caring for infants. Typical replies to this question were:

"I don't like to give them to anybody. I am not affected by the age, just the fact that it is a child."
"A little baby doesn't know what it is all about. At five or six you may be able to reason with them a little better."

"I have only given them to small infants and adults. I am glad I didn't have to give them to toddlers."

The findings related to this question are consistent with the reasons given for difficulty expressed in answer to question number one. In explaining their difficulties with injections, in answer to question number one, a frequent cause was the fact that the child did not understand the reason for associated pain. Therefore, it is not surprising to find the greatest difficulty expressed with the toddler and pre-school age level in which depth of understanding is limited. Because the comprehension level of pre-school age groups is limited, the students' fear of being personally associated with the pain may be increased. The writer recognizes that the findings related to this question cannot be generalized because the experience of eight of the thirteen students interviewed were limited to the care of infants.

Question Six: "Did the type of illness of the child influence your feeling?"

Seven of the thirteen students stated that the type of illness of the child influenced their feeling about injections. Six of these found it difficult to hurt a little baby already in pain with a "prolonged" or terminal illness. The other student was influenced by the fact that she had cared for a child with whooping cough who "stopped breathing" after injections.

Of the six students who did not consider the type of
illness a factor, three stated that they simply were not influenced by the type of illness. Two students said the reason their feelings were not affected by the child's illness was their realization that the injection is ordered to ease pain. One student stated that she had never taken care of a very sick child or one with a terminal illness. The experiences of these two students seem to support the findings that students find it easier to give injections in situations where they can see immediate beneficial results.

Comments pertaining to the type of illness were as follows:

"It is harder to hurt a little baby already in pain, than one who is well. Something like a polio injection should be easier."

"If he were real sick, I would hate to add one more thing to upset him."

"A child who had whooping cough scared me. I would give him an injection, he would cry, then whoop and eventually stop breathing."

The above comments reinforce the previous findings that students identify with sick children. They express empathy for the child who is already in pain and do not want to add to the suffering of a child with a terminal illness. This is illustrated by the statements that they would find it less difficult to give a polio injection to a well child even though this injection would be equally painful.

Question Seven: "Are you comfortable in giving injections?"

Seven of the thirteen students interviewed stated that they were comfortable in giving injections. This group of seven includes the three students who expressed they did not
have difficulty in response to question one. Some of their reasons were:

"Yes I feel confident because I know I give a good one, all I can do is pick them up and say I'm sorry."

"I have had to have shots every two weeks all my life and have never been afraid of them myself. It doesn't bother me to have a baby cry, they stop so fast when I pick them up."

"I am comfortable to the extent that it has to be done."

Two students stated that they were comfortable in giving injections "except for the crying." Both students felt that even though the crying was due to momentary discomfort which the child soon forgot, they did not like to hear him cry. In spite of this neither student would say that she felt uncomfortable.

There appears to be a contradiction between the responses of the students in answer to questions one and seven. Though ten students expressed difficulty in giving injections, only six of these students stated that they were uncomfortable. Two of these students stated that they were comfortable with the procedure because they felt technically skilled but their difficulty was being personally associated with the pain. The remaining two students expressed worry but explained they could not be uncomfortable because this would make the child uncomfortable. The responses of these two students could indicate a need to be at ease in order to make the child feel at ease.

The expressed discomfort of the remaining six students was attributed to essentially three causes; lack of experience,
fear of hurting the child, and the fact that the child was crying and "scared."

In answer to the question, "Why are you uncomfortable?", the students gave the following responses:

"We haven't given enough to be confident or comfortable."

"If the child isn't moving around, I'm afraid I won't do it right and the child will be hurt even more."

"I am uncomfortable because I don't like to hear a child cry."

The responses to this question support the findings that students do not wish to be personally associated with the child who is in pain or crying. Assuming this to be true the student could be expected to be uncomfortable with the crying child.

The discomfort expressed by four students is consistent with the lack of technical skill which they recognized in answer to question three.

Question Eight: "Do you have enough time?"

Time was not a problem factor for any of the thirteen students. All students agreed that their assignments were planned to allow sufficient time to give any injection. The general consensus of opinion was that with the two or three patients generally assigned to them, they had the time available or would "take the time." There was unanimous agreement that:

"We are not rushed because we don't have that many patients. I usually try to take time and consider if this were my child, how much time would I want the nurse to take?"

The writer recognizes that this finding cannot be generalized because the time available to the participating group may not
be consistent with time available to students in other programs.

The problem areas discussed in Chapter IV are illustrated, in order of frequency, in the table on the following page.
## Problem Areas Elicited From Nursing Students in Order of Frequency

<table>
<thead>
<tr>
<th>Problem Areas</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulty in giving injections to children</td>
<td></td>
</tr>
<tr>
<td>Feelings in relation to injections were typical of the way she felt about procedures involving pain for the child</td>
<td></td>
</tr>
<tr>
<td>Technical skill was related to the student's feelings about the procedure</td>
<td></td>
</tr>
<tr>
<td>Giving injections affected the subsequent relationship with the child</td>
<td></td>
</tr>
<tr>
<td>The age of the child affected the student's feelings</td>
<td></td>
</tr>
<tr>
<td>The type of illness of the child influenced the student's feelings</td>
<td></td>
</tr>
<tr>
<td>The student felt comfortable when administering injections</td>
<td></td>
</tr>
<tr>
<td>Time was a factor for satisfactory performance of the procedure</td>
<td></td>
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</tbody>
</table>
CHAPTER V
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

I. SUMMARY

Increasingly complex nursing situations have focused attention on the need to help students of nursing meet the accompanying problems. Much of the nursing student’s future effectiveness, and personal satisfaction in nursing situations will be dependent upon her ability to identify and solve problems. It is likewise important for nursing instructors to be cognizant of problems which students encounter in order that they may be of greater assistance in guiding students in problem solving situations. A review of the literature was found to support the hypothesis that students do encounter problems in giving injections to children. This study sought to: (1) identify the problems felt by students in giving injections to children, and (2) increase the nursing instructor’s knowledge of these problems with the hope that awareness of these problems will permit the instructors to be of greater help to the students.

The problem was studied in one pediatric hospital in the New England area. Thirteen students from one collegiate nursing program participated in the study. The data were collected by interviewing each of the students. An analysis of the data revealed that students do encounter problems in giving injections to children.
II. CONCLUSIONS

The following conclusions have been reached as a result of analysis of the data:

1. Students encountered difficulty in giving injections to children. They realized that injections were painful to children and that the child was not always able to understand the reason for the pain.

2. Increased technical skill was a recognized need for approximately one-half of those interviewed. They agreed that the more practice a person had in giving injections, the more skilled she became. Though they associated difficulty with the procedure, they felt this difficulty was reduced in direct proportion to increased experience.

3. Students did not want to be associated personally with painful procedures. They felt that there was a danger of jeopardizing subsequent relationships with the child if he associated the painful injections with them personally. They agreed that they would not want to be permanently assigned to or associated with injections.

4. Toddlers and pre-school children present the greatest difficulty to nursing students giving injections. Those students who did not express difficulty with toddlers also stated that they had not given injections to children in this age group. They recognized and accepted the emotional reactions of this age group but lacked confidence in their own ability to support and reassure the child. They felt that the com-
prehension level of this age group prevented them from explaining and comforting the child to the extent that they desired.

5. Nursing students recalled their present or childhood reactions to injections in identifying with the feelings of the child. The data clearly indicated the capacity of the students to put themselves in the place of the recipient and share his feeling.

6. Students want to have the instructor accompany them during injections until they feel comfortable with the procedure. Though they did not desire direct assistance from the instructor, it was reassuring to have her nearby.

7. Time was not associated with difficulty expressed by any of the students who were interviewed. All agreed that they had sufficient time to perform the procedure satisfactorily. The writer recognized that this finding cannot be generalized because the time available to this collegiate group of students may not be consistent with the time available to students in programs where service needs are a consideration.

III. RECOMMENDATIONS

The following recommendations are made upon the basis of the findings of this study:

1. That a similar study be done to investigate other problem areas encountered by students.

2. That nursing students be oriented to the expected
emotional reactions of children to traumatic procedures before their experience in giving injections.

3. That experience with this procedure in the areas of adult nursing be a prerequisite to pediatric nursing.

4. That students be accompanied by the instructor during this procedure until they feel comfortable about performing the procedure and ready to perform without assistance.
BIBLIOGRAPHY


APPENDIX

Students' responses to Question One: "How do you feel about giving injections to children?"

"I don't want to give them, yet I know it is going to do them good. Some I don't mind. Some start acting up and crying, it hurts you inside, it really does. I don't like to see people cry, I can't stand it. If I went in with the attitude that I was worried, I wouldn't be able to give it at all. I am worried but I don't show it on the outside, it is all on the inside."

"I have only given one and I didn't like it one bit. It took me a few minutes to get up enough courage. I jabbed once, he screamed and made it worse. He was pathetic, so many things wrong with him and I didn't want to hurt him anymore. When patient's cry, you carry the load on your back."

"I don't like it. I feel like an ogre. The child is defenseless and this makes you feel terrible. Besides an adult can tell you if it is a poor one. A child, you have to hold down."

"There is no way you can make it hurt less. I don't like to give any injections but it is easier if I can see an immediate effect."

"I don't like to give shots, period, because I haven't given enough. Babies have lots of tissue but it seems like shots leave such a big hole. I don't think I have ever hurt anybody, but I might. I don't mind getting shots, myself, only the after effects. Babies don't know that, it is only the needles they are afraid of."

"I find it difficult to give them to toddlers. It is easier with babies who don't move around much."

"I have a psychological block toward injections. I entered nursing to make people comfortable and now I am hurting them to eventually make them well. I know they hurt--I have had them myself. I feel like a real heel because there was actually a little hole left in the child."

"I like pediatrics and I like children but I hate to hurt them. They are small and helpless and I feel as if I am taking advantage of them."
"It bothers me because I don't like injections anyway. Personally, I react violently to injections, even now and as a child. I think the child must feel the same way."

"It doesn't bother me any more than it does to give them to anyone else. I have only given four or five."

"It doesn't bother me. One of the first ones I gave was to a baby who was heavily anesthetized. Immediately, after I gave it the baby began to cry. When I saw that the stimulation helped him it made me feel good."

"I don't feel badly about it. I never encountered a situation where the child was frightened against it."

Students' responses to Question Two: "Is this typical of the way you feel about care which involves pain for the child?"

"I don't like any procedure which is painful for the child. The sooner I get it over with the better."

"Any procedure which makes a baby cry gets on my nerves."

"He doesn't understand the reason for any hurt."

"I don't like to have any pain associated with me personally in one too young to understand why."

"It is the crying that bothers me, pain makes them cry, not the injection."

"It bothers me generally to do anything on anybody that would cause pain. I can only do it because it prevents greater pain."

Students' responses to Question Three: "Do you think the amount of technical skill you have acquired is related to the way you feel about the procedure?"

"Skill comes with practice. It should be easier after we have done more."

"I could do better, but then I could do better in everything I do."

"Every teacher has a different technique. This makes it difficult to adapt."
"The more injections you have given, the more skill you have and the more comfortable you are about giving them."

"I don't feel skilled even though I have given more than I can count."

"Even though I found it difficult to give injections I don't think I would have been able to try if I hadn't had some practice in Medical-Surgical Nursing."

"Practice in Medical-Surgical Nursing helped."

"You should give injections to adults first. It would be hard to start with a child. Not that I enjoy giving them to adults but it is easier."

"The instructor warned me about how the child would react. She helped me with the procedure and I appreciated it."

"To have someone with you in case you need them gives you confidence."

"I need help the first few times to reassure me I am doing right."

"The instructor came with me the first time. Afterward, we discussed it and she helped me to understand that nobody really likes it."

Students' responses to Question Four: "Did this experience affect your sub-relationships with the child?"

"Depends upon whether or not you have established trust and can maintain this trust by comforting the child. If you repeatedly hurt him without re-establishing trust you can ruin your relationship with the child."

"Try to make other pleasant and satisfying contacts with the child so that he can associate me with pleasure as well as pain."

"I had a good relationship with the child and his mother and I was supposed to give the child a shot. I had only one more day with him and I didn't want to spoil it so I had someone else give the shot."

"They aren't as friendly toward me afterward. They are hostile toward me and yell. I sort of feel like I have lost a friend who no longer trusts me."
"In order for care to benefit, we must cooperate. If I hurt him I have a feeling that he won't cooperate with me. Even though it only hurts him a short time he may hold it against me and that would hurt me terribly."

"I have violated his trust. We have become good friends. I do this and if I were a child, I would lose trust--He doesn't understand why."

"Some can be comforted. With others you have lost a friendship. Try to atone for damage but it doesn't always work. Sometimes they are crying so hard that they are in no mood to accept anything. Crying bothers me if I feel I am the cause of it."

"Young children forget, don't carry revenge. Older children react violently, hold a grudge."

"I'm always afraid the child will resent me, hate me or not like me. This is human. You need to have them like you to cooperate."

"They forget quickly and we do good things for them too."

"He knows you have hurt him, yet he looks to you for support. I think I can be the same person, to hurt, yet give support."

Students' responses to Question Five: "Did the age of the child affect your feelings?"

"I would rather give it to an infant than a two year old because the two year old knows what is coming."

"A little baby doesn't know what it is all about. At five or six you may be able to reason with them a little better."

"It is easier for a small infant because he forgets it immediately after the injection. It is important to me that he forget."

"I find it difficult to give them to toddlers. It is easier with babies who don't move around much."

"I have only given them to small infants and adults. I am glad I didn't have to give them to toddlers."

"I am not affected by age, just the fact that it is a child who does not know what is going on."
"A baby usually cries after the injection. The older child cries before, because he associates pain with the needle. I don't mind the infant crying after injections because I can do something about it."

Students' responses to Question Six: "Did the type of illness of the child influence your feelings?"

"It is harder to hurt a little baby already in pain, than one who is well. Something like a polio injection should be easier."

"If he were real sick, I would hate to add one more thing to upset him."

"A child who had whooping cough scared me. I would give him an injection, he would cry, then whoop and eventually stop breathing."

"I have never taken care of a very sick child or one with a terminal illness."

"The injection could be to ease pain in terminal illness."

"The type of illness makes no difference in my feeling."

Students' responses to Question Seven: "Are you comfortable in giving injections?"

"Yes, I feel confident because I know I give a good one, all I can do is pick them up and say I'm sorry."

"I have had to have shots every two weeks all my life and have never been afraid of them myself. It doesn't bother me to have a baby cry, they stop so fast when I pick them up."

"I am comfortable to the extent that it has to be done."

"We haven't given enough to be confident or comfortable."

"If the child isn't moving around, I'm afraid I won't do it right and the child will be hurt even more."

"I don't feel comfortable—Adults have been kind but the baby doesn't understand. I pick them up to comfort them so they will forget."

"I am uncomfortable because I do not like to hear a child cry."
Students' responses to Question Eight: "Do you have enough time?"

"We are not rushed because we don't have that many patients. I usually try to take time and consider if this were my child, how much time would I want the nurse to take?"