

AN ANALYSIS OF SELECTED FACTORS IN THE  
UTILIZATION OF FEMALE REGISTERED  
NURSES IN OKLAHOMA

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## PREFACE

This study is concerned with the shortage of registered nurses in Oklahoma and seeks to determine the extent to which selected socio-economic factors underlie the efficient utilization of nursing manpower in the state. The problem focuses on attracting more individuals to pursue nursing careers, activating the inactive registered nurses, and maintaining the current work force.

In view of the many demands made upon her, the rewards a nurse receives are meager and far from appropriate. This is the basis of the shortage problem. It should be approached in terms of what can be done about it, rather than the mere realization that the demand for nurses far exceeds the supply. There is no reason why a great nation such as ours cannot achieve higher standards of health service for all the people.

I would like to take this opportunity to express my appreciation to my thesis committee members, Dr. John C. Shearer and Dr. Paul V. Braden, for their assistance and advice. Their suggestions and guidance were fundamental in the preparation of this paper. I am indebted to the cooperation and assistance of Dr. Thomas C. Points of the University of Oklahoma Health Intelligence Facility and his staff and to Dr. Orville M. Rippey for his helpful comments and advice.

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## CHAPTER I

### INTRODUCTION

#### The Problem

A severe shortage of nurses exists in our nation and state today.<sup>1</sup> The population increase has strained health care services out of proportion to the increased numbers because the very young and the very old have the greatest needs for services. Nursing is the foundation of these services; it is the most universally used, and it is required on a more intensive basis over a longer period of time than any other single kind of health care.<sup>2</sup> Although the number of active registered nurses has increased each year, the rate of increase has been declining. Only about one-half of all licensed registered nurses are practicing, and of these approximately one-fourth work on a part-time basis.<sup>3</sup> Oklahoma's ratio of active registered nurses per 100,000 population was 228 in 1967, which compares with the national ratio of 325 per 100,000 population and the minimum recommended ratio of 300 per 100,000

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<sup>1</sup>U. S., Department of Health, Education, and Welfare, Public Health Service, Toward Quality in Nursing, Public Health Service Publication No. 992 (Washington, D. C.: U. S. Government Printing Office, 1963), p. 3.

<sup>2</sup>U. S., Department of Health, Education, and Welfare, Public Health Service, Nurse Training Act of 1964, Program Review Report, Public Health Service Publication No. 1740 (Washington, D. C.: U. S. Government Printing Office, 1967), p. 9.

<sup>3</sup>Ibid., p. 11.

population.<sup>4</sup> In the face of this existing shortage of nursing personnel the most careful and thorough manpower planning is required to marshal all resources to meet present and future nursing needs.

Although the shortage problem is recognized both on a national and state-wide basis, few studies have been directed toward investigating the reasons for this shortage. No study of this nature has occurred in Oklahoma.

### The Purpose

The major objective of this study was to determine the major socio-economic factors underlying the utilization of women workers as registered nurses practicing nursing or seeking employment in nursing, registered nurses employed in some other occupation, and registered nurses not employed. I have attempted to relate questionnaire responses from nurses in each of these categories to the utilization of female registered nurses in Oklahoma.

Registered nurses may be divided into three groups: degree nurses, who are graduates of four-year college programs, some of whom pursue graduate study; diploma nurses, who are graduates of three-year hospital programs; and associate degree nurses, who are graduates of two-year junior college programs. This study includes all three groups.

### Research Questions

The President's Commission on the Status of Women, which was established in 1961 to study the problems affecting women's role in the

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<sup>4</sup>American Nurses' Association, Facts About Nursing, 1966 (New York: American Nurses' Association, 1966), p. 9.



economic, political, and cultural life of the Nation, was particularly concerned with ways in which the abilities and talents of women could be used to the maximum.<sup>5</sup> Women may be limited by social customs and tradition in their choice of life patterns and in their preparation for them. Opportunities for part-time employment are very important to women workers. It may enable them to combine their role of wife and mother with that of worker so that they may contribute to the family income, broaden their interests outside the home, and keep intact their work skills. It is on this basis and the review of the literature that I have formulated the following research questions:

(1) Would part-time employment help increase the supply of registered nurses and, at the same time, enable women to function effectively in their dual roles of homemaker and professional?

(2) Do the factors underlying the utilization of registered nurses include county of residence, marital status, age, family responsibilities, child-care expenses, husband's income level, salary, hours, administrative duties, type of certificate, need for refresher courses, and training in other fields?

These research questions represent issues of primary concern to those considering nursing as a profession and to inactive nurses planning to return to work. Through the analysis of data collected in this study, I shall be able to determine the extent to which more part-time employment in nursing and improvements in those selected factors which

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<sup>5</sup>U. S., Department of Labor, Women's Bureau, Underutilization of Women Workers (Washington, D. C.: U. S. Government Printing Office, 1967), foreword.

lend themselves to change might alleviate the shortage of registered nurses in Oklahoma.

#### Procedures

The study was limited to a random sample of licensed registered nurses as of December 31, 1967, in the counties of Major, Payne, Stephens, and Tulsa. These counties were selected because, on a population basis, they represent a cross-section of urban, semi-rural, and rural segments of the Oklahoma economy. Three counties were randomly selected using 1960 Census of Population figures. The criteria employed in selecting the categories were: less than 25 per cent rural population, urban; from 25 per cent to 50 per cent rural population, semi-rural; and over 50 per cent rural population, rural. Payne County was selected because of the unique characteristics displayed by a university community.

Interviews were conducted with the Administrators and Directors of Nursing of the largest<sup>6</sup> hospital in each of these counties, with the exception of Payne County,<sup>7</sup> because of the employment potential they represent. The hospitals involved include Fairview Hospital, Major County; Stillwater Municipal Hospital, Payne County; Medical Center Hospital, Incorporated, Stephens County; and St. John's Hospital, Tulsa County. A questionnaire<sup>8</sup> was designed on the basis of these interviews

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<sup>6</sup>The largest hospitals were determined by bed number according to the Membership of Oklahoma Hospital Association, 1968.

<sup>7</sup>Cushing Hospital is the largest in Payne County; Stillwater was selected because of the university community located therein.

<sup>8</sup>Appendix B.

and related information. This instrument was mailed to 828 licensed registered nurses, with a response of 44 per cent. The geographic bias of the nonrespondents was checked, and no significant difference was detected. The sample was obtained through information collected by the Oklahoma Health Intelligence Facility under the direction of Dr. Thomas C. Points. The questionnaire reported personal data, work patterns, opinions as to nursing in general, employment status, and income information, as well as reasons for practicing nursing or not practicing, factors which might encourage those not working in nursing to return, and a ranking by each registered nurse working in nursing as to the three most important factors affecting the shortage.

## CHAPTER II

### REVIEW OF THE LITERATURE

A shortage, in the sense of an excess of demand over supply, exists in the field of nursing today. This is the normal concomitant of a price rise. In nursing, however, there has been a lag in the response of the wage rate to the increasing demand.<sup>1</sup> It has been suggested that several major factors tend to produce and perpetuate the nursing shortage.<sup>2</sup> Among these the most pertinent for my purposes are the declining rate of increase in the supply of nurses and salaries in nursing in contrast to those in business and industry.

According to the Surgeon General's Consultant Group on Nursing (1963), deficiencies in economic incentives for nurses exist as to both salaries and fringe benefits.<sup>3</sup> Nursing does not compare favorably in this respect with other careers requiring equivalent capabilities and education; salaries of hospital staff nurses are lower, on the average, than those of secretaries, and nurses on the whole do not fare as well

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<sup>1</sup>Thomas Hale, Jr., "Why the Nursing Supply is Failing to Meet the Demand," The Modern Hospital, XCV (September, 1960), p. 101.

<sup>2</sup>Ibid.

<sup>3</sup>U. S., Department of Health, Education, and Welfare, Toward Quality in Nursing, pp. 31-32.

as other employees with respect to unemployment compensation, health insurance, and retirement benefits.<sup>4</sup>

Evelyn Moses (1965) notes that "nursing salaries today are far below those of other professional occupations,"<sup>5</sup> and Ruth Carson points out that nursing is "one of the lowest-paying, hardest-working jobs to which a woman can aspire."<sup>6</sup> She compares the following national salary averages to support her statement:

Teacher . . . . .	.\$6,235
Secretary . . . . .	.\$5,170
General duty nurse. . . . .	.\$4,500 <sup>7</sup>

This certainly adversely affects the recruitment into the profession and almost negates efforts being made to attract inactive nurses back into practice.

#### The Inactive Nurse

The inactive nurse is viewed as a potential source for alleviating the shortage. The 1966 Inventory of Registered Nurses indicates that in 1966, 909,131 registered nurses held licenses to practice.<sup>8</sup> Of that total, 593,694, or 65.3 per cent, were employed in nursing; 285,791, or

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<sup>4</sup>Ibid.

<sup>5</sup>Evelyn Moses, "Nursing's Economic Plight," American Journal of Nursing, XLV (January, 1965), p. 71.

<sup>6</sup>Ruth Carson, How We Can Get the Nurses We Need, Public Affairs Pamphlet No. 385 (New York: Public Affairs Committee, 1966), p. 9.

<sup>7</sup>Ibid.

<sup>8</sup>American Nurses' Association, Facts About Nursing, 1968 (New York: American Nurses' Association, 1968), p. 7.

31.4 per cent, were not; and 29,646, or 3.3 per cent, failed to indicate their employment status.<sup>9</sup> The majority were married and under 39 years of age.<sup>10</sup> Perhaps many of those women not working in nursing would return if the economic rewards made working a worthwhile venture.

Donald Yett (1965) points to one factor--family responsibilities--as being especially important in primarily female occupations such as nursing.<sup>11</sup>

The expense of hiring someone to keep house and mind the children may reduce the effective earnings of young women so much that they would be willing to work only at very high nominal salaries.<sup>12</sup>

Barker and Staton (1965), in a study of inactive nurses in Kentucky, find that responses to a question inquiring as to the primary reason for inactivity differ among those planning not to return to nursing, those planning to return, and those who are uncertain.<sup>13</sup> Of most interest in terms of reactivating nurse manpower is the concern for care of small children among the nurses who do plan to return and even among the nurses who are uncertain about future plans. The responses indicate that nurses are conscious of husband and children; the top three reasons in all groups include the husband's preference that the wife not work and the nurse's preference for the homemaker role.<sup>14</sup>

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<sup>9</sup> Ibid.

<sup>10</sup> Ibid.

<sup>11</sup> Donald Yett, "The Supply of Nurses: An Economists's View," Hospital Progress, XLV (February, 1965), p. 90.

<sup>12</sup> Ibid., pp. 90-91.

<sup>13</sup> Anna E. Barker and Earl E. Staton, "Inactive Nurses," Public Health Reports, LXXX (July, 1965), p. 641.

<sup>14</sup> Ibid.

In a study of inactive nurses in Dane County, Wisconsin (1966-1967), 481 nurses were asked to indicate why they were not currently practicing nursing.<sup>15</sup> "Family need" is mentioned more than four times as often as any other reason given, with "hours" and "need of refresher courses" ranking second and third, respectively; "low salary," however, is mentioned by less than 14 per cent of the respondents.<sup>16</sup> Forty-two per cent of the nurses responding to the survey indicate an intent to return to nursing by 1970.<sup>17</sup> Of those intending to return, however, nearly 90 per cent indicate it would be on a part-time basis.<sup>18</sup>

Platou and Pederson (1966) conducted a study in Minnesota designed to answer the question: "What actions should a hospital take to attract R. N.'s not now employed to the hospital setting?"<sup>19</sup> They find that a number of nurses not working at that time would return to the hospital on a part-time basis.<sup>20</sup> Flexible hours and scheduling constitute the condition most required by registered nurses if they are to return to work part-time.<sup>21</sup> Child care and husbands' attitudes are of major concern. The authors conclude that "hospitals are faced with the

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<sup>15</sup>The Wisconsin State Employment Service in cooperation with the Madison League for Nursing, A Study of Inactive Nurses in Dane County, Wisconsin, 1966-1967 (Madison: Wisconsin State Employment Service, 1967), p. 15.

<sup>16</sup>Ibid.

<sup>17</sup>Ibid., p. 18.

<sup>18</sup>Ibid.

<sup>19</sup>Carl N. Platou and W. Dennis Pederson, "Can More Part-Time Nurses Be Recruited?" Hospitals, XLI (May 16, 1967), p. 77.

<sup>20</sup>Ibid.

<sup>21</sup>Ibid., p. 72.

realization that the recruiting potential is limited to part-time nurses with another primary role"--homemaker.<sup>22</sup>

American Nurses' Association officials comment in the publication Facts About Nursing, 1967 that much of an estimated 3 per cent increase in the nurse supply in 1966 was "due to the growth in numbers of part-time nurses."<sup>23</sup>

Part-time nursing may be the solution to the married nurse's problem of role conflict, but in a study of the shortage of nurses in Vermont, Clark (1964) discovers that "continuity of patients' care was being interrupted by the use of many part-time, married nurses."<sup>24</sup>

Scheduling work in nursing involves problems that are met in few other professions or occupations. Livengood (1965) notes that "nursing, being a public service, is a 24-hour, seven-day responsibility that by its nature cannot condone 'office hours.'"<sup>25</sup> In spite of this need for continuous duty, Livengood concludes that a hospital can determine effective ways not only to increase the effective utilization of nursing personnel and to provide necessary service to patients, but also to give the most equitable leisure time to the nursing staff.<sup>26</sup>

Sister Mary Ann Frances (1965), Director of Nursing Service,

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<sup>22</sup>Ibid., p. 82.

<sup>23</sup>American Nurses' Association, Facts About Nursing, 1967 (New York: American Nurses' Association, 1967, p. 7.

<sup>24</sup>Benjamin F. Clark, "Solving the Nurse Shortage in Vermont," Journal of the American Medical Association, CLXXXIX (August 24, 1964), p. 132.

<sup>25</sup>Lindsay Livengood, "Planned Shifts Save Nurses and Dollars," The Modern Hospital, CIV (February, 1965), p. 101.

<sup>26</sup>Ibid.



St. Joseph Mercy Hospital, Ann Arbor, Michigan, states that cyclical schedules have facilitated the recruitment of nursing personnel.<sup>27</sup>

We have found that nurses are attracted when they see a concrete schedule showing when they will work, when they will rotate, and when they will have days off. This is especially effective in influencing husbands to allow their wives to work.<sup>28</sup>

Part-time nurses can be utilized effectively if provision is made for a technique for scheduling part-time nurses according to patient needs for nursing care.<sup>29</sup>

Community concern for the growing demand for registered nurses prompted Auburn Community College in New York (1967) to review its role in the continuing education of inactive registered nurses.<sup>30</sup> A five-week program was established for nurses who were licensed or eligible for licensure as a registered nurse in New York State, and who had been inactive for a period of five or more years. Emphasis was placed on "reactivation of skills and knowledge essential to present nursing practices."<sup>31</sup> Six months after completion of the first program, over 75 per cent of the nurses who participated were actively employed in some type of nursing service.<sup>32</sup>

Reactivating the inactive nurse involves numerous problems. They

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<sup>27</sup>Sister Mary Ann Frances, "Implementing A Program of Cyclical Scheduling of Nursing Personnel," Hospitals, XL (July 16, 1966), p. 108.

<sup>28</sup>Ibid., p. 125.

<sup>29</sup>Ibid.

<sup>30</sup>Shirley H. Berwind, "The Community College and the Inactive Nurse," Occupational Education Bulletin, III (November 15, 1968), p. 3.

<sup>31</sup>Ibid.

<sup>32</sup>Ibid., p. 5.

do, however, represent an existing pool of trained nurses and a potential source of recruitment.

#### The Active Nurse

According to a recent survey conducted by RN magazine (1968), the majority of nurses work in nursing because they want to serve others; relatively few give a dollars-and-cents reason.<sup>33</sup> Questionnaires were sent to 3,500 RN readers; 1,000 registered nurses responded. Fifty-eight per cent of the full-time nurses that responded are married, and 56 per cent of the full-time nurses have children of nursery and/or grammar school age.<sup>34</sup> Most of them work a forty-hour week, but "even when judged by the basic salary goal set by the American Nurses' Association in 1966 (\$6,500 starting pay), the salaries of most nurses today are inadequate."<sup>35</sup>

The active nurse serves as a guide to developing measures for attracting individuals into the profession. These women are strongly motivated toward helping others. They become discouraged, of course, when they are forced to face continuing problems of low pay, poor working conditions, paper work, and friction between subordinates and superiors.<sup>36</sup> They are, however, courageous in speaking out against inadequacies and injustices, and in attempting to right them.<sup>37</sup>

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<sup>33</sup>Christopher A. Weber, "R. N. Survey--The Nurse Today," RN, XXXI (July, 1968), p. 37.

<sup>34</sup>Ibid., p. 43.

<sup>35</sup>Ibid., p. 36.

<sup>36</sup>Ibid., p. 40.

<sup>37</sup>Ibid.

Registered nurses are an essential link in the chain of health services. Effective utilization of existing nursing resources in conjunction with a growing awareness of the need to relate nursing to socio-economic characteristics may ease the strain on human and health services alike.

## CHAPTER III

### ANALYSIS OF FACTORS UNDERLYING THE UTILIZATION OF REGISTERED NURSES

The population of licensed registered nurses is composed of two distinct groups: those working in nursing and those not working in nursing. The latter group may be further divided into four subgroups: those not working, but seeking employment in nursing; those working at something else; those not working, but seeking employment in something else; and those not working and not seeking employment. The instrument<sup>1</sup> employed in this survey was designed to elicit responses of the group in total to general questions pertaining to nursing as well as questions directed toward each of the individual group classifications. It was assumed that those working in nursing and those not working, but seeking employment in nursing would have similar views regarding nursing and should thus be grouped together. The same assumption was applied to the remaining three groups.

#### Licensed Registered Nurses

A total of 361 licensed registered nurses participated in this survey. Of that total, 79 per cent were working in nursing; .3 per cent were not working, but seeking employment in nursing; 2 per cent were

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<sup>1</sup>Appendix B.

working at something else; .3 per cent were not working, but seeking employment in something else; and 19 per cent were not working and not seeking employment.

Of the total respondents, 1.4 per cent resided in Major County; 7.2 per cent resided in Payne County; 2.8 per cent resided in Stephens County; and 88.6 per cent resided in Tulsa County. The majority of these women originally came from rural areas (49.4 per cent), whereas 29.6 per cent were from metropolitan areas, and 20.9 per cent from urban areas.<sup>2</sup> Upon completion of their training, 32.1 per cent did return to their hometown to practice compared with 67.9 per cent who did not. The reasons given for not returning focused on available opportunities in the hometown area and husband's occupation.

Approximately 38 per cent of those responding fell in the 20-35 age bracket; 43 per cent fell in the 36-50 age bracket; 18.2 per cent were in the 51-65 age category; and 1.4 per cent were 66 and over.

As to marital status, 79.2 per cent were married; 8.6 per cent were single; 6.1 per cent were divorced; 5.3 per cent were widowed; and .8 per cent were separated.

Eighty per cent of the total respondents had children. Sixty-six per cent of the women with children five and under had at least one child in that category; 30 per cent had at least two; and 4 per cent had as many as three children five years old or younger. Fifty-nine per cent of the women with children aged six to ten years had only one child in that category, whereas over 30 per cent had at least two.

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<sup>2</sup>Criteria used to designate these areas were: 10,000 population and under, rural; 10,001-50,000 population, urban; and 50,001 and over, metropolitan.

Sixty-one per cent of the women with children aged eleven to fifteen years had at least one child in that age group, with 34 per cent having at least two. The majority of the children were sixteen years old or over. Forty-one per cent of the women with children in this category had at least one child sixteen years old or over; 36 per cent had at least two; 16 per cent had at least three; and 6 per cent had as many as four. Only one respondent had as many as five children in this category.

With respect to yearly total family income, only .9 per cent of the nurses indicated less than \$3,000; 9.4 per cent indicated \$3,001-\$6,000; 28.2 per cent indicated \$6,001-\$9,000; 22 per cent indicated \$9,001-\$12,000; 17.1 per cent indicated \$12,001-\$15,000; and 22.2 per cent indicated \$15,000 and over. Forty-four per cent of the women indicated that their husband earned from 76-100 per cent of their total family income.

Of the 361 nurses responding, 327 nurses held a diploma in nursing, 1 held an associate degree, and 33 held baccalaureates or better. One hundred eighty-nine of these nurses received their training in Oklahoma; 179 received their training outside Oklahoma; and one failed to respond to this question. Of those coming from outside the state, most of them came from Kansas and Missouri. Pennsylvania, Illinois, and Texas also ranked high. One respondent received her training in Canada and one in Puerto Rico. Of the nurses who had no degree, 50.2 per cent had taken college courses, and 27.8 per cent had taken nurse refresher courses. The number who had taken refresher courses, however, differed significantly by age group (Table I). Ninety per cent of the nurses in the 20-35 age group had not taken refresher courses; 66 per cent of the

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TABLE I

SELECTED CHI SQUARES FOR ALL REGISTERED NURSES

Variables	County			Type of Certificate			Age			Length of Practice			Monthly Income		
	X <sup>2</sup>	df	LS*	X <sup>2</sup>	df	LS	X <sup>2</sup>	df	LS	X <sup>2</sup>	df	LS	X <sup>2</sup>	df	LS
✓ Monthly Income	44.8567	27	*	38.8489	18	**									
Type of Certificate	2.8191	6	NS												
Age	4.9252	9	NS												
✓ Characteristic of Degree Nurse				37.4821	12	**	33.0346	18	**						
Characteristic of Diploma Nurse				11.0350	12	NS	26.2824	18	NS						
Friction				1.5809	2	NS	8.6751	3	*						
Education of Beginning Nurse				139.2083	12	**	19.7850	18	NS						
Refresher Courses				2.9979	2	NS	35.5265	3	**						
Full or Part-time Work				1.3036	4	NS									
Like Most About Nursing	20.1063	15	NS	12.2874	10	NS	11.8584	15	NS	37.3236	30	NS			
✓ Like Least About Nursing	67.2792	54	*	24.3892	36	NS	56.2238	54	NS	75.9550	108	NS			
Supervisory Techs.				.0126	1	NS	6.2088	3	NS						
Employment Status-- Working in Nursing, Working in Something else													13.4747	9	NS

Note: For an explanation of Chi Square, see Appendix C. LS\* - Level of Significance; \*Significant at the .05 level; \*\*Significant at the .01 level; NS - Not Significant.

nurses in the 36-50 age group had not taken refresher courses; 52 per cent of those in the 51-65 age bracket had taken refresher courses; and 60 per cent of the nurses 66 and over had taken nurse refresher courses. Four per cent of all the nurses responding held degrees in some other field. Those listed included: music; English; education; home economics; social science; public welfare; and biological science.

The majority of these nurses began their practice in either surgery or as general duty nurses. Eighty-eight per cent of the working registered nurses, however, indicated that they had not remained in their initial area of nursing. Only .6 per cent did not practice nursing after graduation; 1.4 per cent practiced from 1 to 11 months; 14.7 per cent practiced from 1 to 3 years; 17.2 per cent practiced from 4 to 6 years; 23.7 per cent practiced from 7 to 12 years; 15 per cent practiced from 13 to 18 years; and 27.4 per cent practiced for 19 or more years.

Approximately <sup>30%</sup> 30 per cent indicated that their pattern of work in <sup>\*</sup> nursing since graduation had included one major interruption. <sup>42%</sup> Forty-two per cent of all the women stated "had children" as an explanation of this pattern. Twenty-nine per cent of all the nurses indicated that their work patterns had been irregular because of family needs. Seventy-four per cent of all the nurses indicated that the majority of their work life had been full-time work.

When given a choice of working hours, the great majority preferred the 7 a.m.-3 p.m. shift. They were heavily in favor of daytime shifts; many preferred working when their children were in school on a part-time basis.

As to personal views regarding nursing, 53 per cent indicated that being given the opportunity to help people was what they liked most



about nursing. When asked what they liked least about nursing, 32 per cent felt too many demands were made upon them; 31 per cent disliked the hours; and 23 per cent indicated they liked the pay least. There was a significant difference in the response to this question by county (Table I). The major differences were between Major and Payne County and Stephens County with respect to the feeling that too many demands were made upon the nurse. In Major and Payne Counties, 0 per cent and 5 per cent, respectively, indicated this was what they liked least about nursing, whereas 33.3 per cent of the respondents from Stephens County selected this answer. There was also a major difference between Stephens and Tulsa County with respect to "hours" being what they liked least about nursing: 0 per cent in Stephens County indicated they liked hours least; 27.8 per cent in Tulsa County indicated the hours were what they liked least about nursing. Ninety-seven per cent felt that supervisory techniques, as they pertain to supervisor-nurse relations, could be an instrument for improving working conditions.

The nurses were asked to give their opinion as to what would be the greatest single improvement for registered nurses in the hospital. Although 74 nurses felt they were not qualified to give an answer, 23 per cent of the nurses responding felt that more individual patient care was of primary importance. Seventeen per cent felt that better communications would be the greatest single improvement; whereas 16 per cent indicated higher wages. Less paper work; improved working hours; more registered nurses; and in-service education were others chosen frequently.

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Each nurse was asked to indicate what she felt was the most important characteristic of the degree nurse and of the diploma nurse.

There was a significant difference in the responses given, by type of certificate, to the most important characteristic of the degree nurse; 68 per cent of the diploma nurses felt that lack of practical experience was the most important characteristic, whereas 41 per cent of the degree nurses indicated "education liberal enough in related fields" as the most important characteristic of the degree nurse. There was also a significant difference between the responses of the different age groups to the same question (Table I). The majority of the women in the 20-35, 36-50, and 51-65 age groups indicated they felt that lack of practical experience was the most important characteristic of the degree nurse; the responses of those 66 years old and over were distributed evenly among "task oriented"; "patient oriented"; and "educational liberal enough in related fields." There was no significant difference, however, between the responses, by type of certificate or by age, to the most important characteristic of the diploma nurse (Table I). Sixty-five per cent of the respondents felt the most important characteristic of the degree nurse was her lack of practical experience; 34 per cent felt the most important characteristic of the diploma nurse was enough practical experience. When asked if they felt there is friction between degree graduates and diploma graduates, 58 per cent said "yes," whereas 42 per cent said "no." Responses to this question differed significantly by age group (Table I). In both the 20-35 year age group and the 66 years and over age group the responses to this question were 50 per cent "yes" and 50 per cent "no." In the 36-50 year age group, however, 68 per cent felt there is no friction, whereas 32 per cent felt there is; 55 per cent of those in the 51-65 year age group felt there is no friction, whereas 45 per cent felt there is. Thirty-eight per cent of

the nurses indicated that the beginning nurse should have a diploma; 27 per cent felt a diploma and baccalaureate should be obtained; and 19 per cent felt a combination of diploma, baccalaureate, and associate degree would be most useful. There was a significant difference, however, between the responses to this question and the type of certificate held, as shown in Table I. Thirty-nine per cent of the diploma nurses felt the beginning nurse should have a diploma; 26 per cent of the diploma nurses felt both the diploma and baccalaureate were necessary. Thirty-five per cent of the degree nurses felt the beginning nurse should have a baccalaureate degree, whereas 24 per cent felt the beginning nurse should have a diploma.

The nurses were asked to indicate their monthly salary, whether working full or part-time. Only 5.6 per cent received less than \$100, due in all cases to part-time work; 12 per cent fell in the \$100-\$200 bracket; 6.3 per cent fell in the \$201-\$300 bracket; 6 per cent were in the \$301-\$400 bracket; 16.5 per cent fell in the \$401-\$500 bracket; 28.2 per cent indicated they were in the \$501-\$600 bracket; 16.5 per cent fell in the \$601-\$700 bracket; 4.6 per cent were in the \$701-\$800 bracket; 2.8 per cent were in the \$801-\$900 bracket; and 1.4 per cent indicated they received over \$900. There was a significant difference in monthly income by county as well as by type of certificate (Table I). Fifty per cent of the nurses in Major County fell in the \$401-\$500 bracket; 47 per cent of the nurses in Payne County fell in this same bracket; 33.3 per cent of the nurses in Stephens County indicated they received less than \$100, which was due to part-time work, and 33.3 per cent fell in the \$401-\$500 bracket; 30 per cent of the nurses in Tulsa

County fell in the \$501-\$600 bracket, and 18 per cent fell in the \$601-\$700 bracket. Tulsa County was the only county in which a nurse indicated she received over \$900, and only four of the nurses responding from that county indicated this amount. None of the nurses in Major County indicated they received less than \$100; 10 per cent of the nurses in Payne County fell in this category; and 5 per cent of the nurses in Tulsa County received less than \$100.

The major differences in monthly income by type of certificate were found in the highest and lowest income levels: 94 per cent of the nurses receiving less than \$100 were diploma nurses whereas 75 per cent of those receiving over \$900 were degree nurses. It should be pointed out, however, that the largest number in all cases fell in the \$501-\$600 income bracket: 28 per cent of the degree nurses fell in this category as well as 28 per cent of the diploma nurses; the one nurse responding with an associate degree also fell in this category. The median monthly salary was approximately \$450.

#### Registered Nurses Practicing Nursing (2)

The majority of the registered nurses participating in this survey were employed in nursing. Their reasons for practicing differed, however, as shown in Table II. "Other" reasons included such things as: "want to keep up with current trends;" "love the work;" and "security." There was a significant difference in the response to this question by marital status and whether the nurse did or did not have children (Table III). <sup>46</sup>Forty-six per cent of the single respondents said they practiced nursing because of financial requirements, and 29 per cent said they realized the need for their services; 30 per cent of those married said

they wished to supplement their family's income, and 24 per cent said they realized the need for their services. Of those who had children, 28 per cent indicated they wished to supplement their family's income, and 21 per cent said they realized the need for their services. Of those who did not have children, 39 per cent said they practiced nursing because of financial requirements, and 28 per cent said they realized the need for their services.

TABLE II  
REASONS FOR PRACTICING NURSING, PERCENTAGE RESPONSE\*

Financial Requirements	To Supplement Family Income	Have a Desire to Help the Sick	Prefer to Keep Occupied	Realize the Need for My Services	Other
24.5	23.7	11.9	13.3	22.7	4.0

\*Figures do not add to 100.0 due to rounding.

When asked how long they planned to continue nursing, 45 per cent indicated this was "unknown." Twenty per cent said "as long as work is available;" 10 per cent indicated from 6 to 10 years; 9 per cent indicated 1 to 5 years; and 8 per cent indicated 11 to 15 years. Percentages in other categories were negligible.

Fifty-five per cent of the working registered nurses were employed in hospital nursing; 10 per cent were employed in school nursing as well

TABLE III  
 SELECTED CHI SQUARES FOR ACTIVE REGISTERED NURSES

Variables	Per Cent Spent on Child Care			Area of Nursing			Reasons for Practicing			Length of Continuation			Hospital		
	X <sup>2</sup>	df	LS*	X <sup>2</sup>	df	LS	X <sup>2</sup>	df	LS	X <sup>2</sup>	df	LS	X <sup>2</sup>	df	LS
Monthly Income	49.5327	24	**	117.7392	72	**				69.7079	63	NS	14.7661	21	NS
Hours Generally Worked	8.3499	9	NS												
Marital Status							77.6589	20	**						
Children							14.7244	5	**						
Type of Certificate										14.1148	14	NS			
Like Most About Nursing													12.3122	15	NS
Like Least About Nursing													35.1407	33	NS

Note: For an explanation of Chi Square, see Appendix C. LS\* - Level of Significance; \*Significant at the .05 level; \*\*Significant at the .01 level; NS - Not Significant.

as 10 per cent in doctors' offices; and 8 per cent were employed as private duty nurses. Five per cent were employed by nursing homes; and 3 per cent were employed in industrial nursing as well as 3 per cent in public health nursing. Fewer nurses were employed in nursing education than in any other area. Four per cent indicated "other" and most often specified institutions for children and the mentally ill. Monthly income differed significantly with respect to (area of nursing employment), as shown in Table III. The highest monthly income was reported by those employed by nursing homes; 7.1 per cent received over \$900; 29 per cent fell between \$401 and \$600. Forty-four per cent of the nurses employed in industrial nursing were in the \$501-\$600 category, and 33 per cent were in the \$601-\$700 category; 44 per cent of the public health nurses fell in the \$501-\$600 category, and 22 per cent fell in the \$701-\$800 category; 44 per cent of the nurses employed in doctor's offices were in the \$401-\$500 bracket, and 30 per cent were in the \$501-\$600 bracket; 43 per cent of those in nursing education fell in the \$601-\$700 bracket, and 29 per cent fell in the \$701-\$800 bracket; 35 per cent of those in school nursing fell in the \$401-\$500 category, and 31 per cent fell in the \$501-\$600 category; 30 per cent of the private duty nurses fell in the \$501-\$600 bracket and 20 per cent of them fell in the \$801-\$900 category; and 27 per cent of those employed by hospitals fell in the \$501-\$600 category, whereas 18.4 per cent fell in the \$100-\$200 bracket as well as 18.4 per cent in the \$601-\$700 bracket. Eighty-nine per cent of the nurses preferred the area they were working in.

As mentioned in Chapter I, four hospitals were included in this survey. Twenty per cent of the working registered nurses indicated they were employed by one of these four hospitals. Of these, 80 per cent

were employed by St. John's Hospital, Tulsa; 11 per cent were employed by Stillwater Municipal Hospital; 5 per cent were employed by Medical Center Hospital, Inc., Duncan; and 4 per cent were employed by Fairview Hospital. Several nurses employed by hospitals chose not to name their employer.

The shifts generally worked by these nurses were divided fairly equally, with the exception of the night shift: 28 per cent worked the 7 a.m.-3 p.m. shift; 21 per cent worked from 8 a.m. to 5 p.m.; 19 per cent worked on a part-time basis; 19 per cent worked the 3 p.m.-11 p.m. shift; and 13 per cent worked the 11 p.m.-7 a.m. shift. Fifty per cent generally worked 40 hours per week.

Of those who had children, 40 per cent indicated that help was not needed to take care of the children during the nurses' working hours; 27 per cent indicated their husband took care of the children; 13 per cent required a babysitter; 8 per cent took their children to a nursery; and 5 per cent indicated a grandparent took care of their children. In a few cases a friend or the oldest child took care of the children. The per cent spent on child care ranged from 0 to 33 per cent of the nurses' monthly paycheck. The majority of the nurses indicated that they spent approximately 10 per cent. There was a significant difference between monthly income and per cent spent on child care (Table III). This difference is explained by the fact that of the two respondents who indicated they earned more than \$700 a month, one indicated she spent from 30 to 35 per cent on child care; the other indicated she spent 10 to 19 per cent. This causes the chi square to be misleading.

\* Each of the working registered nurses was asked to rank a given list of possible solutions to the shortage problem in Oklahoma in the

*Problems: shortage*  
Solutions:



order of their importance. Table IV lists the possible alternative answers and the per cent selecting them as their first, second, or third choice. As the table shows, "Raise salaries" was selected by most of the nurses most often as both a first and second choice; "Employer provide child care for children during mother's working hours for a nominal fee" was selected most often as the third choice. In all cases, the nurses chose "Arrange hospital shifts so that available help could be utilized;" "Raise salaries;" "Delegate paper work to ward clerks or secretaries so that nurses can perform nursing duties and supervise nursing functions;" and "Help more students attend nursing school or universities with nursing programs" most frequently. "Employer provide care for children during mother's working hours for a nominal fee" was selected frequently enough to warrant consideration also.

#### Inactive Registered Nurses (3)

Of major concern with respect to inactive nurses are the reasons for their not practicing. "Family needs" was indicated most frequently as the reason for leaving nursing and as the reason for not practicing nursing at the time of the survey. As Table V shows, however, there was a significant difference between the responses to whether "hours" were or were not a reason for leaving for those not working in nursing, nor seeking employment in nursing. Eighty-four per cent said that "hours" were not the reason for their leaving. There was also a significant difference between the responses to whether "low salary" was or was not a reason for leaving for those not working in nursing, nor seeking employment in nursing. Eighty-seven per cent said that "low salary" was not a reason for their leaving.

TABLE IV  
 PER CENT\* OF WORKING REGISTERED NURSES SELECTING ALTERNATIVE SOLUTIONS TO  
 THE SHORTAGE OF REGISTERED NURSES IN OKLAHOMA  
 AS A FIRST, SECOND, OR THIRD CHOICE, 1968

Alternative Answers	%	%	%
	First Choice	Second Choice	Third Choice
(a) Employer provide care for children during mother's working hours for a nominal fee	8.5	12.5	15.6
(b) Arrange hospital shifts so that available help could be utilized	19.6	16.3	13.6
(c) Raise salaries	28.9	19.0	15.2
(d) Delegate paper work to ward clerks or secretaries so that nurses can perform nursing duties and supervise nursing functions	15.9	14.8	15.2
(e) Help more students attend nursing school or universities with nursing programs	19.6	17.1	12.0
(f) Attract more men into the profession to stabilize the work force	1.5	4.2	5.2
(g) Improve working conditions by replacing obsolete equipment with more advanced technological aids	.4	1.9	5.2
(h) Relieve nurses of lesser skilled duties	3.3	8.4	8.0
(i) Provide more active in-service education for nurse assistants	2.2	5.7	10.0

\* Figures do not add to 100.0 due to rounding.

TABLE V  
SELECTED CHI SQUARES FOR INACTIVE REGISTERED NURSES

Variables	Not Working in Nursing, nor Seeking Employment			Hours Preferred Worked		
	X <sup>2</sup>	df	LS*	X <sup>2</sup>	df	LS
Reason for Leaving- Health	.2111	2	NS			
✓ Reason for Leaving- Hours	5.4241	2	*	4.8000	3	NS
✓ Reason for Leaving- Low Salary	7.5099	2	**			
Reason for Leaving- Husband Opposed	2.8309	2	NS			
Reason for Leaving- Family Needs	2.0857	2	NS	3.6916	3	NS
Reason for Leaving- Child Care Expense	.9071	2	NS	7.5862	3	*
Reason for Leaving- Retired	.6609	2	NS			

Note: For an explanation of Chi Square, see Appendix C. LS\* - Level of Significance; \*Significant at the .05 level; \*\*Significant at the .01 level; NS - Not Significant.

Thirty-two per cent of the nurses had not worked as a registered nurse for pay from 1 to 11 months; 36 per cent had not worked from 1 to 5 years; 11 per cent had not worked from 6 to 10 years; and 21 per cent had not worked for over 10 years.

The nurses were asked how many hours per week they would prefer to work if they did return to nursing. Fifty-four per cent said less than 20 hours per week; 24 per cent said 21-39 hours per week; 18 per cent said 40 hours per week; and 3 per cent specified other preferences. When asked what time of day or night they could report for duty, 76 per cent preferred daytime hours.

Fifty-one per cent indicated that if they returned to nursing, they would return to hospital nursing; 16 per cent would return to a doctor's office; and 14 per cent preferred school nursing. Percentage figures in other categories were negligible. Thirty-one per cent chose to return to these areas because of the skills required; 22 per cent noted the opportunities available; 19 per cent indicated "hours" as the reason for their choice; 10 per cent said location was the main reason; 1.5 per cent indicated financial reasons; and 16 per cent indicated "other." Eighty-three per cent of the inactive registered nurses had not been employed in another occupation since leaving nursing employment.

## CHAPTER IV

### SUMMARY AND RECOMMENDATIONS

X (The majority of registered nurses participating in this survey are X actively employed in nursing.) Their purpose is dual in nature: they seek to provide public service and, at the same time, provide for their own families. They represent a segment of society whose role is an essential one in nearly all health services but whose welfare has not been the subject of much public concern. (This is a paradox because [it seems rather obvious that the best way to stimulate interest in nursing careers and therefore serve an urgent need for more nurses is to keep them satisfied, both professionally and economically].) It should be remembered that nursing is a unique occupation because of the demands made upon those devoted to it. [Nurses are responsible for the lives of their "clients," whereas this is rarely the case in other occupations.]

The utilization of registered nurses in Oklahoma clearly depends upon employment opportunities, which are certainly not limited; marital status; age; family responsibilities; salary; administrative duties; and hours. Although many of the nurses participating in this research effort feel the provision of child-care facilities by the employer during the mothers' working hours might help alleviate the shortage, few indicate that child-care expenses take a major portion of their monthly income or caused them to leave nursing. Even though most of the married nurses' husbands earn 76-100 per cent of the family income, this does

*This does*

not keep the wife from working. Monthly income differs by type of certificate and can be said, therefore, to be a factor in the utilization of registered nurses. Also, very few nurses indicate that they left nursing because they needed refresher courses. Training in other fields does not prevent nurses from working in nursing. Thus, my second research question, regarding the factors underlying the utilization of registered nurses in Oklahoma, can be said to be answered in part.

Salaries, administrative duties, and hours are capable of being changed, and perhaps improvements in these areas would serve to increase both the satisfaction of working registered nurses and the number of young people considering nursing careers.

My first research question as to whether part-time employment would help bridge the gap between the demand for and the supply of nurses is

*Inactive nurses* answered in that the vast majority of inactive nurses indicate that if they did choose to return, they would do so only on a part-time basis. *be a nurse*

Secondly, working registered nurses select "Arrange hospital shifts so that available qualified help may be utilized" as their first choice to alleviate the shortage 20 per cent of the time.

The results of this survey lead me to the conclusion that most nurses who have chosen to leave nursing will never return on a full-time basis, unless economically required to do so. Although many registered nurses are graduated each year, the problem expresses itself in terms of a shortage of nurses actually working in nursing. I cannot offer any simple answers because anyone who attempts to investigate the nursing profession will find that there are none.

*degree  
diploma  
certificate*

## Recommendations

As indicated in Chapter III, some nurses prefer one path to the solution of the shortage, while others choose different ones. There is certainly no single route. Based on the information gathered in this study, I would like to make the following recommendations:

1. The preparation for a nursing career should begin in high schools. An educational program initiated in high schools covering all aspects of careers in the health field would enable young people to learn of the employment opportunities and the education required.
2. If a task analysis indicated such an arrangement was feasible in terms of job performance and efficient allocation of resources, hospital shifts should be arranged such that available qualified help could be utilized.
3. Hospitals should provide 24-hour child-care facilities for the children of their employees at a nominal fee.
4. Registered nurses should reclassify themselves. There are three different types of programs which award the registered nurse certificate. The training received differs between programs, and salary differs once training is completed. Eli Ginzberg has suggested that in the future graduates of two- and three-year

nursing programs be called "technicians."<sup>1</sup> Such a distinction would eliminate much of the friction between diploma and degree nurses.

5. Further study should be undertaken regarding the role of collective bargaining in the nursing profession.

A group effort to solve economic problems such as low salaries and poor working conditions might serve to make the field more attractive, and therefore, bring and hold more qualified people.

6. The health services industry, and therefore, nursing, must compete with other occupations and should, then, be structured as virtually all other competitive industries are: individuals should be able to move up the occupational ladder without constantly being faced with rigid licensing requirements.

The problem of the efficient utilization of nursing personnel must be approached carefully. The public should be made aware of the shortage of nurses and what this means in terms of future health care. Nurses seem to be taken for granted, and something should and can be done about it. Nurses have a tendency to want to solve all their problems on their own. The shortage problem, however, concerns all of us. It's solution will require a cooperative effort on the part of the

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<sup>1</sup>Patricia D. Horgan, "Is Nursing Really a Profession?" RN (Oradell: R. N. Publications, Inc., 1960) in Bonney Bullough and Vern Bullough, Issues in Nursing: Selected Readings (New York: Springer Publishing Company, Inc., 1966), p. 58.



public, academicians, doctors, hospital administrators, and above all,  
nurses. Only then may we hope to equilibrate the demand for and the  
supply of registered nurses.

## A SELECTED BIBLIOGRAPHY

- American Nurses' Association. Facts About Nursing, 1966. New York: American Nurses' Association, 1966.
- American Nurses' Association. Facts About Nursing, 1967. New York: American Nurses' Association, 1967.
- American Nurses' Association. Facts About Nursing, 1968. New York: American Nurses' Association, 1968.
- Barker, Anna E., and Earl E. Staton. "Inactive Nurses," Public Health Reports, LXXX (July, 1965), 637-645.
- Berwind, Shirley H. "The Community College and the Inactive Nurse," Occupational Education Bulletin, III (November 15, 1968), 3-5.
- Bullough, Bonnie, and Vern Bullough (eds.). Issues in Nursing: Selected Readings. New York: Springer Publishing Co., Inc., 1966.
- Carson, Ruth. How We Can Get the Nurses We Need. Public Affairs Pamphlet No. 385. New York: Public Affairs Committee, Inc., 1966.
- Clark, Benjamin F. "Solving the Nurse Shortage in Vermont," Journal of the American Medical Association, CLXXXIX (August, 1964), 131-132.
- Cooper, Signe S. "Activating the Inactive Nurse: A Historical Review," Nursing Outlook, XV (October, 1967), 62-65.
- Frances, Sister Mary Ann. "Implementing A Program of Cyclical Scheduling of Nursing Personnel," Hospitals, XL (July, 1966), 108ff.
- Hale, Thomas, Jr. "Why the Nursing Supply Is Failing to Meet the Demand," The Modern Hospital, XCV (September, 1960), 100ff.
- Hayden, Margaret. "A Planned-Time Program Can Boost Nursing Morale, Provide Balanced Coverage," The Modern Hospital, CVII (September, 1966), 127-130.
- Henderson, Cynthia. "Freeing the Nurse to Nurse," American Journal of Nursing, XLIV (March, 1964), 72-77.
- Levine, Eugene. "Nurse Manpower Yesterday, Today, and Tomorrow," American Journal of Nursing, LXIX (February, 1969), 290-296.

- Livengood, Lindsay, "Planned Shifts Save Nurses and Dollars," The Modern Hospital, CIV (February, 1965), 101ff.
- Moses, Evelyn B. "Nursing's Economic Plight," American Journal of Nursing, XLV (January, 1965), 68-71.
- Oklahoma Hospital Association. Membership of Oklahoma Hospital Association, 1968.
- Platou, Carl N., and W. Dennis Pederson. "Can More Part-Time Nurses Be Recruited?" Hospitals, XLI (May, 1967), 77ff.
- Riley, Matilda. Sociological Research II, Exercises and Manual. New York: Harcourt, Brace & World, Inc., 1963.
- Steel, R. G. D., and James H. Torrie. Principles and Procedures of Statistics. New York: McGraw-Hill Book Company, Inc., 1960.
- The Wisconsin State Employment Service in cooperation with the Madison League for Nursing. A Study of Inactive Nurses in Dane County, Wisconsin, 1966-67. Madison: Wisconsin State Employment Service, 1967.
- U.S., Bureau of the Census. U. S. Census of Population: 1960. Vol. I, Characteristics of the Population. Part 38, Oklahoma. Washington, D. C.: U. S. Government Printing Office, 1963.
- U.S., Department of Health, Education, and Welfare, Children's Bureau, and U. S., Department of Labor, Women's Bureau. Child Care Arrangements of Working Mothers in the United States. Children's Bureau Publication No. 461. Washington, D. C.: U. S. Government Printing Office, 1968.
- U. S., Department of Health, Education, and Welfare, Public Health Service, Division of Nursing. Health Manpower Source Book, Section 2, Nursing Personnel. Public Health Service Publication No. 263. Washington, D. C.: U. S. Government Printing Office, 1966.
- U. S., Department of Health, Education, and Welfare, Public Health Service, Division of Nursing. Nurse Training Act of 1964, Program Review Report. Public Health Service Publication No. 1740. Washington, D. C.: U. S. Government Printing Office, 1967.
- U. S., Department of Health, Education, and Welfare, Public Health Service. Toward Quality in Nursing. Public Health Service Publication No. 992. Washington, D. C.: U. S. Government Printing Office, 1963.
- U. S., Department of Labor, Bureau of Labor Statistics. Health Manpower, 1966-75. Report No. 323. Washington, D. C.: U. S. Government Printing Office, 1967.

- U. S., Department of Labor, Wage and Labor Standards Administration. Report of A Consultation on Working Women and Day Care Needs. Washington, D. C.: U. S. Government Printing Office, 1967.
- U. S., Department of Labor, Women's Bureau. 1965 Handbook on Women Workers. Bulletin No. 290. Washington, D. C.: U. S. Government Printing Office, 1965.
- U. S., Department of Labor, Women's Bureau. Part-Time Employment for Women. Bulletin No. 273. Washington, D. C.: U. S. Government Printing Office, 1960.
- U. S., Department of Labor, Women's Bureau. Underutilization of Women Workers. Washington, D. C.: U. S. Government Printing Office, 1967.
- Weber, Christopher A. "R. N. Survey--The Nurse Today," RN, XXXI (July, 1968), 31-46.
- Yett, Donald E. "The Nursing Shortage and the Nurse Training Act of 1964," Industrial and Labor Relations Review, XIX (January, 1966), 190-200.
- Yett, Donald E. "The Supply of Nurses: An Economist's View," Hospital Progress, XLV (February, 1965), 88-102.

APPENDIX A

QUESTIONNAIRE COVER LETTER

## QUESTIONNAIRE COVER LETTER

October 10, 1968

Dear Registered Nurse:

I am a graduate student in economics and presently a Manpower Fellow at the Manpower Research and Training Center at Oklahoma State University. I am especially interested in the utilization of women in the labor force, and the medical profession appears to be in need of all types of manpower, especially women.

I am confident that you are aware of the shortage of registered nurses in Oklahoma and throughout the nation. My masters thesis focuses upon this problem. I am working with four counties in the state. These range from rural to urban counties and include a college community. From the information I have gathered from interviews and correspondence, along with the response to the questionnaire attached, I hope to determine how women can be utilized as registered nurses in Oklahoma in a way which will be most beneficial to them as well as to the medical profession and the public.

The attached questionnaire will take approximately fifteen minutes to complete. All information is confidential, as names are of no concern in my research. I will appreciate your answering the questionnaire and returning it in the enclosed envelope at your earliest possible convenience. Thank you for your time and interest.

Sincerely,

(Mrs.) Donna Martin

Enclosures

APPENDIX B

REGISTERED NURSE UTILIZATION QUESTIONNAIRE







## D. PERSONAL VIEWS REGARDING NURSING

1. What do you like most about nursing?

- |   |   |
|---|---|
| 1) The hours  | 5) Opportunity to work with public and be out of confines of home |
| 2) The pay  |   |
| 3) The opportunity to help people   |   |
| 4) The professional training enables me to take better care of myself and my family | 6) Other (specify):   |
- 
- 
- 

2. What do you like least about nursing?

- |                                    |                                |
|------------------------------------|--------------------------------|
| 1) The hours                       | 4) Too many demands on a nurse |
| 2) The pay                         | 5) The supervisors             |
| 3) Lack of orientation to new jobs | 6) Other (specify):            |
- 

3. What do you feel is the most important characteristic of the degree nurse? (Please check ONE)

- |   |                                 |                                 |
|---|---------------------------------|---------------------------------|
| 1) Task oriented                              | 4) Education not liberal enough | 6) Lack of practical experience |
| 2) Patient oriented                           | 5) Enough practical experience  | 7) Other (specify):             |
| 3) Education liberal enough in related fields |                                 |                                 |
- 

4. What do you feel is the most important characteristic of the diploma nurse? (Please check ONE)

- |   |                                 |                                 |
|---|---------------------------------|---------------------------------|
| 1) Task oriented                              | 4) Education not liberal enough | 6) Lack of practical experience |
| 2) Patient oriented                           | 5) Enough practical experience  | 7) Other (specify):             |
| 3) Education liberal enough in related fields |                                 |                                 |
- 

5. Do you feel there is friction between these two types of graduates?

- |        |       |
|--------|-------|
| 1) Yes | 2) No |
|--------|-------|

If yes, what do you think is the cause and/or result of this?

6. What type of education should the beginning nurse have?

- |                              |                                       |                                    |
|------------------------------|---------------------------------------|------------------------------------|
| 1) Diploma                   | 4) Associate degree                   | 7) Combinations of all three types |
| 2) Baccalaureate             | 5) Associate degree and Diploma       |                                    |
| 3) Diploma and Baccalaureate | 6) Associate degree and Baccalaureate |                                    |





- 5) Help more students attend nursing school or universities with nursing programs
- 6) Attract more men into the profession to stabilize the work force
- 7) Improve working conditions by replacing obsolete equipment with more advanced technological aids
- 8) Relieve nurses of lesser skilled duties
- 9) Provide more active in-service education for nurse assistants

III. REGISTERED NURSES WORKING IN SOME OTHER OCCUPATION, SEEKING EMPLOYMENT IN SOME OTHER OCCUPATION, OR UNEMPLOYED

A. REASONS FOR NOT PRACTICING NURSING AND RELATED INFORMATION

1. Why did you leave the nursing profession? (Mark one or more)
- |                             |  |
|-----------------------------|--|
| 1) Age                      | 8) Student, receiving further training |
| 2) Health                   | 9) Husband opposed                     |
| 3) Hours                    | 10) Family needs                       |
| 4) Low salary               | 11) Dislike nursing                    |
| 5) Transportation problems  | 12) Child-care expenses                |
| 6) Need of refresher        | 13) Retired                            |
| 7) Employment opportunities | 14) Other (specify): _____             |
2. Which of the above answers best explains why you are not practicing nursing now? Write the number(s) on this line: \_\_\_\_\_
3. How long has it been since you worked as a registered nurse for pay?
- |                  |                  |
|------------------|------------------|
| 1) 1 - 11 months | 3) 6 - 10 years  |
| 2) 1 - 5 years   | 4) Over 10 years |

B. EMPLOYMENT INFORMATION

1. If you did return to nursing practice, how many hours would you prefer to work per week?
- |                       |                           |
|-----------------------|---------------------------|
| 1) Less than 20 hours | 3) 40 hours               |
| 2) 21 - 39 hours      | 4) Other (specify): _____ |
2. How many hours per day could you work? \_\_\_\_\_
3. What time of day or night could you report for duty? \_\_\_\_\_
4. In which one of the following fields would you be most likely to work if you returned to nursing?
- |                          |                           |
|--------------------------|---------------------------|
| 1) Hospital nursing      | 5) Nursing education      |
| 2) Private duty nursing  | 6) Doctor's office        |
| 3) School nursing        | 7) Nursing home           |
| 4) Public health nursing | 8) Other (specify): _____ |



APPENDIX C

EXPLANATION OF CHI SQUARE

## EXPLANATION OF CHI SQUARE

Chi square is an index of dispersion. It is used to test the hypothesis that two or more subsamples differ in respect to observed and expected values; that is that the percentages in a two-dimensional table differ. The sampling distribution of chi square depends upon the degrees of freedom in the table. The null hypothesis is a statement of no relationship between variables.<sup>1</sup> There is said to be a significant relationship between the variables if the probability of a larger value of chi square is found to be .05 or less. If, therefore, one says that chi square is significant at the .05 level, this means that there is one chance in twenty that the variables under consideration are not related; their correlation, therefore, is not due simply to chance. If chi square is significant at the .01 level, there is one chance in 100 that the variables under consideration are not related. If the probability of a larger value of chi square is greater than .05, there is said to be no significant relationship between the variables.<sup>2</sup>

The "selected" chi squares in Tables I, III, and V include all chi squares that were found to be significant in the analysis; others are presented because it was felt their nonsignificance might be of interest to some.

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<sup>1</sup>Matilda Riley, Sociological Research II, Exercises and Manual (New York: Harcourt, Brace & World, Inc., 1963), p. 178.

<sup>2</sup>R. G. D. Steel and James H. Torrie, Principles and Procedures of Statistics (New York: McGraw-Hill Book Company, Inc., 1960), p. 435.



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