# Personnel Shortages in the Health Field and Working Patterns of Women 

By WALTER L. JOHNSON, Ph.D.

ALTHOUGH it is well known that large numbers of women are attracted to the health and medical care field, the numerical extent of their employment and the trends toward their greater participation are not always recognized. In 1940, about 58 percent of all workers in the health field were women; by 1950 , this proportion had increased to 63 percent (1a), distributed by occupation as follows:

| Occupation | Percent women |
| :---: | :---: |
| Professional worker | 63 |
| Service worker | 66 |
| Clerical worker- | 91 |
| All other (residual) | 35 |

With the exception of the residual occupations, which constituted only about 9 percent of all workers in the health field, women predominated by a ratio of two or more to one.

A more detailed analysis of the professional group in the health field in 1950, including those in medical and other health services and in hospitals, reveals a similar pattern for specific professional occupations, except medicine and dentistry. The percentages of women in selected professions (1b, 2 ) are:

[^0]Profession
Percent women
Nurse, registered and student_--------- 98
Dietitian, nutritionist-------------------- 97



Dentist ---------------------------------- 3
If physicians and dentists are excluded, about 9 out of 10 professional workers are women, a ratio which might surprise even those most familiar with the characteristics of health personnel.

This paper proposes to defend and emphasize the proposition that these facts identify a whole area of study which is relevant and significant to better understanding and control of personnel shortages in the health field today. Such an emphasis is needed for the reason that insufficient attention has been given to exploring the effect of this kind of sex ratio on the personnel turnover problem-either from the standpoint of measuring its relative influence on the entire personnel problem or of formulating possible courses of action in which this sex ratio is taken into account.

Of course, in a general way, it is widely recognized that the presence of women in significant numbers in any industry or occupation usually increases the magnitude of certain kinds of personnel problems over what they would be if high ratios for men prevailed. However, the application of this hypothesis in the collection of data to measure its effects or in the formulation of broadly conceived programs which cater
to the needs of women has lagged. This is an omission which might be profitably explored in view of the likelihood that shortages of health personnel are likely to remain critical.

In presenting this point of view, no cure for these problems is offered. They have complex and ramifying roots, and long-range solutions will undoubtedly be difficult to achieve. On the other hand, even partial clues which may suggest operations for relieving some of the pressures on personnel administrators now and in the near future may not be wholly unwelcome, and it is within this more restricted framework that the following data are presented. It is also recognized that the data are not new but it is hoped that by presenting them in a systematic and moderately comprehensive way, they may shed new light on an old problem.

The specific aims of this paper are (a) to analyze certain differences in working activities and in strength of attachments to the labor force between men and women, ( $b$ ) to review certain characteristics of women which affect the probabilities that they will or will not participate in the labor force, and (c) to suggest possible steps for mitigating personnel problems in the health field. Such broadly based factual data are a necessary first step in placing this facet of the problem in its proper context and, in lieu of particular data from the health field, will provide clues as to the specific influence of the sex ratio on the size of the personnel problem. A quantitative review of the data may also help the administrator to decide whether or not the effect of the sex ratio is sufficiently great to indicate further pursuit of the problem.

## Sex Differences in Work Behavior

For many decades, the proportion of women in the labor force has risen continuously ( 3,4 ). On the other hand, many differences in attitudes toward gainful work and in actual work behavior between men and women still prevail and will probably continue to prevail in the foreseeable future. An obvious example pertains to the important differences in classes of occupations and industries which attract women as compared with those which attract men (1b, 5). Another significant difference refers to the variations in stability and dura-
tion of employment. Both men and women move about a good deal within the labor force, that is, from job to job and from occupation to occupation $(6-8)$, but their patterns of withdrawal from and reentry into the labor force itself are less similar. Women clearly differ from men in that they manifest a much larger volume of both withdrawal and reentry.
Monthly sample studies of the labor force, conducted by the Bureau of the Census, have presented two lines of evidence for measuring sex differences in participation in the labor force: (a) the work experience of the civilian noninstitutional population in the year preceding the January of enumeration insofar as these experiences could be constructed through retrospective methods and (b) monthly labor force turnover rates $(9 a, 9 b)$.

First, with respect to annual work patterns, if the experience of any "normal" year is examined, that is, any year not marked by economic upheaval or war, it will be found that, (a) of all persons reporting any work experience for the year, a sizably larger proportion of women than of men will report part-time rather than full-time work during the year and (b) of those persons reporting any work, a sizably smaller proportion of women than of men will have reported working a full year ( $50-52$ weeks). In 1954, for example, in the civilian noninstitutional population, over onequarter of the women ( 27 percent) reporting work during the year worked at part-time jobs, whereas about one-tenth ( 11 percent) of the men employed worked at part-time jobs. Although among all women working during the year, over one-third ( 38 percent) reported that they worked for the full year, 66 percent or nearly two-thirds of the men stated that they had worked for the full year. These and other comparisons of annual work experience by age may be found in table 1.

Second, closely linked to these annual work patterns are the variations in labor force entry and withdrawal rates between men and women, and it is probable that differences in the volume of these movements largely account for the annual work experience patterns observed above. In any given year or month, a larger absolute number of women can be expected both to enter and to leave the labor

Table 1. Work experience of the civilian noninstitutional population, by age and sex, United States, 1954

| Age | Total population, in thousands |  | Percent reporting any work, 1954 |  | Percent workers reporting fulltime work |  | Percent workers reporting working 50-52 weeks |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Male | Female | Male | Female | Male | Female |
| Total | 54, 124 | 59, 528 | 85.6 | 42. 8 | 89.4 | 73. 2 | 66 | 38 |
| 14-17 | 4, 533 | 4, 453 | 49. 8 | 33. 9 | 30.5 | 31.5 | 3 | 2 |
| 18-19 | 1, 805 | 2, 120 | 81. 3 | 62. 6 | 70. 8 | 76. 6 | 27 | 24 |
| 20-24 | 3, 620 | 5, 344 | 87. 2 | 57.1 | 89. 7 | 85. 8 | 45 | 40 |
| 25-34 | 11, 068 | 12, 212 | 97.8 | 44. 8 | 95.7 | 78. 0 | 73 | 40 |
| 35-44 | 10, 759 | 11, 486 | 98.4 | 50. 3 | 95.5 | 74.1 | 76 | 40 |
| 45-54 | 9, 097 | 9, 389 | 97. 6 | 49. 4 | 95.2 | 75. 2 | 76 | 45 |
| 55-59 | 3, 752 | 3, 932 | 93. 3 | 39. 7 | 93.8 | 72.8 | 71 | 45 |
| 60-64 | 3, 179 | 3, 355 | 86. 3 | 34.7 | 89.9 | 70.8 | 67 | 45 |
| 65-69 | 2, 522 | 2, 695 | 66. 9 | 22.0 | 82.1 | 57. 9 | 56 | 37 |
| 70 and over | 3, 790 | 4. 542 | 32. 0 | 8. 3 | 64.8 | 54. 9 | 45 | 35 |

Socree: Reference $9 b$.
force (table 2). In 1952, in an average month, for every 100 men entering the labor force 169 women entered, and for every 100 men leaving the labor force 170 women left. If the youngest and oldest age groups are excluded, since they are less stable in their labor force attachments, the differences between men and women become much more pronounced. For instance, in the age group 25-44, which constitutes nearly half the total and may be considered to be the backbone of the labor force, for every 100 men entering the labor force in an average month. about 500 women will enter, and for every 100 men withdrawing in the same period, about 500 women can be expected to withdraw.
The size of the differences in both of these measures is great enough to identify distinct variations between men and women in average individual work patterns. On the whole, working women do not have the close and sustained relationship to the labor force that men have, though of course the internal variation of individual cases around each hypothetical average is probably large enough so that there is a great deal of overlap in work patterns.

## Factors Affecting Working Patterns of Women

The reasons women differ from men in their degree of attachment to the labor force are not difficult to find, and they have been recognized since women began to assume some importance
in the labor force. Women respond to the demands of the feminine role first and to occupational roles second. Hence, to a greater extent than is true of men, external and nonoccupational factors are of primary importance in modifying the occupational behavior of women. This more general point will be considered later but, before doing so, an attempt will be made to measure the strength of some of the specific factors which are associated with low rates of labor force participation by women.

## Marriage

Marriage is the first factor which tends to detach women from gainful activity in the labor market. While there has been a steady and progressive increase of married women in the labor force in recent years, marriage still brings about a larger volume of withdrawals of women, age by age, from what it would have been if the women had remained single (1d). Differences in labor force participation between single women and childless ever-married women are large in every age group, and it even appears that the differences increase with advancing age (see chart). Possibly 1 out of 3 or 4 women at work when they are single will cease to work when they marry or will withdraw from the labor force later.
There is added significance to these differences when it is seen that the proportion of all single women in the general population declines

Table 2. Average monthly entries and withdrawals from the civilian labor force, by age and sex, United States, 1952
(Numbers in thousands)

| Age | Average civilian labor force |  | Average monthly additions to the civilian labor force |  |  | Average monthly withdrawals from the civilian labor force |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Male | Female | Female to male ratio | Male | Female | Female to male ratio |
| Total | 43, 454 | 19, 513 | 1, 188 | 2, 005 | 1. 69 | 1, 177 | 1,996 | 1. 70 |
| 14-19. | 2, 896 | 1, 996 | 560 | 397 | 71 | 480 | 359 | 75 |
| 20-24 | 3, 338 | 2, 504 | 90 | 210 | 2. 33 | 136 | 217 | 1. 60 |
| 25-44 | 20, 530 | 8, 758 | 151 | 804 | 5. 32 | 156 | 792 | 5. 08 |
| 45-64 | 14, 276 | 5, 668 | 203 | 509 | 2. 51 | 210 | 528 | 2. 51 |
| 65 and over | 2, 415 | 590 | 184 | 85 | . 46 | 195 | 100 | . 51 |

Source: Reference 9a.
precipitously within a short space of about 7 or 8 years. It may be estimated from census data (1c) that of a cohort of young women of the same age, about one-quarter will have married by age 19 ; by age 21 , one-half will have married; by age 24 , three-quarters will have married; and by age 26 , about 83 percent will have married. For the specific age groups from 18 through 22 , it can be estimated that 9 to 13 percent within each age group will marry each year. In view of the preceding data, the probabilities are high that a sizable minority of those who do marry will quit the labor market or will not enter it. Assuming that one-quarter of those who marry do leave the labor market, this would give a rate of attrition of about 2 or 3 percent per year of all women in each of these age groups.

## Children

The second factor associated with widespread withdrawals of women from the labor force, which is more significant than the fact of marriage alone, is the arrival of children (1d). The effects of these responsibilities are particularly noticeable during the children's early formative years when the needs for continuous care and guidance are greatest. It is at this point that the lowest rates of participation by married women in the labor force are observed. Not more than about 9 to 13 percent of the married white women in any group with children
under 5 years of age were classified as in the labor force in 1950 (see chart). In addition to the age of the children, the number of children that mothers have to care for has some effect on labor force participation. The chart also

Percentage of white women in the labor force: single women; married women, by number of children ever born; and married women with children under 5 years of age, United States, 1950. (Source: Reference ld.)

shows that there is a small but consistent decrease in the proportion of married women in the labor force with increasing numbers of children ever born to them, and these differences hold for all age groups.

In all instances, the rates of participation in the labor force by women with children are lower than for married women without children. The differences are most marked in the younger age groups, and here they are even greater than the differences between married women without children and single women. On the other hand, there is a good rise in the rate among the married women with children (except for those with children under 6 years of age), with the advancing age of the mother. This suggests that many women tend to reenter the labor force as their children become old enough not to require the kind of care necessary in the preschool and early school years. It may be this kind of movement which is partly responsible for the large number of additions of women to the labor force observed above. In any event, it is obvious that both marriage and parenthood are potent forces operating on the female labor market and that they bulk large in explaining the constant personnel turnover among women.

Also highlighted by these data is the quantitative importance of noneconomic and nonoccupational factors in the determination of when and how long women will be employed in the labor force.

## Practical Implications

Differences in working patterns between men and women and the underlying attitudes and values which determine them are relevant facts to an industry such as the health field, which is heavily dependent on women for the delivery of services and the performance of necessary functions. Greater personnel problems can be expected, primarily for the reason that maintenance of the size of personnel is, potentially at least, a greater problem among women than among men. The working patterns of women and their possible role in contributing to the problems of personnel through attrition in this field should be given some consideration unless specifically disproved as not applicable to this
industry or to particular occupations within it. To give such recognition may help to identify areas where inordinate amounts of resources and energies are being applied to only small segments of the total personnel problem. An example might be the case of an agency becoming concerned with working conditions and job satisfactions to the 'virtual exclusion of other considerations, on the assumption that these internal factors are exclusively related to holding employees to their jobs. It is clear that intrinsically, these are legitimate and significant organizational goals but if they are linked solely to solving personnel problems, it is not evident that they will be wholly successful. Particular agencies probably gain certain competitive advantages through such programs, thereby enabling them to attract personnel from other agencies. This, however, is analogous to robbing Peter to pay Paul, and the net effect toward the solution of the larger problem is zero.

Within broad limits, data of this sort suggest the systematic exploration of programs of action which aim more directly at utilizing to a greater extent some of the lost womanpower which attends the marginal status of women in the labor market. For example, greater flexibility in planning workloads and in making allowances for part-time work could be instituted in many instances. When compatible with organizational goals, conscious and deliberate attention to the needs of women, considered within their framework of reference and the competing demands on them, could conceivably be implemented to induce some women to maintain their attachments to the field or to return to it. Even a small measure of success along these lines would ease or mitigate a situation which is critical at the present time.

Another overlapping possibility suggested by this analysis is to take advantage of an ongoing trend, namely, the increase of married women with older children in the labor force, and to give greater consideration to recruitment from these ranks. It is perhaps unrealistic to assume that women of this age category could or should be persuaded to train for some occupation with formal requirements. On the other hand, within the field at the present time, there are certain on-the-job training experiences for some categories of personnel, and undoubtedly there
are many positions into which this age group could be fitted successfully. Moreover, there are many women, now inactive, who have been trained in skills in the health field. Nurses are an excellent example of such a group. It has been estimated that in 1951 the following proportions of nurses were active:

| Age | Percent active |
| :---: | :---: |
| Under 30_. | - 53 |
| 30-39 | - 39 |
| 40-49 | 35 |
| 50-59 | 33 |
| 60 and over_ | 19 |

For all ages, about 45 percent of the nurses were estimated to be active (10). Until shown to be otherwise, it might be assumed that, given the appropriate conditions, many of these nurses could be induced to return to work in the health field. The same principle may also be applicable to other professional personnel.

Finally, one long-range solution which is suggested is the recruitment of men for ancillary positions in this field. The complexities of this approach are obvious, and in the short run chances of success are probably not great. This should not be allowed to obscure the possibility of change in the long run, however. It would seem that exploratory research and experiment in this area are indicated.

## Summary

With the exception of physicians and dentists, the important professions and occupations in the health and medical care field are numerically dominated by women. This fact alone can be used to account for many of the personnel shortages in this field, when it is explicitly recognized that over a period of time the working patterns of women do not show the stability and continuity that are generally true for men. Because of marriage and childrearing, coupled with distinctive feminine attitudes toward work, large numbers of women tend to withdraw early from the labor force. This has the effect of creating many job vacancies where none would exist if the jobs were held by men and complicates the problem of personnel short-
ages already aggravated by general expansion in activity.

Certain practical steps may be taken to improve this situation. For example, greater attention to the needs and motivations of women and consideration of recruitment from the mid-dle-aged group of women and from men are suggested.

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[^0]:    Dr. Johnson, at the time this analysis was made, was an instructor in sociology, department of environmental medicine and community health, College of Medicine at New York City, State University of New York. He is now co-director of research, Public Health Nursing Project, American Nurses' Foundation, Inc., New York, N. Y.

