

Comparison of Duties and Responsibilities of Public Health Educators, 1957 and 1969

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IN THE PAST 35 years, professional organizations, notably the American Public Health Association and more recently the Society for Public Health Education, have published statements detailing the duties and responsibilities considered appropriate for public health educators. During this period the employing health agencies have listed in their job or merit-system specifications the duties and responsibilities to be assigned to public health educators. These statements by professional organizations and employing agencies have been revised from time to time to reflect changes in the emphases of health activities or services of health agencies.

Within the past few years, health agencies have

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undergone many alterations to reflect the newer thinking regarding social change and the delivery of health services, as well as in response to new social action programs supported by sizable Federal appropriations. These changes have affected the duties and responsibilities of many public health workers including the public health educators.

In recent years the Congress has enacted legislation to bring about several new health programs: Medicare, Medicaid, Comprehensive Health Planning, and the Regional Medical Programs Service for heart disease, cancer, and stroke. New health programs such as the Migrant Health Act, Economic Opportunity Act, Appalachian Regional Development Act, and the Demonstration Cities and Metropolitan Development Act also have been brought about through congressional action. The 89th Congress alone produced 21 new health programs, 17 educational programs, 15 economic development programs, 12 programs to meet the problems of cities, and four development programs.

This outpouring of legislation has spawned many new concepts and revived others concerned with the delivery of health services. For example, neighborhood health centers have increased greatly in number and have extended their services. Community health aides of many types are

being employed by health agencies to assist in the delivery of health services. And the hospital as a purveyor of community health services, emphasized to some extent in the 1930's and 1940's, once again is a focus of attention.

These new programs and concepts have brought about changes in the duties and responsibilities discharged by public health educators in official health agencies. The potential for the public health educator in the hospital setting has been cited (1). Conrath (2) has pointed up opportunities in the Regional Medical Programs Service, Arnold (3) has indicated the role of the health educator in program planning, and numerous authors, for example Heath and Pelz (4), have described activities of public health educators in programs employing community health aides.

No definitive studies have been carried out in recent years to determine if changes have occurred in the duties and responsibilities of public health educators or the nature and extent of such changes, if any. Thus this study was an attempt to provide data of significant interest (a) to health agencies concerned with the staffing and effective use of professionally prepared health educators, (b) to professional societies concerned with qualifications of health education personnel and the growth of the profession, and (c) to schools of public health and other educational institutions engaged in preparing health educators.

Review of Literature

Analysis of the duties and functions of public health personnel was the focus of a few studies in the 1930's, and nearly 15 years elapsed before such studies appeared again in the literature. Little attention was given to the public health educator in these early studies. Reports of health education activities performed by public health personnel, job specifications for health education personnel, and the professional preparation of public health educators do not appear in the literature before 1949. An extensive review of early studies of the duties and functions of public health workers was reported in a 1957 study by Bowman (5).

Use of job analyses and time studies, long accepted as a means of determining the efficient and economical use of personnel in industry and government, became well established and accepted as a methodology for studies of public health personnel through this early research. Beginning in

the 1950's, this methodology has been applied to studies of public health educators. Four time studies of health education activities have been reported by Milne and associates (6), Anderson (7), the California State Department of Public Health's Bureau of Health Education (8), and Bowman (9).

Several studies that included job analyses of public health educators were found in the literature. Those by Rash (10), Derderian (11), and Galiher and Wright (12), as well as the four time studies of health education activities, have been summarized by Bowman (5).

A fifth study, reported by Arnold in two articles (3, 13), was concerned in part with perceptions of the public health educator and his role in program planning and evaluation. The results indicate that health educators were perceived by physicians and nurses as liaison public relations experts between the health department and outside organizations and agencies. The public health nurse and the health educator were perceived as workers who more often carry the health department program to the public, giving service outside the agency. Data indicate that health educators did not perceive themselves—nor did physicians or nurses perceive them—to be responsible for activities in program planning or evaluation to the extent the physicians and nurses were perceived to be responsible.

Delgado-Murphy (14) studied the roles of public health educators employed at territorial or local levels in Puerto Rico. The educators enumerated 27 roles (14). Scrutinizing 14 roles both quantitatively and qualitatively, she found nine they ranked as outstanding: planner, guide, team member, resource person, instructor, coordinator, leader, organizer, and interpreter of the profession. Health administrators and co-workers agreed with only three: planner, guide, and resource person.

Perception of the public health educator's role was the focus of still another study, reported by Wang (15), of 245 health educators graduated from schools of public health and employed in official and voluntary health agencies in the United States. She reported an increasing demand for health educators with diagnostic skills and competency in program planning. Professional preparation was reported to be most deficient in program planning, administration, supervision, consultation, education and training, psychology of learning and group work, and evaluation and

research methods. She concluded that the emergence of a subprofession will increasingly place the health educator in the role of a program analyst, program planner, administrator, and supervisor.

Objectives of Study

Our general aim was to determine if changes had occurred since a 1957 study of the duties and responsibilities of public health educators employed in tax-supported health programs and, if so, the nature of these changes. Specifically, we have attempted to answer the following questions:

1. What duties and responsibilities are discharged by public health educators currently employed in tax-supported health programs?
2. How much work time do public health educators devote to specific duties and responsibilities?
3. How does the time currently devoted to specific duties and responsibilities compare with the time devoted to these activities as reported in a study in 1957?
4. Are there duties and responsibilities currently discharged by public health educators that were not reported in the previous study?
5. Are there duties and responsibilities reported in the previous study that currently are not discharged by public health educators?

Method of Study

The criteria for selecting participants were the same as those established for the 1957 study (5): a minimum of 2 years of employment in health education or related activities since receiving a master's degree from an accredited school of

public health, and current employment in a tax-supported program.

Lists of health education alumni receiving master's degrees between 1957 and 1966 were obtained from six schools of public health. We sent letters to more than 200 alumni who appeared to meet the criteria, soliciting their participation in the study. Of these, many had changed positions and were now employed in voluntary health agencies or were no longer employed in public health; several had left the profession, principally to raise a family; two were deceased; 12 were no longer at the address given and could not be reached; and several declined to participate because of other pressures.

Those who agreed to participate were asked to complete a form, giving information about their academic preparation and employment before and since receiving their graduate degree in health education. They also were asked to code the time they devoted to 20 categories of activities for 1 week on a self-coding time log—an updated revision of an instrument developed for the 1957 study. At the deadline established for returning these instruments by mail, 90 had agreed to participate and had returned a usable time log.

We tabulated the number of participants devoting time to each of the 20 categories of activities and the total amount of time devoted to each category during the week reported, then computed the mean number of hours per week per activity. These frequencies and means were then compared with corresponding data for the 1957 study. We further analyzed the data to determine differences in the percentages of time devoted to each activity

Table 1. Characteristics of selected public health educators, by school of public health, sex, and employing agency, 1957 and 1969

School of public health	Men		Women		Local agency		State agency		Regional agency ¹	Total number of participants	
	1957	1969	1957	1969	1957	1969	1957	1969	1969	1957	1969
Total.....	36	57	40	33	36	33	40	45	12	76	90
California.....	7	8	2	11	3	8	6	9	2	9	19
Columbia.....	3		2		3		2			5	
Harvard.....	0		1		1		0			1	
Hawaii.....		0		1		0		1	0		1
Michigan.....	7	26	13	5	6	9	14	17	5	20	31
Minnesota.....	3	3	8	4	4	5	7	2	0	11	7
North Carolina.....	15	19	10	8	17	8	8	15	4	25	27
University of California, Los Angeles.....		1		4		3		1	1		5
Yale.....	1		4		2		3			5	

¹ Not a separate category in 1957 study.

by public health educators employed by local, State, or regional agencies and also by length of employment in the agencies.

Results

Participants in the study were employed in agencies widely dispersed geographically in the United States. Characteristics of the 1969 and 1957 study groups were compared (table 1).

The group of participants in 1969 was somewhat larger than the group in 1957 (90 compared with 76) with a smaller number of women (33 compared with 40) and a larger number of men (57 compared with 36). Some changes were noted in employing agencies, principally the number, 12, employed in regional programs—a category that was not used in the 1957 study. A small decrease between 1957 and 1969 was noted in the number employed by a local agency (33 compared with 36) and a small increase in the

number employed by a State agency (45 compared with 40). Participants were alumni of six schools of public health in 1969 and seven schools in 1957.

The time devoted to the 20 categories of specified activities by the 90 participants is shown in table 2. Time spent in the comparable categories of activities reported in the 1957 study also is shown. The work week of health educators in the study group was slightly longer in 1969 (42.5 hours) than in 1957 (41.9 hours).

Percentage of educators devoting time to activities. More respondents devoted time to the following activities in 1969 (table 2): person-to-person communication, +15.0 percent; community organization and service, +9.0 percent; joint programs in health education, +8.4 percent; recruitment, +5.4 percent; and administration, +5.3 percent.

Fewer respondents reported devoting time in 1969 to newspapers, radio, and television, —30.6

Table 2. Time devoted by selected public health educators to specified health education activities, 1957 and 1969

Activity	Respondents reporting activity (percent)		Mean hours per week per respondent		Reported time (percent)	
	1957 (N=76)	1969 (N=90)	1957	1969	1957	1969
Total.....			41.9	42.5	100.0	100.0
Administration.....			7.3	9.7	17.4	22.8
Administration.....	88.0	93.3	4.7	6.4	11.2	15.1
Supervision and personnel management.....	68.0	70.0	2.3	2.9	5.5	6.8
Recruitment.....	19.0	24.4	.3	.4	.7	.9
Public relations.....	75.0	77.8	2.6	3.0	6.2	7.0
Community organization and service.....	51.0	60.0	2.3	2.5	5.5	5.9
Consultant functions.....			6.4	5.6	15.3	13.2
Consultant services.....	66.0	67.9	2.4	2.7	5.7	6.4
Inservice resource.....	51.0	40.0	1.5	.9	3.6	2.1
Intradepartmental resource.....	79.0	69.1	2.5	2.0	6.0	4.7
Education.....			9.4	9.3	22.5	21.9
Agency program in health education.....	68.0	70.0	2.1	2.3	5.0	5.4
Joint program in health education.....	66.0	74.4	2.6	3.8	6.2	9.0
School health.....	58.0	43.3	3.0	1.4	7.2	3.3
Staff education and inservice training.....	54.0	56.7	1.7	1.8	4.1	4.2
Communication or dissemination of information.....			10.6	7.6	25.3	17.9
Communication program.....	74.0	64.4	2.2	1.5	5.2	3.5
Person-to-person communication.....	55.0	70.0	2.0	2.3	4.8	5.4
Newspapers, radio, television.....	65.0	34.4	1.8	.9	4.3	2.1
Printed materials.....	64.0	57.8	2.6	1.8	6.2	4.3
Visual or audiovisual aids.....	64.0	51.1	2.0	1.1	4.8	2.6
Research and studies.....	(1)	38.9	(1)	1.1	(1)	2.6
Professional development.....	76.0	74.4	2.7	2.5	6.4	5.9
Other activities.....	14.0	21.1	.6	1.2	1.4	2.8

¹ Not a separate category in 1957 study.

percent; school health, -14.7 percent; visual or audiovisual aids, -12.9 percent; inservice resources, -11.0 percent; intradepartmental resource, -9.9 percent; communication program, -9.6 percent; and printed materials, -6.2 percent.

About the same percentage of respondents reported devoting time in both years to the following activities: public relations, +2.8 percent; staff education and inservice training, +2.7 percent; agency program in health education, +2.0 percent; supervision and personnel management, +2.0 percent; consultant services, +1.9 percent; and professional development, -1.6 percent.

In 1969 more than one-third, 38.9 percent, of the respondents reported devoting some time to research and studies; the mean amount reported was 1.1 hours (range 0 to 11 hours) or 2.6 percent of their work hours. This item was not included as a separate activity in the 1957 study.

Amount of time devoted to activities. A higher percentage of work time was devoted to administration in 1969, +5.4 percent, and slightly higher percentages of time to public relations, +0.8 percent, and community organization and service, +0.4 percent; a lower percentage of time was devoted to communication or dissemination of information, -7.4 percent, and consultant

Table 3. Percentage of time devoted by selected public health educators to specified health education activities, by employing agency, 1957 and 1969

Activity	Local agency		State agency		Regional agency ¹
	1957 (N=36)	1969 (N=33)	1957 (N=40)	1969 (N=45)	1969 (N=12)
Total.....	100.0	100.0	100.0	100.0	100.0
Administration.....	16.7	21.5	19.3	22.5	25.4
Administration.....	10.0	13.1	12.5	14.9	20.4
Supervision and personnel management.....	5.8	7.5	6.1	6.9	4.1
Recruitment.....	.9	.9	.7	.7	.9
Public relations.....	6.8	6.3	5.7	7.4	7.9
Community organization and service.....	5.1	6.5	5.2	4.3	9.7
Consultant functions.....	12.9	10.7	16.8	16.8	8.6
Consultant services.....	5.0	4.2	6.4	8.9	4.5
Inservice resource.....	2.2	1.4	4.3	2.6	1.8
Intradepartmental resource..	5.7	5.1	6.1	5.3	2.3
Education.....	23.9	21.9	20.3	21.5	23.3
Agency program in health education.....	5.2	7.7	4.7	4.3	3.8
Joint program in health education.....	6.6	6.0	5.7	9.8	13.1
School health.....	8.2	2.8	5.2	3.7	2.9
Staff education and inservice training.....	3.9	5.4	4.7	3.7	3.5
Communication or dissemination of information.....	25.7	22.0	25.2	15.2	15.8
Communication program....	6.1	4.4	4.5	3.1	1.8
Person-to-person communication.....	4.2	6.3	4.9	4.5	6.8
Newspapers, radio, television	4.8	2.3	3.8	1.9	1.8
Printed materials.....	4.8	6.0	7.8	3.3	2.9
Visual or audiovisual aids ..	5.8	3.0	4.2	2.4	2.5
Research and studies.....	(¹)	2.7	(¹)	2.7	2.7
Professional development.....	7.0	5.4	6.6	6.7	4.1
Other activities.....	1.9	3.0	.9	2.9	2.5

¹ Not a separate category in 1957 study.

functions, -2.1 percent; and slightly lower percentages to education, -0.6 percent, and professional development, -0.5 percent.

The decrease in time devoted to consultant functions was due to the reduced time spent serving as an inservice resource, -1.5 percent, and intradepartmental resource, -1.3 percent. Time devoted to consultant services actually increased slightly, +0.7 percent.

The decrease in time devoted to communication or dissemination of information was due to reduced percentages of time devoted to the communications program, -1.7 percent; newspapers, radio, and television, -2.2 percent; printed materials, -1.9 percent; and visual or audiovisual aids, -2.2 percent. Person-to-person communication actually showed a slight increase, +0.6 percent, in time.

Not only did fewer respondents participate in school health activities but those who did devoted less time to it, -3.9 percent. Other subcategories of educational activities increased in percentage of work time: the joint program in health education, +2.8 percent; agency program in health education, +0.4 percent; and staff education and inservice training, +0.1 percent.

The increase in time reported for the other activities category, +1.4 percent, included serving as acting health officer, performing secretarial and program duties for State public health associations, assisting with multiscreening procedures, and training dental hygienists in the technique of fluoride application.

Time comparisons at local, State, and regional levels. How health educators spent their time is presented in table 3. Comparisons between 1957

Table 4. Percentage of time devoted by selected public health educators to specified health education activities, by years employed, 1957 and 1969

Activity	Employed 3 years or less		Employed more than 3 years	
	1957 (N=32)	1969 (N=45)	1957 (N=44)	1969 (N=45)
Total.....	100.0	100.0	100.0	100.0
Administration.....	13.9	23.3	19.7	21.7
Administration.....	9.5	15.5	12.2	14.2
Supervision and personnel management.....	3.7	6.8	6.8	6.8
Recruitment.....	.7	1.0	.7	.7
Public relations.....	7.1	6.5	5.4	7.5
Community organization and service.....	7.5	6.5	4.0	5.1
Consultant functions.....	15.1	13.1	15.3	13.7
Consultant services.....	6.1	5.6	5.7	7.2
Inservice resource.....	3.4	2.2	3.5	2.3
Intradepartmental resource.....	5.6	5.3	6.1	4.2
Education.....	22.7	22.2	22.5	22.1
Agency program in health education...	4.4	4.8	5.4	6.1
Joint program in health education.....	6.3	7.3	6.3	9.8
School health.....	8.3	3.6	6.3	3.1
Staff education and inservice training..	3.7	6.5	4.5	3.1
Communication or dissemination of information.....	26.6	18.7	24.4	17.5
Communication program.....	5.3	3.6	5.2	3.3
Person-to-person communication.....	4.6	6.0	4.9	5.4
Newspapers, radio, television.....	4.9	1.9	3.7	2.3
Printed materials.....	5.9	4.6	6.6	3.7
Visual or audiovisual aids.....	5.9	2.6	4.0	2.8
Research and studies.....	(¹)	2.7	(¹)	2.8
Professional development.....	6.1	5.1	6.8	6.5
Other activities.....	1.0	1.9	1.9	3.1

¹ Not a separate category in 1957 study.

and 1969 data were possible at local and State levels only. The regional level was not included in the 1957 study.

The principal findings indicate that health educators employed at the local level devoted more time in 1969 than in 1957 to administration, +4.8 percent, than those employed at the State level, +3.2 percent. Health educators employed at the State level devoted more time in 1969 to public relations, +1.7 percent, than those at the local level, -0.5 percent; to consultant services, +2.5 percent compared with -0.8 percent; and to joint programs in health education, +4.1 percent compared with -0.6 percent. Those at the State level devoted much less time to communication or dissemination of information, -10.0 percent, than those at the local level, -3.7 percent.

Local health educators devoted less time to school health, -5.4 percent, than those at the State level, -1.5 percent. Health educators at the local level, as compared with those at the State level, reported small changes in time devoted to community organization and service, +1.4 compared with -0.9 percent; to staff education and inservice training, +1.5 compared with -1.0 percent; to person-to-person communication, +2.1 compared with -0.4 percent; and to printed materials, +1.2 compared with -4.5 percent.

Time comparison by years of employment. Percentages of time devoted to the various health education activities by health educators employed 3 years or less in contrast to those employed more than 3 years are shown in table 4. Only slight differences were found in percentages of time devoted to the various categories of activities by the two groups.

Greater differences are noted when these data are compared with similar data from the 1957 study. Table 4 indicates that—

1. Health educators employed by the agency 3 years or less showed a greater increase in time devoted to administration, +9.4 percent, than those employed more than 3 years, +2.0 percent.

2. Health educators employed 3 years or less showed slight decreases in time devoted to public relations, -0.6 percent, and to community organization and service, -1.0 percent, while those employed more than 3 years showed some increases in these activities, +2.1 and +1.1 percent.

3. Both groups showed slight decreases in the time devoted to the consultant functions, -2.0

and -1.6 percent, and education, -0.5 and -0.4 percent. Greater decreases were noted for communication or dissemination of information; those employed 3 years or less showed a greater decrease, -7.9 percent, than those employed more than 3 years, -6.9 percent.

4. The decrease in the time devoted to school health activities is greater for those employed 3 years or less, -4.7 percent, than for those employed more than 3 years, -3.2 percent.

5. Time devoted to research and studies differed only slightly, 0.1 percent, for those employed by the agency 3 years or less when contrasted with those employed more than 3 years.

Discussion

Certain trends were evident when the 1969 and 1957 data were compared. Changes in communities, in the nature of health programs, and in the delivery of health services, mentioned earlier in this report, may have been responsible for many of the changes noted in the duties discharged by the public health educators. Academic preparation—changes in programs of study for public health educators—may have played a part. A third factor, changed perceptions of the role held by public health educators, also may have had an effect. This factor may have been influenced by academic preparation and also by the studies and statements published by professional organizations in health education.

The fact that public health educators are devoting more time to joint planning of programs by their own and other agencies, to community organization, and to person-to-person communication may be due to all the factors mentioned. Certainly, schools of public health have been stressing these activities for many years in their programs of study. Concurrently, professional organizations, especially the Society for Public Health Education, have focused in their statements and publications on the health educator's role in face-to-face settings, program planning, and involvement in the solution of community problems and needs (16, 17). There is no doubt, however, that the stress placed upon involvement of consumers and on joint planning by Federal legislation within the past few years has been a major factor in giving high priority to these activities.

The fact that fewer health educators are devoting less time to school health activities, mass

media communication, and as resource persons on educational methods and media to other staff members or to other agencies may be due to the pressures and priorities of the activities mentioned in the preceding paragraph. Or health educators may be receiving fewer requests for consultant services from other staff members and agencies because of preparation and on-the-job experience of others in the use of educational methods, program planning, and community organization. The decrease in time for mass media communication may have been due to the employment of publicists, writers, or other media specialists. Many agencies have added such personnel to their health education staffs or, more recently, have trained community aides or health education aides to take over the preparation of visual materials and the audiovisual presentations of the agency.

The fact that fewer health educators are devoting time to school health and that those who do are giving less time to it may be attributable to several factors. The priority given certain activities and the consequent reduction in time for others, as noted, is one factor. Greater self-sufficiency of school personnel in teaching health, resulting in less need for consultant services, may be another factor. Less preparation of health educators for working with schools is a third possibility. Further analysis of the backgrounds of the study respondents may show that fewer of the 1969 than the 1957 group had classroom experience or preparation for teaching, which may reflect changes in admission requirements to programs in health education in schools of public health. A fourth factor may relate to changes in the perceptions of a public health educator's role and its relation to schools. Statements distinguishing between public health and school health educators may have had a related effect, and a number of other factors are possible. Further investigation is needed to determine which factors are significant and the extent of their impact.

Also, the reduced number of health educators devoting time to mass media activities and the decreased amount of time given by those who do participate may be due to a number of the following factors: pressures of other priority activities, greater self-sufficiency of other health professionals, employment of greater numbers of writers along with graphic and audiovisual technical personnel or aides to take over these activities, less preparation and prior experience in the use of these media, and differences in the role of the

public health educator that attach a lower priority to mass media efforts. Studies showing the greater effectiveness of more personal methods of communication for effecting change as opposed to the mass media approach may well account for the decreased time allotted to mass media activities. Other factors, too, such as increased costs of developing and producing printed and graphic materials, may have been responsible for cutbacks in these efforts. Again, further investigation seems necessary.

It is encouraging to note that some public health educators are devoting time to research and studies, even though the amount is modest. Undoubtedly, the pressures of other priority activities preclude the use of more time by more public health educators. But other factors may be involved such as lack of orientation in research on the part of their employing agencies, lack of interest in research on the part of some health educators, lack of preparation of health education and other health professionals in research design and methodology, and different perceptions of the role of health educators and health agencies.

There are implications, too, for employing agencies in the results of this study. Filling health education positions with persons who have specializations in public relations, publicity, or the mass media seems less appropriate than ever. Contributions of the well-prepared health educator in planning, community organization, person-to-person communication, and education appear to be gaining increased recognition. Staffing health education agencies with persons lacking this kind of preparation would hinder progress in current programs.

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The impact of social change, changes in the delivery of health services, and the newer social action programs supported by Federal appropriations on the role of public health educators has been studied. The principal objectives were to determine the duties and responsibilities being discharged by public health educators employed in 1969 in tax-supported health programs and any changes in these duties and responsibilities by comparing current data with comparable data from a study reported in 1957.

Data were obtained by mail from 90 public health educators who were graduated from U.S. schools of public health between 1957 and 1966. Each respondent recorded in a self-coding time log the number of hours devoted to any of 20 categories of health

education activities during 1 week. These data were tabulated to determine the number of participants devoting time to each activity and the amount of time they devoted to it. The mean hours per week for each activity were also computed. Frequencies and means were then compared with corresponding data of the 1957 study. The data were further analyzed to determine differences in the percentage of time devoted to each activity by public health educators employed by local, State, or regional agencies and also by length of their employment in the agencies.

Public health educators in 1969 were more involved than in 1957 in programs requiring joint planning and operation by their agencies and others and in com-

munity organization and person-to-person communication. These activities required giving more attention to administrative activities and to recruitment of personnel. In 1969 more work time was devoted to administration, public relations, and community organization and service.

Fewer public health educators are devoting time to school health activities and mass media communication or as resource persons to the staffs in their own or other agencies.

In contrasting the activities of public health educators employed at local and State levels, only slight differences were noted between 1957 and 1969. Changes in their duties and responsibilities were reflected in both categories but in no recognizable pattern.