

Analytical Study on Performance of The Community Health Practitioner in Primary Health Care in Korea

I. INTRODUCTION

1. Developmental Background of Community Health Practitioners

The Republic of Korea has made tremendous strides in meeting the health needs of its people by adopting Primary Health Care (PHC) approach as a strategy to health for all.

Prior to the development of the Primary Health Care approach there was a successful experimental study performed by Korea Health Development Institute which was established in 1976. The Institute carried out a health demonstration project placing emphasis on Community Health Practitioner (CHP) Program. CHP is a new type of PHC provider in rural areas. The results show that CHPs effectively improved access to PHC and recommend to be necessary to make the CHP program component replicable to other part of rural areas.

As recommended the CHP programme was adopted by the government on December 31, 1980, by passing a special law on rural health care and this program was implemented in 1981.

During the period from April 1981 to the end of 1983, the government recruited and trained 1,158 community health practitioners and assigned them to remote rural villages. The number of community health practitioners will be increased to 2,000 gradually, and the whole country will be covered by the end of 1985.

2. Qualification and Role of CHP

The CHP is a registered professional nurse and/or midwife with a six-month CHP training

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course given by designated training institute and is in the age bracket between 20 and 55 years of age and is preferably selected by the communities or provinces themselves where they would serve. The functions and responsibilities of the CHPs are summarized as following:

- 1) Organizing and developing of the community
- 2) Program planning
- 3) Program implementation and management
- 4) Management of community health problems
- 5) Providing maternal and child health including family planning
- 6) Management of common and minor ailments

3. Working Environment and Support for CHPs Performance

A CHP is assigned in the primary health post which is established by the county chief according to the special law on rural health care. Each primary health post is located in a designated place which most residents of its service area can reach within 30 minutes. This serves a community with an average population of 3,000, ranging from 1,000 to 5,000.

In order to facilitate the primary health care services, both the government and community provide support; The government provides salary, medical equipment and essential drugs. The community provides a building for the primary health post. Each primary health post has a primary health care council, consisting of community leaders who are the village chief, new village movement and/or community development leader, and ten to twelve executive members selected by the villages. This council is responsible for raising funds to operate the primary health post and for supporting management of the post.

II. PAST STUDIES PERTAINING TO HEALTH PERSONNELS' PERFORMANCE

Several descriptive and empirical studies have attempted to predict the performance of health personnel, especially nursing personnel, in terms of the quality of care rendered by them, and also the relationships between performance and other relevant factors. However, the assessment of performance itself is a difficult measurement task because so many factors influence performance, including environmental, organizational, and individual factors. Many researches have found that biographical information such as age and years of work experience are positively

and/or negatively related to the performance, and not only internal factor such as job satisfaction and personality, but also the various organizational support factors are significantly related to the performance.

Dyer (1967)¹⁾ found that important dimensions of on-the job nursing performance could be predicted at significant levels using personality scales, biographical information, and staff nurse perceptions of the ward's administrative climate in a study of 200 registered nurses in four Utah hospitals. Hansmann et al., (1976),²⁾ indicated a significant (P. 05) positive correlation between job performance and satisfaction as measured by the Job Description Index, but he and Welches et al. found no significant differences between the educational preparation of nurses and their job performance.

Kast and Rosenzweig³⁾ found that the achievement need and job performance are positively related, and need for achievement can be distinguished from other needs. Those, who have a strong need for achievement tend to perform their job efficiently and productively.

Based on the above literature review, the conceptual framework for analysis of performance is presented in Figure 1. As shown in the figure, the demographic variables are partially related to performance while the internal factors such as job satisfaction and achievement need are positively related to performance. But health administrative and community organizational support is assumed to be an influencing factor on performance.

III. OBJECTIVES OF STUDY

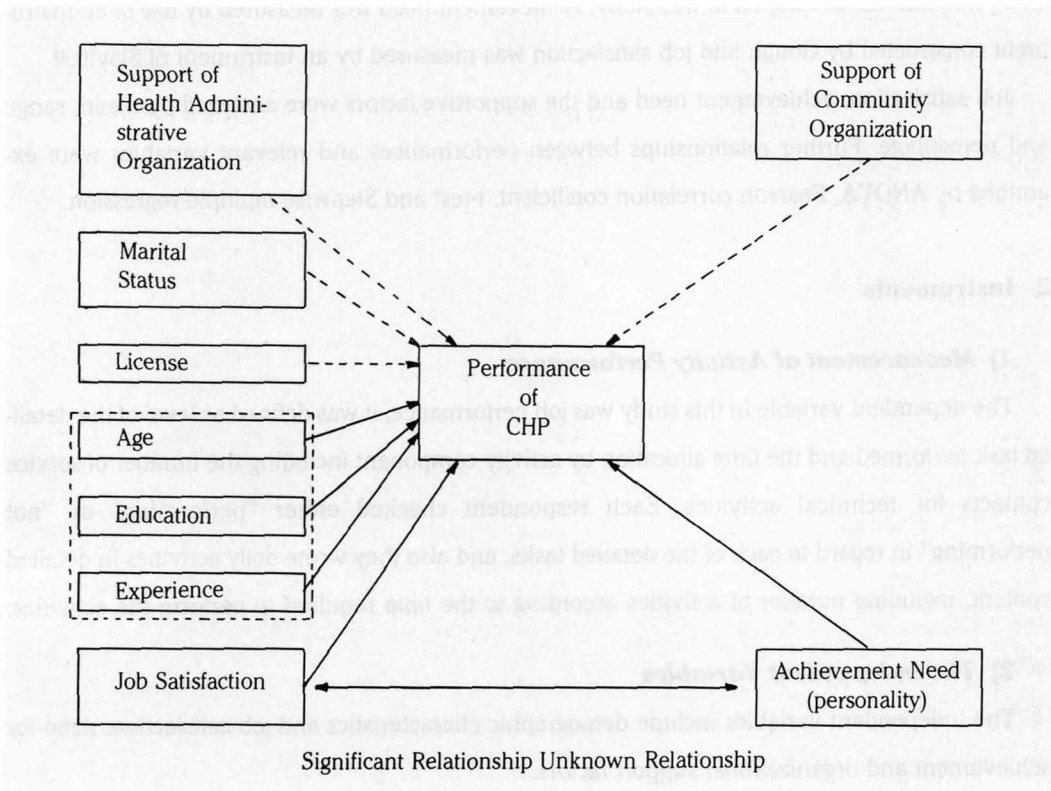
The Community Health Practitioners play an important role in rendering primary health care services in rural areas. The achievements are dependent upon their activities.

Accordingly specific objectives were as follows:

1. To analyze the CHPs' activities in terms of task achievement, activity content and number of service contacts,

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- 1) Elaine D. Dyer, et al, "Can Job Performance be Predicted from biographical, Personality, and Administrative Climate Inventories?", *Nursing Research*, Vol. 21, No. 4, July-August, 1972.
 - 2) Hansmann, et al. and others, *Monitoring Quality of Nursing Care; part 2, Assessment and Study of Correlates*, Washington, D.C. U.S. Government Printing Office, 1976.
 - 3) Katz, Rosenzweig, *Organization and Management; A System Approach*, McGraw-Hill Book Company, 1974, p. 267.

Figure 1. Conceptual Framework for Performance Analysis



2. To determine the level of job satisfaction and achievement need of the CHP,
3. To analyze the level of health administrative support and community support,
4. To determine the relationships between the independent variables (namely, job satisfaction, achievement need and organizational support factors) and dependent variables (namely, task performance and number of service contacts).

IV. METHODOLOGY

1. Data Collection and Analysis

The data was collected from 279 CHPs who have worked more than two years since deployment in field by a self-administered-questionnaire and daily reports written by CHPs for October

12 to December 31, 1983. Their performance and various supportive factors were measured by using instruments developed in this study. Achievement need was measured by use of an instrument constructed by Gough and job satisfaction was measured by an instrument of Slavitt.⁴⁾

Job satisfaction, achievement need and the supportive factors were analyzed by mean, range and percentage. Further relationships between performances and relevant variables were examined by ANOVA, Pearson correlation coefficient, t-test and Stepwise multiple regression.

2. Instruments

1) Measurement of Activity Performance

The dependent variable in this study was job performance, it was defined as level of the detailed task performed and the time allocation by activity component including the number of service contacts for technical activities. Each respondent checked either "performing" or "not performing" in regard to each of the detailed tasks, and also they wrote daily activities in detailed content, including number of activities according to the time required to perform the activities.

2) The Independent Variables

The independent variables include demographic characteristics and job satisfaction, need for achievement and organizational support factors.

a. Demographic Characteristics

The CHP's characteristics include age, marital status, level of education, license and work experience.

b. Job Satisfaction

Job satisfaction as developed by Slavitt was composed of six components; prestige, pay, interaction, autonomy, organizational requirements and task requirement. They included 37 items measured on a 5-point scale which ranged from strongly agree (5 points) to strongly disagree (1 point).

c. Need for achievement

Gough developed the CPI (California Psychological Inventory) as a personality diagnosing

4) Dinah B. Slavitt et al, "Nurse's Satisfaction with their Situation," *Nursing Research*, Vol. 27, No. 2, 1978, pp. 115-120.

instrument composed of 480 items.

29 of the 480 items were related to the need for achievement. These items were checked by each respondent as either “yes” or “no”.

d. Organizational Support Factors

Organizational support factors were defined as health administrative support and community support;

a) Health Administrative Support

(a) The number of contacts with the directors of the health center, the health subcenter and the township office to receive technical and administrative support.

(b) The level of support from the health center, the health subcenter and the township office as perceived by CHP herself.

(c) The understanding of various health personnel about the CHP's role.

b) Community Support

(a) Providing subsidy for the CHP

(b) Frequencies of Primary Health Care Council's (PHCC) Meetings for support of the PHC operation

(c) The level of support from the PHCC as perceived CHP herself.

(d) Understanding of the CHP's role by other health personnel.

V. RESULTS OF THE STUDY

1. Characteristics of Community Health Practitioners

The mean age was 32.5 for CHPs and 21 to 34 age groups are over 60 percent. About for CHPs 56 percent were married and over 70 percent earned their diplomas prior to CHP preparation. The mean number of years of experience in professional nursing was 5.9 and about 62 percent obtained more than one kind of license, that is in addition to their nursing license they had a midwife or school nurse's license. (see Table 1)

2. Performance of Tasks andActivities

1) About 75 percent of the required tasks for fulfillment of the CHP's role and function were performed and the largest scores of the task areas performed were in the management of common

Table 1. General Characteristics of CHPs

(N = 279)

Characteristics	Number	Percent (%)
Age		
20~24	30	10.6
25~29	126	44.9
30~34	54	19.3
35~39	11	4.0
40~44	21	7.7
45~49	17	6.2
50+	20	7.3
Marital Status		
Unmarried	94	33.7
Married	185	66.3
Basic Nursing Education		
High school	70	25.1
Junior nursing college	186	66.7
Baccalaureate degree	10	3.6
Master degree	1	0.4
Other	12	4.3
License		
Nurse	101	36.2
Midwife	5	1.8
Nurse with midwife	30	10.8
Nurse with school nurse	119	42.7
Nurse, midwife, school nurse	24	8.6
Experience (years)		
None	42	15.1
1~3	72	25.8
4~6	87	31.2
7~9	21	7.5
10+	57	20.4

and minor illnesses while the lowest scores were in the management of community health problems. (see Table 2)

2) It was found that CHPs were serving mainly in clinics having on the average 18 cases per day with a majority of their time being spent in curative services rather than therefore for patient centered activities (direct service care) and it appeared that they consumed about 97 minutes for activities outside of office hours, usually from 6 pm to 9 pm and 6 am to 9 am.

Table 2. Level of Task Performances in Task Areas

(N = 279)

Task Area	Level of Task Performance			
	Maximum score	Mean	SD	Rate
	(A)	(B)		(C)
Community Organization and Development	3	2.29	0.88	76.3
Program Planning	5	3.00	1.56	60.0
Program Implementation and Management	13	8.41	2.79	64.6
Management of Community Health Problems	6	3.48	1.73	58.0
MCH Including Family Planning	16	13.22	2.88	82.6
Management of Common and Minor Ailments	10	9.25	1.77	92.5
Total	53	39.67	8.17	74.8

Performance rate (C) = B/A × 100

Table 3. Working Time According to Type of Activity

(N = 139)

Working Time	Patient Centered Activity	Staff Centered Activity	Clinic Centered Activity	Others	Total
Within Office Hours					
Mean time spent (minute)	244.4	31.8	38.1	225.7	540.0
Percent (%)	(45.3)	(5.9)	(7.1)	(41.8)	(100.0)
Range	60~467	0~96	0~177	—	—
Out of Office Hours					
Mean time spent (minute)	64.3	4.7	28.0	—	96.9
Percent (%)	(66.3)	(4.8)	(28.9)	—	(100.0)
Range	0~263	0~55	0~82	—	—
Total					
Mean time spent (minute)	308.7	36.5	66.1	225.7	637.0
Percent (%)	(48.5)	(5.7)	(10.4)	(35.4)	(100.0)

Table 4. Daily Working Time According to Location of Activity

(N = 139)

Working Time	In Clinic	Out of Clinic	Total
Mean Time Spent (minute)	321.5	91.4	412.9
Percent (%)	(77.9)	(22.1)	(100.0)
Range	85~608	7~253	126~727

* Other time (miscellaneous) excluded

Table 5. Working Time According to Time Periods

(N = 139)

Working Time	Within Office Hours				Out of Office Hours				Total 24 hours
	9:00~ 12:00	12:00~ 15:00	15:00~ 18:00	18:00~ 21:00	21:00~ 24:00	24:00~ 3:00	3:00~ 6:00	6:00~ 9:00	
Mean Time Spent (minute)	122.8	95.7	95.6	42.7	11.3	0.8	1.3	40.6	410.8
Percent (%)	(29.8)	(23.3)	(23.3)	(10.4)	(2.8)	(0.2)	(0.3)	(9.9)	(100.0)
Range	32~180	24~166	19~167	0~126	0~66	0~11	0~17	0~116	125~723

* Other time excluded

Table 6. Technical Activity Time for Service Categories

(N = 139)

Working Time	Admini- stration	Community Health Problems	MCH & FP	Curative Service	Clerical Activity	House- Keeping Activity	Messenger Activity	Others	Total
Within Office Hours									
Mean time spent (minute)	31.8	16.4	48.3	178.7	12.8	18.4	6.3	227.3	540.0
Percent (%)	(5.9)	(3.0)	(8.9)	(33.1)	(2.4)	(3.4)	(1.2)	(42.1)	(100.0)
Range	0-96	0-100	0-152	41-438	0-15	0-60	0-55	—	—
Out of Office Hours									
Mean time spent (minute)	4.7	2.6	6.5	54.5	5.6	20.5	1.5	—	95.9
Percent (%)	(4.9)	(2.7)	(6.8)	(56.8)	(5.8)	(21.4)	(1.6)	—	(100.0)
Range	0-55	0-34	0-48	0-246	0-64	0-62	0-49	—	—
Total									
Mean time spent (minute)	36.5	19.0	54.8	233.2	18.4	38.9	7.8	227.3	635.9
Percent (%)	(5.7)	(3.0)	(8.6)	(36.7)	(2.9)	(6.1)	(1.2)	(35.8)	(100.0)

Table 7. Daily Working Time According to Service Type and Location

(N = 139)

Location	Management of Community Health Problems	MCH & FP	Curative Care	Total
In Clinic				
Mean time spent (minute)	6.9	33.3	203.2	243.4
Percent (%)	(2.8)	(13.7)	(83.5)	(100.0)
Range	0-65	0-104	48-574	57-596
Out of Clinic				
Mean time spent (minute)	12.1	21.5	30.0	63.6
Percent (%)	(19.0)	(33.8)	(47.2)	(100.0)
Range	0-108	0-119	0-134	0-320
Total				
Mean time spent (minute)	19.0	54.8	233.2	307.0
Percent (%)	(6.2)	(17.9)	(76.0)	(100.0)

Table 8. Mean Service Cases Per Day

(N = 139)

Service Content	Mean Cases	Range
Health Education	3.3	0~40
Maternal Care	0.5	0~2.2
Infant Care	1.7	0~10.9
Family Planning	1.1	0~5.2
Curative Care	10.8	0~33.8
Basic Sanitation	0.2	0~4.4
Total	17.6	3~61.8

This means that rural people tend to utilize the CHP post based on the most convenient time in line with their living pattern rather than according to the seriousness of their symptoms. (see table 3~8)

Table 9. Daily Working Time According to Characteristics of CHPs

(N = 118)2)

Characteristics	Number	Mean 1)	S.D.	F-value	P-value
Age					
20 ~ 29	55	381.35	96.74	F=6.34	p<.01**
30 ~ 39	27	456.00	107.52		
40 +	36	446.00	113.67		
Marital Status					
Unmarried	29	371.79	107.75	F=7.28	p<.01**
Married	89	433.51	106.77		
Basic Nursing Education					
High school	42	432.98	114.28	F=1.12	p>.05
Diploma	67	405.40	110.28		
Baccalaureate degree	3	437.00	32.05		
Others	6	451.00	93.52		
License					
Nurse	41	434.78	105.44	F=0.75	p>.05
Midwife	5	408.97	113.14		
More than one license	72	432.50	38.89		
Experience (years)					
None	10	341.20	145.43	F=3.10	p<.05*
1 ~ 3	32	396.32	94.17		
4 ~ 6	36	425.39	101.83		
7 +	40	445.95	110.50		
Total		417.52	110.50		

** p<.01

* p<.05

1) Mean working time out of total mean 417.52 minutes

2) Some respondents excluded due to incompleteness of activity records

The length of their working hours were longer for older, married and more experienced CHP's than others, while the service cases were not significantly related to the characteristics of CHP. (see Table 9, 10)

3) Based on the working time and service cases of the CHP per day, the recorded time per case by type of service was as follows; 12.4 minutes per case for curative care, 9.0 minutes for maternal care, 5.4 minutes for infant care, 12.0 minutes for family planning. (see Table 11)

Table 10. Number of Activities According to Characteristics of CHPs

(N = 118)

Characteristics	Number	Mean*	S.D.	F-value	P-value
Age					
20 ~ 29	55	356.81	229.34	F=0.83	p>.05
30 ~ 39	27	392.68	191.05		
40 +	36	420.75	248.12		
Marital Status					
Unmarried	29	316.72	199.68	F=3.34	p>.05
Married	89	404.20	227.92		
Basic Nursing Education					
High school	42	384.67	191.35	F=0.55	p>.05
Diploma	67	371.15	224.83		
Baccalaureate degree	3	385.25	178.74		
Others	6	494.33	421.57		
License					
Nurse	41	356.00	205.38	F=0.53	p>.05
Midwife	5	398.69	235.78		
More than one license	72	330.50	19.09		
Experience (years)					
None	10	252.60	150.08	F=1.63	p>.05
1 ~ 3	32	358.60	212.26		
4 ~ 6	36	409.97	238.67		
7 +	40	409.68	229.14		
Total		382.70	223.71		

* Mean score out of total mean 382.70 cases

Table 11. Time Spent Per Service Unit

Type of Service	Daily Mean Service Contacts (A)	Range	Mean Time Spent (B)	*Time Spent per Service Unit (C)
Curative Care	17.1	5~29	211.9	12.4
Maternal Care	0.3	0~1	2.7	9.0
Infant Care	0.5	0~3	2.7	5.4
Family Planning	0.2	0~1	2.4	12.0

* Time spent per service unit C=B/A

4) It can be assumed from the results of this study that CHPs can handle 27 cases per day for direct services. In assuming the average number of cases to be handled per day by CHPs, only the handling of common and usual health problems is considered because much more time will need to be allocated for delivery care of pregnant women, IUD insertion, emergency care and injuries since the definite time required for each will vary.

* Assumption for number of cases to be handled per day by the CHP

Y_1 : average number of cases for curative services

Y_2 : average number of cases for preventive services

$$Y_1 = \frac{T}{2\bar{x}_1} = \frac{280 \text{ min.}}{2 \times 12.4} = 11.3 \text{ Cases} \quad (1)$$

$$Y_2 = \frac{T}{2\bar{x}_2} = \frac{280 \text{ min.}}{2 \times 8.8 \text{ min.}} = 15.9 \text{ cases} \quad (2)$$

where T = total service time available per day

= daily working time — time for rest — time for supporting a direct care

= 540 min. — 120 min. — 140 min.

= 280 min. / day

Time allocation for curative and preventive service = $\frac{T}{2}$ respectively

\bar{x}_1 : mean time spent for curative services per case

\bar{x}_2 : mean time spent for preventive services per case

3. Job Satisfaction and need for Achievement

The mean score for job satisfaction was 3.47 out of a possible 5. The satisfaction level for prestige had a mean score of 4.3, which was the largest among the 6 components of job satisfaction and the pay level and organizational requirements had the lowest with mean scores of 2.87 and 2.47 respectively. (see Table 12)

The level of achievement need showed an average of 14.92 scores out of 29 (see Table 13). The level of job satisfaction and achievement need were found to be relatively higher in older, married and more experienced CHPs than among others (see Table 13, 14).

Table 12. Mean Score of Job Satisfaction According to Components

Order	Component	Mean*	S.D.
1	Prestige	4.28	0.63
2	Task Requirements	3.70	0.52
3	Personal Interaction	3.11	0.71
4	Autonomy	3.08	0.72
5	Pay Scale	2.87	0.53
6	Organization Requirements	2.47	0.91
Total		3.45	0.39

* Mean score out of 5

Table 13. Mean Score of Job Satisfaction According to Characteristics of CHPs

(N = 279)

Characteristics	Number	Mean ¹⁾	S.D.	F-value	P-value
Age					
20 ~ 29	156	3.38	0.30	F=6.25	p<.01**
30 ~ 39	65	3.47	0.37		
40 +	58	3.59	0.57		
Marital Status					
Unmarried	94	3.34	0.31	F=11.06	p<.01**
Married	185	3.50	0.42		
Basic Nursing Education					
High school	70	3.54	0.56	F=2.87	p<.05*
Diploma	186	3.40	0.31		
Baccalaureate degree	11	3.51	0.26		
Others	12	3.60	0.21		
Lincese					
Nurse	101	3.43	0.34	F=1.19	p>.05
Midwife	5	3.69	0.32		
More than one license	173	3.46	0.42		
Experience (years)					
None	42	3.36	0.30	F=3.81	p<.05*
1 ~ 3	72	3.39	0.32		
4 ~ 6	87	3.43	0.32		
7 +	78	3.57	0.52		
Total		3.45	0.39		

**p<.01

* p <.05

1) Mean score out of 5

Table 14. Mean Score of Achievement Need According to Characteristics of CHPs

(N = 279)

Characteristics	Number	Mean ¹⁾	S.D.	F-value	P-value
Age					
20 ~ 29	156	14.41	3.38	F=7.69	p<.01**
30 ~ 39	65	14.69	3.92		
40 +	58	16.52	3.43		
Marital Status					
Unmarried	94	14.16	3.77	F=5.62	p<.05*
Married	185	15.24	3.50		
Basic Nursing Education					
High school	70	15.57	3.49	F=3.37	p<.05*
Diploma	186	14.42	3.59		
Baccalaureate degree	11	16.27	3.82		
Others	12	16.58	3.70		
License					
Nurse	101	14.32	3.53	F=2.87	p>.05
Midwife	5	17.40	2.88		
More than one license	73	15.13	3.64		
Experience (years)					
None	42	15.29	3.91	F=2.62	p>.05
1 ~ 3	72	14.01	3.59		
4 ~ 6	87	14.77	3.06		
7 +	78	15.61	3.99		
Total		14.92	3.61		

** p<.01 * p<.05

1) Mean score out of 29

4. Status of Organizational Support

1) Concerning the organization support provided to enable CHPs to perform, approximately 50 percent showed positive responses and the detailed findings of the organizational support was as follows:

2) As far as the health administrative organizational support was concerned it was revealed that the subsection chief of the health center gave the most support for the CHP's activities and 55.6 percent of the CHP respondents felt they were helpful (extremely helpful or helpful), but the

support from the primary health care council was very low (13.2%). Most of health administrative and community organizational personnel understood the CHP's role (the distribution ranged from 54.4%-70.8%).

The contacts with health personnel of the health administrative organization were not very frequent since most of the CHPs had contact with them only once a month to receive technical and administrative support. (see Table 15, 16)

Table 15. Degree of Contacts with Health Personnel of Organizational Unit as Perceived by CHPs

Contacts	Health Center Director (%)	Subsection Chief of Health Center (%)	Township Chief (%)	Health Subcenter Director (%)	Primary Health Care Council (%)
Once a One-Two Weeks	11.1	16.8	36.3	12.0	2.8
Once a Three-Four Weeks	72.0	75.3	27.8	25.0	13.4
Once a Five-Six Weeks	3.2	3.6	8.1	5.6	7.0
Once a Seven-Eight Weeks	5.7	2.5	12.6	20.8	25.6
Once a Over Eight Weeks	7.9	1.8	15.2	36.6	51.2
Total	100.0	100.0	100.0	100.0	100.0

Table 16. Degree of Organizational Support as Perceived by CHPs

Level of Support	Health Center Director (%)	Subsection Chief of Health Center (%)	Health Subcenter Director (%)	Township Chief (%)	Primary Health Care Council (%)
Extremely Helpful	8.6	10.8	6.6	10.0	4.3
Helpful	42.7	44.8	44.9	43.0	8.9
Fairly Helpful	30.1	31.2	32.1	28.9	34.8
Slightly Helpful	14.3	8.6	12.6	13.0	19.4
Not Helpful	4.3	4.7	3.8	5.2	32.6
Total	100.0	100.0	100.0	100.0	100.0

3) Only 47.2 percent of the CHP respondents received a subsidy from the primary health care council. It was found that only 54.4 percent of those receiving a subsidy began receiving this subsidy one year after starting their work and 40 percent of the other respondents began receiving this subsidy two years after starting their work and the moment of subsidy was found to be insufficient. (see Table 17)

Table 17. Degree of Understanding of the CHP's Role of Health Manpower as Perceived by CHPS

Status	Health Center Director (%)	Subsection Chief of Health Center (%)	Health Subcenter Director (%)	Township Chief (%)	Primary Health Care Council (%)
Understood	60.2	64.8	70.8	69.3	54.4
Not Understood	39.8	35.2	29.2	30.7	45.6
Total	100.0	100.0	100.0	100.0	100.0

5. Analysis of Relationship between Performance and Related Factor

To analyze the relationship between the independent variables and performance, performance as an dependent variable was defined as the mean scores of task performance and the number of activities for direct services. The higher the mean score of task performance is and indicates the higher the range of activities and also the number of activities carried out the productivity of activity.

1) According to the Pearson correlation coefficient analysis, job satisfaction was significantly related both to the task performance and to the number of activities ($p < .01$, $p < .05$). But, in order to prove the relationship more precisely, it was reanalyzed with ANOVA and then job satisfaction was found to be significantly related to task performance scores, ($F = 5.92$, $p < .01$) and not to the number of activities at the .05 level ($F = 2.58$, $p > .05$) (see table 18)

2) The relationship between performance and achievement need was found to be positively correlated (task performance score; $\gamma = .1477$, $p < .01$, number of activities; $\gamma = .1843$, $p < .05$) (see Table 18).

3) The relationship among the various organizational support factors was partially significant. Organizational support factors were defined as contacts with health personnel by unit; namely

Table 18. Receiving of Subsidy for CHPs from Primary Health Care Council

Content	Number	Percent
Status of Receiving		
Received	120	47.2
Not received	134	52.8
Total	254	100.0
Period of Receiving		
Right after starting work	7	6.0
One year after starting work	65	54.4
Two years after starting work	48	39.6
Total	120	100.0
Amount (Won)		
10,000~ 30,000	34	28.1
40,000~ 60,000	81	67.5
70,000~100,000	5	4.4
Total	120	100.0

Table 19. Pearson Correlation Coefficient of the Relationship between the Dependent Variables and the Independent Variables

Variables	(N=279)		(N=118)	
	Task Performance		Number of Service Contacts	
	P. Correlation coefficient	P-value	P. Correlation coefficient	P-value
Job Satisfaction	.1976	.001***	.2366	.005**
Achievement Need	.4447	.008**	.1843	.023*
Contacts with Health Center	.0698	.125	-.0313	.369
Supports from Health Center	.1222	.023*	.2202	.009**
Contacts with Township Level	.1890	.001***	.0668	.244
Supports from Township Level	.1955	.005**	.2167	.032*
Number of Meetings of PHCC	.3137	.001***	-.1110	.162
Support from PHCC	.1365	.011**	-.0116	.450

* p<.05 ** p<.01 ***p<.001

health center, health subcenter, township office and primary health care council and by level of support from health unit as perceived by the CHP, and also by understanding of the CHP's role (see table 18, 19).

- a) Contacts with both director and subsection chief of the health center was not significant at the .05 level but contacts with both the township chief and the director of health subcenter and also with the primary health care council was found to influence the task performance ($p < .01$), while it was not significantly related to the number of activities ($p > .05$)
- b) The level of support from the health center, the health subcenter and the township office as perceived by the CHPs was related to both the task performance scores and the number of activities ($p < .05$), but support from the primary health care council was significantly related to only the task performance score ($p < .05$). The emotional support given by the primary health care council influenced the CHP's performance ($p < .01$) but the subsidy had no influence on it.

Table 20. Relationship between Performance and CHP's Role Understanding and Subsidy Provided for CHPs

Variables		Task Performance				Number of Service Contacts			
		Mean*	S.D.	t-value	d.f.	Mean**	S.D.	t-value	d.f.
Health Center Director	A	40.30	8.26	1.61	267	422.40	245.90	2.54*	115
	B	38.64	8.22			316.44	167.59		
Subsection Chief	A	40.76	7.09	3.18**	265	396.41	237.54	0.52	110
	B	37.47	9.60			373.17	210.29		
Health Subcenter Director	A	40.56	8.48	1.01	169	390.87	229.09	1.61	72
	B	39.22	6.38			305.77	141.80		
Township Chief	A	40.90	8.04	3.82**	268	415.82	241.06	2.27*	109
	B	36.88	7.85			314.29	184.06		
Primary Health Care Council	A	41.30	7.06	3.21**	257	411.71	228.19	1.59	110
	B	38.03	9.28			344.41	219.54		
Subsidy Received Not Received		39.42	8.01	-0.78	263	357.35	178.08	-0.87	112
		40.21	8.45			393.58	251.67		

* $p < .05$ ** $p < .01$

* Mean score out of 39.67 ** Mean score out of 382.70

A : CHPs perceived the health personnel "understand their role"

B : CHPs perceived the health personnel "do not understand their role"

c) When the CHPs perceived that the subsection chief of the health center and the chief of township office understood their role, their activities and task performance were higher than the others ($p < .05$) and also, the understanding of the CHP's role by the primary health care council was related only to the task performances. The above findings obtained from the various support factors implicated that most of support factors influenced the performances, especially to the range of task performance.

4) It was found that the relationship between the level of job satisfaction and the achievement need act positively on each other ($R = .2144$ $R^2 = .04599$ significance $R = .00015$). This implies that CHPs having a high mean score of achievement need work more actively and have a higher job satisfaction score than others, and also those CHPs having a high mean score of job satisfaction had a high achievement need and carry out more activities.

5) Factors which affected their performances which were explained by Stepwise Multiple Regression Analysis; ages, levels of job satisfaction and achievement need of the CHPs were found to be important factors and the support given by health centers including primary health care councils also proved to be significant factors. (see table 20, 21)

Table 21. Stepwise Multiple Regression Analysis of the Relationship between Number of Activities and Related Variables

Variables	Multiple R	R ²	B Coefficient	F
Job Satisfaction	.3152	.0994	.2363	7.9437**
Support from Health Center	.3678	.1359	.2139	5.5519**
Achievement Need	.4036	.1629	.1697	4.5402**
Township Chief's Understanding of the CHP's Role	.4136	.1710	-.0844	3.5592**
PHCC's Understanding of the CHP's Role	.4220	.1781	.0849	2.9460*
Support from Township Level	.4254	.1810	.0598	2.4678*

* $p < .05$ ** $p < .01$

Table 22. Stepwise Multiple Regression Analysis of the Relationship between Task Performance and Related Variables

Variables	Multiple R	R ²	B Coefficient	F
Age	.3079	.0948	.1936	15.4002***
Job Satisfaction	.3674	.1350	.1381	11.3882***
Support from PHCC	.3919	.1536	.0934	8.7724***
Achievement Need	.4113	.1692	.1489	7.3298***
Contacts with Township Level	.4303	.1852	-.0916	6.5005***
Support from Health Center	.4364	.1904	.0497	5.5667***
Education	.4401	.1937	.0706	4.8382***
Support from Township Level	.4431	.1963	.0592	4.2748***
PHCC's Understanding of the CHP's Role	.4456	.1986	-.0369	3.8270***
Township Level's Understanding of the CHP's Role	.4473	.2000	.0374	3.4507***
Subsection Chief's Understanding of the CHP's Role	.4481	.2008	-.0314	3.1288***
Marital Status	.4486	.2013	.0264	2.8560**
Number of Meetings of PHCC	.4488	.2014	.0135	2.6196**

** p<.01 *** p<.001

VI. CONCLUSION

In conclusion it was found that the level of job satisfaction, achievement need and organizational support significantly influenced the CHP's performance, and also it was found that the relationship among the independent variables such as job satisfaction, achievement need and the other general characteristics of the CHPs positively acted on each other to encourage their performance. As the above findings have shown, most CHPs have performed efficiently in providing primary health care. However, to improve and further develop CHPs to perform their duties the following factors are important. Criteria should be established and strictly applied to select CHP applicants and this should include age, marital status and experience. The supporting organization should also be strengthened.

References

- 1) Dyer E.D., et al, "Can Job Performance be Predicted from Biographical, Personality, and Administrative Climate Inventories?", *Nursing Research*, Vol. 21, No. 4, 1972.
- 2) Hansmann, R.K., et al, *Monitoring Quality of Nursing Care; part 2, Assessment and Study of Correlates*, Washington, D.C., U.S. Government Printing Office, 1976.
- 3) Ivancevich, J.M. et al, *Organizational Behavior and Performance*, Santa Monica, California, Good Year Publishing Co., Inc. 1977.
- 4) Katz, Rosenzweig, *Organization and Management; A System Approach*, McGraw-Hill, Book Company, 1974.
- 5) Locke, E.A. The Nature and Causes of Job Satisfaction," *Handbook of Industrial and Organizational Psychology*, Chicago, Rand McNally Inc. 1976.
- 6) Pinter, K. "Support Systems for Health Professions Students," *Journal of Nursing Education*, Vol. 22, No. 6, 1983.
- 7) Slavitt D.B. et al, "Nurse's Satisfaction with their Situation," *Nursing Research*, Vol. 27, No. 2, 1978.
- 8) Smith, H. et al, An Integrated Approach to Performance Evaluation in the Health Care Field, *Health Care Management Review*, Vol. 5, No. 4, 1980.
- 9) Veronick, P.J, *Descriptive Study Methods in Nursing*, Scientific Publication, No. 219, PAN American Health Organization, 2nd Printing, 1974.

一次保健醫療事業에 있어서 保健診療員의 業務遂行에 관한 分析的 研究

金 鎮 順*

本 研究는 一次保健醫療事業에서 中心的인 역할을 수행하고 있는 保健診療員의 業務를 다각적으로 分析하고 業務遂行과의 관련요인을 파악하여 그 결과를 보건진료원의 效率인 活用을 위한 基礎資料로 제공하기 위하여 실시하였다.

資料는 1981년도에 農漁村에 배치되어 活動中인 保健診療員 279명을 대상으로 1983年 10月 12일부터 10月 27日 기간에는 設問調査를, 1983年 10月 15일부터 12月 30日 기간에는 활동기록지 작성방법의 사용에 의하여 수집하였다.

本 연구를 위하여 측정도구를 개발하고, 사전에 내용 타당도와 신뢰도 검사를 거친 지원실태, 직무분석, 활동분석 및 활동량 기록지와 Slavitt 의 3인의 직업만족척도, Gough 의 성격검사 CPI 척도 등이 利用되었다.

수집된 資料는 총점, 평균치, 표준편차, 백분율 및 범위로 分析되었고, 業務遂行과의 關聯要因은 Pearson 상관계수, ANOVA, t-test 로, 한편 업무수행에 영향을 미치는 주요요인은 단계적 중회귀(Stepwise Multiple Regression)로 分析되었다. 이 研究에서 얻은 主要結果는 다음과 같다.

1) 직무수행정도는 총점 53점에 平均 39.67, 표준편차 8.17로서 부여된 총직무의 75퍼센트를 遂行하고 있는 것으로 나타났다.

보건진료원의 一般的 特性과 職務遂行程度와의 관계는 연령이 많고, 기혼자에서, 그리고 教育水準이 높을수록 수행정도가 높아 統計的으로 유의한 상관관계가 있는 것으로 나타났다.

2) 活動 分析結果에서 活動類型別 日課時間分布는 地域住民에게 직접 서비스 제공이 48.5퍼센트로 제일 높았다. 보건의료관련 총 活動時間은 6시간 50분이며 그중 근무시간이외에 平均 96.9분(1시간 37분)씩 추가 근무하는 것으로 나타났다.

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技術種類 및 活動중에서 진료가 전체활동의 33.1퍼센트를 차지하였으며 保健診療所 內 근무가 전체의 77.9퍼센트, 保健診療所 外가 22.1퍼센트를 차지하였다. 時間帶別 活動에서 근무시간의(08:00~08:59) 활동은 96.7분중 오후 6시~9시 및 오전 6시~9시 사이에 86퍼센트인 83.3분으로 나타났다. 保健診療員의 총활동 평균건수는 370건이며, 1日 평균건수는 17.6건으로 나타났다. 保健診療員의 一般的 特性과 活動時間과의 관계는 연령이 많고, 기혼자에게서 그리고 경력이 많은 保健診療員이 더 많은 활동을 한 것으로 나타났다($P < 0.01$).

3) 保健診療員職에 대한 만족은 平點 5點에 平均 3.47點이며, 연령과 경력이 많은 기혼자에게서 그리고 기타 학력 소지자에 있어서 職業滿足이 높아 통계적으로 유의한 관계가 있었다. ($P < 0.05$).

4) 保健診療員의 성격특성중 성취욕구는 총점 29점에 平均 14.92점, 표준 편차3.61이었다.

一般的 特性중 연령과 경력이 많은 기혼자에게서 그리고 교육수준이 높을때 성취욕구 점수가 높아 통계적으로 유의한 관계가 있었다. ($P < 0.05$).

5) 지원정도를 접촉정도, 도움정도, 역할이해, 수당지급 有無로 分析한 결과 保健 및 行政組織 人力과는 3~4주에 1회 접촉하는 것으로 나타났고, 保健 및 行政組織 人力의 50퍼센트가 業務遂行에 도움을 주는 것으로 인지 되었다.

또한, 60.2~70.8퍼센트의 保健 및 行政組織 人力만이 保健診療員의 역할을 이해하는 것으로 나타났으며, 保健診療所 運營協議會의 50퍼센트 이상이 8주이상 1회 모임을 개최하고 47.2퍼센트 만이 保健診療員에게 수당을 지급하는 것으로 나타났다. 保健診療所 運營協議會의 54.4퍼센트가 保健診療員의 역할을 이해하고 있으며 保健診療員의 52.0퍼센트가 保健診療所 運營協議會로부터 받는 지원이 불충분 하다고 應答한 것으로 나타났다.

6) 保健診療員의 業務遂行과 諸變數와의 관계를 分析한 결과는 다음과 같다.

保健診療員의 業務遂行을 위한 지원과 業務遂行과의 關係를 分析한 결과 지원내용 中 郡·面 및 地域社會組織과의 접촉횟수는 부분적으로만 관계가 있는 것으로 나타났으며 도움정도, 역할이해는 의미있는 관계로 나타났다. ($P < 0.05$).

그러나 물질적 지원인 지역사회의 수당지급은 업무수행과 관계되지 않는 것으로 나타났다. 保健診療員의 性格特性中 성취욕구정도, 직업만족과 업무수행과는 各各 統計的으로 유의한 관계를 나타냈다($P < 0.05$).

성취욕구정도와 직업만족간에도 통계적으로 유의한 차이를 나타내어 성취욕구가 높으면 직업만족도 높다고 할 수 있다.

結論的으로 保健診療員의 業務遂行에는 一般的特性, 性格, 職業滿足과 保健行政 및 地域社會組織의 지원이 關聯變數라고 할 수 있다. 그 중에서도 가장 크게 영향을 미치는 要因은 職業滿足, 一般的 特性중에서는 年齡, 性格, 支援內容 중에서는 保健診療所運營協議會 支援程度 및 保健所 도움으로 나타났다.