

: , -

-

* . *

12 , 4 - 24)

1.

가 .

2000

가

1978

Alma-Ata

가

가

가

(Kim et al., 1985; Song et al., 1988),

(Kim et al., 1983,

Lee, 1983)

, ' 가

17

1993).

(Lee,

, ,

, , 가 , ,

(Community Health Practitioner)

가

(Hong et al., 1984).

(Kim, 1999; Lee 1993; Kim et al., 1985; Kim & Choi, 1986).

(8 ,

*

2001 11 12

2002 4 22

2002 7 24

가 가
 가
 Sunwoo et al.(2000)
 가 1 32,965
 가
 가
 가
 가
 가

(2) : 6
 가 가)
 가 가 가
 가 가
 가 1

가
 가)
 가
 가
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 가 , 가
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 가)
 :

. 99 4.
 (가 , 2000)
 11,927 e-mai

272 가 600 , 45.3% (4.0%), 95 (34.9%), 163 11
 1999 11 2000 3 (59.9%)
 5 가
 <Table 1>
 5. 가 157 (57.7%)
 1) 가 , 43 (15.8%), 20 (7.4%), 10 (3.7%)
 2) 2. 가
 가 , 가 , 가 39.6 (SD= .36) , 23 63 , 31-40 가 51.5% 가 , 41-50 가 41.4% 93%가 30 50
 1. 90.8% , 3 , 72.1% 가 6.6%
 1999 , , , , 6 80 <Table 2>. (4.15%) 가 , 53 721 , 83 1126 (58.4%) 가 150 (37.4%) , 1927 가 (55.1%)

<Table 1> Geographical Characteristics of Community Health Practitioner Post

Variable	Category	Frequency	Percentage
Administrative classification	City-in large	11	4.0
	City(Urban)	95	34.9
	Gun(Rural)	163	59.9
	Others	1	0.4
	City+ Gun	1	0.4
	Missing	1	0.4
	Total	272	100.0
Geographical Characteristics	Remote area	157	57.7
	Island with difficult travel	10	3.7
	Island with good travel	20	7.4
	Area with good travel	43	15.8
	others	36	13.2
	missing	6	2.2
Total	272	100.0	

<Table 2> Demographic Characteristics of CHP

Variable	Category	Frequency	Percentage
Age	23 ~ 30	14	5.1
	31 ~ 40	139	51.1
	41 ~ 50	112	41.2
	51 ~ 63	5	1.8
	Missing	2	0.7
	Total	272	100.0
Marital Status	Single	19	7.0
	Married	247	90.8
	Others	5	1.8
	Missing	1	0.4
	Total	272	100.0
Education	Diploma	196	72.1
	Bachelor's degree	20	7.4
	RN-BSN	23	8.5
	Master's degree or higher	18	6.6
	Others	15	5.5
	Total	272	100.0

, 24 (8.8%), 12.11% (SD= .43), ,
 18 (6.6%), 가 12 (4.4%) . 55.2%가
 , 12.4 10-15%
 (SD= 55.6) , 20 6 .
 17.55% (SD= .63) ,
 8.5 (SD= 65.0) . 84.0%가
 , 가 10-30%
 74%가 가 21.03% (SD= .57) ,
 66.8%가
 20-40%
 가 87% , ,
 4% , ,
 5% , ,
 3. 가 . 50% ,
 1) , 10% , 20% ,
 20% .
 2가 , ,
 , , ,
 64.6% (SD= 12.28) ,
 49.01% 35.3% (SD= 12.16) .
 (SD= .94) , 63.3%가
 50% , 300
 (SD= 224.9) , 53.2

<Table 3> Differences in the Number of Clients Visiting CHP Post, Number of Telephone Counseling, and Number of Home Care Visits per Month by Regional Characteristics

Variable		SS	df	MS	F	Sig
Number of Clients Visiting CHP	Between Groups	540965.67	4	135241.42	2.732	.030
	Within Groups	130701.66	264	49508.20		
	Total	136111.31	268			
Number of Telephone Counselings	Between Groups	6924.08	4	1731.02	.595	.667
	Within Groups	765417.81	263	2910.33		
	Total	772341.89	267			
Number of Home Care Visits	Between Groups	8710.11	4	2177.53	1.482	.208
	Within Groups	383586.40	261	1469.68		
	Total	392296.51	265			

(SD= 53.7) . , 1,531,751 (SD= 369975.6)
 513 , 292 , 800,000 2,500,000
 290 가 (F= 2.73, p= .030) . 116,973.4 (SD= 3793.5)
 <Table 3>, , 0 330,000 ,
 1.7 , 9,748 .
 76.4 , 55.9 , 52.1 56,769.3 (SD= 5854.2) ,
 , 1,598,268 .
 가 , 45.0
 가 (SD= 38.4) , 300가 37가 86,083.6
 , 40.7 (SD= 11,646.6) ,
 가 , 38.1가 , 49.6가 , 708,295.1 (SD= 68,759.7) ,
 . 가 794,379 .
 6 ,
 (65) , (2,392,647 .
)(43) , (37) ,
 (25) , (2)
 (25) ,
 가 .
 4. - .
 1) 37,319.8 (SD= 982.2) ,
 39,850.5 (SD= 1,465.3) , 140,220.0
 6 (SD= 13,333) , 114,041 (SD= 13,333
) , 76,774 (SD= 7661.4)
 400,319.5 .
 154,525 .
 (1) 554,845 . 가 .
 1979 1999 ,
 75%가 1983 1986
 가 , 1985 .
 12,850,000 . 가

1985 , 가 12,850,000 ,
 가 30 가 ,
 가 .
 가. :
 가 = /
 = 12,850,000 /30 가
 = 428,333 / . 99
 가 (가 , 2000)
 ,
 PV = Ct × (1+i)ⁿ 11,927
 PV: 가 Ct: 가 300 ,
 i : n : 가 가
 , 3,578,100
 가 가
 7.5% 가 ,
 , 1,473,948
 (SD=782,313) , 227,832
 (Finker, , 1,292,420 .
 1994), 2001 (2001-14) 300 1
 가 4,913 .
 7.5% (http://www.samiltax.com). 40%
 가 1,271,336 /
 . 가 1,271,336 :
 / 12 = 105,945 /
 가 가
 660,790 . 가 가
 Sunwoo et al.(2000) 가
 3,053,437 가 1
 <Table 4>. 32,965 가
 2)
 (1) 45
 1,483,425

<Table 4> Direct Costs and Indirect Costs per Month related to CHP Services

Category	Ingredients	Costs
Direct costs	Labor costs(salary, education and Training, others)	1,598,268 won
	Direct materials(lease of medical equipment, medical supplies)	22794,379 won
	Subtotal	2,392,647 won
Indirect costs	Overhead(administration, utility, etc.)	554,845 won
	Depreciation	105,945 won
	Subtotal	660,790 won
Total cost		3,053,437 won

가 . Lee(1993) 60 가

가 1 가

가.

1997 가

10km

4 50 , 10km

km 47 74 (가

20% ,) 가 가 가

1 0.20%

4,400,000 1 11.3km , 450(10km)

540 (45 / × 12) 가 +47.74(km) = 500

1 8,148 500 × 2 = 1,000 1

가

25% 300 × 1,000 = 300,000

(2)

가

가

가 , 가

가 . 99

가 (http://www.nso.go.kr)

Kim(1999) 가 1,025,001

가 11.3km , 228 ()

<Table 5> Direct Benefits and Indirect Benefits related to CHP Services

Category	Ingredients	Costs
Direct benefits	Clinic activities	
	Average cost per clinic visit per patient (11,927 won)	3,578,100 won
	*Number of patients visiting CHP per months (300 patients)	
	Home care visits	
Indirect benefits	Average costs per hospital-based home care visit	32,965 won * 1,483,425 won
	Number of home care visits by CHP per month (45cases)	
	Subtotal	5,061,525 won
	Travel	
Indirect benefits	Round trip bus fare (1,000 won) * Number of patients visiting CHP per months (300 patients)	300,000 won
	Productivity	
	Labor cost per person (4,500 won) * travel hour (1 hour) * Number of patients visiting CHP per months (300 patients)	1,350,000 won
	Subtotal	1,650,000 won
Total benefits		6,711,525 won

가 가 4,500 , ,
 가 가 , - ,
 1 가 가
 2.20, 3,658,089 / /
 $300 \times 4,500 / = 1,350,000$
 2
 1,350,000 1999
 1,867 , 가
 6,829,652,163 가
 6,711,525 <Table 5> Lee(1993)가
 1992 975
 (3) - 1.8
 가
 가 10
 298 1999 가
 2000 6 가
 6,711,525 , 가
 3,053,436 가
 가
 3,658,088 가
 (6,711,525 - 3,053,437) 20
 - >0 가 가 , 가
 가 가 85-90% 가
 가 가 (MOHW, 2000),
 가
 6,711,525 / 3,053,436 = 2.20
 , 100% 가 가가
 2 가
 가 80
 가
 21 80-90% , 가 10-20% ,
 가 (Park,

<Table 6> Cost-Benefit Analysis of CHP Services

Variable	Content
Net benefit	Total benefits 6,711,525 won - Total costs 3,053,436 won = 3,658,089 won
Benefit/Cost ratio	$\frac{\text{Total benefits 6,711,525 won}}{\text{Total costs 3,053,436 won}} = 2.20$

1985; Kim, 1984).

64.6%, 35.3% 가 ,

15 가

가 가가 가

50%, 10%, 20%, 가 가

20 가 가

가 가

가 가

가 가

가 1. 가 157 (57.7%)

가 43 (15.8%),

가 20 (7.4%)

2. 39.6 (SD=.36)

90.8%

, 3

72.1% 가

6.6%

(Nurse Practitioner, NP)

가 1960 3. 50%,

10%, 20%, 20%

2 NP 300 (SD=.75)

24 53.2 (SD=3.3)

1.7

가 , 45.0가 (SD=2.35)

4. 3,053,437

가 가

가 6,711,525

가 6,711,525 / 3,053,436

(Lee, 1993). = 2.20 100%

가

가 가
가 .

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- Abstract -

Cost-Benefit Analysis on Community Health Practitioner

Lee, Tae-Wha*, Ko, Il-Sun *

Purpose: The purpose of the study were to describe outcomes of CHP activities, and to evaluate the economic validity of CHP through a cost-benefit analysis.

Method: The sample size was 272. Data were collected using a researcher developed questionnaire from November 1999 to March, 2000.

Result: The mean age of CHPs was 39.6 (SD=.36). In regard to marital status, 90.8% of the respondents were married. 72% of the CHPs had associate degree. Among CHP activities, providing medical services was 50%, followed by home care visits 20% and health promotion services 20%, preventive services

* College of Nursing, Nursing Policy Research Institute Yonsei University

10%. Total costs per month incurred to CHP activities was ~~¥~~3,053,437(\$2,442.7). Total benefits per month was ~~¥~~6,711,525(\$5,369.2). Hence, net benefit was calculated as ~~¥~~3,658,089(\$2,926).

Conclusion: Cost-benefit ratio was 2.20, which provides the evidence of the economic viability of CHP program. The result of

cost-benefit analysis, however, would more strongly support the economic value of CHP if intangible benefits of CHP activities such as decreases in pain and suffering and increased quality of life, could be counted.

Key words : Community Health Practitioner,
Cost-Benefit Analysis,