NEED FOR DEVELOPMENT OF HOME HEALTH
NURSING PROGRAM IN KOREA

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I. INTRODUCTION

Korean health care system emphasises acute medical care system and care that is given in institutions. Delivery of nursing services in a patient's homes by professional nurse is not currently integral component of the Korean Health Care system. There is only one hospital based home nursing program and it is associated with a nursing educational program. Yonsei University established at Woonju Christian Hospital, a community health nursing service to provide home care to discharged patients and preventive and health maintenance care their families in 1974. These services have not been expanded to any other institution, although the evaluative research for that program showed that more than 90% of patient sample were satisfied with the program (Chun et al., 1981). Another study reported more than 85% of their patient sample

would accept to a system of home nursing service following hospital care (Lee et al., 1981; Ko, 1982). Favorable staff attitudes toward home care programs were reported by Lee and her associates in 1986 (Lee et al., 1986). What is lacking was information as to wether there were needs for home care services that were unmet.

The concept of home care services has taken on now significance with the increased incidence of chronic illness, increases in the proportion of the elderly population and the cost of hospitalization. There are fewer family members available to provide the care as the family size decreases.

According to the statistics of the Economic Planning Board of Korea in 1988, there are about 4.3% of elderly of the total population and most of them have some chronic illness. The leading cause of death in Korea are disease's of the circulatory system and neoplasms. The Ministry of Health and Social Affairs of Korea reported that there are 3.7% of disabled patient with chronic illness of the total population. These conditions indicate that a large portion of this population required assistance to maintain their daily life patterns and require longterm

care to avoid use of expensive acute care facilities. With the implementation of the medical insurance program in the health care system in 1977, there has been a substantial increase in the utilization of medical care facilities. The fee for service payment system inadvertently incouraged overutilization of inpatient services while coverage decisions also favored inpatient care. This reimbursement system resulted in a higher rate of hospital bed occupancy, early patient discharge without adequate arrangement for post--hospital care. And increase risk of relapse and readmssion to the hospital. In addition to this, there is a high potential medical care cost to rise. Since hospital care cost is one of the largest contributors to health care costs. Shin (1982) reported that 59% of medical care cost was comprised by hospital care cost. To cope with this situation nursing profession in Korea is considering the development of home health nursing programs as one component of a continuum of health care services. One of the authers came to the university of Maryland for this purpose. What become apparent during the course of her studies was that the US system provided information about cost the organization and types of services that could be provided but no direction for development of services in relation to consumers recognition of need and willingness to use.

Before proceeding to develop home health nursing in Korea, US home care services were identified as a model to be examined. Because it was well established and included both private and governmental components. Also it was determined to carry out and assessment of the Korean people the readiness to use these services if available. This article is to describes selected studies carried out in U.S.A. on home care services and koreans studies that explored health care services from the perspectiives of the consumers. And report on a study that was carry out in Korea that investigated publics perception about need for services. Discussion of the Korean's findings suggest the need for replication of the study in USA.

II. LITERATURE REVIEW

In America no literature found on the public's perception of need and willingness to use home care services. There were studies that patient satisfaction with services already provided. Rather the studies investigated the ralationship of various patient characteristics to placement in home care settings. The principal age group served in home care comprised persons aged 65 and over (Berk & Bernstein, 1985; Colvin & Nelson, 1979; Levenson, 1975) and women used more home health care than men (Engstrom, 1986; Young and Fisher, 1980).

In studies that use ICDA-8, shown that the diagnostic group comprising circulatory disorders (which includes stroke) is the most prevalent primary diagnosis, followed by that comprising neoplasms and other frequent primary diagnostic categories include endocrine diseases, musculoskeletal disorders and injuries (Levenson, 1975; Berry & Pettit, 1980). A study in 1969 of patients of home health agencies in 9 New York counties found that three quarters of the case load consisted of chronic and long-term patients, the physical disabled, and the terminally ill.

The living arrangements of elderly home care clients was studied from a variety of perspectives. The availability of family or friends to assist patients around the clock is often the critical determinant of the feasibility of in-home care(Caro, 1980) and the key to successful home care management is viewing the patient, the caregiver and the environment as a unit requiring services (Alcalay, 1980; Hankers, 1984).

Extensive research conducted on functional status and the activities of daily living of chronic care clients(Asberg, 1986; Mahoney & Barthal, 1965). A study of health status outcomes in

three alternative Veterans Administration long-term care setting for chronically ill, home care, and community and hospital based nursing home care, reported that the most powerful predictor of outcome was patient's level of functionality at the time of placement(Mitchel, 1978). Fortinsky et al.(1981) recommended that both function and the informal support care system must be assessed if long-term care is succeed, Ballard & Mcnamara(1983) found that functional status, not medical diagnosis, predicted home nursing services for cancer and cardiac patients.

The second category of US studies deals with the major issues in home care of cost effective ness. Hammond(1979) reviewed a large number of studies of cost effectiveness which used a variety of methodologies. He suggested that from the standpoint of third-party underwriters, home health care is less expensive than extended hospitalization, but there are insufficient data to draw a parallel conclusion about its impact on unnecessary hospital admissions. As far as nursing home care is concerned, he found that cost were roughly equivalent for patients requiring the same level of care. An evaluation Study (Tolkoff-Rubin et al., 1978) reported that home care could be a viable, economically feasible, alternative to institutionalization for carefully selected patients who are either terminally ill, have catastrophic neurological illnesses, of suffer from multi-system chronic illness. However, since the total coommitment of family members is essential for successful home care, the authors caution that the cost of having a family member stay at home to care for the patient or the cost to the family of providing outside assisstance not covered by third-party payers is unpredictable.
The GAO(1982) reported that home care had the potential for reducing hospital length of stay of reducing admission and readmission rates. Brooten, et al.(1986) concluded that early

dicharge of very low birth weight infants with follow-up in the home by a hospital-based nurse specialist is safe and cost effective.

Contray to US, Korean studies have focus on potential consumers and patient care needs. Research concerning patient perception nursing needs at discharge revealed that 38.6% and 69.7% of them had some or great deal of need for nursing services (Lee at al., 1981 ; Ko, 1982). When these patients were asked if they wanted home nursing services, over 85% accepted (Lee et al., 1981 : Ko, 1982). In addition most of them prefered a hospital based program. Lee & her associates concluded that there was agreat demand for a systematic home care services to patients who have been discharged from hospitals following critical care. The respondents in the lower income group reported a higher demand and respondents receiving financial assistance of the government of other funding agencies reported higher demands for home care services than those counterparts with higher education and higher income. Only one study looked of hospital staff percept of need for home care services and its findings revealed over 90% reported that hospital based community health nursing service was essential (Lee et al., 1986).

While study concerning nursing needs of the rural area community people showed that they also had some or great degree of nursing needs in physical, social, psychological and spiritual (Kim, 1985). She suggested the number of home nursing care needs increased as the age of the subjects increased. A survey was conducted by Moon and Ruth add to body of knowledge in this field and is reported here.

III. Research Project (Method)

1. SUBJECT AND PROCEDURE

Administrative approval was obtained prior to initiation of the study in Korea. Total subjects

were 1,550 include 390 patients, 380 caretakers and 780 community people in seoul, the capital city of Korea. Data were collected from July to August 1988. Every subject was interviewed and completed a short questionaire. Socio-demographic information by interview and opinion toward home health nursing program by structured questionaires was obtained by 6 interviewers who received extensive training in the uniform administration of the questionaires, designed for this study. Patients and care takers for 5 university hospitals and community respondents were selected 5 government district offices, seoul railroad station. Care takers of all the patient discharged during data collection. Patients medical history information from hospital records with consent of the patients and hospital was record. We gave the subjects about basic concept in home health nursing program in the questionaire.

The questionaire was formulated from literature research, personal experience and consulted to 5 nursing school staffs and 5 head nurses who were working in university hospital and revised by pilot study. It was consisted of three parts: information on socio-demographic characteristics, need for development of home health nursing program, willingness to use of it if available and medical history for the patient.

2. DATA ANALYSIS

The 3 groups(community people, patient, caretaker) were compared on socio-demographic characteristics by percent distribution. Tested by chisquare to examine the difference of perceived need for development of home health nursing program and their willingness to use it. Because the dirrerence of 3 groups socio-demographic characteristics were great, examined the group as a whole by sicio-demographic characteristics and examined the subgroup of patient by medical history.

3. LIMITATION

As employed convenience sampling method for Seoul population and the general characteristics of the studied subject was not same as the nation wide one, it's a lack of representativeness. So the results would not generalizable to the whole nation. However the population of Seoul area composited one fourth of the whole nation one.

Ⅳ. RESULT

1. Characteristics of sampled population

General characteristics of all respondents in terms of the age, sex, educational level, having or not having medical benefit and monthly income, displyed in table 1.

Distribution of patient sample according to medical history displayed in table 2. Disease the most prevalent one was neoplasms with 15%, next came normal and complication of pregancy, child birth and puerperium with 15%, disaeses of nervous system and sense organs followed them with 14%. 33% of them waited for admission and their average length of stay in the hospital were 15.5days. Average paid money to hospital out of their pockets for care was 935$. 88% of them had a caretaker during hospitalization, and 93% of them were cured or improved, wheares 7% of them thought that their dischage time was adequate.

2. Need perception for development of home health nursing program

As a whole 81% of sampled population reported need for development of home health nursing program, while 7.5% of them didn't need it, and the remain ones(11.5%) didn't know it (table 3). Community people reported need 83% as compared with 78% patient and 79% caretaker; The difference was statistically signi-

TABLE 1. GENERAL CHARACTERISTICS OF ALL RESPONDENTS

Characteristics	Comm. people		Patient		Care taker		Total	
	No.	%	No.	%	No.	%	No.	%
Age :								
20 − 29	411	52.7	115	29.5	83	21.8	609	39.3
30 − 39	200	25.6	78	20.0	124	32.6	402	25.9
40 − 49	111	14.2	68	17.4	85	22.4	264	17.0
50 − 59	39	5.0	56	14.4	60	15.8	155	10.0
60 − 99	19	2.4	73	18.7	28	7.4	120	7.7
Sex :								
Male	483	61.9	174	44.6	103	27.1	760	49.0
Female	297	38.1	216	55.4	277	72.9	790	51.0
Educational level :								
Primary school	27	3.5	78	20.0	63	16.6	168	10.8
Middle school	36	4.6	49	12.6	53	13.9	138	8.9
High school	296	37.9	138	35.4	153	40.3	587	37.9
Coll. & above	421	54.0	125	32.0	111	29.2	657	42.4
Medical benefit :								
Have	606	77.7	334	85.6	327	86.1	1267	81.7
Not have	174	22.3	56	14.4	53	13.9	283	18.3
Monthly family income($)								
Below 500	98	12.6	69	17.7	51	13.1	218	14.1
501 − 1000	310	39.7	126	32.3	109	27.9	545	35.2
1001 − 2000	215	27.6	92	23.6	98	25.1	405	26.1
2001 − 3000	92	11.8	48	12.3	64	16.4	204	13.2
More than 3000	13	1.7	16	4.1	26	6.7	55	3.5
No response	52	6.7	39	10.0	32	8.2	123	7.9
Total	78	100.1	390	100.0	380	100.0	1550	100.0

TABLE 2. CHARECTERISTICS OF PATIENTS RELATE TO MEDICAL HISTORY

Characteristics	No.	%
Diagnosis:	40	10.3
Infectious and Parasitic diseases	58	14.9
Neoplasms	9	2.3
Endocrine and metabolic immunity disorder	11	2.8
Diseases of blood and blood forming organs	54	13.8
Diseases of nervous system and sense organs	25	6.4
Diseases of circulatory system	12	3.1
Diseases of respiratory system	35	9.0
Diseases of digestive system		

Diseases of genito-urinary system	29	7.4
Diseases of skin and subcutaneous tissus	4	1.0
Diseases of musculoskeletal system	33	8.5
Complication of pregnancy, child birth and puerperium	57	14.6
Symptoms, signs and ill-defined conditions	11	2.8
Injury and poisoning	12	3.1
Waiting time for admission(day)		
0	262	67.2
1-7	91	23.3
8-15	13	3.3
16-30	15	3.9
over 31	9	2.3
Length of stay(day)		
1-7	160	41.0
8-15	121	31.0
16-30	62	15.9
over 31	43	11.0
Missing	4	1.0
Average : 15.5 days		
Caretaker in hospital		
Have	342	87.7
Not have	48	12.3
Total medical care expense($)		
Below 500	167	42.8
501-1000	81	20.8
1001-2000	94	24.1
2001-3000	40	10.2
More than 3000	5	1.3
Missing	3	0.8
Average : 935		
Status at discharge		
Cured	93	23.8
Improved	270	69.2
No change or worse	26	6.7
Missing	1	0.3
Opinion regarding discharge time		
Adequate	268	68.7
Inadequate	122	31.3
Total	390	100.0

TABLE 3. NEED PERCEPTION OF HOME NURSING SERVICE BY SOCIO-DEMOGRAPHIC VARIABLES

Variables	Need		Not need		Don't know		Total	
	No.	%	No.	%	No.	%	No.	%
Age :								
20 — 29	496	81.4	41	6.7	72	11.8	609	100.0
30 — 39	334	83.1	27	6.7	41	10.2	402	100.0
40 — 49	206	78.0	22	8.3	36	13.6	264	100.0
50 — 59	126	81.3	17	11.0	12	7.7	155	100.0
60 — 69	92	76.7	10	8.3	18	15.0	120	100.0
Sex :								
Male	630	82.9	54	7.1	76	10.0	760	100.0
Female	624	79.0	63	8.0	103	13.0	790	100.0
Educational leves : ****								
Primary school	114	67.9	16	9.5	38	22.6	168	100.0
Middle school	97	70.3	23	16.7	18	13.0	138	100.0
High school	478	81.4	39	6.6	70	11.9	587	100.0
College & above	565	86.0	39	5.9	53	8.1	657	100.0
Medical benefit :								
Have	1039	82.0	90	7.1	138	10.9	1267	100.0
Not have	215	76.1	27	9.5	41	14.5	283	100.0
Monthly family income($) : ***								
500 or less	160	73.4	24	11.0	34	15.6	218	100.0
501 — 1000	440	80.7	44	8.1	61	11.2	545	100.0
1001 — 2000	340	84.0	26	6.4	39	9.6	405	100.0*
2001 — 3000	178	87.3	10	4.9	16	7.8	204	100.0
More than 3000	37	67.3	6	10.9	12	21.8	55	100.0
Group : ***								
Community	651	83.5	44	5.6	85	10.9	780	100.0
Patient	304	77.9	44	11.3	42	10.8	390	100.0
Caretaker	299	78.7	29	7.6	52	13.7	380	100.0
Willingness to use : ****								
Use	699	95.0	13	1.8	22	3.1	704	100.0
Not use	63	23.4	26	55.3	5	10.6	47	100.0
Depending on situation	732	75.2	58	8.0	117	16.2	712	100.0
Total	1254	80.9	117	7.5	179	11.5	1550	100.0

*** P < .01, **** P< .001

ficant(P<.01).

As to need perception according to educational level of all subjects, college and above educated group ranked the highest with 86%, high school group came next with 81%, middle school and primary school group followed them with 70% and 68%, respectively: The dirrerence was statistically significant(P<.001).

As to need perception according to monthly family income for all subjects, those whose family income 2001-3000$ group ranked the highest with 87%, 1001-2000$ group ranked the second with 84%, 501-1000$ group came the third with 81%, 500$ or less group and more than 3000$ group followed them with 73% and 67%, respectively: The difference was statistically significant(P<.01)

There was statistically significant difference in terms of need perception and willingness to use service(P<.001). Those who had willingness to use the service perceived need 95%, as compared with 63% and 75% of those who didn't

TABLE 4. NEED PERCEPTION OF HOME NURSING SERVICE BY SELECTED PATIEN VARIABLES

Variables	Need		Not need		Don't know		Total	
	No.	%	No.	%	No.	%	No.	%
Opinion regarding discharge time : **								
Adequate	220	82.1	23	8.6	25	9.3	268	100.0
Inadequate	84	68.6	21	17.2	17	13.9	122	100.0
Status at discharge :								
Cured	76	81.7	7	7.5	10	10.8	93	100.0
Improved	211	78.1	32	11.9	27	10.0	270	100.0
No change or worse	17	65.4	5	19.2	4	15.4	26	100.0
Length of stay :								
1 — 14	223	79.4	30	10.7	28	10.0	281	100.0
over 15	78	74.3	14	13.3	13	12.4	105	100.0
Medical care expense($) : *								
500 or less	135	80.8	22	13.2	10	6.0	167	100.0
501 — 1000	67	82.7	6	7.4	8	9.9	81	100.0
1001 — 2000	73	77.7	8	8.5	13	13.8	94	100.0
More than 2000	28	62.2	8	17.8	9	20.2	45	100.0
Waiting time for admission(day) :								
0	202	79.2	26	10.2	27	10.6	255	100.0
1 — 7	60	80.0	9	12.0	6	8.0	75	100.0
Over than 7	42	70.0	9	15.0	9	15.0	60	100.0
Caretaker in hospital :								
Have	263	76.9	42	12.3	37	10.8	342	100.0
Not have	41	85.4	2	4.2	5	10.4	48	100.0
Total	304	78.0	44	11.3	42	10.8	390	100.0

*P<.05, **P<.02

have willingness to use and those who would decide by situation, respectively.

There were no statistically significant difference in need perception in terms of the age, sex, having or nor having health benefit for all subjects.

As displayed in table 4, the need perception according to total medical care expense of patient sample, those whose expense with 501-1000$ group ranked the highest with 83%, 500$ or less group came next with 80%, 1001-2000$ group and more than 2000$ group followed them with 78% and 62%, respectively:The dirrerence was statistically significant (P <.05)

As to need perception according to patient's opinion regarding discharge time, those who thought that's right time reported need 82% as compared with 68% of those who didn't think so: The difference was statistically significant(P <.01)

There were no statistically significant differ-ence in need perception in terms of the waiting time for admission, length of stay, status at discharge and having or not having caretaker in hospital for the subject of patient.

As displayed in table 5, the 5 most higher need perception reported in terms of patient's diagnosis, were diseases of skin and subcutaneous tissue(100%), complication & normal of pregnancy, child birth and puerperium(90%), Diseases of nervous system and sense organs(85%), Injury and poisoning(83%) and Neoplasms(79%).

3. Williness to use the service

As a whole 48% of sampled population reported that they would use the home health nursing service if available, while 3% of them would not use it, and the remain ones(49%) would decide it by situation (table 6).

Regard to willingness to use the service according to age group, those of age with over than 60 group ranked the highest with 55%, age with 40-49 group ranked the second with 54%,

TABLE 5. NEED PERCEPTION OF HOME NURSING PROGRAM BY DIAGNOSIS

Diagnosis	Need		Not need		Don't know		Total	
	No.	%	No.	%.	No.	%	No.	%
Infectious diseases	30	75.0	7	17.5	3	7.5	40	100.0
Neoplasms	46	79.3	5	8.6	7	12.1	58	100.0
Immune disorders	5	55.5	3	33.3	1	11.1	9	100.0
Diseases of blood	7	63.6	4	36.4	—	—	11	100.0
Diseases of nerv. & sense	46	86.2	2	3.7	6	11.1	54	100.0
Circulatory diseases	18	72.0	4	16.0	3	12.0	25	100.0
Respiratory diseases	8	66.6	2	16.7	2	16.7	12	100.0
Digestive diseases	26	74.3	4	11.4	5	14.3	35	100.0
G — U system diseases	23	79.4	3	10.3	3	10.3	29	100.0
Diseases of skin	4	100.0	—	—	—	—	4	100.0
Musculoskeletal diz.	24	72.7	5	15.2	4	12.1	33	100.0
Diseases of pregnancy	51	89.5	2	3.5	4	7.0	57	100.0
Symptom & Sign	6	54.5	2	18.2	3	27.3	11	100.0
Injury & poison	10	83.3	1	8.3	1	8.3	12	100.0

TABLE 6.WILLINGNESS TO USE THE SERVICES BY SOCIO-DEMOGRAPHIC VARIABLES

Variables	Will Use		Won't use		Depends on Situation		Total	
	No.	%	No.	%	No.	%	No.	%
Age : ***								
20 − 29	257	43.3	22	3.7	314	53.0	593	100.0
30 − 39	183	47.9	3	0.8	196	51.3	382	100.0
40 − 49	128	54.5	8	3.4	107	45.5	235	100.0
50 − 59	77	52.4	7	4.8	63	42.9	147	100.0
60 − 69	59	55.1	7	6.5	41	38.3	107	100.0
Sex : ****								
Male	396	54.1	22	3.0	314	42.9	732	100.0
Female	308	41.6	25	3.4	407	54.9	741	100.0
Educational levea : ***								
Primary school	75	52.8	9	6.3	58	40.8	142	100.0
Middle school	58	45.7	9	7.1	60	47.2	127	100.0
Hign school	244	43.6	14	2.5	302	53.9	560	100.0
College & above	327	50.9	15	2.3	301	46.8	643	100.0
Medical benefit : ***								
Have	584	48.7	27	2.3	587	49.0	1198	100.0
Not have	120	43.8	20	7.3	134	48.9	274	100.0
Monthly family income($) :								
below 500	101	42.6	9	3.8	127	53.6	237	100.0
501 − 1000	264	48.9	14	2.6	262	48.5	540	100.0
1001 − 2000	183	48.3	11	2.9	184	48.7	378	100.0
2001 − 3000	86	46.7	5	2.7	93	50.5	184	100.0
More than 3000	27	56.3	4	8.3	17	35.4	48	100.0
Group :								
Community	374	49.6	22	2.9	358	47.5	754	100.0
Patient	166	46.0	17	4.7	178	49.3	361	100.0
Caretaker	164	45.9	8	2.2	185	51.8	357	100.0
Total	704	47.8	47	3.2	721	49.0	1472	100.0

**P<.02, ***P<.01, ****P<.001

age with 50-59 group came next of them with 52%, age with 30-39 and 20-29 group followed them with 47% and 43%, respectively : the difference was statistically significant(P<.01).

Regard to willingness to use the service according to gender, the willingness of male was 54% as compared with 42% female group : The difference was statistically significant(P<.001)

Regard to willingness to use the service according to educational level, primary school

group ranked the highest with 52%, college and above group came next with 50%, middle and high school group followed them with 45% and 43%, respectively: The difference was statistically significant(P<.01)

Regard to willingness to use the service according to having or not having medical benefit, the willingness of those who had medical benefit group was 49%, compared with 44% of those who did not have one.

There were no statistically significant differences in the willingness of use service in terms of the three groups(community people, patient, caretaker), and monthly family income for the all subjects.

There was statistically significant difference in the willingness of use service in terms of patient's status at dischage(P<.02): The willingness of those of no change or worse group reported willingness was 55%, as compared with 45%

TABLE 7. WILLINGNESS TO USE THE SERVICE BY SELECTED PATIENT VARIABLES

Variables	Will Use		Won't use		Depends on Situation		Total	
	No.	%	No.	%	No.	%	No.	%
Opinion regarding discharge time :								
Adequate	114	45.2	11	4.4	127	50.4	252	100.0
Inadequate	52	47.3	6	5.5	52	47.3	110	100.0
Status at discharge : **								
Cured	39	45.4	2	2.3	45	52.3	86	100.0
Improved	114	45.2	11	18.2	127	50.4	252	100.0*
No change or worse	12	54.5	4		6	27.3	22	100.0
Length of stay :								
1 — 14	108	42.7	14	5.5	131	51.8	253	100.0
More than 14	50	52.6	2	2.1	43	45.3	95	100.0
Medical care expense($) :								
500 or less	70	44.6	7	4.5	80	51.0	157	100.0
501 — 1000	36	48.7	4	5.4	34	45.9	74	100.0
1001 — 2000	38	46.3	5	6.1	39	47.6	82	100.0
More than 2000	11	39.3	0	0.0	17	60.7	28	100.0
Waiting time for admission(day) :								
0	108	45.4	10	4.2	120	50.4	238	100.0
1 — 7	30	42.9	5	7.1	35	50.0	70	100.0
Over 7	26	51.0	1	2.0	24	47.1	51	100.0
Caretaker in hospital								
Have	143	45.1	16	5.0	158	49.8	317	100.0
Not have	'23	52.3	1	2.3	20	45.5	44	100.0
Total	166	46.0	17	4.7	178	49.3	361	100.0

**P<.02

TABLE 8. WILLINGNESS TO USE THE SERVICES BY DIAGNOSIS

Diagnosis	Will Use		Won't use		Depends on Situation		Total	
	No.	%	No.	%	No.	%	No.	%
Infectious diseases	17	45.9	3	8.1	17	45.9	37	100.0
Neoplasms	29	56.9	3	5.9	19	37.3	51	100.0
Immune disorder	5	62.5	1	12.5	2	25.0	8	100.0
Diseases of blood	6	54.5	1	9.0	4	36.5	11	100.0
Diseases of nerv. & sense	22	44.9	1	2.0	26	53.1	49	100.0
Circulatory diseases	9	37.5	2	8.3	13	54.2	24	100.0
Respiratory diseases	3	30.0	—	—	7	70.0	10	100.0
Digestive diseases	13	40.6	2	6.3	17	53.1	32	100.0
G — U system diseases	9	37.5	1	4.2	14	58.3	24	100.0
Diseases of skin	2	50.0	—	—	2	50.0	4	100.0
Musculoskeletal diseases	14	42.4	—	—	19	57.6	33	100.0
Diseases of pregnancy	28	50.0	1	1.8	17	48.2	56	100.0
Symptom & signs	3	27.3	1	9.0	7	63.7	11	100.0
Injury & poison	6	54.5	1	9.0	4	36.5	11	100.0

TABLE 9. FREQUENCY DISTRIBUTION OF SAMPLE AS A TOTAL GROUP & THE THREE SUBGROUPS BY ANTICIPATED ADVANTAGES OF HOME NURSING SREVICE

Advantage	Total		commanity people		patient		caretaker	
	No.	%	No.	%	No.	%	No.	%
emotional stability	1015	65.5	515	66.0	261	67.1	239	62.9
time saving	878	56.6	429	55.0	229	58.5	220	58.0
convenient to family	876	56.5	430	55.1	224	57.3	222	58.4
learn of pt. care	816	52.6	420	53.8	195	50.0	201	53.0
learn of diseases	794	51.2	419	53.7	191	49.0	184	48.4
effective use of medical service	763	49.2	369	47.3	196	50.3	198	52.1
solving health problem	747	48.2	395	50.6	183	46.9	169	44.5
cost saving	581	37.5	275	35.3	155	39.7	151	39.8
promoting rehabilitation	483	31.2	208	26.7	148	38.0	127	33.4

cured and improved group, resepectively(table 7).

There were no statistically significant differences in the willingness of service in terms of the waiting time for admission, length of stay, having or not having caretaker in hospital, total medical care expense and opinion in discharge time.

As displayed in table 8, the 4 most higher

willingness to use the service reported in terms of patient's diagnosis, were endocrine and metabolic immunity disorder(63%), Neoplasms(57%), Diseases of blood and blood forming organs(55%), and injury and poisoning(55%)

4. Anticipated advantage of home nursing service

We found that things over than 50% of all subjects thought as advantage of home nursing service were emotional stability of patient(66%), time saving(57%), convenient to family(57%), learn of patient care(53%) and disease process(51%), while things less than 50% of them thought as advantage of the service were cost saving(37.5%), solving other family member's health problem(48.2), promoting patient's social rehabilitation(31.2%) and effective use of medical resources(49%) (table 9).

5. Anticipated disadvantage of home nursing service

We found that over than 40% of all subject thought that unavailabe of emergency care(49%), anxiety of patient(41%) and uncomfortable home physical environment(43%) would be the disadvantage of home nursing service(table 10). And other things that they worried ones were anxiety of family(33%), inconvenience of family(26%), violating privacy(17%), entertaining nurse as a guest(25%) and unreliable nursing service(15%).

6. Acceptable nursing activity in home care.

Concerning to what nursing activity they would accept in home nursing service, the following items of nusing srevice were the ones that more than 50% of all subject agreed to receive : vital sign check(84%), oral medication(59%), injection(75%), wound care(51%), exercise and rest(54%), personal hygiene(54%), health education(61%) and psychological care(51%), while the services that less than 50% of them agreed to receive were specimen collection(50%), diet therapy(46%), colostomy care(23%), enema(44%), catheterization(38%), suction(27%), hemodialysis(20%), and environmental care(44%) (table 11).

7. Opinion on payment method of home nursing service

We found that their most favorite payment method of home nursing service was the fee de-

TABLE 10. FREQUENCY DISTRIBUTION OF SAMPLE AS A TOTAL GROUP & THE THREE SUB-GROUPS BY ANTICIPATED DISADVANTAGES OF HOME NURSING SERVICE

Disadvantage	Total		community people		patient		caretaker	
	No.	%	No.	%	No.	%	No.	%
unavailale emergency care	761	49.1	399	51.2	175	44.9	187	49.2
unfavorable environment	671	43.3	373	47.8	156	40.0	142	37.4
anxiety of patient	637	41.1	310	39.7	174	44.6	153	40.3
anxiety of family	509	32.8	244	31.3	133	34.1	132	34.7
inconvinient to family	400	25.8	213	27.3	107	27.4	80	21.2
entertaining nurse	382	24.6	209	26.8	92	23.6	81	21.3
violating privacy	257	16.6	148	19.0	63	16.2	46	12.1
unreliable service	236	15.2	125	16.0	71	18.3	40	10.5

TABLE 11. FREQUENCY DISTRIBUTION OF SAMPLE AS A GROUP & THE THREE SUBGROUPS BY ACCEPTABLE NURSING ACTIVITY IN HOME CARE.

Nursing	Total		commanity people		patient		caretaker	
activity	No.	%	No.	%	No.	%	No.	%
vital sign check	1300	83.9	679	87.1	316	81.0	306	80.5
injection	1169	75.4	587	75.3	292	74.9	290	76.3
health education	951	61.4	499	64.0	230	59.0	222	58.4
oral medication	914	59.0	414	61.4	223	57.2	212	55.8
exercise and rest	834	53.8	400	53.1	213	54.6	207	54.5
personal hygiene	831	53.6	394	51.3	215	55.1	216	56.8
psychological care	794	51.2	413	50.5	199	51.0	201	53.0
wound care	785	50.8		52.9	196	50.3	178	46.8
specimen collection	773	49.9	374	47.9	211	54.1	188	49.5
diet therapy	715	46.1	372	47.7	178	45.6	165	43.4
enema	686	44.4	275	35.3	216	55.4	197	51.8
environmental care	674	43.5	364	46.7	156	40.0	154	40.5
catheterization	585	37.7	223	28.6	192	49.2	170	44.7
suction	410	26.5	183	23.5	114	29.2	113	29.7
colostomy care	356	23.0	148	19.0	108	27.7	100	26.3
hemodialysis	234	20.3	99	12.7	65	17.7	70	28.4

TABLE 12. OPINION ON PAYMENT METHOD OF HOME NUSING SERVICE

Payment	community people		patient		caretaker		Total	
method	No.	%	No.	%	No.	%	No.	%
1. One fee regardless of services	120	17.2	32	10.6	33	10.0	185	15.1
2. Fee depends on service given	229	32.9	114	37.6	116	35.3	459	37.3
3. Fee depends on service time	37	5.3	27	8.9	28	8.5	92	7.5
4. 1 + 2	128	18.4	49	16.2	51	15.5	228	18.6
5. 2 + 3	121	17.4	51	16.8	54	16.4	226	18.4
6. others	62	8.9	30	9.9	48	14.6	140	11.4
Total	697	100.0	303	100.0	329	100.0	1229	100.0
7. no response	83	10.7	87	22.3	51	13.3	221	14.3

pends on service given with 37.3%(table 12). 14.3% of total subjects was not responded.

V. DISCUSSION

The finding that more than 80% of sample perceive the need of home care, are similar to other studies(Lee, et al. 1981 : Ko, 1982). Community people perceived need more than those of patient and caregiver. The possible explanation for this finding is that the community group is younger and more educated than other two groups so their way of thinking are more reasonable compare with other two groups. Consumers attitude seem favorable for develop ment of home nursing programs. Especialy the higher need perception was found in the middle income class family and higher education. The higher need perception was shown in the group of medical aid patients and who felt discharge timing was adequate.

An interesting finding was that 49% of all respondents and 50% of those who reported perceived need stated their use of services would depend on the situation. For planners, this large uncertain group is problematic requiring increased information, decisions size of home care money allocation, resources to family or their institution. The higher willingness to use services was shown in the group of patients whose status was not improved at discharge.

Findings in current differ from what has been reported in the literature(Irwin, 1978 : Chun, et al. 1981). The primary things subjects expect as advantage of home nusing services were patient's emotional stability, time saving, and convenient to family, while the less expected ones were cost saving and promoting patient's social rehabilitation. The possible explanation of this difference comes from that our studied population has not experienced home care.

However the find in current study are in line with the studies of disadvantages reported in literature(Rogatz, 1985). They worried about unavailable of emergency care in the event of emergency, uncomfortable home physical environment and anxiety of patient. Though more than half of sample did not mind the disadvantage of home nursing care, we should keep in mind those things they worried and try to minimize the problem.

In current study, anticipated nursing activities not experience with home care that may be reflected in responses. The items of nursing srevice in home care that most subjects repeorted to accept, were traditional nursing activities including vital sign check, injection and health education. While most of sample population did not agreed to receive the care of technology depend activities including colostomy, hemodialysis and suction. These results could be come from the lack of knowledge in nursing services.

The findings that variety of opinion regarding the payment method of home nursing service and 14% of them does not respond of it, are interesting. The possible explanations for these findings are that they haven't thought of it and have no prior experience reimbursement. Generally health care payment method have been decided by planners regardless of public opinion.

In America, Home care began to be seen by health policy planners as a cost-containment measure and as an alternative to institutional care, The advent of prospective payment, the DRG system in the hospital has had a definite impact on home care(Graffin, 1988). The phrase "sicker and quicker" has come to describe the patient being discharged to home care. Today there are about 6000 home health agencies under various type of sponsorship and current trend was steadily increasing need for home health care services of different kinds and different population group. In the past home care consisted of changing dressings, monitoring insulin, or caring for pre-

gnant women and new borns. Today many children are technology dependent, on respirators, intravenous chemotherapy, or other treatments, while thousands of other patients depend on dialysis monitoring, and other sustained services(Davis, 1988). Runner-Heidt(1987) suggested that some of the forces expected to increase the future demand and market for home health services are 1) an aging population 2) fewer family caretakers(relate to the movement of woman into the labor force) 3) cost-containment pressures by government, third party payers, and employers 4) consumers health awareness and concerning 5) growing desire among patients to receive treatment at home and 6) technologic developments facilitation "hign tech" home treatment. Korea is small country with young and homogeneous population and family composition is supportive for home care. However not long before the situation of Korea would be almost similar to today's Amercia.

Although this study have some limitation to generalize the whole nation, the results of this study not only suggested to educate the publics in nurse's roles and activities but also to develop home health nursing program in Korea. Specially home health nursing services are needed for the following conditions : 1) The Hospitals where the occupancy rate are greater than 90%, perhapse most of university hospitals in urban area are in this case. 2) Long-term, terminally ill, and acute patients who are in the later stages of surgical, medical, maternal and pediatrics.

Ideally, a national health program would integrate home health nursing program and develop a comprehensive strategy for health care. The patients transfering from one to another health care resources, in accordance with patient's needs.

Reference

Alcalay, R. : The need of social support for health. Proceedings of 1980 annual meeting of the Society of Preventive Medicine. Tucson, AZ, 1980.

Asberg, K.H. : Assessment of ADL in home care for the elderly. Scandinavian Journal of Social Medicine, 14 : 105-111, 1986.

Ballard, S., & McNamara, R. : Quantifying nursing needs in home health care. Nursing Researcch, 32(4) : 236-241, 1983.

Berk ML, Bernstein A. : Use of home health services : Some findings from the national medical care expenditure survey, Home Health Care Services Quarterly 6(1) : 3-12, 1985. Berry, N. J. & Pettit S. L. : Home care for blue cross insured patients : A case study, Home Health Review, Dec. 1980.

Broteen, D., Kumar S., Brown L. P., Butts P., Finkler S. A., Sachs S., Gibbons A., & Papadopoulos M. : Arandomized clinical trial of early hospital discharge and home follow-up of very-low-birth weight infants, The New England Journal of Medicine, 314 : 924-938, 1986.

Bureau of Statistics, Economic Planning Board, Korea : Population projection by age group(1985-2000), 1988.

Caro, F. C. : Impect of home srevices on functionally disabled adults, a proposal submitted to the Health Care Financing Administration by the institute for social welfare research, New York : Connunity Service Society. 1980.

Chun, S. C., Kim, M. I., Suh, M. H., Cho, W. J. Kim, E. S. & Choo, S. K. : An evaluative study of the community Health nursing service under the early discharge program of the Wonju Christian Hospital, Yonsei University, Nursing Research Institute, Yonsei University, Seoul, Korea, 1981.

Colvin, B. M. & Nelson, J. F. : Home health care in New York State : A descriptive analysis, Syracuse, N. Y. : Home Care Association of New York State, 1979.

Dunlop, B. D. : Expanded home-based care for the impaired elderly : Solution of pipe dream?, American Journal of Public Health, 70(5) : 514-519, 1980.

Engstrom, M.: Home health utilization review, Home Health care nurse, 5(6): 30-33, 1986.

Fortinsky, R. H., Granger, C. V., & Seltzer, G. B.: The use of functional assessment in understanding home care needs. Medical care, 19(5): 489-499, 1981.

Hankes, D. D.: Self care: Assessing the aged client's need for independence. Journal of Gerontologic Nursing, 10: 27-31, 1984.

Hammond, J.: Home health care cost effectiveness: An overview of the literature, Public Health Reports, 94(4): 305-312, 1979.

Irwin, T.: Home health care: When a patient leaves the hospital, Public affairs pamphlet No. 560(New York: Public Affairs Committee, 1978).

Keithley, J., Glandoon, G.L., Llewellyn, J.,Berger B., Levin, D.: The cost-effectiveness of same-day admission Surgery, Nursing Economics, 7(2): 90-98, 1989.

Kim, S. S.: An exploratory study of home nursing care needs and the implementation of home nursing caree, Doctoral dissertation of Yonsei University, Korea, 1985.

Ko, I. S.: Analysis of elderly patient's nursing needs following discharge from a hospital, Master thesis of School of Public Health, Seoul National Univarsity, Korea, 1982.

Lee, E. O., Rhee, S. J. & Park, S. A.: A survey on patient nursing needs following discharge from hospital, Journal of Korean Academic Nurse's Association, 11(2): 40-53, 1981.

Lee, Y. S., Suh, M. H. & Suh, M. S.: A study of the attitude of the health team towards a hospital based community health nursing service, Journal of Korean nurses association, 25(2): 72-79, 1985.

Levenson, G.: Type, Length, and Cost of Care for Home Health Patients, New York: Council of Home Health Agencies and Community Health Services, National League for Nursing, 1975.

Mahoney, F. I. & Barthel, D. W.: Functional evaluation: The Bartel index. Maryland State Medical Journa. 14(2): 61-65, 1965.

Ministry of Health and Social Affairs, Korea: Year book of health statistics, 1988.

Mitchel, J. B.: Patient outcome in alternative long-term care settings, Medical Care, 16(6): 439-452, 1979. Shin, Y. S.: Review in hospital care cost in Korea, Institute of Hospital research, Seoul, Korea,1(1): 12-17, 1982.

Tolkoff-Rubin, N. E. et al.: Coordinated Home care: The Massachusetts General Hospital Experience, Medical Care, 16(6): 453-464. 1978.

Rogatz, P.: Home health care: some social and economic considerations, Home Health care Nurse, 3(1): 38-43, 1985.

U. S. General accounting Office: The elderly should benefit from expanded home health care but increasing these services will not ensure cost reductions, Washington D.C., December, 1982.

Young, K. and Fisher, C.: Medicare Episodes of Illness:

A study of hospital, skilled nursing facility and home health agency care, Health Care Financing Review, fall 1980.