# Demographic characteristics of users of Psychiatric home care in patients suffering from psychiatric morbidities; at Al-Madina Al-Munawara KSA

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#### **Abstract**

**Objectives**: To examine the differences in the demographic and clinical characteristics of users of Psychiatric home health care in patients suffering from psychiatric morbidities and to assess patient satisfaction form the service provided.

Patience and methods: A cross sectional study started in January 2013 & ended in December of the same year. The cases were 171 patients with psychiatric disorders, 97 were enrolled in a home-based care at Psychiatric Hospital, Madinah, Saudi Arabia. They were compared as regards to the demographic and clinical characteristics another randomly selected 74 psychiatric patients in a hospital-based out patient treatment who were considered as the control group.

**Results:** when these two groups were compared, significant differences were found, in age, duration of illness—years, social status—and clinical diagnosis. There was significant less visits to the emergency in the group receiving HHC—while there is no significant difference in the gender, education level, co-morbid disorders and number of hospitalization in the previous year between both groups. Patients in HHC group were more satisfied from the service provided.

**Conclusion:** HHC proves to be more efficient in improving morbidity among psychiatric patients. Older and single people prefer to use this service.

**Key words**: psychiatric patients, home health care, hospital care, emergency room visits, hospital admission.

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# Introduction

Mental health disorders are a major public health problem worldwide, affecting people of all ages, cultures and socio-economic statuses [1]. No country or socioeconomic status is immune from the burden of mental disorders [2]. One out of every three primary care patients presents with clinical problems related to mental illness [3]. This situation is applied to Saudi Arabia in which one 3rd of primary health care patients have mental illness [4]. Although many effective interventions for the treatment of mental disorders are known, and awareness of the need for treatment of people with mental disorders has risen, the proportion of those who need mental health care but who do not receive it remains very high. This so-called "treatment gap" and is estimated to reach about 76-85% for low- and middle-income countries, and even 35-50% for high-income countries [5].

Home Health Care (HHC) is a formal, regulated program of care delivered by variety of health care professionals in the patient home [6]. HHC services are provided by physicians, nurses, physio-therapists, occupational therapists, home care aids, social worker, and dieticians; as well as drug and equipment supply [7]. Many reasons have helped home visits to be considered as one of the fastest growing medical sector. This could be because the in-patient model of care may not be optimally serving the needs of the growing number of elderly and disabled people [8]. In the Kingdom of Saudi Arabia Home Health Care services was started by the Green Crescent Hospital in 1980, as a part of their emergency program [9]. Due to the fact that treating mental disorders as early as possible, and close to the person's home and community can lead to the best health outcomes [10], the psychiatric home care has been introduced in Al-Madinah Munawwarah region in February 2007. It provides nursing, social service, psychotherapy, psycho education and medications according to the patient's needs.

Few studies have been undertaken to evaluate the effectiveness of home based care as an adjunct to routine clinical care within the community mental health service system. The medical home concept is a centerpiece of health care reform. The goals for a medical home are that it be accessible, comprehensive, coordinated, culturally responsive, person-centered, and compassionate. It would be an accountable entity where patients and families feel that their interests are primary and attended to by caring clinicians [11]. The objectives of this study was to examine the differences in the demographic and clinical characteristics of users of Psychiatric home care in patients suffering from psychiatric morbidities and to assess patient satisfaction form the service provided.

#### Patience and methods

The study started in January 2013 & ended in December of the same year. The study involved 171 Saudi patients (86 males & 85 females) with lifetime clinical diagnosis of psychiatric illnesses treated disorders according to (ICD 10) criteria. Ninety seven (97) of the patients were enrolled in a home-based care program. They were compared in their demographic and health data with another randomly selected 74 patients in a hospital-based treatment who were considered as control groups. In both groups, the diagnosis included Dementia, paranoia, bipolar disorders and depression. All patients were under treatment with anti-psychotic medications according to standard protocol that is applied for both groups. Data were obtained by the team of HHC using one to one interview with the patients and their sponsors. Data from hospital records were used for comparing the number of hospitalization and the number of emergency room visits in the previous year.

The team of HHC included a psychiatrist, a nurse and a social worker. Services provided at home included giving the long term antipsychotic medications, simple medical examination (clinical, blood pressure measurement, blood glucose measurement). The number of home visits by the team ranged from once weekly to once monthly according to the severity, medication frequency and the diagnosis of cases.

## **Ethical Consideration**

Ethical approval for the study was obtained from the research committee of Al-Madinah psychiatric hospital.

Explanation of the study & an oral consent was obtained from both the patients and their relatives

No names, addresses or any other data that points to the personality of patients were included

All information in the files was kept confidential and accessed only by the HHC team.

## Data Analysis

Statistical analysis was done using the SPSS program including frequency distribution and cross-tabulation. The comparative outcomes of clinical diagnosis, social and economic data were analyzed using the chi-square test for categorizing data t test was used to compare means of the numbers of re-admission and the length of hospital stay. A p-value of 0.05 or less was taken as statistically significant in the final data analysis. To insure correct data entry, all entered records were rechecked.

#### **Results**

The study included 97 patients (48 males & 49 females) enrolled in HHC program, and 74 patients (37 males & 37 females) attending the outpatient clinic of Psychiatric hospital (the control group). There was no gender difference between both groups (P=.947). Mean age of the first group was 47.38 ±18.11 (16-93 years); mean age for the second group was 37.00±1.52 (12-73 years); There was highly significant difference in age between both groups (P<.0001). Mean duration of illness (date of diagnosis) was 14.8 ±9.98 years in in the HC group in comparison to 9.45 ±9.93 years for the control group. There was highly significant difference in illness duration between both groups (P=.001). Reason for home care included: confirm taking medication (20.0%), no one to bring to the hospital (22.1%), frequent hospitalization (11.6), old age and difficulty in moving out (16.8%), financial causes (4.2%), noncompliance

with follow up at outpatient clinics (8.4%), family refusal to attend for stigmatization (2.1%) & multiple reasons (14.8%).

Table 1 presents the clinical psychiatric diagnosis and medical co morbidities among studied groups.

Table 1: Clinical psychiatric diagnosis among the studied groups

Diagnosis	Number of cases		
	Home care group	Control group (n=74)	
	(n=97)		
Dementia	13 (13.4%)	0	
Epilepsy	0	6 (8.2%)	
Obsessive compulsive disorders	0	6 (8.2%)	
(OCD)			
Mental retardation	3 (3%)	4 (5.4 %)	
Phobia	0	2 (2.7 %)	
Anxiety	0	1 (1.3 %)	
Mania	0	2 (2.7 %)	
paranoia	58 (59.8%)	20 (27.0%)	
bipolar	17 (17.5 %)	9 (12.2%)	
depression	6 (6.2%)	24 (32.5)	
	P= <b>0.000</b>		
Co morbid diseases among the stu	died groups		
No co-morbid diseases	78 (80.4%)	55 (74.3%)	
Diabetes	6 (6.2%)	7 (9.5%)	
hypertension	2 (2.1%)	4 (5.4%)	
Combined diabetes and	7 (7.2%)	3(4.1%)	
hypertension			
Hypothyroidism	2 (2.1%)	3(4.1%)	
Stroke	1(1%)	0	
Hepatitis B	1(1%)	0	
Osteoporosis*	0	2 (2.8%)	
	P=.484		
*Osteoporosis diagnosed by bon	e scan		

More than half of the HHC group (59.8%) suffered from paranoia while the majority of the control group (32.5%) suffered from depression. There is high significant difference between both groups in the psychiatric diagnosis. No significant difference was found in the medical conditions affecting both groups as the majority of them had no report of other identified medical conditions.

There was no significant difference in education level but highly significant difference in social status between both groups (table 2).

Table 2: Education and social status among the studied groups

Education		
	Home care	Control group (n=74)
	(n=97)	
Illiterate	24 (24.7%)	19 (25.7%)
Read & write	13 (13.4%)	8(10.8%)
Primary school	14(14.4%)	13(17.6%)
Preparatory	<b>19</b> (19.6%)	10(13.5%)
Secondary	19(19.6%)	17(23.0%)
University	7(7.2%)	<b>6</b> (8.1%%)
Post graduate	<b>1</b> (1%)	1(1.4%)
P = <b>0.94</b>		
Social status		
Married	21(21.6%)	31(41.9%)
Single	40(41.2%)	32(43.2%)
Divorced	21(21.6%	9(12.2%)
Widow	15(15.5%)	2(2.7%)
P = 0.000		

The majority of those using HHC group (41.2%) were single. The married group constitute 21.6% among HHC group in comparison to 41.9% among the control group.

The number of emergency room visits were significantly lower among the HHC group while there is no significant difference between both groups regarding the number of hospital admission in the previous year of the study (table 3).

Table 3: Duration of illness, no of visits to emergency psychiatric room & hospital admission among the studied groups

The studies parameter	Mean ±SD		P
	Home care group (n=97)	Control group (n=74)	value
no of emergency visits in the last year	.62±1.3	$1.69 \pm 2.453$	.000
no of hospital visits	.25± .652	.35±.943	.447

Among the HHC group 74 cases (76.3%) admitted improvement in their conditions in comparison to 51 cases (68.9%) of the control group, results were insignificant (P=.179). Among family members of the HHC group 75 close relatives (75.3%) living with patients observed improvement in their conditions in comparison to 38 (51.4%) of the control group, results are highly significant (P=.003).

All patients on HHC and their relatives reported satisfaction for the service offered in comparison to only (18.3%) among control group. 14.1% of those attending the outpatient clinic reported dissatisfaction, 48 (28.7%), reported partial satisfaction. There was no single refusal to the visits of the team of HHC.

## **Discussion**

Psychiatric disorders in Saudi Arabia, are estimated to have high prevalence [12]. Studies show that considering patients' views becomes particularly important in the psychiatry setting where the service users are often socially and economically marginalized. [13].

In recent decades, determining the level of patient satisfaction has been found to be the most useful tool for getting patients' views on how to provide care. This is based on two major principles: patients are the best source of information on quality and quantity of medical services provided and patients' views are determining factors in planning and evaluating satisfaction [14].

The assessment of patients' satisfaction with medical services has been a rapidly developing area of research for almost 20 years [15]. It is essential to understand the

issues important in psychiatry setting in order to avoid patients' dissatisfaction and non-compliance with recommendations.

In this study all patients of HHC group were satisfied from the service in comparison to only 18.3% of those attending the outpatient clinics. This satisfaction most probably reflects superior service as evidence by significant reduction emergency visits among patients in this group. Our results are in agreement with a recent study done at Al-Madinah Al-Monawarah found that HHC is more efficient in improving morbidity and reducing the rate of hospital readmission among Schizophrenic patients [16]. Another study suggested that community-based family interventions for persons with serious mental illnesses are effective and efficient [17]. The patient's home environment allows for privacy, social interaction, spiritual and emotional comfort, and safety. A safe neighborhood within close proximity to services is important for many patients. The comfortable home environment makes patients choose to receive care at home. It makes them feel a greater sense of wellbeing which helps in improving their participation in the management of their care [8]

We found that the group of HHC have longer duration of illness. Researchers found that community based care encompass greater potential for stabilization, and even improvement, of the condition of long term psychiatric patients [18]. The users of HHC in our study were significantly older than the outpatient treatment group. Home care has grown into a vital source of health care, especially for elderly, who represent the highest percent of recipients [19]. More widows, divorced and less married patients are users of HHC services.

All our patients accepted the HHC service, 76.3% of them admitted improvement in their conditions in comparison to 68.9% of the control group. A pilot study done at King Faisal Specialist Hospital and Research Center indicated that patients and their families benefited from the nursing care and psychosocial support in HHC. The study demonstrated that such a program reduced the need for hospital admissions, clinic, as well as the number of emergency visits [9].

Home Health Care helps the physician to fully understand the social factors related to his patient. This understanding will assist the physician in patient management as well as strengthen the patient-doctor relationship [9]. The above mentioned factors may be

related to the acceptance and satisfaction of our patients who received HHC. Our study found no significant difference in hospital admission between both groups, same results were obtained by a randomized controlled trial which found that Home care did not increase the number of admissions compared with hospital care [20].

#### Conclusion

Home based care may offer advantages over hospital based care for patients with serious mental illness and their relatives.

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