

Effects of inflow of inpatients attendants at a tertiary care hospital — A study at Civil hospital Karachi

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Abstract

Objective: To assess the trend of attendants accompanying inpatients and its effect on a tertiary care hospital in Karachi.

Methods: A cross sectional study was carried out at CHK, through interview-based questionnaires targeting three groups of interest viz. patients admitted in the wards and stable enough to answer questions appropriately, attendants residing at CHK premises and heads of hospital departments or administrative Resident Medical Officers.

Results: Out of 281 patients, 149 (53.03%) had only one attendant staying with them, 74 (26.34%) had two, 39 (13.88%) had more than two and 19 (6.76%) had none.

Out of 240 attendants, 204 (85%) planned to stay within the hospital till discharge of their patient while 24 (10%) till a week and 12 (5%) for two weeks.

Out of 21 administrative heads, 18 (85.71%) faced problems due to presence of extra attendants and 3 (14.29%) did not. However, all 21 (100%) agreed that there were risks associated with presence of too many attendants; which were financial burden 13 (61.9%), infections 14 (66.67%), physical violence 11 (52.38%), disturbance of hospital sanctity 13 (61.91%), and crimes 10 (47.62%).

Conclusion: Our study suggested that there was a significant trend for patients to be accompanied by multiple attendants at CHK. Although hospital did not have to provide food and shelter to them, but their presence in large numbers was in violation to hospital protocols. In view of the hospital administration multiple attendants caused hindrance in duties of staff and posed infections and security risks.

Keywords: Attendants, Visitors, Visitors' policy, Hospital, In-patients. (JPMA 62:1367; 2012). (JPMA 63: 143; 2013)

Introduction

The practice of visiting relatives, friends and acquaintances when they are in hospitals as patients is commonly accepted as a sociable and thoughtful act.¹ Every hospital whether it is of public sector or private hospital, makes certain rules and regulations for attendants of the patients for smooth running of the hospital. In Pakistan, where 1 bed is available for 2300 persons and 1 nurse for 6000 persons and 1 basic health unit/ Rural Health Centre for 21500 persons,² the rush by the attendants creates a lot of problems. A study conducted in Taiwan and China showed an observation similar to our culture, that their custom is to provide company to their loved ones during hospitalization often 24 hours per day.³ Studies carried out by Swedish planning and Rationalization Institute for Health and Social Services indicate that patient's wish to have their relations present during physicians round to discuss the influence of illness on their future and meet other patients having a similar illness.⁴

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According to a study, hospital authorities develop restricting visiting hours for Intensive care Units and wards to protect patients and families from exhaustion or stress.⁵ It has also been observed that visitors give medicines of their own choice and add food of different varieties against a strictly controlled medicine and diet to the patient which may cause harm to him.⁶

Stretching over 100,000 square feet, The Civil Hospital Karachi (CHK) - a 1758 bedded Tertiary care government hospital- is one of the largest hospitals in Pakistan.⁷ It comprises of 34 departments. Averages of 2 million patients visit its outpatient department every year, out of which 95% patients are non-affording. Over Rs. 750 million are spent on the upkeep of facilities and provision of free treatment and medicines.⁸

Average daily admission at CHK is about 100 to 120 patients, daily OPD visits comprise 2500 to 3000 patients and daily emergency visits make up 700 to 800 patients. This information was obtained from the monthly chart consisting of in-patients and OPD admissions at Civil Hospital, Karachi from the office of Medical Superintendent, Civil Hospital, Karachi.

Under the above situation, this study was developed to assess the trend of attendants and its effect on a tertiary care

hospital (CHK) in Karachi.

Method

The study design was a cross sectional hospital based survey in a tertiary care public sector hospital of Karachi; CHK. The study population included: Patients in ward, attendants staying within the hospital premises and the representatives of administration of wards /departments.

The total sample size was 542; 281/542 (51.85%) patients, 240/542 (44.28%) attendants and 21/542 (3.87%) representatives of administration. The sampling technique applied was a non probability convenience sampling. Study duration was January to September 2010. All investigators reached out study subjects at mentioned study setting. Subjects willing to participate were assessed for eligibility based on inclusion and exclusion criteria. Information was given to them about nature of study and verbal consent was taken. Free will of rejection to participate was respected. Self administered survey questionnaire was given to representatives of administration, while a structured interview was carried out from patients and attendants by the investigators. The questionnaires had the socio demographic data along with reasons for stay duration, bearing of expenditures, sleeping place, suffering with infections, security and other problems faced by patients and hospital management. The data thus collected was analyzed through SPSS version 15 calculating frequencies and percentages were for the data (responses).

The inclusion criteria included the patients in wards who were stable enough to answer the questions appropriately and willing to participate in the study, attendants outside the wards, but within the hospital premises and the representatives of departments (Heads of departments (HOD) or Resident Medical Officer (RMO). The exclusion criteria included the subjects from the sample population who were unwilling to participate in the study.

Permission was obtained from the ethical review board of the investigators university.

Results

A total of 542 respondents were involved in this study. Of these respondents, 240 were the attendants of the patients, 281 were the patients themselves and 21 were the RMO or the HOD of the respective departments in which the study was conducted.

As shown in Table-1, the majority of the patients, more than 50% had only one attendant staying with them in the ward itself. Very few of the patients were alone in the ward without an attendant (7%). Regarding the visiting hours only about 60% adhered to the timing schedule of

Table-1: Response of inpatients at Civil Hospital Karachi.

Number of attendants with patient	Number of patients N=281	Percentage %
Only one attendant	149	53.03
Two attendants	74	26.34
more than two attendants	39	13.88
No attendant	19	6.76
Following of visiting hours by patient's attendants		
Yes	167	59.43
No	79	28.11
Sometimes	35	12.46
Disturbance to patients by others' attendants		
Yes	26	9.25
No	252	89.68
Sometimes	3	1.07

Response of the inpatients (shown in number and percentage) at a tertiary care hospital of Karachi (CHK) regarding the number of attendant, visiting hours followed by the attendants and disturbance caused by the patients attendant to the neighboring patients.

the Civil Hospital Karachi. Remaining either did not follow the rules or occasionally adhered to the visitors timing for the CHK. Surprisingly around 90% were not disturbed by the visitors of their neighboring patients or the visitors of the other patients in the same ward.

Table-2 shows the results for the responses of attendants with the patients admitted in CHK. As shown in the table, few attendants were from Karachi itself, majority being from outside Karachi i.e cities or villages in other parts of the sindh province of Pakistan. Only 8% of the attendants were from Baluchistan. Regarding the relationship of the attendant with the patient, this is shown in Table-2, and considering the culture in our part of the world, it is not surprising that nearly 90% were blood relatives. Table-2 also shows the duration of stay of the attendants with the patient, at CHK. Most of them were with the patient till he or she was discharged from the hospital and they supported all expenditures, such as food etc for themselves. The Saylani Welfare Trust (a local Nongovernmental organization, NGO) was supportive to the patient attendants, as it provided food to less than 50% of the total attendants of the patient. However, there was no help from government or NGO regarding shelter for the attendants, mostly from outside Karachi. Therefore they slept under the open sky, either within CHK or road side outside CHK; this was very disturbing to most of them. The attendants were afflicted with a number of diseases and were taking abusive substances; these have been described in detail in Table-2.

Table-3 shows the responses of Administrative heads

Table-2: Information given by attendants (respondents) of patients at Civil Hospital Karachi.

Place of Residence	Number of respondents N=240	Percentage %
Karachi	92	38.33
Outside Karachi:	148	61.67
Interior Sindh	115/148	47.92
Baluchistan	20/148	8.33
Other parts of country	13/148	5.42
Relationship with patient		
Blood Relative	215	89.58
Distant relative or friend	25	10.42
Expected period of stay of the attendants		
Up to a week	24	10.0
Up to 2 weeks	12	5.0
Till the discharge of patient	204	85.0
Sources of finance during the stay of attendants		
By themselves	172	71.67
Shared between patient & attendant	53	22.08
Charity	15	6.25
Arrangement of meals by attendants		
Buy from hospital or nearby canteen	148	61.67
From a welfare organization (Saylani welfare trust)	92	38.33
Place of sleeping of attendants		
Within the hospital (in ward or welfare structures or roadside)	223	92.92
Not sleeping in hospital	17	7.08
Diseases found among attendants		
Skin diseases	17	7.08
Lung diseases	16	6.67
Hepatitis	11	4.58
Gastrointestinal	21	8.75
Other diseases	17	7.08
No diseases	158	65.83
Intake of abusive substances by attendants		
Cigarette	60	25.0
Paan/ Chalya/ gutka/ Niswar	59	24.58
Charas/ I/V drugs	3	1.25
None	118	49.17

Permanent place of residence, relationship with the patient, period of stay, meal intake, place of sleep, diseases and intake of abuses by the attendants of the patients at civil hospital Karachi. The data is described in frequency and percentages.

(HODs or their representatives) of CHK. This table shows that the HOD faced problems with the extra attendants, as according to them the attendants and the patients did not follow the visitors policy rules at CHK.

Participants were asked to indicate from options, all the problems they faced due to extra attendants, including "Demand of entry inside ward" "Interference in professional duties" and "Violence like quarrelling with staff" or no hindrance to the work of the HOD or their representative, the frequency of

Table-3: Response of administrative head in the respective wards of CHK regarding problems faced by them due to the presence of patients attendants.

Any Problems* faced by Admin Due to extra attendants	Number of respondents N=2a		Percentage %
	Responses	Percent of Cases	
Yes	18	85.71	
No	3	14.29	
Following visitors' policy at ward			
Yes	5	23.81	
No	16	76.19	
Satisfaction of Admin with security system			
Yes	11	52.38	
No	10	47.62	
**Hindrance created by attendants in professional duties			
N	%	%	
They keep demanding entry inside	11	34.38	52.38
They interfere in our work	16	50	76.19
They become violent	3	9.38	14.29
No hindrance in work	2	6.25	9.52
Total	32	100	152.38
**Risks associated with presence of attendants; indicated by Admin			
Financial burden	13	21.31	61.91
Infections	14	22.95	66.67
Physical violence	11	18.03	52.38
Disturbance of peace	13	21.31	61.91
Crime	10	16.39	47.62
Total	61	100	290.48
**Steps taken by Admin to minimize risk of infections			
Do not allow infected attendants	6	14.63	28.57
Do not allow stay of unnecessary people	16	39.02	76.19
Promote alcohol rubs	6	14.63	28.57
Germicidal sprays	8	19.51	38.10
No action	5	12.20	23.81
Total	41	100	195.24

* disturbing/affecting the work of health professionals

**questions with multiple responses.

these responses is shown in the table 3. This table also shows the response of the HOD to the present security system of CHK.

Administrative heads were asked to indicate from the options, all the possible risks they considered were associated with presence of too many attendants and the responses given were are shown in Table-3. When asked to indicate from options, all the steps taken at their wards to minimize risk of infection transmission through attendants; majority did not allow infected attendants or, stay of unnecessary people in the ward itself. Very few took constructive measures such as alcohol rubs or germicidal sprays.

Discussion

CHK provides quality health care services and advance medical facilities to patients free of cost or at the lowest possible cost, which attracts a large number of poor patients to this hospital. Families and relatives accompanying patients are able to easily stay within the hospital premises because of lack of enforcement of strict visitation policies. Many Charitable institutions are also active at CHK. Some of them provide food to patients at wards and others distribute food outside wards to the relatives of patients. This further encourages these poor people to lay their mattresses along corridors and lanes of the hospital and start living there until their patient is discharged. The disordered and untidy look of the hospital due to this lead us to undertake this study. Through this study we wanted to estimate the number of attendants/visitors with patients who are staying within the hospital, to explore the reasons for this, to find out if there is any burden on the management of CHK due to this and to emphasize any possible security and health risks associated with it. The study also intended to bring this issue into the notice of policy makers and suggest solutions to them.

We came to know from interviewing families staying at CHK that majority [204 (85%)] was here to facilitate their patient and planned to leave when he/she was discharged. In Pakistani society especially the rural areas families have a custom of accompanying their relatives who are ill and provide them care and comfort. Relatives outside immediate family also come to visit the patient and offer any kind of services or help needed.

It is realized that flexible (open more liberal) visitation policies can generate greater patient satisfaction.^{10,11} Hospitals all over the world welcome visitors but they have set visiting policies and rules and regulations to maintain the order and sanctity of the hospital. The history of visiting policies dates back to 1960, when neonatal intensive care units were established. There was grave concern about the spread of communicable diseases involving immature immune systems. There was also an effort to protect patients and families from exhaustion or stress caused by too many visitors, so hospitals instituted restrictive visiting hours in intensive care units and general wards.⁵ Visitors also create problems for the patients as well as the staff working in the hospital. A lot of nursing time is lost in dealing with visitors which hampers their daily routine. They are sometimes rude, invariably make the ward dirty and cause overcrowding. Presence of more visitors tires the patient by incessant talking, and proximity to the patient predisposes to infection. Chances of theft and lifting of belongings of patients are increased. The relationship of hospital infection with an increased number of visitors is beyond doubt. Visits, especially in the post-operative wards are a potential source of bringing

infection to the hospital. Occasionally, it has been seen that visitors give medicines of their own choice or add foods of different varieties to a strictly controlled diet.⁶

In CHK we found that visitor's policy was implemented at wards. One attendant was allowed to accompany one patient 24 hrs while other visitors were only allowed for 2 hrs i.e from 3p.m to 5p.m. However, what was inconsistent with international norms was the stay of visitors within hospital premises for periods as long as patients stay at the hospital (40.21% patients reported that their multiple attendants were staying at CHK). This was because these families had come from outside Karachi (61.67% attendants were from outside Karachi) and they had no placeto stay. Cheap rent houses or hotels near to the hospital were not available or the visitors were not informed about it. In addition to this there was no strict implementation of policies at CHK. The official websites of renowned hospitals in the US and UK like: University hospital, Cincinnati, USA; Cabell Huntington hospital, west Virginia, USA; upstate university hospital, Newyork, USA; St.Vincent's hospital, Dublin, Ireland inform visitors about hotels near to the respective hospital, cafes and gift shops and about bus routes and driving directions.¹² In addition to this they display visiting policy on website and guide patients and visitors about their rights and restrictions. The same is also available in the form of booklets and posters. Even some of the private hospitals of Pakistan for instance Aga Khan University Hospital Karachi, Liaquat National Hospital Karachi, South City Hospital Clifton Karachi, Doctors Hospital and Medical Centre Lahore etc display necessary information for visitors and patients on their websites. Although CHK maintains a website but neither on it, nor in printed form, is there any such information to educate patients and visitors.

Despite scarcity of cheap cafeterias in and around CHK, there was easy availability of food from charity organizations (38.33% attendants arranged meal from Saylani Welfare Trust) on which many people relied and were happy with that. There were no proper shades or waiting areas for visitors so they sat on the floor and even slept there at night. Many times there was no bench provided on bedside for attendant staying with the patient 24 hours because of which they sometimes shared patient's bed. There was a lack of public toilets within the hospital so people had to use toilets built outside the hospital. Therefore we were unable to find any way in which the attendants or visitors are a burden on the hospital administration.

We found that Heads of Departments, residents and house officers complained about hindrance at work due to presence of extra visitors (90.48% admin personnel reported hindrance at work). Nurses interviewed in a pilot study, prior to starting the actual study were also of more conservative

and strict view of visitation policy. Inexperienced nurses may be reluctant to have visitors present while they perform tasks to avoid public scrutiny.¹³ Family members are emotionally disturbed if their relative is in a critical condition. In such a state of mind they may demand extra attention from staff or become abusive. Violence from patients and visitors against Emergency Department nurses is highly prevalent, according to a research conducted in USA.¹⁴ Sometimes there are VIP visitors who flaunt their connections with the powers that be and create unpleasant situations by abusing security guards, finding faults with the doctors, expecting maximum attention and the best possible care for their patients at the expense of others, which reinforces the feeling of discrimination among other patients.¹ Since at CHK there are many visitors with each patient, violence against nurses is one possible security risk. Secondly, Pakistan is a victim of terrorism and witnesses frequent bomb blasts. CHK can easily become the target due to presence of unrestricted and unidentified people, who may carry any such explosive with them.

Policies concerning restricted or open visiting hours are being challenged in health care institutions internationally with no apparent consensus on the appropriateness of the visiting hour policies for paediatric and adult patients. The rules that govern practice are often based on institutional precedence and assumptions of staff and may have little or no evidence to support them.¹⁵ According to recent researches traditional rationale for restricted visiting are not supported by studies in literature nor consistent with current concepts of patients rights.¹⁶ It is reported that there is no increase in septic complications with open visiting policy.¹⁷ Hence open visitation policy is currently in use for neonatal intensive care units, paediatric ward, psychiatry wards, critical care units to provide greater patient satisfaction and ensure quick healing.

Limitation of this study is that it was not possible to calculate the sample size scientifically prior to starting the study as no local studies on this topic were available. However, further studies on a wider scale in government hospitals of the country can be done with appropriate calculation of sample size.

We recommend that the hospital should apply restrictive visiting policy at general wards and ensure issuance of visitors cards and passes so that unnecessary persons can be removed from the hospital premises.

Conclusion

Our study suggested that there was a significant trend for a

patient to be accompanied by multiple attendants at CHK. Mostly attendants preferred to remain within the hospital day and night until their patient was discharged. However, since this is in violation to hospital protocols and can be a source of infection and violence, hence adequate measures need to be taken to decrease the number of attendants coming to hospitals

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