

ORIGINAL ARTICLE

UNDERSTANDING HEALTH SEEKING BEHAVIOR OF HEALTH CARE PROFESSIONALS IN TERTIARY CARE HOSPITALS IN PAKISTAN

Shazia Bana, Javed Yakoob*, Nourin Jivany, Asima Faisal, Humeira Jawed, Safia Awan*

Department of Health and Hospital Management, *Institute of Business Management & Department of Medicine, Aga Khan University, Karachi-Pakistan

Background: Health seeking behaviour refers to the behaviour of people towards seeking their own health through provided health services. The medical professionals are at a higher risk of avoiding health seeking behaviour because they believe they are aware of the diseases and their symptoms as well as the pharmaceutical management of the disease. The aim of this study was to understand the healthcare seeking behaviour of nurses and doctors as well as the factors affecting it in hospitals of a major city in a developing country. **Methods:** A cross-sectional study was designed and a self-report questionnaire was distributed to healthcare workers at four tertiary care hospitals from July, 2012 to December, 2014. A total of 1015 participants responded. There were 234 (23%) doctors, 664 (65%) nurses, 60 (6%) pharmacist and 57 (6%) paramedical staff. **Results:** The doctors 194 (83%) had a greater access to medical facilities compared to nurses 278 (42%) ($p<0.001$). Doctors 176 (75%) compared to nurses 262 (39%) were utilizing healthcare service more often ($p<0.001$). Majority of the nurses 494 (74%) never visited a doctor for any complaint over a period of one year compared to doctors 132 (56%) ($p=0.002$). Doctors 234 (100%) and nurses 662 (99.7%) equally self-medicated themselves ($p=0.401$). Nurses 134 (20%) were less aware of the organization policies offered for employees ill-health compared to doctors 102 (44%) ($p<0.001$). Nurses 530 (80%) were also less aware of the significance of regular health check-ups compared to doctor 234 (100%) ($p<0.001$). **Conclusions:** Among the healthcare workers, doctors have greater access to healthcare facilities. Majority of nurses do not seek healthcare when they get sick. Self-medication is common in both groups.

Keywords: Healthcare professionals; health seeking behaviour; self-medication; over the counter medications

J Ayub Med Coll Abbottabad 2016;28(3):545-9

INTRODUCTION

Health of a state or the population depends upon a variety of factors. It requires qualified doctors, nurses, paramedical staff and the government support. Our country lacks vital resources required for the provision of better health. It has been reported that "Pakistan's 3.1% of the gross domestic product is spent on economic, social and community services.^{1,2} About 0.8% is spent on healthcare, which is lower than in Bangladesh (1.2%) and Sri Lanka (1.4%).² In 2005 and 2006, less than 17\$ were spent on each Pakistani's health, which is insufficient according to international standard.³ According to the economic survey of Pakistan 2005-06, government spent 0.75 percent of GDP on health sector.⁴

Our population is exposed to infective diseases such as cholera, tuberculosis, pneumonia, malaria, polio, etc., and systemic disorders such as asthma, diabetes mellitus, ischemic heart disease, etc. Over this double burden of diseases is the problem of understaffing, poor qualification and training of the healthcare workers. Health care

professionals are at a greater risk due to their profession, as they are exposed to infections, injuries, stress, violence, allergies, contact diseases and many others. Just because of the self-recognized diseases the health care professionals end up into self-medication. This has been reported to be prevalent in developing countries.⁵ There is no sector in health zone that is immune to drug misuse and abuse.⁴ The impact of this abuse and self-medication is increasing and will have severe legal, ethical and health consequences.

Health seeking behaviour refers to the behaviour of people towards seeking their own health through provided health services. The medical professionals are at a higher risk of avoiding health seeking behaviour because they believe they are aware of the diseases and their symptoms as well as the pharmaceutical management of the disease. "Self-medication is most prevalent in male members, aged between 30 and 39 year, belonging to medical profession at the level of post-graduation."⁶

A total of 22.7% of the respondents of the study, self-treated and medicated recognized diseases.⁵ The reasons offered were familiarity with treatment options, less time consumption, quick relief, less severity of the condition, cost, etc. This study aims to address the knowledge, attitude and practices of the nurses and doctors health seeking behaviour, and to identify the barriers that refrain them to seek health for them.

MATERIAL AND METHODS

This cross-sectional study was conducted at tertiary care hospitals of Karachi, Pakistan. The duration of this study extended from July, 2012 to December, 2014. The inclusion criteria to participate in the study were recently practicing doctors and nurses working particularly at tertiary care hospital in Karachi, whereas medical and nursing students were excluded from the study. Individuals’ participation in the study was voluntarily. The ethical approval was sought to conduct the research from the institutional ethics review board of each hospital. Explanation of the purpose and significance of the study was informed to the participants followed by taking a written consent from the participants. The participant’s confidentiality was maintained by coding of their responses. If the participants wished to withdraw their participation in the study, they were allowed to do so.

A self-report questionnaire was designed and the data was collected through this structured questionnaire. It comprised of three sections, the first was the general information of individual, the second part covered general information of the individual’s health; and the third part included the knowledge, attitude and practice of health care professionals regarding their health seeking

behaviour. A pilot study was conducted before the collection of final data.

The sample size was calculated to estimate the health seeking behaviour of the healthcare staff. The sampling technique used was convenient non-probability sampling. Frequency of existing practice of health seeking behaviour of healthcare workers was assumed as 50% and a bound on error of ±5%, precision level of 0.5 and confidence level of 95%. The required sample size for the study was 1034. Data was entered and analysed by using SPSS software version 17 (statistical Packages for Social Sciences). For quantitative variables mean±SD was calculated. Pearson chi square or fisher exact test or likelihood ratio was used to compare two variables. Participation of the study participants was voluntarily.

RESULT

A total 1015 participants responded. There were 234 (23%) doctors, 664 (65%) nurses, 60 (6%) pharmacist and 57 (6%) paramedical staff. Their duration of experience varied from less than two years to ten years and education from secondary school certification to post-graduation. There was a significant difference in the availability of the medical facilities to healthcare workers. Doctors 194 (83%) compared to nurses 278 (42%) had access to health care facilities ($p<0.001$), (Table-1). Doctors 176 (75%) compared to nurses 262 (39%) ($p<0.001$) were utilizing healthcare service (Table-1). Irrespective of the medical facilities offered by the organization, 42 (17%) doctors and 68 (10%) ($p=0.002$) nurses, visited a doctor (Table-1). Majority of the nurses 494 (74%) never visited a doctor for any complaint over one year compared to 132 (56%) doctors ($p=0.002$) (Table-1).

Table-1: Comparison medical facilities available to healthcare workers

	Profession		p value
	Doctors	Nurses	
Do you have medical facility available to you by your healthcare organization			
Yes	194 (83)	278 (42)	<0.001
No	40 (17)	386 (58)	
Do you utilize the above mentioned medical facility			
Yes	176 (75)	262 (39)	<0.001
No	18 (8)	14 (2)	
Do not get any medical facility			
	40 (17)	388 (58)	
Do you see a doctor for health problems irrespective of the medical facility you get from your health care organization			
Yes	42 (18)	68 (10)	0.002
No	192 (82)	596 (90)	
How often did you see doctor in last one year			
Did not see a doctor	132 (56)	494 (74)	<0.001
Once	102 (44)	144 (22)	
Twice	0	6 (1)	
Thrice	0	8 (1)	
More than thrice	0	12 (2)	

*p value <0.05 was significant; n (%)= number and percentage

Table-2: Self-medication practice of healthcare workers

	Profession		p value
	Doctors	Nurses	
Do you self-medicate yourself in case of your illness			
Yes	234 (100)	662 (99.7)	1
No	0	2 (0.3)	
If yes, how long you keep on self- medicating yourself before seeing a doctor			
1-2 week	186 (79)	97 (15)	<0.001
3-4 week	44 (19)	359 (54)	
More than 4 weeks	0	138 (21)	
Till the symptoms get severe	4 (2)	70 (10)	
Do you face any difficulty while going to see a doctor			
Yes	48 (20)	148 (22)	0.645
No	186 (80)	516 (78)	
In your opinion which is the MOST important factor that resist healthcare professionals from seeking health care			
The high cost of healthcare	44 (19)	182 (27)	<0.001
No facility provided to health care workers for their own health care needs	76 (32)	22 (3)	
Experience of treatment modalities for health problems as health care provider	78 (33)	172 (26)	
Accessibility to health care	4(2)	124(19)	
Self-medication	32 (14)	158 (24)	
Lack of trust on other health care professionals	0	6 (1)	
Are you aware of the common health problem, symptoms and its treatment			
To great extent	232 (99)	476 (72)	<0.001
To some extent	2 (1)	188 (28)	

Table-3: Factors associated with self-medication practice of healthcare workers

	Profession		p value
	Doctors	Nurses	
Aware of the policies that organization offers for employee's ill health			
To great extent	102 (43)	134 (20)	<0.001
To some extent	128 (55)	479 (72)	
Not all	4 (2)	51 (8)	
Are you aware of the significance of regular health check-ups			
To great extent	234 (100)	530 (80)	<0.001
To some extent	0	134 (20)	
Is self- medication helpful to treat self			
Agree	114 (49)	316 (48)	<0.001
Neutral	96 (41)	294 (44)	
Disagree	24 (10)	54 (8)	
Is health care work experience enough to self-medicate			
Agree	122 (52)	200 (30)	<0.001
Neutral	112 (48)	460 (69)	
Disagree	0	4 (1)	
Are healthcare professionals working in hospital prone to hospital acquired infections			
Agree	198 (85)	660 (99.4)	<0.001
Neutral	36 (15)	2 (0.3)	
Disagree	0	2 (0.3)	
Is clinical assessment necessary to diagnose health issues			
Agree	96 (41)	492 (74.1)	<0.001
Neutral	124 (53)	170 (25.6)	
Disagree	14 (6)	2 (0.3)	
Can healthcare professional thoroughly assess clinical symptoms by him/herself			
Agree	52 (22)	62 (9)	<0.001
Neutral	166 (71)	602 (91)	
Disagree	16 (7)	0	
Do you prefer seeing a doctor before taking over the counter drugs			
Always	4	8	<0.001
Frequently	6	18	
Usually	116	24	
Rarely	74	490	
Never	34	124	
Do you make adjustment in treatments according to my knowledge of medical science			
Always	38	18	<0.001
Frequently	142	141	
Usually	54	482	
Infrequent	0	23	

Self-medication was equally common in both groups. Two hundred and thirty-four (100%) doctors versus 662 (99.7%) nurses equally self-medicated themselves ($p=0.401$) (Table-2). However, when the duration of self-medication was compared, doctors 186 (80%) exceeded nurses 97 (15%) ($p<0.001$) (Table-2). When asked if they found difficulty in consulting a physician for their illness, 48 (20%) doctors and 148 (22%) nurses denied any difficulty to see a doctor ($p=0.645$) (Table-2). The high cost of healthcare was the main reason for 182 (27%) nurses to resist them for seeking healthcare compared to 44 (19%) doctors ($p<0.001$) (Table-2). Another reason that was important in this regard was knowledge of medication and treatment modalities for health problems as healthcare provider for both doctors 78 out of 234 (33%) and nurses 172 out of 664 (26%) ($p<0.001$) (Table-2). Familiarity with common health problem symptoms and their treatment to great extent was the main reason for doctors 232 (99%) compared to nurses 476 (72%) ($p<0.001$) that prevented them to seek healthcare (Table-2). Nurses 134 (20%) were less aware of the organization policies offered for employees ill-health compared to doctors 102 (44%) ($p<0.001$) (Table-3). They were also less aware of the significance of regular health check-ups 530 (80%) compared to doctor 234 (100%) ($p<0.001$) (Table-3). Self-medication was found helpful to treat self by 304 (46%) nurses and 80 (34%) of the doctors ($p<0.001$). Forty-six out of 234 (20%) doctors agreed that healthcare work experience was enough to self-medicate compared to 4 out of 664 (1%) nurses ($p<0.001$) (Table-3). More nurses 660 (99%) agreed that healthcare professionals working in hospital are prone to hospital acquired infections and injuries compared to 198 (85%) doctors ($p<0.001$) (Table-3). Two hundred and twenty (94%) doctors compared to 660 (99%) nurses agreed that clinical assessment was necessary to diagnose health issues (Table-3).

Only 52 out of 234 (22%) doctors compared to 62 out of 664 (9%) ($p<0.001$) nurses agreed that healthcare professional thoroughly assess clinical symptoms by themselves (Table-3). One hundred and sixteen (50%) doctors compared to 464 (70%) ($p<0.001$) nurses frequently took OTC drugs. One hundred and sixteen (50%) doctors compared to 24 (4%) ($p<0.001$) nurses usually preferred seeing a doctor before OTC while 74 (32%) of the doctors compared to 490 (74%) ($p<0.001$) nurses rarely consulted a doctor before taking the OTC (Table-3). Thirty-eight (16%) doctors compared to 18 (3%) ($p<0.001$) nurses always made adjustment in prescribed treatments according to their knowledge of medical science (Table-3).

DISCUSSION

Medical benefits are an important asset provided by health care organization to help their employees. These assist them financially to bear medical

expenses. Moreover, according to Occupational Safety and Health Act (1970), company provides employees with hygienic motivational working environment and a medical facility. In Karachi, Pakistan, only 50% of the healthcare workers are getting health or medical benefits. Only some healthcare organizations offer their employee healthcare benefits. This study showed that there was a marked difference between doctors and nurses getting medical benefits from their respective healthcare organizations which is a major hindrance to seeking health care. However, doctors appear to utilize this medical benefit more than nurses. Although when these were not provided, a very low percentage of healthcare providers seek healthcare in case of illness or injury. A very few number of doctors and nurses seek healthcare immediately when they fall sick, and the majority waits for the worsening of symptoms. Moreover, more than half of the doctors and nurses have not sought health care even once in the last one year. Practice of self-medication is high among doctors and nurses as they have knowledge and experience of disease symptomatology and treatment awareness. They also denied having any problem in seeking healthcare advice.

Self-medication is common all over the world. Medications are approved as being safe for self-medication by the national drug regulatory body after considering the socioeconomic status of the community. Most of these medicines are normally used for the prevention or treatment of minor symptoms, which usually do not justify medical consultation. In chronic or recurring illnesses, after initial diagnosis and prescription, self-medication is possible but the role of the doctor cannot be denied. A professional with an adequate level of health care education, knowledge, experience and expertise can self-medicate. Self-medication in case of illness can also be hazardous. Frequent assessment is required to assess the effectiveness of the medications. This study demonstrated that more than 80% of doctors self-medicate for 1 to 2 weeks of illness but 30% of the nurses wait for worsening of the health problem, the reason being difficulty in seeking healthcare. The prevalence rate of self-medication in Pakistan is not known. A previous study carried out showed prevalence rate of 76%.⁷ Similarly a limited study carried out in urban and rural house-holds of a few districts of Punjab, showed availability of modern drugs in many house-holds.⁷

Healthcare professionals at tertiary care hospitals are prone to health hazards as also described previously.⁸ Hospital employees were reported less healthy than the general workforce and cost more in health care spending. The study reported health-risk and

health care use among 740,000 hospital workers and their dependents in 2010 compared them with general workforce employees and their dependents. They found hospital employees are often diagnosed with chronic conditions like asthma, obesity and depression, and were 5% more likely hospitalized. They spent 9% more in health care costs than the general workforce. They were at a higher risk of getting affected by hospital environment. Doctors do not seek health care effectively and prolong self-medication. Moreover, doctors and nurses do not clinically assess themselves before taking over the counter (OTC). Health care professionals do not even consult doctors prior to take OTC and if they by chance consult doctors make adjustment in the medication and treatment routine as per their medical knowledge.

The implications of this study are that healthcare professionals need to take care of their health more than any other professional. This is in keeping with a previous study that showed that large numbers of healthcare workers were not wearing protective clothes and practice of safe practices were more prevalent among those working for more than five years and doctors.⁹ Regarding occupational hazardous and protocols of infectious disease control were better known to all the doctors and nurses.¹⁰

However, initiating regular health check-ups and reinforcing health seeking behaviour may increase the financial burden of the employing organization. This suggests that health care professionals' at public and private organization need to be educated about the significance of regular health screening, on time health seeking behaviour and risks associated with self-medication. The limitations of the study are that it was done in tertiary care hospitals setting. Cross-sectional study is just a snap shot and reflects only the present situation and does not cater to the past circumstances. Self-medication without assessment is common in healthcare providers, both doctors and nurses. It is preferred over seeking health care and consultation.

CONCLUSION

Among the healthcare workers, doctors have greater access to healthcare facilities. Majority of nurses do

not seek healthcare when they get sick. Self-medication is common in both groups.

Competing interest: None

Funding: None

CONTRIBUTION OF AUTHORS

SB was responsible for the conception and design. SB, JY, NJ, AZ, HJ and SA reviewed the published literature. SB and JY wrote the greater portion of the draft to which NJ, AZ, HJ and SA added on. All authors reviewed and approved the final version to be submitted for publication.

REFERENCES

1. Government of Pakistan. Ministry of Finance Budget. Pakistan: Finance Division; 2004. [Internet]. [cited 2015 Jun 21]. Available from: <http://www.finance.gov.pk/publications/Year Book 2005-06>
2. World Bank World Development Report. Knowledge for Development. 1999. Washington DC. [Internet]. [cited 2015 May 16]. Available from: <http://web.worldbank.org/>
3. Poullier JP, Hernandez P, Kawabata K, Savedoff WD. Patterns of global health expenditures. Health Systems Performance Assessment: Debates, Methods and Empiricism. 2003. Geneva, Switzerland: World Health Organization [Internet]. [cited 2015 Jun 26]. Available from: <http://www.nursingcenter.com>
4. Akram M, Khan FJ. Health care services and government spending in Pakistan. Pakistan Institute of Development Economics, Pride working Paper. 2007. [Internet]. [cited 2015 May 19]. Available from: <http://www.pide.org.pk/pdf/Working Paper-32/pdf>
5. Dabney DA. Onset of Illegal Use of Mind-Altering or Potentially Addictive Prescription Drugs among Pharmacist. J Am Pharm Assoc (Wash) 2001;4(3):392-400.
6. Ali AN, Kai JTK, Keat CC, Dhanaraj SA. Self-medication practices among health care professionals in a Private University, Malaysia. Int Curr Pharm J 2012;1(10):302-10.
7. Tomson G, Surky G. Self- Prescribing by way of pharmacies in three Asian developing countries. Lancet 1986;2(8507):620-2.
8. Sifferlin A. Least Healthy Employees? Hospital Workers. Time magazine, health and family: 2012. [Internet]. [cited 2015 May 20]. Available from: <http://healthland.time.com/2012/10/16/least-healthy-employees-hospital-workers>
9. Kumar A, Khuwaja AK, Khuwaja AM. Knowledge practice gaps about needle stick injuries among healthcare workers at tertiary care hospitals of Pakistan. J Ayub Med Coll Abbottabad 2012;24(3-4):50-2.
10. Kumar R, Samrongthong R, Shaikh BT. Knowledge, attitude and practices of health staff regarding infectious waste handling of tertiary care health facilities at metropolitan city of Pakistan. J Ayub Med Coll Abbottabad 2013;25(1-2):109-12.

Address for Correspondence:

Dr Javed Yakoob, Department of Medicine, Aga Khan University, Stadium Road, P.O. Box 3500, Karachi-Pakistan

Tel: +92 21 34864679

Email: javed.yakoob@aku.edu