# PATIENT SAFETY: A SURVEY OF KNOWLEDGE OF GENERAL PRACTITIONERS IN KARACHI

### Naila Azam, Uzma Hassan\*, Najm-us-Saqib Khan\*\*, Asghar Javed\*\*\*

Armed Forces Postgraduate Medical Institute Rawalpindi, \*Rawal Institute of Health Sciences, Islamabad, \*\*Naval Headquarter Islamabad, \*\*\*Fauji Foundation Hospital Karachi

### ABSTRACT

**Objective:** To study the knowledge of General Practitioners on Patient's Safety.

Study Design: Descriptive cross sectional study.

Place and Duration of Study: Malir district, Karachi, from Feb 2012 to April 2012.

*Material and Methods*: Response to a closed ended questionnaire by general practitioners (GPs) was recorded using non probability convenient sampling. The variables were derived from aspects of patient safety issues. The questionnaire used 11 potential risk factors to explore GPs' views on patient safety.

**Results**: A total of 68 GPs responded out of the total 150 GPs running their private clinics or filter clinics of private hospitals in the Malir district area. The risk factors most frequently judged as a threat to patient safety were a poor doctor-patient relationship, insufficient continuing education on the part of the GP and a patient age based guidelines and patient privacy in the reception/waiting room were not perceived as risk factors by most of the GPs.

**Conclusion**: GPs in the present study judged a broader range of factors than in previously published research on patient safety in primary care, including a poor doctor-patient relationship, to pose a potential threat to patient safety. Other risk factors such as infection prevention, deviation from guidelines and incident reporting were judged to be less relevant than considered conventionally.

Keywords: Patient safety Primary care, Risk factors.

## INTRODUCTION

Patients approach primary care physicians as the first resort for help when in distress. The primary care physicians need to take care of their dependent patients in all aspects of care with caution. Patient safety has received increased attention worldwide1. The focus of research is mostly upon hospital care<sup>2</sup>, although most patients attain their healthcare in primary care settings, particularly in countries with a strong primary care system<sup>3</sup>. Primary care has been found to be relatively safe although incidents do occur in this setting as well<sup>4</sup>. The occurrence of incidents in primary healthcare has been estimated to be somewhere between 5 and 80 times per 100,000 consultations<sup>5</sup>. Different definitions of patient safety and a patient safety

Correspondence: Dr Naila Azam, AFPGMI Rawalpindi Email: drnailaazam@yahoo.com Received: 08 Jun 2012; Accepted: 29 Apr 2014 incident have been published. A working group from the World Health Organization, has defined a patient safety incident as an event or circumstance which could have resulted, or did result, in unnecessary harm to a patient<sup>6</sup>. Such a definition is useful but it does not specify which components of healthcare delivery may be related to patient safety.

In primary care practice, consideration of patient safety is mostly associated with the reporting of incidents and specific aspects of the delivery of healthcare such as medication safety and the prevention of infection<sup>7</sup>. However, in a recent interview study with physicians and nurses in primary care, the scope of patient safety was found to be much broader than the aforementioned<sup>8</sup>. The views of health professionals should thus be sought to identify what risk and safety means in actual practice.

In the present study, GPs were surveyed to gain better insight into what they consider unsafe

practices and what they judge to be risk factors for patient safety in primary care.

## PATIENTS AND METHODS

This cross sectional, descriptive study was carried out at Malir district, Karachi from Feb to April 2012. All the GPs attending various primary health care clinics in the Malir district in Karachi were contacted to participate in the study. The response rate was 45.3%. They were requested to respond to a self administered pre tested questionnaire. These doctors have the basic medical qualification of MBBS with an average practice experience of 10-12 years. They attend to common public from the largely lower socio economic background and hail from various regions of the country. The doctors also belong to a diverse background having been educated in various medical colleges of the four provinces.

A thorough literature search was done to identify the unbiased and commonly agreed risk factors for patient safety were considered by various health care professionals in the family medicine practice in Pakistan. No fixed definition of patient safety was considered to avoid being restricted to the usual factors. Finally, the survey also included some questions to determine the demographic characteristics of the general practice.

The data was entered into SPSS 16 for analysis. Descriptive statistics were used to describe the data i.e mean and standard deviation (SD) for quantitative variables while frequency along with percentages for qualitative variables.

# RESULTS

The survey was completed by 68 of the 150 GPs we approached, which is a response rate of 45.3%. Of the 68 respondents, 57.35% were males; 42.65% were females. Detailed breakdown is shown in table-1. The mean age was 38.4 years. The percentages of the GPs who scored the potential risk factors to patient safety were calculated table-2. The highest ranked factors were not keeping up one's medical knowledge (58%), a poor doctor-patient relationship (72%)

and patient age over 65 years (36.8%). The existence of a language barrier (10%) and polypharmacy (45.8%) were also judged to place patient safety at risk although somewhat less than the aforementioned factors. Patients presenting with unexplained symptoms and repeat visits by patients for the same symptoms were not viewed as much of a risk factor by the GPs (15% and 9.5%, respectively). Deviation from the evidence-based guidelines provided by the ministry of health for GPs was judged to be unsafe by only 2.1% of the GPs, and 10% of the GPs correlated lack of privacy in the waiting room with patient safety.

# DISCUSSION

The present survey is to our knowledge one of the first few to examine physicians' views on patient safety during daily primary care. The clinical cases judged to be unsafe by a majority of the GPs concerned the use of the medical record system and the prescription and monitoring of medication. The potential risk factors judged to be most unsafe for primary practice were a poor relationship, doctor-patient insufficient maintenance of the GP's medical knowledge and a patient over 65 years. Language barriers and polypharmacy were also frequently judged to constitute risk factors for patient safety in primary care.

Remarkably, deviation from evidence-based guidelines and privacy in the waiting room were not perceived as threats to patient safety by the GPs in our study. This suggests that judgments of patient safety -just as definitions of medical error- greatly depend upon individual attitudes and may thus be arbitrary to a considerable extent.

Failure to keep one's medical knowledge upto-date scored high as a risk factor for patient safety. Medical knowledge is of obvious importance, and insufficient knowledge can result in inadequate decision-making for both diagnostic and treatment purposes<sup>9</sup>. Interestingly, a poor doctor-patient relationship scored equally high as a risk factor for patient safety. A poor doctor patient relationship can have negative

based guidelines as suboptimal treatment but not harmful to the patient. This suggests that under

Table- 1: Demographic profile of GPs in the study (n=68).
---

Age group		Total (n=68) Ma			ale (n=39)		Female (n=29)		
30-35 yrs		14	20.6%	6	15.4%		8	27.6%	
36-40 yrs		13	19.1%	7	17.9%		6	20.7%	
41-45 yrs		9	13.2%	3	7.7%		6	20.7%	
46-50 yrs		15	22.1%	8	20.5%		7	24.1%	
51-55 yrs		12	17.6%	10	25.6%		2	6.9%	
56-60 yrs		4	5.9%	4	10.3%		-		
61-65	yrs	1	1.5%	1	2.6%		-		
Table- 2: Frequency distribution of patient safety GPs perception among GPs									
S.no	Risk factors			Theme			Patient safety judged o be at risk (% GPs)		
1	Deviation from guidelines provided by Ministry of health for GPs				Evidence base medicine			2.9%	
2	Patient who has consulted more than twice during GP's office hours for the same complaint					Repeat visits		9%	
3	Lack of privacy at reception or in waiting room				Privacy	Privacy		10%	
4	Patie	Patient with a chronic disease			Chronic disea	se	12%		
5	Language barrier between GP and patient					Language barrier		13%	
6	Patient who frequently comes for medically unexplained complaints				Unexplained complaints		15%		
7	Patient who 'shops' between different GPs in the same practice				5 Different GP	Different GPs		22%	
8		nt age >65 y	Age	Age		37%			
9	Patient with more than 5 medications				Poly-pharma	Poly-pharmacy		46%	
10	Not keeping one's medical kno to-date			owledge up	Knowledge		59%		
11	Poor	doctor-patie	oatient relationship Com		Communicatio	on		72%	

outcomes for patient satisfaction, treatment compliance and even the health status of the patient<sup>10</sup>. The diagnostic process can also be complicated by a poor doctor patient relationship and communication problems, with inadequate diagnosis as a result. In contrast, deviation from evidence-based guideline and hygiene (i.e., the case of suturing without sterile gloves) were not viewed as a major threat to patient safety by the GPs in our study. We can only speculate that physicians consider deviation from evidence treatment or failure to provide the treatment recommended by a guideline may not be part of the physician's concept of patient safety. It is also possible that physicians clearly see their deviation from evidence-based guidelines to be based upon adequate clinical decision making and careful consideration

The response rate for this study was acceptable as this being a non-probability convenient sample. However, the demographic characteristics of the respondents in our study may not be representative for the population of GPs in Pakistan. While the survey used in this study was not empirically validated, it was nevertheless based upon the results of interviews and the insights of experienced GPs with regard to the choice of potential risk factors. The primary care cases indeed occur frequently in daily practice, which is supported by not only our own clinical experience but also the comments of the respondents in our survey study.

The results of this study highlight which aspects of general practice care are viewed as most important for patient safety from the perspective of the GPs themselves. Nevertheless, the scope of patient safety is broader than the perspective of only the GP4. The GPs in our study judged well-known medication factors (e.g., prescription and monitoring, adherence to alerts) as critical for patient safety but also less wellknown factors such as a good doctor-patient relationship. The Manchester Patient Safety Framework for Primary Care is available to chart the safety of the healthcare culture<sup>11</sup>. However, for adequate implementation of such a monitoring system into primary care, it is important that what the GPs themselves consider most important for patient safety in actual practice be taken into consideration as well. Obviously, strategies to improve patient safety are needed. Organizational culture may play an important role in patient safety improvements<sup>12</sup>. It would be inappropriate to narrow down patient safety programs to the monitoring of medication and prevention of infection in primary care, for instance, but the necessary breadth poses a major challenge for the development of patient safety programs and the actual measurement of patient safety because valid measurement and improvement trajectories require specificity. Further research should be conducted on the implementation of the present

findings into useful patient safety programs. Finally, it might be useful to investigate the correspondence between the definitions and perception of patient safety provided by patients and GPs.

# CONCLUSION

The GPs in this study judged a poor doctorpatient relationship, failure to maintain one's medical knowledge and polypharmacy as critical risk factors for patient safety. Guideline adherence, patient privacy, language barrier and repeat visits scored low. The present findings have implications for the further study of patient safety and the improvement of primary care.

## REFERENCES

- Donaldson SL. An international language for patient safety: global progress in patient safety requires classification of key concepts. Int J Qual Health Care. 2009; 21:1.
- 2. Stelfox HT, Palmisani S, Scurlock C, Orav EJ, Bates DW. The "To Err is Human" report and the patient safety literature. Qual Saf Health Care 2006; 15:174-8.
- Starfield B, Shi L, Macinko J. Contribution of primary care to health systems and health. Milbank Q 2005; 8:457-502.
- Wetzels R, Wolters R, van Weel C, Wensing M. Mix of methods is needed to identify adverse events in general practice: a prospective observational study. BMC Fam Pract 2008; 9:35.
- Sandars J, Esmail A. The frequency and nature of medical error in primary care: understanding the diversity across studies. Fam Pract 2003; 20:231-6.
- World alliance for patient safety drafting group: towards an international classification for patient safety: the conceptual framework. Int J Qual Health Care. 2009; 21:2-8.
- De Leeuw JBR, Veenhof C, Wagner C, Wiegens TA, IJzermans JC, Schellevis FG et al. Patiëntveiligheid in de eerstelijnszorg: stand van zaken. [Patient safety in primary care: The current state of affairs] Utrecht, NIVEL; 2008.
- Gaal S, van Laarhoven E, Wolters R, Wetzels R, Verstappen W, Wensing M et al. Patient safety in primary care has many aspects: an interview study in primary care physicians and nurses. J Eval Clin Pract. 2010 Jun; 16(3): 639-43.
- 9. Makeham MA, Mira M, Kidd MR. Lessons from the TAPS study knowledge and skills errors. Aust Fam Physician 2008; 37:145-6.
- Ong LM, de Haes JC, Hoos AM, Lammes FB. Doctor-patient communication: a review of the literature. Soc Sci Med 1995; 40:903-18.
- 11. National Primary Care Research and Development Centre. Manchester Patient Safety Framework (MaPSaF) for Primary Care. Manchester: The University of Manchester; 2006 [Cited 2009 Nov 9]. Available from: http:// www.nrls.npsa.nhs.uk.
- Scott T, Mannion R, Marshall M, Davies H. Does organisational culture influence health care performance? A review of the evidence. J Health Serv Res Policy. 2003; 8:105-17.

.....