

Working and Attitudes of Self-employed General Practitioners in Pakistan: A rural-urban Comparison

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ABSTRACT

Aims: To observe any differences and similarities in the working of self-employed GPs in rural and urban areas of Pakistan, to evaluate the workload of self-employed GPs: a rural-urban comparison and to assess the attitude of self-employed GPs towards community based public health research.

Methods: This study was conducted partly in the District of Lodhran and partly in the City of Bahawalpur in Punjab over a period of five months (1st June 2012 to 31st October 2012). Self-employed GPs working in Lodhran Town (n = 23) and in Bahawalpur city (n = 40) were included in the study. Data collection has been done in two phases and was done by completing the questionnaires during personal interviews with every GP and supplemented by telephonic conversations. Both phases were completed by using same methods and same questionnaire.

Results: The mean age of practitioners in rural areas was 42.09±6.49 while it was 44.21±9.63 years (p=0.35). All of the respondents in both groups were male. 87% of the rural and 59% of the urban doctors had no post-graduation qualification. 71.4% (n=15) of the rural and 46.2% (n=18) of urban doctors performed surgery at their clinics. Participation in continuing medical education (CME) courses was 19.0% (n=4) in rural while 30.8% (n=12) of the urban practitioners. 23.8% (n=5) of the rural and 36.8% (n=14) of the urban doctors read medical journals.

Conclusion: Overall this study identified few differences between urban and rural primary care physician working conditions. Many of the GPs had a negative attitude toward research, and had little awareness for medical research.

Key words: Attitude, practice, family doctors, health personnel, primary health care

INTRODUCTION

In Pakistan general practitioners (GPs) are self-employed medical doctors. They are usually fresh medical graduates with a limited clinical training. The clinical training or House Job (as it is called in Pakistan) usually ranges between 12 and 24 months. These GPs work independently and establish their own clinics in their hometowns. They usually charge for their services direct from their patients and this amount is invariably very less. General practice is critical to the overall provision of effective health care and research in general practice is vital for the improvement of patient healthcare outcomes.¹ Compared to other clinical disciplines, however, general practice has produced significantly less published research in terms of both researchers and subjects.² There is, as yet, no strong culture of research in general practice and much of the existing research is conceived and undertaken by people outside primary care.³⁻⁵ Practice-based research presents an ideal setting for primary care research, as primary care is not just the best recruiting center

for patients, it is a dynamic environment where GPs work to understand and solve problems

The utilization of research, which is the backbone of evidence-based medicine, is in a terrible state in developing countries.⁶ The state of the production of research is also not encouraging. In all disciplines of science and technology, Pakistan has 168 researchers per million citizens, India has 208; the comparable figure for the United States is 4673 researchers per million and 3794 in United Kingdom.⁷ Non-participation of GPs could make practice-based studies potentially biased and undermine the validity of the research results. Consequently, a well-developed primary medical care system is needed. This includes initiatives to develop new research and encourages general practitioners to take part in medical research studies.

PATIENTS AND METHODS

This was a cross-sectional epidemiological study. Study was conducted partly in the District of Lodhran and partly in the City of Bahawalpur in Punjab. The study was conducted over a period of five months (1st June 2012 to 31st October 2012). Self-employed GPs working in Lodhran town (n=23) and in Bahawalpur city (n= 40) were included in the study. Lodhran is a

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rural district and Bahawalpur is a medium sized city of Pakistan. The total population of the Lodhran district is (approx) 1.16 million. Percentage break-up of the rural and urban population is 85.6 and 14.4 respectively. The total area of district Lodhran is 1790 square kilometers. Total number of doctors in the district is (approx) 120.⁸ Bahawalpur is 12th largest city of Pakistan. The population of Bahawalpur is (approx) 700,000. There is a government medical school, one university teaching hospital and one university in Bahawalpur City. A total of 40 self-employed GPs working in Bahawalpur were included in this study. 3 GPs were selected randomly for interviewing from each union council of Bahawalpur City. Convenience non-probability sampling technique was used. Data collection has been done in two phases and was done by completing the questionnaires during personal interviews with every GP and supplemented by telephonic conversations. Both phases were completed by using same methods and same questionnaire. A questionnaire was prepared in English language and comprised of three parts. First part is related to personal lives of GPs and second part is related to their professional lives and the third part of the questionnaire included questions about their participation in various academic and research activities. Before the interview, they were thoroughly briefed about the background and significance of this study. Statistical Package for Social Sciences Windows version 17 was used for database assembly and analysis. Only those questionnaires were included which were completed. Descriptive analysis (means, standard deviations and percentages) was performed. To determine significant associations between variables, cross-tabbing of the variables was performed and Pearson Chi squared test was applied. Values were considered significant when they were below 0.05 ($p < 0.05$).

RESULTS

We recruited a total of 23 medical practitioners in the rural areas and 40 practitioners in the urban areas. The mean age of practitioners in rural areas was 42.09 ± 6.49 while it was 44.21 ± 9.63 years ($p=0.35$). All of the respondents in both groups were male. Demographics data is shown in Table 1. About the working at the Government hospitals, 14(60.9%) of urban doctors have worked at least once at government hospitals while 8(34.8%) respondents working at rural areas have never worked at these hospitals ($p=0.79$). Among Urban doctors, only 2.6% ($n=1$) have never worked at public hospitals. Out of these, 10(43.5%) at rural and 24(61.5%) at urban places are still working in the Government hospitals

($p=0.31$). At rural areas, 12(52.2%) while 30(76.9%) at urban areas work at their practice at least for more than 8 hours a day ($p=0.11$). 6(26.1%) at rural while 16(41%) at urban practices never take weekly holiday ($p=0.40$). An average of 60 patients visits at the rural practitioners, while 35 patients visit at the urban practices. However 18(46%) of urban and 13(56%) rural practitioners maintain a record of their patients ($p=0.53$). About visiting patients at their homes, 11(47.8%) of the rural group while 14(35.9%) of the urban group of practitioners usually visit patients at their homes if called for ($p=0.46$). At their clinics, significant numbers of practitioners perform minor or major surgeries as shown in Table 2. Also shown is the awareness with regards to medical research, evidence based medicine and participation in various professional activities.

Table 1: Demographic data of GPs

Demographic data	Urban		Rural	
	No.	%	No.	%
Age (years)				
24 – 45	23	57.5	13	60.7
> 45	17	42.5	10	29.3
Gender				
Male	40	100.0	23	100.0
Domicile				
Local district	34	85.0	13	60.7
Non-local	6	15.0	10	29.3
Postgraduation				
Minor diploma	12	30.0	3	13.0
Major diploma	5	12.5	-	-
No Postgraduation	23	57.5	20	87.0
Experience in practice				
< 5 years	15		3	13.0
5 - 10 years	10		8	34.7
> 10 years	15		12	52.3

DISCUSSION

The aim of this study was to investigate the attitudes and practices of general practitioners towards health sciences research with comparison among the rural or urban areas. This analysis was based upon questionnaire data from 63 physicians. Overall this study identified few differences between urban and rural primary care physician working conditions. However in an Irish study by Gabhainn⁹ shows that rural practitioners and their practices differ from their urban counterparts in many important aspects with regards to number of patients attended, work hours and monetary benefits. The study by Hider P¹⁰ in New Zealand shows that aside from a few key differences, the characteristics of patients, practitioners, and practice were generally similar between rural and non-rural locations during normal hours. This might be due to different characteristic of

rurality in South Asia compared with rurality in countries such as Australia and Canada and Ireland¹¹.

Table 2: Comparison of working of the practitioners

Working condition	Rural	Urban	P value
Perform major surgery at clinic (laparotomy, herniorrhaphy)	4(19%)	1(2.6%)	0.10
Perform minor surgery at clinic (incision & drainage, wound closure)	5(71.4%)	18(46.2%)	0.19
Membership of any professional union	21(91.3%)	31(79.5%)	0.29
Membership of any political or religious party	7(33.3%)	1(2.6%)	0.004
Participation in continuing medical education (CME) courses	4(19%)	12(30.8%)	0.42
Aware of Evidence Based Medicine (EBM)	0	5(12.8%)	0.19
Read medical journals	5(23.8%)	14(36.8%)	0.41
Keep patient records for medical research	3(14.3%)	7(17.9%)	0.91

In western countries, there is an ongoing discussion about impact and consequences of the feminisation within medicine^{12,13}. The proportion of women working in rural or urban areas is quite similar ranging between 34% to 38%¹⁴. In contrast, the situation is quite different in Pakistan as the general practice is still dominated by male practitioners. In our study, no female general practitioner could be recruited. This difference may be due to different cultural and social expectations and responsibilities faced by females in our setting in contrast to males: like household and marital responsibilities. Our results show that 54.5% of rural and 84.6% of urban doctors had a domicile of the local district. The relevance of residents having rural area experience when choosing a career in a rural area is widely known. As a consequence, strategies to correct misdistribution by admitting students from rural backgrounds preferentially into university and offering clinical training in rural settings have been implemented. Early direct contact with rural areas during medicine school could reduce negative perceptions towards working in a rural area. The study by Richards¹⁵ in Scotland shows that those

working in rural areas were more likely to have been born in rural areas. Approximately one-third (34%) had lived in their current location for more than 10 years, and that proportion was higher for the urban group compared with rural dwellers. Similarly, the urban dwellers were more likely to have been in their current job for more than 10 years. In comparison, in our study, 50% of the rural and 38.5% of the urban doctors were practicing for more than 10 years in their respective areas. Manahan¹⁶ conclude that the Age and stage of life, rural background, and location of family members also have bearing on personal values, which in turn impact recruitment and retention in the rural areas.

Primary care physicians in single-handed practices in rural areas worked on average four hours more per week than their urban counterparts¹⁷. From our analysis we would conclude that those practicing in urban areas worked for more hours than those in the rural areas. At rural areas, 123(52.2%) while 30(76.9%) at urban areas work at their practice at least for more than 8 hours a day. The findings of the study by Cowling¹² indicate that even in a system with universal coverage, barriers to primary care access persist and are sufficient to influence healthcare delivery system. Many western countries are facing an existing or imminent shortage of primary care physicians especially in rural areas^{10,13}. When our results were compared with studies in the other countries with similar objectives of attitude towards research and continuing medical education, there were found various disparities. The study by Pawar¹¹ in India reports that 28% of doctors in a tertiary care hospital had made scientific presentations, and only 4% had publications. The study by Aslam⁴ reveals that even post graduate doctors were deficient practically in terms of reading and writing medical literature. One reason being the insufficient teaching of scientific research methodology during undergraduate and postgraduate medical training. The study by Khan³ reflects grave inadequacies of health research training at medical schools across the country. Rehman *et al*⁵ suggest that the strategies to encourage physician participation in clinical research include financial and nonfinancial incentives, adequate training, research questions that are in line with physician interests and have clear potential to improve patient care, and regular feedback. Finally, encouraging research culture and fostering the development of inquiry and research-based learning among medical students is now a high priority in order to develop more and better clinician-researchers.

The study by Sabzwari¹⁸ reveals that majority of the junior faculty of Pakistani medical universities who participated in this study were currently not

involved in research and a very small proportion of them received any training during their undergraduate studies. Overall, majority of physicians sampled, were not involved in research. There is an immediate need to improve research training in our educational institutes to facilitate the development of the local literature both in terms of research utilization and production. By highlighting this issue of poor research culture, we hope to contribute to increased awareness among those who read journals and who can bring about positive change.

CONCLUSION

Overall this study identified few differences between urban and rural primary care physician working conditions. Many of the GPs had a negative attitude toward research, and had little awareness for medical research.

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