
ORIGINAL ARTICLE

Attitude of Self-Employed General Practitioners Towards Medical Research

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ABSTRACT

Background: In Pakistan general practitioners (GPs) are self-employed medical doctors, who work independently and establish their own clinics usually in their hometowns. Compared to other clinical disciplines, however, general practice has produced significantly less published research in terms of both researchers and subjects. Our objective was to assess the attitude of self-employed GPs towards medical research.

Materials and methods:

Cross-sectional survey was conducted in the districts of Lodhran and Bahawalpur in Punjab from May to Oct, 2012. Convenience sampling technique was used to select these GPs. Data was recorded on the questionnaires, collected through personal interviews with every GP.

Results: The mean age among the doctors was 43.44±8.63 years. All doctors were males. 87% of the rural and 59% of the urban doctors had no postgraduate medical qualification. Mean duration of general practice was 10.05±6.96 years. Only 30.2% (n=19) read any medical journal regularly whereas 49.2% (n=31) read occasionally, 14.2% (n=9) have no interest in reading of the medical journals. 31.7% (n=20) of the respondents mentioned overwork in clinical practice as the main reason for non-participation in research activities. Whereas 12.7% (n=8) mentioned financial constraints while 19.1% (n=12) of the respondents find no personal benefits in medical research. Lack of infrastructure was mentioned by only 9.5% of the respondents.

Conclusion: Overall this study identified that many of the GPs had a poor attitude for medical research in particular; rather than just lack of the facilities. Overwork in clinical practice, financial constraints and lack of personal benefits were the main reason for non-participation in research activities.

Keywords: General practitioners, Primary Health Care, Attitude, Urban, Rural, GP attitudes, Questionnaire survey.

INTRODUCTION

In Pakistan general practitioners (GPs) are self-employed medical doctors. They are usually fresh medical graduates with a limited clinical training. These GPs work independently and establish their own clinics usually in their hometowns. The health system in South Asian countries is run mainly by the private sector.¹ Vast numbers of patients go through the private health sector.

Compared to other clinical disciplines, however, general practice has produced significantly less published research in terms of both researchers and subjects.^{2,3} 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.^{4,5} Practice-based research presents an ideal setting

for primary care research, as primary care is not just the best recruiting center for patients, it also provide a dynamic environment where GPs and other healthcare professionals are at constant pace of work required to understand and solve problems.⁶

Community-based research engages community members, uses local knowledge in the understanding of health problems, involves community members in the processes and products of research⁷ so their results are valid and potentially less biased as compared to practice-based studies.

We planned to identify the factors showing attitude for non-participation of GPs in medical researches.

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Objectives:

The objective of the study was to assess the attitude of self-employed GPs towards medical research and to find out reasons for non-participation in research activities.

MATERIALS AND METHODS

This was a cross-sectional survey.

(a) Study setting:

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 (01-06-2012 to 31-10-2012).

(b) Study subjects:

Self-employed GPs working in Lodhran town (n=23) and in Bahawalpur city (n= 40) were included in the study. Lodhran is a 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. Total number of doctors in the district is (approx) 120.⁷ Bahawalpur is 12th largest city of Pakistan. The population of Bahawalpur is (approx) 700,000. There is a government medical college, one govt 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.

(c) Data collection

Data was collected by completing the questionnaires during personal interviews with every GP. A questionnaire was prepared in English language and comprised of three parts. First part was related to socio-demographic information of GPs and second part related to their professional education or training and the third part of the questionnaire included questions about their participation, awareness and attitude towards research activities. Before the interview, they were thoroughly briefed about the background and significance of this study.

Written consent was obtained from participating doctors. The study participants were assured of the confidentiality of their data. The participants were requested when they were given

the questionnaires, to complete and return them to the researchers. When this was not possible, cell phone numbers of participants were noted and the forms were collected from them later. A database of the participants was constructed.

(d) Data analysis:

SPSS 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.

RESULTS

We recruited a total of 63 general practitioners of whom 23 medical practitioners belonged to the rural area and 40 practitioners were from the urban area. The mean age among the study subjects was 43.44±8.63 years. All of the respondents in both groups were male. Mean Duration of General Practice was 10.05±6.96 years. Demographics data is shown in Table 1.

As shown in Table no 2, most of the respondents (95.3%, n=60) consider medical research as useful and majority (57.2%, n=36) is willing to take part in any medical research activity in the future. However, 79.3% (n=50) of them do not keep record of the patients; therefore the patient record is not available for research purposes. With regards to the reading habits of the GP's, only 30.2% (n=19) read any medical journal regularly whereas 49.2 % (n=31) read occasionally, 14.2% (n=9) have no interest in reading of the medical journals. Regarding the accessibility of the GP's to medical journals, 49.3% (n=31) of the respondents read literature provided by pharmaceutical companies only, 9.5% (n=6) read local medical journals, 3.1% (n=2) have access to foreign journals while 12.7% (n=8) read both local and foreign journals.

The reasons mentioned by general practitioners for non-participation in medical research are shown in Table 3. Out of these, 31.7% (n=20) of the respondents mentioned overwork in clinical practice as the main reason for non-participation in research activities. Whereas 12.7 % (n=8) mentioned financial constraints as the main reason while 19.1(n=12) of the respondents find no personal benefits in medical research. Lack of infrastructure was mentioned by only 9.5% of the respondents.

Table 2: Attitude towards Research Activity

		n	%
Read any medical journals	Regularly	19	30.2
	Occasionally	31	49.2
	No	9	14.2
	No Response	4	6.4
Journal accessibility	Pakistani journals	6	9.5
	Foreign journals	2	3.1
	Both local and foreign	8	12.7
	Literature by pharma companies	31	49.3
	No response	16	25.4
Patient record available for research purpose	Yes	10	15.8
	No	50	79.3
	No Response	3	4.7
Willing to participate in any research activity	Yes	36	57.2
	No	14	22.3
	No Response	3	4.7
Medical Research is useful	Yes	60	95.3
	No	3	4.7

Table 3: Reason for Non-participation in Research Activities

Reasons	n	%
Overwork in clinical practice	20	31.7
Financial constraints	8	12.7
Lack of personal benefits	12	19.1
Lack of infrastructure	6	9.5
Lack of time	7	11.2
Lack of training in research methodology	5	7.9
No motivation	5	7.9
Total	63	100

DISCUSSION

The aim of this study was to investigate the attitudes and practices of general practitioners towards medical research. This analysis was based upon questionnaire data from 63 general practitioners.

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 similarities. The study by Pawar⁹ in India reports that 28% of doctors had made scientific presentations, and only 4% had publications. The study by Khaliq¹⁰ reveals that majority of 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 Robinson¹¹ reflects grave inadequacies of health research training among general practitioners. Gabhainn *et al*¹² 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

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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 Sabzwari¹³ reveals that majority of practitioners who participated in the 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. Unfortunately, in Pakistan, doctors have attached more emphasis towards clinical practice with little input in the field of research. The causes implicated for this trend are lack of time and infrastructure, financial constraints, lack of future benefits and paucity of mentors who are well-versed in research.¹⁴

Several studies^{15,16,17} have looked at attitudes and interest in research among doctors working in various specialties and subspecialties. In the primary care field, most studies found time, financial constraints, busy clinical practices and lack of interest as major deterrents to clinicians' involvement in research. Other similar studies identified financial incentives and infrastructure support as key factors in promoting research. Age and gender differences in research interest were also seen with younger physicians showing more inclination towards research and a comparatively smaller involvement of female physicians. Inadequate mentorship and lack of time have been other major barriers 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.

CONCLUSIONS

Overall this study identified that many of the GPs had a poor attitude for medical research in particular; rather than just lack of the facilities. Overwork in clinical practice, financial constraints and lack of personal benefits were the main reason for non-participation in research activities.

REFERENCES

1. Sadana R, D'Souza C, Hyder AA, Chowdhury AM. Importance of health research in South Asia. *BMJ*. 2004 ;328(7443):826-30.
2. Sabri AA, Qayyum MA. The problem of evidence-based medicine in developing countries. *CMAJ*. 2006;175(1):62.

3. Jowett SM, Macleod J, Wilson S, Hobbs FD. Research in primary care: extent of involvement and perceived determinants among practitioners from one English region. *Br J Gen Pract*. 2000;50(454):387-9.
4. Khan H, Khan S, Iqbal A. Knowledge, attitudes and practices around health research: the perspective of physicians-in-training in Pakistan. *BMC Med Educ*. 2009;9:46.
5. Aslam F, Qayyum MA, Mahmud H, Qasim R, Haque IU. Attitudes and practices of postgraduate medical trainees toward research a snapshot from Faisalabad. *J Pak Med Assoc*. 2004;54:534-6.
6. Rahman S, Majumder MA, Shaban SF, Rahman N, Ahmed M, Abdulrahman KB, et al. Physician participation in clinical research and trials: issues and approaches. *Adv Med Educ Pract*. 2011;2:85-93.
7. Karmaliani R, McFarlane J, Asad N, Madhani F, Hirani S, Shehzad S, Zaidi A. Applying community-based participatory research methods to improve maternal and child health in Karachi, Pakistan. *Nurs Outlook*. 2009;57(4):204-9.
8. Punjab Development Statistics 2012. Bureau of Statistics, Government of the Punjab, Lahore. Pages 189-210. Available: <http://bos.gop.pk/?q=system/files/Development-Statistics-2012.pdf>
9. Pawar DB, Gawde SR, Marathe PA. Awareness about medical research among resident doctors in a tertiary care hospital: A cross-sectional survey. *Perspect Clin Res*. 2012;3(2):57-61.
10. Khaliq MF, Noorani MM, Siddiqui UA, Anwar M. Physicians reading and writing practices: a cross-sectional study from Civil Hospital, Karachi, Pakistan. *BMC Med Inform Decis Mak*. 2012;12:76.
11. Robinson G, Gould M. What are the attitudes of general practitioners towards research? *Br J Gen Pract*. 2000;50(454):390-2.
12. Gabhainn SN, Murphy AW, Kelleher C. A national general practice census: characteristics of rural general practices. *Fam Pract*. 2001;18:622-6.
13. Sabzwari S, Kauser S, Khuwaja AK. Experiences, attitudes and barriers towards research amongst junior faculty of Pakistani medical universities. *BMC Med Educ*. 2009;9:68.

14. Hennink M, Stephenson R. Using research to inform health policy: barriers and strategies in developing countries. *J Health Commun.* 2005;10(2):163-80.
15. Lloyd T, Phillips BR, Aber RC. Factors that influence doctors' participation in clinical research. *Med Educ.* 2004;38(8):848-51.
16. Rosemann T, Szecsenyi J. General practitioners' attitudes towards research in primary care: qualitative results of a cross sectional study. *BMC Fam Pract.* 2004;5(1):31.
17. Shewan LG, Glatz JA, Bennett CC, Coats AJ. Contemporary (post-Wills) survey of the views of Australian medical researchers: importance of funding, infrastructure & motivators for a research career. *Med J Aust.* 2005;183:606-1