DOCTORS PERCEPTION ABOUT STAYING IN OR LEAVING RURAL HEALTH FACILITIES IN DISTRICT ABBOTTABAD

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Background: An imbalance exists between offered medical services and needed health care for the people in rural areas of Pakistan. Many studies have found non-availability, of health care providers as major contributors to the poor health indicators of the rural areas. **Methods and Results:** An endeavor to attend the issue has been made through a cross-sectional survey of the Medical Officers working in the different health facilities of District Abbottabad. The study found that the doctors are neither trained to work in rural setups nor they are given proper facilities and service structure to work there. They perceive to face disadvantages affecting their social, professional and family life, if they join in rural areas. **Recommendations:** This study recommends strengthening of Community Oriented Medical Education for motivating doctors towards participation in rural health services. Doctors working in rural health facilities might be given financial and professional incentives and a conducive environment to retain them.

Keywords: Health care providers, Health indicators, Rural

INTRODUCTION

The provision of adequate, accessible, appropriate and affordable health is one of the fundamental rights, recognized by global leadership under banner of World Health Assemblies of 1978 and 1998[1]. The current technologically advanced global village of earth is still challenged by inadequacies of appropriate and efficient medical care facilities in most developing countries. This picture is even more complex in rural areas due to imbalances between offered medical services and health care needs of the communities.

Pakistan is facing similar situation in rural areas, where 66% of the population is residing The national health plan is based upon the concept of Primary Health Care (PHC), which forms a network of First Level Care Facilities (FLCF) in the rural areas.[2] In Pakistan, the utilization of rural public sector health facilities had been estimated to be as low as 27%, in situation analysis report published by Ministry of health during 1995. The same report realizes that the under-utilization is mostly due perceived quality of care being offered at rural health facilities· The Ministry of Health and World Health Organization (WHO) conducted a study in 1993 on utilization of rural health facilities in Pakistan, which showed that out of 58 medical officers (MO) only 64% were present giving an absenteeism rate of 36%.[3] In 41% of the facilities, the doctors were residing within the institutions. Electricity was available in 91% of Rural Health Centers (RHCs) and 55% of Basic Health Units (BHUs) piped water was available in 61% of RHCs 28% of BHUs; and telephone was available in 7 out of 23 RHCs and no BHU had this facility. Although 65% of the RHCs have official accommodations for Women Medical Officer (WMO), no WMO was utilizing the accommodation facilities. In BHUs utilization of the official accommodation by the M.Os was 18.6%. It was found that electric power, drinking water and sanitation are the prerequisites in the BHU / RHC[2].

Improving health services in poor communities might involve changing the incentive structure for public providers. Introducing incentives in the public sector is often difficult due to non-flexibility of civil service rules. Incentive methods like paying extra allowances for hardship posts have been implied in many countries. All mechanisms of incentives have their own risks and none of them is problem free.[4]

Recognition of the need for some form of public policy intervention in order to overcome problems of unavailability of doctors in rural areas has led to the establishment of several programs by Western Governments. The General Practice Rural Incentives Program (GPRIP) of Common Wealth Governments recognized the need for incentives in order to recruit doctors for rural and remote areas of need.[5] Many rural practitioners in Europe experienced a lack of locum relief and access to backup and specialist services. A potential obstacle to the implementation of the strategy for quality service delivery is the understandable reluctance of health staff, often having a relatively urban background and social and family ties, to work in remote communities with poor utilities and social opportunities. Better selection process would be to link selection of candidates to districts where they already live, so that even before they are trained, they are allocated for particular districts and communities, and after training will not be accepted elsewhere.[6]

Irene identified lack of essential equipment, non-availability of resources like electricity, safe water, communication system and isolation from other units as traits of a hardship rural post. She advises not to force and

manipulate staff to accept rural postings against their will. Medical staff might accept these postings through mechanisms of differential reward and provision of relief for the hardship involved.[7-9]

Measures designed to improve levels of practitioner's retention in rural and remote areas should focus on avoiding and controlling frequent transfers and postings of doctors.

Some experts have suggested remedies to the situation including establishment of a rural health academy at divisional level to impart training and refresher courses to doctors working in the rural areas; priority in postgraduate education and training abroad; grant of rural and non-practicing allowance; and regular linkages with administration, management, and academic activities of their concern.[10-14] Proper education facility for the children of the doctors and staff working in the rural areas is one of the priority requirements. Duty timings of a doctor should be fixed in a manner that he could easily take rest and perform his other responsibilities; otherwise payment for overtime shall be made to them.[15-16]

Governments often have used combinations of compulsory services and incentives to improve the geographical distribution of physicians. Incentives for rural services have been used in the United States, Canada[13] and Norway.[14] The evaluation and optimal design, of incentive systems require an understanding of the responsiveness of physicians to these incentives. However, little is systematically known about physicians' preferences. For the developed world there are a handful of studies, most notably Bolduc et al. 1999 for Quebec, and Hurley 1989,1990 for United States whereas for the developing world there are only anecdotal reports.[12]

Although problem of high absenteeism has been identified but reasons for this phenomenon still remain unexplored. This study realizes the need and attempts to address this by identifying the factors that affect the willingness of doctors to work in rural areas, as perceived by them. The gathered information is used to generate evidence-based recommendations.

MATERIAL AND METHODS

The study is a Cross-sectional survey of the Medical Officers working in the public sector health facilities in District Abbottabad. The main focus of the study was to explore the reluctance of doctors for working in public sector rural health facilities. An attempt was made to measure the reluctance and identify its causes from the perspective of doctors. This task was pursued through census of all medical officers working in public sector health facilities of District Abbottabad

Doctors both male and female working as Medical Officers in B.H.U, R.H.C, Civil hospitals, District headquarter hospital and Ayub teaching hospital of district Abbottabad, during December 2000 were the study population. There were total of 134 doctors who met the study criteria out of these 4 could not be contacted and 5 refused to participate in the study so a total of 125 doctors were interviewed for the study

The doctors were divided into three categories according to their working experience and a different type of questionnaire was designed using international and national literature for each category

In all the three categories, structured questions about demographic and other information were used whereas the perceptions were probed through open-ended free-listing type questions. The SPSS and Excel software was used to analyze the data. The study has no external validity beyond doctors working as Medical Officers in district Abbottabad, which does not dilute the study, as it had same area of focus and extrapolation of its results beyond this scope was never designed.

RESULTS

There were 125 Medical Officers available and agreeing to participate in the research in District Abbottabad. These Medical Officers were posted in different health facilities offering varying levels of care as indicated in table-1.

Table-1: Distribution of doctors in health facilities of District Abbottabad (n=125)

Facility	%
Ayub Teaching Hospital	42
District Headquarter Hospital	26
Rural Health Center	24
Basic health center	04

The age range for all respondents was 27 to 45 years with the mean age of 33 ± 4 years. There were 13.6% (17) females with mean age of 32 ± 2.5 years whereas the males were 86.4% (108) with mean age of 33.5 ± 3.5 years. Among the doctors interviewed 76 (61%) were married and this ratio of married: unmarried remained same in both sexes. Out of 32 medical officers working in rural facilities 20 (63%) were married with mean number of children as 2. Majority of MOs in BHU 18 (70%) were married, with only two not having any child till the time of interview.

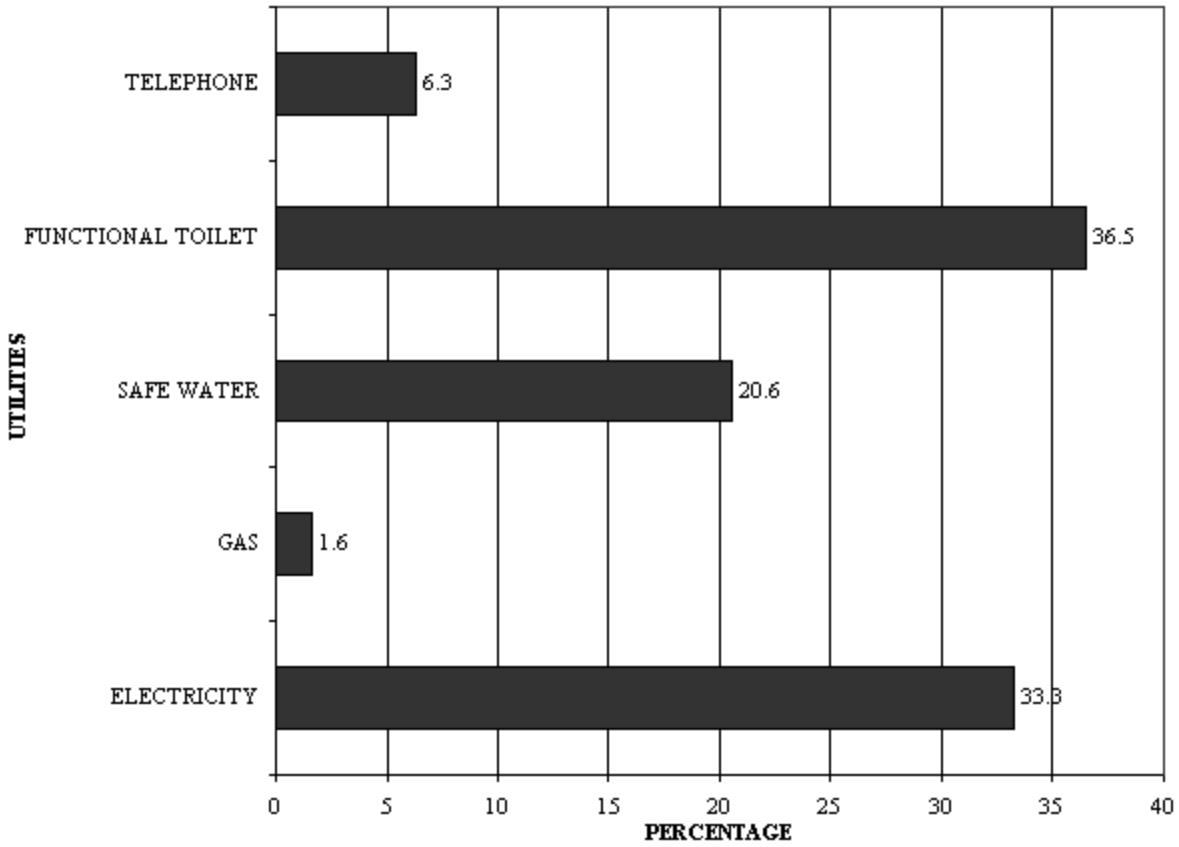

Figure-1 Availability of Utilities at Rural Health Care Facilities of District Abbottabad

About 44% (8/18) of the married MOs there had young children of preschool ages. One third (34%) of the MOs working in Abbottabad were married to doctors and the mean formal education of the spouses of the rest was 13±years.

The 32 doctors currently working in rural health facilities and 31 who had previously worked in such facilities were probed to explore their perceptions regarding availability of utilities in rural facilities. The Responses are shown in Figure-1.

Willingness to work in Rural Health Facilities

Responding to the question about willingness to work in rural health facilities 37(29.6%) doctors showed their will to work in such facilities. The doctors who showed their willingness to work in rural health facilities were asked to give five reasons for their willingness. The reasons given by doctors for their willingness to work in the rural health facilities are summarized as multiple responses in the table-2.

Table-2: Reasons as perceived by doctors for willingness to work in Rural Health Facilities

Reasons for willingness	Sex of the respondents				Total	
	No.	%	No.	%	No.	%
Completion of compulsory periphery service	24	14	2	20	26	14

Private practice in rural areas	23	13	1	10	24	13
As a bachelor no family liabilities	22	11	0	0	22	11
Less work load in rural	18	10	2	20	20	10
Get time to study in rural health facilities	15	9	2	20	17	9
No strict supervision	16	9.5	1	10	17	9
Rural background	13	7.5	0	0	13	8
Independent job in rural health facilities	10	6	0	0	10	6
To help poor	10	6	0	0	10	6
Facility near family residence	9	5.5	0	0	9	5
Residence provided with rural health facilities	8	4.5	1	10	9	5
To complete MPH requirement	7	4	1	10	8	4

The number of responses does not add equal to number of cases because it is a multiple response type table

When the willingness to work in rural areas was cross tabulated with the residential back ground, marital status and the spouse job of the doctors and the chi-square test was applied to examine the significance of the results achieved showed a significant relationship between willingness to work in rural areas and these factors as shown in the table-3. Similar relationship was explored between the gender of the doctors and the willingness to work, but their relationship was not significant.

Table-3: Cross-tabulations of willingness of doctors to work in rural areas

	Cross-tabulation category		**Total**	
Willingness	No.(%)	No. (%)	No.(%)	**P-value**
	Urban	**Rural**		
Willing	17 (14)	20 (16)	37 (30)	0.009
Unwilling	62 (49)	26 (21)	88 (70)	
	79 (63)	46 (37)	**125 (100)**	
	Married	**Unmarried**		
Willing	17 (13)	20 (16)	37 (30)	0.027
Unwilling	59 (47)	29 (23)	88 (70)	
	76 (60)	**49 (40)**	**125 (100)**	
	Working spouse	**Non-working spouse**		0.009

Unwillingness to work in rural areas

When the doctors interviewed were explored about the unwillingness to work in rural health facilities 70%of all interviewed were unwilling to work in rural health facility. Out of these 70% more then 60% are those who have never worked in a rural health facility the responses given by both the groups of doctors are summarized in the table-4 which shows that the main reasons are the lack of professional growth and delay in the post graduation by working in a rural health facility.

Table-4: Reasons as perceived by doctors for unwillingness to work in rural areas

	Doctors Ever worked in a Rural Health Facility		**Doctors Never worked in a Rural Health facility**		**Total**	
Reasons as perceived by doctors	Number*	%	Number*	%	Number*	%
No professional growth	24	13	41	16	65	15

No clinical experience	24	13	38	14	62	14
Delay in post graduation	30	16	30	12	60	14
Facility away from family residence	20	11	25	10	45	10
Poor living conditions	20	11	20	8	40	9
Decrease in earning	13	7	27	11	40	9
Poor schooling for children	18	10	20	8	38	9
Spouse job	12	6	13	5	25	6
High qualification	5	3	19	7	24	5
No exposure to rural life	7	4	13	5	20	5
Poor infrastructure of rural facilities	10	5	9	4	19	4
Poor transport facilities	2	1	0	0	2	0

*The number of responses exceeds number of cases because it is a multiple response type table

DISCUSSION AND CONCLUSION

Poor availability of doctors in rural areas is an on going problem in Pakistan. The causes of this reluctance are many folds and all these combine making the problem a complex one. Majority of the students in medical colleges have an urban background, as they have more chance to get admission due to open merit policy in most of the medical colleges. As a result they prefer to work after their graduation in to areas where they are reared. In medical colleges the MBBS curriculum has no community orientation, the doctors thus produced have no orientation or experience of the rural health in other words the doctors are being trained to work only in big hospitals with sophisticated equipment. The service structure of the doctors is such that there are no attractions for working in rural health facilities, rather there are disadvantages affecting their social, professional and family life.

This problem of reluctance of doctors to work in rural health facilities is an international phenomenon, as the same was observed in countries like Brazil, India, Indonesia, and Zambia according to the World Bank, 2000 report. Akbar Zaidi found that only 17% of the medical students interviewed were ready to practice in rural areas after their graduation.[17] The staff posted in rural health facilities had a high rate of absenteeism according to a study conducted by the MoH / WHO (1993) out of 58 medical officers (MO) posted at rural health facilities only 64% were present.[5]

In district Abbottabad there were 52 sanctioned posts of medical officers in rural health facilities but only 33 were filled. About 38% posts were lying vacant, depicting a very high proportion of medical officers unwilling to work against rural posts. This is exactly in line with international situation illustrated in literature.

Like all individuals, doctors have their own traits and characteristics that distinguish them socially and culturally. Education spanned over 5 to 6 years in medical colleges located in cities and expected living style after graduation, tilts them more to urban living. They develop acquaintances and links with their colleagues and seniors on technical introductions. When sent to rural areas they feel isolated and left out. Irene A identified difficulties in transferring staff to rural areas as many did not want to live in isolated areas. The urban dwellers would willingly go to rural areas of which they have no knowledge, is a killer assumption which might be contributing towards high absenteeism

Whereas table-2 depicts that those who were having a rural back ground enjoyed better willingness to be there.

The doctors who are unmarried are more likely to opt for the rural posting than the doctors who are married. This is evident from table-2, which shows that this effect is statistically significant. This finding was contrary to the findings of a study by Kenneth et al, 1999 in Indonesia in which the relationship between the marital status and the willingness to work in the rural areas was not strong.[15] This might be due to cultural differences or differences in the set up of rural areas.

The basic infrastructure and presence of the utilities is important for the retention of the doctors in the rural health facilities. This study showed that the electricity was present only at 33.3%, functional toilets at 36.5%, safe

water at 20.6% and telephone at 6.3% of the facilities while gas was present at only one of the facilities as described in figure-2 .The availability of these utilities was lower then the MoH / WHO figures of 1993, where electricity was available in 55.2% of BHUs; piped water was available in 60.9% of RHCs and 27.6% of BHUs; and telephone was available in 7 out of 23 RHCs and no BHU had this facility. This difference may be because the MoH/WHO study was conducted at the national level and this study was focused only in one district.

Although the study showed that 69% of the doctors had visited the rural health facilities during their student life. But they are lacking training to work in rural health facilities. As mentioned in the "Why medical students will not practice in rural areas" by Zaidi,[17] Students have no community experience and at best gain only superficial knowledge from text books. Although a large number of students had visited primary health care facilities. They very seldom actually interact with rural community.

The infrastructure of our rural health facilities is so poor that a doctor thinks he is being wasted in a rural health facility. He has nothing to offer to his patients, he is clinically deteriorating and a rural posting does not play any role in post graduation. This adds to the reluctance of the doctors which he had developed from family, social and financial reasons.

This study showed that a significant number of doctors suggested priority for post graduation as a mean for attracting doctors to rural areas. The same factor was highlighted by Kenneth et al in a study "What Do Doctors Want".[15]

Excessive turn over of doctors in rural areas may be modified by offering them good salaries and locum relief according to the hardship of the area in which they are posted

For this purpose an incentive package can be offered to doctors working in rural areas which include higher cash salaries , and special allowances according to the hardship of the post.

In this study doctors suggested incentives and salary increase as an important factor for attracting doctors to work in rural areas.

RECOMMENDATIONS

In order to improve the availability of the doctors in public sector health facilities in rural areas following recommendations are made

- There should be special emphasis in MBBS curriculum on primary health care
- The MBBS curriculum should be made community oriented with more and meaningful visits to rural health facilities
- The functioning of rural health facilities should be improved by regular and appropriate supply of medicines and diagnostic facilities

Provision of services for the houses and facilities such as electricity, safe water and functional toilets should be ensured.

- Rural health Facilities where doctors can not be posted due to absence of basic amenities in recent future might be identified and rather than a doctor a properly trained health technician might be posted there.
- Rural health academy should be made to train doctors for catering the needs of rural population

- There should be regular and meaningful supervision by appointment of properly trained health managers.
- No doctor should be allowed postgraduate training in any hospital without two years compulsory rural service.
- Rural posting should be made attractive by providing incentives, such as
- Special rural allowances based on the hardship of the area to which doctor is posted.
- Priority should be given for post graduation to the doctors who spend two years in a rural health facility.
- Special refresher courses should be launched for Medical officers working in rural areas to keep them in touch with the medical advancements.

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