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Rural Medical Practitioners: Who are they? What do they do? Should they be trained for improvement? Evidence from rural West Bengal

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Rural Medical Practitioners: Who are they? What do they do? Should they be trained for improvement? Evidence from rural West Bengal

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Abstract

Background and objectives: The private healthcare sector in rural India is often dominated by unqualified rural medical practitioners (RMPs). However, there is limited evidence on RMPs and potential for an intervention to reduce their harmful practices. This paper attempts to build up a brief profile of the RMPs based on a suitably selected sample, critically examine their role and explore the need for an intervention. **Method**s: In addition to review of secondary data and literature, we have interviewed 104 RMPs, 765 household respondents, 188 Panchayat members and 48 Auxiliary Nurse Midwives (ANMs) with semi-structured questionnaires in select blocks of West Bengal. **Results**: RMPs' level of knowledge varies depending upon the nature of disease but for a significant number of cases they do not seem to suggest harmful medicines. Users are generally satisfied with effectiveness of their treatment and price. Panchayat members and ANMs have mixed opinions but are largely in favour of a training programme to improve the RMPs. RMPs too feel similar need but their expectations vary enormously with no willingness to pay for

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training. **Interpretation and conclusion**: RMPs seem to be important components of rural health care in West Bengal in the current context but their role should not be overemphasized given the politico-administrative dilemma. As a transitional arrangement the initiative of training the RMPs must be explored and experimented but such training should be tuned in such a way not to institutionalize the role of the RMPs and does not attract more people to join the RMP force.

Keywords:

Rural India, Rural Healthcare, Rural Medical Practitioner, Rural Health Intervention, Quack, West Bengal.

1. Background and objectives

The private health sector in India, as elsewhere, consists of a variety of providers ranging from super-specialty facilities equipped with the latest technology and qualified doctors to the "unqualified" self-appointed medical practitioners (RMPs) or quacks who have very little formal knowledge to back their treatment practices. The high prevalence of RMPs in the rural areas in India and elsewhere is documented in some studies (1-12). West Bengal is believed to have roughly 2 lakhs of such RMPs and the state government is considering training and using them as rural health care providers (13). From time to time serious concerns have been raised about the quality of health care provided by this vast number of RMPs as poor quality of health care rendered by them is likely to have serious implications for disease transition, spread of infectious diseases and development of drug resistance in the community (14). Therefore, it may be important to critically examine the role of RMPs in the current context.

The existence of RMPs or quacks is as old as the history of health care (15) and different definitions of quacks are found in the literature. From the point of view of law and legitimacy, qualified practitioners are different from the Quacks mainly on two accounts: the former are (a) recognised by the state and (b) expected to possess the knowledge of best acceptable practice in a given context (15-17). The Supreme Court of India defines quack as follows: *A person who does not have knowledge of a particular system of medicine but practices in that system is a quack and a mere pretender to medical knowledge or skill, or to put it differently, a charlatan.* The operational definition of RMP includes three types of health care providers: (a) who practice without any formal training on any stream (allopathy, homeopathy, ayurvedic, etc.); (b) who graduated in medicine from an unrecognised organisation; or (c) who graduated in a non-allopathic system but practice an allopathic system of medicine (7).

Given that there are limited studies on RMPs and there is a need to explore the potential for intervention programmes to improve their services in the current policy context, the current paper sets out two objectives. First, it aims to provide a detailed profile of

RMPs. Second, the contributions and prospects of the RMPs are critically examined in the broader context of health care provision in an underserved community and the need for interventions by the state and/or NGO is discussed.

2. Materials and Methods

The empirical analysis of this paper is based on data from a primary survey which was carried out in August-September 2010. The survey covered three administrative blocks of Birbhum district in West Bengal, namely Dubrajpur, Sainthia and Mayureswar II. Apart from the fact that these blocks represent diversity in terms of their closeness to urban population and the district headquarters, and occupational profile, they were selected considering the feasibility and logistic aspects of conducting the field survey. Birbhum is predominantly a rural and agricultural district and is one among the typically backward districts of West Bengal. According to Census 2011, about 87 per cent of Birbhum's population lives in the rural areas and earn their livelihood through agriculture and related activities. The district has a large proportion of socio-economically disadvantaged population (30.6 per cent SC population and 7.6 per cent ST population according to Census 2011 and 35.1 per cent Muslim population according to 2001 Census). The rural sector of the district is divided into nineteen community development blocks. The selected blocks represented mixed population without any disproportionately higher share of the ST or SC. All RMPs practising in these three blocks were listed. Only those RMPs having at least 10 years of schooling, not trained in non-allopathic system of medicine and were willing to take part in the survey was finally included in the survey. Other than RMPs and their users, elected representatives of the local governments (Panchayat members) and ANMs were included in the survey with different questionnaires for them as it is important to know their perspectives with regard to RMPs as well. Therefore, the survey collected information from three other types of stakeholders – users of RMPs (i.e. the households), government health workers (ANMs) and community leaders (elected Panchayat members) – all from the areas where the RMPs practiced. Each RMP was requested to provide a diversified list of 25-30 patients who had visited him or had been seen by him in the last one month with

adequate numbers of ST, SC, Muslim and women patients. The obtained list of patients was then converted into a stratified household list of users of that particular RMP. We tried to select a maximum 10 sample households for each RMP and attempt was made to ensure at least 2 ST, 2 Muslim, 2 SC households and 4 households from other categories of users. However, some RMPs were not willing to provide us a list of their users and for some RMPs we could not get 10 households who satisfied our criteria of selection. From each sample household, one respondent was selected who visited the RMP in most recent time preceding the survey. It would have been ideal to include the government doctors working in the rural areas as representative of government health workers. However, it was found during the pilot survey that in many cases the government doctors did not know all RMPs working in the area and it was the ANMs who had a fairly good idea about the practising RMPs in the areas they served. In all, our survey interviewed (with semi-structured questionnaires) 104 RMPs, 765 households, 188 Panchayat members and 48 ANMs spread across 18 Gram Panchayats in 3 blocks. The survey sought verbal consent from each household, RMP, Panchayat Member and ANM after clearly explaining the purpose of the survey. From the RMPs, detailed information was collected on their background, knowledge, attitude and practice and their interface with constituent groups of the community where they practice – the users, government health workers and community representatives. The symptoms of the patients as described by the RMPs and the medicines prescribed by the RMPs were recorded. Other details of the patients along with symptoms and prescribed medicines were assessed by a team of two qualified doctors to make judgment on the appropriateness of the medicines prescribed. The survey was carried out by a team of 9 field investigators (3 investigators for each block) and one field supervisor. They were all with educational qualification of graduation and above, and were from the study area. They were trained for three days before the field survey by one of the co-authors. Collected data were fed into the computer using CSPro and analysed using Stata 11. Though the survey was carried out almost five years ago, a recent policy announcement by the state government on initiating statewide training programmes for the RMPs clearly indicates that the

relative importance of RMPs in the rural health system in West Bengal has not diminished. (13)

3. Results

A brief profile of the RMPs

A brief profile of the sample RMPs is provided in Table 1 using select summary measures. For most of the RMPs (79.8%) medical practice was the main profession, but almost all of them were simultaneously engaged in other income earning activities, sometimes in multiple activities. The other income earning activities were agriculture, petty business, insurance agents, assisting qualified doctors etc. The average age of the RMPs was about 41 years (median age 39 years). Approximately 60% of the RMPs were 40 years or younger and about 80% of the RMPs are 50 years or younger. The average duration of schooling of the RMPs is 12.5 years and average length of experience is 13.2 years. But it must be noted that our sample of RMPs included only those who completed at least 10 years of schooling. As a preparation for their practice, little more than one-third of the RMPs either worked with a qualified doctor as assistants while more than half of the RMPs has either learned from other RMPs (mostly from their fathers) or from medical institutions of questionable credential.

Table 1: Profile of RMPs surveyed

	Estimate (95% CI)
RMPs with medical practice as main occupation (%)	79.8 [70.8, 86.5]
Average years of schooling	12.5 [12.0-12.9]
Average years of experience	13.2 [11.3, 15.0]
Average number of trainings attended	1.0 [0.6, 1.3]
Having own chamber/clinic (%)	85.6 [77.3, 91.2]
Provide both allopathic and other medicines (%)	14.4 [8.8, 22.7]
Average number of patients per day	14.9 [12.6, 17.2]
Goes on call (visit patients' house) (%)	89.4 [81.7, 94.1]
Provides all medicines most of time (%)	76.0 [58.5, 95.2]
Having own fridge (%)	37.6 [28.6, 47.6]
Procure medicines from wholesalers (%)	57.4 [47.4, 66.8]

Source: Primary Survey (2010)

Knowledge

The estimates of a select set of parameters related to RMPs' knowledge (with regard to disease and treatment), attitude and practice (with regard to treatment) are presented in Table 2. A number of questions were asked to examine RMPs' level of knowledge of some specific diseases, their symptoms and treatment. RMPs' level of knowledge with regard to possible reasons for breathing trouble was found to be very poor. More than 60% of the RMPs could not name asthma as one of the possible causes of breathing trouble. Only 3% of the RMPs could tell four commonly found causes of breathing trouble and as high as 22% of the RMPs could not tell even a single possible reason for breathing trouble. However, it was observed that their knowledge and awareness was better with regard to possible reasons for stomach pain. Almost half of the sample RMPs could tell four commonly found reasons for stomach pain. Out of 104 RMPs we surveyed, 50 RMPs reported to experience at least one 'complicated medical case' in the last three months. Comments on the prescribed medicines were then classified into four categories: (a) right medicine, (b) probably right medicine, (c) wrong medicine; and (d) difficult to comment given the information. It was interesting to observe that in 28 (56%) cases the RMPs reported to have prescribed/provided either right medicine or probably right medicine. Out of the remaining 22 cases, only in 5 (10%) cases it was clear that wrong medicines were prescribed. For the rest 23 cases, it was either difficult to make judgment or no harmful medicine was suggested.

Table 2: The knowledge-attitude-practice parameters of the RMPs

	Estimate (95% CI)
RHCP who could correctly mention at least three possible reasons for breathing trouble (%)	10.6 [5.9, 18.3]
RHCP who could correctly mention at least four possible reasons for stomach pain (%)	49.0 [39.4, 58.7]
RMPs who could rightly answer what criteria one should consider for deciding about the doses of antibiotics (%)	50.0 [40.4, 59.6]

	Estimate (95% CI)
RMPs who believed that referring patients to other providers would harm their reputation (%)	2.9 [0.9, 8.7]
RMPs who could correctly tell at least three symptoms for identifying at risk mothers (%)	10.6 [5.9, 18.3]
RMPs who could tell pregnant women need minimum 3 antenatal check-up (%)	56.3 [46.5, 65.7]
RMPs who could tell pregnant women need tetanus injection (%)	55.3 [45.5, 64.8]
RMPs who could tell pregnant women need iron-folic acid tablet (%)	61.2 [51.3, 70.2]
RMPs who could correctly tell how many doses of BCG a child should be administered in one year from birth (%)	43.3 [34.0, 53.1]
RMPs who could correctly tell how many doses of OPV a child should be administered in one year from birth (%)	4.8 [2.0, 11.2]
RMPs who could correctly tell how many doses of DPT a child should be administered in one year from birth (%)	22.1 [15.1, 31.3]
RMPs who could tell at least 2 correct causes of liver disease	51.9 [42.2, 61.5]

Source: Primary Survey (2010)

Attitude

About 39% of the RMPs reported to have no interaction with fellow RMPs practicing in the same or neighboring areas. With regard to their attitude toward referral of what they considered 'complicated' or 'difficult' cases, a mixed pattern was found. As per their reporting, one-fourth of the patients were directly referred to government facilities and in half of the cases the patients were referred to government hospitals or private doctors only after providing what they considered essential minimum primary care. None of the RMPs reported that referring patients to government hospitals or private doctors would be damaging for their reputation, rather they feel that referring the patients in right time would earn them trust from the community and the patients who

get cured after referral generally come back to them to share the treatment information. Against this finding, it is surprising to observe that one-fourth of the uncommon/complicated cases were retained by the RMPs and this could be a matter to worry.

With regard to RMPs' felt need for further knowledge, almost 95% of the RMPs feel the need for undergoing some kind of training programme by qualified doctors for improving their knowledge and treatment practices, although they do not show any willingness to pay for such training. In-depth interviews with the non-willing RMPs does not indicate that they are better-off in terms of knowledge and practice. A majority of the willing RMPs do not have well specified goals on what they expect to learn from the training programme. Nevertheless, one-tenth of them expressed goals such as teeth removal and small surgery etc.

Practice

Most of the RMPs (85.6%) practice allopathic systems only and the remaining 14.4% of the RMPs do prescribe ayurvedic and/or homeopathy medicines along with allopathic medicines. On average an RMP gets about 15 patients per day. Even though our survey included questions on RMP's earnings, it was difficult to separate out their earnings from cost of medicines as all RMPs charged a fee as mark-up on the cost of medicines and the proportion of mark-up varied across RMPs and users.

About 76% of the RMPs provided almost all the required medicines to their patients. More than 90% of the RMPs store their own medicines and it is worth noticing that about 57.4% of them procure medicines from the wholesalers or dealers. Visiting RMPs by the medical representatives of pharmaceutical companies is common, especially RMPs with good patient-turnover. About 70% of the RMPs reported of administering intravenous injection and 64% of the RMPs reported of administering drip. Most of the RMPs (95%) provide antibiotic though only half of them could say what characteristics of the patients they would consider while deciding about the doses of antibiotics.

Even though half of the RMPs in the sample have reported that

pregnant women do come to them, similar question with one month recall period resulted in negative response. All RMPs report that they always refer the pregnant women to health centres after doing the essential primary checkup. Serious doubts can be raised both about RMPs' knowledge of what constitute the essential checkup as well as their capacity to carry out the checkup (Table 2). Although checking of blood pressure, anemia, pulse rates were reported by large number of RMPs, an equally good number of RMPs has mentioned about checkups which required advanced knowledge and equipment. RMPs' lack of knowledge with regard to reproductive health care is supported by the evidence as only 10.6 per cent of the RMPs could tell at least three symptoms of possible risky pregnancies. RMPs' knowledge of immunization is equally poor.

Perspective of Users

Our sampling design does not allow us to estimate what proportion of rural population goes to the RMPs when they fall sick. Estimates from other studies suggest that such figures can lie anywhere between 60% and 90% in the rural areas (1,7). Since our sample of households includes only those households who visited an RMP in the last three months preceding the survey, we could explore the reasons why they preferred RMPs in comparison to other health care providers. The main reason why a large majority of the rural population prefers RMPs instead of 'free' government facilities is the easy accessibility of the former. The second major reason is related to the poor quality of the government facilities as perceived by the rural people. Parameters capturing patients' experience with the RMPs are provided in Table 3. It is worth noting that a majority of users

Table 3: Parameters capturing patients' experience with RMPs

	Estimate (95% CI)
Patients who said RMPs explained reasons for the illness (%)	48.9 [44.7, 55.1]
Patients who said RMPs explained how to avoid such illness in future (%)	56.0 [51.8, 60.2]

	Estimate (95% CI)
Patients who said RMPs provided all the medicines	61.0 [56.8, 65.0
Patients who said to pay fees of RMPs in instalments (%)	26.0 [22.5, 29.9]
Patients who said RMPs charged right or less money (%)	90.5 [85.4, 95.6]
Patients who were happy with the service of RMPs (%)	69.2 [65.2, 73.0]
Patients who would visit RMPs in future for similar illnesses (%)	86.6 [83.5, 89.2]

Source: Primary Survey (2010)

(62%) did not consider their illness serious enough to go to government facilities or qualified private doctors. The average cost of a visit to an RMP is Rs. 61 (median cost is Rs. 50) and as high as 90.5% of the respondents are satisfied with the price charged by the RMPs.

Role of RMPs: from the perspectives of ANMs and GP Members

The ANMs do have a fairly good idea about the RMPs practicing in their areas (Table 4). The opinion of the ANMs about the practices of the RMPs is mixed. The skill of the RMPs in providing various curative care is perceived to be low by the ANMs. Though about 20.8% (10 out of 48) of them has sought help of RMPs in various public health programmes such as Pulse Polio and Health Camp for reaching out to the population, only 10.4% (5 out of 48) of the ANMs believe that RMPs can properly treat patients. Majority of the ANMs believe that it is the easy accessibility of RMPs and rural population's greater trust in them for minor illnesses and not so much due to the unavailability of government facilities which is responsible for the RMPs' popularity and the subsequent bypassing of government facilities. It is worth noticing that more than 80% (38 out of 48) of the ANMs believe that the role of RMPs can be improved by providing them proper training.

Table 4: Interaction and attitude related parameters for the RMPs and community

	Estimate (95% CI)
ANMs' knowledge and opinion	
Knowing the RMPs in their areas	
ANMs know all RMPs in their work area (%)	18.8 [9.8, 32.9]
ANMs know one/few RMPs in their work area (%)	72.9 [58.2,83.9]
ANMs don't know any RMP in their area (%)	8.3 [3.0, 20.8]
ANM believe that RMPs can treat some ailments (%)	62.5 [47.6, 75.3]
ANMs' opinion on why people prefer RMPs	
Easy accessibility and availability (%)	54.2 [39.6, 68.0]
Higher trust on RMPs (%)	33.3 [21.1, 48.2]
RMPs provide medicines (%)	8.3 [3.0, 20.6]
Unavailability of government doctors (%)	22.9 [12.9, 37.4]
ANMs who ever took help of RMPs (%)	20.8 [11.3, 35.2]
ANMs who believe that training can improve RMPs(%)	81.3 [67.1, 90.2]
GP members' opinion	
GP members' assessment about the quality of service provided by the RMPs	
Very good (%)	13.0 [8.1, 20.3]
Moderately good (%)	56.9 [47.9, 65.5]
Average (%)	25.2 [18.2, 33.7]
Cannot say (%)	4.9 [1.6, 14.8]
GP members who believe that RMPs can assist government health workers (%)	30.9 [24.6, 37.9]
GP members who believe that training can improve RMPs (%)	76.6 [69.9, 82.1]

Source: Primary survey (2010)

The opinion of the GP members about the quality of health care rendered by the RMPs is also mixed (Table 4). Almost 30 per cent of GP members find the quality either average or are not in a position to comment. Even though little less than one-third of the GP members are of the opinion that RMPs can help the government health workers on various health-related programmes in the village, they could hardly specify any such programme or activity where the support of the RMPs can be utilised. Like the

ANMs, majority of the GP members (76.6%) believe that RMPs need more training and such training if provided could improve the services rendered by them.

When we look at the ANMs-RMPs or Panchayat Member-RMPs interaction from the RMPs' point of view, most of the RMPs personally know the ANMs who are working in their areas. Very few of them visited the local health centres for attending meetings about public health programmes such as pulse polio, malaria or filaria. Their association with the local government (Panchayats) does not appear to be strong. RMPs enjoy a good relation with GP members at personal level but do not have any formal communication channel with the local government. More than 80% of the RMPs do not have any knowledge if any health-related meeting has taken place in their GPs in last three months which was organized by the Panchayat or Health Department. Only 16% RMPs knew that a health-related meeting took place in their Gram Panchayats and only 5% of the RMPs were convened to such a meeting.

4. Discussion

A number of studies including our analysis suggest that the rural population's higher dependence on the RMPs could be due to their close proximity, continuous availability, cheaper price, perceived 'higher effectiveness' of treatment and options of part payments. This is compounded by the fact that many public facilities, especially those located in the rural areas run with lesser doctors and health staff than what is required even by a loosely set standard (18). The RMPs score better in terms of availability and continuity as high absenteeism among doctors and health staff is a regular feature in many public health facilities located in the rural areas (19,20). RMPs have been proved to be crucial for treating injury because of their widespread availability and easy accessibility (21).

Though it is a common perception that treatments from RMPs are cheaper than treatment from other healthcare providers, a study found that the typical visit to a RMP costs as much as it costs to visit a government facility (7). As far as the perception of 'higher effectiveness' of treatment is concerned, there are few possible

reasons for developing such a perception. First, in absence of any legal control RMPs prescribe and provide medicines which ordinary health workers are not authorised to prescribe even if they possess the same knowledge as the RMPs with regard to the disease and possible treatment. There are clear rules about what an ordinary health worker can and cannot do. By comparison, the RMPs are unregulated which does not prevent them from prescribing or providing treatment and medicines which they are not authorised to do. Second, the patients are more satisfied with the care they receive from the RMPs as they receive more attention from the latter than what they usually receive from the health workers or the doctors at the primary level public facilities. Moreover, the treatments provided by RMPs are often believed to be more effective as RMPs are more prompt in administering injection and intravenous drops as desired by many patients even if medical conditions do not warrant so (20, 22, 23). Third, RMPs do not generally charge separate fees and rather compensate that by adding a surcharge on the fee for medicines. Most of the patients tend to believe that they are only paying for the medicines (1).

It is worth noticing that more than half of the RMPs (57.4%) in our sample procure medicines directly from the wholesalers and not from the retail medicine shops. It is equally striking to observe that medical representatives regularly visit those RMPs having good business and often act as a sole source of information for new drugs. In the absence of any formal and authentic channel for them to know about new diseases and new medicines, the salesman of the medical companies (medical representatives) have filled that vacuum. It is observed that the salesman not only supply them medicine but also teach them when and how to use the medicines. (23) In a situation where the practices of the qualified doctors are found to be highly influenced by the biased information from the pharmaceutical companies, one wonders how severe such influence could be for the RMPs (25,26). However, the price of medicines and the implied cost of treatment can probably work as a constraint since any cost increase may be expected to negatively affect demand for RMPs' treatment. Like another study we too found that RMPs generally buy those medicines which are effective but not very expensive (17). One

can, therefore, further argue that any sort of ignorance on the part of the policy makers with regard to the practices of the RMPs can only lead to lopsided interventions (24).

Though it was not observed in our study, other studies have found significant numbers of children and pregnant women being treated by the RMPs. This can have larger implications for the functioning of the publicly funded Reproductive and Child Health programme in rural areas. It is found that boys often get priority for being treated by qualified doctors while treatment by RMPs becomes the first choice for girls (27). In such an environment of gender discrimination, improving the treatment practices of the RMPs is definitely going to beneficial for girls and others (women, elderly) who face similar type of discrimination in health care utilisation.

People's perception of 'more effective treatment by RMPs' often does not stand empirical scrutiny if we look at the available empirical evidence. A study found that about 60% of rural hospitalised persons had initiated their treatment with the RMPs and out of them a large section of the patients shifted to hospitals due to non-recovery of illness with the RMPs or due to deterioration of health status under their treatment (7). Another study too did not find higher effectiveness of treatment by the RMPs (6).

Harmful practices of the RMPs are documented in many studies (1, 3-6). There is evidence that RMPs prescribe antibiotics in smaller doses than what is required from the medical point of view. The patients who are treated with inadequate doses of antibiotics often get better, but help develop drug resistance in their community which makes future treatment less effective (22). Concerns have also been raised that various national programmes launched to eradicate disease such as malaria, tuberculosis and cholera are at the risk of becoming less effective because of the proliferation of RMPs (28-30). There are other harmful practices by the RMPs such as reuse of syringes or needles, use of unsterilized medical equipment and disposing of biomedical wastage in unscientific manner. Late referral of cases or making cases complicated by wrong treatment is another area of their harmful practices. There is mixed evidence on this issue in our

study as well as in other studies (22, 28-30). It is found that for children only 10 per cent of the cases were referred to the formal provider, while another 20 per cent were not cured (7). While about 80 per cent of RMPs can diagnose common diseases and treat them, 25 per cent are involved in inappropriate practices like unsafe abortion and unsafe childbirth (31). The late referral of cases may not be confined to the child illness alone, there is anecdotal evidence that the quacks refer complicated cases to public facilities or qualified private doctors only when health condition of the patients go completely out of their control.

Governments seem to have two options with regard to the RMPs. The first option would be completely ban the RMPs with strict laws and provide 'standard' health care package by qualified doctors. The second option could be accepting the reality of RMPs and provide them with training on minimum essential aspects of curative treatment and public health and integrate them with the national health goals. Ensuring adequate basic health care facilities with qualified staff who would remain available round-the-clock for basic curative services and birth delivery in the rural areas does not seem to be feasible at least in the short-run. Therefore, accepting the RMPs as reality and allowing them to perform restricted role in providing health care may look as a pragmatic step to many. However, these two options are not necessarily mutually exclusive. While exercising the second option in the short-run, the government can aim at going for the first option in the long-run though the feasibility of such a move can be questioned. One can argue that even as an experiment, instead of banning their practices a selected number of RMPs can be trained with some elementary knowledge of treatment in order to reduce their current harmful practice as well as improve their practice.

With some exceptions, most of the state governments do not seem to have addressed the issues related to RMPs, informal providers or quacks at a specific policy level. In some legal cases governments have intervened when complaints were lodged against them for harmful treatment (32). Andhra Pradesh is a state with a history of associations of the informal providers and their associations have grown to such a strength that they have

got an arrangement with the state government for providing them training with the aim of certifying them through state paramedical council (9). It is not difficult to understand the reasons behind governments' soft stance on the RMP issue. In places where government health facilities are either non-existent or of poor quality, RMPs become only affordable option available to the rural population. Banning the RMPs in such a situation without providing acceptable alternative to the rural population can only raise agony of the people. But at the same time, legal aspects and pressure from the physicians lobby make it difficult for the governments to accept publicly the possibly positive role played by the large number of RMPs. Doing so will be amounting to accepting its failure to provide health care to the poor population, especially to the rural poor. Such dilemma has possibly prevented the governments in most of the Indian states to take measures to monitor and control the activities of the RMPs. One may compare the positive role played the community health workers (such as village health guides (VHG) which was introduced in the 1980s) with the current days RMPs. Though the VHGs were expected to provide basic health services such as minor treatments, their main stay were preventive measures including education and liaison with specialised health institutions. By contrast, the economic rationale based on which the current RMPs function is different and orients them more towards providing curative rather than preventive care. There is hardly any formal connection between the RMPs and the government health institutions. One can explore the feasibility of replacing the system of RMPs by a cadre of bachelors of community health in the long-run though such a proposal could be very well subject to apprehension and criticism.

5. Conclusion

The evidence and arguments presented in this paper may make a case for interventions for the RMPs in order to reduce their harmful practices and improve quality of service. Experience from other contexts suggests that it may be possible to minimise the risk of harmful practices of the RMPs by providing them hands-on training. It has been found that training has improved the diagnosis and counselling practices of informal providers in India,

the provision of anti-malaria drugs by shopkeepers in Kenya and the management of diarrhoea and acute respiratory infections by private medical practitioners in Mexico (33-35). In a controlled-intervention study it was found that as a result of training the traditional bonesetter could considerably reduce the rate of gangrenous limbs, infection, non-union and malunion (36).

However, some critical issues need to be kept in mind. First, an intervention in the form of a training programme for the RMPs may face socio-political and administrative constraints and also resistance from the mainstream medical fraternity. This has happened in the past in different forms in different contexts. Apart from this resistance, there are legal dimensions which may limit the involvement of the unqualified RMPs in the formal medical care programme of the government. In 1970s when oral rehydration salts (ORS) solution was experimentally introduced in Africa and South Asia during the passive outbreak of cholera, ordinary persons were trained to administer ORS since it was not possible to provide intravenous saline by trained doctors. The move faced strong opposition from the hospital-based clinicians and oral rehydration treatment was regarded by the clinicians as a second class treatment (37). In a similar way, the proposal by the union government a few years ago to initiate a three year training course to produce community health practitioners for rural areas short of graduate doctors, thus creating a parallel stream of medical practitioners in the rural areas, had triggered a heated debate across the country which was finally abandoned (18). Second, the low education base of the RMPs may make it difficult to educate them through training programmes. There is also the issue of sustaining the knowledge which is provided through the training, especially if changing practices is cost enhancing. It was found that even the performance of qualified doctors diminished few months after the training (38). With regard to referrals one may also raise the point that a RMP may not have enough incentive to refer many of his cases to government hospitals or to qualified private practitioners as it may reduce his credibility, however we find otherwise. Finally, training the RMPs should be viewed as some kind of transitional arrangement and should not attract more and more people to become RMPs. However, our study did not collect any detailed information on the

reasons behind people's preference and non-preference for the RMPs and to what extent access, availability and quality of formal care in the study area are responsible for people's dependence on the RMPs. This must be considered as a limitation of the study.

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