

Original Article**Assessment of collocation coverage of AYUSH doctors under National Rural Health Mission in Udaipur Division**Kumar Arun*, Keerti**, Sharma C P***, Choudhary Mahesh[#], Sharma Sandeep^{##}, Goyal Bharat Kumar*

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Background: The National Rural Health Mission (NRHM), announced in 2005 and implemented on the ground in 2006, has formulated 'revitalizing local health traditions and mainstreaming AYUSH' as one of its strategies to strengthen the public health services.

Objective: Purpose is to assess the overall collocation coverage of AYUSH, Training of AYUSH doctors and the available facilities for AYUSH doctors and find the gaps in these facilities.

Material and Methods: This study was a cross sectional study. Three districts (50% of total) were randomly selected from Udaipur division which comprises of six districts. All Primary health centers/Community health centers/District hospitals with collocation of AYUSH doctors in randomly selected three districts were included in the study for assessment of collocation coverage and facilities available for AYUSH.

Results: Mean age of the AYUSH doctors found to be 35±3.2 years. Overall collocation coverage percentage was found to be 35.5%, most of the collocation was at PHC level (41.5%) followed by DH (33.3%) followed by collocation at CHC level (13.1%). Majority 58 (86.5%) of AYUSH doctors were found to be trained on SBA (Skill Birth Attendant). Majority 46 (68.7%) of collocated facilities were lacking the board of AYUSH chikitsa Kendra. There is severe dearth of residential accommodation for AYUSH doctors.

Keywords: AYUSH, collocation

INTRODUCTION

The public health system in our country has various drawbacks. The gap between requirement and availability of human resources at various levels of health care is wide. Despite constraints of human resources, practitioners of Indian Systems of Medicine (ISM), Registered Medical Practitioners (RMPs), and other locally available human resources have not been adequately mobilized and integrated in the system. The National Rural Health Mission (NRHM), announced in 2005 and implemented on the ground in 2006, has formulated 'revitalizing local health traditions and mainstreaming AYUSH (Ayurveda, Unani, Siddha, Homeopathy)' as one of its strategies to strengthen the public health services. This convergence of AYUSH with the Allopathic health services is meant to [1]:

- Provide choice of treatment systems to the patients,
- Strengthen facility functionality,
- Strengthen implementation of the National Health Programmes.

Planning and implementation of the NRHM strategy related to AYUSH services varies greatly across states, dependant on the existing level of development of AYUSH services in the state, and the development emphasis of the state. The present study was conducted among three districts of Udaipur division to assess AYUSH services in terms of coverage, training of the AYUSH doctors, and status of facilities available for AYUSH to improve the utilization of this considerable resource of AYUSH workforce. Udaipur is a predominantly tribal district of southern Rajasthan, with a population of 30,67,549 (Census 2011). Udaipur district has 1 Medical college,

one District hospital, one Satellite hospital, 21 Community Health Centers, 69 Primary Health Centers [2]. Dungarpur has one district hospital, 10 CHCs, 37 PHCs [3]. Rajsamand is situated 67 Km north of Udaipur. It has one district hospital, seven CHCs and 36 PHCs [4].

MATERIAL AND METHODS

Study Area: The present study was conducted in three randomly selected districts of Udaipur Division viz. Udaipur, Rajsamand and Dungarpur.

Study design: Cross-sectional observational design adopted for the study.

Sampling procedure: Udaipur division has total six districts namely Banswara, Chittorgarh, Rajsamand, Udaipur, Dungarpur and Pratapgarh. Three districts (50% of total) were randomly selected from the division by blindly picking up the paper chits viz. Udaipur, Rajsamand, Dungarpur. All 65 PHC/CHC/DH with collocation in randomly selected three districts were included in the study for assessment of collocation coverage and facilities available to AYUSH doctors.

Data Analysis: A codebook was prepared to facilitate data entry. Collected data was entered and analyzed with MS Excel for total number of AYUSH personnel against the number of facilities. Number of AYUSH personnel recruited and trained & gaps in training and facilities available for AYUSH.

RESULTS

A total of 37 AYUSH doctors posted at Udaipur district, 12 in Dungarpur district and 18 in Rajsamand district of Udaipur division in collocation with allopathic doctors under NRHM at various Primary health centers/community health centers/district hospitals.

Majority 44 (65.7%) of AYUSH doctors were in age group of 26-35 years followed by doctors in the age group of 36-45 years. None of the AYUSH doctor was more than 45 years of age. The mean age of doctors was found to be 35±3.2 years. Rajsamand district differs from two other districts in this aspect by having more number of AYUSH doctors in higher age group i.e. 36-45 years. Majority 53 (79.1%) of AYUSH doctors posted in collocation were males (Table 1).

Collocation coverage percentage refers to percentage of health facilities were at least one AYUSH doctor

Table 1: Profile of AYUSH doctors

Variable	Udaipur (n=37)	Dungarpur (n=12)	Rajsamand (n=18)	Total (n=67)
Age in years				
26-35	27 (73)	9 (75)	8 (44.5)	44 (65.7)
36-45	10 (27)	3 (25)	10 (55.5)	23 (34.3)
Gender				
Male	28 (75.6)	10 (83.3)	15 (83.4)	53 (79.1)
Female	9 (24.4)	2 (16.4)	3 (16.6)	14 (20.9)

*Figures in the parenthesis indicates percentage

posted in collocation with allopathic doctors under NRHM. Considering all the selected districts simultaneously the overall collocation coverage percentage was found to be 35.5% (65 out of total 183 facilities), most of the collocation was at PHC level 59 (41.5%) followed by 33.3% (one out of three) District Hospital followed by collocation at CHC level 13.1% (five out of 38). Visualizing the districts separately, Udaipur district had overall collocation coverage of 38.4%. Rajsamand district showed bit more collocation coverage of about 40.9%. Dungarpur district showed least collocation coverage (25%) with AYUSH doctors posted only at PHC level (32.4%), none of the AYUSH posted at CHC and DH level (Table 2).

Table 2: Distribution of AYUSH doctors according to collocation

Health Facilities	Udaipur	Dungarpur	Rajsamand	Total
PHC	31 (44.9)	12 (32.4)	16 (44.4)	59 (41.5)
CHC	3 (14.2)	0(0)	2 (28.5)	5 (13.1)
DH	1 (100)	0(0)	0(0)	1 (33.3)
Total	35 (38.4)	12 (25.0)	18 (40.9)	65 (35.5)

*Figures in the parenthesis indicate collocation coverage in percentage

Striking feature that defies the efforts of NRHM was that very few doctors were trained on important national aspect topics like IMNCI (Integrated Management of Neonatal and Childhood Illnesses) (5.9%), RCH (Reproductive child health) (4.5%), and RNTCP (Revised National Tuberculosis Control Programme) (11.9%). None of the AYUSH doctors were found to have training on RTI/STI (Reproductive Tract Infections/Sexually Transmitted Infections) (Table 3).

Looking at the infrastructure majority 46 (68.7%) of collocated facilities were lacking the board of AYUSH chikitsa Kendra. Although 41 (61.2%) of the facilities

Table 3: Distribution of AYUSH doctors according to in service trainings attended

Trainings attended	No. of AYUSH doctors (N=67)
SBA Training	58(86.5)
Routine Immunization Training	44(65.7)
IMNCI Training	4(5.9)
RNTCP Training	8(11.9)
RCH Training	3(4.5)
Training on Leprosy	26(38.8)
HIV/RTI/STI Training	0(0)
Training on Swine Flu	21(31.3)

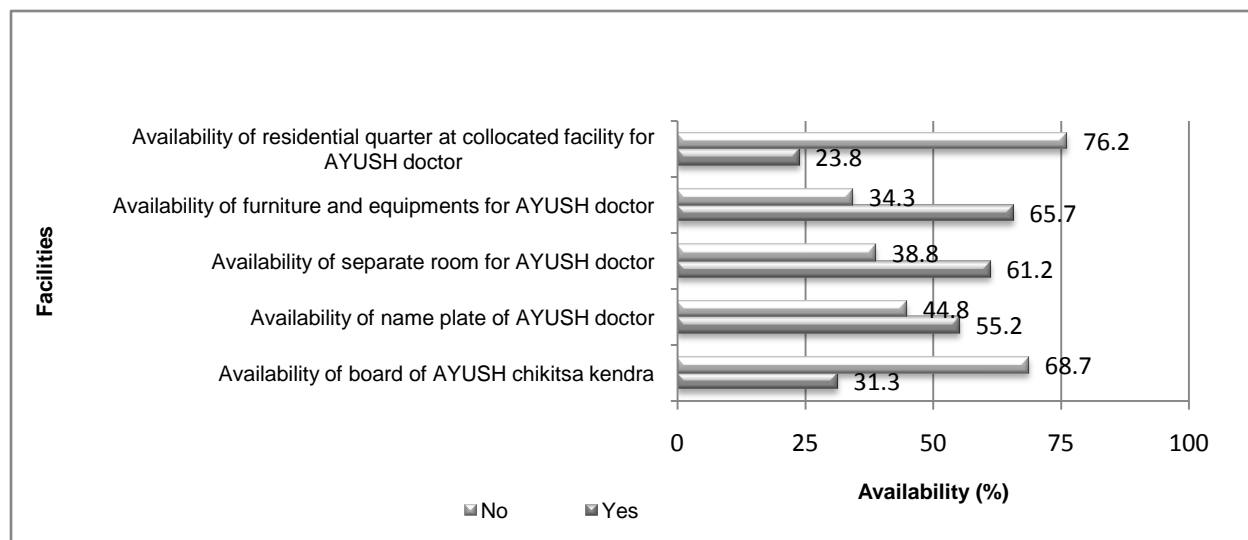
*Figures in the parenthesis indicates percentage

furniture, almirah and equipments like sphygmomanometer. In Dungarpur district majority nine (75%) of AYUSH doctors reported to utilize the fund for purchase of table, chair, almirah.

DISCUSSION

Observing the profile of AYUSH doctors posted at collocation the mean age of the doctors found to be 35 ± 3.2 years while majority of the doctors 44 (65.7%) were in age group 26-35 years in Udaipur zone. In congruence with our study, the average age of the clinical care providers is found to be 34 years in a study conducted by Krishna D Rao et al (2010) [5] in state of Chhattisgarh. Contrary to our findings, study by K. Chopra and T. Mathiyazhagan (1997) [6] conducted in Gwalior district, Madhya Pradesh has

Figure 1: Status of the facilities available for AYUSH systems



were having separate room, adequate furniture and equipments available for AYUSH doctors but the lodging facility is a big constraint in motivating the doctors to stay at HQ. There is severe dearth of accommodation for AYUSH doctors (Fig. 1).

Regarding utilization of untied fund for AYUSH in 2012, in Udaipur majority 25 (67.5%) of doctors reported to utilize the fund for purchase of equipments, furniture. Remaining 12 (32.5%) doctors although received the fund at their health facility but not utilized yet for their AYUSH system. AYUSH doctors of Rajsamand reported that only single time they received untied fund of Rs 10,000 and majority 12 (66.6%) of doctors utilized that for purchase of

observed to have more than 50 per cent of the ISM practitioners in the age group of 36-45 years. Analyzing the districts individually findings of district Rajsamand were in congruence with the findings of above mentioned study with 55.5% of doctors in age group 36-45 years.

Our study found that majority 53 (79.1%) of AYUSH doctors posted in collocation irrespective of the districts were males. In congruence to this, study by K. Chopra and T. Mathiyazhagan (1997) [6] conducted in Gwalior district, Madhya Pradesh has observed to have more of male AYUSH practitioners. Also the study conducted by Krishna D Rao et al

(2010) [5] in state of Chhattisgarh found more of male AYUSH practitioners.

Observation of distribution of AYUSH doctors according to posting at collocated health facilities showed that the overall collocation coverage percentage was found to be less than 50%. Only 59 PHCs (41.5%) out of total 142 had at least single AYUSH doctor posted. Individually none of the district showed coverage at PHC level more than 45%. Only 5 CHCs (13.1%) out of total 38 CHCs were found to have single AYUSH doctor posted none of the CHCs in Durgapur district reported to have any AYUSH doctor posted. Only one district hospital (33.3%) at Udaipur district out of the three DHs in three individual districts had AYUSH doctors posted. These findings shows deviation from the recommendations of National Policy on Indian Systems of Medicine & Homoeopathy-2002 [7], that at least one physician from the Indian Systems of Medicine & Homoeopathy (ISM & H) should be available in every primary health care centre. Our study finding also showed departure from strategies of mainstreaming of AYUSH of National Rural Health Mission (NRHM) (2005) [8] of Collocation of AYUSH Doctors and paramedics in all PHCs/CHCs/DHs. In congruence with our findings an evaluation study by Kaveri Gill (2009) [9] of NRHM conducted across four states viz. Andhra Pradesh, Uttar Pradesh, Bihar, Rajasthan found that actual numbers of AYUSH personnel already in place are low across the board of all states. However an appraisal study by NHSRC (National Health Systems Resource Centre) (2009) [10] of state PIPs of 2007-10 revealed that Co-locations seem to be the only activity followed promptly across all states, but with wide variations. Several of the States with strong existing services of AYUSH in the public health services, such as, Gujarat, Rajasthan, Himachal Pradesh, and J&K, have rolled out the recruitment of AYUSH doctors for PHCs and CHCs under the NRHM to a greater degree than others. Similar to our study findings a survey done by Ritu Priya and Shweta A.S (2010) [11] in 18 states revealed that relative to allopathic facilities the total AYUSH services still remain low in most states even after collocation. Nagaland has only 21 co-located institutions, and they are all at the CHC level. Sikkim has co-located AYUSH services at three DHs only. In Tamil Nadu, all DH and sub-district hospitals have collocation, but just over one-third PHCs and a negligible proportion of dispensaries have collocation, so that the overall coverage of AYUSH services still remains well below the Allopathic. The exceptions are Kerala, Tripura and West Bengal, where the AYUSH service

institutions are more in number than the Allopathic. However contrary to our findings Orissa is co-locating in almost 100% PHCs and CHCs, Uttarakhand in all DHs and 50% PHCs and CHCs, J&K in almost all PHCs. In congruence with our study a study conducted by SEDEM (society for economic development and environmental management) (2010) [12] through ministry of health and family welfare in Rajasthan found that in comparison with Allopathic facilities, the number [location and coverage of rural area] of AYUSH facilities is inadequate. Mixed findings i.e. both contrary and similar findings were observed in a study conducted by PEO, Planning commission (2011) [13] for evaluation of NRHM in 37 districts of seven states viz. Uttar Pradesh, Madhya Pradesh, Jharkhand, Orissa, Assam, Jammu and Kashmir and Tamil Nadu. Almost similar to our study findings it was observed that in U.P AYUSH services was very poor and only 38% PHCs was providing the same. However in contrast to our findings in the state of Tamil Nadu only 15% PHCs were providing the same, in M.P 25% PHCs was providing the AYUSH services and in Jharkhand only 10% PHCs were providing the same. In Orissa 75% PHCs were providing the same. AYUSH services were almost satisfactory in J&K and 65% PHCs were providing the same. AYUSH doctors at CHCs are reported to be better in states of Tamil Nadu and Orissa, and none of the CHCs in Uttar Pradesh and Madhya Pradesh has any AYUSH doctor in position. Collocation at DH level seems to working only in Tamil Nadu.

Majority 58 (86.5%) of AYUSH doctors found to be SBA trained also most (65.7%) of the doctors were trained on routine immunization but very few doctors were found to be trained on important national aspect topics like IMNCI four (5.9%), RCH three (4.5%), and RNTCP eight (11.9%). In congruence with our findings an appraisal study by NHSRC (National Health Systems Resource Centre) (2009) [10] of state PIPs of 2007-10 found that majority of AYUSH doctors are being given training in SBA in six states but in contrast to our findings they also observed that AYUSH doctors are also trained on IMNCI in three states. Similar findings with our study a study conducted by Krishna D Rao et al (2010) [5] in state of Chhattisgarh revealed that AYUSH practitioners in government service undergo some training in allopathic medicine, particularly in the control and treatment of diseases covered in the national disease control programs (e.g. TB, malaria, leprosy, and blindness) and vaccinations. In contrast to our study NRHM Manipur report 2011 [14] found that out of the total 88 AYUSH doctors, majority (74) AYUSH

Doctors are trained in IMNCI, only 10 AYUSH Doctors are trained on SBA and 10 AYUSH Doctors are trained on RTI/STI at state level. Supporting our study findings PIP of NRHM Rajasthan 2011-12 [15] reveal that majority of AYUSH doctors are being imparted SBA training to provide obstetric first-aid and to refer the emergency cases to the higher facilities.

Observation of the available facilities for AYUSH revealed that most of the facilities are lacking the board of AYUSH chikitsa Kendra and residential facility for AYUSH doctor. Around 35% of the health facilities were lacking adequate furniture and separate room for AYUSH doctor. These findings shows deviation from strategies of mainstreaming of AYUSH under National Rural Health Mission(NRHM) (2005) [1] according to which norms of IPHS should be maintained for AYUSH faculty at PHCs/ CHCs/ DHs. Similar to our study findings a study conducted by Prof R K Mutatkar and Dr R S Arole (2009) [16] to asses mainstreaming of AYUSH under NRHM in Himachal Pradesh, Madhya Pradesh, Chhattisgarh & Maharashtra found that AYUSH doctors have been most vocal about their marginalized status in Health System due to poor infrastructure by way of poor state of buildings, lack of furniture in dispensaries. In contrast to our findings a survey done by Ritu Priya and Shweta A.S (2010) [11] in 18 states to assess status and role of AYUSH under NRHM reveal that Among the co-located facilities, the District Hospitals had separate space for the AYUSH OPD in all states, the CHCs had separate space only in Orissa, Manipur and Sikkim, and in no state in the PHCs. Signage's were generally not adequate. In congruence with our study a study by J. K. Laxmi (2012) [17] in Andhra Pradesh revealed that numerous doctors describe the premises provided for AYUSH doctors to them as grossly inadequate. Besides space, furniture and equipment are reported to be in short supply in several PHCs.

Majority 46 (>65%) of AYUSH doctors irrespective of the districts utilized the untied fund although received only once, for purchase of furniture and equipments at their health facility. Similarly an evaluation study by Kaveri Gill (2009) [9] of NRHM conducted across four states viz. Andhra Pradesh, Uttar Pradesh, Bihar, Rajasthan found that usage of funds for PHF fell primarily into the following illustrative categories: purchase of electricals; fittings, furniture (beds, chairs); equipment (surgical tools, rubber sheets); emergency drugs; construction; repairs etc. Similarly a study by J. K. Laxmi (2012) [17] in Andhra Pradesh revealed the contingency fund, ostensibly usable for

some equipment, stationery, repairs etc, is not conveyed in a timely manner to all the AYUSH medical officers.

CONCLUSION

This study was planned after seven years of execution of NRHM and the findings have been an eye opener so this leads us to conclude that the dissonance between the stated goals of revitalizing and mainstreaming AYUSH under NRHM and the reality of inequitable implementation is patent. So the collocation coverage of AYUSH need to be enhanced and it needs sound political commitment. Existing infrastructure and facilities of the AYUSH systems ought to be upgraded by the Current improvement in information and technology. Minimum standards of Quality of equipments, supply of drugs, building and conveyance facilities in the AYUSH network need to be maintained at all collocated health facilities.

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Date of Submission: 13/10/2013

Date of Acceptance: 05/11/2013

How to cite this article: Kumar A, Keerti, Sharma CP, Choudhary M, Sharma S, Goyal BK. Assessment of collocation coverage of AYUSH doctors under National Rural Health Mission in Udaipur Division. J Res Med Den Sci 2013;1(2):56-61

Source of Support: None

Conflict of Interest: None Declared