Research Article

Study of knowledge, attitude and practice of AYUSH doctors, evaluation of MHTs working in RBSK and client satisfaction

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ABSTRACT

Background: Rashtriya Bal Swasthya Karyakram (RBSK) is newly launched programme under NRHM, under which screening of 6 month to 18 year children done by AYUSH doctors. The objective was to evaluate the infrastructure and staff available with mobile health teams (MHTs), knowledge, attitude and practice (KAP) of AYUSH doctors regarding 4Ds and client satisfaction for screening done by AYUSH doctors.

Methods: Two blocks from each Indore and Ujjain district were randomly selected and observational check list made according to norms of RBSK was used for assessment of staffing pattern, availability of equipment’s with mobile health team. A pretested questionnaire is used to evaluate KAP of AYUSH doctors and client satisfaction.

Results: According to the norms of Rashtriya Bal Swasthya Karyakram all the mobile health teams were deficient in terms of human resources and equipments. All the doctors under study were graduate in AYURVEDA, most of them were trained for RBSK and having good knowledge regarding the 4Ds, a significant difference was observed in their attitude and practice with regards to referrals and examination of children. Most of the beneficiaries were satisfied with the screening services.

Conclusions: All Mobile Health Teams were deficient in paramedical staff and tool kit for screening where the used tools were replaced only once a year. And there is difference in attitude and practice of MHT doctors.

Keywords: MHT, RBSK, 4Ds

INTRODUCTION

The Rashtriya Bal Swasthya Karyakram (RBSK) or ‘Child Health Screening and Early Intervention Services’ Programme under National Rural Health Mission was launched by the Ministry of Health and Family Welfare in February 2013. It aims at early detection and management of the 4Ds, (Defects at birth, Diseases in children, Deficiency conditions and Developmental Delays) prevalent in children.1 Health screening of children done under the School Health Programme which caters the children in age group of 6-17 years (mainly) while the RBSK screens children from 6month-18 years, thus ensuring early detection and appropriate management of condition in all the age groups. However, further gains can be achieved by early detection and management of conditions in all age groups, henceforth preventing them to progress into more severe and debilitating forms, thereby reducing hospitalization and improved school attendance.2

For screening of children aged 6month to 18 year RBSK provides norms which ensures provision of two mobile health teams (MHT) in each block. Each team comprises of 2 Ayush medical officers, (a male and a female), 1 ANM and 1 pharmacist cum data entry operator.1

Every MHT works in accordance to a microplan provided to them which requires them to inform school and AWCs before their visit. All children identified or suspected of
the any condition among 4Ds are referred to the CHC, DH, DEIC according to their condition.

Since the foundation of this programme is formed by MHTs hence it become essential to find out the training status, knowledge, attitude and practice of the AYUSH doctors regarding various 4Ds, tool kit availability with them, and client satisfaction, hence this study tries to evaluate the same.

METHODS

The study evaluated the infrastructure and staff available with Mobile Health Teams (MHTs), for this two blocks were randomly selected from each Indore and Ujjain districts by lottery method and all the MHTs were chosen from each block for evaluation of implementation of program, two MHTs were working in each block hence total 8 MHTs, and each MHT is comprised of 2 doctors one male and one female, one pharmacist and one nurse, hence ideally 16 doctors, 8 nurses and 8 pharmacist cum computer operator must be available, a pretested questionnaire was used to know the field of specialization, training status, knowledge, attitude and practice of AYUSH doctors working within the MHTs, KAP of MHT doctors in which knowledge question were taken from the resource material of RBSK, attitude and practice questions were framed by keeping the guidelines of programme in mind. An observational checklist is used for tool and equipment’s which taken from RBSK guidelines. Beneficiaries who availed the services and referred in past one year in respective area 5% of beneficiaries were taken, 25 beneficiaries were randomly selected from the area of each MHTs for client satisfaction. Client satisfaction is assessed by a pretested questionnaire. Data is entered in Microsoft excel sheet for analysis and Appropriate test were applied by SPSS version 20 wherever required.

RESULTS

In Indore district, 7 out of 8 (87.5%) doctors were available and 1 was on maternity leave while in Ujjain all doctors were available. Data entry operator was available with 2 MHTs (50%) in Indore, while in Ujjain data entry operator was available with 3 MHTs (75%), and nurse was available with all MHTs of Indore while in Ujjain only with 1 MHT (25%). All MHTs were having vehicle because there was a Memorandum of Understanding with the private transport service provider for providing transport to Mobile Health Teams for their scheduled field visits.

Child Health Screening Card, Mobile Health Team register, Monthly reporting format and Micro-planning format were available in all MHTs under study ear speculum was not available in the kits of 1 MHT (25%) of Indore and 4 MHTs (100%) of Ujjain, Infantometer was not available in the kit of 1 MHT (25%) of both the districts.

Gloves were not available with 3 MHTs (75%) of Indore and 1 MHT (25%) of Ujjain district. Bell was unavailable in the kit of 1 MHT (25%) of Indore district, Infant weighing scale was not available in the kit of 1 MHT (25%) of each district, Bowl and lawn tennis ball were not available in the kits of all 4 MHTs (100%) of Ujjain district.

<table>
<thead>
<tr>
<th>Knowledge about various aspects of 4Ds</th>
<th>Indore</th>
<th>Ujjain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge about various aspects of birth defects</td>
<td>Average score</td>
<td>percentage</td>
</tr>
<tr>
<td>Knowledge about various childhood deficiency disorders</td>
<td>7</td>
<td>100%</td>
</tr>
<tr>
<td>Knowledge regarding common childhood diseases</td>
<td>6.4</td>
<td>91%</td>
</tr>
<tr>
<td>Knowledge about various developmental delays and disability</td>
<td>6.6</td>
<td>94%</td>
</tr>
</tbody>
</table>

In Indore district 71.4% were having 2 years’ experience of working in RBSK, while 1 doctor was untrained as she had recently joined while in Ujjain district 75% were having 2 years’ experience of working in RBSK. The Knowledge Attitude and Practices of medical officers of all Mobile health Team was assessed using a pretested questionnaire which was prepared from RBSK resource material. Average score of MHT doctors of Indore and Ujjain districts 100 and 98% respectively for various aspects of birth defect, for various deficiency disorder doctors of Indore and Ujjain districts scored 91% and 90% respectively, while in common childhood disease average score was 94% and 90% for Indore and Ujjain district respectively and in various developmental delays and disability average score of Indore and Ujjain district was 94% and 95% respectively (Table 1).
Regarding the necessity of microplan in Indore district 3 (42.85%) agreed, 3 (42.85%) were neutral and 1 (14.28%) disagreed with regards to the necessity of microplan, while in Ujjain district 5 (62.5%) doctors agreed, 2 (25%) were of neutral opinion and 1 (12.5%) was disagreed with it. There was a significant difference between the opinions of doctors of Indore and Ujjain district. Effectiveness of microplan for working the opinion of doctors in Indore district 3 (42.85%) agreed, 2 (28.57%) were neutral and 2 (28.57%) disagreed while in Ujjain district 5 (62.5%) agreed 1 (12.5%) was neutral and 2 (25%) disagreed.

<table>
<thead>
<tr>
<th>Attitude</th>
<th>Necessity of micro plan</th>
<th>Working according to microplan is effective</th>
<th>Target for child screening per month interferes with quality of screening</th>
<th>Necessity of informing the school or AWC before the visit</th>
<th>Necessity of arrangement for emergency referral of a child</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Indore (n=7)</td>
<td>Ujjain (n=8)</td>
<td>Indore (n=7)</td>
<td>Ujjain (n=8)</td>
<td>Indore (n=7)</td>
</tr>
<tr>
<td>Strongly agreed</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Agreed</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Neutral</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Disagreed</td>
<td>1</td>
<td>00</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Strongly disagreed</td>
<td>00</td>
<td>1</td>
<td>00</td>
<td>00</td>
<td>00</td>
</tr>
</tbody>
</table>

There was no significant difference between the opinions of doctors of Indore and Ujjain district. Target for screening interferes with quality of screening in Indore district 5 (71.4%) agreed, 1 (14.28%) was neutral and 1 (14.28%) disagreed that the target for child screening interferes with the quality of screening while in Ujjain district 7 (87.5%) agreed and 1 (12.5%) disagreed with it. There was no significant difference between the opinions of doctors of Indore and Ujjain district.

<table>
<thead>
<tr>
<th>Practice</th>
<th>Working according to the micro plan</th>
<th>Washing hands before examining a child</th>
<th>Washing hand after examining the child</th>
<th>Wearing gloves before examining a child with skin disease</th>
<th>Using mask while examining a child with respiratory disease</th>
<th>Maintaining privacy during the examination of adolescent girl</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Indore (n=7)</td>
<td>Ujjain (n=8)</td>
<td>Indore (n=7)</td>
<td>Ujjain (n=8)</td>
<td>Indore (n=7)</td>
<td>Ujjain (n=8)</td>
</tr>
<tr>
<td>Always</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Sometimes</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Never</td>
<td>00</td>
<td>00</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>3</td>
</tr>
</tbody>
</table>

In practice of work according to microplan 57% of doctors always work according to it while 43% sometimes in Indore district while in Ujjain 62.5% were always work according to it while 37.5% were sometimes. Before examining child 43% doctors always wash their hands while 43% sometime wash 14% never wash their hands in Indore while in Ujjain only 25% always wash, 62.5% sometimes and 12.5% never wash.
their hands. After examining child 14.3% of doctors always wash their hands 14.3% sometimes do and 71.4% never do in Indore district while in Ujjain 25% always wash 37.5% sometimes and 37.5% never wash their hands. Using gloves while examining a child with skin disease is practiced always by only 14.3% doctors, sometimes by 28.6% and 57.1% never do so in Indore while in Ujjain 25% always and 37.5% sometimes and 37.5% never do. No doctor always use mask while examining a child with respiratory disease in both the districts. Most of doctors maintain privacy while examining adolescent girl (Table 3).

Beneficiary satisfaction for different facilities provided during screening Out of 200 (100 from each district) In Indore satisfied 75 (75%), 9 (9%) were neutral 16 (16%) dissatisfied.

In Ujjain 70 (70%) satisfied, Neutral were 14 (14%), 16 (16%) dissatisfied. There was no significant difference observed in the satisfaction level of clients for different services provided during screening in both Indore and Ujjain districts.

**DISCUSSION**

In the interviewed Mobile Health Teams the requirement of Medical Officers were fulfilled with AYUSH doctors in both the districts. All the medical officers were graduate in AYURVEDA (BAMS) other stream of AYUSH is missing from the team and most of them were working with Rashtriya Bal Swasthya Karyakram for two years. All of them were trained for RBSK except one. Data entry operator cum pharmacist and nurses were deficient in MHTs under study, in the absence of data entry operator cum pharmacist the doctors were overburdened with work of reporting and data entry. In absence of nurse it’s difficult to facilitate screening of children in orderly manner. Vehicle and Driver were available with all MHTs as there is MOU with the private sector transporter which is their strength.

All Mobile Health Teams were deficient in tools and equipment as per the norms of Rashtriya Bal Swasthya Karyakram as there was no regular replacement of tools and equipments.1 The kit was replaced only once a year. The tools used by MHTs are essential for the screening of children.

The Knowledge Attitude and Practices of medical officers of all Mobile health Team was assessed using a pretested questionnaire which was prepared from RBSK resource material. Scores of MHTs doctors were excellent regarding the knowledge of 4Ds.

A significant difference was observed in attitudes of doctors of Indore and Ujjain regarding the necessity of microplan, all the doctors of both the district were agreeable on regarding the need of arrangement of transport for emergency referral. However there was no separate vehicle for the emergency referral in case of need.

Most of the Mobile Health Team doctors work according to pre decided microplan, few doctors wash their hands before examining the children and very few wash after completing the examination because it depends on availability of soap and water at Anganwadi Kendra and school. Most of the doctors never wear gloves while examining a child with skin disease because only 5 pair of gloves was available in kit and most of doctors never wear mask while examining a child with respiratory disorders because there was no provision of mask in kit. They try to maintain privacy during adolescent girl examination but there is no partition/curtain available for it with the Mobile Health Teams and most of them were aware about checking expiry date of drugs before providing it to the client.

Beneficiary Satisfaction for Different Facilities provided during screening Out Of 200 (100 from each district) most of the beneficiaries were satisfied with the screening services in both the districts.

**CONCLUSION**

The present study tries to analyze the functioning of Rashtriya Bal Swasthya Karyakram via selected Mobile Health Teams working in Indore and Ujjain districts of the Madhya Pradesh state. All mobile health teams were deficient in paramedical staff and tool kit for screening where the used tools were replaced only once a year. Recommendation: Based on the observations made, the following are the recommendations of the present study; The recruitment of drop out and vacant staff posts to be filled at the earliest of mobile health teams and district early intervention centre and timely replacement of the damaged tools of kit of mobile health teams should be done and there should be a provision of fund for each mobile health teams for purchasing tools as per their requirement and job training for new staff and timely refresher training must be conducted for all AYUSH doctors as well as on the field job training must be done. Importance of microplanning must be included in the training sessions and there should be a provision of separate emergency referral for children.

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Conflict of interest: None declared
Ethical approval: The study was approved by the Institutional Ethics Committee

**REFERENCES**


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