Coverage and quality of health condition screening of children under RBSK program in Jalgaon and Nanded districts of Maharashtra

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Executive Summary

The Government of India has introduced several initiatives and programmes over the years to address the country's poor child health and survival status. Till 1977, Child health becomes part of the family planning programme with diarrheal disease control programme introduced. Over a period of time many changes took place in the child health programme and finally in 2013, a nationwide "Rashtriya Bal Suraksha Karyakram" launched under National Health Mission. The programme addresses child health and survival using a Continuum of Care approach, providing health interventions across a child's lifecycle. The programme also aims to provide seamless healthcare services through care at home, community outreach, and at health facilities. The programme follows a multi-pronged approach. The border objectives of the present study are to evaluate the adequacy of the infrastructure under RBSK like manpower, equipment, drugs, consumables, IEC, etc., to understand the views/opinion of the health personnel about the implementation of RBSK and the issues faced by them and identification of gaps in implementation of RBSK. Data collection was done with a semi-structured questionnaire using the Google form. The Google form was shared with all the RBSK team members via email. Univariate and bi-variate techniques were used for data analysis. The findings of the study suggest that deployment of Mobile Health Teams (MHT) was as per stipulated norms, almost all guidelines were being followed in the process of selection of team, i.e., age, qualification etc. Satisfactory representation of socially backward groups was observed. There were 45 and 46 MHT's working in Nanded and Jalgaon district, respectively. In terms of vacancies, a total of 10 positions in Nanded and 14 positions in Jalgaon district were vacant. In both the districts, most of the team members of RBSK were not aware about proper terms of the functioning of the RBSK. There was a huge dissatisfaction among the all team members of RBSK regarding less remuneration and insecurity of the job. They also struggle for their status as per their designation. In the opinion of all team members of RBSK, programme plays a very crucial role in the area of child health care. However, there was a lack of coordination among the all line departments working for the welfare of the children. Major surgeries were not being done at Government facilities. Almost all the members were stated that they were getting medicine and equipment's for the treatment of children. It has also being seen that almost every respondent participated in the study needs refresher training to develop their individual skills and knowledge regarding the effective implementation of the scheme.

Chapter 1

INTRODUCTION

Background

India has the largest number of children in the world. However, child health indicators in India continue to be alarming. A significant number of children die every year due to preventable diseases and infections, with four diseases (respiratory infections, diarrheal diseases, other infectious and parasitic diseases, and malaria) contributing to half of under five deaths in the country (UNICEF, 2011). Further, with estimated 26 million births every year, India's contribution to global child deaths is a significant 20% (UNICEF, 2011), under five child mortality is 1.27 million children per year, of which 81% takes place within one year of age.

The Government of India has introduced several initiatives and programmes over the years to address the country's poor child health and survival status over the years. The Government of India (GoI) recognizes child survival and development as essential for the overall development of the society. Major milestones so far include: launch of the Child Survival and Safe Motherhood Programme (CSSM) in 1992; Reproductive and Child Health Programme Phase I (RCH I) in 1997, followed by RCH II in 2005; the National Rural Health Mission (NRHM) in 2005 which, along with the National Urban Health Mission, became part of the National Health Mission in 2013; the Call to Action for Child Survival and Development, and the subsequent Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCH+A) strategic framework in 2013. The RMNCH+A strategy is based on a continuum-of-care approach and defines integrated packages of services for different stages of life. The programme also aims to provide seamless healthcare services through care at home, community outreach, and at health facilities. Rastriya Bal Swasthya Karyakram (RBSK) is one of the its kind ambitious programme under child health umbrella. The programme follows a multi-pronged approach.

Rashtriya Bal Swasthya Karyakram (RBSK): An overview

Rashtriya Bal Swasthya Karyakram (RBSK) launched on 6th February, 2013 by the Ministry of Health and Family Welfare under the umbrella of National Health Mission to promote child health screening and early intervention services. This is one of the unique initiative in the world aimed at child health screening and early services to provide comprehensive care to all the children in the community intervention against 4Ds (Defects at birth, Development delays

including disability, Diseases and Deficiencies). As per the guidelines of this Programme, screening of children up to 6 weeks of age is conducted initially at delivery points by medical officers, staff nurses, and ANMs, and subsequently at home by ASHAs as part of Home Based New-born Care (HBNC). Screening of children aged 6 weeks to 6 years takes place at Anganwadi centers at least twice a year, and of children aged 6 to 18 years at school once in a year.

Screening for children at Anganwadi centers and schools is conducted by Mobile Health Teams. The Mobile Health Team consists of two AYUSH doctors (one male and one female), one ANM/Staff Nurse and one pharmacist with basic computer skills. Children that have been screened and diagnosed with a health condition are referred to Early Intervention Center's that have been set up at District Hospitals (District Early Intervention Centre's- DEICs) or to other secondary/tertiary facilities wherever DEICs are yet to be set up. These DEICs are the first referral point for further investigation, treatment and management and provide referral linkages to designated secondary/ tertiary health facilities.

Literature review

Evidences from the previous studies

Global Research on Developmental Disabilities Collaborators (2022) highlights the urgent need to prioritise early childhood development for the beneficiaries of global child survival initiatives who have lifelong disabilities, especially in low-income and middle-income countries, as envisioned by the Sustainable Development Goals Agenda. Study suggests that the risk of a child having a disability is at least ten times that of dying before the fifth birthday. Disability also increases the risk of premature death and reduced life expectancy. It has been found that Early Intervention Services is more important for improvement in health status of children (Madhusudhan, et al., 2016).

Challenges/barriers in functioning of RBSK Programme

RBSK Programme has been completed over Eight years, and its provides mix picture of its achievements. For example, a study conducted by Varghese et al., 2015 covering 10 caregivers of children with intellectual disabilities found that these children were forced to live in with a poor quality of life because of cognitive, structural and financial barriers they face in accessing health care. Cognitive barriers include caregivers being unable to identify the complex needs

of their children and poor information on government financial aid. Another study done by George et al., in 2014 with 32 parents of children with developmental disabilities indicated both physician-related and parent-related barriers in dealing with children with developmental disabilities. Physician-related barriers were identified as lack of skills and understanding of children with developmental disabilities, lack of knowledge and resources, lack of specialist back-up services, and communication difficulties with regard to conveying bad news to clients. Parent-related barriers were financial constraints, delay in accepting the diagnosis, and prevalent myths, beliefs and stigma pertaining to disability.

In the recent year, many studies have been done on some aspect of RBSK both on empirical and secondary data set. Which also provides the shortcoming, strength and role of RBSK program in reduction in the infant and child mortality. Some studies have also done from services provider points of view. For example, study conducted by Kumar et al., (2021) in Jodhpur suggests that lesser salary and dual workload for pharmacists were major barriers which along with challenges such as harsh weather conditions, poor terrain, and resistance created by local community hindered the working up to full potential by the Mobile Health Team staff of RBSK. Similarly, another study done by Parmar et al., (2016) asserted that the Mobile team of Rashtriya Bal Swasthya Karyakram were deficient in terms of human resources and equipment's. However, they further added that all the doctors were graduate in AYURVEDA, most of them were trained for RBSK components and having good knowledge about the 4Ds. Though a significant difference was observed in their attitude and practice with regards to referrals and examination of children. But most of the beneficiaries under study were satisfied with the screening services of RBSK. The insufficient staff and lack of knowledge has also been a significant hindrance in RBSK initiative that had been mentioned by previous studies. A study conducted in the Ujjain and Indore found that there was a deficiency of staff and infrastructure in DEIC and lack of proper referral system between Mobile Health Teams (MHTs) and DEICs which were affecting the rendering of services to beneficiaries under the RBSK initiative. Further, beneficiaries were dissatisfied with the Referral services and availability and behaviour of DEIC Staffs (Parmar et al., 2016).

In some of the districts the situation of functioning of RBSK programme is worst. For illustration, Prabhu et al., in 2021, asserted that DEIC of Raipur and Raigarh district were running in the same building of district hospital at both places. In terms of staffing, in DEIC Raipur-Audiologist, Speech therapist, Optometrist, Lab technician posts were vacant, whereas, in DEIC Raigarh – Pediatrician, Psychologist, Optometrist, Lab technician posts were found

vacant at the time of assessment. DEIC Raipur were also lacked few important equipment for physiotherapy.

There is no doubt better implementation of RBSK will ultimately lead to an overall improvement in child health programme as highlighted by Rameshbabu et al. (2019). Though the shortage of infrastructure and human resource, particularly, special manpower like special educator is of major concern of the programme (Rameshbabu et al., 2019; Panigrahy & Swain, 2019). Taboos and superstitions in community, harsh climate, dual workload on pharmacists as data operators, and non-inclusion of AYUSH medicines for AYUSH medical officers (MOs) are also a major challenge in the proper functioning of RBSK programme (Kumar et al., 2021).

Training is critical in understanding of essence of the programme and to provide better and suitable services. Study have found that training of the RBSK programme is not at satisfactory level (Ahmad and Ahmad, 2018). Moreover, Kumar et al., reported that about one third of the staff perceived the training to be sufficient for daily work needs, but needed more session for birth defects and development delays (Kumar et al., 2021)

Illnesses/problems among children

The common illnesses/problems among children identified by various studies varies study to study and setting to setting. For example, Pagolu (2021) found that incidence of birth defects, and genetic diseases were high in Visakhapatnam district. On the other hand, Bafna and Mirgunde (2020) found that Congenital heart disease (CHD) as a major problem among children in his study. Tiwari et al., (2015) in their study found that out of total screened children 21768 children were found to have some disease, 434 children were found to have some kind of deficiency and 113 children were found with development delay including disabilities. Many children are undiagnosed and deprived of treatment for curable diseases. Ahmad and Amhad (2018) found birth defects as a major problem among children.

Knowledge about RBSK programme among community persons

The knowledge about any initiative among the community persons is critical aspect without which no program can achieve its objectives. Several studies have highlighted the mix results about the knowledge and utilization of RBSK services. A studies form North Gujarat found that knowledge regarding the DEIC among the mothers were below satisfactory level in their pilot study and it has had improved after the interventions (Patel & Vaghela, 2021).

Satisfaction received from RBSK

Satisfaction from the services received is the core scale of which depicts to what extent intervention is successful and what are the community expectation from the particular intervention. It will further give an idea how to improve the interventions which fulfil the objective of its. Previous evidence shows the mixed results about the satisfaction of community persons with regards to RBSK initiative. For illustration, Shruti et al., (2021) in their study found that clients were more satisfied with the services provided by the paediatric department and dissatisfied with the counselling and psychology department.

Rationale of the study

Under National Rural Health Mission, School Health Programme was implemented in the State in association with Sarva Shiksha Abhiyan since February 2008, wherein health screening of children in the age group of 6 to 18 years was ensured at all Schools in rural and urban area through 440 teams appointed for this purpose.

With the success of School Health Programme in Maharashtra, Govt. of India, launched Rashtriya Bal Swasthya Karyakram (RBSK) on 6th February 2013 at Palghar block of Thane district. RBSK aims at early detection and management of the '4Ds' (Defects at birth, Diseases in children, Deficiency conditions and Developmental delays including disabilities) prevalent in children. Under RBSK, in Maharashtra, total 1130 teams were proposed in the year 2013-14 among that 1093 teams were established. In Addition to these teams, 37 Ashram school teams were posted in tribal districts for screening of Ashram Schools Students. State Government implemented the Rashtriya Baal Swasthya Karyakram in all 33 Districts 1st April 2013.

As evidence shows RBSK implementation has been quite slow and different states are in a different stages of implementation. Several studies from different point of view have done on RBSK. Some studies' focus was place specific, some has been given focus on barriers and challenges face by benefices and some studies are accessed the finance and infrastructure. In Maharashtra, the programme has been completing decade, but the systematic assessment of the service providers' knowledge, practice and perception has not been done. Hence, the broader aim of the study is to assess the knowledge and views/opinion of the health personnel about the implementation of RBSK and the issues faced by them in the Maharashtra.

Objectives of the study

The major objectives of the study are:

1. To evaluate the adequacy of the infrastructure under RBSK like manpower, equipment, drugs, consumables, IEC, etc.
2. To understand the views/opinion of the health personnel about the implementation of RBSK and the issues faced by them.
3. To identify the gaps in implementation of RBSK, if any and suggest the measures to improve the same.

CHAPTER 2

DATA, METHODS AND PROFILE OF THE SELECTED DISTRICTS

This chapter talks in detail about the data and method used for the study. The chapter further gives a detailed description about the study district. Information about the study area, demographic indicators and gender wise child population of different age group is given in this chapter. In nutshell, Nanded and Jalgaon districts were selected for the purpose of the study. Total 45 and 46 RBSK teams were working in Nanded and Jalgaon districts respectively. Total 356 posts of different discipline are sanctioned, out of this 332 posts are filled. All of them have selected for the study from which 254 respondents participate in the study.

Study area

Jalgaon and Nanded districts of Maharashtra state were selected for the study purpose. The rationale for selecting the districts is that both are of High Priority Districts' of Maharashtra declared by the MoHFW based on composite index of RMNCH+A indicator.

In Jalgaon, the child mortality rate is 6.7 per thousand live birth and Maternal mortality rate is 29 per hundred thousand pregnancies. Also, a total of 46 RBSK teams are currently working in the Jalgaon district therefore, we will get the sufficient information. Moreover, 12.6 per cent of the district population belong to 0-6 years' age group. Females' literacy rate is 62.1 and 10 and 15 percentage of the district population are SC and ST, respectively. During the 2016-17 a total 248411 children have been screened at the Aganwadi center in the district. Moreover, 991 children aged 0-18 years were referred to higher facility for treatment. In the district 2658 ASHAs are in position 2559 ASHAs are posted in Non-tribal area and 98 are posted in tribal area.

Regarding Nanded district, Nanded has a sex ratio of 937 females for every 1000 males, and a literacy rate of 76.94%. 27.19% of the population lived in urban areas. Scheduled Castes and Scheduled Tribes make up 19.05% and 8.38% of the population respectively. The maternal mortality rate is 28 per hundred thousand pregnancies Also, a total of 45 RBSK teams are currently working in the district. A total of 1513 ASHAs are working in the district.

Data collection

Data collection was done with a semi-structured questionnaire. Data for the present study was collected from all the service provider engaged in the RBSK team i.e. ASHA, ANM, MO, pharmacists, etc. using the google form. The period of data collection was 9 days; from 28 March 2022 to 6 April 2022. To fulfil the study objectives, a comprehensive checklist was developed and later the same checklist was converted into **Google Form**. The google form was shared with all the RBSK team members via email. Similarly, the link was shared with the district coordinators via WhatsApp. They further shared it with the respective team members who are having problems accessing the form via email.

A pre-test of the Google Form was done before sending the Google Form to the respective persons for the responses to all the teams in Jalgaon and Nanded districts. Based on the information received from the districts, all the service provider from both the districts were selected for interviewed to fulfil the study objectives.

Statistical analysis

Univariate and bi-variate techniques were used for data analysis. SPSS Statistical software was used for data analysis and tabulation.

Profile of the study districts

About Jalgaon

Jalgaon district is part of the Nashik division (one of the six administrative divisions of the state) of Maharashtra state. As per 2011 Census, the total population of the district is 42,29,917 with male population of 21,97,365and female population of 20,32,552. The district constitutes about 3.76 percent of total population of the state. The district has a population density of 359 inhabitants per square kilometre. Its population growth rate over the decade 2001-2011 was 14.71%. The population by sex shows that males constitute about 51.94 percent and females constitute about 48.05 percent of the total population of the district. Jalgaon has a sex ratio of 925females for every 1000 males.

The child sex ratio in the district is extremely unfavourable to the girl child with 925 female children per 1000 male children in 2011. Further, the child sex ratio in the district declined by

933 in 2001 to 925 in 2011, which is higher than the decline in the state. Sex wise literacy rates shows that it is 74.14 percent for males and 62.12 percent for females with a gap of almost 12 per cent between males and females. Female literacy is much lower than the state average of 75 per cent.

In Jalgaon district, total children's population of 0-18 years are 1520968, which constitute 36.0 % of total district's population. Out of total 0-18 years' population, 54.2% are Male and 45.8% are female in the district. Within male and female population, 37.5% and 34.3% belongs to 0-18 years' age group in the district (**Table 2.1).**

In case of rural area, out of total population about 40% population are in 0-18 years' age group. The proportion of 0-18 years' population constitute 38.5% in male and 35.1% in female in the rural Jalgaon district (**Table 2.2).**

As far as urban Jalgaon is concerned, total 34% of the population belongs to 0-18 years of age group. These proportion constitute 35.3% in male and 32.6% in female **(table 2.3).**

Table 2.1: Distribution of population of 0-18 years by their gender in Jalgaon district, Maharashtra.

Age-group	Total		
	Total	Males (%)	Females (%)
0-4	3,73,060	54.3	45.7
5-9	3,93,448	54.2	45.8
10-14	4,22,723	53.8	46.2
15-18	331737	54.4	45.6
Total	**1520968**	**823730**	**697238**
District Population	**4229917**	2197365	2032552
0-18 years population of total population (in %)	36.0	37.5	34.3

Source: Census 2011

Table 2.2: Distribution of population of 0-18 years by their gender in rural area of Jalgaon district, Maharashtra

Age-group	Total	% of Rural Males	% of Rural Females
0-4	2,64,338	54.3	45.7
5-9	2,75,058	54.1	45.9
10-14	2,96,104	53.8	46.2
15-18	228866	55.1	44.9
Total	**1064366**	**577988**	**486378**
District Population	2887206	1500514	1386692
0-18 years population of total population (in %)	36.9	38.5	35.1

Source: Census 2011

Table 2.3: Distribution of population of 0-18 years by their gender in Urban area of Jalgaon district, Maharashtra

Age-group	Total	% of Urban Males	% of Urban Females
0-4	108722	54.2	45.8
5-9	118390	54.4	45.6
10-14	126619	53.8	46.2
15-18	102871	52.7	47.3
Total	**456602**	**245742**	**210860**
District Population	**1342711**	**696851**	**645860**
0-18 years population of total population (in %)	34.0	35.3	32.6

Source: Census 2011

About Nanded district

Nanded is one of the district of Marathwada regions of Maharashtra and have a predominantly agrarian economy. It comprises of sixteen talukas viz. Mahur, Nanded, Hadgaon, Kinwat, Bhokar, Billoli, Degloor, Mukhed, Kandhar, Himayatnagar, Ardhapur, Mudkhed, Umri, Dharmabad, Naigaon and Loha. Majority of its population is engaged in agricultural activities. Very few industries exist in the district. The existing industries are agriculture based. Majority of its population lives in rural areas. The total literacy rate of Nanded district is 75.45% as compared to 82.34% of Maharashtra in 2011.

As per 2011 Census, the total population of the district is 33,61,292 with male population of 17,30,075 and female population of 16,31,217. The district constitutes about 3 percent of total population of the state. The district has a population density of 319 inhabitants per square kilometre. Its population growth rate over the decade 2001-2011 was 16.7%. The population by sex shows that males constitute about 51. 47 percent and females constitute about 48.52 percent of the total population of the district. Nanded has a sex ratio of 937 females for every 1000 males.

The child sex ratio in the district is 910 female children per 1000 male children in 2011. In 2011 the sex wise literacy rates show that it is 57.33 percent for males and 44.72 percent for females with a gap of almost 12.61 percent between males and females. Female literacy is much lower than the state average of 75 percent.

The total population of 0-18 years is 1335679 in Nanded district which constitute 39.7 % of total district's population. Out of total 0-18 years' population 51.5% are Male and 48.5% are female. Within male and female population, 40.8% and 38.7% belongs to 0-18 years' age group in the district (**Table 2.4).**

In case of rural area, out of total population about 40.1% population are in 0-18 years' age group. The proportion of 0-18 years' population constitute 41.3% in male and 38.9% in females in the rural Nanded district (**Table 2.5).**

As far as urban Nanded is concerned, total 38% of the population belongs to 0-18 years of age group. The proportion constitute 39.4% in male and 38.0% in female population **(table 2.6).**

Table 2.4: **Distribution of population of 0-18 years by their gender in Nanded district, Maharashtra.**

Age-group	**Total**	**Males (%)**	**Females (%)**
0-4	319401	52.28	47.72
5-9	346205	52.13	47.87
10-14	374776	52.32	47.68
15-18	295297	54.74	45.26
Total	**1335679**	705174	630505
District Population	3361292	1730075	1631217
0-18 years population of total population (in %)	39.7	40.8	38.7

Source: Census 2011

Table 2.5: **Distribution of population of 0-18 years by their gender in Rural area Nanded district, Maharashtra.**

Age-group	**Total**	**Males (%)**	**Females (%)**
0-4	237626	52.18	47.82
5-9	254011	51.9	48.1
10-14	275026	52.24	47.76
15-18	215255	55.61	44.39
Total	981918	519185	462733
District Population	2447394	1258160	1189234
0-18 years population of total population (in %)	40.1	41.3	38.9

Source: Census 2011

Table 2.6: **Distribution of population of 0-18 years by their gender in urban area of Nanded district, Maharashtra.**

Age-group	**Total**	**Males (%)**	**Females (%)**
0-4	81775	52.57	47.43
5-9	92194	52.76	47.24
10-14	99750	52.55	47.45
15-18	80042	52.39	47.61
Total	353761	185989	167772
District Population	913898	471915	441983
0-18 years population of total population (in %)	38.7	39.4	38.0

Source: Census, 2011

Table 2.7: **Blocks wise total schools in the Jalgaon and Nanded district, 2011-2012.**

Sr. No	Blocks Jalgaon	Total schools	Nanded Blocks	Total schools
1	Amalner	244	Ardhapur	92
2	Bhadgaon	134	Bhokar	165
3	Bhusawal	193	Biloli	144
4	Bodwad	70	Deglur	219
5	Chalisgaon	310	Dharma bad	73
6	Chopda	233	Hadgaon	245
7	Dharangaon	136	Himayt Nagar	126
8	Erandol	118	Kandahar	297
9	Jalgaon	145+202 Jalgaon Municipal Corp.	Kinwat	380
10	Jamner	272	Loha	279
11	Muktainagar	138	Mahoor	159
12	Pachora	243	Mudkhed	106
13	Parola	184	Mukhed	335
14	Rawer	242	Naigaon	168
15	Yawal	216	Nanded	470
			Nanded MC	15
16	**Total**	**3080**	Umri	113
			Total	**3386**

Source: DISE Portal (District Information System for Education)

The above table 2.7, depicts block wise total schools in the Jalgaon and Nanded district of Maharashtra. Total 3080 schools in Jalgaon and 3386 schools in Nanded district are available. The highest number of schools are available in Amalner block and least in Bodwad block of Jalgaon district. Similarly, in the Nanded district, highest numbers of schools are available in Nanded Block and least in Nanded MC block.

CHAPTER 3

STATUS OF RBSK PROGRAM IN THE STUDY DISTRICTS

Introduction

This chapter talks about the infrastructure is having in both the studied districts i.e. Nanded and Jalgaon. Availability of various health facilities in the districts. Similarly, information is given about the total teams working in each district, total human resource is sanctioned and in place. For this chapter both primary and secondary data has been used. Unfortunately, we did not get child screening data for Jalgaon district, hence no information on this issues is there in this chapter.

Health infrastructure in the study districts

The table (Table 3.1) shows the availability of public health facilities in Jalgaon and Nanded districts. Total 559 and 478 public health facilities are available in the Jalgaon and Nanded districts respectively. In Jalgaon district, total 442 Sub Centres, 95 Primary Health Centres, 19 Community Health Centres and 3 data are available. Similarly, in Nanded district, out of total health facilities, 379 are Sub-Centres, 80 are Primary Health Centres, 13 are Community Health Centres, 4 Sub-District Hospitals and 2 District Hospitals. Further, total 3640 Anganwadi centres in Jalgaon and 483 Anganwadi centres in Nanded are available.

Table 3.2 depicts the details of the teams working in each block of the Nanded and Jalgaon districts. Nanded is having 16 blocks and 45 teams are working in the district. Of which 2 teams each is working in MNC and Nagar Panchayat respectively. One each is working in two different Ashram school.

Similarly, there are 15 blocks in the Jalgaon district and 46 teams are working in the district. Of which, 2 teams are working in two different Ashram schools

Table 3.1: Total No. of Public Facilities in Jalgaon and Nanded Districts

Public Facility	**Jalgaon**	Nanded
SC	442	379
PHC	95	80
CHC	19	13
SDH	3	4
DH	0	2
Total	**559**	**478**
Anganwadi*	3640	3019
Medical College	1	2

Source: Rural Health Statistics, 2019-20; * NHM portal

Table 3.2: Distribution of Number of Teams Per Block in Nanded and Jalgaon Districts

Name of Blocks of Nanded District	Number of teams allotted under RBSK	Name of Block Jalgaon District	Number of teams allotted under RBSK
Nanded	3	Amlmer	2
Ardhapur	2	Bhadgaon	2
Mudkhed	2	Bodwad	1
Bhokar	2	Bhusawal	3
Hadgaon	3	Chopda	4
H.Nagar	2	Chalisgaon	5
Kinwat	4	Dharangaon	2
Mahur	2	Erandole	2
Loha	3	Jalgaon	4
Kandhar	3	Jamner	5
Mukhed	4	Muktainagar	2
Degloor	2	Pachora	3
Biloli	2	Parola	2
Dharmbad	1	Raver	4
Naigaon	3	Yawal	3
Umari	1	Ashram Team Yawal	1
MNC	2	Ashram Dedicated Team Jalgaon	1
NP	2		
Sarkhani Ashram School	1		
Bhodhadi Ashram School	1		
Total	**45**	**Total**	**46**

Table 3.3: Distribution of Number of Teams and Human Resource Sanctioned and Vacant Positions in the Blocks of Nanded District

Name of Block	Number of teams allotted under RBSK	MO (male)		MO (Female)		ANM		Pharmacist		Total Vacancies
		Sanction	Vacant	Sanction	Vacant	Sanction	Vacant	Sanction	Vacant	
Nanded	3	3	0	3	0	3	0	3	0	0
Ardhapur	2	2	0	2	0	2	0	2	0	0
Mudkhed	2	2	0	2	0	2	0	2	0	0
Bhokar	2	2	0	2	0	2	0	2	0	0
Hadgaon	3	3	0	3	0	3	0	3	2	2
H.Nagar	2	2	0	2	0	2	0	2	1	1
Kinwat	4	4	1	4	2	4	0	4	0	3
Mahur	2	2	0	2	0	2	0	2	0	0
Loha	3	3	0	3	0	3	0	3	0	0
Kandhar	3	3	0	3	0	3	0	3	0	0

Mukhed	4	4	2	4	0	4	0	4	0	2
Degloor	2	2	0	2	0	2	0	2	0	0
Biloli	2	2	0	2	0	2	0	2	0	0
Dharmbad	1	1	0	1	0	1	0	1	0	0
Naigaon	3	3	0	3	0	3	0	3	0	0
Umari	1	1	1	1	0	1	0	1	0	1
MNC	2	2	0	2	0	2	0	2	0	0
NP	2	2	0	2	0	2	0	2	0	0
Sarkhani	1	1	0	1	0	1	0	1	0	0
Bhodhadi	1	1	**1**	1	0	1	0	1	0	1
Total	**45**	**45**	**5**	**45**	**2**	**45**	**0**	**45**	**3**	**10**

Source: RBSK District Programme Supervisor, Nanded

Table 3.3 gives the details of the Human Resource sanctioned and available in each block of the Nanded district. Total 180 positions of different disciplines are sanctioned for the district. Of them, 170 are filled and 10 are vacant. Maximum 3 posts are vacant at Kinwat block which it is a *tribal and remote block of the district.*

A total of 45 positions of male medical officers are sanctioned for the district. Of them, 40 are filled and 5 are vacant. Maximum 2 posts are vacant at Kandahar block. Whereas, as per the guidelines of the programme one male and one female medical officer is mandatory in each team. Even then 2 teams of Kandahar block are working without a male medical officer. The vacancy of medical officers definitely hampers the quality of the programme.

In case of female medical staff, total 45 positions of female medical officers are sanctioned for the district. Of them, 43 are filled and 2 are vacant. Both of them are from the Kinwat block of the district. Whereas, as per the guidelines of the programme one male and one female medical officer is mandatory in each team. Even then teams of Kinwat block, both the positions of female medical officers are vacant. The vacancy of medical officers definitely hampers the quality of the programme. The matter of filling up the vacant posts needs to be taken on top priority. Although the posts come under NHM and on a contract basis.

Total 45 ANM posts are sanctioned in district. All the sanctioned posts are filled in district. This is the only post where the guideline is being followed by the district.

In case of Pharmacists, total 45 positions of Pharmacists are sanctioned for the district. Of them, 42 are filled and 3 are vacant. Three teams are working in the Hadgaon block of which only one team is having Pharmacist’s post filled.

Table 3.4: Distribution of Number of Teams and Human Resource Sanctioned and Vacant Positions in the Blocks of Jalgaon District

Name of Block	Number of teams allotted under RBSK	MO (male)		MO (Female)		ANM		Pharmacist		Total Vacancies
		Sanction	Vacant	Sanction	Vacant	Sanction	Vacant	Sanction	Vacant	
Amlmer	2	2	0	2	0	2	0	2	0	**0**
Bhadgaon	2	2	2	2	2	2	0	2	1	**5**
Bodwad	1	1	0	1	0	1	0	1	0	**0**
Bhusawal	3	3	0	3	0	3	0	3	0	**0**
Chopda	4	4	0	4	0	4	0	4	0	**0**
Chalisgao	5	5	2	5	0	1	0	1	0	**2**
Dharangao	2	2	2	2	0	2	0	2	0	**2**
Erandole	2	2	0	2	0	2	0	2	0	**0**
Jalgaon	4	4	0	4	0	4	0	4	0	**0**
Jamner	5	5	2	5	0	5	0	5	0	**2**
Muktainag	2	2	0	2	0	2	0	2	0	**0**
Pachora	3	3	1	3	0	3	0	3	0	**1**
Parola	2	2	0	2	1	2	0	2	0	**1**
Raver	4	4	0	4	0	4	0	4	0	**0**
Yawal	3	3	1	3	0	3	0	3	0	**1**
Ashram	1	1	0	1	0	1	0	1	0	**0**
Ashram	1	1	0	1	0	1	0	1	0	**0**
Total	**46**	**46**	**10**	**46**	**3**	**42**	**0**	**42**	**1**	**14**

Source: RBSK District Programme Supervisor, Jalgaon

Table 3.4 shows the details of the Human Resource sanctioned and available in each block of the Jalgaon district. Total 176 positions of different disciplines are sanctioned for the district. Of them, 162 are filled and 14 are vacant. A maximum 5 of 8, posts are vacant at Bhadgaon block. Two teams are working with less than 50 per cent of manpower in the block of the district.

In case of male medical officer, total 46 positions of male medical officers are sanctioned for the district. Of them, 33 are filled and 13 are vacant. Maximum 5 posts are vacant at Bhadgaon, Dharangaon and Jamner blocks of the district. Whereas, as per the guidelines of the programme one male and one female medical officer is mandatory in each team. Even then teams of Dharangaon and Bhadgaon blocks, both the positions of male medical officers are vacant. The vacancy of medical officers definitely hampers the quality of the programme. The matter of filling up the vacant posts needs to be taken on top priority. Although the posts come under NHM and on a contract basis.

As far as female medical officer is concerned, total of 46 female medical officers post are sanctioned for the district. Of them, 43 are filled and 3 are vacant. 2 posts are sanctioned and both are vacant at Bhadgaon, out of 2 one post is vacant at Parola block of the district. Whereas, as per the guidelines of the programme one male and one female medical officer is mandatory in each team. Even then teams of Bhadgaon and Parola blocks. The vacancy of medical officers definitely hampers the quality of the programme. The matter of filling up the vacant posts needs to be taken on top priority. Although the posts come under NHM and on a contract basis.

Moreover, a total of 42 positions of Pharmacists are sanctioned for the district. Of them, 41 are filled and one post is vacant. One team at Bhadgaon is working without a Pharmacist. Even though just one vacancy is there, it is violating the guidelines of the programme.

Children screening status in Nanded district

A total of 45 RBSK teams are working in the Nanded district which visits Anganwadi centers twice a year and schools once in a year.

Table 3.5 provides the details of visits of RBSK team to Anganwadi centers during 2019-22. The RBSK teams had completed the target of visiting the Anganwadi centers during 2019-20, but during the year 2020-21 and 2021-22 target was not achieved. None of the visit made during 2020-21 and only 48% of the target achieved. When we enquire about the same the state official cited the reason of closing of the school due to COVID-9 pandemic.

Title 3.5: Visits of RBSK team to Anganwadi centers, Nanded 2019-22

Year	1st round Total AW	Visit Screening AW	%	Total Children's AW	Screened Children's	%	2Sd round	Screening children	%	2sd Total children	2sd round checking children	%
2019-2020	3758	3758	100	257708	233457	91.0	3758	3758	100	257708	153589	60.0
2020-2021	3758	0	0.0	257708	0	0.0	3758	3758	100	257708	0	0.0
2021-2022	4099	1948	48.0	290208	115152	40.0	4099	0	0	290208	0	0.0

Source-RBSK team Nanded District

Table further depicts that in the first round, a total of 3758 Aganwadi centres in 2019-20 and 1948 Anganwadi centers were visited by RBSK team in 2021-22. At the same time, a total of 25,7,708 children in 2019-20 and 29,0,208 in 2021-22 were registered in the Aganwadi centres, out of which 91% and 40% children were screened at the Aganwadi respectively.

In the second round of RBSK team visit to Anganwadi centres, of total registered children, a total of 60% of children screened in 2019-20. For 2021-22, no data was provided from the Nanded RBSK team.

Table 3.6: Total targeted school, Number of schools visited by RBSK team, total children in schools and total children screened by RBSK team in Nanded district 2019-22.

Year	Total schools	Visit Screening schools	%	Total Children's In schools	Screened Children's	%
2019-2020	2738	2738	100	412564	383504	93.0
2020-2021	2738	0	0.00	412564	0	0.00
2021-2022	2918	1166	40.0	464874	189811	41.0

Source-RBSK team Nanded District

Table 3.6 depicts that in the first round, a total of 2,738 schools in 2019-20 and 1,166 schools in 2021-22 RBSK teams visited. At the same time, 38,3,504 children in 2019-20 and 18,9,811 in 2021-22 were screened in the schools, constituting 93% and 41%, respectively. Interestingly, no visit was made to schools during 2020-21; this may be due to the closing of the schools owing to the Covid-19 pandemic.

Table 3.7: SAM and MAM children identified by RBSK teams, Nanded, 2019-22

Year	1st round Anganwadi reference childrен	2st round Anganwadi reference childrен	Total school reference childrен	Total SAM childrен	Classification	Remaining children	Total Mam children	Classification	Remaining children
2019-2020	1393	1327	4576	559	332	227	2233	916	1317
2020-2021	0	0	0	0	0	0	0	0	0
2021-2022	583	0	1539	10	2	8	65	32	33

Source-RBSK team Nanded District

The above table 3.7 provides the detail of SAM and MAM children identified by RBSK team during 2019-22. It can be seen from the table that total number of children referred during 1st round from Anganwadi were 1393 and in the 2nd round it was 1327 during 2019-20. Also total

school children referred was 4576 during 2019-20. During the same year total 559 children were identified as SAM and 2233 as MAM. In the year 2020-2021 no visit to Anganwadi centers and schools were made in the district due to covid19 pandemic period. Further, during 2021-22, total 10 SAM and 65 MAM children were identified by RBSK teams in the district.

Table 3.8: total number of surgeries done under RBSK program, Nanded, 2019-22

Year	Heart surgery selected childre n	Comple te heart surgery	Not willing or follow-up	Waitin g for heart surger y	Other surgery listed children	Other surge ry comp leted	Not willin g or follo w-up	Waiti ng for surge ry	Coc hlea r imp lant	Co mpl eted coc hlea r
2019-2020	148	65	79	4	358	226	100	32	0	0
2020-2021	0	0	0	0	0	0	0	0	NA	15
2021-2022	49	38	0	11	64	60	0	4	6	4

Source-RBSK team Nanded District

In the Nanded district, a total of 148 children were selected for heart surgeries in the year 2019-2020, of which a total of 65 surgeries were done, 79 children were not willing or follow up, and 4 children were waiting for heart surgery. During the same year total 358 children were listed for the other surgeries, of which 226 surgeries were done, 100 children were not willing or follow-up and 32 children were waiting for surgery. The impact of lockdown is clearly visible from the table as there were no heart and other surgeries done during 2020-21, except cochlear implant (15).

During 2021-22, a total of 49 children were selected for heart surgery, of which 38 heart surgeries were done and 11 children were waiting for the heat surgeries. During the same year total 64 children were listed for the other surgeries, of which 60 surgeries were done, 4 children were waiting for surgery. Six children were listed for Cochlear implant, of which 4 cochlear implant were done.

Chapter 4

Profile of the study respondents

Introduction

In social research, the profile of the respondents is not only important but essential to explain their attitude, behavior and activities and every individual has an important bearing on it. People belongs to different socio-economic backgrounds are likely to perceive social issues differently, and consequently their behavior will be unique. This chapter gives the information on age, gender, religion, education and experience of the respondents. This chapter basically deals with the primary data. An understanding of the background of respondents is essential for the analysis of the data is collected and presented in the chapters.

Demographic and Socio characteristics of study respondents

Table 4.1 depicts the background characteristics of the respondents who participated in the study. It can be seen from the table that a total of 254 respondents participated in the study; 70 (28.3%) from the Nanded district and 184 (71.7%) from the Jalgaon district.

A majority (56.7%) of the respondents were from the 31-40 years' age group, followed by the 20-30 years' age group (26%) and 41-50 years' age group (16%). 55% of respondents were female, and 44.8% were male. The majority of the respondents were a follower of the Hindu religion (84.3%), followed by Buddhists (7.5%) and Muslim religion (7.1%). Data further reveals that the majority (37.4%) of the respondents were from the Scheduled caste, followed by General caste (27.6%) and Scheduled Tribes (15.4%).

As far as study districts are concerned, in the Nanded district, the majority of the respondents were from the 31-40 years' age group (54.3%), belonged to the female category (54.3%), followers of the Hindu religion (81.4%) and belonged to General caste category (42.9%).

Similarly, in the Jalgaon district, most of the respondents were from the 31-40 age group (57.6%), followed by the 20-30 years' age group (28.8%). Again, female (55.4%) was dominating stage in the Jalgaon district. Most (85.3%) of the respondents belonged to the Hindu religion, followed by the Buddhist religion (7.6%). In the case of caste, 42.9% were from the Scheduled caste, followed by General (21.7%) and ST caste (15.8%).

Table 4.1: Background Characteristics of the respondents of Nanded and Jalgaon districts

Characteristics	Nanded		Jalgaon		Total	
	%	N	%	N	%	N
Age						
20-30	20	14	28.8	53	26.4	67
31-40	54.3	38	57.6	106	56.7	144
41-50	25.7	18	12.5	23	16.1	41
Above 50	0	0	1.1	2	0.8	2
Sex						
Female	54.3	38	55.4	102	55.1	140
Male	45.7	32	44.6	82	44.8	114
Religion						
Buddhist	7.1	5	7.6	14	7.5	19
Hindu	81.4	57	85.3	157	84.3	214
Muslims	10.0	7	5.9	11	7	18
Others	1.4	1	1	2	1.2	3
Caste						
General	42.9	30	21.7	40	27.6	70
OBC	4.3	3	8.7	16	7.5	19
SC	22.9	16	42.9	79	37.4	95
ST	14.3	10	15.8	29	15.4	39
NT	11.4	8	7.1	13	8.3	21
VJNT	4.3	3	3.8	7	3.9	10
Total	**100.0**	**70**	**100.0**	**184**	**100.0**	**254**

Note: Other caste consist of Christian and Jain.

Education qualification and work experience among the respondents in the study districts

Table 4.2 shows the respondents' education qualifications, current job profile and work experience in the study district.

Overall, from the table, it can be seen that 49.2 per cent of respondents possess the qualification of BAMS, followed by the qualification required for the post of ANM (20.5%), D. Pharma (14.8%) and B. Pharma (8.3%). Only 2.8 per cent of the respondents hold master's degrees in the medical field.

In terms of designation, 28 per cent of the respondents were LMO, followed by MO (26.8%) and ANM (20.5%) and Pharmacists (24.4%).

Pertaining to work experience, 44.9 per cent of respondents have put up 7-10 years, and 23.2 per cent of respondents put up more than ten years of their services in RBSK.

As far as study districts are concerned, in the Nanded district, a majority (48.6%) of the respondents possess the qualification of BAMS, followed by the qualification required for the post of ANM (27.1%), D. Pharma (11.4%) and B. Pharma (10.0%). Only one respondent holds a master's degree in the medical field. In terms of designation, 32.9% per cent of the respondents were MO, followed by LMO (30.0%), ANM (21.4%) and Pharmacists (14.3%). Regarding work experience, 51.4 per cent of respondents have put up 7-10 years, and 20 per cent of respondents put up 2-5 years of their services in RBSK. 18.6% of the respondents hold experience of more than ten years.

Similarly, in the Jalgaon district, a majority (49.2%) of the respondents possess the qualification of BAMS, followed by the qualification required for the post of ANM (20.5%), D. Pharma (15.8%) and B. Pharma (7.6%). Only 3.3 per cent of the respondents hold a master's degree in the medical field. In terms of designation, 28.3% of the respondents were Pharmacists, followed by LMO (27.2%), MO (24.5%) and ANM (20.1%).
In the case of work experience, 42.4 per cent of the respondents have put up 7-10 years, and 25 per cent of the respondents put more than ten years of their services in RBSK.

Table 4.2: Education Qualification, designation and working experience of the respondents of Nanded and Jalgaon districts

	Nanded		Jalgaon		Total	
	%	N	%	N	%	N
Education						
BAMS	48.6	34	49.5	91	49.2	125
BAMS with diploma	1.4	1	3.8	7	3.1	8
MD	1.4	1	3.3	6	2.8	7
ANM	27.1	19	17.9	33	20.5	52
D Pharma	11.4	8	15.8	29	14.6	37
B Pharma	10.0	7	7.6	14	8.3	21
M Pharma	0.0	0	2.2	4	1.6	4
Designation						
MO	32.9	23	24.5	45	26.8	68
LMO	30.0	21	27.2	50	28.0	71
ANM	21.4	15	20.1	37	20.5	52
Pharmacist	14.3	10	28.3	52	24.4	62
District programme supervisor	1.4	1	0.0	0	0.4	1
Work experience						

Less than one year	10.0	7	11.4	21	11	28
2-5 years	20.0	14	18.5	34	18.9	48
5-7 years	0.0	0	2.7	5	2	5
7-10 years	51.4	36	42.4	78	44.9	114
more than ten years	18.6	13	25.0	46	23.2	59
Total	**100**	**70**	**100**	**184**	**100**	**254**

Chapter 5

Knowledge and practice among the respondents related to RBSK

Health service providers' knowledge about health programs can significantly impact the program goals and community persons. Health service providers with complete and proper knowledge of health programs can effectively communicate the benefits of the programs to community persons and deliver the program effectively and efficiently. This can increase the uptake of the program and improve the program's ability to achieve its goals. Having great knowledge of health programs among the service provider can enhance patient-provider communication, improve patient understanding of the program, increase community persons' engagement with the program and increase trust and confidence. This can lead to increased engagement with the program, improved patient outcomes, and increased program success.

In contrast, when service providers lack knowledge about a program, it can negatively impact program implementation, effectiveness, patient outcomes, and program uptake. When health service providers lack knowledge about the program, they may not identify patients who would benefit from the program, resulting in poor patient outcomes. This poor identification can lead to missed opportunities for early intervention and treatment. If a service provider lacks knowledge of the program, they may not promote the program to their patients, resulting in low program uptake. This low uptake can limit the program's reach and impact on the targeted population.

In this chapter, an analysis of the studied factors of respondents' knowledge about the RBSK scheme and current practice is in place. The chapter is presented under different tables and figures according to the objectives of the study. Simple frequency distribution has been used for the present chapter.

Below table 5.1 speaks about the knowledge of respondents from which source they came to know about the RBSK programme. A maximum of 40.9 per cent of respondents have replied 'other' as their source of knowledge, but they did not specify it. 35.4 per cent stated Friend, followed by Newspaper (28.7%), Relatives (13.4%), Posters (10.2%) and TV (7.9%) as a source of knowledge about RBSK programme. This shows the different sources from which respondents got information about the RBSK programme.

Table 5.1: - Percentage distribution of respondents by their Source of Knowledge about RBSK programme

Source	%	N
Friends	35.4	90
Newspaper	28.7	73
Relatives	13.4	34
Posters	10.2	26
TV	7.9	20
Pamphlets	7.5	19
Radio/ Through NRHM office/ Civil Hospital Jalgaon/ In Maharashtra in Palghar district 1st RBSK Program was launched/ ANM/ I was working in school health program	5.1	13
Other	40.9	104
Total		**254**

Note: percentage are not 100 due to multiple response.

Table 5.2 depicts the training status of the respondents. The question asked the respondents whether they had received any training after joining the RBSK programme. Out of 254 respondents, 240 replied yes- they have received the training. A majority (95%) of the pharmacists have received training after joining of the RBSK; 94 per cent of LMOs, MOs and ANMs had received training after joining the duties of RBSK. Those who have not received training may be new joining, as there is turnover in Human Resources.

Table 5.2: Percentage distribution of team members who received training under RBSK Programme

	Nanded		Jalgaon		Total	
Designation	**%**	**N**	**%**	**N**	**%**	**N**
ANM	100.0	15	91.9	37	94.2	52
LMO	95.2	21	94.0	50	94.4	71
MO	100.0	23	91.1	45	94.1	68
Pharmacist	90.0	10	92.3	52	95.1	62
Total	**97.1**	**69**	**92.4**	**184**	**94.5**	**253**

Table 5.3 shows the practice of screening of children of 0-3 years. 89.8% of the respondents replied ‘Anganwadi’ as the screening place, followed by Home (27.6%), Sub-center (9.4%) and Schools (2.4%).

Table 5.3: Place of screening of 0-3 years' children under RBSK

Place of Screening	%	N
Anganwadi	89.8	228
Home	27.6	70
Sub Centre	9.4	24
School	2.4	6
Total		254

Note: Percentage are not hundred due to multiple response.

Table 5.4 depicts the practice of screening of children aged 3-6 years. 98% of the respondents stated 'Aganwadi' as a place for the screening of children of 3-6 years of age.

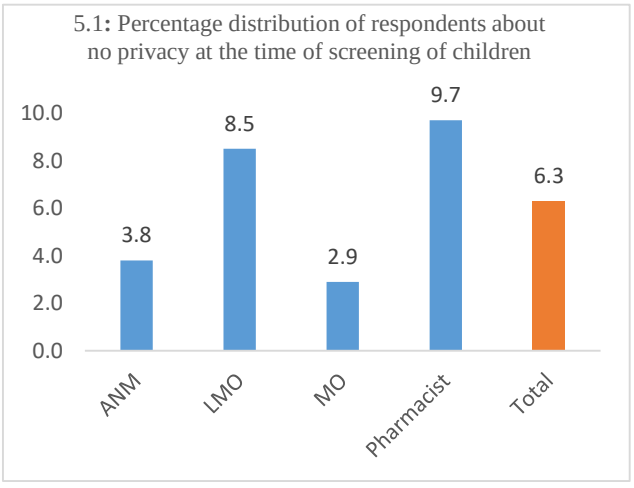
Though it is seen from the data in tables 5.3 and 5.4 that the majority of the respondents replied 'Anganwadi' as a screening place for children. But the team member is using different places i.e. school, sub-centre and home, for child screening as per the requirement.

Table 5.4: Place of screening of 3-6 years' children under RBSK

Place of Screening	%	N
Anganwadi	98.0	249
School	3.1	8
Sub Centre	3.9	10
Total	**100**	**254**

Figure 5.1: - Percentage distribution of respondents about no privacy at the time of screening of children

Figure 5.1 explains whether there is privacy at the time of screening of the children. Altogether 6.3 per cent of respondents stated that there is no privacy at the time of screening of the children. Surprisingly maximum of 9.7 per cent of Pharmacists stated that there is no privacy at the time of examination. Whereas 8.5 per cent LMOs stated no privacy and just



2.9 per cent of male MO stated about non-availability of privacy. This is somewhat indicating that those who examine children are least bothered for privacy at the time of examination.

Table 5.5: Knowledge of respondents about Community-Based Newborn Screening

Designation	Nanded		Jalgaon		Total	
	%	N	%	N	%	N
ANM	93.3	15	94.6	37	94.2	52
Pharmacist	100	10	90.4	52	91.1	62
MO	100	23	84.4	45	89.7	68
LMO	90.5	21	88.0	50	91.9	62
Total	95.7	69	72.4	184	90.6	253

Table 5.5 depicts the knowledge of the respondents about community-based screening. A total of 90.6 per cent of the respondents were aware of community-based screening. In the case of the Nanded district, 95.7 per cent of respondents had knowledge, and in Jalgaon72.4 per cent of respondents had knowledge of the same. Further looking at the total, 94.2 per cent of ANM reported the knowledge of community-based screening, and 89.7 per cent of MO reported the knowledge of community-based screening which was least among all the categories.

Table 5.6 Knowledge about Facility Based Newborn Screening among respondents.

Designation	Nanded		Jalgaon		Total	
	%	N	%	N	%	N
ANM	86.7	15	86.5	37	86.5	52
Pharmacist	90.0	10	92.3	52	91.9	62
MO	100	23	91.1	45	94.1	68
LMO	95.2	21	94.0	50	94.4	71
Total	**92.9**	**69**	**91.3**	**184**	**91.7**	**253**

Table 5.6 explains the knowledge of the respondents about facility-based newborn screening. Of 253 respondents, 233 said they are aware of facility-based newborn screening. A total of 91.7 per cent were aware of facility-based newborn screening. Further, in the case of the Nanded district,92.9 per cent of the respondents were well aware of community-level screening, whereas 91.3 per cent were aware of it in the Jalgaon district. Pertaining to ANM, 86.5 per cent and 86.7 per cent were aware of Jalgaon and Nanded districts, respectively. In the case of Pharmacists, it was 92.3 per cent and 90 per cent in Jalgaon and Nanded, respectively. Together awareness among MOs was 94.1 per cent. But if we go district-wise, then it was 100 per cent in Nanded and 91.1 per cent in Jalgaon. Regarding LMOs, 95.2 per cent of the LMOs in Nanded and 94 per cent in Jalgaon reported knowledge of facility-based

newborn screening. *As the results are showing 92 per cent awareness among the RBSK team. Ideally it should be 100 per cent as this the part of their duty.*

Table 5.7 Knowledge about the Health Worker Conducting Facility Based Newborn Screening among respondents

Designation	%	N
MO	46.5	118
Existing health manpower working at SC/PHC	40.9	104
ANM	39.4	100
GNM	22.8	58
ASHA	20.9	53
RBSK Team	3.5	9
DEIC/NICU	0.4	1
Not answered	8.3	21
Total		**254**

Note: The add-up of the percentage column is more than a hundred due to the multiple responses.

Table 5.7 depicts the knowledge of respondents about the health personnel conducting the facility-based newborn screening. In continuation with table 5.6, out of a total of 254 respondents, 233 have replied that they are knowing about facility-based newborn screening. Further, it has been asked who is conducting facility-based newborn screening; a maximum of 46.5 per cent have replied that MOs are doing it; following this, 40.9 per cent stated that existing staff at PHC and SCs are doing the screening. ***A total of 20.9 percentage of the respondents stated that ASHA is doing a facility-based screening of newborn which is not the correct answer as she is not at all responsible to do so and moreover she is supposed to work in the field only.***

Table 5.8: Knowledge among respondents about team composition of RBSK.

Designation	Nanded		Jalgaon		Total	
	%	N	%	N	%	N
ANM	86.7	15	86.5	37	94.2	52
Pharmacist	90.0	10	92.3	52	91.1	62
MO	100.0	23	91.1	45	89.7	68
LMO	95.2	21	94.0	50	91.9	71
Total	**92.9**	**69**	**91.30**	**184**	**90.6**	**253**

Table 5.8 speaks about the respondents' knowledge about the team composition of the RBSK. From the table, 90.6 per cent of the respondents were aware of the team composition of the RBSK. In the case of the Nanded district, it comes to 92.9 per cent, and in Jalgaon, it was 91.30 per cent. Further, if we go designation-wise, in Nanded, 100% of MOs were aware of the team composition, and in the case of Jalgaon, it was 91.1. Concerning the Nanded district, 95.2 per cent of LMO were aware and 94 per cent from the Jalgaon district. In the case of ANM awareness, it was 86.7 and 86.5 per cent in Nanded and Jalgaon, respectively. Regarding Pharmacists, 90% from Nanded and 92.3% from Jalgaon were aware of team composition.

The data shows that in the Jalgaon district, awareness was less about team composition overall and designation-wise also. So it is recommended that team Jalgaon need some orientation about team composition.

Table 5.9: Respondents' response of team composition of RBSK.

Designation	%	N
MO Male	2.4	6
MO Male, B. MO Female, C. ANM	0.4	1
MO Male, B. MO Female, C. ANM, D. Pharmacist	36.6	93
MO Male, B. MO Female, C. ANM, D. Pharmacist E. Driver	0.8	2
MO Male, B. MO Female, C. ANM, D. Pharmacist, E. Driver	39.4	100
MO Male, B. MO Female, C. ANM, D. Pharmacist, E. Driver, F. ASHA	1.2	3
MO Male, B. MO Female, C. ANM, D. Pharmacist, E. Driver, F. ASHA, G. MPW	6.7	17
MO Male, B. MO Female, C. ANM, E. Driver	0.4	1
MO Male, B. MO Female, C. ANM, F. ASHA	0.4	1
MO Male, B. MO Female, D. Pharmacist	0.4	1
MO Male, C. ANM, D. Pharmacist, E. Driver	0.4	1
MO Male, D. Pharmacist, E. Driver	0.4	1
MO Female	2	5
MO Female, C. ANM, D. Pharmacist	0.4	1
MO Female, C. ANM, D. Pharmacist, E. Driver	0.4	1
MO Female, C. ANM, D. Pharmacist, E. Driver, G. MPW	0.4	1
ANM	2.4	6
ANM, D. Pharmacist, E. Driver	0.4	1
Pharmacist	2.4	6
Driver, G. MPW	0.4	1
Not Answered	2	5
Total	**100**	**254**

Table 5.9 explains the knowledge of the respondent's responses about the team composition of the RBSK. In continuation with the knowledge of the respondents about the team composition. Further, it was asked them to tell the team composition of RBSK. Out of 254 respondents, 249 replied that they were knowing the team composition. But from the data, it was seen that just

36.6 per cent of respondents knew the exact team composition of the RBSK. A total of 63.4 per cent of respondents were not aware of the proper team composition of the RBSK. ***This is somewhat serious that people working on the programme don't know about it. Therefore, it is recommended to give them one refresher training.***

Table 5.10: RBSK team members making home visits to newborns for screening

Designation	Nanded		Jalgaon		Total	
	%	N	%	N	%	N
ANM	33.3	15	94.6	37	76.9	**52**
LMO	33.3	21	94.0	50	76.1	**71**
MO	70.0	23	80.0	45	76.5	**68**
Pharmacist	50.0	10	82.7	52	77.4	**62**
Total	**48.6**	**69**	**87.5**	**184**	**76.8**	**253**

Table 5.10 speaks about the team members visiting the newborn home. Out of 253 respondents, 195 are doing home visits to the newborn for screening. From the data, 76.9 per cent of ANM visited the newborn home to screen the newborn. Looking further into the districts, it was 94.6 per cent in Jalgaon and 33.3 per cent in Nanded, respectively. In total, 76.1 per cent LMOs are doing home visits. In the case of Jalgaon district, it was 94 per cent and 33.3 per cent in Nanded district. A total of 76.5 per cent of MOs are doing home visits; 80 per cent in Jalgaon and 70 per cent in Nanded. In the case of pharmacists, 77.4 per cent are doing home visits; regarding the districts 82.7 per cent in Jalgaon and 50 per cent in Nanded.

Table 5.11: Information for home visits is given by the healthcare providers.

Designation	%	N
ASHA	79.9	203
Anganwadi Worker	77.6	197
ANM	20.5	52
MPW	6.7	17
Total		**254**

Note: As this is multiple choice question percentage is more than hundred

Table 5.11 speaks about the health providers who are giving information to the RBSK team's requirement of a home visit to the newborn. A maximum of 79.7 per cent of respondents stated ASHA's are giving the requirement of home visits to the RBSK team. Further 77.6 per cent stated that Anganwadi worker is giving the information. Although respondents have reported ASHA, Anganwadi workers, ANM and MPW are giving information but the right answer is ASHA. But the answer may be depending on the practices being followed in the field.

Table 5.12: RBSK team members referring children to the higher facility for further treatment

Facility	%	N
DH	69.7	177
DEIC	57.9	147
RH	55.5	141
SDH	44.5	113
PHC	43.3	110
SNCU	27.6	70
Total		254

Note: As this is a multiple choice question, hence percentage is more than hundred

Table 5.12 is giving information about the referral services given by the RBSK team. A maximum of 69.7 per cent of respondents stated that they refer children to DH for further treatment followed by 57.9 per cent refer children to DEIC, 55.5 stated Rural Hospital as referring point, whereas, 44.5 per cent said Sub-district hospital, 43.3 per cent stated PHC and 27.6 said SNCU as a referring point. There are six healthcare facilities listed this may be as per the requirement of the treatment.

Table 5.13: Person accompanying with children for further treatment if Government vehicle provided

Person Accompany	%	N
RBSK Team Member	72.8	185
ASHA	8.3	21
Nobody	3.1	8
Parents	1.2	3
Teacher/ Depends upon situation/relative/ Ashram School Staff/ Anganwadi worker	2.3	6
Not answered	18.9	48
Total		**254**

Note: As this is multiple choice question percentage is more than hundred

Table 5.13 illustrate the details of the persons accompanying the referred child with a government vehicle. A total of 72.8 per cent of the respondents stated that one of the RBSK team members accompany the referred child for further treatment. A total of 3.1 per cent stated that nobody accompanies them, which is somewhat strange. This might be because they have not come across such an incident. 18.9% of the respondents did not answered the question.

Table 5.14: Response of health staff regarding getting sufficient medicine for the treatment of the children

Designation	Nanded		Jalgaon		Total	
	%	N	%	N	%	N
ANM	100	15	81.1	37	86.5	52
Pharmacist	100	10	82.7	52	85.5	62
LMO	100	21	76.0	50	83.1	71
MO	69.6	23	80.0	45	76.5	68
Total	**90.0**	**69**	**79.9**	**184**	**82.7**	**253**

Table 5.14 explains about the sufficient supply of medicine for the treatment of the children. Of the total surveyed health staff, 210 respondents stated they get sufficient medicine to treat the children. A total of 90 per cent of the surveyed health personnel from Nanded and 80 per cent from Jalgaon district reported that they get sufficient medicine for the treatment of their children. 86.5 per cent of the ANM responded that they get sufficient medicine. As far as the district is concerned, 100 per cent ANMs from the Nanded district and 81 per cent of ANMs Jalgaon district responded that they get sufficient medicine for the treatment of children. A total of 85.5 per cent of pharmacists reported that they get sufficient medicine; in Nanded, the percentage is 100 per cent, and in Jalgaon, it is 82.7 per cent. In the case of LMOs, 83.1 per cent stated that they get sufficient medicine; in Nanded, it is 100 per cent and in Jalgaon, it is 76 per cent. Similarly, a total of 76.5 per cent MOs reported that they get sufficient medicine. In Nanded, the percentage is 69.6, and in Jalgaon, it is 80 per cent.

Below table 5.15 depicts the information on whether respondents get essential equipment for the treatment of the children. A total of 96.5 per cent of the respondents stated that they get the essential equipment to treat the children. Regarding the Jalgaon district, 98.9 per cent of respondents reported they get essential equipment, whereas it was 90 per cent in Nanded.

Almost all respondents (3.1%) who reported that they do not get the essential equipment, reported the unavailability of a ***stethoscope and weighing machine which is very instrumental in the assessment of the children health.***

Though the percent of saying non-availability equipment is small and they are not costlier also supplies of the equipment should be done on a priority basis.

Table 5.15: Percent distribution of the respondents getting essential equipment's for the treatment of the children

District	No		Yes		Total	
	%	N	%	N	%	N
Jalgaon	1.1	2	98.9	182	100	184
Nanded	8.6	6	90.0	63	100	69
Total	**3.1**	**8**	**96.5**	**245**	**100**	**253**

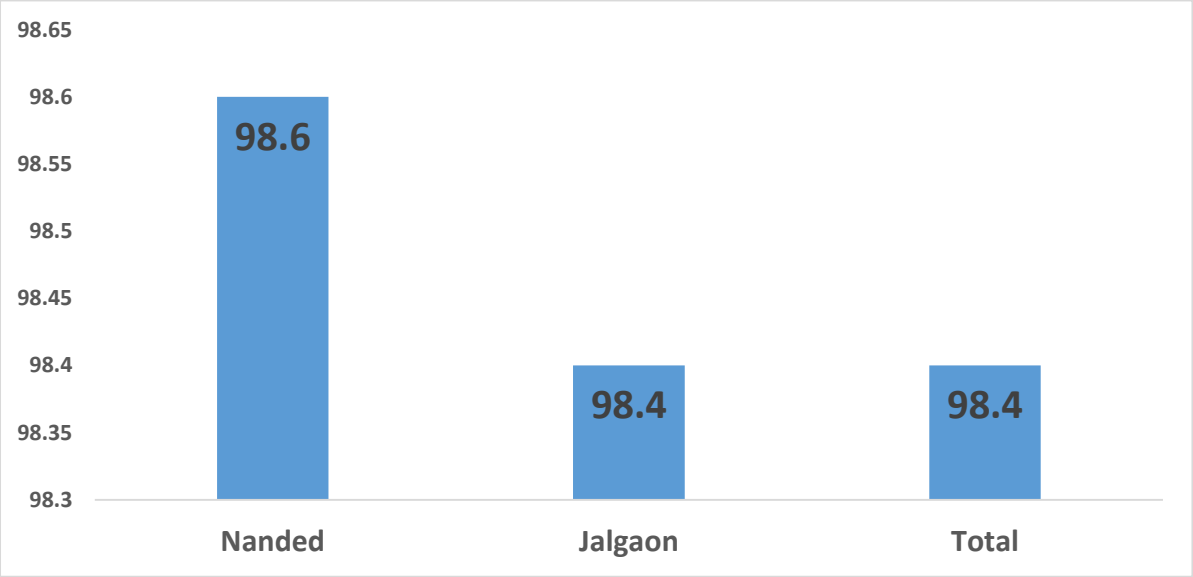
Table 5.17: Health staff knowledge about the availability of DEIC in their districts

Designation	Nanded		Jalgaon		Total	
	%	N	%	N	%	N
ANM	60.0	15	89.2	37	80.8	52
LMO	33.3	21	88.0	50	71.8	71
MO	26.1	23	84.4	45	64.7	68
Pharmacist	60.0	10	86.5	52	83.9	62
Total	**41.4**	**69**	**87.5**	**184**	**74.8**	**253**

Table 5.17 speaks about the awareness among the health staff about the availability of the District Early Intervention Centre (DEIC) in their respective districts. Out of 253 respondents, 190 (74.8%) have replied that there is DEIC in their districts.

From the table, it is seen that 87.5 per cent of respondents from Jalgaon and 41.4 per cent of the respondent from Nanded district had replied about the availability of DEIC in their respective district. However, there is no functional DEIC in the Nanded district; it is under construction. It is a somewhat serious issue. As they are working for the RBSK programme, DEIC is an integral part of the programme. Not only the personnel working in the RBSK but everyone working in child health must know about the DEIC.

Figure 5.2: Respondents knowledge about Mahatma Jyotiba Phule Jan Arogya Yojana (MJPJAY)



5.18: Knowledge of Mahatma Jyotiba Phule Jan Arogya Yojana (MJPJAY) among respondents

Designation	Nanded		Jalgaon		Total	
		N		N		N
ANM	93.3	15	94.6	35	94.2	52
LMO	100	21	98.0	50	98.6	71
MO	100	23	100	45	100	68
Pharmacist	100.	10	100	52	100	62
Total	**98.6**	**69**	**98.4**	**184**	**98.4**	**253**

Table 5.18 explains about the knowledge of respondents about MJPJAY. The table shows that 98.4 per cent of respondents of Jalgaon and 98.6 per cent of respondents of Nanded district have knowledge of MJPJAY schemes.

Moreover, apart from the awareness regarding MJPJAY, surveyed health personnel have been asked about gaps between MJPJAY and RBSK. They stated that there is a gap in communication and coordination. They replied that the documentation process should be easier for RBSK patients, all students should be covered under MJPJAY, lack of awareness in the community about the scheme, and a list of hospitals under MJPJAY should be provided to the RBSK team. Some surgeries are not included in MPJAY and are also difficult at DH. All the listed surgeries of RBSK need to be included under MJPJAY.

Figure 5.3: Percentage Distribution knowledge of respondents about the Linkage Between RBSK and MJPJAY

Figure 5.3 explains the knowledge of respondents about the linkage between RBSK and MJPJAY. 88.2 % of the respondents from both districts think that there is a linkage between both programmes.

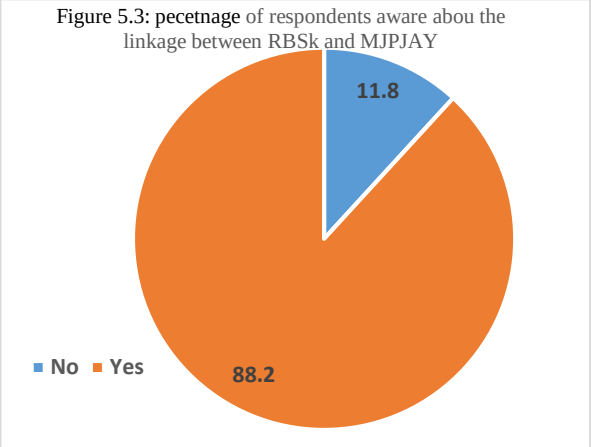
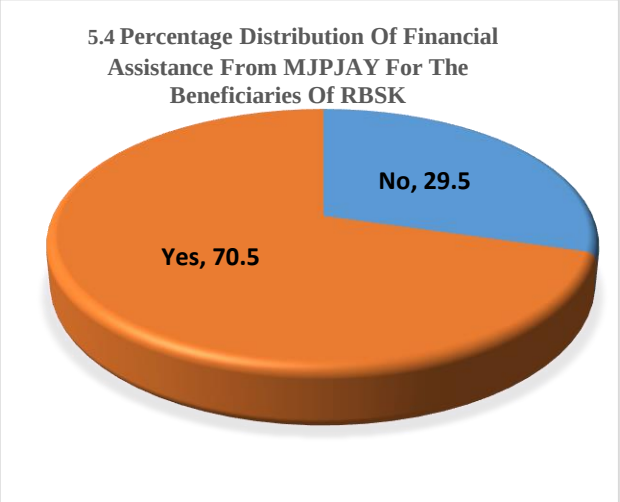


Figure 5.4: Percentage Distribution of Financial Assistance from MJPJAY for the Beneficiaries of RBSK

Figure 5.4 depicts the financial assistance from MJPJAY to RBSK beneficiaries. About 70.5 per cent of the respondents said yes that there is financial assistance for RBSK beneficiaries. Whereas, 29.5 of respondents replied that there is no financial assistance from MJPJAY to RBSK.



Besides closed ended, an open-ended question was asked to the respondents about the financial provision for the treatment of the children if any defect detected. Most of the respondents replied provision is made from the RBSK funds, as per government norms, referring children to existing health facilities, referred to DEIC and DH. Besides this there is provision under NHM for referrals.

Table 5.19: RBSK team members facing difficulty in getting assistance from health facilities

Designation	Nanded		Jalgaon		Total	
		N		N		N
ANM	40.0	15	43.2	37	42.3	52
LMO	33.3	21	28.0	50	29.6	71
MO	17.4	23	22.2	45	20.6	68
Pharmacist	30.0	10	19.2	52	21.0	62
Total	**28.6**	**69**	**27.2**	**184**	**27.6**	**253**

Table 5.19 explains whether RBSK teams are facing difficulty in getting assistance from the health facilities in the periphery. Total 27.6 per cent of respondents stated that they face difficulties in getting assistance from health facilities. Among the respondents' categories, 42.3 per cent of ANM reported that they faced difficulties in getting assistance from health facilities, followed by LMOs (29.3%), Pharmacists (21%) and MOs (20.6%).

The percentage of getting difficulties is quite high. Therefore, it is recommended to find out the root cause of the problem further investigation is needed to be done also needs to find out the type of difficulties and their solutions.

Table 5.20: RBSK team sharing Advance Tour Programme (ATP) with health personnel in the field

Designation	%	N
Medical officer, PHC	82.3	209
Anganwadi Worker	74.0	188
ANM	37.8	96
ASHA	34.6	88
MPW	18.5	47
Total		**254**

Note: As this is multiple choice question percentage is more than hundred

Table 5.20 depicts the RBSK team sharing information about their advance tour programme with staff working in the field and associated with the RBSK programme. 82.3 per cent of the surveyed health personnel stated that they share ATP with the Medical Officer of the Primary Health Centre. 74 per cent of Heath staff replied they share their ATP with Anganwadi workers, 37.8 per cent reported that they share it with ANM, and 34.6 per cent responded that they share the ATP with ASHAs.

Here researcher feels that ASHA is the first port of call in the village; and under HBNC she is having very close contact with the newborn babies in the field. Therefore, she must be informed about ATP of the RBSK team.

Table 5.21 (a): RBSK team member who are engaged in duties other than RBSK duties

Designation	Nanded		Jalgaon		Total	
	%	N	%	N	%	N
ANM	73.3	15	62.2	37	65.4	**52**
LMO	52.4	21	46.0	50	47.9	**71**
MO	78.3	23	60.0	45	66.2	**68**
Pharmacist	70.0	10	73.1	52	72.6	**62**
Total	**67.1**	**69**	**60.3**	**184**	**62.2**	**253**

Table 5.21 (a) depicts the RBSK team engaged in duties other than the RBSK work. Out of 253 respondents, 158 have replied that they are engaged in duties other than RBSK. Altogether 62.2 per cent of the respondents stated that they are given duties other than RBSK. From the table, it is seen in Jalgaon, 60.3% of respondents stated that they are engaged in duties other than RBSK duties. Similarly, 67.1% of respondents from Nanded district said that they are engaged in other duties than RBSK duties.

Table further shows that 72.6 % Pharmacists stated that they are given other duties, followed by MOs (66.2%), ANMs (65.4%) and LMOs (47.9%). So, here Pharmacists is the most vulnerable cadre.

During March 2020 to almost up to June 2021 RBSK MO's were deputed for COVID-19 duties. Further the non-functioning of schools and Anganwadi's, RBSK teams could not visits to the schools and Anganwadi's.

The researcher's observation is that the present health system is having a lot of vacancies in all cadres. This is one of the reasons for giving additional duties other than RBSK and the figures are self-explaining that due to other workloads RBSK teams may be not able to perform their duties to the fullest extent. Therefore, we recommend that the staff should not be engaged in other work than their assigned work. As this leads to low performance in their main activity.

Table 5.21 (b): Percentage distribution of Team members of RBSK who are engaged in duties other than RBSK duties

Duties other than RBSK	%	N
Conducting OPD	67.1	106
Any work not related to RBSK	32.9	52
Total	**100**	**158**

Table 5.21 (b), in continuation of table 21 (a), further researcher depicts the duties of the RBSK staff other than RBSK work. Of 254 respondents, 158 replied that they had been given duties other than RBSK work. Of these 158 respondents, 67.1 per cent have stated that they conduct OPD as an additional duty, and 32.9 stated that they do any other work unrelated to RBSK.

Chapter 6

Results from the telephonic interview from the Beneficiaries' household

In order to get an idea about the out of pocket expenditure and experiences of community persons about RBSK some telephonic interview have been done. We collected the RBSK beneficiaries list from the district RBSK authority with their details information. The list of school health programs targeted and Anganwadi centres covered in the district were received from the Nanded district. Nanded district officials had supplied the list of 220 beneficiaries; out of that 20 beneficiaries were selected thorough systematic random sampling method for telephonic interview. Due to the nonresponse of 5 selected beneficiaries, total 15 telephonic interview were done. The time duration for telephonic interviews were 25th April to 29th April 2022. The result of the telephonic interviews is given below.

Table 6.1: Summary of telephonic interviews, Nanded district

Sr. no.	Type of Problem	Age of the patient	Nature of treatment	Total expenditure	Expenditure on treatment	Expenditure on	Current state of patients	Satisfied/ Unsatisfied
1	Kidney Problem	28 months	Surgery	7200	Free	Medical test and blood test	Gradually recovering	Unsatisfied
2	Heart problem	4 years	Surgery	4000	Free	Accommodation and food	Good	Satisfied
3	Heart problem	4 years	Surgery	1500	Free	Medicine	Good	Satisfied
4	Heart problem	7 years	Surgery	5000	Free	Lunch and dinner	Good	Satisfied
5	Heart problem	-	Surgery	1500	Free	Return travel	Good	Satisfied
6	Head	14 years	Surgery	Free	Free	None	Good	Satisfied
7	Cyst on forehead	9 years	OPD	Free	Free	None	Good	Satisfied
8	Leg problem	10 Years	Leg Surgery	Free	Free	None	Good	Satisfied
9	Cyst on forehead	9 years	OPD	Free	Free	None	Good	Satisfied
10	Heart problem	11 years	Heart Surgery	Free	Free	None	Good	Satisfied
11	Heart problem	5 years	Heart Surgery	Free	Free	None	Good	Satisfied
12	Urine problem	3.5 years	Treatment done at private hospital	25000	-	-	Good	-

The details of telephonic interviews are as follows:

1. A telephonic interview was conducted in the **Nanded** district with the father of one of the beneficiary aged 28 months who had a kidney problem 9 months ago. The respondent told that Aurangabad Hospital did not give any information about the RBSK and its benefits. Even Anganwadi workers and ASHA told that child was having only a malnutrition problem. When the child's situation gradually deteriorated day by day, we ourselves took the children to Aurangabad Hospital for a cure. In the beginning, we were told to pay 75,000 for treatment by the hospital staff, however, later they enquired about the "Kesari Ration Card" to provide the "Mahatma Jotiba Fule Scheme" benefits. The respondent replied that as they possessed the "Kesari Ration Card" therefore, most of the treatments were free of cost. However, they had to spend INR 4,000 on medical tests and INR 3200 on blood tests. At the time of the interview respondent reported that the growth of the child is very slow and the weight of the child is only 9 kg. There are no health check-ups had happened in the last 6 six months due to the COVID-19 pandemic as per the respondent statement.
2. One of the respondents (Uncle of the beneficiary) from Kinvatinwat Block of Nanded district replied in telephonic interview that his child had a heart problem. The age of the child was 4 years. He told after knowing the problem Aganwadi centre immediately took the check-up of the child and then the RBSK team referred the child to the Nanded District Hospital. After some medication the District hospital referred the child to Wardha Hospital for heart surgery as there was no advanced level medical facility available in the district hospital as per the respondent. In Wardha Hospital, though the Heart surgery of the child was done free of cost, but family had to spend INR 4000 for on their accommodation and fooding. He further replied, after the treatment child recovered very fast and now doing well. He further praised the RBSK program by adding that because of the RBSK program child got the treatment, else they were not in that position to go for the treatment due to the hard financial problem. He further added that RBSK is a good program for needy people.

3. Another respondent from ISLAPUR village of Kinwat block told that his son aged 4 years had Hernia problem. RBSK team organized a health camp were hernia surgery was done free of cost. But there was a shortage of some medicine, hence we had to spent Rs. 1500 for medicine. He also suggested that there should be provision of all type of surgeries under RBSK at the local level.

4. The same type of response we received from the Degloor village of Degloor block, in which, the mother of the 7 years old patient replied that RBSK team checked her girl and referred to district hospital surgery. But due to unavailability of equipment at district hospital, district hospital referred the girl to Vinoba Bhave Hospital Wardha for heart surgery. The surgery and transportation facility was free of totality free of cost. However, they had to spent Rs. 5000 for their lunch and dinner in Wardha.

5. A father of beneficiary who went through the heart surgery from Ajani village of Biloli block told that his son was checked by the RBSK team and referred to district hospital Nanded. After some treatment there, district hospital referred his son to Wardha hospital for heart surgery. In the Wardha hospital, surgery was done free of cost but they spent about Rs. 1500 for return travel to their home. Now the son is fine. They were satisfied with the benefits received from RBSK Scheme.

6. A father of 14 years old beneficiary from Balapur village of Dharmabad block told that his son had some problem in head. He received the information from a health worker about a one day health camp at the RH Dharmabad. They visited that camp at RH where the head surgery of his some was done free of cost. As per his statement "Treatment was free of cost, we are satisfied with the operation. Now my son's growth is good; he doesn't know of the RBSK program.

7. A mother of beneficiary (9 years old gilrl) from the Golegaon village of Umri block told that her girl was suffering from the cyst on forehead problem. The RBSK team checked the girl and referred to RH Bhokar for treatment. She got all the treatment from there free of cost and received all the information. Now she is well.

8. Another respondent from the Niaigaon block who was a mother of the patient (10 years old girl) replied that her girl was suffering from the leg problem. Asha worker informed her about the health camp being organised by local MLA at Naigaon hospital and advised her to visit Naigaon hospital. In that camp, the leg surgery of the girl was done free of cost. Now, she is fine. Though she doesn't Know RBSK Scheme.

9. A mother of 9 years old beneficiary from Golegaon village of Umri block told that her girl was suffering from cyst on forehead. RBSK team checked her girl and refer to RH Bhokar for treatment. She got the treatment free of cost. Now she is well.

10. Similarly, a mother of 11 years old beneficiary from Loha block replied that her child was suffering from heart problem. The RBSk team checked the girl and refer to a panelled hospital lotus in Nanded city. This facility completed the health check-ups and then referred to Vinoba Bhave Hospital Wardha for heart surgery. RBSK scheme provided travel facility from Nanded to Warda free of cost and all treatments were free of cost. Now, this girl is studying in school. Parents will be visiting the hospital next month at Nanded for a health check-up. The beneficiaries mother was aware of the RBSK scheme.

11. A telephonic interview was conducted with the father of the beneficiaries from the Khairgaon village of Naigaon block. His 5 years old girl had hole in heart. The Anganwadi worker suggested attending the health camp for Girls' illnesses. He said that they visited the health camp and heart surgery was completed in Nanded. Now the girl has speech and hearing problems, for that parent will visit the DIEC in few days.

12. One of the respondents (Uncle of the beneficiary) from Malkautha village of Mudkhed block responded that his child aged 3.5 years had a urine problem. RBSK team checked the child and informed Anganwadi teacher. However, we took the child to a private hospital for treatment. We spent about Rs. 25,000 on his treatment. We did not take any benefit of the RBSK scheme because we had feared of illness of our son.

Conclusion

Based on the result of the telephonic interview, in conclusion, we can say that most RBSK program is catalyst in the treatment of 4 D's. The out of pocket expenditure on treatment of the diseases/ problem is almost nil, whatever expenditure have happened was on travel, accommodations and on food. Though two of the respondents reported expenditures on medical tests and medicines. Almost all of the caretaker/guardian of the beneficiaries are satisfied with the benefits received from the RBSK programme

CHAPTER 7

SUMMARY, CONCLUSION AND POLICY RECOMMENDATIONS

Summary

The major findings of the study are presented in this chapter, based on the analyses and interpretations. Findings have been presented after studying various factors related to RBSK in providing health care services to the children in the age group of 0 to 18 years, by visiting Anganwadi centers and Schools under NHM. In terms of profile of the districts, Nanded is having 16 blocks and 45 teams are working in the district. Of which 2 teams, each is working in MNC and Nagar Panchayat respectively. One each is working in two different Ashram schools. There are 15 blocks in the Jalgaon district and 46 teams are working in the district. Of which, 2 teams are working in two different Ashram schools

Human resource

Human Resources Sanctioned n the Blocks of Nanded District

- Total 180 positions of different disciplines are sanctioned for the district of **Nanded**. Of them, 170 are filled and 10 are vacant. Three posts are vacant at Kinwat block which it is a **tribal and remote block of the district**.
- A total of 45 positions of male medical officers are sanctioned for the district. Of them, 40 are filled and 5 are vacant. Maximum 2 posts are vacant at Kandahar block. Whereas, as per the guidelines of the programme one male and one female medical officer is mandatory in each team. ***Even then 2 teams of Kandahar block are working without a male medical officer. The vacancy of medical officers definitely hampers the quality of the programme.***
- Total 45 positions of female medical officers are sanctioned for the district. Of them, 43 are filled and 2 are vacant. Both of them are from the Kinwat block of the district. Whereas, as per the guidelines of the programme one male and one female medical officer is mandatory in each team. ***Even then teams of Kinwat block, both the positions of female medical officers are vacant. The vacancy of medical officers definitely hampers the quality of the programme. The matter of filling up the vacant posts needs to be taken on top priority. Although the posts come under NHM and on a contract basis.***

- Total of 45 ANM posts are sanctioned in Nanded district. All the sanctioned posts are filled in district. This is the only post where the guideline is being followed by the district.
- Total 45 positions of Pharmacists are sanctioned for the district. Of them, 42 are filled and 3 are vacant. ***Three teams are working in the Hadgaon block of which only one team is having Pharmacist's post filled.***

Human Resources Sanctioned in the Blocks of Jalgaon District

- Total 176 positions of different disciplines are sanctioned for the district. Of them, 162 are filled and 14 are vacant. A maximum 5 of 8, posts are vacant at Bhadgaon block. Two teams are working with less than 50 per cent of manpower in the block of the district.
- Total 46 positions of male medical officers are sanctioned for the district. Of them, 33 are filled and 13 are vacant. Maximum 5 posts are vacant at Bhadgaon, Dharangaon and Jamner blocks of the district. The teams of Dharangaon and Bhadgaon blocks, both the positions of male medical officers are vacant. The vacancy of medical officers definitely hampers the quality of the programme. The matter of filling up the vacant posts needs to be taken on top priority. Although the posts come under NHM and on a contract basis.
- Total of 46 female medical officers are sanctioned for the district. Of them, 43 are filled and 3 are vacant. 2 posts are sanctioned and both are vacant at Bhadgaon, out of 2 one post is vacant at Parola block of the district. The teams of Bhadgaon and Parola blocks.
- Total of 42 positions of Pharmacists are sanctioned for the district. Of them, 41 are filled and 1 is vacant. One team at Bhadgaon is working without a Pharmacist. Even though just one vacancy is there, it is violating the guidelines of the programme.

Participation of Respondents in the study by Districts

- From both, the district 254 respondents fill out a google form. Total 71.7 percent respondents from Jalgaon took part and 28.3 percent of respondents are from the Nanded district. As the participation is voluntary there is no obligation on the RBSK team members to be a part of the study.
- In terms of designation maximum of 28 percent LMO's have participated in the study, following this 26.8 percent male MO. A total of 24.4 percent Pharmacists and 20.5 percent of ANM are participated in the study.
- Further pertaining to the experience 44.9 percent respondents have put up 7-10 years and 23.2 percent respondents put up more than 10years of their services in RBSK.

Profile of the surveyed health personals

- Total 254 members of the RBSK participated in the study.
- Maximum of 56.7 per cent of respondents are from the age group of 31 to 40 years of age and most of them were female.
- Most of the respondents were Lady Medical officers (28%) followed by Male Medical Officers (26.8%), Pharmacist (24.4%) and ANM (20.5%).
- Total 95 per cent of pharmacists, 94 per cent of LMOs, MOs and ANMs have received training after joining the duties of RBSK. Those who have not received training may be a new joining, as there is turnover in the HR.
- Total 76.9 per cent of ANM does home visits for the screening of new born. Total 76.1 per cent of LMOs, 76.5 per cent of MOs and 77.4 per cent of Pharmacists do home visits.

Reasons given by those who don't do home visits

- Children of 0 to 6 age group coming in Anganwadi. Aganwadi Sevika and ASHA does home visits. Parents bring children at Anganwadi at the time of check-up. ASHA & Anganwadi workers do home visits regularly to newborn, they present their reports regularly to the corresponding PHC or Sub Centre.
- RBSK team does not having time for home visits. As 1 RBSK team covers 103 Anganwadi's and 75 schools and 55 villages.

Knowledge and practice

Knowledge among surveyed health persons RBSK process

- As the results are showing 91 per cent awareness among the RBSK team. Ideally it should be 100 percent as this the part of their duty.
- A total of 70.9 percent of the respondents given answer that ASHA is doing a community-based screening of newborn is the correct answer. But 30 percent of the respondents are given wrong answer. Therefore, it is recommended to have one refresher training of the team of RBSK to orient the responsibilities of each stakeholder.
- As the results are showing 91 percent awareness among the RBSK team. Ideally it should be 100 percent as this the part of their duty.
- A total of 20.9 percentage of the respondents stated that ASHA is doing a facility-based screening of newborn is not the correct answer as she is not at all responsible to do so and moreover she is supposed to work in the field only. Therefore, it is recommended to have

one refresher training of the team of RBSK to orient the responsibilities of each stakeholder.

- Just 36.6 percent of respondents are knowing the exact team composition of the RBSK. A total of 63.4 percent of respondents are not aware of the proper team composition of the RBSK. ***This is somewhat serious that people working on the programme don't know about it. Therefore, it is recommended that one refresher training is needed.***

Respondent's knowledge about the availability of DEIC in their districts

- 87.5 percent of respondents replied about the availability of DEIC in Jalgaon. There is no functional DEIC in Nanded district, still 41.4% of the respondent reported about the availability of DEIC in the district.
- This somewhat serious issue. As they are working for the RBSK programme and DEIC is the part of the programme. Not only the personnel working in the RBSK but everyone working in child health must have the knowledge of DEIC.

Sufficient supply of medicine and equipment for the treatment of the children

- Total 90 per cent from Nanded and 80 percent from Jalgaon district are getting sufficient medicine for the treatment of the children.
- A total of 96.5 percent of the respondents stated that they are getting essential equipment for the treatment of the children.

Knowledge of Mahatma Jyotiba Phule Jan Arogya Yojana (MJPJAY)

- Altogether 98.4 percent are well aware of MJPJAY, 98.4 percent of respondents of Jalgaon district is having knowledge of MJPJAY and 98.6 percent are having knowledge of MIPJAY schemes from the Nanded district.
- Total 88.2% of respondents from both the districts are thinks that there is a linkage between RBSK and MJPJAY**.**

Gap in MJPJAY and RBSK

- Respondents stated that there is a gap in communication and coordination.
- The documentation process should be easier for RBSK patients.
- All students should be covered under MJPJAY.
- Lack of awareness in the community about the scheme.

- A list of hospitals under MJPJAY should be provided to the RBSK team. Some surgeries are not included in MPJAY and are also difficult at DH.
- All the listed surgeries of RBSK need to be included under MJPJAY.

Financial provision

- Most of the respondents stated that provision is made from the RBSK funds as per the government norms; Referring children to existing health facilities, for refer to DEIC and DH. Besides this, there is a provision under NHM for referrals. Availability of essential equipment for the screening of the children.

Difficultied in getting assistance from health facilities

- Altogether 27.6 percent of respondents stated that they are facing difficulty in getting assistance from the health facilities
- The percentage of getting difficulty is quite high. Therefore, it is recommended to find out the root cause of the problem further investigation is needed to be done also needs to find out the type of difficulties and their solutions.

RBSK team engaged in duties other than RBSK duties

- Altogether 62.2 percent of the respondents stated that they are given duties other than RBSK. in Jalgaon 60.3% respondents stated that they are engaged in other duties than RBSK duties, similarly, 67.1% respondents from Nanded are saying that they are engaged in other duties than RBSK duties.
- Data shows that 72.6 Pharmacists stated that they are given other duties. Following MOs, ANMs and LMOs. So, here Pharmacists is the most vulnerable cadre.
- During March 2020 to almost up to June 2021 RBSK Mo's were deputed for COVID-19 duties. Further the non-functioning of schools and Anganwadi's, RBSK teams could not visits to the schools and Anganwadi's.
- ***The researcher's observation is that the present health system is having a lot of vacancies in all cadres. This is one of the reasons for giving additional duties other than RBSK and the figures are self-explaining that due to other workloads RBSK teams may be not able to perform their duties to the fullest extent. Therefore, we recommend that the staff should not be engaged in other work than their assigned work. As this leads to low performance in their main activity.***

- Block Education officer giving target of school visits and Child Development Project Officer is giving target of Anganwadi visits. Two criteria are being used for deciding the targets. One is on the basis of total enroll children in schools /Anganwadi and the second criteria is the area covered by PHC and by beat.
- According to the annual action plan has been made to check 200 students of school and 125 to 150 anganwadi children per day. As per the strength of Anganwadi and schools, 2 visits to each Anganwadi and one visit to each school in year According to no of school & anganwadi. Approximately 75 schools and 103 Anganwadi's in a year.
- The services aim to cover children of 0-6 years of age in rural areas and urban slums in addition to children enrolled in classes 1st to 12th in Government and Government aided Schools.
- All 254 respondents stated that the programme is very useful for the treatment of the child disease at an early stage.

CONCLUSION

RBSK is an important Karakorum launched on 6th February, 2013 by the Ministry of Health and family welfare under the umbrella of National Health Mission to promote child health screening and early intervention services. This is one of the unique initiatives in the world aimed at child health screening and early services to provide comprehensive care to all the children in the community intervention against 4Ds (Defects at birth, Development delays including disability, Diseases and Deficiencies). According to the guidelines of the central government as per the population proportion of children in every state, the district is allotted Mobile Health Teams (MHT) for screening of children from the age group of 0 to 18 years. Each team is having four designated caregivers i.e. 1 male medical officer, 1 lady medical officer, 1 ANM and 1 pharmacist. For the movement of the team, one dedicated vehicle is also allotted to the team. Teams are supposed to visit Anganwadi's and schools in the periphery for screening of the children.

The present study concludes that, as per norms stipulated for the deployment of MHTs, appointment of caregivers in the teams, almost all guidelines are being followed in the process of selection of team, i.e., age, qualification etc. Satisfactory representation of socially backward groups is observed. There are few vacancies in both the districts. In both the districts most of the caregivers are not aware about proper terms of the functioning of the RBSK. There is huge dissatisfaction among the all team members of the RBSK regarding less remuneration and

insecurity of the job. They are also struggling for their status as per their designation. In the opinion of all caregivers, RBSK is playing very crucial role in the area of child health care. There is a lack of coordination among the all line departments working for the welfare of the children. Major surgeries are not being done at Government facilities. All the diseases should be covered under RBSK. Almost all are getting medicines and equipment for the treatment of the children.

Development of individual skills is very important to support and strengthen health care services. Therefore, every RBSK team member should be given appropriate training to develop their individual skills and knowledge regarding the effective implementation of the scheme.

POLICY RECOMMENDATIONS

Human Resources

- In Nanded 10 posts and in Jalgaon 14 posts are vacant. All vacancies need to be filled on priority basis.
- Looking at the length of the services put up by the team members. It is strongly recommended that either they should be given the salary at par with the regular staff or they can be merged somewhere in the regular services as per their eligibility.

Home Visits by RBSK team

- Total 76.8 percent of respondents are making home visits. Pertaining to district 48.6 and 87.5 percent respondents are making home visits. It is recommended that team should be encouraged for making home visits.

Knowledge of Respondents

- A total of 65.4 percent of respondents are not aware of the proper team composition of the RBSK. **This is somewhat serious that people working on the programme don't know about it. Therefore, it is recommended that one refresher training is needed.**
- From the study it has come out many respondents are not aware about DEIC. It is recommended that they should be made aware of all the services related to child health care.

Supply of medicine and equipment

Though there is little shortage is reported. But it should not be there.

Coordination with other Schemes

There should be a proper communication and coordination among MJPJAY and RBSK. The documentation process should be easier for RBSK patients. All students should be covered under MJPJAY. Creation of awareness in the community about the scheme. A list of hospitals under MJPJAY should be provided to the RBSK team. All the listed surgeries of RBSK need to be included under MJPJAY.

Difficulties

- The percentage of getting difficulty in getting support from health care facilities is quite high (27.6%). Therefore, it is recommended to find out the root cause of the problem further investigation is needed to be done also needs to find out the type of difficulties and their solutions.
- The researcher's observation is that the present health system is having a lot of vacancies in all cadres. This is one of the reasons for giving additional duties other than RBSK. Therefore, we recommend that the staff should not be engaged in other work than their assigned work. As this leads to low performance in their main activity.

Suggestions given by the respondents for improvement of RBSK programme

- RBSK programme must be handled at PHC level to reduce the gap between students and parents with the RBSK team.
- Salary of all RBSK employees should be increased as equal to permanent employees
- There should be a separate RBSK section at the taluka level like CDPO and BEO, it will be full-time dedicated to the health care of 0 to 18 years' children. Minimum 2 MO 1 male medical officer and 1 female medical officer should be permanently posted at each taluka. DEIC and NICU should start at the SDH level.
- Integrated approach should be there all other departments should work hand in hand for the health care of 0 to 18 years age group.

- All types of investigation and testing facilities should be available at district level like MRI and CT Scan EEG BERA ,2D ECHO, and Spects Distribution. All surgery and major diseases should include in MJPJAY for 0-18 yrs.
- For improvement RBSK programme no RH OPD duties given to MO's. A school health card is a must to keep the record of each child.
- Advance technology training needs to be given to the team for effective implementation of RBSK programme.
- Provision of big vehicles for transporting patients.
- Special desk for RBSK refer patient in DH and at medical College hospital.
- Referral services should be strengthened. Online quotation for referral institution is complex process.
- More surgeries should be done at District Hospital and at Government Medical Collage.
- Regular referral camps arrangement with expert doctors, health awareness and proper counselling of parents about good health of kids.

Bibliography

Ahmad M. and Ahmad S.K. (2018). Evaluation of Rashtriya Bal Swasthya Karyakram (RBSK) in Jammu and Kashmir: A case study of Ganderbal District. PRC, Department of Economics, University of Kashmir, Srinagar.

Bafna, A. A., & Mirgunde, S. Role of Rashtriya Bal Swasthya Karyakram in the Reduction of Mortality and Morbidity in Children with Congenital Heart Disease.

George, C. E., Norman, G., Benjamin, T. E., & Mukherjee, D. (2014). Barriers to Early Diagnosis, Intervention and Social Integration of Children with Developmental Disabilities: A Qualitative Study from Rural Villages and a Poor Urban Settlement of Bangalore, South India. Disability, CBR & Inclusive Development, 25(4), 61-83.

Global Research on Developmental Disabilities Collaborators. (2022). Accelerating progress on early childhood development for children under 5 years with disabilities by 2030. *The Lancet Global Health*.

Kar, A., Radhakrishnan, B., Girase, T., Ujagare, D., & Patil, A. (2020). Community-based screening and early intervention for birth defects and developmental disabilities: lessons from the RBSK programme in India. *Disability, CBR & Inclusive Development, 31(1),* 30-46.

Kumar, N., Joshi, N. K., Jain, Y. K., Singh, K., Bhardwaj, P., Suthar, P., ... & Kirti, R. (2021). Challenges, Barriers, and Good Practices in the Implementation of Rashtriya Bal Swasthya Karyakram in Jodhpur, India. *Annals of the National Academy of Medical Sciences (India)*, *57*(04), 237-243.

Kumar, N., Joshi, N. K., Jain, Y. K., Singh, K., Bhardwaj, P., Suthar, P., ... & Kirti, R. (2021). Challenges, Barriers, and Good Practices in the Implementation of Rashtriya Bal Swasthya Karyakram in Jodhpur, India. *Annals of the National Academy of Medical Sciences (India)*, *57*(04), 237-243.

Madhusudhan, H. N., SushilKumar, I., Ranganath, T. S., & Ravish, K. S. (2016). Review of Rashtriya Bal Swasthya Karyakram and Utilization of Referral Services in Urban Field Practice area of Bangalore Medical College. *RGUHS National Journal of Public Health*, *1*(3).

Pagolu, K. R. (2021). Developmental Difficulties Prevalence and Management Capacities Among Children Including Genetic Disease in a Coastal District of India. *Biomedical Journal of Scientific & Technical Research*, *38*(5), 30775-30781.

Panigrahy, B., & Swain, A. (2019). A cross-sectional study to evaluate the functioning and infrastructure of mobile health teams and DEIC (District Early Intervention Centre) at Koraput District of Odisha under Rashtriya BAL Swasthya Karyakram (RBSK). *World J Pharm Med Res, 5*, 165-172

Parmar, S., Bansal, S. B., Raghunath, D., & Patidar, A. (2016). Study of knowledge, attitude and practice of AYUSH doctors, evaluation of MHTs working in RBSK and client satisfaction. *Int J Community Med Public Health*, *3*, 2186-2190.

Parmar, S., Raghunath, D., Dixit, S., Bansal, S. B., & Patidar, A. (2016). A cross-sectional study to evaluate the functioning and infrastructure of DEIC, and client satisfaction Ujjain and Indore districts established under RBSK. *IOSR J Dent Med Sci*, *5*(09), 92-94.

Patel, J., & Vaghela, P. (2021). A study to assess the effectiveness of awareness programme on knowledge regarding district early intervention centre among mothers of selected areas of north Gujarat. *International Journal of Advances in Nursing Management*, *9*(1), 32-34.

Prabhu, S. A., Shukla, N. K., & Roshni, M. S. (2021). Rapid assessment of Rashtriya Bal Swasthya Karyakram program implementation and beneficiary feedback at two district early intervention centres in Chhattisgarh State in India. *Current Medical Issues*, *19*(1), 3.

PRC Srinagar conducted the RBSK evaluation of Gander Bal district in Jammu and Kashmir in 2018

Rameshbabu, B., Kumaravel, K. S., Balaji, J., Sathya, P., & Shobia, N. (2019). HEALTH CONDITIONS SCREENED BY THE 4DS APPROACH IN A DISTRICT EARLY INTERVENTION CENTRE (DEIC) UNDER RASHTRIYA BAL SWASTHYA KARYAKRAM (RBSK) PROGRAM. *Pediatric OnCall, 16(3),* 73-78.

Shruthi, H., Doddaiah, S. K., Chandan, A. G., Murthy, M. N., & Bilimale, A. S. (2021). Assessment of beneficiary satisfaction at district early intervention centre, Mysuru district, Karnataka. *International Journal of Community Medicine and Public Health*, *8*(9), 4411.

Tiwari, J., Jain, A., Singh, Y., & Soni, A. K. (2015). Estimation of magnitude of various health conditions under 4Ds approach, under RBSK Programme in Devendranagar block of Panna District, Madhya Pradesh, India.

UNICEF, I., & UNICEF. (2011). The situation of children in India: a profile. New Delhi: UNICEF.

Varghese, J., Grills, N., & Mathias, K. (2015). Barriers in health care access faced by children with intellectual disabilities living in rural Uttar Pradesh. Journal of Social Inclusion, 6(1), 55-70.