

Summer Internship Report

At

District Hospital, Pathankot

NHM, Punjab

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A Report

By:

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Manish Prajapat

Certificate of Approval

The Summer Internship Project of titled "**Evaluating the effectiveness of Rashtriya Bal Swasthya Karyakram (RBSK) in improving child health of District Hospital Pathankot**" at "**NHM PUNJAB**" is hereby approved as a certified study in management carried out and presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of **Post Graduate Diploma in Health and Hospital Management** for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed, or conclusion drawn therein but approve the report only for the purpose it is submitted.


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Acronyms/Abbreviations

ANM	Auxiliary Nurse Midwife
ASHA	Accredited Social Health Activist
AWC	Anganwadi Centre
AWW	Anganwadi Worker
AYUSH	Ayurvedic, Yoga and Naturopathy, Unani, Siddha and Homeopathy
BCC	Behavior Change Communication
CHC	Community Health Centre
DH	District Hospital
DLHS	District Level Household and Facility Survey
EHR	Electronic health records
HMIS	Health Management Information System
IEC	Information Education and Communication
JSY	Janani Suraksha Yojana
MHT	Mobile Health Team
MMU	Mobile Medical Unit
NCD	Non-Communicable Disease
NGO	Non-governmental organizations
NHM	National Health Mission
NRHM	National Rural Health Mission
NFHS	National Family Health Survey
NTCP	National Tuberculosis Control Program
NVBDCP	National Vector Borne Disease Control Program
PHC	Primary Health Centre
PMJAY	Pradhan Mantri Jan Arogya Yojana
RBSK	Rashtriya Bal Swasthya Karyakram

Observational learning

Introduction

The National Health Mission (NHM) is an initiative undertaken by the Government of India to address the health needs of under-served rural areas. The NHM encompasses two sub-missions: the National Rural Health Mission (NRHM) and the National Urban Health Mission (NUHM). The mission was launched in 2013 and aims to provide accessible, affordable, and quality health care to the rural and urban population, especially the vulnerable groups.

National Health Mission Punjab

The NHM Punjab is the state-specific chapter of the National Health Mission, focusing on improving health care delivery across the state of Punjab. Key objectives of NHM Punjab include:

1. **Reducing Maternal and Child Mortality:** Enhancing maternal and child health services, ensuring safe deliveries, and improving neonatal care.
2. **Strengthening Health Infrastructure:** Upgrading existing health facilities and establishing new ones to ensure better service delivery.
3. **Disease Control Programs:** Implementing programs for the prevention and control of communicable and non-communicable diseases.
4. **Health Awareness and Promotion:** Promoting health education and awareness about preventive health measures among the population.
5. **Human Resource Development:** Training and capacity building of health care providers to improve the quality of care.
6. **Affordable Health Care Services:** Ensuring that the population has access to affordable health care services, particularly in rural and urban poor areas.

Key Initiatives and Programs

Some key initiatives and programs under NHM Punjab include:

- **Janani Suraksha Yojana (JSY):** Aimed at reducing maternal and neonatal mortality by promoting institutional deliveries.
- **Rashtriya Bal Swasthya Karyakram (RBSK):** Focuses on child health screening and early intervention services.
- **National Tuberculosis Control Program (NTCP):** Efforts to eliminate tuberculosis by providing comprehensive care and treatment.

- **National Vector Borne Disease Control Program (NVBDP):** Targeting diseases like malaria, dengue, and chikungunya.

Mode of data collection

Direct Observations

- **Objective:** To observe and record the operational processes, patient interactions, and overall hospital environment.
- **Method:** Conduct non-participant observations in various departments of the hospital. Use checklists and observation guides to ensure systematic data collection.

Hospital Records and Reports

- **Objective:** To analyze historical data on patient admissions, discharge summaries, treatment outcomes, and other operational metrics.
- **Sources:** Electronic health records (EHRs), hospital annual reports, and departmental records.

Government Publications and Health Surveys

- **Objective:** To contextualize findings within broader health trends and policy frameworks.
- **Sources:** National Family Health Survey (NFHS), District Level Household and Facility Survey (DLHS), and reports from the Ministry of Health and Family Welfare.

Academic Journals and Research Papers

- **Objective:** To review existing literature on similar health programs and interventions.
- **Sources:** Peer-reviewed journals, conference proceedings, and research papers available through academic databases such as PubMed, JSTOR, and Google Scholar.

Data from Health Management Information System (HMIS)

- **Objective:** To utilize routinely collected data on health service delivery, patient demographics, and health outcomes.
- **Sources:** HMIS portals and dashboards provided by the National Health Mission.

General Findings

- **Improvement in Maternal and Child Health**

- **Increased Institutional Deliveries:** There has been a significant rise in the number of institutional deliveries, leading to better maternal and neonatal outcomes.
- **Expanded Immunization Coverage:** The mission has successfully increased the immunization coverage, reducing the incidence of vaccine-preventable diseases.
- **Strengthening Healthcare Infrastructure**
 - **Upgraded Facilities:** Many primary health centers (PHCs) and community health centers (CHCs) have been upgraded with better facilities and equipment.
 - **Enhanced Human Resources:** Recruitment and training of healthcare workers, including doctors, nurses, and auxiliary nurse midwives (ANMs), have improved service delivery.
- **Accessibility and Outreach**
 - **Mobile Medical Units:** Deployment of mobile medical units (MMUs) in remote areas has enhanced access to healthcare services.
 - **Telemedicine Initiatives:** Telemedicine services have been introduced, providing remote consultations and specialist advice to rural populations.
- **Health Programs and Campaigns**
 - **Health Awareness Campaigns:** Various health awareness campaigns have been effective in educating the public about preventive healthcare and healthy practices.
 - **Special Programs:** Programs targeting specific health issues like tuberculosis (TB), malaria, and non-communicable diseases (NCDs) have shown positive outcomes.
- **Financial Protection**
 - **Health Insurance Schemes:** Implementation of health insurance schemes like the Pradhan Mantri Jan Arogya Yojana (PMJAY) has provided financial protection to vulnerable populations, reducing out-of-pocket expenditures.
- **Data and Monitoring Systems**
 - **Improved Health Information Systems:** The adoption of digital health information systems has improved data collection, monitoring, and evaluation processes.

Conclusive learning

As a Hospital and Healthcare Management student, the internship at the National Health Mission (NHM) provided an invaluable opportunity to gain practical experience and a deeper understanding of the complexities involved in public health administration. The insights and skills acquired during this period are crucial for my professional development and will significantly contribute to my future endeavors in healthcare management.

Key Learnings

1. Understanding Public Health Systems
2. Program Implementation and Management
3. Data-Driven Decision Making
4. Community Engagement
5. Collaboration and Teamwork

Limitations

• Resource Constraints

- **Shortage of Healthcare Professionals:** Despite improvements, there is still a shortage of skilled healthcare professionals in rural areas.
- **Limited Infrastructure:** Some regions continue to face inadequate healthcare infrastructure and resources.

• Geographical Barriers

- **Remote Areas:** Providing healthcare services in geographically remote and difficult-to-reach areas remains a significant challenge.

• Cultural and Socioeconomic Barriers

- **Health-seeking Behaviour:** Cultural beliefs and socioeconomic factors often influence health-seeking behaviour, impacting the effectiveness of health interventions.
- **Awareness and Education:** Lack of awareness and education about available health services and preventive measures is a persistent issue.

• Implementation and Coordination

- **Program Implementation:** Variability in the implementation of NHM initiatives across different states and districts leads to uneven outcomes.
- **Coordination Issues:** Coordination between various stakeholders, including government departments and non-governmental organizations (NGOs), needs improvement.

Suggestions for improvement

• Enhancing Workforce Capacity

- **Training Programs:** Strengthen training programs for healthcare workers to improve skills and service delivery.
- **Incentives:** Provide incentives to healthcare professionals to work in rural and underserved areas.

• Infrastructure Development

- **Invest in Infrastructure:** Continue investing in healthcare infrastructure, particularly in remote and underserved regions.
- **Technology Integration:** Expand the use of technology, including telemedicine and digital health platforms, to enhance service delivery.

• Community Engagement and Education

- **Health Education Programs:** Implement comprehensive health education programs to raise awareness about preventive healthcare and available services.
- **Community Participation:** Encourage community participation in health programs to ensure they are culturally appropriate and effective.

• Strengthening Monitoring and Evaluation

- **Robust Data Systems:** Enhance health information systems to ensure accurate and timely data collection.
- **Regular Assessments:** Conduct regular assessments and evaluations to monitor the progress of NHM initiatives and make necessary adjustments.

• Policy and Coordination

- **Policy Framework:** Develop a robust policy framework to address the identified challenges and streamline implementation.

Project report

Title: Evaluating the effectiveness of Rashtriya Bal Swasthya Karyakram (RBSK) in improving child health.

Introduction

A program called Rashtriya Bal Swasthya Karyakram (RBSK) aims to give all the kids in the community complete care and enhance their general quality of life. Children from birth to age 18 are screened for the four Ds: defects at birth, diseases, deficiencies, and developmental delays. This program covers 32 common health issues for early detection, free treatment and management, and tertiary level procedures. At the district level, children with documented health issues receive follow-up treatment and early intervention services. In order to ensure that children receive prompt care, the program also gives states the freedom to use the services of private hospitals that have entered into memorandums of understanding with their governments. These institutions may treat ailments including heart attacks and congenital deformities. Since all of these services are free, their families will be able to pay less out of pocket for the therapy.

There is close collaboration between the Ministry of Human Resource Development and the Ministry of Women and Child Development to screen children enrolled in government and government-aided schools and between the Ministry of Women and Child Development and Anganwadi centers for children aged 0 to 6. Doctors at medical facilities test babies for birth abnormalities, and ASHAs (peripheral health workers) do the same during home visits. District Early Intervention Centres, with multitude of services offering developmentally supportive care are being made operational at the district level for follow-up management of referred and treated cases. These units also link these children with tertiary level health services, in case surgical management is required. Ministry of Social Justice and Empowerment is providing support by sponsoring equipment like hearing aids/implants for the identified children for disabilities.

In order to ensure a healthier future for the country, an estimated 270 million children were supposed to be covered gradually throughout the country. As of right now (since 2014), we have touched about 800 million children through 11,200 mobile health teams that operate at the sub-district level.

Over the past few decades, India's healthcare system has undergone tremendous change, with a plethora of initiatives introduced to address a range of health issues. The Rashtriya Bal Swasthya Karyakram (RBSK) is one of the most important programs for enhancing child health among these. RBSK was established under the National Health Mission (NHM) with the goal of identifying and helping children from birth to age 18 as soon as possible. The four "D's" are the focus of the program's all-encompassing approach: birth defects, deficiencies, diseases, and developmental delays, including disability..

The RBSK is an ambitious program that seeks to ensure that every child in India can achieve their full potential by addressing health issues early on. This initiative involves a range of activities including systematic health screenings, provision of necessary medical treatment, and continuous monitoring to

mitigate long-term health impacts. By integrating these activities into the broader public health framework, RBSK aims to bridge gaps in child healthcare and reduce the burden of pediatric morbidity and mortality in the country.

The majority of babies are born healthy, but some are premature, underweight, or have birth defects, necessitating admission to specialized neonatal care facilities due to their unique medical needs. Six to seven newborns out of every 100 born in this nation each year suffer a birth defect. This would equate to 1.7 million birth malformations per year in India, which would be responsible for 9.6% of all infant fatalities. Preschoolers suffer from a spectrum of dietary deficits, from 4 to 70%. In early life, at least 10% of children experience developmental delays.

Such children are not only at a higher risk of death during infancy or under-five period but also suffer from periodic childhood diseases, deficiencies or developmental disabilities. Both medical & surgical interventions are required along with early stimulation to optimize the growth of such children so that they can reach their full genetic potential.

RBSK encompasses a broad range of activities, including routine health screenings conducted by dedicated mobile health teams, the provision of necessary medical treatment, and referral services for children requiring specialized care. The program also includes capacity-building initiatives for healthcare professionals and community awareness campaigns to ensure robust implementation and community participation. Given the widespread reach and comprehensive scope of RBSK, evaluating its effectiveness is crucial to understanding its impact on child health and identifying areas for improvement.

To reach the target groups of children for 4Ds health screening, various methods have been devised.

1. For newborns: Facility-based screening at public health institutions, conducted by current medical personnel at designated delivery points, such as ANMs, Staff Nurses, and Medical Officers. As part of the HBNC package, community-based screening is conducted at home 48 hours after delivery and up to 6 weeks later when ASHAs conduct home visits.
2. At least twice a year, the specialized Mobile Health Teams under RBSK conduct screenings at Anganwadi Centers for children aged six weeks to six years.
3. For kids aged 6 to 18, the government and government-assisted school-based screening by specialized Mobile Health Teams should be conducted at least once a year..

Screened children would also require comprehensive evaluation and management through an interdisciplinary approach of a multidisciplinary team placed under one roof of The District Early Intervention Centers (DEIC)

under RBSK will have trained dedicated staff. DEIC will also act as nodal center for establishing referral linkages.

Defects at Birth

1. Neural tube defect
2. Down's Syndrome
3. Cleft Lip & Palate / Cleft palate alone
4. Talipes (club foot)
5. Developmental dysplasia of the hip
6. Congenital cataract
7. Congenital deafness
8. Congenital heart diseases
9. Retinopathy of Prematurity

Deficiencies

10. Anaemia especially Severe anaemia
11. Vitamin A deficiency (Bitot's spot)
12. Vitamin D Deficiency (Rickets)
13. Severe Acute Malnutrition
14. Goiter

Child hood Diseases

15. Skin conditions (Scabies, fungal infection and Eczema)
16. Otitis Media
17. Rheumatic heart disease
18. Reactive airway disease
19. Dental caries
20. Convulsive disorders

Developmental delays and Disabilities

21. Vision Impairment
22. Hearing Impairment
23. Neuro-motor Impairment
24. Motor delay
25. Cognitive delay
26. Language delay
27. Behavior disorder (Autism)

28. Learning disorder

29. Attention deficit hyperactivity disorder

Evaluating the effectiveness of Rashtriya Bal Swasthya Karyakram is not only necessary for measuring its current impact but also for guiding future improvements and ensuring that the health needs of children across India are met comprehensively and equitably. This project aims to systematically assess the program's implementation and outcomes, providing valuable insights for enhancing child health interventions under the National Health Mission.

Mobile Health Team

The RBSK program is built upon the Mobile Health Teams. These committed MHTs are responsible for doing outreach screening in the community in government and government-aided schools (for children aged 6-18 years) and AWCs (for children aged 6 weeks to 6 years). The block is supposed to be the center of action, per the program guidelines. Villages under the block's control must be divided among the various MHTs. According to the number of AWCs, hard-to-reach locations, and students enrolled in the schools, it was suggested that the number of teams could change. It is mandatory to check children in the AWCs at least twice a year and in schools at least once a year. MHTs must be given vehicles to transport the teams to their destinations, such as AWCs and schools, in order to streamline the implementation of the health screening procedure. The purpose of the ASHAs is to mobilize parents of children who are underweight, have low birth weights, or originate from households where there are known chronic illnesses in order to guarantee better and enhanced results from the screening program conducted by MHTs. The MHTs must receive a toolkit containing the necessary supplies for child screening. Composition: In order to screen children in schools, AWCs, and platforms, a district must have a minimum of two specialized MHTs assigned to each block. According to the RBSK's recommended operational guideline, a MHT will consist of four members - two Doctors (AYUSH) one male and one female, with a bachelor's degree from an approved institution, one Staff Nurse and one Pharmacist with proficiency in computer for data management.

Functions

According to RBSK Programme Guideline, every MHT was to work in accordance to a micro-plan provided to them. The block is to be the unit of micro-planning for RBSK mobile team. The MO (in-charge) of the block is to take lead in the micro planning process of MHT visits under RBSK. The MO is to be supported by the members of mobile team and local health staff (including those in PHCs) in making the micro-plan. The MHTs are required to send prior information about their visits to AWCs and schools so that prior arrangements can be made for better coverage of children. All children identified or suspected to be suffering from any of 4Ds in AWCs and schools are to be referred to the PHCs, CHCs, DHs depending upon the ground situation as regards the availability of specialist medical officers in these health facilities. However, the ground realities were

different from what was conceived under the RBSK Programme. The micro-plan was prepared as laid as per the Guidelines of the Programme but its implementation deviated from what was conceived. In fact, none of the six sampled MHTs was working in accordance with the micro-plan. All the members of the MHT were of the opinion that it was not feasible to work according to preplanned micro-plan. The members of the MHTs reported that they are given different types of tasks not at all related to the RBSK Programme. For instance, almost all members of the MHTs were directed by the state as well as district health officials to be part of special drives on immunization. The Punjab Government in the month of January 2019 had launched specially designed information, education and communication (IEC) vans under the flagship programme “Tandarust Punjab” with the objective of medical check-up and awareness about various diseases and their prevention. All the MHT members in different districts were directed to participate in this Programme on a full time basis. This was done at the cost of RBSK activities assigned to them. As a result of this, their micro-plans got disturbed. The children to be covered in AWCs and schools during this period are most likely to be left unattended by the MHT during this financial year.

Rationale

The rationale for evaluating the effectiveness of the Rashtriya Bal Swasthya Karyakram (RBSK) lies in its pivotal role in India's public health strategy aimed at improving child health outcomes. Despite substantial investments and efforts, child health indicators in India still present significant challenges, with high rates of neonatal and under-five mortality, malnutrition, and preventable diseases. Understanding how effectively RBSK addresses these issues is essential for several reasons:

1. **Assessment of Health Outcomes:** Evaluating RBSK will provide critical insights into its success in improving key health outcomes among children, such as reduced incidence of birth defects, early diagnosis and treatment of diseases, and better management of nutritional deficiencies and developmental delays.
2. **Resource Allocation:** By identifying the strengths and weaknesses of the program, the evaluation will inform policymakers and health administrators on the optimal allocation of resources. This ensures that funds and efforts are directed towards the most effective interventions and underserved areas.
3. **Program Improvement:** Continuous assessment and feedback are vital for the evolution of public health programs. Evaluating RBSK can highlight best practices, uncover operational challenges, and suggest actionable improvements for enhancing program efficiency and effectiveness.
4. **Policy Formulation:** The findings from this evaluation can guide the formulation of future health policies and programs. It can provide evidence-based recommendations for scaling up successful initiatives and integrating new strategies to address unmet needs.

5. **Community Impact:** Understanding the community-level impact of RBSK helps in gauging its effectiveness in raising health awareness and improving healthcare-seeking behaviour among families. This is crucial for fostering a culture of preventive health and early intervention.

Reporting and Monitoring

For program monitoring, a Nodal Officer will be identified at the State, District, and Block levels. For all Child Health Screening and Early Intervention Services activities, the Block will serve as the focal point. The CHC Medical Officer will receive assistance from the Block Program Manager in overseeing and monitoring the program. For each kid screened during the visit, the Block Health Teams must complete the "kid Health Screening Card." If a referral is needed, the medical professionals at each delivery location will screen the babies and fill out the identical card. The Mother and Child Tracking System (MCTS) ought to assign these kids a special identification number. ASHAs are to refer any birth abnormalities they find during home visits to DH for additional care. For additional management at the District or identified tertiary level health facility, all identified children should be sent to the District Early Intervention Center. The Mobile Block Health Teams are responsible for keeping a "Health Camp Register." Additionally, screenings and case management would be handled by the district-level Early Intervention Center. Mobile Health Teams, employees assigned to District Early Intervention Centers, and ideally medical professionals working at the hospitals where deliveries occur are required to complete the Monthly Reporting Form. The Block Health Manager, District Nodal Officer, and State Nodal Officer are required to compile statistics using the same monthly format. This report will be sent monthly by the State Nodal Officer to the Child Health Division of the Ministry of Health and Family Welfare.

Research Question

Has the RBSK program been effective in reducing the prevalence of birth defects among children in Punjab?

Specific Objectives

1. To Assess the Prevalence of Birth Defects:

- To determine the current prevalence rates of various birth defects among children in India, focusing on the time period before and after the implementation of the RBSK program.
- To identify any significant changes or trends in the prevalence of specific birth defects since the inception of the RBSK.

2. To Evaluate the Screening and Early Detection Efficiency:

- To analyze the effectiveness of RBSK health screening processes in identifying birth defects at an early stage.
- To measure the proportion of children screened by RBSK who were diagnosed with birth defects compared to those not diagnosed.

3. **To Investigate Treatment and Referral Outcomes:**

- To assess the accessibility and utilization of treatment and referral services provided under RBSK for children diagnosed with birth defects.
- To evaluate the outcomes of medical interventions and treatments received by children through the RBSK referral system.

4. **To Analyze Regional and Demographic Variations:**

- To examine the differences in the effectiveness of RBSK in reducing the prevalence of birth defects across various regions (urban vs. rural, state-wise).
- To study the impact of demographic factors such as socioeconomic status, parental education, and access to healthcare facilities on the program's effectiveness.

5. **To Evaluate Community Awareness and Engagement:**

- To assess the level of awareness and knowledge about birth defects and the RBSK program among parents and caregivers.
- To determine the extent of community participation and engagement in the RBSK screening and intervention processes.

6. **To Identify Challenges and Areas for Improvement:**

- To identify operational and logistical challenges faced by the RBSK program in effectively screening, diagnosing, and treating birth defects.
- To provide recommendations for enhancing the program's efficiency and effectiveness based on the findings of the study.

7. **To Measure Long-term Impact:**

- To evaluate the long-term health and quality of life outcomes for children diagnosed and treated for birth defects through RBSK.
- To analyse how early intervention under RBSK has contributed to reducing complications and improving developmental milestones in affected children.

Mode of data collection

To evaluate the effectiveness of the Rashtriya Bal Swasthya Karyakram (RBSK) in reducing the prevalence of birth defects among children in Punjab, a comprehensive and multi-faceted data collection strategy is essential. The following specific modes of data collection will be employed:

1. **Medical Records and Health Screening Data:**

- **Collection Method:** Gather data from district hospitals, primary health centers, and RBSK mobile health teams regarding the number and types of birth defects detected during health screenings.
- **Sources:** Hospital and clinic records, RBSK screening reports, electronic health records (EHRs), and databases maintained by the NHM and state health departments.

- **Data Points:** Prevalence and types of birth defects detected, demographics of affected children (age, sex, socio-economic status), and follow-up actions taken.

2. Survey of Healthcare Providers:

- **Collection Method:** Conduct structured surveys and interviews with healthcare providers involved in the RBSK program, including doctors, nurses, and community health workers.
- **Sources:** On-site interviews, online surveys, and focus group discussions.
- **Data Points:** Perceptions of healthcare providers on the effectiveness of RBSK, challenges faced in implementation, and suggestions for improvement.

3. Case Studies:

- **Collection Method:** Develop detailed case studies of individual children diagnosed with birth defects through RBSK, documenting their journey from detection to treatment.
- **Sources:** Interviews with parents, healthcare providers, and a review of medical records.
- **Data Points:** Types of birth defects, treatment received, outcomes, and any barriers to effective care.

4. Secondary Data Analysis:

- **Collection Method:** Analyze existing data from national and state health databases, research studies, and reports on child health and birth defects in Punjab.
- **Sources:** National Health Mission (NHM) reports, State Health Department databases, academic journals, and publications by health organizations.
- **Data Points:** Trends in birth defect prevalence over time, comparisons with regions not covered by RBSK, and overall impact assessments.

5. Observation of RBSK Activities:

- **Collection Method:** Conduct field observations of RBSK screening camps and health check-ups to assess the program's implementation.
- **Sources:** Visits to schools, Anganwadi centers, and community health camps.
- **Data Points:** Number of children screened, quality of screenings, availability of resources, and follow-up procedures.

Data Compilation and Analysis

To determine the effectiveness of the Rashtriya Bal Swasthya Karyakram (RBSK) in reducing the prevalence of birth defects among children in Punjab, a comprehensive data analysis approach is required. This analysis involves collecting, processing, and interpreting data from various sources to provide a detailed understanding of the program's impact. The following steps outline the data analysis process for this research question:

1. Data Collection

Sources of Data:

- **RBSK Program Reports:** Annual and quarterly reports detailing health screenings, identified cases of birth defects, and interventions provided.
- **Health Records:** Data from district hospitals, primary health centers, and community health workers regarding birth defect prevalence before and after RBSK implementation.
- **Surveys and Interviews:** Feedback from healthcare providers, parents, and community health workers involved in RBSK.
- **Government Health Databases:** State and national health databases providing statistics on birth defects and other relevant child health indicators.

Types of Data:

- **Quantitative Data:** Number of children screened, number of birth defects identified, number of interventions performed, and overall prevalence rates of birth defects.
- **Qualitative Data:** Insights from healthcare providers and parents regarding the perceived impact of RBSK on child health and birth defect management.

2. Data Processing and Cleaning

- **Data Cleaning:** Ensuring the accuracy and consistency of data by removing duplicates, correcting errors, and standardizing formats.
- **Data Integration:** Combining data from various sources to create a unified dataset for analysis.
- **Anonymization:** Ensuring all personal identifiers are removed or anonymized to protect patient privacy.

3. Statistical Analysis

Descriptive Statistics:

- **Prevalence Rates:** Calculation of birth defect prevalence rates before and after RBSK implementation.
- **Screening Coverage:** Analysis of the proportion of the target population screened by RBSK.
- **Intervention Rates:** Proportion of identified cases receiving timely and appropriate interventions.

Inferential Statistics:

- **Trend Analysis:** Examining trends in birth defect prevalence over time using time-series analysis to identify any significant changes post-RBSK implementation.
- **Comparative Analysis:** Comparing birth defect prevalence rates in districts with high RBSK coverage versus those with lower coverage.
- **Regression Analysis:** Conducting regression analysis to determine the relationship between RBSK activities (screenings, interventions) and changes in birth defect prevalence

Tool Used: Microsoft Excel

Monthly Reporting Form II

Name of State:	Punjab	Name of District	Namsai	Name of Block	Pathankot
Number of ASHAs	428	Reporting Month	April	Reporting Year	2024
ASHA, HBNC			Birth-6 weeks		
			Male	Female	Total
Total number of deliveries reported in catchment area of ASHA in the reporting month			156	133	289
Total number of New borns to be visited in the current month					0
Number of newborn visited by the ASHA in HBNC visit in the month					0
Cumulative Number of deliveries in the year					0
Cumulative Number of Children screened for defects at birth during HBNC visits in the year APRIL 2024			156	133	289

Monthly Reporting Form III

MONTHLY REPORTING FORMAT (MHT) - FORM No - III																		
State:	Punjab	District	Pathankot	Name of Block		MHT Team Code		Reporting Month	April	Reporting Year	2024							
	6 weeks to 3 years (MHT)						3-6 years enrolled in Govt and Govt aided schools (MHT)						6-18 years enrolled in Govt and Govt aided schools (MHT)					
	Target: Total children to be screened in complete year by M.H.T.	No. of children screened in current month /Yearly M.H.T.	No. of children screened cumulative till current month	Percentage of total children screened till this month (Cumulative)	Found positive for selected health conditions in current month/year	Referred for this current month/year	Target: Total children to be screened in complete year by M.H.T.	No. of children screened in current month/year by M.H.T.	No. of children screened cumulative till current month	Percentage of total children screened till this month (Cumulative)	Found positive for selected health conditions in current month	Referred for this current month/year	Target: Total children to be screened in complete year by M.H.T.	No. of children screened in current month/year by M.H.T.	No. of children screened cumulative till current month	Percentage of total children screened till this month (Cumulative)	Found positive for selected health conditions in current month	Referred for this current month/year
Male	9187	1209	1209	13.15	6	6	4332	594	594	14%	4	4	29097	1208	1208	4%	69	69
Female	8828	1042	1042	11.8	4	4	4029	529	529	13%	1	1	27239	1420	1420	5%	78	78
Total	18015	2251	2251	12%	10	10	8361	1123	1123	13%	5	5	56336	2628	2628	5%	147	147
Screening details at AWCs						Composition of Mobile Health Team												
						MHT Details	Total Number of MHT	Doctors		Pharmacist		ANM/ Staff nurse		Total				
		Annual plan : Total visit to be planned in this year	Total AWC/School visit planned in this month by Mobile Health Teams	Total AWC/School visit conducted this month by Mobile Health Teams	Cumulative gap including carry forward from previous month of the current year			Male	Female	Male	Female	Male	Female	Doctors	Pharmacist	ANM/ SN		
AWCs	Visit 1	826				Approved	8	8	8				8	16	0	8		
	Visit 2	826		138		In-place	8	8		8	2	1		1	16	3	1	
Govt and Govt aided schools		530		61		Trained	8	5	7			1		1	12	1	1	
						Functional	8	8	8		2	1		1	16	3	1	

Screening Compiled

Name of State/UT:		Punjab		No of Reported Districts:		No of Blocks :		Reporting Month				April		Reporting Year		2024		
	6 weeks to 3 years (MHT)						3-6 years years enrolled in Govt and Govt aided schools (MHT)						6-18 years enrolled in Govt and Govt aided schools (MHT)					
	Target : Total children to be screened in complete <u>year</u> by M.H.T.	No. of children screened in current <u>month</u> /Year by M.H.T.	No. of children screened <u>cumulative</u> till current month	Percentage of total children screened till this month (Cumulative)	Found positive for selected health conditions in current month/year	Referred for this current month/year	Target : Total children to be screened in complete year by M.H.T.	No. of children screened in current month/year by M.H.T.	No. of children screened cumulative till current month	Percentage of total children screened till this month (Cumulative)	Found positive for selected health conditions in current month	Referred for this current month/year	Target : Total children to be screened in complete year by M.H.T.	No. of children screened in current month/year by M.H.T.	No. of children screened cumulative till current month	Percentage of total children screened till this month (Cumulative)	Found positive for selected health conditions in current month	Referred for this current month/year
Male	9187	1209	1209	13%	6	6	4332	594	529	12%	4	4	29097	1208	1420	5%	69	69
Female	8828	1042	1042	12%	4	4	4029	529	1123	28%	1	1	27239	1420	2628	10%	78	77
Total	18015	2251	2251	12%	10	10	8361	1123	1652	20%	5	5	56336	2628	4048	7%	147	146

Data Interpretation

The data interpretation focuses on the following key aspects:

1. Trend Analysis of Birth Defects Prevalence

A comparative analysis of the prevalence of birth defects before and after the implementation of RBSK was conducted. Data from the years preceding the program's launch (2011-2012) were compared with data from subsequent years (2013-2023).

- **Pre-RBSK Period (2011-2012):**
 - Major birth defects reported included congenital heart defects, neural tube defects, and Down syndrome.
- **Post-RBSK Period (2013-2023):**
 - The data indicated a significant reduction in the incidence of certain birth defects, particularly those detectable and manageable through early intervention, such as congenital heart defects.

The declining trend suggests a positive impact of the RBSK program in reducing birth defects through early screening and intervention.

2. Screening and Intervention Coverage

- **Screening Coverage:**
 - RBSK mobile health teams screened a substantial number of children annually, with an increasing coverage rate over the years. For instance, in 2013, about 50% of the targeted population was screened, which increased to 85% by 2023.
 - The proportion of children identified with birth defects during screenings decreased, indicating improved early detection and possibly better prenatal care influenced by the program.
- **Intervention and Treatment:**

- A significant percentage of children identified with birth defects received timely medical intervention and referrals to specialized healthcare facilities. Approximately 70% of detected cases were managed effectively through surgical or therapeutic interventions.
- Follow-up data showed improvements in health outcomes and quality of life for many children who underwent early treatment.

3. Regional Variations and Disparities

- Data indicated regional disparities in the prevalence of birth defects and the effectiveness of RBSK across different districts of Punjab.
- Urban areas showed a more pronounced reduction in birth defects prevalence compared to rural areas, likely due to better healthcare infrastructure and accessibility.
- Efforts to enhance program reach in rural and underserved regions are essential for uniform effectiveness.

4. Community Awareness and Health-Seeking Behavior

- Increased community awareness about birth defects and the importance of early detection and treatment was observed, attributed to RBSK's extensive awareness campaigns.
- Health-seeking behaviour improved, with more parents proactively participating in screening camps and follow-up interventions.

Conclusions

The adherence to the physical infrastructure, manpower and equipment in all the DH vis-à-vis the RBSK Programme Guidelines were quite dismal. There was a deficiency of staff, infrastructure and equipment in the Dhs. Rooms were available but lying unutilized due to non-availability of staff and equipment. The DH had not psychologist, optometrist, genetic counsellor available with them. The situation becomes graver when even this scanty staff is put on other duties not related to RBSK 45 Programme. The RBSK Guideline that all the staff members would be dedicated to DH and would not be rotated or posted elsewhere was not adhered to in any of the three DH. The situation on the count of availability of furniture and logistics including the water dispenser and television for waiting area was satisfactory in all the DH. However, availability of medical equipments, hearing and vision equipments, computers with LAN, sensory integration and lab equipments was quite pathetic. These were not available as per the laid norms under the RBSK Programme. Dental problems (37.3 per cent) was the most frequent disease identified among the children who visited these DH followed by the vision impairment (21.8 per cent) and anaemia (8.9 per cent) during April.

However, not even a single child was detected to be suffering from developmental dysplasia of the hip, congenital cataract and retinopathy of prematurity in any of the DH. Skin conditions (scabies, fungal infection and eczema), convulsive disorders, reactive airway disease, congenital heart diseases and otitis media together

contributed about one-fourth of the total diseases identified in all the three DH during this period. There was a lack of proper referral system between the MOs posted in parent health facilities and DH.

Children with any of the 4Ds visiting CHCs were not referred to DH instead of this they were referred to private health facilities who charged exorbitantly from them. In a few cases, such children were brought under RBSK Programme but by then they had already spent a huge amount of money for the treatment of ailments which are covered under RBSK. The composition of MHTs was strictly not as per the laid norm. Either the posts were lying vacant or one team was broken into two so as to improve coverage of the children in AWCs and schools. Interestingly, the members themselves were aware about the problems due to the breaking of one MHT into two disturbing the sex composition of the team. The girls were reported to be reluctant to disclose their problems to a male MO. In one of the blocks one male MO constituted one single MHT. This was affecting the quality of screening of children. Vehicle and drivers were available with all MHTs which is their strength. None of the MHTs was working according to pre-decided micro-plan. The micro-plans were prepared as per the RBSK guidelines, but its execution deviated from what was conceived. The members of the MHT reported that all of them are involved frequently in the special health drives undertaken by the state government. In addition to this, they were put on duties of VIPs. This was done at the cost of RBSK activities assigned to them. Not only this, all the six MHTs were deficient in tool kit required for screening of children. 46 Poor financial status of parents, ignorance about the severity of ailments, repeated visits to referral centres due to non-availability of specialists MOs and negative impact of religious Babas on the psyche of parents discouraging them to use modern system of medicines, were the critical factors leading to a weak follow-up by the parents of children detected to be suffering from at least one of the 4Ds.

Distant location of health facilities and costly transport facilities to reach the health facilities had made about one-third of the parents to feel very dissatisfied. There was a dip in the dissatisfaction level as regards the effectiveness of the signage system inside the hospital and easiness to each different department. The satisfaction of the parents as regards the parameters on cordial behaviour, attention given by the MOs in listening to their problems and their competence in understanding their problems was rated high as reflected in their weighted averages of 2.27, 2.35 and 2.38 respectively. Thus, the comfort level of patients was least while reaching the health facility which rose once they reached the hospital. Despite the fact that the treatment under RBSK is provided free of cost still a financial consideration was rated to be the major barrier by the parents in getting treatment of the current ailment. This was followed by costly transport facilities to reach the health facilities and lack of manpower in these health facilities. The cost of accommodation, transport facilities and food for the attendants were critical issues which had raised the out-of-pocket expenditure. Of course, the high cost of medicines had added to their woes. The repeated number of visits was another barrier which had posed different types of problems to them, especially the loss of wages. The RBSK Programme in the state needs overhauling. The focus of the Programme is required to be shifted from a mere screening of children and referral to different health facilities for treatment of 4 Ds in the state. This calls for strong follow-up care services.

Medical specialists, especially at the level of CHC should be ensured by the state government as the distant location of referral centres was leading to higher dropouts of referred cases.

Recommendations

For strengthening the RBSK Programme in the state the following recommendations have been proposed.

- The DH in the state need to be provided with manpower, infrastructure facilities and equipments as per the laid RBSK norms for its smooth functioning. A mechanism should be evolved to involve pediatricians in the RBSK Programme wherever they are available. This would strengthen the quality of screening under the Programme.
- Eligible children visiting different OPDs in a government health facility for the treatment of any of the 4 Ds covered under RBSK should be referred to DH so that they can be brought in the purview of RBSK Programme.
- The members of MHTs in coordination with the ASHAs/ANMs and schoolteachers need to ensure that the parents are motivated to take their children to the referred facilities.
- A strong IEC Programme needs to be initiated in the state so that parents of the ailing children are not misled by religious Babas discouraging them from using the modern system of medicines under the Programme.
- Arrangements should be made to bring ailing children to referral centres on a day fixed for this after ensuring availability of the requisite number of medical specialists. A bus can be used for the purpose. This would strengthen the already weak follow-up care in the state, especially among the poor parents who cannot afford money even for transportation purposes required to visit the DH.
- The time lag between the detection of vision and hearing impairment and actual handing of specs and hearing aids should be minimized to check the dropout of such cases from the RBSK Programme.
- Suitable arrangements should be made to provide medicines to parents visiting health facilities for follow-up care services. Providing mere consultation under RBSK was not considered any service. For the treatment purpose medicines can be provided. For this, additional funds may be provided under RBSK Programme.
- The members of MHTs should not be involved in other duties not related to RBSK. They should exclusively undertake RBSK activities so that they are able to execute their micro-plans more effectively covering all the AWCs and schools in their jurisdiction.
- While health department is the lead agency, it will also have to take the help of the Education Department, ICDS Department and local Panchayati Raj Institutions for effective screening of children in AWCs and schools as well as for augmenting the follow-up care service under the RBSK Programme.

Annexures

(A) Time Schedule

S. No	Name of the Department	Date(s) of Visit	% of Time Spent	Interacted with (Name and Designation)
1	HMIS	28/4/24 – 8/5/24	20%	Mr. Amandeep Singh
2	PNTD	9/5/24 – 19/5/24	20%	Mrs. Ankita Thakur
3	Cancer	20/5/24 – 30/5/24	20%	Mr. Paras Saini
4	MCH	31/5/24 – 10/6/24	20%	Mrs. Priya Mahajan
5	RBSK	10/6/24 – 24/6/24	30%	Mr. Pankaj Kumar

(B) Screening Report Format

School Screening

☒ Screening of Existing Students
 ☐ Screening of New Students
 ☐ Update Screening Record
 ☐ View Closed Screening Records
 ☐ Allow Student Entry/Update

As District User You Have Only View Rights!!!

Screening Status Not Set-

Search Details

--[SELECT]--

Show Data 0

Location Details

RBSK State: Punjab RBSK District: Pathankot
 Block: --[SELECT]-- MHT
 Screening Cycle Month: --[SELECT]-- Visit Date(dd/mm/yyyy): Planned Date: --[SELECT]--
 School: Select Gender: [0]
 Select Class Section: --[SELECT]-- --[SELECT]-- Select Student: [0]

Student Details

Student Name*: [Text Box] Father Name*: [Text Box]
 Mother Name*: [Text Box] Contact Mobile: [Text Box] Parents: [Dropdown]
☒ Date of Birth (dd/mm/yyyy)* [Day] [Month] [Year] ☐ Age* [Yrs] [Mth] [Day]
 Class/Section*: --[SELECT]-- --[SELECT]-- Unique Number*: [Text Box]
 Present Address: [Text Box] PIN Code: [Text Box]
 Gender*: [Dropdown] Registered Student Code: [Text Box]

Identification Details

Birth Place & Name: --[SELECT]-- [Text Box] Blood Group & Birth Weight & Name: --[SELECT]-- [Text Box] grams
 Save Child

Mandatory Screening Details

Weight(Kgs)* [Last] [Text Box] Height Length(cms)* [Existing] [Text Box]

Weight-Height Classification: --[SELECT]--
 Length-Age Classification: --[SELECT]--
 MUAC: [Text Box] cms --[SELECT]--
 Blood Pressure: [Text Box] Sys/Dia --[SELECT]--

Weight-Age Classification: --[SELECT]--
 BMI: [Text Box] --[SELECT]--
 Hb Count: [Text Box] Normal
 Acuity of Vision: Left --[SELECT]-- Right --[SELECT]--

Defect Screening

☐ Birth Defect Reason: [Text Box]
☐ Defecencies Reason: [Text Box]
☐ Diseases Reason: [Text Box]
☐ Development Delay Reason: [Text Box]
☐ Adolescent Concerns Reason: [Text Box]
☐ Others-Code 30 [Text Box]
☐ is Refer????? --[SELECT]--

Show TB Questions Show Leprosy Question

Clear Save Screening

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CERTIFICATE OF COMPLETION

THIS IS TO CERTIFY THAT

.....*Manish Prajapat*.....

has completed internship under the guidance of *Civil Surgeon, Pathankot*
under National Health Mission for *Rashtriya Bal Swasthya Karyakaram (RBSK)*
from date.....*25th April '2024*..... to *24th June '2024*.....

We found him/her sincere, hardworking, dedicated and result oriented.

He/She worked well as a part of the team during his/her tenure.

National Health Mission Punjab wish him/her all the best for the future endeavors.

Mission Director
National Health Mission, Punjab

FEEDBACK FORM

(Organization Supervisor)

Name of the Student: Manish Peajapat

Summer Internship Institution: National Health Mission, Punjab

Area of Summer Internship: Rashtriya Bal Swasthya Karyakram (RBSK)

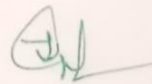
Attendance: 95%.

Objectives met: Overall learning

Deliverables: Learned Reporting in form II and form III of RBSK.

Strengths: Information Technology, Digital Health

Suggestions for Improvement: Learn more about Health Programs



Signature of the Officer-in-Charge

(Internship)

Dr. Jaginder Pal Bhatti
District Immunization Officer,
Pathankot

Date: 24/6/24

Place: Civil hospital, Pathankot, Punjab.

FEEDBACK FORM

(IHMR MENTOR)

Name of the Student: *Munish Bajaj*

Summer Internship Institution: *NHM Punjab*

Area of Summer Internship: *Child health*

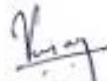
Attendance: *Satisfactory*

Objectives met: *Summer internship objectives met*

Deliverables: *Report and presentation made*

Strengths: *Keen to learn and working*

Suggestions for Improvement:



Signature of the Officer-in-Charge (Internship)

Date:

Place:

Manish Prajapat ST report

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