Dissertation

At

IIHMR Delhi

(1st March to 15th June 2023)

A Project Report On

Assessment of Knowledge, Attitude and Practice (KAP) regarding Screening of the Diseases and Defects at Birth under Rashtriya Bal Swasthya Karyakaram (RBSK) among health care providers

IIHMR Delhi

By **Dr Pooja Kumari**

PG/21/071

Under the guidance of

Dr Sidharth Sekhar Mishra

Assistant Professor, IIHMR, New Delhi

PGDM (Hospital & Health Management)

2021-2023

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CERTIFICATE

Dr Pooja Kumari, affiliated with IIHMR, Delhi, conducted a research project titled " Assessment of Knowledge, Attitude and Practice (KAP) regarding Screening of the Diseases and Defects at Birth under Rashtriya Bal Swasthya Karyakaram (RBSK) among health care providers" A Primary Study conducted between 1ST March 2023 to 15th June 2023. The study involved the collection of primary data from the study participant and data analysis and report writing.

Sidharth Sekhar Mishra

Mentor

Dr Sidharth Sekhar Mishra

Assistant Professor, IIHMR, New Delhi

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Dr Pooja Kumari** student of Post Graduate Diploma in Hospital & Health Management (PGDHM) from International Institute of Health Management Research, New Delhi has undergone **Dissertation** at **IIHMR Delhi** from **1st Mar 2023** to **15th June 2023.**

Dr Pooja Kumari has successfully carried out the study designated to her during the dissertation period & her approach to the study has been sincere, scientific & analytical.

The Dissertation is in fulfillment of the course requirements and I wish her all success in all her future endeavors.

Sidharth Sekhar Mishra

Dr Sumesh Kumar

Associate Dean, Academic & Student Affairs

IIHMR, New Delhi

Dr Sidharth Sekhar Mishra

Mentor

Certificate of Approval

The following dissertation titled **"Assessment of Knowledge, Attitude and Practice (KAP) regarding Screening of the Diseases and Defects at Birth under Rashtriya Bal Swasthya Karyakaram (RBSK) among health care providers"** at **"IIHMR DELHI"** 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 **PGDM (Hospital & Health 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 dissertation only for the purpose it is submitted.

Dissertation Examination Committee for evaluation of dissertation.

Name	Signature
PRAVEEN KUMAR	
VINAY	
SUKOSH BHARDWAJ	

CERTIFICATE FROM DISSERTATION ADVISORY COMMITTEE

This is to certify that Dr Pooja Kumari, a graduate student of the **Post-Graduate Diploma in Health & Hospital Management** has worked under our guidance & supervision. She is submitting this dissertation titled **"Assessment of Knowledge, Attitude and Practice (KAP) regarding Screening of the Diseases and Defects at Birth under Rashtriya Bal Swasthya Karyakaram (RBSK) among health care providers"** in partial fulfillment of the requirements for the award of the **Post-Graduate Diploma in Health & Hospital Management.**

This dissertation has the requisite standard & to the best of our knowledge no part of it has been reproduced from any other dissertation, monograph, report or book.

Sidharth Sekhar Mishra

Mentor

Dr Sidharth Sekhar Mishra

Assistant Professor, Mentor

IIHMR, New Delhi

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled **Assessment of Knowledge, Attitude and Practice (KAP) regarding Screening of the Diseases and Defects at Birth under Rashtriya Bal Swasthya Karyakaram (RBSK) among health care providers,** submitted by Dr Pooja Kumari, Enrollment No. **PG/21/071** under the supervision of **Dr. Sidharth Sekhar Mishra** for award of Postgraduate Diploma in Hospital & Health Management of the Institute carried out during the period from **1st Mar 2023 to 15th June 2023.** Embodies of my original work & has not formed the basis for the award of any degree, diploma associateship, fellowship, titles in this or any other Institute or other similar institution of higher learning.

Dr. Pooja Kumari

ACKNOWLEDGEMENT

I would like to express my sincere gratitude to IIHMR Delhi (Indian Institute of Health Management Research) for providing me with the opportunity to work under the NHSRC Bypass project. This project has been an invaluable experience in enhancing my knowledge and skills in the field of healthcare management.

I am immensely grateful to Dr Sidharth Sekhar Mishra, my mentor and guide throughout this project. His expertise, guidance, and unwavering support have been instrumental in shaping my understanding of the healthcare landscape and project management. His invaluable insights, constructive feedback, and continuous encouragement have greatly enriched my learning experience.

I would also like to extend my thanks to the entire team of NHSRC BYPASS PROJECT for their constant support and cooperation. Their collective efforts and dedication have made this project a success.

Next, I would like to extend my heartfelt appreciation to my parents, whose unwavering support and sacrifices have made my educational journey possible. Their constant encouragement, love, and belief in my abilities have been a constant source of strength for me. Their unwavering faith in my potential has been a driving force behind my achievements, and I am forever grateful for their unwavering support.

I am truly grateful to all the individuals and organizations involved in this project, as their contributions have been indispensable in my professional growth and development.

Dr Pooja Kumari

Date- June 2023

FEEDBACK FORM

Name of the Student: Dr. Pooja Kumari

Name of the Organisation in Which Dissertation Has Been Completed: IIHMR - DELHI

Area of Dissertation: Assam, Jharkhand, Chhattisgarh

Attendance: 100 %

Objectives achieved: yes

Deliverables: Project deliverables

Strengths: Communication Skill, and Analysis, Problem solving skills, Innovative mindset

Suggestions for Improvement:

Suggestions for Institute (course curriculum, industry interaction, placement, alumni):

Siddharth Sekhar Mishra

Signature of the Officer-in-Charge/ Organisation Mentor (Dissertation)

Date: 28/06/2023

Place: New Delhi

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PART A- ORGANISATIONAL DETAIL

ABOUT IIHMR DELHI

The International Institute of Health Management Research (IIHMR), New Delhi is allied to the 'Society for Indian Institute of Health Management Research' which was established in October 1984 under the Societies Registration Act-1958. IIHMR-Delhi was setup in 2008 in response to the growing needs of sustainable management and administration solutions critical to the optimal function of healthcare sector both in India and in the Asia-Pacific region.

We are a leading institute of higher learning that promotes and conducts research in health and hospital management; lends technical expertise to policy analysis and formulation; develops effective strategies and facilitates efficient implementation; enhances human and institutional capacity to build a competent and responsive healthcare sector. Our multi-dimensional approach to capacity building is not limited to academic programs but offers management development programs, knowledge and skills-based training courses, seminars/webinars, workshops, and research studies. Our four core activities are…

- Academic courses at masters and doctoral level in health and hospital management to meet the growing need of skilled healthcare professionals.
- Research that has high relevance to health policies and programs at national and global level.
- Continued education through management development programs and executive programs for working professionals to help them upgrade their knowledge and skills in response to the emerging needs of the industry.
- Technical consultation to the national and state-level flagship programs to address the gaps in planning as well as implementation.

International Institute of Health Management Research, New Delhi (IIHMR-Delhi)

Over the years IIHMR-Delhi has emerged as an institute of repute both nationally and globally for producing socially conscious, skilled and vibrant top-class health care management professionals. Our graduates are well-matched for the ever-changing health care sector and evolving social milieu. The institute has progressed as a leader in research, teaching, training, community extension programmes and policy advocacy in the field of health care. IIHMR has carved out a niche for itself through its cutting-edge academic curriculum, infrastructure, accomplished multi-disciplinary faculty and research.

The Institute as an autonomous body of international stature has been developing leaders for several years to shape tomorrow's healthcare by equipping the students in the fields of health, hospital, and health information technology.

The Institute's dynamic health care research programmes provide rigorous training in management, health systems, hospital administration, health care financing, economics, and information technology.

Commitment to Inclusive Excellence

As an institute, IIHMR-Delhi is committed to creating an environment of higher learning that can serve as the model for the kind of society it strives to build – one of equity, social

justice and mutual support. We have also made a concerted effort to promote the ethos and philosophies amongst today's students and nurture them into growing as effective managers, to think both critically and ethically, to learn to cope with ethical dilemmas and apply systems-thinking approaches to serious and complex societal problems. Our internationally renowned faculty lead multidisciplinary health research in multifarious areas such as public health, health services, health economics, hospital management, social determinants of health, mental Health and other topics of global and national interest.

The IIHMR is invited by various governmental and civil society organizations to provide technical support for capacity building and policy research needs that culminates in developing innovative and equitable health care strategies and provide advocacy support for health policy and planning. The institute also responds to the global health threats, natural disasters, conflict and related humanitarian crisis. In addition to the Masters and doctoral level programmes, IIHMR-D also offers several highly specialized and popular Management Development Programmes (MDP) to wide range of health professional in the country and overseas which largely addresses educational needs amongst in-service aspirants.

Career as a health care management professional

A health management professional cardinally serves humanity and offers excellent opportunities to those who wish to make a difference in the world. Issues in public health are complex and common to all communities at local, national and global levels; hence the demand of health care managerial professionals are rising tremendously. These programmes prepare the graduates for executive and leadership roles in respective professional fields and train them to execute high quality work and conduct policy research on diverse health issues. The courses also are skillfully designed to develop a holistic understanding of the core issues and enables practical applications of the same through internship opportunities. The specializations would develop key competencies in specific areas of interest of the students and would enable the incumbents to grow into accomplished and multifaceted professionals.

Career opportunities are abundant for our students to explore connections between health care and other academic disciplines across the IIHMR campuses. We offer practical and meaningful internship experiences through partnerships with governmental agencies, hospital sector, civil society organizations, local businesses and industry, and a global network of governmental and non-governmental organizations. Our students at IIHMR-Delhi have life-changing opportunities to BE WORTHY and MAKE A POSITIVE CHANGE IN THE WORLD! Come join us!

Advantages of Studying in IIHMR-Delhi

- State-of-the-art architectural infrastructure, campus facilities
- Internationally renowned multidisciplinary faculty team
- Placement assistance in reputed organizations
- Range of scholarship opportunities for meritorious students
- Leading collaborations and networking with global health organizations

- Professional affiliation of students in National/International forums
- Centrally located campus & easy accessibility/connectivity by road/Metro
- Numerous national and international awards won by students
- Excellent academic curriculum for overall professional development and growth of students

With health management degrees, our graduates become health care executives in many public health and medical settings, including international health organizations, research organizations, Government and non-governmental organizations, hospitals, IT and Consulting, Insurance and other sectors. The comprehensive academic curriculum of all programmes integrates theory with internships in different health and hospital settings over a period of two years along with a research dissertation of publishable quality. The talented, socially conscientious and dedicated Alumni of IIHMR-Delhi are making significant contribution to health care sector in all states of India and overseas.

PGDM (Hospital and Health Management)

Specializations:

- Health Management
- Hospital Management
- Health Information Technology

Specialization in Hospital Management:

A comprehensively packaged course for hospital professionals providing an in-depth understanding of hospital operations, quality management, patient safety, management information systems, planning and legal framework. The programme trains students in relevant subjects which, together with intensive internships, equips students to acquire leadership positions in hospitals and allied healthcare organisations. The job profiles range from – human resources management, project planning and implementation, quality management, operations management, costing and financial management, business development in the allied sectors, health IT, health insurance in hospital sector etc.

Specialization in Health Management:

The programme includes a detailed and systematic study of the health systems, understanding and implications of national health programmes, health policy and planning, programme implementation and management. It also orients the students to important areas of public health such as health systems research, epidemiology, quality assurance in healthcare and global health. It prepares students to take on managerial positions in the national health programmes, civil society organizations and other national and international health care organizations. They are also prepared to be competent professionals having sufficient knowledge and practical exposure in various fields such as health insurance, consulting, CSR, healthcare IT.

Specialization in Health Information Technology:

It combines health informatics with information technology that encompasses data mining and data Warehouse Bioinformatics, Clinical Information Systems, Health Insurance and Managed Care, Designing for Healthcare Information Technology and Artificial Intelligence. The course focuses on enabling students to use technology for allowing healthcare organizations to safely deliver services, communicate with citizens and protect data. The course aims at improvement in healthcare quality and effectiveness, increase in healthcare efficiency and increasing administrative efficiency.

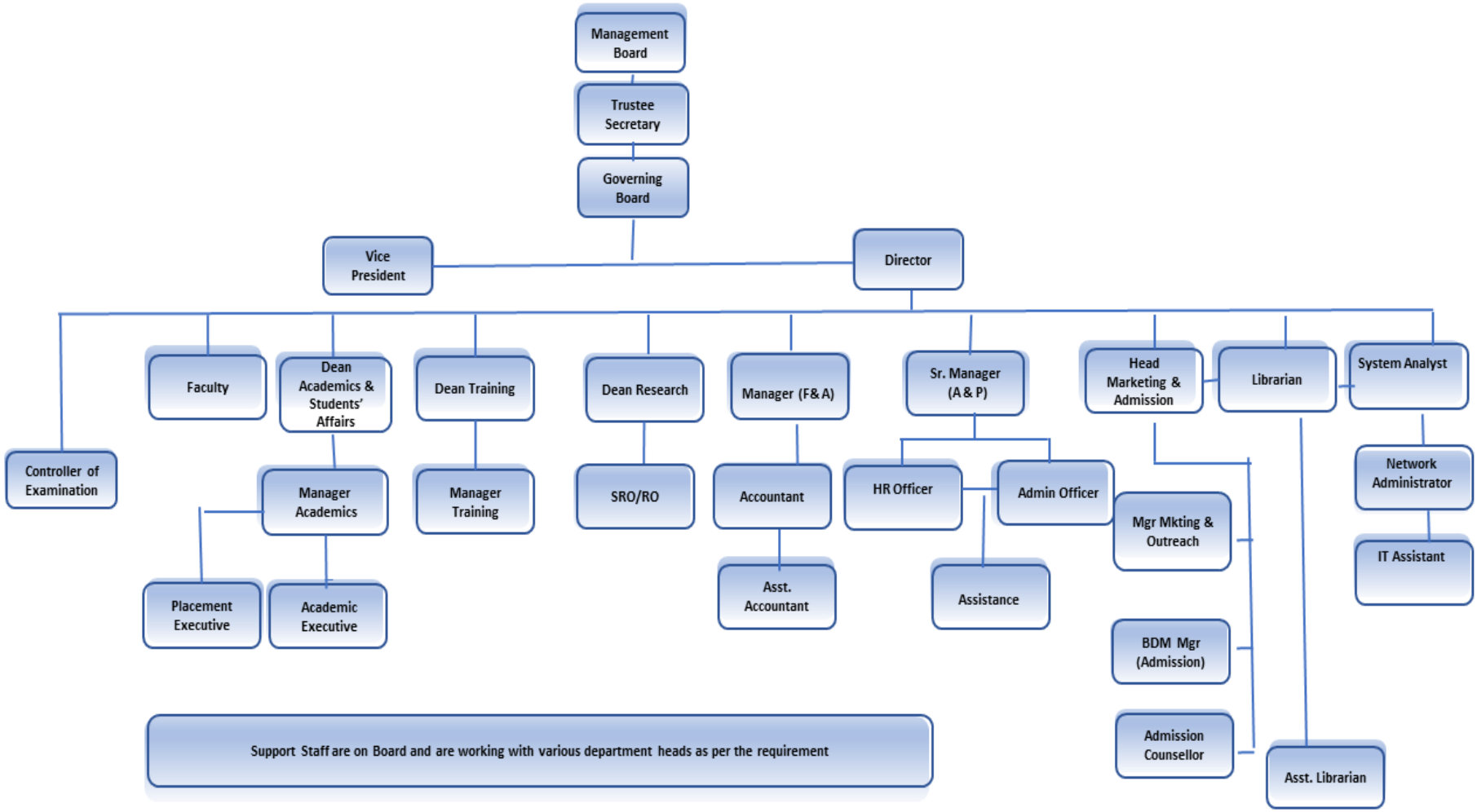
Mission

IIHMR Delhi is an institution dedicated to the improvement in standards of health through better management of health care and related programs. It seeks to accomplish this through management research, training, consultation and institutional networking in a national and global perspective.

Vision

IIHMR is a premier institute in health management education, training, research, program management and consulting in the health care sector globally. The Institute is known as a learning organization with its core values as quality, accountability, trust, transparency, sharing knowledge and information. The Institute aims to contribute to social equity and development through its commitment to support programs aiming at poor and the deprived population.

Organogram of IIHMR Delhi


Management Board
Trustee Secretary
Governing Board
Vice President
Director
Controller of Examination
Faculty
Dean Academics & Students' Affairs
Dean Training
Dean Research
Manager (F& A)
Sr. Manager (A & P)
Head Marketing & Admission
Librarian
System Analyst
Manager Academics
Manager Training
SRO/RO
Accountant
HR Officer
Admin Officer
Network Administrator
Placement Executive
Academic Executive
Asst. Accountant
Assistance
Mgr Mkting & Outreach
IT Assistant
BDM Mgr (Admission)
Admission Counsellor
Asst. Librarian
Support Staff are on Board and are working with various department heads as per the requirement

CORE ACTIVITIES

Research

Our research contributes to the advancement of science and technology in the domain of health and welfare. Evidence and new knowledge from our research studies have informed health and population policies, strategies, programme monitoring and evaluation. Lately, there has been an expansion in the nature and scope of research studies and projects undertaken by the Institute. The broad spectrum of research activities at IIHMR encompasses surveys, exploratory analysis of health services access, impact studies of health programmes, as well as health policy analysis at the state, central, and global level.

Training

A distinct activity of our Institute is to offer continued advanced managerial and leadership capacity enhancement courses to young as well as seasoned health and hospital professionals. Over the years, the Institute has acquired the distinction of being an apex health leadership training institute in the country. The Institute's capacity building programme emphasizes upon strengthening the technical and managerial capacity of programme officials and researchers working at different levels in the government sector, academia, and with philanthropies/NGOs in India and in the South-Asia region.

Teaching

The Institute offers several academic programmes. These include full-time regular on campus programmes, doctoral programmes, executive programmes, and certificate courses. We offer, Postgraduate Programme in Hospital and Health Management (PGDHM), two-year duration full-time programme; Fellowship in Program Management (FPM) of three-year duration; Supply Chain Management certificate course of three-months duration; Hospital Management executive course of ten-months duration; and Public Health Financial Management executive programme of one-year duration.

These educational programmes enhance the knowledge and skills of health and hospital professionals in planning and operating management techniques; diagnosing and solving management problems; and acquiring domain specific competencies to efficiently manage and maintain the quality of care at public and private hospitals and healthcare institutions in India and other developing countries.

FACILITIES

- Gym
- IIHMR Library
- IIHMR Hostel

- Cafetaria
- Media Room
- Smart Classrooms
- Computer/Language Lab
- Field Practice Area
- Counselling

ACADEMICS

ABOUT PGDM

Program Educational Objective (PEO)

The Post Graduate Program in Hospital and Health Management at IIHMR is designed to provide the graduate students with appropriate knowledge, attitude and skills to enable them to perform as effective leaders and managers in healthcare industry"

Additionally, the program seeks to fulfil the following specific objectives:

- To understand concepts and techniques of management and their application in hospital and healthcare organizations.
- To develop skills in diagnosing and solving management problems in healthcare.
- To apply the management skills in planning, operationalizing and managing healthcare organizations.
- To focus on strategic responsibilities for capacity building and human resource development for healthcare delivery.
- To understand and apply the principles of research to identify healthcare problem and provide solutions.
- To explore and implement new technology and innovations in health sector.

Program Outcome

Upon completion of the program the student will be able to "Function effectively as leader and/or manager in a healthcare set up". In order to achieve this, the following program outcomes have been defined:

- Internalize the concepts of management such as healthcare delivery system, strategic planning, Human Resources, marketing, finance and operation
- Apply knowledge of research and management techniques and functions in an integrated manner in healthcare set up
- Use appropriate skills to support healthcare organizations to take informed decision in planning, building and managing healthcare organizations
- Utilize learning acquired from trainings and practical exposures in real time situations

- Utilize the technical skills of research and development for effective implementation of programs in health care sector
- Creating relevant skills and vision for effective implementation of programs and policies in the health care sector.

EPGDPHFM (Executive Post Graduate Diploma in Public Health Financial Management)

The Executive Post Graduate Diploma in Public Health Financial Management course is a one-year program jointly offered by IIHMR Delhi and IIHMR University for NHM Odisha personnel sponsored by NHM Odisha. It especially designed for working professionals to enhance their financial management skills for better decision making under public health environment. Enhanced understanding and knowledge of financial management and its approaches are pivotal for efficient and effective utilization of resources. To achieve this objective, a course in public health financial management with an overall goal to provide a fundamental understanding of key issues in financial management, health economics, public health for informed decision-making and implementation is designed.

Program Educational Objectives (PEO)

At the end of the program the participants would be able to:

- Impart financial skills relevant to the public health systems
- Enhance understanding and knowledge of financial management and its approaches are pivotal for efficient and effective utilization of resources.
- Enhance the leadership skills

Programme Learning Outcomes (PLOs)

At the end of the course the participants would be able to:

- Demonstrate understanding about the principles, concepts and theoretical foundation of public health financing.
- Show in-depth knowledge about the influence of health care financing and health policy linkages the given context.
- Apply the tools and techniques for Budgeting, Planning and Monitoring of public health financing at block/district level.
- Design and integrate financial management systems for overall public health performance system.
- Develop and interpret financial reporting system in public health
- Display leadership competencies required for District/Block level public health finance management.

FPM (Fellow Program in Management)

Health sector is one of the largest growing sectors in the country in terms of opportunities, employment and revenue. This is backed by the focussed structural and policy level reforms in the health sector, rapid digital advances, huge investments, changes in population demographics and disease epidemiology. Sustainability of the health sector growth also depends on the availability of trained resource with requisite technical and managerial skills. While acquiring technical knowledge is easy, knowledge pertaining to management requires collation of real-world experience and research. Fellow Programme in Management (FPM) conducted at IIHMR Delhi is an attempt in this direction to develop best healthcare management talent. It is specially designed for individuals working in Healthcare Industry, Government, and Social Sector and interested in pursuing research in the health sector. Upon successful completion of the Programme, the participant will receive the degree of Fellow Programme in Management.

Program Educational Objective

PEO1: Contribute synergistic and experiential learning as futuristic healthcare professionals and promote quality and evidence-based research in healthcare.

PEO2: Gain higher practical healthcare management skills and contribute as a skilled academic pool for healthcare capacity building.

PEO3: Be involved in exploring and implementing new technology and innovations in health sector with emphasis on emerging public health challenges.

Program Outcome

PO1: Domain Knowledge: Internalize the knowledge of healthcare management, research methodology, analytical, scientific writing and use of digital technologies to develop evidence-based solutions.

PO2: Problem Analysis: Identify, formulate, research literature and analyze the emerging public health challenges.

PO3: Research Skills: Utilize the principles of scientific enquiry, analytical thinking, apply knowledge of research and management techniques in an integrated manner in healthcare.

PO4: Research Ethics: Use, apply ethical frameworks and commit to professional ethics and responsibilities and norms while conducting research, implementing solutions and sharing of knowledge in the society in the context of healthcare domain.

PO5: Professional Identity: Understand, analyze, communicate the values of their professional role in the society and utilize the skills gained to effective capacity building and sharing of knowledge.

EPHM (Executive Program on Hospital Management)

- To provide hospital management program as weekend course, for developing requisite managerial and business skills in hospital management.
- To give opportunity to the working individuals who seek higher education while working to further their career in hospital management healthcare.

Course Benefits

By completing this executive program, the individual will develop the ability to understand the roles and responsibilities of hospital managers and gain the requisite skills for completing their assignment successfully. This course will orient them towards corporate culture, situational analysis, strategic planning, and decision-making in various domains of hospital management.

SCM (Supply Chain Management)

Introduction:

Patient care depends on timely availability of drugs, consumables, and other materials. As compared to developed world, the supply chain in developing countries continues to be weak. In spite of the fact that 25 -35% of expenses are incurred on materials in health institutions, the well-developed techniques to manage supply chain as a scientific system are lacking. The total system requires critical information on need, demand, consumption, regulations, and related issues to be dealt with in an integrated manner. There is need to consider affordability, quality, and timely availability of materials. Further the efficiency of a health institutions partly consists in maximizing the quality of patient care per unit of cost for which supply chain management has an important role to play. With the fast-changing technology, there is an urgent need to acquire required skills to ensure timely supplies consistent with upgraded technology.

The three months certificate program has been designed to train the participants from developing countries for appropriate methods in demand estimation, procurement, stocking distribution, inventory control and maintenance of supplies and equipment's.

Objectives:

On completion of the course, students should be able to:

- understand the supply chain management cycle right from production to consumption of materials
- deal with day to day problems and issues in supply chain production, transportation and warehousing
- understand supply chain management at primary, secondary and tertiary care facilities
- discuss and formulate action plans for reforms in supply chain management for efficient healthcare delivery

Course Benefits:

Organizations:

- Optimal use of resource and minimization of wastage of materials

- Enhanced patient satisfaction through availability of right supplies and equipment

Individual:

- Acquiring skills in appropriate methods for procurement, distribution and maintenance of supplies and equipment
- Participants will be able to make use of proper inventory management techniques to avoid over-supplies or stock out
- The knowledge acquired will be helpful in handling higher management responsibilities in future

Expected Outcomes after Completing the Course:
At the end of the course, the participants should be able to draw out a roadmap for improvement of supply chain management in their institution for providing efficient medical care at an optimum cost.

Target Group:
Professionals dealing with materials in various health institutions, Directors, Medical Superintendents, Store officers, HODs of various clinical and diagnostic services, Specialists and Senior Medical officers, Senior Nurses, Chief /Head Pharmacists, Healthcare Consultants, Pharmaceutical Industrial Mangers and PhD/MHA/MPH students.

RESEARCH / PUBLICATIONS

Area of Research / History

In the area of research, the International insitiute of health management research, Delhi is contributing to the development of health and population policies, strategies, programme monitoring, evaluation and generation of new knowledge. Over the years there has been an expansion in the nature and scope of projects and research studies undertaken by the Institute. The range is wide; from studies involving survey and data generation to exploratory and impact studies of health services and programmes. The Institute entered into policy research and development in a major way, influencing policy making at the state and central government levels. Some of the projects are interpretative in nature and have come up with new interpretations of ground reality.

Publication

Faculty of the institute are widely published, and have several peer-reviewed journal articles, books, conference proceeding to their credit. Additionally, to disseminate knowledge generated through various research projects, IIHMR also publishes working paper, policy briefs and newsletters.

Research Team

The interdisciplinary teams of faculty and research staff constitute an enabling environment for learning and professional growth and development. The multi-disciplinary faculty members with strong research competencies have boosted evidence-driven and program-relevant research in the recent years. IIHMR Delhi also involves the students in the research projects during their internship and dissertation period.

TRAINING

About Training and MDP's

Today's health sector demands a multidisciplinary team of professionals adept at creating a cross sectoral collaborative environment. International Institute of Health Management Research, Delhi has renowed faculty members who have expertise in health, hospital, and health information technology.

Management Development Programs(MDPs)

MDPs are organized for a period of three to five days by individual faculty in their respective expertise. Different organization i.e. Governmental, Non-Government Organizations, Corporate sector , at national and international level are approached for nominations. Since the inception of IIHMR Delhi in 2008, a total of 56 MDPs were organized.

WHO Fellowship Program

WHO has been regularly deputing health functionaries from India and South- East Asian Regional countries for fellowship programs in Project Management, Health Information System, Organisation Development, Human Resource in Health, International health etc.

Customized Trainings

Customized Trainings are organized on the basis of request received from different National and International healthcare organizations. The training contents are finalized in consultation with respective organization. 39 customized programs have been organized for national and international participants from agencies like the Government of National Capital Territory, Delhi, World Health Organization- SEARO, ESIC, Indian Railways, Urban Health Initiative, United Nations Development Programme, IL&FS Education & Technology Services Limited, various Corporate hospitals, Urban Primary Health Care Services Delivery Project- Bangladesh, Ministry of Health and Family Welfare – Bangladesh, Ministry of Public Health, Afghanistan, Rokyan Management Consultancy-Afghanistan Ministry of Health-Sri Lanka, Ministry of Health and Welfare- Myanmar, Jigme Dorji Wangchuck National Referral Hospital- Bhutan, to name a few.

Centers

CENTER FOR CLIMATE, ENVIRONMENT AND HEALTH (CCEH)

(Recognized by Government of India as Centre of Excellence under the National Programme on Climate Change & Human Health)

India Universities and Institutions Network for Disaster Risk Reduction (IUINDRR-NIDM)

Why focus on Climate Change & Environmental Health?

The fate of the Earth and the vulnerability of human society are intrinsically linked to the way humans impact the environment and influence climate change. According to WHO, climate change is the single biggest health threat facing humanity. It is estimated that between 2030 & 2050, climate change will cause approximately 25 0,000 additional deaths annually, from malnutrition, malaria, diarrhea, and heat stress etc.

Intergovernmental Panel on Climate Change (IPCC) report says that action on climate change must include both adaptation and mitigation simultaneously. There is a critical and immediate need to act towards mitigating greenhouse gases (GHG) and protect people & infrastructure from the inevitable impact of climate change.

To address the challenges in health, environment, and climate change, IIHMR Delhi established the Center for Climate, Environment & Health in the year 2019. The center aims to bring together academicians, scientists, policymakers, industry, health care providers and civil society with a mission to reduce the health impacts from climate change, especially in our most vulnerable populations.

Vision

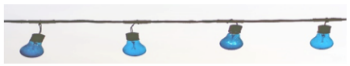
CCEH aims to develop into a world recognized learning hub to promote evidence synthesis and capacity building in the field of climate change and environmental health.

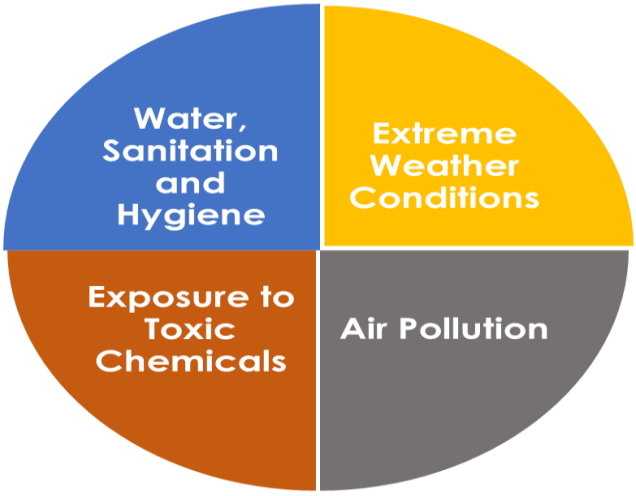
It aspires to contribute to the creation of a sustainable and resilient world where diverse ecosystems can thrive, thus equipping communities with the means to both mitigate and adapt to climate change.

CCEH works to

- establish comprehensive networks and expand the knowledge base among institutions engaged in research and development related to climate science, encouraging research in the areas of climate change.
- conduct policy gap analysis and to measure the effectiveness of current policy on climate change.
- provide a comprehensive educational program in climate change and health that trains future leaders.
- carry out capacity building programs for states to increase their understanding of climate risks and vulnerability.

Our Initiatives-Focus Areas





What We Do

Academics

- Sensitize students about the effects of climate change on human and environmental health.
- Draws faculty from across academia, industry, policy sector, etc. to undertake teaching and research in the field of climate change.
- Works with national & international universities to bring together researchers, policymakers, practitioners, and local businesses to serve as a focal point for innovators looking to bring about global change through ground-breaking, usable solutions.
- Provide platform for hosting National and International conferences related to Climate change and Environmental Health.

Training

- Conduct capacity building programs to increase an understanding of climate risks and vulnerability.

Research

- Revolves around a multi facet dimension catering to the thematic areas of the Centre. Research activities focus on issues such as climate change, rise of infectious diseases, exposure to toxic chemicals to name a few.
- Create new partnerships/collaborations to advance knowledge on human health effects of climate change.
- Policy papers on emerging issues related to climate change & Environment health.

Services

- Sensitization of institutions and hospitals through mock drills like fires, chemical disasters, floods, cyclones, earthquakes, or any other unforeseen events that could result in harm or even death.

Glimpses of Work Done

Some Research Projects Undertaken by CCEH in the last 5 years

- 2013-2016 Climate change and malaria in sub-himalayan region and central India; Funded by DST
- 2017-2020 Climate Variability and Tribal Communities; Funded by DST
- 2018-2019 Health Impact Assessment of Delhi Metro; Funded by DMRC
- 2019-2020 Assessing the Knowledge & Awareness about COPD among healthcare providers and Community; Funded by Chest Research Foundation
- 2019-2020 Developing a Climate Vulnerability tool for health for state of Rajasthan, India Funded by WHO
- 2021-2022 The National Action Plan for Climate Change and Human Health; Funded by NCDC

Collaboration- With National Centre for Disease Control for Vulnerability Assessment for Climate Change for 18 States/UTs in the country in December 2021

Trainings & Capacity Building workshop- Organized "Training of Trainers" for 30 states with TERI on Climate change & Health Vulnerability Needs Assessment under National Program on Climate Change and Human Health, NCDC, Ministry of Health and Family welfare, Government of India.

Participated at the State level TOT for State and District Nodal Officers under National Program for Climate Change and Human Health (NPCCHH) organized by Directorate of Public Health, Government of Odisha in February 2022.

Advisory Role- Participated as civil society stakeholder in NDMA meetings with Ministry of Home Affairs, Government of India.

Webinars- International Webinar on "Health Vulnerability for Climate Change" with experts from WHO Geneva, Belgium, Nepal on February 2022.

Presentations- Presented India Case Study at Regional training on 'Advancing health-climate action through improved vulnerability and adaptation assessment and planning' organized by WHO/SEARO in August 2021

IIHMR Delhi in collaboration with partner institutes organized Environmental Health e-conference on "Environmental determinants of Infectious Diseases in India in Dec 2020

Innovation Cell

IIHMR- Delhi

IIHMR, since inception has successfully produced highly skilled industry ready health professionals with managerial capabilities and innovative blend of mind through its well-crafted course curriculum and knowledge dissemination around emergent technologies and data analytics (DA), having high significance to modern healthcare systems.

Innovation Cell

IIHMR set up its incubation and entrepreneurship cell in 2020 to promote this culture. Discussions were held on several occasions with Senior Management to initiate activities. We had an MOU with EDII to foster such an environment. Webinars were organized where our students also participated. To further provide a boost to such activities, we had another MOU with IIHMR Foundation housed in Jaipur that was created solely to support startups and incubators.

As per the directives from Ministry of Education (MoE) under Institution's innovation council (IIC 5.0) initiatives, the incubation cell was upgraded to innovation councils and has been registered in year 2022. It has members represented by faculty, students and industrial consultants with specific roles and responsibilities. It is with an aim to provide a common platform to interact, besides nurture the budding entrepreneurs towards innovative avenues and various other opportunities in healthcare industry.

Vision: To evolve into a platform that brings together students, alumni, faculties, working healthcare professionals, industry experts, policy makers and investors towards innovation in healthcare and nurture a sustaining entrepreneurship culture in the country.

Mission: To contribute to the healthcare ecosystem by providing a focused education, training and mentorship to the participants that would ignite generation of new innovative ideas.

To support healthcare innovations that address healthcare needs of India and promote social equity and development.

Objectives:

- To establish an innovation and incubation cell catering health system and healthcare.
- To promote education and research in the domain of healthcare using modern and advance technologies.
- Knowledge dissemination in the area of Cognitive science using artificial intelligence, machine learning and deep learning technologies.
- To promote innovation in students and providing a conducive ecosystem for new development in healthcare.

Few of the IIC initiatives like entrepreneur talks, online sessions on design and innovative thinking with innovation in mind and start-up innovators interaction were organized during our placement drives so as to inspire and make our students understand the start-up culture.

Few of our Associations and innovation handholds with start-ups: Our association with industrial representatives and consultants has helped in establishing a centre for innovation with industrial collaborate like working with:

- A start-up in MedTech domain having developed the emerging technologies driven Mobile App and web portal to measure the vital parameters of a person using camera sensors and AI, wherein we are supporting in the field test and helped them to recalibrate it further. This association has further helped in establishing a industry-academia bonding and creating jobs for healthcare professionals from our institute.
- Another Startup in digital measurement equipment in medical diagnosis to measure the blood parameters. In single invasive use, one can find out the anemia and other blood related diseases using small digital measuring device developed and produced in India.
- A collaboration with IIHMR to develop AI based solutions for anthropometric measurements for early detection of malnutrition in child 0-6 years.

The student council of our innovation cell is actively participating in incubation centre establishment, with an objective to handhold budding entrepreneurs and start-ups specially from healthcare domain. Our effort is to establish a cohesive ecosystem to nurture new innovations in our institute. Therefore, our futuristic stride is to attract best talents and innovators by establishing an incubation centre. We are also planning to establish the social-media campaigns with an objective to help our students get best technology interface in our institute and make them understand its various utility in healthcare domain. Our course work includes industrial and field visits to facilitate

knowledge and innovation to our students, as it drives a way to think innovative and creative, it also will align the students towards new implementations across the industry.

Innovation Facilities:

Artificial Intelligence Laboratory (AI-Lab): with over 150 latest workstation and server infrastructure for experimenting on the cutting-edge technologies and tools.

Discussion and meeting Rooms: For conducting of presentations and brain-storming sessions we have Media, Entrepreneurship, and Board rooms for the students and member of IIC council members.

Industrial Collaboration and experts empanelled: To support and guide students, we have exclusive collaborated with industrial consultants and experts from innovation and technology sector.

Community Outreach Programme

Community Outreach Programme which has been added to its work portfolio as a fifth pillar of the institute activities. The Institute had a felt need of having a community outreach area or a demonstration site in order to develop and ensure that the students of IIHMR Delhi, who are future health management professionals, have a connect with the community and are able to identify, manage and address key individual and community health needs in the real settings. The programme not only facilitates in imparting hands-on experience to the students but also facilitates in learning of skills beyond the four walls of an institute and also serves as a platform to hone the skills of students. This programme started in Goyla Dairy, South-west District, New Delhi after obtaining due approval from the Directorate General of Health Services, Govt. of NCT of Delhi on 04th February 2022. The Goyla Dairy area is a peri urban aera covered an approximate population of 55000. The health care needs are catered by two Aam Aadmi Mohalla Clinics (one in Goyla Khurd and other in Qutub Vihar), one urban PHC, one TB clinic and one leprosy clinic. A group of 21 ASHA workers and five ANMs act as an interface between the community and health services, catering to needs related to comprehensive primary healthcare of the populace. There are two medical officers in UPHC and two in each Mohalla clinics. The TB clinic and leprosy clinic are managed by Damien Foundation India Trust (DFIT) in Qutub Vihar.

General Objective: –

To develop a connect between future health management professionals and the community to enable them to identify and manage key individual and community health needs by mobilizing locally available resources.

Specific Objectives: –

A. A Health Needs Assessment would be conducted in the first phase with the following objectives:

1. To assess the health needs of the community through a population-based family health survey.
2. To assess the preparedness of the health system to meet the population needs.

B. Based on the findings from family health profile, we would develop and implement interventions to address the problems of the community with the following objectives:

1. To reduce the out-of-pocket expenditure in health by households through information sharing (reducing information asymmetry) and mobilising available resources at individual and community level (public and private).
2. To improve use of clean fuels, safe drinking water and toilets at the household and community level.
3. To develop capacity of care givers in family for providing care for providing MCH and selected NCD care (Hypertension, Diabetes and Cancer)

Approaches: -

The students who are enrolled in the PGDM course are getting good exposure to field-based practicum training and is strengthening student's skills in terms of following skillsets:

1. establishing communication with various stakeholders including medical officers, health care functionaries and community.
2. orientation on different national and state health programs.
3. eliciting information from beneficiaries through formal and informal interactions and interviews on a particular topic.
4. use of technology to collect, manage and analyze data.
5. organizing events at community level for a specific purpose such as general health checkup, screening of diseases, dissemination of health-related messages.
6. liaising with care providers, beneficiaries, management team and decision makers; and
7. conducting periodic reviews of specific health programs with reference to health, hospital and health IT management to understand the process of health management information system.

PART B – PROJECT REPORT

ABBREVIATIONS

ANM- Auxiliary Nurse and Midwife

ASHA- Accredited Social Health Activists

AYUSH- Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy

CHC- Community Health Centre

DH- District Hospital

4D's- Defects at birth, Diseases, Deficiencies, and Developmental Delays

KAP- Knowledge, Attitude and Practice

MHT- Mobile Health Team

NITI AAYOG- National Institution for Transforming India

OOPE- Out of Pocket Expenditure

PHC- Primary Health Center

RBSK- Rashtriya Bal Swasthya Karyakram

SNCUs- Special Newborn Care Units

WB- West Bengal

LIST OF FIGURES

FIGURE3- Showing the post profile of the participants.

FIGURE4- Shows the knowledge of diseases at birth of the participants.

FIGURE-5- Shows the knowledge of defect at birth of the participants.

ABSTRACT

Introduction: The introduction of the Rashtriya Bal Swasthya Karyakram (RBSK) in 2013 marked a significant step by the Government of India in addressing child health issues. This innovative initiative focuses on child health screening and early intervention services, aiming to establish a systematic approach for early identification and providing necessary care, support, and treatment. The strategy covers children from birth to 18 years of age and targets 32 common health conditions related to defects at birth, diseases, deficiencies, and developmental delays (4 Ds).

Aim: To Assess the Knowledge, Attitude and Practice regarding Screening of the Diseases and Defects at Birth under the RBSK among health care providers

Methodology: Hospital (PHC, CHC, DH) based Descriptive cross-sectional study,3 different state of India that were Jharkhand (Hazaribagh), Chhattisgarh (Rajnandgaon) and Assam (Baksa). Out of Pocket Expenditure was used as indicator for the selection of the state. District was selected based on Aspirational district index published by NITI Aayog from the selected states.

Results- Based on the knowledge assessment of the participants regarding defects and diseases at birth, it was found that 15 participants had a knowledge level ranging from 21% to 40%. However, only 3 participants demonstrated a higher level of knowledge, ranging from 41% to 60%, specifically related to defects and diseases at birth.

Conclusion: Need for continuous efforts to enhance the knowledge, attitude, and practices regarding diseases and defects identification and reporting at birth.

Key words: RBSK, MHT, 4D's. Child Health, India, Evaluation, Assam, Jharkhand, Chhattisgarh

INTRODUCTION

In India, approximately 26 million babies are born each year. According to the 2011 Indian Census, children aged 0-6 years constitute 13% of the country's total population.[1] Overall, children in India are in good health when compared to adult standards, and significant advancements have been made in reducing mortality and diseases among young individuals. However, it is crucial to sustain the progress achieved and exert additional efforts to further enhance children's health. It is noteworthy that under-5 mortality in the Indian population accounts for approximately 1.27 million deaths.[2]

In our country, approximately 6 to 7 out of every 100 infants born each year are affected by birth defects. This translates to around 1.7 million cases of birth abnormalities annually, contributing to 9.6% of all neonatal mortality. Moreover, the prevalence of undernutrition or nutritional deficiencies among children in India ranges from 4% to 70%. Additionally, at least 10% of Indian children experience developmental delays during their early years. According to the technical reports of Special Newborn Care Units (SNCU), around 20% of infants discharged from SNCUs are later diagnosed with developmental delays and/or disabilities.[3]

The Rashtriya Bal Swasthya Karyakram (RBSK) is a pioneering and ambitious initiative launched by the Ministry of Health and Family Welfare, Government of India.[4] Launched as part of the National Health Mission, the Rashtriya Bal Swasthya Karyakram (RBSK) integrates the previously existing school health program.[5]

The introduction of the Rashtriya Bal Swasthya Karyakram (RBSK) in 2013 marked a significant step by the Government of India in addressing child health issues. This innovative initiative focuses on child health screening and early intervention services, aiming to establish a systematic approach for early identification and providing necessary care, support, and treatment. The strategy covers children from birth to 18 years of age and targets 32 common health conditions related to defects at birth, diseases, deficiencies, and developmental delays (4 Ds). The program ensures free treatment and care, including tertiary level procedures. The Ministry of Human Resource Development and the Ministry of Women and Child Development collaborate closely to screen children enrolled in Anganwadi centers (for children aged 0-6) and those enrolled in public and publicly assisted schools. Doctors at healthcare facilities evaluate newborns for birth abnormalities, while Accredited Social Health Activists (ASHA) visit newborns at their homes for assessment and support. This coordinated effort aims to enhance early detection, diagnosis, and intervention to improve child health outcomes.[6]

The intervention under the Rashtriya Bal Swasthya Karyakram (RBSK) encompasses a wide range of medical, surgical, and therapy-based approaches. These interventions can include Medical and Surgical Intervention: Children identified with specific health conditions or birth defects may require medical or surgical interventions. This could involve specialized treatments, surgeries, or procedures to address their health needs. Therapy-based Intervention: Different forms of therapy may be recommended based on the child's requirements. These can include physiotherapy to address physical limitations, occupational therapy to improve daily living skills, speech, and language therapy to address communication difficulties, vision therapy for visual impairments, behavioral therapy to address behavioral challenges, and psychological assessment and therapy for mental health concerns. Access to Services: These services should be provided based on

the child's individual needs and can be delivered at primary, secondary, or tertiary health centers. If government facilities lack certain specialized services, children may be referred to centers outside the state or even in the private sector. The objective is to ensure that necessary interventions are accessible to all children, regardless of their economic background, and are provided at no cost to families. The principles of equity and a universal health approach guide the provision of these services, aiming to ensure that every child in need receives the required interventions to support their health and development.[7]

RATIONALE

This study was conducted with the intent to assess Knowledge, Attitude, and Practice (KAP) regarding screening of diseases and defects at Birth under Rashtriya Bal Swasthya Karyakaram (RBSK) among health care providers. There was need to raise the concern regarding the defects and diseases occurring at birth and it was required to take intervention at early stages to reduce the impact of defects and diseases. A detailed understanding of the factors that influence health as well as effective methods for obtaining and utilizing information to improve child's health and to reduce burden of expenses and hospitalization. So this paper attempts to assess KAP of screening of diseases and defects under RBSK at 3 states of India

OBJECTIVE

To Assess the Knowledge, Attitude and Practice regarding Screening of the Diseases and Defects at Birth under the RBSK among health care providers

1. To understand the Knowledge of Mobile health team (MHT) members (AYUSH doctors and ANM) and health care providers regarding RBSK program
2. To understand the Attitude of Mobile health team (MHT) members (AYUSH doctors and ANM) and health care providers regarding RBSK program
3. To understand the Practice of Mobile health team (MHT) members (AYUSH doctors and ANM) and health care providers regarding RBSK program

METHODOLOGY

A Hospital (PHC, CHC, DH) based Descriptive cross-sectional study was conducted in three districts in three different states of India. For the selection of the state in the study Out of Pocket Expenditure was undertaken as a significant indicator. As per the National Health Accounts: (2017- 18) released in November 2021, there were three states which were selected with one state out of pocket expenditure (OOPE) above national average from different regions of the country and two states below the same. The state with higher OOPE were WB selected and two with lower OOPE were Chhattisgarh and Assam were selected. But, as in the stage 2 we have utilised the Aspirational districts which were not available in West Bengal we selected the state next in list that was Jharkhand, and the district was selected based on Aspirational district index published by NITI Aayog from the selected states. These were the districts coming on high index on NITI Aayog aspirational district program.

SL NO	STATE	DISTRICTS
1	Jharkhand	Hazaribagh
2	Chhattisgarh	Rajnandgaon
3	Assam	Baksa

The Mobile Health Team (MHT) members were selected as the primary unit of study and ASHA was also selected as secondary unit of the study due to their pivotal role in implementing the program at the grassroots level. Purposive sampling was used for the study, and Ayurveda, Yoga and Naturopathy, Unani, Siddha, and Homoeopathy (AYUSH) medical officers, auxiliary nurse midwives and (ANMs) of the Mobile Health Team (MHT), and ASHA personnel were invited to participate. and Doctors, ANM, and

ASHA, available in the health facility who were ready to give consent was included in the study and any person who didn't provide consent was excluded in the study. And pharmacist as data operator of mobile health team was also excluded in the study.

The entire study was for the period of three month. And the sample size of the study was only 36, study participant was selected according to the members of the mobile health team assigned by the government of India per district , Two MHT was appointed in one district and in one MHT members consist of two AYUSH Doctor as a medical officers and one ANM and one pharmacist as a data operator was appointed as member and ASHA was selected randomly on the basis of the previous research study because ASHA work as a community health care provider and do community screening.

Quantitative questionnaire was used to collect the data and that was fully picture based closed ended questionnaire and most of the pictures was selected from the RBSK job aid proposed by the government of India, and data was collected at the time of visit in the individual state. Data was cleaned and then analysed by using the software IBM SPSS Version 22

Ethical consideration was taken from The IIHMR Student Research Review Board, and the study was initiated after institutional ethics approval. All participants were informed of the study's goals then written consent of the participants was taken prior the data collection.

RESULT

The study included a total of 18 participants, and their characteristics were analysed in terms of age, gender, and post profile.

In age wise distribution in 20–30years age group there were 4 participants that accounting for 22.22% of the total sample. And in 31-40 years age group most of the participants fell into this with 10 individuals representing 55.55% of the sample. and Above 40 years age group there were 4 participants that also making up 22.22% of the total sample. **(Shown in fig 1)**

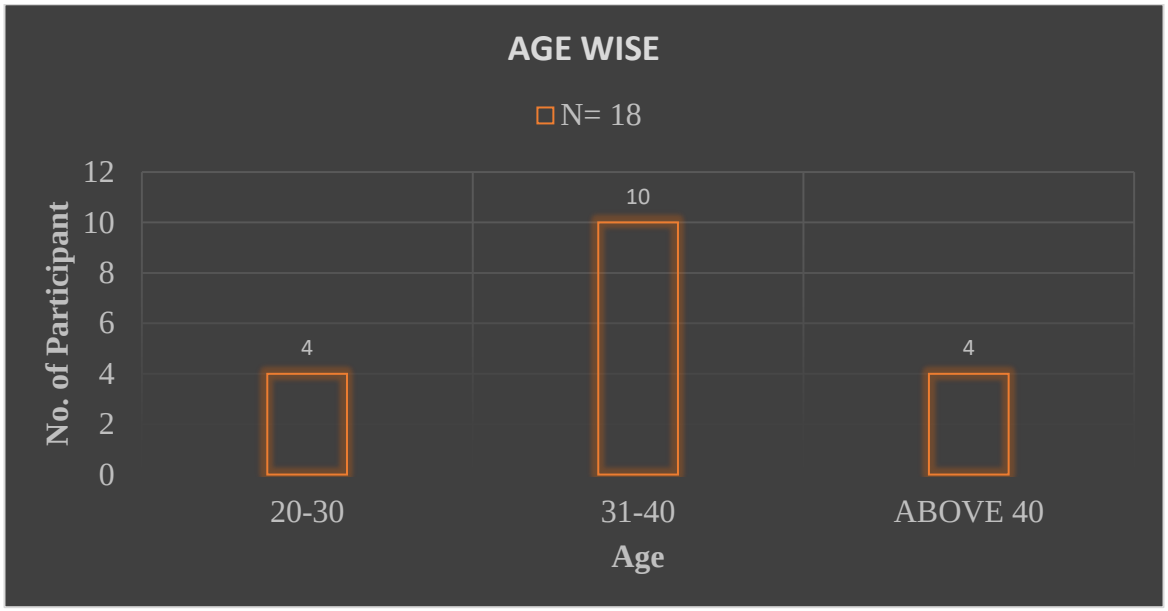


Fig 1: - showing age wise distribution of the study participant.

In gender wise distribution out of the 18 participants 8 were male that representing 44.44% of the sample. and the remaining 10 participants were female that accounting for 55.55% of the total sample **(shown in fig 2)**

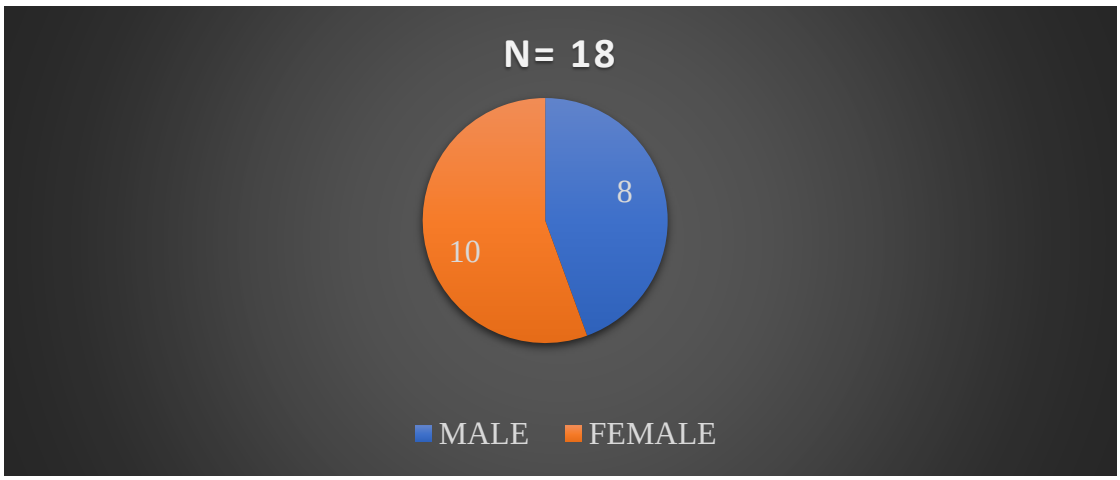


Fig 2- showing gender wise distribution of the participants.

Post Profile Wise Distribution shows that most participants held the post of a doctor, with 11 individuals representing 61.11% of the sample, and Six participants were Auxiliary Nurse Midwives (ANMs) which making up 33.33% of the sample, and Only one participant held the post of an Accredited Social Health Activist (ASHA) which representing 5.55% of the total sample. (Shown in fig 3), These findings provide insights into the demographics of the Mobile Health Team (MHT) members participating in the study, highlighting the distribution of age groups, gender, and different post profiles within the team.

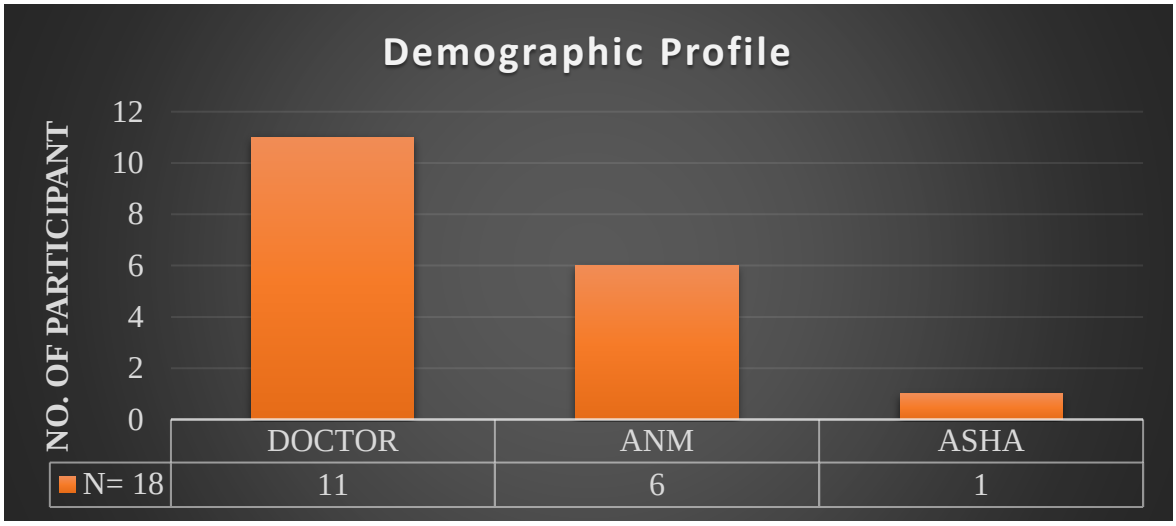


Fig 3: - showing the post profile of the participants.

The study was conducted for the knowledge, Attitude and Practice assessment of the diseases and defect at the birth and in terms of knowledge of diseases and defects at birth, none of the participants had knowledge in the range of 0-20% and The majority of participants, 15 individuals, had knowledge in the range of 21-40%, representing 83.33% of the total sample. And Three participants had knowledge in the range of 41-60%, accounting for 16.67% of the sample. and None of the participants had knowledge in the range of 61-80%. And 81- 100% **(shown in figure 4 and figure 5),** These findings indicate that most of the participants had a moderate level of knowledge (21-40%) regarding diseases and defects at birth, while a smaller proportion had a higher level of knowledge (41-60%). There were no participants with knowledge levels below 20% or above 60%.

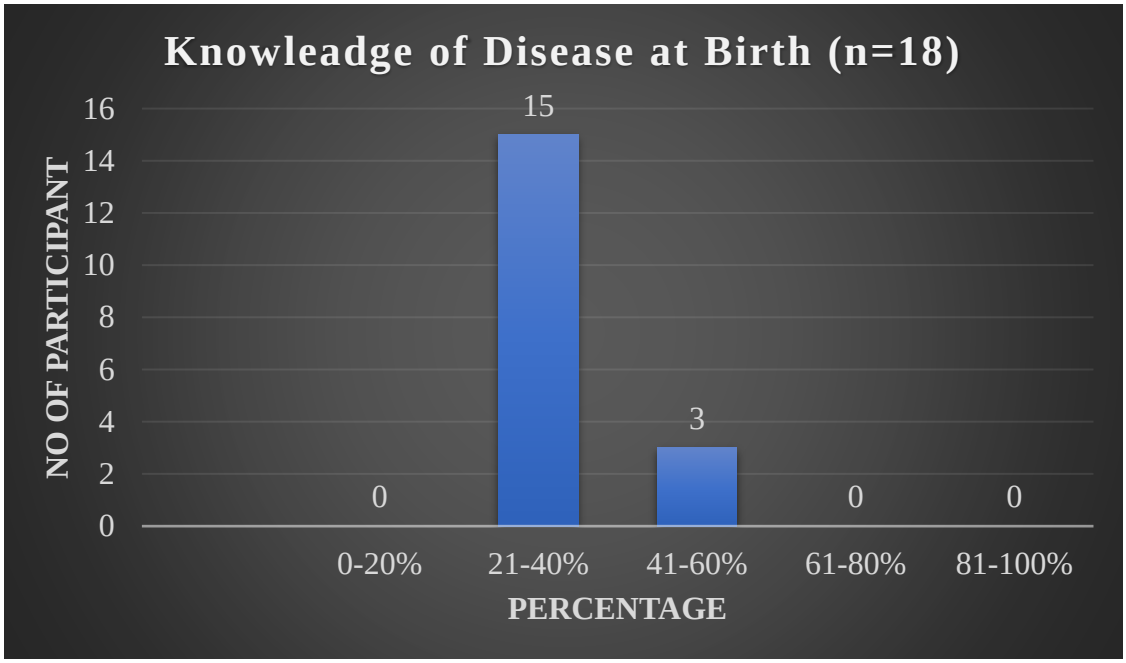


Fig 4- shows the knowledge of diseases at birth of the Participant.

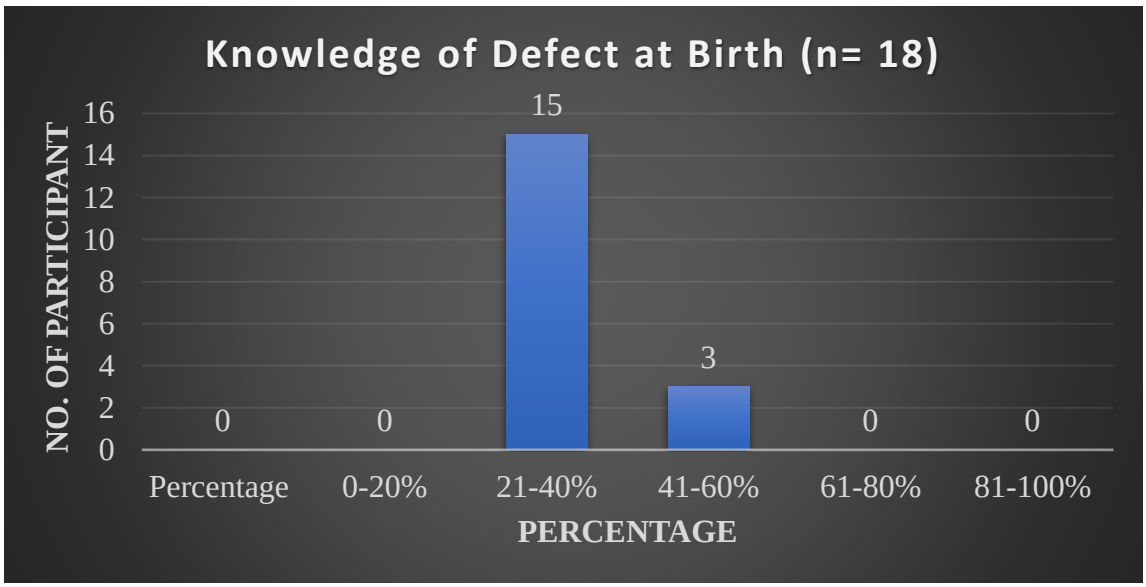


Fig 5- shows the knowledge of defect at birth of the Participant.

For the attitude assessment of the participant for Rashtriya Bal Swasthya Karyakram(RBSK) program most of the participants in the study exhibited a positive attitude towards the program. They expressed enthusiasm and support for the initiative, recognizing its potential to bring about positive change in child health. These participants acknowledged the importance of early identification and intervention in addressing health issues among children. They saw the RBSK programme as a great tool for giving children in need comprehensive care, support, and therapy, regardless of their family's financial situation. These individuals recognized the equity and universal health approach underlying the program, emphasizing the significance of ensuring access to healthcare services at no cost to families. Their positive attitude towards the RBSK program reflected a commitment to improving child health outcomes and an appreciation for the efforts being made at the grassroots level to implement this innovative initiative.

For practice part in the study, it was found that participants were not allowed to do screening of diseases and defect at birth in the hospital because screening at birth was

done by the pediatrician in the hospital. They just do screening in the community and at Anganwadi centre and refers to the higher facility of the district or to the state as per the need for the treatment required. Participants understood the need for expertise and experience in handling the unique healthcare needs of new-borns and. By adhering to these guidelines, participants demonstrated their commitment to providing appropriate care and ensuring the best possible outcomes for new-borns in their communities.

DISCUSSION

With the major objectives of early identification and management of the 4Ds (Defects at Birth, Diseases, Deficiencies, and Development Delays), the Rashtriya Bal Swasthya Karyakram (RBSK) programmes started in February 2013. RBSK the first child health programme to particularly address both the medical and habitation needs of children with disabilities, stands out for its innovative approach. This programme understands the significance of comprehensive support and interventions to help children with disabilities attain their full potential in addition to the identification and treatment of medical issues. The RBSK programme adopts a holistic approach to meet the varied needs of children with disabilities by encompassing a wide range of services, including medical, surgical, and therapy-based therapies. This all-encompassing approach distinguishes the RBSK and underlines its applicability in tackling the health and development issues this vulnerable community faces. In this study, the aim was to assess the knowledge, attitude, and practices of the Mobile Health Team (MHT) members and other health care providers like ASHA who were involved in implementing the RBSK program. The study sought to examine the level of understanding and awareness among the MHT members and ASHA regarding the diseases and defect at the birth of the program, as well as their overall attitudes towards its objectives and their practices in carrying out their responsibilities.

The implementation of the RBSK program faces several challenges and barriers. Some of the major issues include:

1. Salary: RBSK members often face inadequate compensation for their workload. This can demotivate and hinder the retention of skilled personnel. as compared to the workload According to research done by Sogarwal et al [8] and Best and Kumar [9], several national programs in the nation have reported experiencing similar difficulties with execution.

2. Training: There is a need for continuous training to enhance the skills of RBSK members in screening and managing the health issues related to the 4 D's (Defects at Birth, Diseases, Deficiencies, and Development Delays). Additional training can help improve the effectiveness of the program.

3. Regional variations: Different weather conditions and geographical factors across different regions of the country pose challenges in implementing the program uniformly. These variations may affect access to healthcare services and transportation.

4. Manpower shortage: Insufficient availability of trained healthcare professionals and support staff is a significant challenge in the successful implementation of the program. The shortage of manpower can lead to delays in screening and providing necessary interventions.

5. Transport facilities: Inadequate transportation infrastructure and facilities can limit the reach of the program, especially in remote or rural areas. Lack of transportation can impede timely access to healthcare services. all these Similar issues were discussed and documented in the research studies carried out by Kumar et al. [10]

Addressing these challenges requires attention from policymakers and stakeholders to ensure that RBSK members receive appropriate remuneration, receive regular training to enhance their skills, and efforts are made to overcome regional variations, address the shortage of manpower, and improve transport infrastructure for efficient program implementation.

The results of the study indicated that the Mobile Health Team (MHT) members in the medical block faced a deficiency in terms of human resources required to meet the program's targets. Most medical officers in the MHT had a background in Ayurveda, Yoga and Naturopathy, Unani, Siddha, and Homeopathy (AYUSH). However, there was

a noticeable shortage doctor and nurses within the MHT and there was shortage of data entry operator. This shortage of support staff potentially impacting the efficient functioning of the RBSK program, as data entry operators play a crucial role in maintaining accurate records and nurses provide essential healthcare services. The findings highlighted the need for addressing this deficiency in human resources within the MHT, ensuring that an adequate number of doctors and nurses are available to support the successful implementation of the program, Similar results were emphasised in the studies carried out by Singh et al. [7]

The national guidelines of the RBSK emphasize the crucial role of ASHAs and Anganwadi workers in complementing the program's initiatives. These frontline healthcare workers play a vital role in early identification of birth defects or health issues and sensitizing caregivers about the importance of seeking medical advice from the dedicated Mobile Health Team (MHT). However, in the district studied, their involvement was found to be minimal, highlighting the need for proactive measures to ensure their active participation and coordination. Efforts should be made to strengthen the engagement of ASHAs and Anganwadi workers in the RBSK program, including providing appropriate training and resources to enhance their capacity to identify and refer children in need of medical attention. By actively involving these community health workers, the RBSK program can maximize its impact and ensure that children receive timely and comprehensive care. Similar finding was highlighted by Chakraborty et al. [3]

LIMITATION

The number of participants included in the study was limited, which affects the generalizability of the findings to the larger population. A small sample size did not adequately represent the diverse range of results within the target population. Mobile Health Team members were not allowed to screen children 0- to 6-month-old. ASHA were not doing the screening of the children in the community. Limited number of research study was done on RBSK scheme.

CONCLUSION

Need for continuous efforts to enhance the knowledge, attitude, and practices regarding diseases and defects identification and reporting at birth. strengthening awareness campaigns, providing training to healthcare providers, and ensuring accessibility to screening and diagnostic facilities can contribute to improving the overall effectiveness of RBSK in identifying and managing diseases and defects at birth, leading to better child health outcomes.

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ANNEXURE

ANNEXURE I:-QUESTIONNAIRE USED FOR DATA COLLECTION

SCREENING OF DEFECT AND DISEASES AT BIRTH UNDER RASHTRIYA BAL SWASTHYA KARYAKRAM (RBSK) PROGRAM

A) SCREENING OF DEFECT AT BIRTH

1)


FIG 1

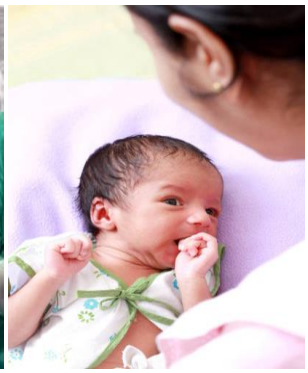

FIG 2


FIG 3


FIG 4


FIG 5


FIG 6

2)	 FIG 7  FIG 8  FIG 9  FIG 10  FIG 11  FIG 12
3)	 FIG 13  FIG 14  FIG 15  FIG 16  FIG 17  FIG 18

4)




FIG 19 FIG 20 FIG 21



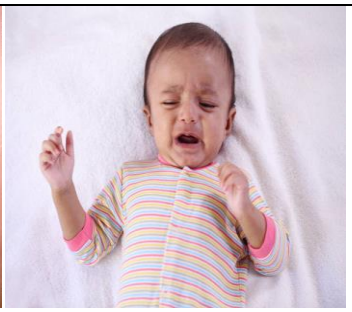
FIG 22 FIG 23 FIG 24

5)



FIG 25 FIG 26 FIG 27

FIG 28

6) **A)**	 FIG 29  FIG 30  FIG 31  FIG 32
B)	 FIG 33  FIG 34  FIG 35
7)	 FIG 36  FIG 37  FIG 38  FIG 39

8)

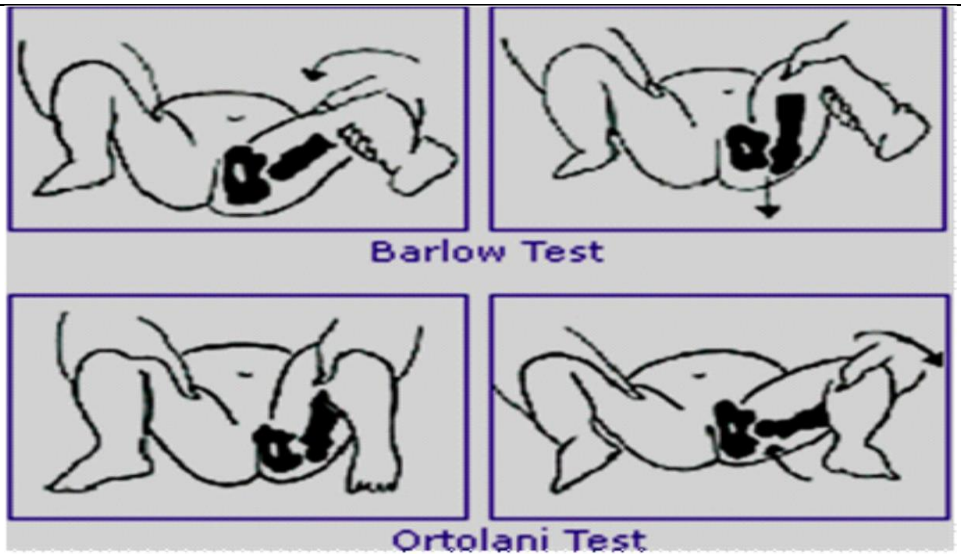


FIG 40

9
A)

FIG 41

FIG 42

FIG 43

B)

FIG 44

FIG 45

FIG 46

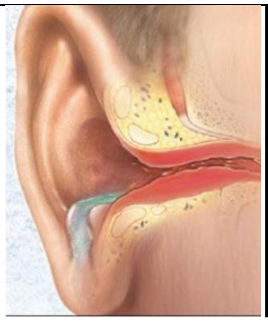
FIG 47

FIG 48

C) CLEFT FEET	  FIG 49 FIG 50
10) UPPER LIMB **A) WRIST SWELLING**	   FIG 51 FIG 52 FIG 53
B) PALM	   FIG 54 FIG 55 FIG 56
11)	  FIG 57 FIG 58

12)	 FIG 59  FIG 60  FIG 61  FIG 62

B) SCREENING OF DISEASES AT BIRTH

1)	  FIG 63 FIG 64
2)	   FIG 65 FIG 66 FIG 67
3) A)	   FIG 68 FIG 69 FIG 70
B)	   FIG 71 FIG 72 FIG 73

4)
A)


FIG 74


FIG 75


FIG 76


FIG 77


FIG 78

B)


FIG 79


FIG 80


FIG 81

C)


FIG 82


FIG 83


FIG 84

D)


FIG 85


FIG 86


FIG 87


FIG 88

FIG 89


FIG 90

E)


FIG 91


FIG 92


FIG 93


FIG 94

	   FIG 95 FIG 96 FIG 97
6) REACTIVE AIRWAY DISEASES	More Than 3 Episodes Of Increased Shortness Of Breath And Difficult Breathing And Wheezing

ANNEXURE II :- SCORING SHHET

Screening of defect and diseases at birth under Rashtriya Bal Swasthya Karyakram (RBSK) program

SCORING SHEET

A) SCREENING OF DEFECT AT BIRTH

Sl No.	NAME OF THE DEFECT	SCORE OBTAINED	REMARKS
1	HEAD		
2	NECK		
3	EYE		

4	EARS		
5	NOSE		
6 (A)	MOUTH (CLEFT LIP)		
6(B)	MOUTH (CLEFT PALATE)		
7	ABNORMAL FACIES (DOWN's SYNDROME)		
8	HIP CONGENITAL HIP DYSPLASIA /DISPLACEMENT		
9(A)	LOWER LIMB (CLUB FOOT)		
9(B)	LOWER LIMB (BOW LEG)		
9(C)	LOWER LIMB (CLEFT FEET)		
10(A)	UPPER LIMB (WRIST SWELLING)		
10(B)	UPPER LIMB (PALM)		
11	SPINE NEURAL TUBE DEFECT		
12	CONGENITAL HEART DISEASE		

B) SCREENING OF DISEASES AT BIRTH

Sl No.	**NAME OF THE DISEASES**	**SCORE OBTAINED**	**REMARKS**
1	CONVULSIVE DISORDER (FITS/ SEIZURES)		
2	OTITIS MEDIA		
3(A)	DENTAL CONDITION (NATAL TEETH)		
3(B)	DENTAL CONDITION (SWOLLEN/ BLEEDING / RED GUMS)		
4(A)	SKIN CONDITION		

	(I)COLOR :- JAUNDICE, PALLOR		
4(B)	SKIN CONDITION (II) EDEMA		
4(C)	SKIN CONDITION (III) BIRTH MARKS		
4(D)	SKIN CONDITION (IV) INFECTIOUS LESIONS:- VIRAL, BACTERIAL, FUNGAL (ERYTHEMA, MACULE, PAPULE, VESICLE, PUSTULE)		
4(E)	SKIN CONDITION (V) PRURITUS: DRY SKIN, ALLERGY, ECZEMA, CONTACT DERMATITIS AND SCABIES		
5	REACTIVE AIRWAY DISEASES		

ANNEXURE III :- PATIENT INFORMATION SHEET

PATIENT INFORMAION SHEET

You are being invited to participate in a research study. Before you take part in this research study, all information related to study will be explained to you and you will be given the chance to ask questions in case of any doubt. Please read carefully the information provided in this sheet. If you agree to participate, please sign the informed consent form.

STUDY TITLE: :- Assessment of Knowledge, Attitude and Practice (KAP) regarding Screening of the Diseases and Defects at Birth under Rashtriya Bal Swasthya Karyakaram (RBSK) among health care providers

PURPOSE OF THE STUDY: Assessment of the Knowledge, Attitude and Practice regarding Screening of the Diseases and Defects at Birth under the RBSK among health care providers

PROCEDURE OF THE STUDY: This study will be conducted in form of a structure interview. The total duration of each interview will be 10-20minutes.

PARTICIPANT'S RESPONSIBILITY: If you wish to participate in the study, you will be interviewed.

POSSIBLE RISKS/ DISCOMFPRTS: This study involves only interview and the information provided would be kept confidential as financial discussions are being done.

POTENTIAL BENEFITS: The study will help us to understand KAP of AYUSH Doctors and health care providers.

CONFIDENTIALITY OF INFORMATION AND MEDICAL RECORDS: All information collected will be kept confidential and used only for the purpose of this research.

PARTICIPANT'S RIGHTS: Your willingness to participation in this study is purely voluntary. If you wish to withdraw from the study at any point, you are free to do so. Kindly inform the investigators if you choose to withdraw from the study. If you are willing to participate in the study you will be required to provide your voluntary consent in the section provided below.

COST OF PARTICIPATION AND COMPENSATION: You will not be paid any incentives for your participation in the study.

CONTACT DETAILS OF THE INVESTIGATOR: For any information related to the study and your participation, you may contact

Dr. Pooja Kumari

Consultant (Research officer)

IIHMR Delhi

Mobile: 7903722509

ANNEXURE IV :- PARTICIPANT INFORMED CONSENT FORM

PARTICIPANT INFORMED CONSENT FORM

I have been explained about the “study titled :- Assessment of Knowledge, Attitude and Practice (KAP) regarding Screening of the Diseases and Defects at Birth under Rashtriya Bal Swasthya Karyakaram (RBSK) among health care providers”. The purpose and procedure of the study has been explained to me in detail in a language of my understanding.

I understand that my participation in the study is purely voluntary, and I may choose to withdraw from the study at any point if necessary.

I also understand that information provided by me will be kept confidential and will be used for purpose of this research only.

Potential risks and benefits of my participation in this study have been explained to me.

I hereby provide my voluntary consent to participate in the above study.

Signature/ LTI of participant

Name of participant:

Place:

Date:

Signature of investigator

Name of investigator

Signature of witness 1:

Name of Witness 1:

Signature of witness 2:

Name of Witness 2:

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Name of Guide/Supervisor	Dr./ Prof.: Dr. Siddharth Sekhar Mishra		
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