IIHMR UNIVERSITY

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IMPLEMENTATION SCIENCE - Synthesis and Translation of Research and Innovations in Polio Eradication (STRIPE) – Multi-country Project (USA, India, Indonesia, Afghanistan, Bangladesh, Nigeria, DRC Congo, Ethiopia)

Date: January 30, 2021

Dr. Piyusha Majumdar (Ph.D; M.Sc in Anthropology from Department of Anthropology, University of Delhi), is an alumnus of Miranda House college, Delhi University. She has qualified University Grants Commission's National Eligibility Test Examination for university level lectureship. She has previously worked with The Inclen Trust International, Indian Council of Medical Research, Department of Psychology, University of Delhi and GfK India. She is a public health researcher specialized in Qualitative & Quantitative methodology and evaluation techniques. In last 12 years, she has been instrumental in Designing High-Quality Project Proposals for National and International clients and brilliantly implemented Multiple Research Projects in the area of Public Health, Child health & Nutrition, maternal and child health, HIV/AIDS, Tobacco control and health communication. Some of the prestigious International projects were awarded by UNICEF, World Lung Foundation, Institute of Health Metrics & Evaluation, USA and International Union against TB & Lung Diseases. She was also associated with large-scale National surveys like Annual Health Survey, District Level Household and Health Facility Survey, National family Health Survey and Integrated Biological and Behavioral Surveillance Survey. She is also engaged in developing curriculum of "IMPLEMENTATION SCIENCE" to teach Global Health Leaders about the Lessons Learned from Polio Eradication in collaboration with Johns Hopkins Bloomberg school of Public Health (USA) She has plethora of publications for national and international journals. She is also an Editorial Board member for Academic Journal of Anthropological Studies

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Dr. Piyusha Majumdar, Assistant Professor, IIHMR University
30th January, 2021

STRIPE RESEARCH FINDINGS

STRIPE KNOWLEDGE PACKAGING

IMPLEMENTATION SCIENCE

Content of the Presentation

STRIPE Members

1. Johns Hopkins University School of Public Health, Department of International Health, USA
2. Indian Institute of Health Management Research, Jaipur, India
3. Global Innovations Consultancy Services (GLICS), Afghanistan
4. BRAC James P. Grant School of Public Health (BRAC JPGSPH), BRAC University, Bangladesh
5. University of Kinshasa, School of Public Health, DRC Congo
6. School of Public Health, Addis Ababa, Ethiopia
7. Faculty of Medicine, Public Health, and Nursing, Universitas Gadjah Mada, Indonesia
8. University of Abadan, Faculty of Medicine,

Study Objectives

Objective 1: Knowledge Mapping - Mapping of explicit and tacit knowledge of implementation of the GPEI

Objective 2: Knowledge Synthesis - Synthesis and packaging of knowledge assets into a knowledge

Objective 3: Knowledge Product dissemination as an academic course on implementation science, management development program or training program for public health professionals and students

Knowledge Mapping

Explicit

Databases, memos, notes, documents, etc.

1) Gray Literature review

Tacit

The minds of human stakeholders. It includes cultural beliefs, values, attitudes, mental models, etc. as well as skills, capabilities and expertise.

2) Online Survey

3) Paper based offline survey

4) Key Informant Interviews

Source: http://www.knowledge-management-tools.net/different-types-of-knowledge.html

Methodology used in STRIPE

1. Consultation meeting involving key stakeholders from Govt. of India, WHO, BMGF, UNICEF, CORE, academic institutions etc

2. Grey literature review – Systematic search → Training of research team → Literature review → Information extraction in a pre-defined format → Data uploaded on Qualtrics → Combined data exported and analyzed

3. Online survey – Respondents were identified → Bilingual survey tool was emailed using *Smartech soft.*→ Responses were collected on Qualtrics → Combined data exported and analyzed

Consultation Meeting on ...ns Learned from Global Polio Eradication
May 19, 2018
Organized by: IIHMR University, Jaipur, Indi... collaboration with: Johns Hopkins Bloomberg School of Pu...

Methodology used in STRIPE continue...

4. Offline survey - Respondents (specially grassroot level stakeholders) were identified → Appointments were scheduled → Survey was conduced by a team of trained research staff → Bilingual paper-based survey tool was used → Data was uploaded on Qualtrics → Combined data exported and analyzed.

5. Key Informant Interviews (KIIs) - Respondents were identified → Appointments were scheduled → KIIs were conduced by core project team → Paper-based tool was used → Data was uploaded on Qualtrics → Combined data exported and analyzed.

Summary: Knowledge Mapping Activity

Literature Review		
	Total Documents identified	360
	Data extraction done	242
	Excluded (Published and Poor quality docs*)	118
Survey		
	Total persons contacted	4792
	Online respondents	358
*Tables/graphs/data files etc.	Offline respondents (UP, Bihar, Raj, Haryana)	165

Key Informant Interviews				
• Frontline	4	• Govt. of India	6
• Subnational	10	• WHO	5
• National	11	• UNICEF	6
	25	• Rotary	2
		• Others (Core group, Inclen, BMGF, Academic institutions)	6
			25

Broad Areas of Research

OVERVIEW OF GPEI PROGRAM IN INDIA

MAGNITUDE OF THE PROGRAM

ORGANIZATION OF POLIO PROGRAM

KEY ACTORS INVOLVED IN POLIO PROGRAM

KEY CHALLENGES IN THE IMPLEMENTATION OF GPEI PROGRAM

INTERNAL CONTRIBUTOR OF CHALLENGES (INDIVIDUAL, INTERPERSONAL, ORGANIZATIONAL)

EXTERNAL CONTRIBUTOR OF CHALLENGES (COMMUNITY, ENVIRONMENTAL, TECHNOLOGY, POLITICAL, SOCIAL)

Broad Area of Research

Solutions for Polio Eradication (Leadership and Partnership, Evidence based planning and Strategizing, Monitoring, accountability and surveillance, social mobilization and multipronged mass media strategies

Strategies for Technological challenge

Strategies for vaccine refusal

Strategies for Health system fatigue/complacency

Strategies for Operational Issues

Strategies to overcome challenges in high-risk areas, coverage of missed children

Strategies for Topographical challenges

Unintended (Positive and Negative) Consequences

Key Challenges in Implementation of GPEI

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2/2/2021

IMPLEMENTATION CHALLENGE

- **Identification and Tracking of Migratory population**
- **International Importation**

- Enormous size of the campaign (0.65 millions polio booth & immunization of 170 million children)
- Diversity – Geographic and socio-cultural
- Management & capacity building of Increased Human Resource
- Gaps in Surveillance of Acute Flaccid paralysis cases

- **Topographical Disposition in Kosi river area in North Bihar. Area continuously flooded during rainy season**
- **Naxalite affected areas in states of North-east India**

- **Too many and too frequent vaccination sessions**
- **Frequent and sporadic outbreaks**
- **Building Confidence of Technical Person – we can do it!!**
- **Retain ongoing Momentum of implementors**

Operational Challenges

Tracking In High Risk & Underserved Areas

Vaccine Hesitancy & Refusal among community member

Topographical Disposition

challenge

Health System Fatigue

Logistic Challenges

- **Non-acceptability of vaccine among specific group**
- **Religious Beliefs & Attitude of Some Minority communities**
- **Myths associated with vaccine**

- Vaccine production
- Procurement
- Vaccine Distribution from stores – state-district – village
- Maintenance of cold chain system (-20 degree)

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- KOSI River Strategy
- GIS Mapping
- 107 Block Action Plan
- Leadership and Accountability
- Political will and Commitment

Environmental

- NPSP
- Vaccine Vial Monitor
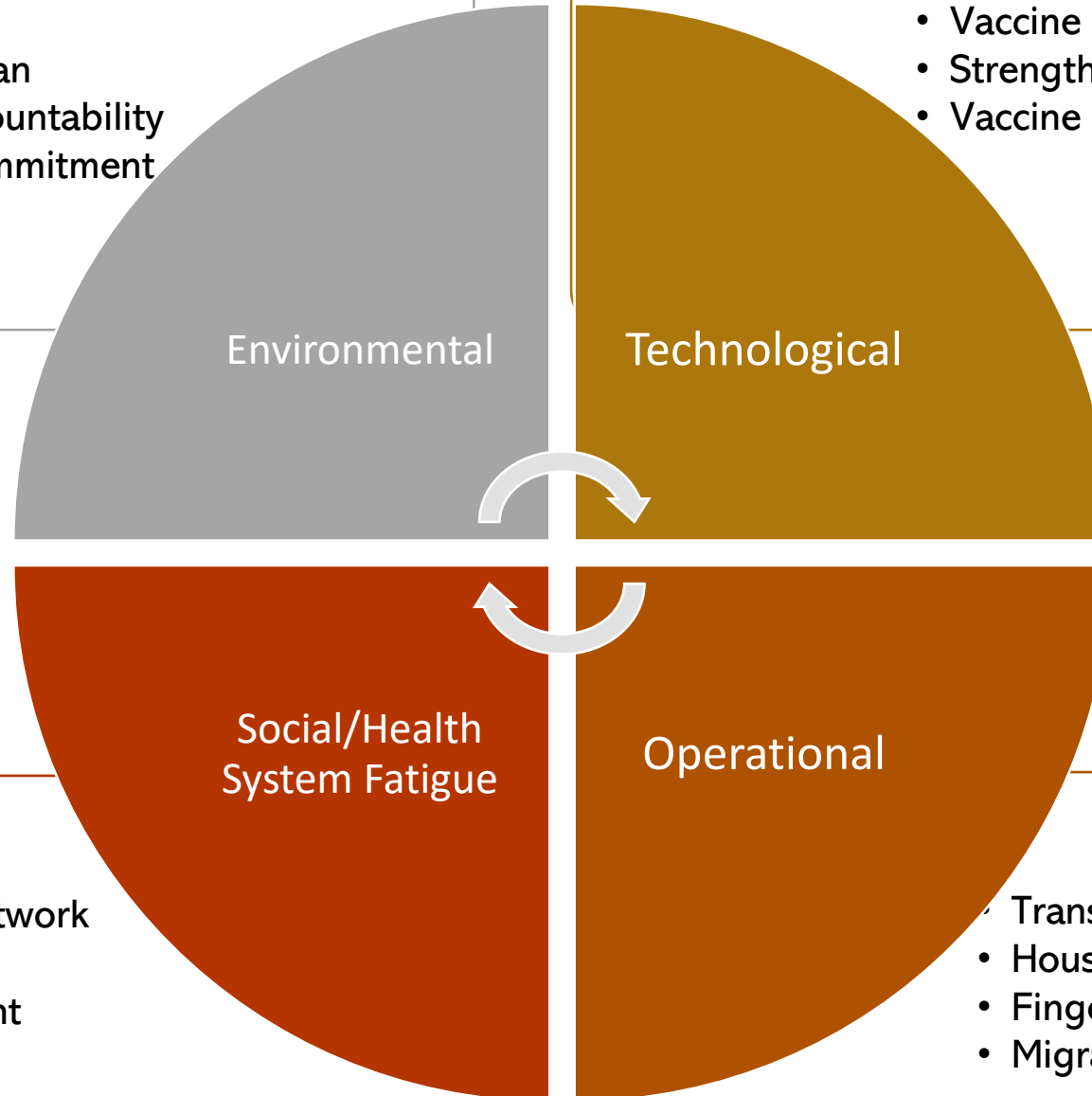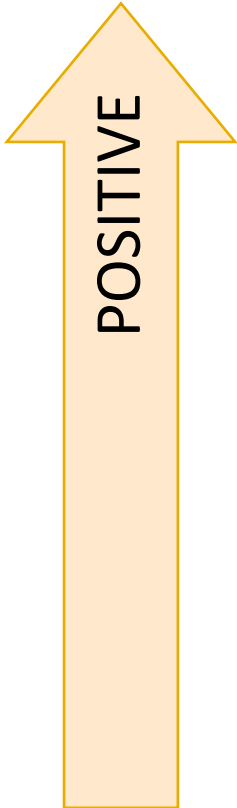- Strengthening of Cold chain
- Vaccine Efficacy and Switch

Technological

- Social Mobilization Network
- Underserved Strategy
- Community Involvement
- Mass Media Strategy
- Celebrity Advocacy

Social/Health System Fatigue

Operational

- Transit/Congregational site tracking
- House to House Marking
- Finger marking with indelible Ink
- Migrant Strategy

Unintended Consequences

POSITIVE

- Vaccine supply chain strengthening

- Health system strengthening

- Leveraging effective partnerships

- Human resource capacity building

- Evidence-based planning

- Life transformation of community mobilizers

- Monitoring, evaluation, and supportive supervision

- Evidences of value for strengthening of Universal immunization program

- Low Priority of Routine Immunization and other Programs (MCH & FP)

- Developmental challenges highlighted

- Rise in Perverse Incentive

NEGATIVE

Lessons Learned

Building partnerships and alliances

Power of Engagement

Field Epidemiology Support

Context Analysis and Developing Specific Strategies

Human Resource Management

Commodities and Logistic and Supply Management
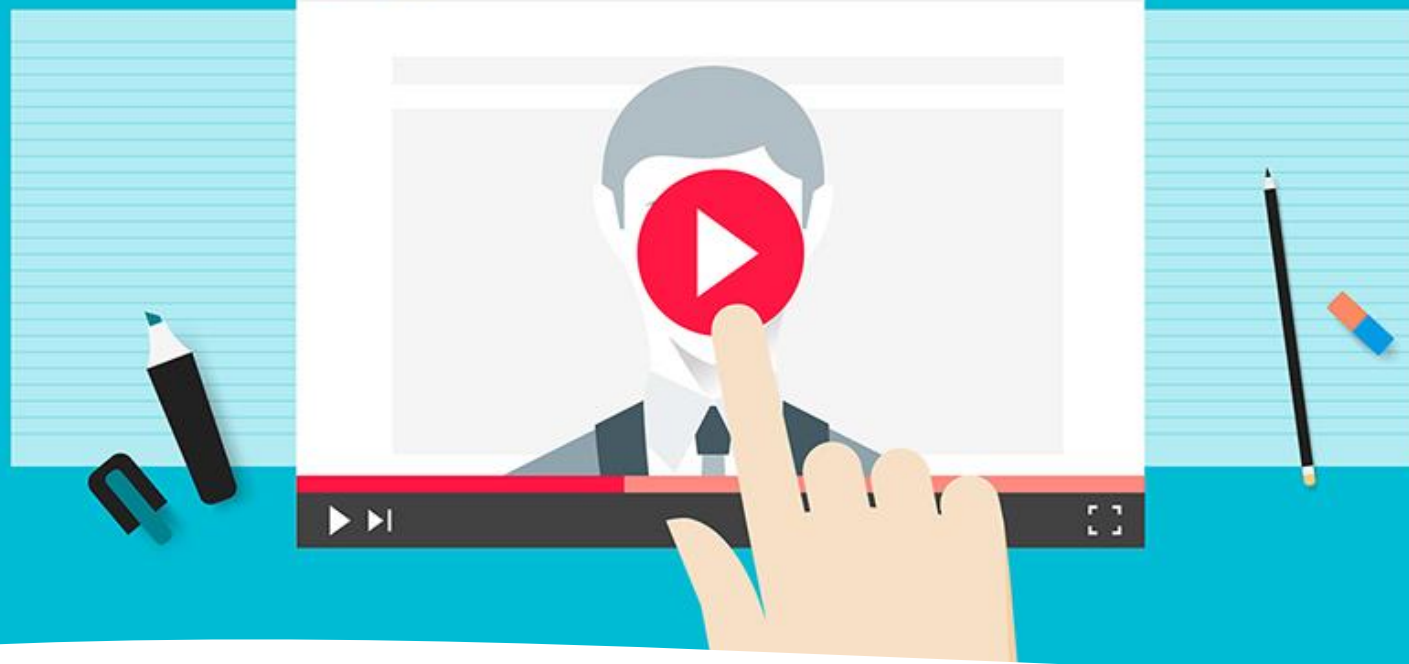
Leveraging Technology

Behavior Change Communication

Course Development

Teaching teams established based on the expertise, interest and data experience in the knowledge domain and understanding on Implementation science competencies

The learning objective of the course cover 10 core competencies in implementation science developed for low- and middle-income country settings.

This courses mainly discuss the original research from Nigeria, Ethiopia, DRC, Afghanistan, India, Bangladesh, and Indonesia to dig into the major challenges Global Polio Eradication program has faced

MooC Lecture Recording

- Health Commodity and Logistics Management – By Dr. S.D.Gupta, May 2020

- Community Engagement – By Dr. Piyusha Majumdar, April 2020

Knowledge Product – Resource & Publication

- https://stripe.jhu.edu

Knowledge Translation Activities

- Publication of STRIPE India Research findings in the form of Research Briefs

- Link of Research BriefC:\Users\Piyusha\Desktop\RB\IIHMR Research Brief.pdf

Knowledge Products – STRIPE Consortium

Massive Open Online Courses (MOOC)

Collecting and Using Data for Disease Control and Global Health Decision Making. The course addresses application of surveillance systems in a wide variety of epidemiological situations and make data informed decisions. 3 Weeks Course; 3 hours per week.

Building Alliances in Global Health: From Global Institutions to Local Communities. This course aims a developing understanding of challenges of alliance building within the global health sector. 5 weeks. 3 hours per week.

Planning and managing Global Health Programmes: Promoting Quality, Accountability and Equity. 5 weeks. 3 hours per week.

(https://www.futurelearn.com/partners/stripe)

Knowledge Product – India Team

Implementation Science for Effective Implementation of Health Programs

- A 5-day Management Development Program and Implementation Clinic has been designed and developed at IIHMR for health professionals national, state and district levels and researchers. The course will be offered in May 2020.
- Elective course on Implementation Science for MBA (Health Management) and MPH students, to be introduced at IIHMR University

Link of IS Brochure C:\Users\Piyusha\Desktop\Implementation Science for Effective Implementation of Health Programs_brochure_blue.pdf

Link of IS Promotional Video: https://youtu.be/odJaSrqrKIM

Implementation science can

Translate Research into Practice

Policy into Practice

Practice to Sustainability

IMPLEMENTATION SCIENCE FRAMEWORK

IDENTIFICATION OF BOTTLENECK /CHALLENGES/GAPS IN ANY PROGRAM

DEVELOPING AND IMPLEMENTING INNOVATIVE STRATEGIES

MEASURING THE EFFECTIVENESS AND EFFICIENCY AFTER IMPLEMENTATION

UTILIZING INFORMATION (CONSEQUENCES) (TURNING KNOWLEDGE INTO PRACTICE-)

Use of Implementation Science

- Understanding context,
- Assessing performance,
- Informing implementation and Facilitating Health Systems Strengthening
- Supporting the scale-up of interventions and integrating them into health systems at the national level