SUMMER INTERNSHIP PROGRAM

At

NITI AAYOG, NEW DELHI

From MAY 1st 2024 to JUNE 30th 2024

A REPORT BY

SWETA SAMANTARAY

Master of Business Administration

Hospital and Health Management

2023-25

Under the Mentorship of

Dr. Varsha Tanu, Associate Professor

हेमन्त कुमार मीना
उप सचिव
Hemant Kumar Meena
Deputy Secretary

नीति आयोग
भारत सरकार
Government of India
NITI Aayog

Date: 08th July, 2024

NA/SW/1-16(7)/2020-WCD

TO WHOMSOEVER IT MAY CONCERN

1. This is to certify that **Ms. Sweta Samantaray,** a student of IIHMR University, Jaipur pursuing her MBA in hospital and health management, has successfully completed her internship with NITI Aayog, Government of India from 1/05/2024 to 30/6/2024. During the period of Internship, she worked under Women & Child Development vertical on the subjects given below:

   HUMAN PAPILLOMAVIRUS VACCINE: CHALLENGES AND OPPORTUNITIES FOR INTRODUCTION IN INDIA'S UNIVERSAL IMMUNIZATION PROGRAM.

2. She has shown special flair for the study and her performance in preparation of the report has been rated as 'Very Good'.
3. During the period of her internship programme, she was punctual and hardworking.

I wish her every success in her life and career.

(Hemant Kumar Meena)
Deputy Secretary

(हेमंत कुमार मीना)
(HEMANT KUMAR MEENA)
उप सचिव
Deputy Secretary
नीति आयोग/National Institution for Transforming India (NITI)
भारत सरकार/Govt. of India
नई दिल्ली/New Delhi

IIHMR UNIVERSITY

IIHMR University Faculty Mentor Approval

This is to certify that **Dr. Sweta Samantaray** of academic year 2023-25 of **INSTITUTE OF HEALTH MANAGEMENT RESEARCH** has prepared a poster with respect to her summer internship held during May-June 2024.

She has carried out work as per the guidelines. Her poster is approved for presentation.

Date: 22/07/2024

22/7/24

Dr. Varsha Tanu

Associate Professor

IIHMR University Jaipur

HUMAN PAPILLOMAVIRUS VACCINE: CHALLENGES AND OPPORTUNITIES FOR INTRODUCTION UNDER INDIA'S UNIVERSAL IMMUNIZATION PROGRAM

Presented by: Sweta Samantaray **Roll No:** 1863 **Stream:** MBA HM

Faculty Mentor: Dr. Varsha Tanu **Industry Mentor:** Dr. Sudha Goel

BRIEF HISTORY

- NITI AAYOG, National Institute for Transforming India is the Apex public policy think tank of Government of India, established on 1 January 2015.
- NITI Aayog is a state-of-the-art resource Centre with knowledge and skills promoting research, innovation and provide strategic policy vision for the Government.
- NITI Aayog is the replacement of planning commission which was established on 15th March 1950.
- NITI Aayog's creation has two hubs-a) Team India hub interface between State and Central Government b) Knowledge and Innovation Hub fosters think tank capabilities.
- Seven pillars of NITI Aayog: pro-activity, pro-people, participation, Empowering, Inclusion of all, Equality, and Transparency.

SWOT ANALYSIS

STRENGHTS

- Support from Government and International Organizations like NTAGI , WHO , GAVI.
- Established Immunization infrastructure
- CERVAVAC vaccine is available
- Public Health Benefits
- Global success stories

WEAKNESS

- Lack of Awareness and Acceptance.
- Logistics challenges of distribution of vaccine in remotes areas.
- Financial constraints for large scale supply.
- Insufficient training to the providers.

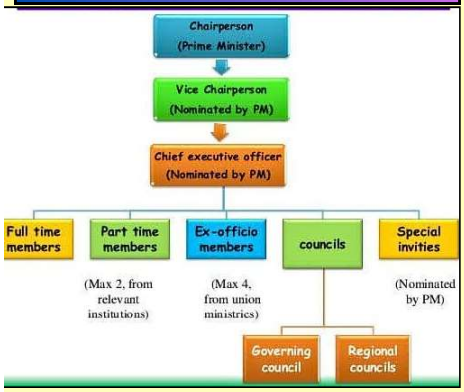
OPPORTUNITES

- Holistic Health Education Campaigns approach.
- Technological Advancements for tracking vaccine coverage (U-WIN app)
- Partnership with International organizations.

THREATS

- Spread of misinformation and vaccine hesitancy
- Other health priorities and emergencies divert attention.
- Occurrence of adverse events negatively impact public perception.

ORGANIZATION STRUCTURE



VISION

VISION

For Achieving Cooperative Federalism NITI Aayog to provide strategic, functional technological inputs to Prime Minister and Governments at all level fostering innovation and knowledge.

MISSION

MISSION

To provide data based policy inputs for making India 3rd largest economy while achieving sustainable development goals including employment for all by 2047.

CHALLENGES FACED

- Vaccine Hesitancy due to myths, religious , cultural stigmas.
- lack of awareness among parents, adolescents, healthcare providers
- No standard Guidelines for educating community
- Private healthcare sector has no portal to track and distribute reminder
- Vaccine affordability and Accessibilty

KEY LEARNINGS

- Understood the policy formulation involving various stakeholders
- Use of MS Office ,power BI for data analysis and report writing.
- Assisted in conducting Inhouse meetings through preparing minutes draft.
- Suggestion of recommendation plan for inclusion HPV vaccine in India's UIP.
- Enhancement of professionals skills by the vast exposure which I received during the internship period

PRACTICAL LEARNING VS THEORTICAL LEARNING

- Direct Involvement in policy making discussions and formulations through inhouse meetings
- Got experience on writing research report by conducting secondary research, preparing questionnaire, giving recommendations.
- Learnt basic approach of reviewing the policy documents, presentation of main findings and art of networking with the stakeholders.
- Gained Knowledge of National health programs and its implementation challenges in various states.
- Exposure to various Research Techniques which have been applied to research studies while reviewing articles.
- Learning managerial qualities and importance of leadership skills in policy formulations.

USEFULNESS OF INTERNSHIP

- Exposure of policy making process by working on the real world challenges
- Networking with government officials gaining knowledge on HPV vaccination
- Development of research skills by giving evidence based recommendations
- Understanding of public health systems addressing specific issues
- Implementation of the skills and etiquettes learned in a practical way

GLOBAL RECOMMENDATION

World Health Organization

WHO Global Strategy visions a world where cervical cancer is eliminated: 90% Vaccination 70% Screening 90% Treatment target by 2030.

Gavi The Vaccine Alliance

Achieve 86 million adolescent girls with HPV vaccine coverage by 2025 focusing on quality and sustainable vaccine type.

U-WIN

NTAGI recommends HPV vaccine in UIP by vaccination drive in primary schools for 9-14 years adolescent girls.

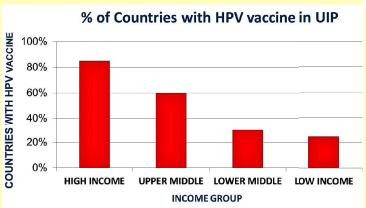
ABOUT THE TOPIC

"One woman dies of cervical cancer every two minutes , each one is preventable."

- Cervical cancer is the second most Cancer in women. It is caused by Human papillomavirus.
- Cervical cancer is preventable and curable if detected early.
- Cervical cancer treatment is not accessible and affordable for all.
- HPV vaccination is the best way to prevent HPV related diseases and cervical cancer.
- 138/194 countries have succeeded in Introducing HPV vaccine in Universal Immunization program.

PREVELANCE

- Globally In 2020 Cervical cancer accounted 6,04,000 new cases and over 3,40,000 deaths.
- India accounted 1,23,907 new cases and 77,348 deaths.
- Cervical Cancer accounts 25.6% Global burden of prevalence.



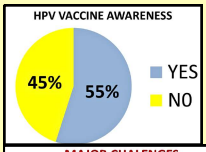
AIM

To identify the Challenges and Opportunities in Introduction of HPV vaccine in India's Universal Immunization Program and to make recommendations bringing positive public health impact.

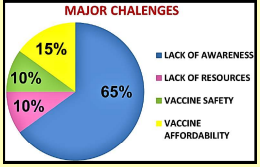
OBJECTIVES

- Identifying key challenges and barriers
- Evaluate the knowledge, Attitude and perceptions to raise awareness.
- To make recommendations plan .

FINDINGS



55% Respondents have heard about HPV vaccine

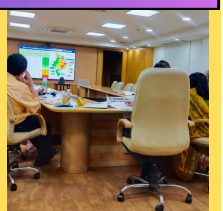


65% Believe lack of awareness is major challenge

RECOMMENDATIONS

- Holistic Education campaigns: Given by Leaders , survivors , healthcare providers in schools.
- Educational Training: Must be conducted related HPV vaccine benefits, adverse effects , guidelines through workshops , webinars.
- Feedback and suggestions: Should be taken on Regular basis through a standard questionnaire format.
- Adapting GAVI Recommended Price: Through provision of subsidy programs.
- Conducting Mass(school, camp, door to door) vaccination Drive: Covering 9-14 years adolescents girls.
- Building strong Monitoring and Surveillance system: Through Strengthening the U-win app.

GALLERY



WEEKLY REPORT 1

NAME OF THE ORGANISATION: NITI AAYOG, NEW DELHI

PROJECT OF SUMMER INTERNSHIP PROGRAM: ANALYSIS OF CHALLENGES OF HUMAN PAPILLOMAVIRUS VACCINE IN UNIVERSAL IMMUNIZATION PROGRAM AND THE WAYS TO OVERCOME THE BARRIERS BRINGING A POSITVE IMPACT ON PUBLIC HEALTH. (WOMEN AND CHILD DEVELEOPMENT)

NAME: SWETA SAMANTARAY

ROLL NO. : 1863

STREAM: MBA IN HOSPITAL AND HEALTH MANAGEMENT

WEEK NO.: FIRST, 1st

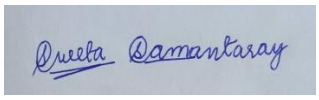
FROM: 1st MAY 2024 TO 3rd MAY 2024

ACTIVITY DONE	• **Introduction Briefing in NITI Aayog with a vision to foster Cooperative Federalism and mission to create a policy Environment conducive in achieving SDGs by promoting India's economic growth.** • **Focusing on area of interest and choosing a Research Topic with respect to health vertical.** • **Preparing a Summary on Human Papillomavirus (HPV) Epidemiology and Vaccination impact on Public Health.** • **Outlining the Report Framework involving Background, situation Analysis, Problem statement, Aim, strategy, objectives, intervention, Activities.** • **Analysing the Prevalence of HPV in Global, National Aspect in men and women by WHO Data.** • **Challenges and constrains faced by HPV vaccine in universal immunization programme and ways India can overcome it.**
LINKING THEORY (CLASSROOM LEARNING) WITH PRACTICE AT THE ORGANISATION	• **Comparing of all the other vaccines included in Universal Immunization programme and HPV vaccine which is not involved in the programme due to various factors of cost**

	effectiveness, efficacy, safety, and logistics challenges. • **Learning the core concept of forming research questions, streamlining the research process, setting the SMART objectives, choosing the study design for finding the accurate information.** • **Reviewing the literature and using of the way of data collection in terms of qualitative and quantitative data.** • **Learning the practical aspect of analysing the secondary data from the world health organisation, lancet journal source.**
GAPS IDENTIFIED ON THE WORKING AREA	• **High cost, logistic barriers, prioritising other vaccines rather than HPV vaccine has led to high mortality and morbidity in 80% developing countries, being the major root cause of cervical cancer and genital warts.**
SUGGESSTIONS FOR IMPROVEMENT	• **Improvement strategy is by bringing out awareness through public health campaigns.** • **Inclusion of HPV vaccines through insurance coverage in universal immunization program.** • **Focusing on building trust and giving evidence based report regarding the safety and efficacy of the vaccine is crucial.** • **Training healthcare providers and providing adequate vaccine supply and leveraging technology helps to overcome logistics barrier.**
PLAN FOR THE NEXT WEEK	• **Focusing on the Need Assessment of the HPV vaccine in India's public health scenario.** • **Framing the Topic of the report involving the challenges faces and ways to overcome the problem.** • **Reviewing previous articles, journals from Ministry of Health and Family welfare, Immunization technical**

	support unit, World Health Organisation. • **Write up regarding the background of HPV disease epidemiology and programme intervention.**

Signature of the Student



Approved by the IIHMR University's Mentor

WEEKLY REPORT 2

NAME OF THE ORGANISATION: NITI AAYOG, NEW DELHI

PROJECT OF SUMMER INTERNSHIP PROGRAM: SITUATIONAL ANALYSIS OF THE EXISTING GAP CHALLENGES PREPAREDNESS TO RECOMMEND THE IMPLEMENTION STRATEGIES FOR HUMAN PAPILLOMAVIRUS VACCINE INTRODUCTION IN INDIA'S UNIVERSAL IMMUNIZATION PROGRAM: (WOMEN AND CHILD DEVELEOPMENT)

NAME : SWETA SAMANTARAY

ROLL NO. : 1863

STREAM : MBA IN HOSPITAL AND HEALTH MANAGEMENT

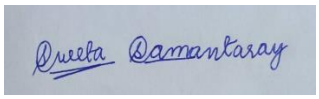
WEEK NO. : SECOND, 2nd

FROM : 6th MAY 2024 TO 10th MAY 2024

ACTIVITY DONE	• **Framing of the topic of the report identifying the challenges and barriers of implementing HPV vaccine in India's Universal Immunization program and overcoming strategies.** • **Analysing the knowledge, attitude and HPV vaccine Intention among women in India Article and forming open end and close end questionnaire.** • **Focusing on the WHO position paper on HPV vaccine for the understanding the disease Epidemiology** • **Understanding the Newer vaccines like inactivated polio vaccine, rotavirus vaccine, measeles, rubella, pnemoccocal conjucate vaccine, tetanus and adult diphtheria vaccine implementation in universal immunization program and the lacunae of HPV vaccine to be not included in Universal Immunization program.**
LINKING THEORY (CLASSROOM LEARNING) WITH PRACTICE AT THE ORGANISATION	• **Accurate knowledge and understanding of Disease epidemiology of cervical cancer and its intervention strategies.** • **The demographic concepts of understanding the mortality rates and the morbidity rates for interpreting the gaps are easy.** • **The proving of null or alternate hypothesis in an article is better**

	understood by the analysis of article.
GAPS IDENTIFIED ON THE WORKING AREA	• **Understanding the safety and efficacy of the vaccine in different regions of the country and with different demographic details is a time consuming process- gap identified while working on the research article.** • **Fostering more innovative ideas to reaching out to community through mass media, social platform, capacity building to address gaps related HPV vaccine and its intervention strategies.**
SUGGESSTIONS FOR IMPROVEMENT	• **More analysis of Data based on primary research of data collection so that the data will be more authentic and viable.** • **Analysis of the lacunae of not implementing HPV vaccine in the universal immunization program and finding the right intervention providing maximum coverage of vaccine in India.** • **Spreading awareness and surveillance of vaccine tracking through digital platform like U-win apps.**
PLAN FOR THE NEXT WEEK	• **Understanding the National Vaccine policy and its framework.** • **Universal immunization schedule implications, doses, route of administration, site.** • **Focusing on articles related to countries those who have HPV vaccine in the policy framework and its success rate and future goals so that that can be adapted in India to reduce morbidity and mortality rates.**

Signature of the Student



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WEEKLY REPORT 3

NAME OF THE ORGANISATION: NITI AAYOG, NEW DELHI

PROJECT OF SUMMER INTERNSHIP PROGRAM: SITUATIONAL ANALYSIS OF THE EXISTING GAP CHALLENGES PREPAREDNESS TO RECOMMEND THE IMPLEMENTION STRATEGIES FOR HUMAN PAPILLOMAVIRUS VACCINE INTRODUCTION IN INDIA'S UNIVERSAL IMMUNIZATION PROGRAM: (WOMEN AND CHILD DEVELEOPMENT)

NAME : SWETA SAMANTARAY

ROLL NO. : 1863

STREAM : MBA IN HOSPITAL AND HEALTH MANAGEMENT

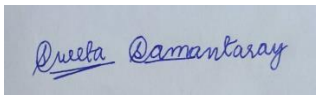
WEEK NO. : THIRD, 3rd

FROM : 13th MAY 2024 TO 17th MAY 2024

ACTIVITY DONE	• **Preparing the summary of National Vaccine Policy – its framework, policy context, guidelines.** • **Reviewing the universal immunization schedule its doses, route of administration and the newer vaccines introduction.** • **Department of Science and Technology Analysing the phases of preclinical and clinical phase of vaccine trial.** • **Reviewing the Cervavac vaccine-India first HPV vaccine.** • **Analysing Challenges and opportunities to make women cervical cancer free in India.** • **Focusing prevalence of HPV in developed countries and India.**
LINKING THEORY (CLASSROOM LEARNING) WITH PRACTICE AT THE ORGANISATION	• **Awareness how the phase of clinical trial of vaccines is passed after license to the food and drug administration and then given to the public of certain population.** • **Holistic view of how developed countries like Australia achieved 89% girls vaccination and 86% boys vaccination above 15 years through**

	digital vaccination program.
GAPS IDENTIFIED ON THE WORKING AREA	• **Policies regarding implementation and monitoring of public health programs related to cervical cancer and HPV vaccination is still a social stigma.** • **Robust data collection and analysis of universal immunization program schedule coverage is a major challenge.**
SUGGESSTIONS FOR IMPROVEMENT	• **Implementing SMART objectives of HPV immunization awareness program for all reaching the difficult zones through door to door or school based campaigns program.** • **Focusing of Gender Neutral vaccination campaign.**
PLAN FOR THE NEXT WEEK	• **Preparing the report involving background of the report.** • **Cervical cancer epidemiology involving the triads in India to be mentioned in the report.** • **Focusing on the prevention strategy of cervical cancer.** • **Preparing an implementation plan for the gaps of HPV vaccine inclusion in Universal Immunisation program of India.**

Signature of the Student



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WEEKLY REPORT 4

NAME OF THE ORGANISATION: NITI AAYOG, NEW DELHI

PROJECT OF SUMMER INTERNSHIP PROGRAM: SITUATIONAL ANALYSIS OF THE EXISTING GAP CHALLENGES PREPAREDNESS TO RECOMMEND THE IMPLEMENTION STRATEGIES FOR HUMAN PAPILLOMAVIRUS VACCINE INTRODUCTION IN INDIA'S UNIVERSAL IMMUNIZATION PROGRAM: (WOMEN AND CHILD DEVELEOPMENT)

NAME : SWETA SAMANTARAY

ROLL NO. : 1863

STREAM : MBA IN HOSPITAL AND HEALTH MANAGEMENT

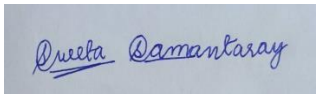
WEEK NO. : FOURTH, 4th

FROM : 20th MAY 2024 TO 24th MAY 2024

ACTIVITY DONE	• **Attended a meeting on a topic of Nurturing minds, building resilience: A Redesigned Mental Health Program for comprehensive wellbeing. It focuses how the existing gaps must have proposed provision recommendations at the primary, secondary and Tertiary level to improve services under District Mental Health Programme.** • **Understanding the Vancouver citation of Referencing.** • **Reviewing and Writing the review of literature of 5 articles in a concise summary manner outlining the structure of the report.** • **Analysing the District Hospital kalakalp and Quality score of all states having unique National identification Number ID in the excel report.**
LINKING THEORY (CLASSROOM LEARNING) WITH PRACTICE AT THE ORGANISATION	• **Practical approach how plans, policy and guidelines are formulated and revised for the implementation of the program at different levels of the country.** • **Having a holistic understanding how Vancouver, Harvard and APA citation referencing styles differ from each other.** • **The importance of review of literature playing a vital role in outlining the structure of the report.**

GAPS IDENTIFIED ON THE WORKING AREA	• **Implementation and revising a policy is a long term process and requires a streamline involvement of other organisations for decision making.** • **Sorting of articles for review of literature requires an accurate understanding of the aim and objectives which is challenging step.**
SUGGESSTIONS FOR IMPROVEMENT	• **Continuous evaluation and upward and downward feedback mechanism involving helps in decision making in effective manner.** • **Focusing on standard sources of reviewing the articles like World Health Organisation, National Technical Advisory Group on Immunisation improves the accuracy of the research.**
PLAN FOR THE NEXT WEEK	• **Focus on the Abstract of the research report.** • **Preparing the outline framework of the poster involving the organisation vision and mission.** • **Focusing on the Press Information Bureau articles for the recommendation strategies of HPV vaccine in India.**

Signature of the Student



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WEEKLY REPORT 5

NAME OF THE ORGANISATION: NITI AAYOG, NEW DELHI

PROJECT OF SUMMER INTERNSHIP PROGRAM: SITUATIONAL ANALYSIS OF THE EXISTING GAP CHALLENGES PREPAREDNESS TO RECOMMEND THE IMPLEMENTION STRATEGIES FOR HUMAN PAPILLOMAVIRUS VACCINE INTRODUCTION IN INDIA'S UNIVERSAL IMMUNIZATION PROGRAM: (WOMEN AND CHILD DEVELEOPMENT)

NAME : SWETA SAMANTARAY

ROLL NO. : 1863

STREAM : MBA IN HOSPITAL AND HEALTH MANAGEMENT

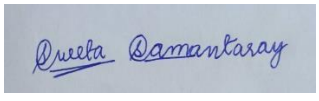
WEEK NO. : FIFTH, 5th

FROM : 27th MAY 2024 TO 31th MAY 2024

ACTIVITY DONE	• **Writing up the report introduction, rationale and background focusing the GAVI, SAGE, WHO and NTAGI recommendations.** • **Focusing on the global and national prevalence of HPV infections causing cervical cancer and HPV related disease.** • **HPV vaccination background, history, epidemiology, types, safety, efficacy, dosage side effects is understood.** • **Understanding the preparedness of the countries globally who have successfully introduced HPV Vaccine in UIP program and reduced the mortality and morbidity of the diseases.** • **Despite India's having strengthen its health system after Covid 19 what are gaps and challenges it its facing for vaccine coverage of HPV introduction in UIP.**
LINKING THEORY (CLASSROOM LEARNING) WITH PRACTICE AT THE	• **Linking the building blocks of health system needed in HPV vaccine introduction in UIP with the gaps and challenges faced.** • **Linking HPV vaccine introduction in UIP with National Program for diabetes, cancer, stroke and cardiovascular disease program with**

ORGANISATION	**primary, secondary and tertiary level interventions.** • **Understanding health unit economics required for health infrastructure, manpower training, resources in inclusion of HPV vaccine in India's UIP.**
GAPS IDENTIFIED ON THE WORKING AREA	• **Gaps in the governance and policy implementation in India's from the top level of the organisation to the root level.** • **Lack of communication awareness between the organisations.** • **Gaps majorly lies in low income and low middle income countries in HPV vaccine introduction due to large population.**
SUGGESSTIONS FOR IMPROVEMENT	• **Learning from the past vaccine introduction in India and building comprehensive strategy and evaluating the safety efficacy and adverse effects related the vaccine introduction.** • **Education training to ASHA, ANM related HPV vaccine advantages and concern related HPV vaccine.**
PLAN FOR THE NEXT WEEK	• **Focusing on Srilanka, Australia and Thailand UIP and success reason of vaccine coverage and reduction of mortally and morbidity for HPV related disease.** • **Focusing on the Cervavac vaccine developed indigenously in India.** • **Write up about the topic abstract in a precise way.**

Signature of the Student



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WEEKLY REPORT 6

NAME OF THE ORGANISATION: NITI AAYOG, NEW DELHI

PROJECT OF SUMMER INTERNSHIP PROGRAM: HUMAN PAPILLOMAVIRUS VACCINE: CHALLENGES AND OPPURTUNITIES FOR INTRODUCTION IN INDIA'S UNIVERSAL IMMUNIZATION PROGRAM (WOMEN AND CHILD DEVELEOPMENT)

NAME: SWETA SAMANTARAY

ROLL NO. : 1863

STREAM: MBA IN HOSPITAL AND HEALTH MANAGEMENT

WEEK NO. : SIXTH, 6th

FROM: 3rd JUNE 2024 TO 7th JUNE 2024

ACTIVITY DONE	• **Working on the strength of the report focusing on the screening of cervical cancer in India VS cost effective analysis of human papillomavirus vaccine for the prevention of cervical cancer in India.** • **Identifying the major gaps and challenges faced by HPV canine introduction in UIP despite strengthen health vaccination coverage after COVID 19 in India.** • **Focusing on measures of diagnosis, screening, treatment of cervical cancer and other HPV related diseases to find the underlying challenges faced in introduction of HPV vaccine in India's UIP.**
LINKING THEORY (CLASSROOM LEARNING) WITH PRACTICE AT THE ORGANISATION	• **Linking the concepts of SWOT analysis focusing on the strengths and weakness of HPV vaccine introduction in UIP of India.** • **Linking the building blocks of health system to identify the strength and weakness.**

GAPS IDENTIFIED ON THE WORKING AREA	• **Understanding the gaps lies in social hesitancy and awareness among people in low income, low middle income countries.** • **Focusing more on the safety and efficacy of the HPV vaccine for the adolescent age group for men and women both.**
SUGGESSTIONS FOR IMPROVEMENT	• **Bringing out more HPV vaccination campaign and drives targeting schools and colleges.** • **Focusing on gender neutral group for the vaccination coverage.** • **Building campaigns drives and awareness in the area difficult to reach and HIV Risk population.**
PLAN FOR THE NEXT WEEK	• **Working on the presentation for the report including basic concepts, gaps, strategies and recommendation plan.**

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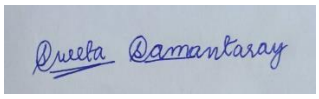

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WEEKLY REPORT 7

NAME OF THE ORGANISATION: NITI AAYOG, NEW DELHI

PROJECT OF SUMMER INTERNSHIP PROGRAM: HUMAN PAPILLOMAVIRUS VACCINE: CHALLENGES AND OPPURTUNITIES FOR INTRODUCTION IN INDIA'S UNIVERSAL IMMUNIZATION PROGRAM (WOMEN AND CHILD DEVELEOPMENT)

NAME: SWETA SAMANTARAY

ROLL NO. : 1863

STREAM: MBA IN HOSPITAL AND HEALTH MANAGEMENT

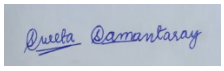
WEEK NO.: SEVENTH, 7th

FROM: 10th JUNE 2024 TO 14th JUNE 2024

ACTIVITY DONE	• **Attended a meeting regarding Brain Health: Its challenges and opportunities for implementation in national level.** • **Research mapping, review of literature, pre pilot study conducted by NIMHANS was discussed in the meeting.** • **Preparation of presentation on my report focusing on aim, objectives, introduction, prevalence, measures, challenges, global practices, recommendation plan.** • **Attended a presentation given by an acquaintance on the topic developing recommendations for psychosocial support during humanitarian crisis.**
LINKING THEORY (CLASSROOM LEARNING) WITH PRACTICE AT THE ORGANISATION	• **Linking the basic etiquettes of being presentable in a meeting in the practical organisation sector.** • **Utilising the basic ideas of presenting a presentation in a concise manner.**

GAPS IDENTIFIED ON THE WORKING AREA	• **To make presentation more concise, crisp and in bullet points format.** • **To focus more on the self-ideology of recommendation plan rather than which is already present in organisation.**
SUGGESSTIONS FOR IMPROVEMENT	• **To be more accurate one must cover recent articles with the revised guidelines.** • **To focus on Intersectoral communication to solve the ground level problem with opinions from different level of organisation.**
PLAN FOR THE NEXT WEEK	• **To prepare for the presentation and to be thorough with the aim, objective and the reason of choosing this specific topic.** • **To start preparing the outlining of the poster.**

Signature of the Student



Approved by the IIHMR University's Mentor

WEEKLY REPORT 8

NAME OF THE ORGANISATION: NITI AAYOG, NEW DELHI

PROJECT OF SUMMER INTERNSHIP PROGRAM: HUMAN PAPILLOMAVIRUS VACCINE: CHALLENGES AND OPPURTUNITIES FOR INTRODUCTION IN INDIA'S UNIVERSAL IMMUNIZATION PROGRAM (WOMEN AND CHILD DEVELEOPMENT)

NAME: SWETA SAMANTARAY

ROLL NO. : 1863

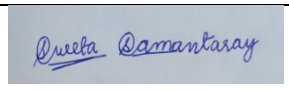
STREAM: MBA IN HOSPITAL AND HEALTH MANAGEMENT

WEEK NO.: EIGHTH, 8th

FROM: 18th JUNE 2024 TO 21st JUNE 2024

ACTIVITY DONE	• **Finalizing the presentation with a strong recommendation plan by analysing the challenges and opportunities of HPV Vaccine in India's UIP.** • **Finalizing the Report with focusing on the rational, aim, objectives.** • **Questionnaire was prepared focusing on the knowledge, attitude and perception.** • **Preparation for the presentation by making a summary was practiced.**
LINKING THEORY (CLASSROOM LEARNING) WITH PRACTICE AT THE	• **Understanding the importance of reviewing of literature and referencing which helped me in preparing the report and presentation.** • **Utilising the skills learned in MS PowerPoint, MS word, Google form**

ORGANISATION	**to prepare the report.**
GAPS IDENTIFIED ON THE WORKING AREA	• **Capacity to handle in depth research and data analysis is lacking .** • **Gap lies between policy formulation and it's role for implementation.**
SUGGESSTIONS FOR IMPROVEMENT	• **Monitoring and surveillance system should be strengthened to ensure proper functioning of policy.** • **More Financial authority should be given to improve the research Analysis.**
PLAN FOR THE NEXT WEEK	• **Goal is to give presentation with the knowledge gained.** • **Completion of poster with Doing SWOT Analysis.** • **Starting the compiled Report by following the format provided.**

Signature of the Student 

Approved by the IIHMR University's Mentor

WEEKLY REPORT 9

NAME OF THE ORGANISATION: NITI AAYOG, NEW DELHI

PROJECT OF SUMMER INTERNSHIP PROGRAM: HUMAN PAPILLOMAVIRUS VACCINE: CHALLENGES AND OPPURTUNITIES FOR INTRODUCTION IN INDIA'S UNIVERSAL IMMUNIZATION PROGRAM (WOMEN AND CHILD DEVELEOPMENT)

NAME: SWETA SAMANTARAY

ROLL NO. : 1863

STREAM: MBA IN HOSPITAL AND HEALTH MANAGEMENT

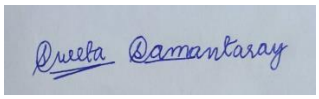
WEEK NO.: NINTH, 9th

FROM: 24th JUNE 2024 TO 28thJUNE 2024

ACTIVITY DONE	• **Submission of Final Report of the topic human papillomavirus vaccine: Challenges and opportunities for introduction in India's Universal immunization program proposing a strong recommendation plan.** • **Giving the final presentation to the panel members involving the senior advisor health and family welfare vertical, deputy secretary women and Child Development and esteemed organisation members with in the guidance of my mentor Dr Sudha Goel mam(senior consultant)** • **Taking up the suggestion given in the presentation and making the changes accordingly.**
LINKING THEORY (CLASSROOM LEARNING) WITH PRACTICE AT THE	• **Understanding the etiquettes of giving a presentation and taking the suggestion and appreciation in a positive way.** • **Presentation skills learned from IIHMR everyday classroom Assignment enhanced my confidence level to give presentation in Niti**

ORGANISATION	**Aayog.**
GAPS IDENTIFIED ON THE WORKING AREA	• • **Opinions from various person in the organisation may create conflict of interest and coming to single conclusion becomes difficult.**
SUGGESSTIONS FOR IMPROVEMENT	• **Feedback and surveys with new suggestions must be taken from every level of organisation of a specific department to access the ground challenge and up come with a solution.**
PLAN FOR THE NEXT WEEK	• **Completion of the summer internship training with key learning's and practical experience.**

Signature of the Student



Approved by the IIHMR University's Mentor

Compiled Report

Name of the Organisation: NITI AAYOG, NEW DELHI

Area/ Department/ Project of Summer Internship Program:

WOMEN AND CHILD DEVELOPMENT VERTICAL

HUMAN PAPILLOMVIRUS VACCINE: CHALLENGES AND OPPORTUNITIES IN INDIA'S UNIVERSAL IMMUNIZATION PROGRAM.

Name of the Student: SWETA SAMANTARAY

Roll no: 1863

Stream: MBA HOSPITAL AND HEALTH MANAGEMENT

Activity Done	**WEEK 1** • **Introduction Briefing in NITI Aayog** with a vision to foster Cooperative Federalism and mission to create a policy Environment conducive in achieving SDGs by promoting India's economic growth. • **Focusing on area of interest** and choosing a topic to do secondary Research. • **Selection of 4-5 topics of my interest area** to work upon like- 1. Mission Indradhanush Immunization program 2. Anaemia Mukht Bharat 3. National tobacco control program 4. Mental health related disorders. 5. HPV vaccination • **Chose to work on HPV vaccine challenges and opportunities in introduction in India's Universal Immunization Program.** HPV virus causes cervical cancer which is second most leading cause of death among women in India. Despite high prevalence the awareness regarding vaccine is very less. My motivation was to recommend strategies to would bring positive health impact. • **Beginning with the library research** I Prepared a Summary on HPV vaccine, cervical

	cancer Epidemiology and it's need to be introduced in India's UIP. • **Outlining the Report Framework:** 1. Introduction 2. Background 3. Challenges 4. Opportunities 5. Global practices 6. Recommendation 7. Conclusion **WEEK 2** • **Framing the research statement** of the report based on the core problem faced. • As cervical cancer and HPV related disease is a major concern my research topic was based to identify its challenges and opportunities to introduce HPV vaccine India's UIP. • **Focusing on the Aim of the topic**: to identify the challenges and opportunities and to make recommendation for its inclusion in India's UIP. • **Formulating of major objectives** of the Topic • Identify the key challenges and opportunities of HPV vaccine inclusion in India's UIP. • Analysing the knowledge, attitude and HPV vaccine Intention among women in India Article. • To make recommendation plan to suggest ways for vaccine inclusion India's UIP. • **Reviewing of literature from sources like** 1. World Health organisation 2. Immunization technical support unit. 3. GAVI, vaccine alliance 4. India's National Technical Advisory group on immunization. 5. Strategic Advisory group of Experts 6. Articles from lancet, PubMed 7. Press information bureau articles • **Keyword used in research-** 1. Human papilloma virus 2. HPV vaccine 3. Cervical cancer 4. Universal immunisation program 5. Cervical cancer epidemiology 6. Focusing on the WHO position paper on HPV vaccine for the understanding the disease Epidemiology

	WEEK 3 Reviewing of 5-7 Articles • Reviewing the **cervical cancer epidemiology and its management** • Understanding **why vaccination in the best** form to prevent HPV vaccine. • Finding the **prevalence, mortality globally and in India (WHO factsheet)** • Preparing the **Summary of National Vaccine Policy** of India. Understanding how the newer vaccines introduced in UIP. • **Reviewing the Universal immunization schedule** its doses, route of administration and the newer vaccines introduction. • Understanding how Department of Science and Technology conducts **phases of vaccine trial.** • **Reviewing the Cervavac vaccine** (India first HPV vaccine; doses, price, effects, usage, benefits. • Analysing of article: **Challenges and opportunities to make women cervical cancer free in India.** **WEEK 4** • **Attended an In-house meeting in NITI AAYOG on a topic of Nurturing minds, building resilience: A Redesigned Mental Health Program for comprehensive wellbeing.** It focuses how the existing gaps must be addressed by making recommendations focusing on the primary, secondary and Tertiary level to improve services under District Mental Health Programme. • **Wring the summary of 5-7 articles reviewed.** • **Analysing the District Hospital kalakalp and Quality score** of all states having unique National identification Number ID in the excel report. **WEEK 5** • **Writing up the report introduction, rationale and background** focusing the GAVI, SAGE, WHO and NTAGI recommendations. • **Focusing on the global and national prevalence** of HPV infections causing cervical cancer and HPV related disease.

	• **Understanding the preparedness of the countries globally** who have successfully introduced HPV Vaccine in UIP program- 1. Thailand 2. Uzbekistan 3. Kenya 4. Tanzania 5. Australia 6. Vietnam **WEEK 6** • **Reviewing articles focusing on States of India having high HPV vaccine coverage** like Sikkim, Delhi. • **Reviewed article: cost analysis of cervical cancer screening vs. cost effectiveness of HPV vaccine** preventing cervical cancer in India. • **Identifying the major gaps and challenges** faced by HPV vaccine introduction in UIP. 1. Vaccine hesitancy 2. Lack of awareness 3. No standard education guidelines 4. No portal to track data 5. Affordability and accessibility • **Reviewing the articles signify the key opportunities** of HPV vaccine Inclusion in India's UIP- 1. Urgency 2. Necessity 3. Timing 4. Support 5. Strong Impact • **Writing up all the 15-20 reviewed articles** in the report under heading of challenges, opportunities and global practices. **WEEK 7** • **Attended a meeting regarding Brain Health**: Its challenges and opportunities for implementation in national level. Research mapping, review of literature, pre pilot study conducted by NIMHANS was discussed in the meeting. • **Attended a presentation** given by an acquaintance on the topic developing **Recommendations for psychosocial support during humanitarian crisis**. • **Reviewed WHO, GAVI, NTAGI**

	recommendations given for HPV vaccine inclusion in Universal immunisation program to eliminate cervical cancer. • **Writing up the own recommendation plan** and the ways to achieves it based on the objectives and challenges faced. 1. Holistic campaign approach 2. Education training to healthcare providers 3. Adapting cost effective vaccine strategy 4. Mass vaccination drive 5. Building strong monitoring and surveillance system. 6. Partnership with internship organisations **WEEK 8** • **Finalizing the Report** by writing up the conclusion and referencing all articles in **Vancouver citation**. • **Preparing the presentation** with a strong recommendation plan by analysing the challenges and opportunities of HPV Vaccine introduction in India's UIP. • **Questionnaire was prepared focusing on the knowledge, attitude and perception** of HPV related awareness among women. • **Submission of Final Report of the topic human papillomavirus vaccine: Challenges and opportunities for introduction in India's Universal immunization program proposing a strong recommendation plan.** **WEEK 9** • **Giving the Final Presentation** to the panel members involving the senior advisor health and family welfare vertical, deputy secretary women and Child Development and esteemed organisation members under the guidance of my mentor **Dr Sudha Goel** mam(senior consultant health and family welfare vertical) • **Presentation was highly appreciated**. Suggestions were given by the mentors for future improvement. • **After making improvements the final report and presentation was submitted** to my mentor and administration completing the two months summer training journey.

Linking theory (Classroom learning) with practice at your organisation	**WEEK 1** • Understanding the **purpose of conducting the research** using the **concepts of research methodology** • Development of research process is a cyclical process- 1. **Identifying the core problem**: why HPV vaccine is important and formulating the problem statement. 2. Learning the core concept of forming research questions, **streamlining the research process,** setting the **SMART objectives**, choosing the study design for finding the accurate information. 3. **Reviewing the literature** and using of the way of data collection in terms of qualitative and quantitative data. 4. Learning the practical aspect of **analysing the secondary data** from sources of WHO, NTAGI, GAVI and articles. 5. Learned writing a **research report framework** focusing aim, objectives, background, challenges, opportunities and recommendations. **WEEK 2** • Using concepts of **Epidemiology** Understanding of Disease epidemiology of cervical cancer, prevalence, epidemiological triad and impact of the disease on human population. • Using the concepts of **Demography** The demographic concepts of understanding the mortality, morbidity, prevalence, incidence rates. • Using concepts of **National health program** How programs help in spreading awareness-Example-National program for diabetes cancer stroke and cardiovascular disease help in spreading awareness of cancer treatment management at primary, secondary and tertiary level.

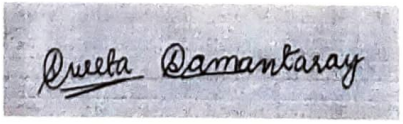
	WEEK 3 • Understanding the **policy implementation and analysis** 1. Through meetings and discussion among various stakeholders helps to analyse the national and global policies and how the newer vaccines introduced in UIP. 2. Awareness how the phases of clinical trial of vaccines is passed after license and then given to the public of certain population. **WEEK 4** • **In depth understanding of review of literature and referencing** Having a holistic understanding how Vancouver, Harvard and APA citation referencing styles differ from each other. • Linking **behavioural communication concept** Understanding the importance of awareness and education of HPV vaccine through holistic campaigns and trainings. **WEEK 5** • **Linking health policy concepts and digital health** 1. How building blocks of health system needed in HPV vaccine introduction in UIP understanding the finances, resources, service delivery , governance. 2. How digital health will upgrade data information handling. 3. Interdisciplinary collaboration of various stakeholders by taking feedbacks and surveys enhances knowledge. • Linking **health economics concepts** Understanding health unit economics required for health infrastructure, manpower training, and resources in inclusion of HPV vaccine in India's UIP. **WEEK 6** • Linking **principles of management** concept Linking the concepts of SWOT analysis focusing on the strengths and weakness of HPV vaccine introduction in UIP of India. **WEEK 7** • **Business communication skills learned through IIHMR presentations**

	• Linking the basic etiquettes of being presentable in a meeting in the practical organisation sector. • Utilising the basic ideas of presenting a presentation in a concise manner. **WEEK 8** • **Utilising the value added skills** learned to prepare report and presentation- 1. MS PowerPoint 2. MS Word 3. MS Excel 4. Power BI 5. Google form 6. Canva **WEEK 9** • **Report Writing**: learned Drafting a report in a structured manner. • Understanding the etiquettes of giving a presentation and **taking the suggestion and appreciation in a positive way.** • Presentation skills learned from **IIHMR everyday classroom Assignment enhanced my confidence level to give presentation** in Niti Aayog.
Gaps identified on the working area.	**WEEK 1** • Based on research topic gaps found are- **Vaccine hesitancy, lack of awareness, no education guidelines, prioritising other vaccines** led to high prevalence of cervical cancer. **WEEK 2** • Understanding the **safety and efficacy** of the vaccine conducting various pilot studies is a challenging process. • Strengthening the **screening is difficult** as HPV infection is asymptomatic. • **Treatment of cervical cancer requires well established resources** and medical expertise which is not affordable for all.

	• Vaccine storage and delivery in rural and difficult to reach areas is a challenging process. **WEEK 3** • HPV vaccination is still a **social stigma** subject. • **Data collection, monitoring and surveillance to track HPV prevalence in private sector is lacking**, failing to distribute reminders for next doses. **WEEK 4** • **Implementation and revising a policy is a long term** process and requires a streamline involvement of other organisations for decision making. • Introduction of HPV vaccine in UIP require a **lengthy and complex regulatory and approval process.** • Sorting of articles for review of literature requires an accurate understanding of the aim and objectives which is challenging step. **WEEK 5** • **Communication barriers** between different stakeholders delay the process of decision making. **WEEK 6** • **Limited research on the safety and efficacy** of the HPV vaccine for the adolescent age group for men and women both. • **Long term cost effective and sustainable vaccination method is still not established**. **WEEK 7** • To make **presentation more concise, crisp and in bullet points format**. • To focus more on the **self-ideology of recommendation plan** rather than which is already present in organisation. **WEEK 8** • Capacity to handle **in depth research and data analysis is lacking.** • Utilization of **digital health technologies is less adapted.** • Gap lies between policy formulation and it's role for implementation because of **lack of feedback and survey.**

	• **Conducting more localized research** on cost effectiveness analyse of HPV vaccination with other cervical cancer prevention method will strengthen the evidence. • Adapting GAVI recommended prices to make vaccine affordable by **advocating subsidies program.** **WEEK 7** • To be more **accurate most recent articles with the revised guidelines to be reviewed.** • **Feedback and survey to be conducted at regular** interval must take to have better suggestion of disease elimination. **WEEK 8** • **Monitoring and surveillance system** should be strengthened to ensure proper functioning of policy. • **Global practices** that fits India's social, economic and cultural aspect to be adapted. • **More Financial authority** should be given to improve the research Analysis. **WEEK 9** • **Self-improvement** by more focusing on the streamlining the work of presentation and report writing. • More **innovative research hubs** involving young minds with digital technology will help in progressing of HPV vaccine inclusion in India's UIP bring positive public health Impact.

Signature of the Student



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