

SUMMER INTERNSHIP PROGRAM

at

**National Institute of Health and Family Welfare
New Delhi**



01-May 2024 To 28-June 2024

Report By

Mayank Singh

Master of Business Administration
(Hospital and Health Management)
2023-25

under the Mentorship of

Dr. S Ramachandra Rao

(Reader and former Head of Department of Reproductive biomedicine, NIHFV)

&

Dr. Goutam Sadhu

(Professor, IIHMR)



राष्ट्रीय स्वास्थ्य एवं परिवार कल्याण संस्थान

(स्वास्थ्य एवं परिवार कल्याण मंत्रालय, भारत सरकार के अधीन एक स्वायत्तशायी संस्थान)



The National Institute of Health and Family Welfare

(An Autonomous Institute under Ministry of Health & Family Welfare, Government of India)

बाबा गंगनाथ मार्ग, मुनीरका, नई दिल्ली-110067

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Web Site: www.nihfw.org

F.No. A-33012/5/2007-Acad.

Dated: 28/06/2024

TO WHOM SO EVER IT MAY CONCERN

This is to certify that Dr. Mayank Singh, currently enrolled in the MBA, (Hospital and Health Management), student from IIHMR University, Jaipur has successfully completed his Summer Training/ Internship programme on the Project Report entitled— "**A Study on Gut Microbiota Stealthing Influence on Non-Communicable Diseases**" at The National Institute of Health and Family Welfare, New Delhi for the period from 1st May, 2024 to 28th June, 2024 under the guidance of Dr. S. Ramachandra Rao.

His conduct during the Summer Training Programme was good and I wish him a bright career ahead.

प्रो. वी. के. तिवारी / Prof. V. K. Tiwari,

(Dr. V.K. Tiwari)

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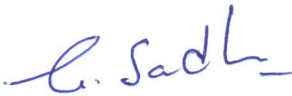
Dean of Studies

IIHMR University Faculty Mentor Approval

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

He /she has carried out work as per the guidelines. His / Her poster is approved for presentation.

Date: 19/07/2024



(Signature of Faculty Mentor)

Dr. Goutam Sadhu
Professor
IIHMR UNIVERSITY JAIPUR

About NIHF

NIHF is an autonomous institute, established in 1997 by combining NIHA and NIFP, acting as health promotion and family welfare program body that is regulated by ministry of health (under GOI).

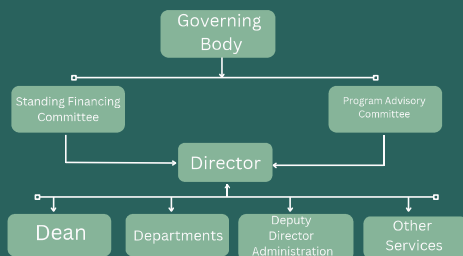
Mission

- NIHF is to be seen as an Institute of global repute in public health & family welfare management.

Vision

- To act as think tank, catalyst & innovator for management of public health and related health & family welfare programs by pursuing multiple functions of Education & Training, Research & Evaluation, Consultancy & Advisory services as well as provision of specialized services through inter-disciplinary teams.

Organization Structure



Learning During Internship

A) Research Methodology

- Basics of Research Methodology.
- Making a Report, manuscript and article reading.
- Got to know about numerous journals eg Taylor Francis, Frontiers, Nature, etc.
- Importance of impact factors, predatory journals, citation and referencing software's.

B) Assignment

"A Study on Gut Microbiota Stealthing Influence on Non-Communicable diseases"

- Numerous articles and evidences suggests a strong linkage of gut microbiome to the onset of many Non- Communicable diseases.
- Studies as shown that the Mortality rate due to NCDs are more(68%) than the Communicable diseases. (Institute of health and metric evaluation).

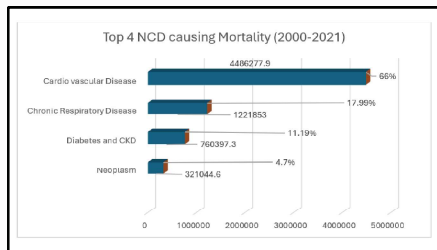


Figure 1- Top 4 NCDs causing mortality in India (IHME 2000-2021)

- Various studies show that Gut Dysbiosis first leads to Leaky gut syndrome causing bacterial toxins to enter blood circulation triggering systemic inflammation, imbalance of SCFA and Immune system causing NCDs like CVDs, IBD and especially Diabetes (Madhogan et al 2022).
- Dysbiosis or Disturbance of normal gut microflora is caused due to various factors like Diet, Lifestyle changes, use of Antimicrobials, Pollution and Early exposure to enviroment (Figure 2).

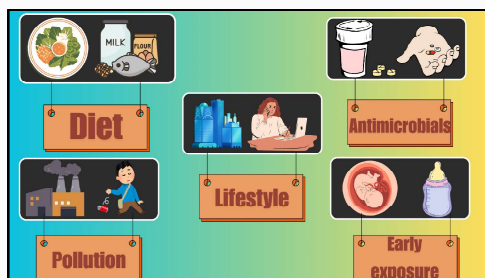


Figure 2- Various factors causing Dysbiosis of gut microflora

- This study also promote research in this specific field and also include the Indian perspective which was seen that less articles were present/published on Indian gut microbiome during literature review.
- Lastly the study also includes various methods and management of gut microbiota which lowers the probability if having NCDs in future and also promoting healthy life.

Value Addition

- Curriculum vitae writing, difference from biodata and Resume.
- Data Analysis
- Centre of Health informatics (CHI)
- ELISA
- IEC Making

SWOT Analysis

STRENGTH

- Reputation
- Expert Faculty
- Training Programs

WEAKNESS

- Funding
- Outdated Technology

OPPORTUNITY

- Collaboration with private institutes, NGOs, etc.
- Technological Advancement like AI

THREAT

- Competition with other bodies like NHSRC
- Health Crises
- Retention of skills

Theoretical Understanding v/s Practical Exposure

THEORY

- Research Methodology
- National Health Programs
- IEC

PRACTICAL

- Report and Manuscript writing.
- CHI
- Pamphlet Making
- Real time work in government setup.

Challenges Faces

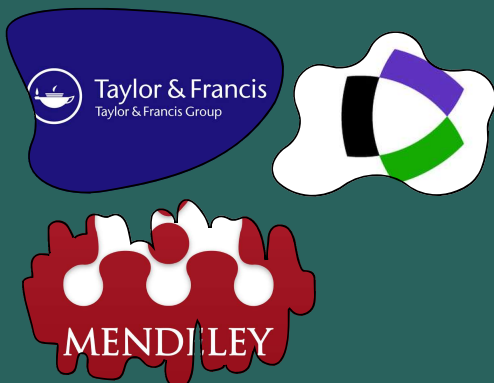
- New exposure to data analysis field and topic.
- Lack of consistency.
- Difficulty in citation and final adjustment.
- No live Projects.

Usefulness of internship

- exposure to now work field and government work culture.
- Improvement in skills especially Technical skills.
- New connections at NIHF as well as at NHSRC.

Suggestions

- Utilization of the Department's Clinic for frequently to attain its full potential.
- Introduction of Live projects for the interns and compulsory Training programs.
- Advertisement for the awareness of Institute's clinic for family welfare.
- Annual Faculty Development sessions for enlighten about new technologies and advancement.



Acknowledgement

I would like to extend my deepest gratitude to those who have significantly contributed to my research. My heartfelt thanks go to my mentor, Dr. S. Ramachandra Rao, Reader and Former Head of the Department of Reproductive Biomedicine, and Nodal Officer for the Postgraduate Diploma in Public Health Management (PGDPHM) at the National Institute of Health and Family Welfare (NIHFW). His exemplary supervision has been continuous source of inspiration and motivation throughout the course of my work.

I am also profoundly grateful to Dr. Sanjay Gupta (Dean) and Prof. Dr. Goutam Sadhu, IIHMR for providing the necessary Guidance to work in an extremely new environment which was crucial for the completion of this report and internship. My sincere thanks also go to Prof. V.K. Tiwari, Dean of Studies, as well as Mr. Vinod Tejawani (IIHMR) for facilitating my enrollment in the Summer Internship at NIHFW.

Finally, I deeply appreciate the assistance provided by my colleague, Dr. Ankit Bhonsle, his support was indispensable in completing this report. I am also immensely thankful to my parents and my God for their unwavering support in all my endeavors.

June 2024

Dr. Mayank Singh

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Annexure A

Completion Certification from the Organization CERTIFICATE

This is to certify that Dr./Mr./ Ms. Mayank Singh of MBA-HRM (batch) of 2023-25
IIMR University Jaipur (Name of the department/institute) has worked with our
organization for his/her summer internship from May 2024 to June 2024 (date).
The overall performance shown by him/her during the period was excellent/good/average. This certificate
is being issued to meet the requirements of the IIMR University.

Date: 28/06/2024

S. Ramachandra Rao
(Signature of organization Mentor)

Name: DR. S. RAMACHANDRA RAO

Designation: Reader & Former Head

Seal/Stamp of the Organization

डा. एस. रामाचंद्र राव / Dr. S. Ramachandra Rao
रीडर / Reader
Deptt. of Reproductive Biomedicine
राष्ट्रीय स्वास्थ्य एवं परिवार कल्याण संस्थान
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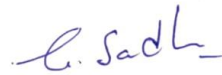
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A handwritten signature in blue ink, appearing to read 'G. Sadhu'.

(Signature of Faculty Mentor)

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Poster A4

SIP ORGANIZATION: NIHF, NEW DELHI
ORG. MENTOR: Dr. S RAMACHANDRA RAO
UNI. MENTOR: Dr. GOUTAM SADHU

IIHMR UNIVERSITY

SUMMER INTERNSHIP POSTER IIHMR JAIPUR SUBMITTED BY: Dr. MAYANK SINGH A STUDY ON GUT MICROBIOTA STEALTHING INFLUENCE ON NON-COMMUNICABLE DISEASES



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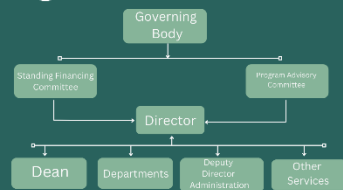
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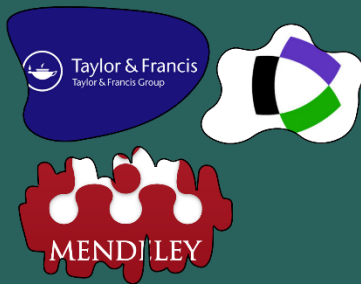
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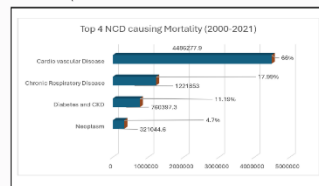


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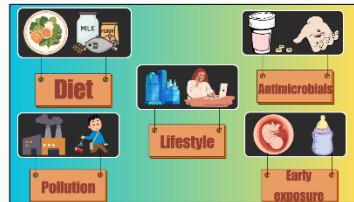


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Compiled Report

1. Activities Done

An initial briefing was taken by the organization mentor, Dr. S Ramchandra Rao who is the Reader and former Head of the department of Reproductive biomedicine at NIHFW. Briefing includes the working and contribution of NIHFW to public health, regulation via MoHFW, ongoing projects, different department running the institute, collaboration of JNU (Jawaharlal Nehru University) and DU (Delhi University) for PGDPHM and MPH courses. Later we discussed some ideas for summer intern report writing under the mentor at NIHFW and selected a strong topic on the same day.

An orientation program was organized by the academics which include visits to-

- ❖ MCTFC (Mother and Child Tracking Facilitation Centre)
- ❖ CHI (Centre of Health Informatics)
- ❖ NCCVMRC (National Cold Chain Vaccine Management and Resource Centre)
- ❖ LMIS (Learning Management Informatic System)
- ❖ Skill Lab

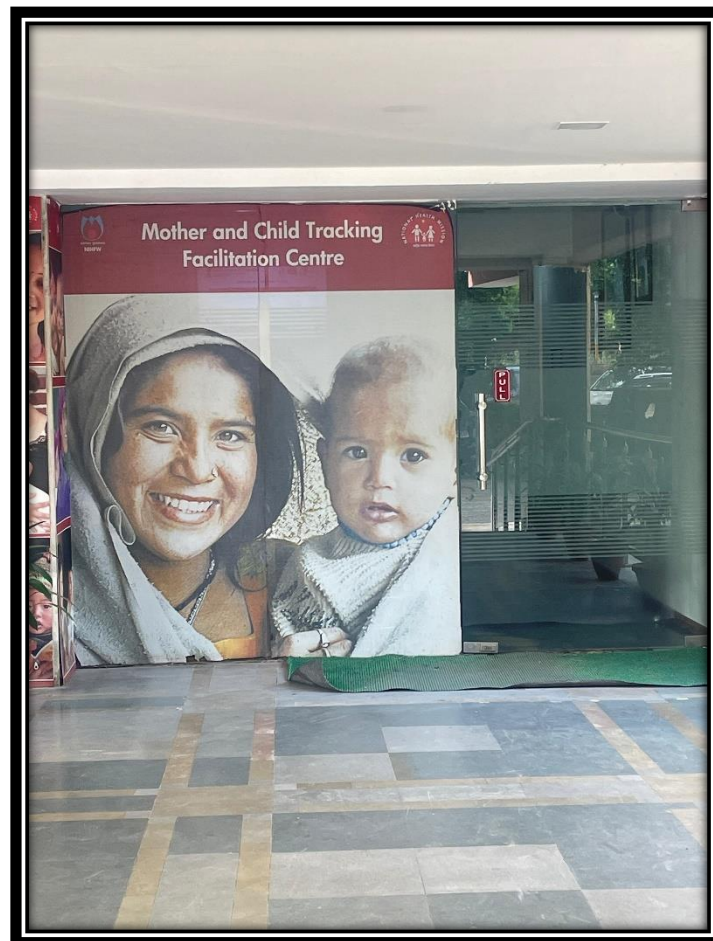
1.1 Centre of Health Informatics (CHI)



CHI (a nodal agency) is situated at NIHFW Regulated by Dr. S Ramachandra Rao sir (Nodal officer of CHI), aims to provide technical support for development, monitoring and upgradation of IT application, to strengthen MoHFW by providing expertise in professional areas like digital health, public health, IT security, data analytics and project management. Three major program we discussed during orientation was:

1. E-Clearance (eCARE)
2. Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA)
3. Pradhan Mantri National Dialysis Program (PMNPD)

1.2-Mother and Child Tracking Facilitation Centre (MCTFC)



With the support of more than 60 staff members having good communication skill and polyglot, tracks/monitor and facilitates service delivery and also builds two-way communication between service providers and beneficiaries. It ensures that all pregnant woman get their Ante-Natal Care check-up (ANCs).

The MCTFC is a call center and is designed:

- to get feedback from beneficiaries on various mother and childcare services and programs to evaluate the program interventions.
- to educate people about health services and to encourage healthy habits and behavior.
- to give MCTS a supporting framework and assist in verifying the data input in MCTS by calling expectant mothers, kid parents, and medical professionals.

1.3-National Skill lab “Daksh”



It provides training and various skill advancements to health care providers such as Auxiliary nurse midwives, Student nurse, Lady health visitors, Medical officers, Pediatricians, Faculty/obstetricians aiming to improve the overall quality of RMNCH+A. The lab training aims to reduce IMR (Infant mortality Rate) and MMR (Maternity Mortality Rate) and increase Skill birth attendance (SBA) and Emergency Obstetric and New-born Care (EmONC). Lab provides repetitive practices and real clinical problem simulations under skilled and qualified trainers.

1.4-Learning Management Informatic System (LMIS)



SAKSHM-LMIS (Stimulating Advanced Knowledge for Sustainable Health Management) as a scope and objective to promote online learning to improve health care and health education via using online platform. Before it was TMIS (Training Management and Informatics System), but now it is replaced by LMIS. Currently having over 280 medical courses and over 290 Public health courses present accessible via website and mobile application. It also acts as a central repository for healthcare related knowledge and skill learning and materials. Promotes knowledge sharing and also allows to learn from various skilled instructors performing best in their respective domains.

1.5-National Cold Chain Vaccine Management and Resource Centre (NCCVMRC)



The National Cold Chain and Vaccine Management Resource Center (NCCVMRC) is a pivotal institution dedicated to enhancing the efficiency and reliability of vaccine storage and distribution in India. Located at the National Institute of Health and Family Welfare (NIHFW) in New Delhi, NCCVMRC plays a crucial role in the country's immunization program. It provides comprehensive training, resources, and support to health professionals to ensure that vaccines are stored and transported under optimal conditions, thereby maintaining their potency and effectiveness. The center also develops and disseminates best practices and guidelines for cold chain management, aiming to reduce vaccine wastage and improve immunization coverage across the nation. Through its initiatives, NCCVMRC contributes significantly to the public health sector by ensuring that life-saving vaccines reach every corner of the country safely.

Seminars, Webinars and Sessions

-Two seminars on Disaster Management and oral health program were conducted in the teaching block presented by the PGDPHM students to the various faculty and students.

The topics assigned to the students were thoroughly covered and were also followed by question-answer session and presentation feedback by the judging faculty.

-Attended two more seminars on digital health and non-communicable disease with faculty and other students.

-Attended two webinars: -

1. Frontiers Forum Virtual Series- Redefining the future of healthcare, unpacking AI's impact and potential by Dr. Eric Topol.

2. Clarivate web of sciences webinar of three sessions and one Quiz.

- Session 1 - Effective scientific discovery and writing leveraging Web of Science: Discovery begins here!

- Session 2 - Selecting the right journal for publication and avoiding predatory journals

- Session 3 - Reference Management and Good Citation Behavior (Author's role)

-Attended one session on how to make a CV, Resume and Biodata along with other PGDPHM students taken by Dr. shanti Dahal from PHFI (Public Health Foundation of India).

-Attended a journal club by Dr. Nitin on topic "Effectiveness of a school-based behavioral change intervention in reducing chronic disease risk factors in Chandigarh, India: a cluster-randomized controlled trial.

-Attended a Distance Learning Program (DLC) orientation session by Dr. Dutta.

-Attended a Hindi Kaaryashaala and Fire mock Drill by Delhi fire department.

Activities with respect to the Department

With the guidance of my mentor at the organization, I was able to finalize a report in a span of 2 months on the topic "**A Study on Gut Microbiota Stealthing Influence on Non-Communicable diseases**". It took more than 30 articles to read and more than 100 for referencing during the drafting period which requires focus and precision. The topic fulfills both the mentor and mentee as the first part that is microbiota is related to the mentor's background and the NCDs that is my favored or area of interest in public health. Currently the progress is up to the report writing, in later stages manuscript and final Review article is pending which will be accomplished in near future.

Another activity in which I was involved was ELISA testing. The laboratory constantly receives blood serum sample from patients who visited the clinic. The ELISA test was carried out on the serum for testing Insulin, Prolactin, Follicle stimulating hormone and Thyroid stimulating hormone. With the help of the Lab technician, I was able to observe

the procedure (biotin wells, standards, quality, buffer, TMB and Stop solutions) and Absorbent Machine (450 nm) for constructing a graph and final values.

Visited to the Infertility Clinic at NIHFV which offers clinical services that include managing gynecological and reproductive endocrinological problems, managing infertility, providing prenatal care, immunizing patients, newborns, and children, and providing contraceptive treatments.

Visited Animal house situated adjacent to NCCVMRC where guinea pigs, mice and rats are kept which are used for clinical trials and research purpose.

Created an IEC (Pamphlet) for RBM department which shall conduct a 5-day training program.

2. Linking Theory Classes with Practice

- National oral health program related to National health policy (NHP) module held in term 3 by Varsha Tanu ma'am and Mamta Ma'am.
- Hierarchy of public health institutes taught in health care delivery system during term 1.
- Disaster management can be related to teachings in Epidemiology and hospital services.
- Research methodology can be related to the core project taken by me under guidance of the organization mentor which was taught during term 3 by Anoop Khanna sir and Neetu Ma'am.
- National program for prevention and control of non-communicable diseases related to National health policy (NHP) module by Varsha ma'am and Mamta Ma'am.
- Digital health taught during term 3 by Swapnil Sir.
- Organization culture taught in principles of management by Alok sir.
- Introduction writing taught by J.P sir during research methodology class.
- Data collection from ICMR, NFHS and IHME into excel sheets and creating suitable graphs from the extracted data learned during excel classes.
- RMNCHA+ in NHP module by Dr Mamta Chauhan Ma'am can be related for the orientation skill lab DAKSH visit.
- Organizational behavior by Dr. Neetu purohit ma'am.
- Business communication by Dr. Alok Mathur sir.
- CHI and LMIS can be related with national health policy by Varsh ma'am and Mamta ma'am, also digital health by Swapnil sir.
- NCCVMRC can be related by health care delivery system by Dr. Sanjay Gupta sir.
- Principal of management by Alok sir.

- Behavior change communication by Neetu ma'am and Alok Mathur sir.
- Designing effective IEC material taught in behavior change communication by Alok sir.
- Digital health teaching can be related by Frontier webinar on AI impact and potential.
- Behavior change communication by Neetu ma'am and Alok Mathur sir.
- Plagiarism check learned in principle of management by Alok Mathur sir.

3. Gaps identified

- No formal introduction and institute tour to the new interns by the academic's section for better understanding to the new workplace.
- One basic orientation and common tour of the institute for familiarization is important.
- No common workplace for the interns to settle and work though I used to sit in my department's laboratory, but my colleges sometimes suffer to find a place to sit and work which I also experienced during lunch breaks when I found my department closed.
- Though the institute has a library section in NDC but it's hard to work there due to constant noise, seating problems associated with charger points, regular events or sessions and internet issues.
- Sometimes can't participate in different training programs organized by other departments.
- Less to no Communication between different faculty members of the institute leading to favoritism.
- No live projects for intern available in the institute.
- Limited to no access to ongoing workshops like NCCVMRC training, ABDM (Ayushman Bharat digital health mission), NHA (National health authority) workshops or seminars.
- Such workshops organized by one department of the institute cannot be accessed by the other department students.
- Reproductive Biomedicine department comprises of a huge and well an equipped laboratory which have a less use currently as only a 5-day training program is organized to use the lab facilities.

- Act of procrastination was observed in some of the members of the institute which sometimes feels as intentional.
- The distribution of the interns to the respective faculties was not up to the mark as the backgrounds and interest area were not colliding well.
- The Institute lack of field visits or at least a visit or orientation to NHSRC which lies on the same premises.
- Despite of under regulation of MoHFW, the institute does not use all the resources and underperforms, for example the staff under CHI are performing well but are not much aware about newer technology and when counter questioned, they were not aware much.

4. Suggestions

- Interns are part of NIHFW, not a specific department. We should have limited only, but access to different training programs.
- Less interaction and more Ego between the institute employees lead to less development and more conflicts. More interactions and constant meetings should be held to improve such problem between institute members.
- Live projects and such discrimination of department wise organization of workshop should be removed as students or interns are a part of the institute.
- Research Methodology module should contain at least 2 practical class that will help student to write report, articles, case studies and others.
- Lab facilities should be used frequently as not doing so is a wastage of resources.
- Constant training programs should be conducted at least bi-annually for proper usage of lab facilities.
- Faculties/ employees should follow basics of work culture and should take teaching the students seriously as they are a part of teaching institute.
- Academics section should distribute the students/interns accordingly and ask their area of interest priorly.
- Field visits or orientation to NHSRC is required.
- Proper utilization of resources and boost is required plus meeting with new technologies is essential

Weekly Report-1

Name of the Organisation: NIHFW

Area/ Department/ Project of Summer Internship Program: Reproductive Biomedicine

Name of the Student: Dr. Mayank Singh

Roll no:1747

Stream: MBA Hospital and HealthCare

Week no: 1

From: 1/05/2024 to 5/05/2024

Activity Done	• Greetings and brief introduction to the mentor (Dr. S Ramchandra Rao). Sir gave brief on the institute's history, current and previous faculty, numerous departments, courses offered by the institute and role of the institute in public health. • Observe ELISA test done in laboratory for insulin and prolactin on the serum samples collected from the patients visiting to the institute's clinic. • Discussed on my interest and current knowledge on research methodology, later discussed various research topic for research review paper (Primarily to make a report followed by manuscript and then publication of an article. • Read various articles regarding research topics from numerous journals line Taylor and Francis, Frontiers and Natures, etc. • Attended seminars on National Oral Health Program and Disaster Management conducted by tow PGDPHM students in teaching block.
Linking theory (Classroom learning) with practice at your organisation	• National oral health program related to National health policy (NHP) module held in term 3 by Varsha Tanu ma'am and Mamta Ma'am. • Hierarchy of public health institutes taught in health care delivery system during term 1. • Disaster management can be related to teachings in Epidemiology and hospital services.

	Research methodology can be related to the core project taken by me under guidance of the organization mentor which was taught during term 3 by Anoop Khanna sir and Neetu Ma'am.
Gaps identified on the working area.	No formal introduction and institute tour to the new interns by the academic's section for better understanding to the new workplace.
Suggestions for improvement	One basic orientation and common tour of the institute for familiarization is important.
Plan for the next week.	- Research topic finalization. - Clinic visit.

Signature of the Student

Approved by the IIHMR University's Mentor

Weekly Report-2

Name of the Organisation: NIHFW

Area/ Department/ Project of Summer Internship Program: Reproductive Biomedicine

Name of the Student: Dr. Mayank Singh

Roll no:1747

Stream: MBA Hospital and HealthCare

Week no: 2

From: 6/05/2024 to 12/05/2024

Activity Done	• A tentative research topic selection was done (Related to Gut microflora disturbance causing non-communicable diseases) and read various related articles from various journals and utilization of online library resources. • Did drafting of the article which include only basic skeleton makeup of the future report keeping manuscript and article in mind. • Attended seminar on Digital health and non-communicable diseases presented by PGDPHM students in teaching block under various faculty and students. • Observation of the weekly ELISA testing on blood serums from the clinic. • Visited the institute clinic which was supervised by Dr. Renu Saraswat (Head of department of reproductive biomedicine) and observed consultations, blood withdraw and body fluids collection, vitals checkup and counselling.
Linking theory (Classroom learning) with practice at your organisation	• National program for prevention and control of non-communicable diseases related to National health policy (NHP) module by Varsha ma'am and Mamta Ma'am. • Research methodology (secondary data collection by reading numerous articles and visiting websites for published data by the government or recognized institutes like IHME) by Anoop sir and Neetu Ma'am.

	• Digital health taught during term 3 by Swapnil Sir. • Organization culture taught in principles of management by Alok sir.
Gaps identified on the working area.	• No common workplace for the interns to settle and work though I used to sit in my department's laboratory, but my colleges sometimes suffer to find a place to sit and work which I also experienced during lunch breaks when I found my department closed. • Though the institute has a library section in NDC but its hard to work there due to constant noise, seating problems associated with charger points, regular events or sessions and internet issues.
Suggestions for improvement	• At least one common room for the interns or students to sit comfortably and work without internet issues and easy access to the administrative block. • Library should be treated as library where people can study and work without any disturbance and library should be upgraded for laptop use and LAN connection.
Plan for the next week.	• Continue the research.

Signature of the Student

Approved by the IIHMR University's Mentor

Weekly Report-3

Name of the Organisation: NIHFW

Area/ Department/ Project of Summer Internship Program: Reproductive Biomedicine

Name of the Student: Dr. Mayank Singh

Roll no:1747

Stream: MBA Hospital and HealthCare

Week no: 3

From: 13/05/2024 to 19/05/2024

Activity Done	• Attended a seminar by Dr. Shanti Dahal (Manager–placement at PHFI Delhi) for how to frame your biodata, Curriculum vitae and resume professionally. • Final research topic selection and read various related articles plus use of ProQuest and Sage journal provided by D.A Handerson library IIHMR. • Parallel drafting of the report that is chapter 1 Introduction where I gave a basic into to the gut microflora and its disturbance leading to the NCDs with some stats of India and global. • Making/correcting layout of the review study with constant discussion with the mentor at the organization. • Observation of the weekly ELISA testing on blood serums from the clinic. • Attended orientation on MCTFC (Mother and Child tracking facilitation Centre) by Mr. Sharad sir situated at ground floor where more than 60 female employees constantly take feedback by cold calling to the beneficiaries and track / monitor the government services.
Linking theory (Classroom learning) with practice at your organisation	• Research methodology by Anoop sir and Neetu Ma'am.

	• Introduction writing taught by J.P sir during research methodology class. • Data collection from ICMR, NFHS and IHME into excel sheets and creating suitable graphs from the extracted data learned during excel classes.
Gaps identified on the working area.	• Sometimes can't participate in different training programs organized by other departments. • Less to no Communication between different faculty members of the institute leading to favouritism.
Suggestions for improvement	• Interns are part of NIHFW, not to a specific department. We should have limited only, but access to different training programs. • Less interaction and more Ego between the institute employees lead to less development and more conflicts. More interactions and constant meetings should be held to improve such problem between institute members.
Plan for the next week.	• Continue the research.

Signature of the Student

Approved by the IIHMR University's Mentor.

Weekly Report-4

Name of the Organization: NIHFW

Area/ Department/ Project of Summer Internship Program: Reproductive Biomedicine

Name of the Student: Dr. Mayank Singh

Roll no:1747

Stream: MBA Hospital and HealthCare

Week no: 4

From: 20/05/2024 to 26/05/2024

Activity Done	• Wrote the introduction that is chapter 1, followed by the objectives and chapter 3 that is factors causing dysbiosis for the report writing / research. • Attended Skill lab orientation by Dr. Geetanjali ma'am situated at ground floor adjacent to the clinic. • National skill lab DAKSH at NIHFW have skilled faculty for training new ANMs, SNs, MO, Paediatricians and OB Gynae. The Lab consists of dummy models, relation with IMR, MMR etc are explained by Dr. Geetanjali in the insightful session. • Observation of the weekly ELISA testing on blood serums from the clinic.
Linking theory (Classroom learning) with practice at your organisation	• RMNCHA+ in NHP module by Dr Mamta Chauhan Ma'am can be related for the orientation skill lab DAKSH visit. • Research methodology by Dr Anoop Khanna sir and Neetu Ma'am. • Organization behaviour by Dr. Neetu purohit ma'am. • Business communication by Dr. Alok Mathur sir.

Gaps identified on the working area.	• No live projects for intern available in the institute. • Limited to no access to ongoing workshops like NCCVMRC training, ABDM (Ayushman Bharat digital health mission), NHA (National health authority) workshops or seminars. • Such workshops organized by one department of the institute cannot be accessed by the other department students.
Suggestions for improvement	• Live projects and such discrimination of department wise organization of workshop should be removed as students or interns are a part of the institute. • Research Methodology module should contain at least 2 practical class that will help student to write report, articles, case studies and others.
Plan for the next week.	• Finish the report as soon as possible. • Attend CHI orientation.

Signature of the Student

Approved by the IIHMR University's Mentor.

Weekly Report-5

Name of the Organisation: NIHFV

Area/ Department/ Project of Summer Internship Program: Reproductive Biomedicine

Name of the Student: Dr. Mayank Singh

Roll no:1747

Stream: MBA Hospital and HealthCare

Week no: 5

From: 27/05/2024 to 2/05/2024

Activity Done	• Progress in report writing and research along with side-by-side article reading and drafting with regular alteration and correction with proper discussion and reference citation using Mendeley. • Attended orientation of CHI (centre of health informatics) situated in main building at 4th floor by Mr Gaurav where he gave basic information and understanding of CHI including two prominent Yojna regulated by CHI that are PMNDP and PMSMA. • Attended orientation of SAKSHAM LMIS by Dr. D.K Yadav where he taught us about learning and informatics system, various courses available at the platform, how to access via website or application. • Attended by orientation of NCCVMRC (National cold chain and vaccine management resource centre) situated at ground floor where training programs are conducted to enhance and teach proper management of cold chain system for vaccine storage and transportation to different terrains of India. • Observation of the weekly ELISA testing on blood serums from the clinic.
Linking theory (Classroom learning) with practice at your organisation	• Research methodology by Anoop sir and Neetu ma'am. • CHI and LMIS can be related with national health policy by Varsh ma'am and Mamta ma'am, also digital health by Swapnil sir.

	NCCVMRC can be related by health care delivery system by Dr. Sanjay Gupta sir.
Gaps identified on the working area.	Reproductive Biomedicine department comprises of a huge and well an equipped laboratory which have a less use currently as only a 5-day training program is organized to use the lab facilities.
Suggestions for improvement	- Lab facilities should be used frequently as not doing so is a wastage of resources. - Constant training programs should be conducted at least bi-annually for proper usage of lab facilities.
Plan for the next week.	Continue the report writing.

Signature of the Student

Approved by the IHHMR University's Mentor.

Weekly Report-6

Name of the Organisation: NIHFW

Area/ Department/ Project of Summer Internship Program: Reproductive Biomedicine

Name of the Student: Dr. Mayank Singh

Roll no:1747

Stream: Hospital and Health Management

Week no: 6

From: 3/06/2024 to 9/06/2024

Activity Done	• Progress in report writing and research along with side-by-side article reading and drafting with regular alteration and correction with proper discussion and reference citation using Mendeley. • Attended orientation of DLC (Distant learning course) by Dr. Dutta where has told us about the history of institute where establishment of its 1st course was done followed by others and currently offering 6 courses. • Attended Hindi Kaaryashaala session organized in teaching block. • Attended journal club presentation by Dr. Nitin student of MHA and doing thesis under Rao sir where he must show his understating on a study (Cluster randomized control trial) given by the faculty and judged plus questioned during the club presentation. • Observation of the weekly ELISA testing on blood serums from the clinic.
Linking theory (Classroom learning) with practice at your organisation	• Research methodology by Anoop sir and Neetu ma'am. • Principal of management by Alok sir. • Organization behaviour by Neetu ma'am.

Gaps identified on the working area.	• Act of procrastination was observed in some of the members of the institute which sometimes feels as intentional. • Distribution of the interns to the respective faculties were not up to the mark as the backgrounds and interest area were not colliding well.
Suggestions for improvement	• Faculties/ employees should follow basics of work culture and should take teaching the students seriously as they are a part of teaching institute. • Academics section should distribute the students/interns accordingly and ask their area of interest priorly.
Plan for the next week.	• Continue the report writing. • Attend webinars.

Signature of the Student

Approved by the IIHMR University's Mentor

Weekly Report-7

Name of the Organisation: NIHFW

Area/ Department/ Project of Summer Internship Program: Reproductive Biomedicine

Name of the Student: Dr. Mayank Singh

Roll no:1747

Stream: Hospital and Health Management

Week no: 7

From: 10/06/2024 to 16/06/2024

Activity Done	• Progress in report writing and research along with side-by-side article reading and drafting with regular alteration and correction with proper discussion and reference citation using Mendeley. • Some new chapters were added, and some segments were removed during constant evaluation of the report. • Observe ELISA test in laboratory for Insulin, prolactin, LH and FSH. • Attended webinar on Redefining future health care: unpacking AI's impact and potential by Frontiers Forums where the speaker told us about potential of AI in health care system strengthening, how and why doctors refuse use of AI, some cases solved by AI globally, etc. • Created a Pamphlet (IEC Materia) for the department of Reproductive Biomedicine which conducts a 5-day training course for 20-25 students in reproductive biomedicine.
Linking theory (Classroom learning) with practice at your organisation	• Research methodology by Anoop sir and Neetu ma'am. • Behaviour change communication by Neetu ma'am and Alok Mathur sir. • Designing effective IEC material taught in behaviour change communication by Alok sir.

	Digital health teaching can be related by Frontier webinar on AI impact and potential.
Gaps identified on the working area.	Institute lack of field visits or at-least to visit or orientation to NHSRC which lies in same premises.
Suggestions for improvement	Field visits or orientation to NHSRC is required.
Plan for the next week.	- Continue the report writing. - Attend 3 webinars and quiz.

Signature of the Student

Approved by the IIHMR University's Mentor.

Weekly Report-8

Name of the Organisation: NIHFW

Area/ Department/ Project of Summer Internship Program: Reproductive Biomedicine

Name of the Student: Dr. Mayank Singh

Roll no:1747

Stream: Hospital and Health Management

Week no: 8

From: 17/06/2024 to 23/06/2024

Activity Done	• Finished writing report writing and submitted for evaluation to the mentor. • Checked for plagiarism in drill bit, an anti-plagiarism software to which the institute have subscription. • Attended a webinar for 3 days by Clarivate which have sessions upon web of sciences, how to choose a journal and avoid predatory journals and use of endnote. • observe ELISA test for insulin and prolactin only for the serums brought from the clinic after centrifuge. • Attended a fire drill conducted by Delhi fire department at NIHFW. • Visited clinic and observed various consultation and counselling of patient.
Linking theory (Classroom learning) with practice at your organisation	• Research methodology by Anoop sir and Neetu ma'am. • Behaviour change communication by Neetu ma'am and Alok Mathur sir. • Plagiarism check learned in principle of management by Alok Mathur sir.

Gaps identified on the working area.	• Despite of under regulation of MoHFW, the institute does not use all the resources and underperforms, for example the staff under CHI are performing well but are not much aware about newer technology and when counter questioned, they were not aware much.
Suggestions for improvement	• Proper utilization of resources and boost is required plus meeting with new technologies is essential
Plan for the next week.	• Finalize the report writing. • Will attempt Clarivate quiz. • Visit clinic on Tuesday. • Visit animal house. • Printing of the report.

Signature of the Student

Approved by the IIHMR University's Mentor.

Weekly Report-9

Name of the Organisation: NIHFW

Area/ Department/ Project of Summer Internship Program: Reproductive Biomedicine

Name of the Student: Dr. Mayank Singh

Roll no:1747

Stream: Hospital and Health Management

Week no: 9

From: 24/06/2024 to 28/06/2024

Activity Done	• Finalized the report and got printed followed by signatures and final plagiarism check. • Visited clinic. • Visited animal house.
Linking theory (Classroom learning) with practice at your organisation	• Research methodology by Anoop sir and Neetu ma'am. • Behaviour change communication by Neetu ma'am and Alok Mathur sir. • Plagiarism check learned in principle of management by Alok Mathur sir.
Gaps identified on the working area.	Nill
Suggestions for improvement	Nill
Plan for the next week.	Nill (Finished)

Signature of the Student

Approved by the IIHMR University's Mentor