# **Internship Training**

at

# Jhpiego, Bhopal

# Awareness & Medical Seeking Behaviour of People During Second Wave of Covid

 $\mathbf{B}\mathbf{y}$ 

Dr. Binit Kumar Surana

PG/19/021

Under the guidance of

Dr. Anandhi Ramchandran Associate Professor & controller of examinations

**PGDM** (Hospital & Health Management)

2019-21



International Institute of Health Management Research New Delhi The certificate is awarded to

### Dr. Binit Kumar Surana

in recognition of having successfully completed his Internship in the department of

# **NISHTHA, Comprehensive Primary Health Care**

and has successfully completed his Project on

# Awareness & Medical Seeking Behaviour of People During Second Wave of Covid

8<sup>th</sup> March 2021-31<sup>st</sup> May 2021

At

## Jhpiego, Bhopal

He comes across as a committed, sincere & diligent person has a strong drive & zeal for learning.

We wish him all the best for future endeavors.



Md. Afzal Team Lead Survelliance Jhpiego

## **TO WHOMSOEVER IT MAY CONCERN**

This is to certify that **Dr. Binit Kumar Surana** student of PGDM (Hospital & Health Management) from International Institute of Health Management Research, New Delhi has undergone internship training at **Jhpiego**, **Bhopal** from 8<sup>th</sup> March 2021 to 31<sup>st</sup> May 2021.

The Candidate has successfully carried out the study designated to him during internship training and his approach to the study has been sincere, scientific and analytical.

The Internship is in fulfillment of the course requirements.

I wish him all success in all his future endeavors.

Ms. Divya Aggarwal Associate Dean, Academic and Student Affairs IIHMR, New Delhi Mentor IIHMR, New Delhi

# **Certificate of Approval**

The following dissertation titled

## "Awareness & Medical Seeking Behaviour of People During Second Wave of Covid"

at

## Jhpiego, Bhopal

is hereby approved as a certified study in management carried out and presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of **PGDM** (**Hospital & Health Management**) for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

Dissertation Examination Committee for evaluation of dissertation.

Name Signature

Dr Anandhi Ramachandran

Dr Vinay Tripathi

Dr Ajay Sood

## **Certificate from Dissertation Advisory Committee**

This is to certify that **Dr. Binit Kumar Surana**, a graduate student of the **PGDM** (**Hospital & Health Management**) has worked under our guidance and supervision. He is submitting this dissertation titled "**Awareness & Medical Seeking Behaviour of People During Second Wave of Covid" at "Jhpiego, Bhopal"** in partial fulfillment of the requirements for the award of the **PGDHM** (**Hospital & Health Management**).

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

Md Af

Dr Anandhi Ramachandran Associate Professor & Controller of Examination IIHMR , New Delhi Md. Afzal Team Lead Survelliance Jhpiego

## INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT RESEARCH, NEW DELHI

### **CERTIFICATE BY SCHOLAR**

This is to certify that the dissertation titled

"Awareness & Medical Seeking Behaviour of People During Second Wave of Covid"

at

Jhpiego, Bhopal

Submitted by Dr. Binit Kumar Surana

Enrollment No. PG/19/021

Under the supervision of **Dr. Anandhi Ramchandran, Associate Professor and controller of examination** for award of PGDM (Hospital & Health Management) of the Institute carried out during the period from **8**<sup>th</sup> **March 2021 to 31**<sup>st</sup>**May 2021** embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other Institute or other similar institution of higher learning.

Signature

## FEEDBACK FORM

Name of the Student: Dr. Binit Kumar Surana

**Dissertation Organisation:** JHPIEGO, Bhopal

**Area of Dissertation:** Awareness & Medical Seeking Behaviour of People During Second Wave of

Covid

**Attendance:** 100%

### **Objectives achieved:**

1. Understanding the level of awareness among people in relation to 2<sup>nd</sup> wave of covid-19

- 2. Understanding the medical seeking behavior of people during 2<sup>nd</sup> wave of covid-19 & their reaction towards vaccination
- 3. Understanding how the social media platform utilized for gathering resources for covid-19?

#### **Deliverables:**

- 1. Presentation for the Covid appropriate behavior, awareness study
- 2. Excel dashboard for the analysis for Covid Data Analysis

**Strengths:** Dr Binit Kumar Surana is a hardworking individual and has a keen eye for attention to detail. In a short span of time he could understand the project and thereafter took forward the study.

**Suggestions for Improvement:** Nil.

**Suggestions for Institute (course curriculum, industry interaction, placement, alumni):** The students should be instructed on proposal writing and drafting official documents and GIS.



Md. Afzal Team Lead Survelliance Jhpiego

Date: 28.06.2021 Place: Bhopal

# **Acknowledgement**

First and foremost I would like to thank The Almighty GOD whose grace makes all the things possible.

I would like to take the opportunity to devote my thanks and express deep sense of gratitude to my mentor **Dr. Anandhi Ramchandran (Associate Professor & Controller of Examination)**, organization mentor **Md. Afzal (Team Lead Surveillance at Jhpiego)** and my senior and guide **Dr. Jyoti Benawri (State team head NISHTHA).** I am greatly indebted to them for providing their valuable guidance, advice, constructive suggestions, positive and supportive attitude and continuous encouragement, without which it would have not been possible to complete the project.

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Last but not least I am extremely grateful to my **family and friends** for their encouragement and support and preparing me for my future, without which I would have not attained all that I have so far.

I hope that I can build upon the experience and knowledge that I have gained and make a valuable contribution towards community in coming future.

Dr. Binit Kumar Surana

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## **TABLE OF CONTENTS**

S.No	Content	Page No
I.	List of Abbreviations	9
II.	Organization Profile	10-15
III.	Introduction	19-20
IV.	Objective	21
V.	Methodology	22-23
VI.	Result and Analysis	24-26
VII.	Discussion	27-31
VIII.	Conclusion	31-32
IX.	Limitations of the study	33
X.	Recommendations	33
XI.	References	34-36
XII.	Annexures (I and II)	37-44

## **List of Tables/Charts**

**USAID - United States Agency for International Development** 

RISE - Reaching Impact, Saturation, and Epidemic Control

PHC - primary health care

NPM - Nurse Practitioners in Midwifery"

**ANC - Antenatal Care** 

Table 1.1 – Severity of the Covid-19 wave.

Table 1.2 – Participation pertaining to awareness of second wave of Covid-19

Table 1.3- Resource helpfulness, behavior and reaction towards vaccines.

**Table 1.4- Vaccine willingness** 

**Table 1.5- Vaccine effectiveness** 

Table 1.6- Use of social media.

Annexure I – Google form

**Annexure II- Figures of responses** 

# **Organization Profile**

Jhpiego is a Johns Hopkins University-affiliated nonprofit organisation dedicated to world health. The Johns Hopkins Program for International Education in Gynecology and Obstetrics, or Jhpiego, was created in 1973 and is currently known simply as Jhpiego.

To prevent the deaths of women and their families, Jhpiego leverages on its technical knowledge and significant experience in the field, as well as the innovation and science of The Johns Hopkins University.

Jhpiego creates innovative, cost-effective, and high-quality health-care solutions for women and their families. These practical, evidence-based approaches are helping the world's most vulnerable people gain access to high-quality health care.

This organization helped the Indian government by saving the lives of an estimated 86,000 children and 10,000 women by improving contraception services over the last six years.

Jhpiego has assisted in the establishment of over 26,900 Health and Wellness Centers across 14 Indian states through its comprehensive primary health care strengthening programmes by working with health experts, governments and community leaders. These facilities serve 326 million people by bringing comprehensive primary health care closer to their homes.

The key programme areas of Jhpiego are:

### 1. Women's Health

- Maternal, Newborn & Child Health
- Adolescent Health
- Reproductive Health & Family Planning
- Cervical & Breast Cancer Prevention & Treatment

### 2. Disease Prevention & Treatment

- Infection Prevention & Control
- HIV, Tuberculosis & Emerging Infectious Diseases
- Malaria Prevention & Treatment
- Safe Surgery

## 3. Strengthening Health Systems

- Health Systems Strengthening
- Gender & Equity
- Digital Health
- Innovations

To better respond to the requirements of individual countries, Jhpiego became more field-based over time, opening its first field office in Kenya in 1993. Jhpiego now maintains field offices in more than 30 countries throughout the world. Jhpiego has active projects in 9 Asian countries as of 2015.

### Mission

Jhpiego develops and provides life-saving health care solutions. Jhpiego establishes systems and enhances the capabilities of health practitioners in collaboration with national governments, health professionals, and local communities to save lives now and ensure a healthy future for women and their families.

### Vision

**Self-reliant countries**, healthy **families**, and **communities that can withstand adversity**, **h**aving equal access to high-quality, life-saving health care administered by competent and loving caregivers for all women and families, regardless of where they live.

# Jhpiego contributed towards work in various areas in India

# Fighting COVID-19 Under the Reaching Impact, Saturation, and Epidemic Control (RISE) Project

- The NISHTHA project, directed by Jhpiego, has improved the capacity of 49,105 primary-level health care professionals in COVID-19 management, assisting more than 41 million people in their fight against the pandemic.
- RISE is working in select countries, including India, to combat the COVID-19 epidemic
  by promoting the safe and effective use of mechanical ventilators, with financing from
  the United States Agency for International Development (USAID).
- In India, USAID funded 200 ventilators during the first wave of COVID-19, which were
  placed in 29 health facilities across the country. RISE offered technical help to these
  facilities to guarantee that ventilators were used safely, effectively, and indefinitely, and
  encouraged the establishment of support programme to address the needs of these
  hospitals caring for severely ill COVID-19 patients.
- A second phase of the project builds on this work, aiming to create robust and responsive health systems capable of dealing with the current COVID-19 epidemic as well as comparable future threats.

# **Comprehensive Primary Health Care - NISHTHA: Transforming Comprehensive Health Care in India**

This USAID-funded five-year initiative intends to change, redesign, and re-engineer
primary health care (PHC) in India in order to provide equitable, comprehensive, and
client-centered PHC that improves health outcomes for marginalised and vulnerable
populations, including women and girls.

- NISHTHA advocates for the development of a robust, responsive, accessible, sustainable, and affordable PHC system that ensures the successful delivery of reproductive, maternal, newborn, child, and adolescent health services, as well as the integration of quality tuberculosis control services.
- At the national level and across 12 states, NISHTHA is aiming to assure the availability
  of a qualified workforce, build sustainable training ecosystems, and develop health care
  infrastructure and responsive health systems (Assam, Chhattisgarh, Jharkhand, Madhya
  Pradesh, Odisha, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim
  and Tripura).
- Jhpiego has started converting 30,050 health institutions into functional Health and Wellness Centers, and enabling 24,000 community health officers to manage PHC teams.
   As a result, 143 million individuals will have access to high-quality, comprehensive PHC services.

# Promotion of Healthy Hygiene Behaviors in Primary Care: NISHTHA in collaboration with Unilever

- The NISHTHA initiative is trying to enhance the reach and effect of healthy hygiene behaviours across selected communities for the benefit of approximately 132 million people in four states, with funding from Unilever (Madhya Pradesh, Chhattisgarh, Jharkhand, and Nagaland).
- In addition, the Government of India's flagship Ayushman Bharat program's School Health and Wellness Program platform and Health and Wellness Centers are being used

to improve knowledge, attitudes, and practices among school children and within communities by delivering specially curated content on water, sanitation, and healthy hygiene behaviors.

# Dakshata: The Government of India's Strategic Initiative for Quality Improvement in Labor Rooms

- Jhpiego has been a key technical partner in the development of Dakshata, the Indian government's strategic effort aiming at improving the quality of care during and immediately after childbirth by bringing together competent, trained, and confident practitioners.
- The Dakshata initiative leverages the World Health Organization's Safe Childbirth Checklist as a framework for enhancing health-care professionals' abilities, prioritising resource availability, increasing compliance with safe-care practises, and improving datadriven decision-making.

## **Born Healthy: Addressing Maternal Infections to Improve Newborn Outcomes**

- Born Healthy is a proof-of-concept project funded by the Children's Investment Fund Foundation that aims to change the way prenatal care is delivered in Rajasthan State.
- It's an evidence-based ANC strategy that focuses on identifying and treating maternal
  infections, as well as enhancing targeted iron and calcium supplements during
  pregnancy.
- While the initiative began at 125 facilities over 14 blocks in 4 districts of Rajasthan (Bundi, Dholpur, Karauli, and Udaipur), it now aspires to reach pan-country scalability by informing ANC guidelines for the entire country.

# Manyata: Sustaining Quality Assurance Accreditation for Maternal Health Care in India's Private Sector

- MSD for Mothers (as Merck for Mothers is known in India) is partnering with Jhpiego to implement Manyata, a programme aimed at private-sector health care facilities in Uttar Pradesh, Jharkhand, and Maharashtra, based on the success of a previous programme that used private enterprise to improve maternal, newborn, and family planning in India.
- Jhpiego collaborates closely with partners on this programme to build and evaluate a
  viable and investable business model for a quality assurance mechanism, setting the
  framework for long-term quality improvement efforts in India's commercial maternal
  health care sector.

## Introduction of Simulation in Nursing Education and Inter-Professional Training in India

 The Indian Nursing Council developed a state-of-the-art National Reference Simulation Centre at SGT University in 2018 with technical help from Jhpiego, Laerdal Medical India Private Limited, and Shree Guru Gobind Singh Tricentenary (SGT) University.

### **Antenatal Risk Stratification: Continuum of Care Tech**

- Jhpiego is designing and piloting a repeatable, scalable digital platform throughout the continuum of care with partners Khushi Baby and Accenture Development Partnerships (from pregnancy to immediate postnatal period till discharge).
- The Khushi Baby app (for the antenatal period) and the ASMAN app (for the intranatal period) are being integrated and tested as a connected suite in a digital platform as part of

this project, which aims to demonstrate the feasibility of digital integration on overall service delivery across the continuum.

• The project is funded by the Bill & Melinda Gates Foundation.

### Midwifery Initiative Strengthening in India

- Jhpiego is assisting the Government of India in establishing "Nurse Practitioners in Midwifery" (NPMs) and "Midwifery-Led Care Units" to revolutionise maternal and newborn health care in India by offering knowledgeable, skilled, compassionate, and woman-centered care.
- This initiative is funded by the Bill & Melinda Gates Foundation.

## 1. PREFACE

# **Abstract**

INTRODUCTION:-In the recent times when India is struck with second wave of covid, this wave has affected most of the world. This has changed the complete scenario of the country compared to the 1<sup>st</sup> wave. As there were advancements in the age distribution and increase in the death rate which was doubled than 1<sup>st</sup> wave, this wave is being considered more severe than the 1<sup>st</sup> till now. This study focuses on the awareness of people regarding the second wave of covid-19 and their preparedness for this wave. As this wave proved to be more severe, there were some changes seen in the behavior of the people regarding covid treatment and the main transformation was seen for the vaccination drive in which social media also played a major role in creating and spreading awareness to the maximum. This helped people in incorporating the covid appropriate behavior during this unprecedented times.

**METHODS:-**A small descriptive study with semi structured questionnaire was incorporated in time frame of 2 months (April-May 2021) to collect the responses of the people selected from the post graduate and graduate background along with students which were in final year or had given the exams. Due to limitations of the study convenient sampling was adopted with time constraint, availability of people due to covid and their acceptance to participate, the form was circulated using e-mails or WhatsApp after which 43 responses were collected excluding the dropouts.

**RESULTS:-**Most of the positive inferences came out looking upon the responses in context of the severity of the disease, their increased level of awareness with the extensive use and impact of social media for appropriate behavior and their positive reactions towards vaccination and its entire process.

**CONCLUSION:-**The public awareness, acceptance and appropriate behavior of people towards treatment and vaccination was the major step in creating the vaccination drive the biggest campaign ever. Every innovation has advantages and disadvantages attached to it but getting adopted to use of technology at a faster pace was the biggest success among people during second wave of covid-19.

### 2.DISSERTATION REPORT

### 2.1 INTRODUCTION

The recent wave "second wave" of covid was not less than a "tsunami" in India There was a tremendous increase in the number of positive cases as well as number of deaths accompanying it. With the matter of fact, looking onto the sudden surge of covid cases, it was clearly ruled that there were several factors responsible for this resurgence and this mainly happened because of the mutation in the "Sars-cov2" virus. This mutant virus emerged with extensive transmission speed and incubation period was nearly negligible affecting almost every age group of people when compared to 1<sup>st</sup> wave where the profile of the patients in terms of age was quite different. This widespread disregarded several behavioural changes among people in their daily routine like use fancy masks, not much of sanitizers and many more. These factors led to highlight obvious differences in the severity of first and second wave.

In this time of pandemic, the role and use of social media penetrated in the lives of people. Every resource related to covid whether be it availability of beds, oxygen cylinders, ventilators, medicined and even injectable which were on boom of their usage like Remdesivir and many other drugs. The pharmaceutical companies themselves circulated the compiled list of distributors for the drugs and even for the home delivery. The social media content called "covid resources" gained popularity but also added a fear factor on the situation of worsening the scenario. These information were proved authentic and real to some people but mostly it turned out of no help. They were addressed as "infodemic" meaning abundance of information in excess, some accurate and some of no help.

On contrary to this, these resources created a panic situation among people pertaining to the scarcity of the medicines and injections. People to started to stock them up for emergency of their family members who were suffering from Covid. And this also led to black marketing of injections and even for the oxygen cylinders required for treatment.

The role of information technology also played a major role in context with vaccination drive for Covid-19 in India. Every information regarding the availability of near by centres for vaccination through government portal, live insights from people who had got their vaccine shots jabbed, booking schedule for vaccination, use of Aadhar card and even vaccination certificate could be downloaded from the site or Arogya Setu app. But when initially when the vaccine was launched many people willingly turned up for this but somewhere hesitant to get the vaccine with regards to post vaccination symptoms. Many such kinds of behavioural changes were noticed in the second wave compared to the 1<sup>st</sup> wave of covid-19.

So this was conducted to assess the awareness among people for second wave of Covid-19, its severity, the impact and use of social media for gaining resources for covid and the behavioural change in sense of precautions, frequency to visit the doctors and their reaction towards vaccination and decisions adopted by the Government to combat this situation.

### 2.2 PURPOSE OF THE STUDY

The reason behind conducting this study is to understand the awareness of people regarding 2<sup>nd</sup> wave of covid-19 in context of its severity, impact on their level of awareness and their preparedness. This study would also bring some highlights about covid appropriate behaviour adopted by people and their insights on positive or negative reaction towards the vaccination. This study would also focus on exploring the impact of social media for covid-19 resources and whether they were useful or not along with creating awareness & spreading information among people.

### 2.3 KEY RESEARCH QUESTIONS

- What is the level of awareness among people in relation to 2<sup>nd</sup> wave of covid-19?
- What is the medical seeking behavior of people during 2<sup>nd</sup> wave of covid-19 & their reaction towards vaccination?
- How is the social media platform utilized for gathering resources for covid-19?

### 2.4 OBJECTIVES

- To understand the awareness of public regarding second wave of covid-19.
- To gain an understanding of the medical seeking behavior during second wave of covid.
- To assess the perception of public towards vaccination.
- To explore the use of social media in obtaining information related to covid-19 in the second wave

### 2.5 METHODOLOGY

- **STUDY DESIGN** Descriptive study
- **STUDY PPOPULATION** People with educational background of post graduate, graduate and college students were selected.
- **SAMPLING AND SAMPLE SIZE** Convenient sampling was done with a limitation of time constraint and resources, availability of people because of covid and their acceptance to participate. Sample size was calculated using this formula.

$$n = \frac{Z^2 p(1-p)}{d^2}$$

Where 
$$p = 40\%$$
  
 $Z= 1.96 \text{ for } 95\% \text{ CI}$   
 $d = 20\%$ 

After considering 20% drop outs, final sample size was 110.

• **STUDY METHOD** – Semi structured questionnaire based study was conducted using google form. The google form was created comprising of people's demographic details like age, gender, educational background and questions were kept specific to awareness and severity of covid-19, use of social media and their medical seeking behavior& perception towards taking vaccination.

Request for participation was sent through e-mails or Whatsapp. Based on their acceptance to participate the link of the questionnaire was shared. After circulating the google form to 130 people but only 43 responses were obtained after considering drop outs who did not agreed to participate. The responses were obtained keeping ethical consideration in mind that identity of participants and their responses would not be revealed and accessed by any other participant as they were for academic purpose only.

- **STUDY DURATION** The study was conducted in the time frame of April-May 2021
- **INCLUSION CRITERIA-**Post graduates and graduates who are working and the students who are undergoing and have given final exams but yet to start working were included.
- **EXCLUSION CRITERIA** Respondents below 18 years of age were excluded.
- Google form -( Link to the google form and questions .Annexure1)

### 2.6 RESULTS

SEVERITY	First wave	Second wave	Both are equal
Which wave was more severe?	2.3%	88.6%	9.1%

(Table 1.1)

 When the question pertaining to the severity was asked majority voted for second wave but still 9% of the respondents believed that both waves were equal depending upon the positivity rate and no.of deaths.

Question pertaining to awareness of second wave of covid.	YES	NO
Compared to 1 <sup>st</sup> wave, was your level of awareness increased?	93.2%	5%
Were you prepared for second wave of covid ?	36.4%	45.5%

(Table 1.2)

• The symptoms, treatment and availability of the facilities for covid-19 during second wave made to people more aware as compared 1<sup>st</sup> wave in terms of testing, following precautions and treatment.

## RESOURCE HELPFULNESS, BEHAVIOUR & REACTION

	YES	NO	MAY BE
Were the online resources authentic?	56.8%	38.6%	

Did any precautions were added apart from previous being followed?	70.5%	18.2%	
Frequency to visit the doctor increased ?	29.5%	70.5%	
Overmedication being done?	5%	90.9%	
Did the stocking of medicines was done?	13.6%	79.5%	
Any other vaccines to be brought?	52.3%	22.7%	25%
Was the dosage in the gap of vaccination valid?	31.8%	29.6%	38.6%
Paid vaccination programme?	27.3%	59.1%	13.6%
Complexity of vaccine registration system ?	38.6%	47.7%	13.6%

(Table 1.3)

Negative reaction was observed among the respondents on the paid vaccination programme
on seeing the severity 59% opposed the idea of paid programme. The trend of registration for
vaccination saw different scenario that majority were able to book the slot for their
registration.

Vaccination reaction	Willing	Hesitant	None of above
Reaction towards vaccination?	72.7%	13.6%	13.6%

(Table 1.4)

• The positive trend for vaccination was evident here also that 72% willingly turned for vaccination despite knowing the post vaccination sysmptoms.

Vaccine effectiveness	Covaxin	Covishield	Sputnik
	29.5%	52.3%	18.2%

(Table 1.5)

• This inference could purely be on the vaccine availability in a respective state.

Use of social media platform	Facebook	Twitter	WhatsApp	Govt.portal	Online news
	11.4%	22.7%	31.8%	50%	77.3%

(Table 1.6) (pictorial representation – Annexure 2)

### 2.7 DISCUSSION

The recent wave or the second wave of covid was not less than a "tsunami" in India<sup>(2)</sup>. Seeing the increased surge in the number of cases and death rates in April 2021 and when compared to the statistics of the previous year i.e. 2020, it was very much evident that the second wave spreading with a tremendous speed. There were many factors which could have been thought off for the reason

of increase in the cases and deaths simultaneously. Mainly 2 factors which got highlighted were the **mutation** of the virus which evolved with increase in the rate of transmission and second was the **incubation period** of virus inside the human body which was found to be lesser in the second wave than the 1<sup>st</sup> wave of covid. And due to less incubation time the positivity rate was also increased.

Focusing on to the mutation of the virus, less incubation period, shift in the age profile of the people getting affected and new addition in the symptoms of covid made the second wave more severe than the 1<sup>st</sup> wave of covid. This positive inference could be clearly made out from the responses which we got on the severity of the wave and in which 88.4% of the people opted that the second wave of covid is more severe than 1<sup>st</sup> wave. And when it comes on the preparedness and awareness for the onset of second wave, this was something contrast which popped out that 46.5% of the public in our study was not prepared for the second wave of covid or it happened because of behavioural lapse of people:

With lot of factors emerging and evolving in the second wave of covid like the increased awareness on knowledge about the disease and precautions by using reference of various guidelines being issued by the Government, continuous use masks, sanitization and prevalence of social distancing, increased awareness of testing, awareness on symptoms, treatment and many more, definitely added an extra point on 93% of the positive response obtained from people when they were questioned on the their level of awareness for second wave of covid-19 in the study.

With the increase in the surge of number of positive cases of covid-19, there was also an increase in the surge or usage of social media and many government portal sites for obtaining information on covid related resources. The pandemic crisis spiked the use of social media than ever before. And this gap was filled due to imposition of lockdown across the states. The ease of access to all the information related to covid was made available to people at their finger tips be it availability of beds, oxygen cylinders and medicines for treatment. This had paved the way of new innovation in the advent of covid-19 crisis. The social media had supported people in many unexpected ways like in their emotional and mental wee being and provided a pool of health seeking information to people. This was also evident from the responses of our study that maximum number of people used social media platform for gaining information on covid-19 in which mainly. And this also added a positive inference that 55.8% of the people who used the social platform for covid resources found out be authentic and helpful as they have used for their families and relatives. And with the help of these resources almost 77% of public adopted new precautions in their daily routine like opting for some breathing exercises, intake of immunity boosters and steam inhalation and many more

This could also be quoted with the example that even the doctors spared their time on teleconsultation via video conferencing, so that the maximum people could be benefited who could not reach out to hospitals for treatment or who did not the access for these resources. And this pandemic had created a boom in the use of technology and innovations. But as we know that every new innovation has pros and cons attached to it. On one side were there were around 70% of people who thought that there is no need of visiting the doctor unnecessarily even for the mild symptoms or a seasonal flu but on contrary there was over aware population who got panicked and went on

increasing their visits to doctor and landed overmedicating themselves. But from inference it was clear that 90% people did not panic and miss used the information available to them.

The only disadvantage that got highlighted from the use of social media was the scenario of scarcity of the medicines required for the treatment of covid-19. Seeing people seeking help for availability of medicines on social media platforms created a havoc situation in the minds of many people. In relation to this it was noticed that around 14% of people were attacked by the fear of scarcity of the medicines and they started stocking them up for future use if required. But in contrast 79% showed positive attitude in their behaviour.

These above mentioned factors were called the "infodemic" of the covid-19, which was defined as abundance of the information some authentic and useful and rest were not helful.

Globally measures were taken to control and contain the disease in the form nationwide lockdown. Apart from all the diagnostic and therapeutic strategies being adopted by the government, the vaccination drive for covid-19 was a great kick start as a measure to control the disease. Though it was started with a specific target population of front line healthcare workers and then secondly coming down to the age group of 60yr and above, this vaccination drive proved to be the world's biggest vaccination campaign. As the use of information technology was also applicable in spreading the awareness about vaccination with their side effects and hearing from some healthcare leaders over the news about the effectiveness of vaccine and people should support the Government in making this vaccination drive a successful one. These information also led to increase in the awareness for getting vaccinated and its acceptance for the same. And this came out as positive response from our study that 72 % of people willingly turned up for vaccination and which showed

the whole hearted acceptance for vaccination campaign and rest were hesitant to go for vaccination because of fear post vaccination symptoms.

With the initial progress and acceptance to the terms and conditions imposed by the government, there were 2 vaccines which were to be made aviable for the public, they were covishield and covaxin. The introduction of sputnik to India is the most recent addition in the campaign. Initially the availability of these 2 vaccines gained popularity among people to get them vaccinated. Slowly when the drive gained the speed of execution,51.2% of people stated that covishield is more effective than any other as the maximum public was jabbed by the dose of covishield. But on contrary only 30% who took the shot of covaxin stated that it more effective irrespective of the side effects attached to it-

When the vaccination drive was initiated the Government decided to bear the cost of vaccine for the health and frontline workers but when they decided to stream down to target other people this raised a conflict of interest that is it a valid decision to make such huge programme a paid one seeing the severity of the disease. As the Government's procurement policy revealed that the purchase of covishield dosage costs them for about 200Rs and covaxin for 206 Rs .So to incur that procurement cost and overcome the expenditure there was a disparity regarding this decision. And from our study response also it could be inferred that 60% population were against the paid programme for vaccine.

There were guidelines which were issued by the Government and WHO for the procedure of vaccination that centres allocated for vaccination must have the old storage facility and the proper documentation needs to be maintained along with its link to Aadhar card for every target population. The initial guideline for administration of vaccine was that there should be gap of about minimum 4-

6 weeks between the 2 dosage but recently it was announced that this gap had been increased to 12-16 weeks. The rumours were spread that this was done in order to cover up the shortage of vaccine in the country but there was a differing statement that 37% of public thought that it might be a valid decision but on seeing the severity this might not sound in harmony with the situation

As the cases continue to rise and death rates were also seeking a hike, the government decided to taper down and open the vaccination for 45+years of people and then gradually coming down to 18+ years as target population. For this the Government made a mandate decision that every 18+ year candidate had to register themselves on the government portal, but as soon as the appointment window was available the system and the site got crashed with the registration overload. And this system glitch made the registration process even more complex. But with passing time the process became an ease of access which also got reflected in our study that around 45% people didn't find the registration process complex.

With advancement of time and addition of sputnik vaccine in the administration cycle gained a popularity 54% inferred that Government should decide to buy more vaccine other than covishield ,covaxin and sputnik so that everyone should get vaccinated as soon as possible and also to rule out the vaccine shortage in near future. This would cover the entire India with vaccination and bring an end to this covid-19 era by completely eradicating the disease.

### 2.8 CONCLUSION

The surgencies in the cases of covid-19 and increased mortality rate with different age profile of people characterized the second wave of covid to be more severe than the 1<sup>st</sup> wave with increase in its transmission speed. In this second wave of pandemic the information technology saw a boom in all the best possible ways which happened in nearly a very short span of time for eg Twitter and Whatsapp were flooded with information with government portal at the forefront. Though some of the studies criticized the people that increase in the no. of cases was due to their behavioural lapse but collecting insights from our study was evident that knowledge and awareness among people played a major role to help control the disease.

The public awareness, acceptance and positive attitude of people towards vaccination was the major step in creating the vaccination drive the biggest campaign ever but their were many barriers pertaining to post covid vaccination symptom which created a hesitant behaviour among the people. Again the role of awareness programme for covid vaccine came up with bright results and maximum population willingly turned up for it. Every innovation has advantages and disadvantages attached to it but getting adopted to use of technology at a faster pace was the biggest success among people during second wave of covid-19.

## 2.9 LIMITATIONS OF THE STUDY

This study had a few limitations. Online study was conducted based on the network of the person conducting the study which had to rely on the circulation of link of the form through online medium like e-mails or WhatsApp seeing the severity of the disease spread and people getting infected covid. Due to time constraint of the study as it was to carried out in time frame of 2 months(Aprilmay 2021), the survey had to rely on the availability of people to agree for participation as many people in the network were infected with covid so they dropped out from participation. So seeing this scenario convenient sampling could be carried out to obtain responses. Despite these limitations a good number of responses were obtained which was helpful for the study along with literature being reviewed for the same.

### 2.10 RECOMMENDATIONS

- The availability of information should not create a negative impact.
- The use of technology for maintaining health &well being should be followed from now on.
- People should keep updated themselves for new additions in the technology.

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## ANNEXURE I (GOOGLE FORM)

### AWARENESS & MEDICAL SEEKING BEHAVIOUR OF PEOPLE DURING SECOND

### WAVE OF COVID

This is a short questionnaire which will assess your awareness in relation to the severity of second wave, use and impact of social media to gather authentic and helpful resources, your medical seeking behaviour and reaction towards vaccination during the second wave of covid-19. Your identity and responses will be kept confidential. Please feel free to agree or disagree on your participation in this survey.

Your cooperation will be highly appreciated. Please feel free to connect through e-mail.

DR BINIT SURANA IIHMR, NEW DELHI E-mail - surana.vineet@yahoo.com
* Required
Email *
Your email
Do you wish to participate in this survey?
Agree
Disagree
Your answer
AGE *
Your answer
GENDER *
Female Male

E-MAIL ADDRESS *
Your answer  EDUCATIONAL QUALIFICATION *  Post graduate  Graduate  Student
Which wave of covid-19 do you think is more severe?*
First wave Second wave Both are equal None of the above
Compared to the 1st wave , was your level of awareness increased in the second wave? *
Yes No May be
Were you prepared for the second wave ? *
Yes No Maybe
Which social media platform did you use to gather resources on second wave of covid-19?*
Facebook Twitter Whatsapp Government portals Online news
Were these resources authentic and helpful?*
Yes No May be
Did you add up any new precautions or measures for this wave different to the previous being followed ? $\ast$
Yes No Maybe

Was your frequency to visit the doctor increased even for mild symptoms and slight seasonal variation in this wave of covid as compared to 1st?\* Yes No Maybe Did you overmedicate yourself for mild symptoms without any consultation? \* Yes No Maybe Seeing the scarcity of the medicines, have you also started stocking them up for future?\* Yes No Maybe What was your reaction to get vaccinated for covid-19? \* You willingly turned up for vaccination You felt hesitent None of the above According to you, which vaccine is effective?\* COVISHIELD **COVAXIN SPUTNIK** Do you think government should buy vaccines other than covishield ,covaxin and sputnik? \* Yes No Maybe The gap between the 1st & 2nd dose of covishield has increased to 12-16 weeks, do you think its valid seeing the disease severity?\* Yes No Maybe Vaccination for covid should have been a paid programme? \* Yes No Maybe

Did you find the registration system for vaccination on government portal complex ? \*

Yes

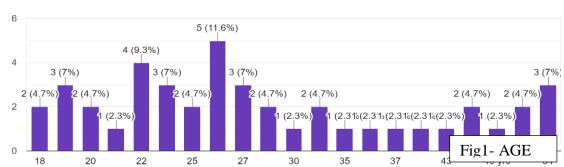
No

Maybe

# **ANNEXURE II (FIGURES)**

## **ANNEXURE 2**





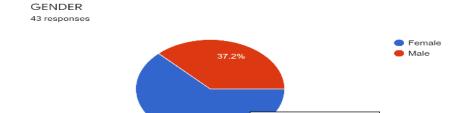


Fig 2- Gender

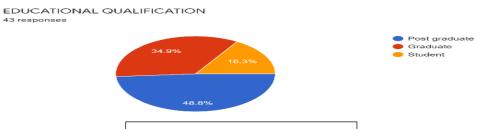
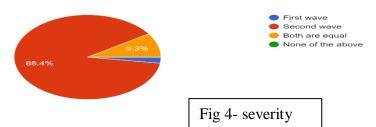


Fig 3- Educational qualification

Which wave of covid-19 do you think is more severe?



Compared to the 1st wave , was your level of awareness increased in the second wave? <sup>43</sup> responses

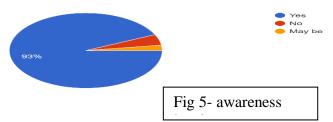


Fig 6-preparedness

43 responses

Yes
No
Maybe

Were you prepared for the second wave?

Which social media platform did you use to gather resources on second wave of covid-19?

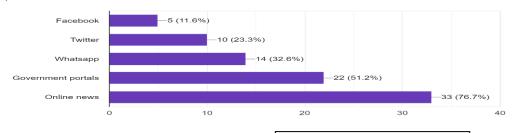


Fig 7- use of social media

● Yes ● No ● May be

Were these resources authentic and helpful?

45 respondes

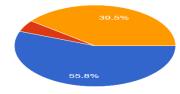


Fig 8-helpful resources

Did you add up any new precautions or measures for this wave different to the previous being followed?

43 responses

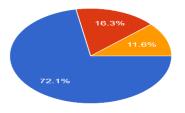
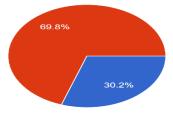




Fig 10-precautions

Was your frequency to visit the doctor increased even for mild symptoms and slight seasonal variation in this wave of covid as compared to 1st?

43 responses

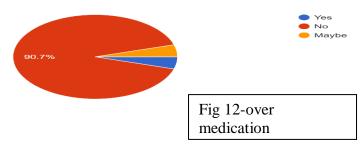


Maybe

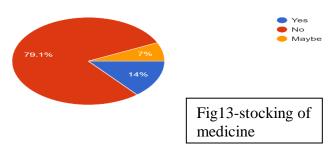
Yes
No

Fig 11-frequency to doctor

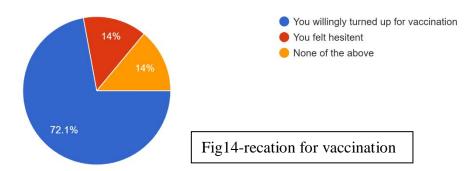
Did you overmedicate yourself for mild symptoms without any consultation? 43 responses



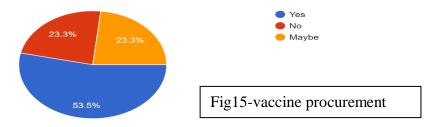
Seeing the scarcity of the medicines , have you also started stocking them up for future ?  $^{\rm 43\,responses}$ 



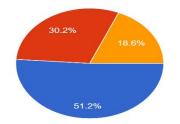
What was your reaction to get vaccinated for covid-19? 43 responses



Do you think government should buy vaccines other than covishield, covaxin and sputnik?



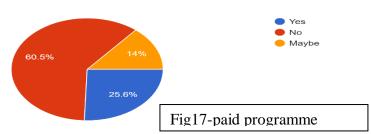
According to you , which vaccine is effective ? 43 responses



COVISHIELDCOVAXINSPUTNIK

Fig16-vaccine effectiveness

Vaccination for covid should have been a paid programme ? 43 responses



Did you find the registration system for vaccination on government portal complex ?  $\ensuremath{^{43}}\xspace$  responses

