

## MAHATMA GANDHI INSTITUTE OF MEDICAL SCIENCES, SEVAGRAM

## **IAPSM National Youth Conclave March 2021**

## **Report of Pre-conclave Workshop**

## **Artificial Intelligence in Indian Public Health Scenario**

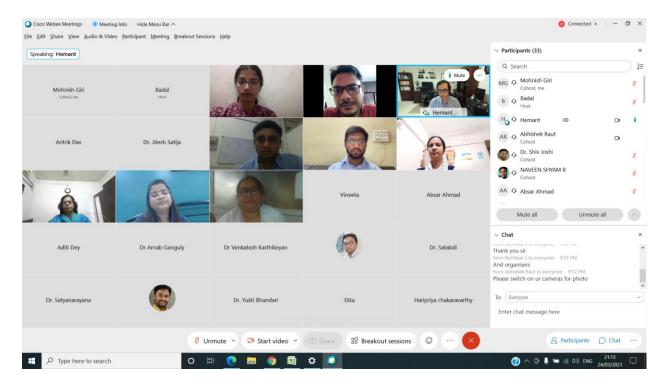
**Date** : 24 Mar 2021

Number of delegates: 37

**Resource person**: Dr Hemant Kulkarni, Chief Executive Officer, M&H Research, LLC, San

Antonio, Texas, USA and President, Lata Medical Research Foundation, Nagpur, India

Dr Hemant Kulkarni, resource person, gave emphasis on the guiding principles for the use of Artificial Intelligence for Public Health (AI4PH) interventions. The use of Artificial Intelligence (AI) in public health must be guided by superior technical and ethical considerations aimed to mitigate ethical risk in public health and related policy interventions, reflected in the following guiding principles. People-centered. Actions and solutions must be people centered and not be used solely by itself. As one of many technologies to aid public health AI should respect the rights of the individual. Ethically grounded. Discussions, developments, and implementation must be grounded in the globally-agreed ethical principles of human dignity, beneficence, no maleficence and justice. Demonstrates scientific integrity. AI interventions followed scientific best practice including being reliable, reproducible, fair, honest, and accountable.



Dr Hemant Kulkarni gave the information of components and subfields of artificial intelligence. Machine learning was the process of applying training-data to a "learning algorithm." The algorithm generates a set of rules, based on identified data patterns. These rules could then be used to classify new data or predict future data. By using different training-data, the same learning algorithm could be used to generate different models. Cognitive search is used in AI solutions (such as machine learning and NLP) to incorporate and understand digital content from many different types of sources, such as text, images, video and machine data. Artificial intelligence used in identifying changes in the ECG. The goal was to improve the relevance of the results generated from a user search. Dr Hemant also discussed that Virtual agents (chatbots) are also known as "conversational agents". These were software applications that mimic written or spoken human speech to simulate a conversation or interaction with a real person. For example Chatbox as a health assistant can be used in mental health. Chatbox can be used to counsel the patient about their mental health.

Case studies along with examples of the chatbots were discussed about the impact of artificial intelligence on Health.

