

SUMMER TRAINING REPORT

ASSESSMENT OF KNOWLEDGE AMONG ELDERLY ABOUT COVID 19

By

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2019 – 21**

OBJECTIVES

1. TO STUDY THE KNOWLEDGE, AWARENESS, ATTITUDE TOWARDS COVID 19 IN ELDERLY PEOPLE.
2. TO STUDY THE ASSOCIATION OF AGE AND AWARENESS OF COVID 19 AMONG ELDERLY PEOPLE.

INTRODUCTION

- THE WORLD IS CRIPPLED WITH THE COVID 19 OUTBREAK, ACCORDING TO WORLD HEALTH ORGANIZATION, GLOBALLY AS OF MAY 2020, THERE HAVE BEEN 5,267,419 CONFIRMED CASES INCLUDING 341,155 DEATHS.
- THE MINISTRY SAID 0.5% OF COVID 19 DEATHS HAVE OCCURRED IN PATIENTS BELOW 15 YEARS, 2.5 % IN 15-30 YEARS OF AGE GROUP AND 11.4% IN 30-45 YEARS OF AGE GROUP, 35.1% IN 45-60 YEARS OF AGE GROUP AND 50.5% IN 60 YEARS OR OLDER AND AROUND 73% HAVE OCCURRED AMONGST PATIENTS WITH UNDERLYING HEALTH DISORDERS.
- WITH THE DEMOGRAPHIC ACHIEVEMENTS OVER TIME, SHARE OF ELDERLY PEOPLE IN OUR POPULATION IS GOING TO BE 158.7 MILLION BY 2025 AND IS EXPECTED TO EXCEL POPULATION OF BELOW 14 YEARS IN 2050, THEREFORE REQUIRING FIRM AND STRONG POLICY PARADIGM INVOLVING FAIR SHARE FOR ELDERLY CARE ESPECIALLY IN HEALTHCARE CONSIDERING THEIR DETERIORATING HEALTH WITH AGING.

INTRODUCTION

- THOUGH INDIAN GOVERNMENT HAS MADE EFFORTS TO INCLUDE GERIATRIC CARE IN HEALTH PLANS, BUT IT IS CLEARLY NOT ENOUGH WHEN COMPARED TO THE BURDEN OF MORBIDITY AND MORTALITY AMONG THE ELDERLY, MAKING THE OLDER PEOPLE IN OUR COUNTRY MORE SUSCEPTIBLE TO COVID 19 THAN ANYONE ELSE.
- IN SUCH TIMES OF NEED, IT IS EXTREMELY NECESSARY TO TAKE CARE OF OUR ELDERLY, FROM INDIVIDUAL LEVEL TO COMMUNITY, ALL EFFORTS ARE REQUIRED. A COMPREHENSIVE PATIENT CARE THAT INCLUDES EVALUATION OF PHYSICAL, MENTAL, SOCIAL AND LIFESTYLE ISSUES AND THEN MAKING AND EXECUTING AN EVIDENCE-BASED HEALTH CARE PLAN THAT ADDRESSES THEIR NEEDS. AND TO EVALUATE THIS, THE ELDERLY THEMSELVES SHOULD BE KNOWLEDGEABLE OF THEIR HEALTH CARE NEEDS. SUCH KNOWLEDGE CAN BE GENERATED ONLY BY FIRST ASSESSING THEIR PRE HAND KNOWLEDGE REGARDING THE DISEASE AND THEN EVALUATING IT TO FURTHER TAKE STEPS TO ENHANCE IT IF FOUND INSUFFICIENT. THEREFORE, MAKING THEM BETTER PREPARED FOR COVID 19 PANDEMIC.

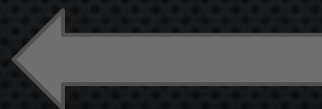
LITERATURE REVIEW

- OUR WORLD HAS LIVED THROUGH PANDEMICS AND EPIDEMICS FOR CENTURIES, ACCORDING TO WHO, SOME OF THE MANY PANDEMICS AND EPIDEMICS WERE OF CHIKUNGUNYA, CHOLERA, EBOLA VIRUS, INFLUENZA ETC.
- DUE TO THEIR AILING MENTAL AND PHYSICAL CONDITIONS, THE ELDERLY IS NATURALLY PREDISPOSED TO SUCH PANDEMICS AND EPIDEMICS
- NATIONAL INSTITUTE OF VIROLOGY, PUNE, COVERING 8 STATES FROM 2010-2013, DEATH DATA WAS OBTAINED FOR THAT PERIOD WHERE ESTIMATED ANNUAL INFLUENZA ASSOCIATED RESPIRATORY MORTALITY RATE WERE HIGHEST FOR 65 YEARS AND ABOVE (9.2-93.0 DEATHS/100000) AND INFLUENZA ASSOCIATED CIRCULATORY DEATHS WERE ALSO HIGHER AMONG THOSE OF 65 YEARS AND ABOVE(7.9-135.8/100000) AS COMPARED TO THOSE AGED 65 YEARS AND BELOW

LITERATURE REVIEW

- OTHER TOP 5 CAUSES OF ELDERLY DEATHS ARE:
- 1.HEART DISEASES
- 2.CANCER
- 3.STROKE
- 4.CHRONIC LOWER RESPIRATORY DISEASES
- 5. DIABETES.
- ACCORDING TO A SITUATION ANALYSIS OF THE ELDERLY IN INDIA IN 2011 BY MINISTRY OF STATISTICS AND PROGRAMME IMPLEMENTATION, THERE IS A SHARP RISE IN AGE SPECIFIC DEATH RATE WITH 20/1000 DEATHS FOR PEOPLE IN AGE GROUP 60-64, 80/1000 IN PEOPLE OF AGE GROUP 75-79 YEARS AND 200/1000 IN 85 YEARS AND ABOVE OF AGE
- THEREFORE, THE BURDEN OF MORTALITY AND MORBIDITY IS HIGH AMONG THE ELDERLY AND AVAILABILITY OF INFRASTRUCTURE AND RESOURCES ARE LOW, HENCE A CAREFULLY CULTIVATED CONSIDERATION OF TWO SOCIAL DIMENSION OF EPIDEMICS IS REQUIRED;

INDIVIDUAL LEVEL



COMMUNITY LEVEL

LITERATURE REVIEW

- INDIVIDUAL LEVEL DIMENSIONS INCLUDE PERCEIVED SEVERITY OF DISEASE AND PERCEIVED SUSCEPTIBILITY WHICH VARIES ACCORDING TO THE AGE OF THE ELDERLY, SEX, AND UNDERLYING COMORBIDITIES AND STRENGTH OF THEIR IMMUNE SYSTEM BUT THE COMMUNITY LEVEL DIMENSION CAN BE MANAGED EFFECTIVELY AND EFFICIENTLY BY GENERATING ADEQUATE AWARENESS AND KNOWLEDGE OF THE DISEASE.

RESEARCH METHODOLOGY:

- THE STUDY POPULATION IS PEOPLE AGED 65 YEARS AND ABOVE. A SAMPLE SIZE OF 50 IS TAKEN. THE RESEARCH DESIGN ADAPTED IS CROSS-SECTIONAL DESIGN AND A STRUCTURED QUESTIONNAIRE IS USED. THE QUESTIONNAIRE IS DIVIDED INTO TWO SECTIONS, ONE SECTION DEALS WITH THE DEMOGRAPHIC DATA AND SECOND SECTION DEALS WITH THE KNOWLEDGE OF THE ELDERLY TOWARDS COVID 19.
- BELOW ARE THE VARIABLES TO ASSESS KNOWLEDGE

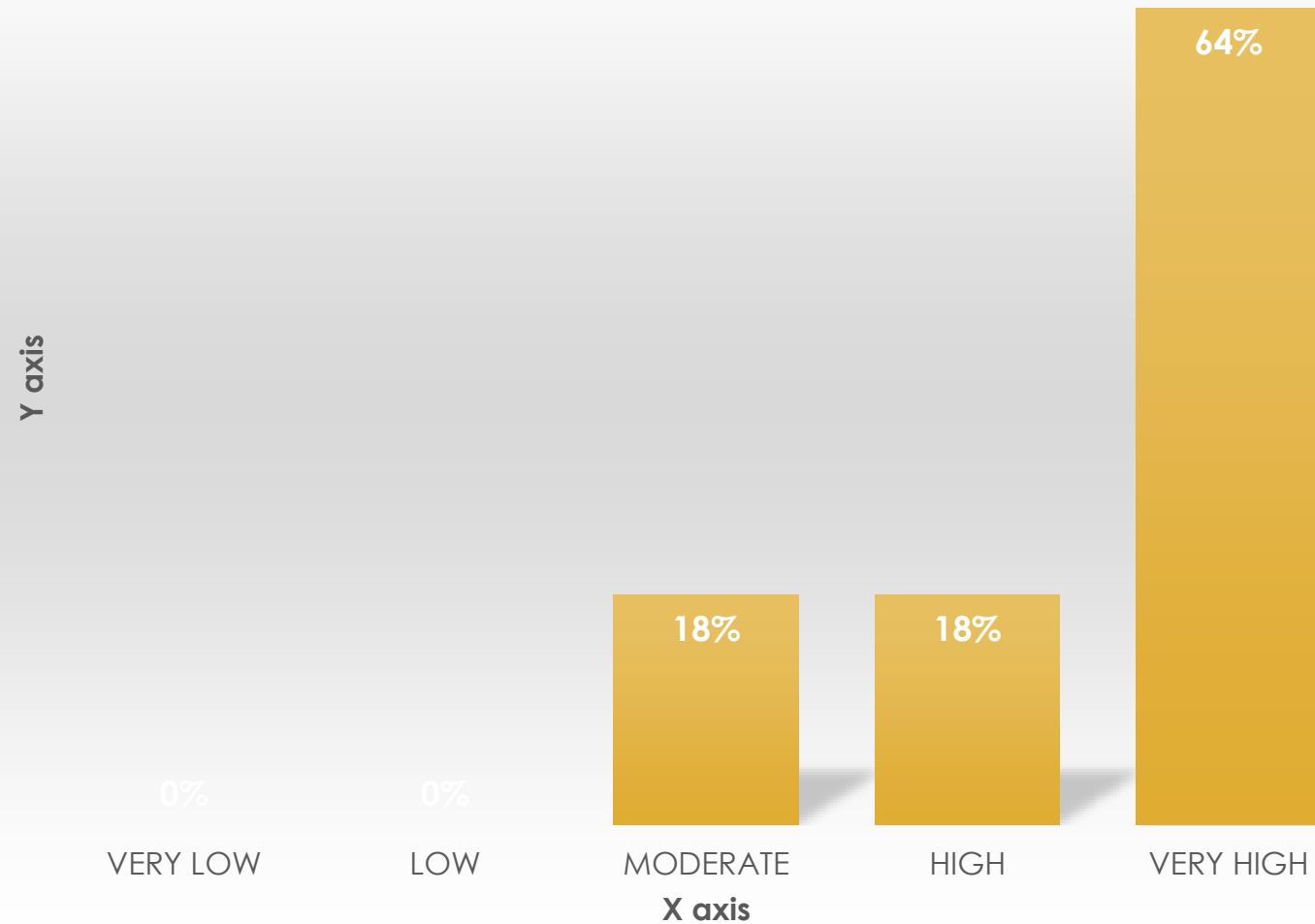
AGE
GENDER
WORKING STATUS
LEVEL OF EDUCATION
LIVING STATUS

DATA ANALYSIS:

Age 65-74 years 75-84 years 85 and above	Sample size (%) 20(40%) 16(32%) 14(28%)
Gender Male female	24(48%) 26(52%)
Education level Less than senior secondary level Senior secondary level Graduate Postgraduate	20(40%) 11(22%) 10(20%) 9(18%)
Working status Currently working Unemployed retired	7(14%) 17(34%) 26(52%)
Living status Alone With family Nursing care facility	7(14%) 36(72%) 7(14%)

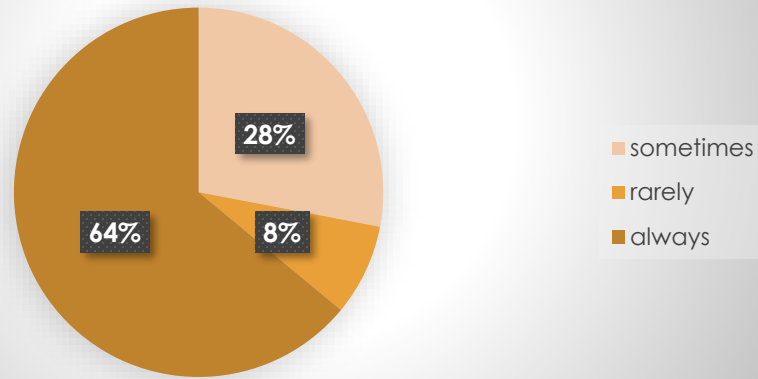
- DATA IS ANALYZED USING EXCEL AND CHI SQUARE TEST IS DONE TO ASSESS THE ASSOCIATION OF KNOWLEDGE TOWARDS COVID 19 AND VARIABLES STATED IN TABLE 1.1. THE P-VALUE IS CONSIDERED SIGNIFICANT AT ≤ 0.05 .
- DATA IS SUMMARIZED IN THE TABLE.

COVID19 THREAT SERIOUSNESS



64% ELDERLY SAID
THE COVID19 THREAT
IS VERY HIGH AND 18
% SAID IT TO BE
MODERATE AND
OTHER 18% HIGH.

AROGYA SETU APPLICATION AWARENESS



shows if elderly is aware about the Arogya setu application. 62% said they were aware of the application whereas 34% said they haven't heard of it yet.

Methods of prevention



shows methods of prevention followed by elderly during COVID 19 pandemic. About 98% of elderly washed their hands with soap and water followed by 84% who covered their mouths on sneezing 78 % used face masks and 64% used alcohol based sanitizers.

COVID 19 THREAT SERIOUSNESS

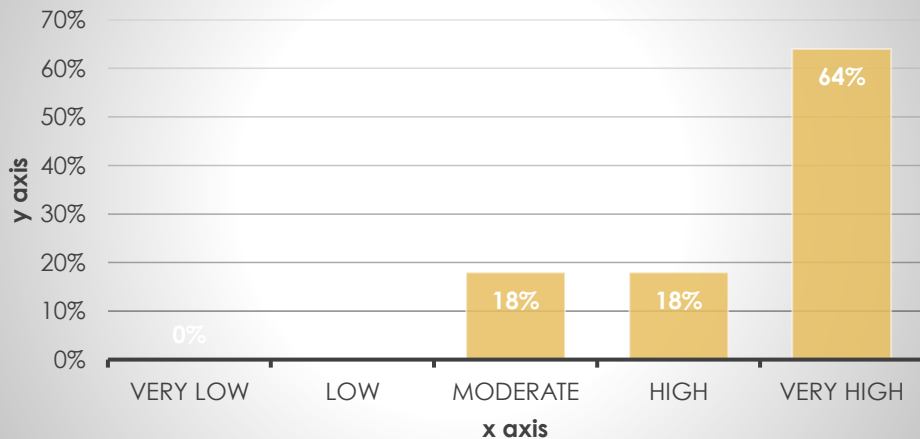
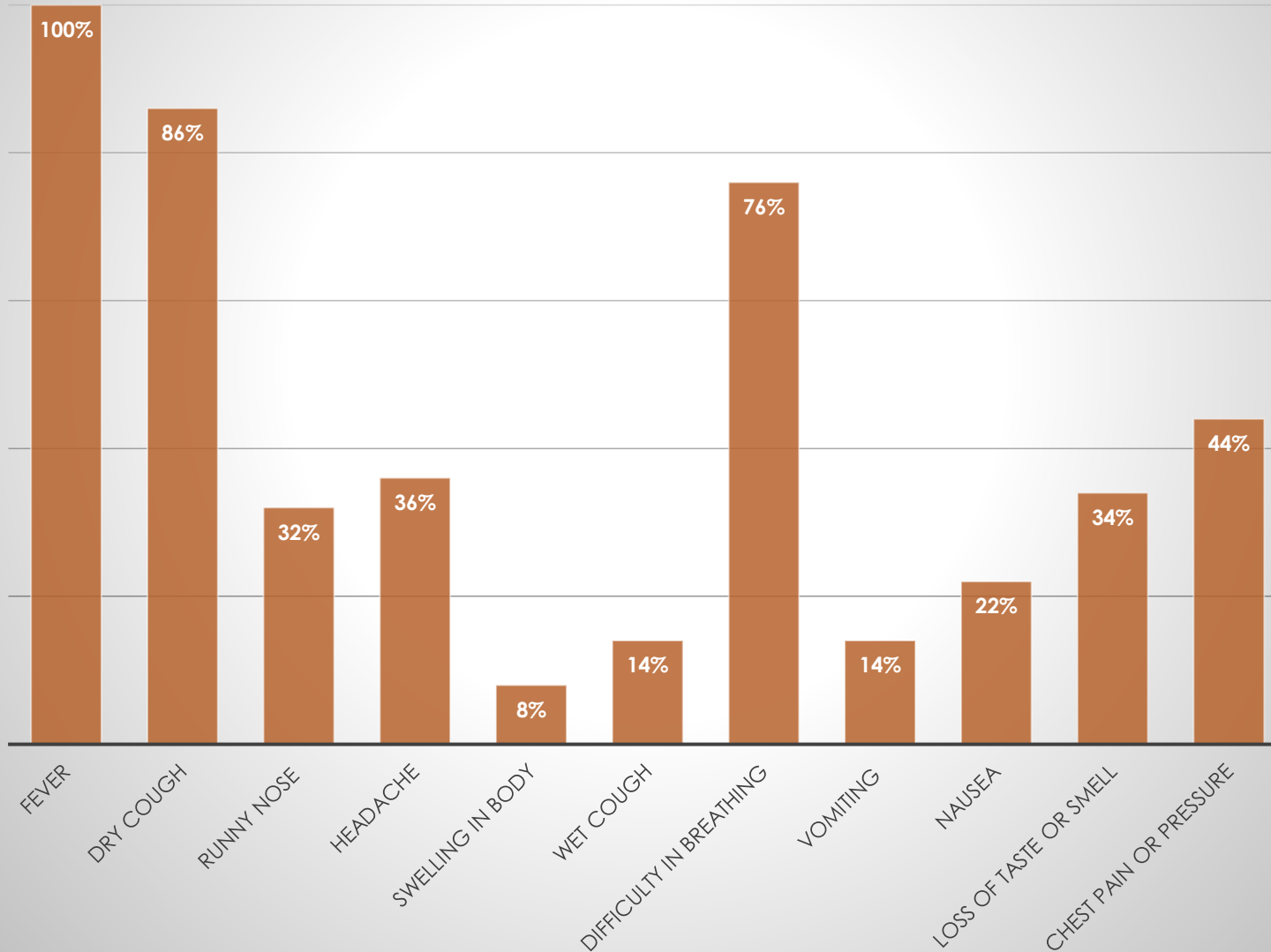


Chart on left shows how serious do elderly think COVID 19 threat is. 64% elderly said the COVID19 threat is very high which means that it is a hazardous condition and may cause catastrophic damage and 18 % said it to be moderate which means it may cause minor damage, remaining 18 % thought it to be high risk which means it may cause significant damage.

Symptoms of COVID 19



SHOWS THE SYMPTOMS OF COVID 19 MARKED BY ELDERLY. 100% OF THE ELDERLY SAID THE SYMPTOM TO BE FEVER FOLLOWED BY DRY COUGH AND DIFFICULTY IN BREATHING. 14% MARKED WET COUGH INCORRECTLY AS A SYMPTOM OF COVID 19.

FINDINGS:

- AFTER APPLYING CHI SQUARE TEST TO ASSESS THE ASSOCIATION OF KNOWLEDGE WITH AGE, GENDER, WORKING STATUS, LEVEL OF EDUCATION AND LIVING STATUS, IT WAS FOUND THAT FEW FACTORS WERE SIGNIFICANTLY ASSOCIATED WITH ELDERLY KNOWLEDGE TOWARDS COVID 19 INCLUDING AGE (P-VALUE 0.02) AND WAY OF LIVING (P-VALUE 0.001)

VARIABLES	KNOWLEDGE			P value
AGE	Don't know	No	Yes	0.02
65-74 years	0	0	20	
75-84 years	6	0	10	
85 and above	4	1	9	
LIVING STATUS	Don't know	No	Yes	0.001
Alone	0	7	0	
With family	2	7	27	
Nursing care facility	0	3	4	
GENDER	Don't know	No	Yes	0.15
Male	10	0	14	
Female	6	0	20	
WORKING STATUS	Don't know	No	Yes	0.43
Currently working	1	0	6	
unemployed	7	0	10	
retired	8	0	18	
LEVEL OF EDUCATION	Don't know	No	Yes	0.06
	0	8	2	
ISSL	7	11	2	
SSL	0	8	1	
GRAD	1	10	0	
PG				

CONCLUSION:

- AFTER APPLYING CHI SQUARE TEST, THE P-VALUE CALCULATED IN ASSOCIATION WITH KNOWLEDGE AND AGE WAS 0.02 AND WITH LIVING STATUS WAS 0.001 ($p\text{-value} < 0.05$) SUGGESTING THE KNOWLEDGE OF COVID 19 IN ELDERLY MIGHT BE ASSOCIATED WITH THEIR AGE AND LIVING STATUS.
- THERE WAS NO ASSOCIATION OF KNOWLEDGE WITH GENDER, WORKING STATUS AND EDUCATION LEVEL OF THE ELDERLY, HOWEVER MORE DATA IS NEEDED TO BE COLLECTED AND ANALYZED.

RECOMMENDATIONS:

THE ELDERLY HAS GOOD ENOUGH KNOWLEDGE TOWARDS THE COVID 19 PANDEMIC, BUT MEASURES ARE REQUIRED TO BE TAKEN TO IMPROVE AND ENHANCE THEIR KNOWLEDGE.

THE KNOWLEDGE AND AWARENESS AMONG THOSE ABOVE 75 YEARS NEEDS TO BE ENHANCED DUE TO DIMINISHING HEALTH AND COGNITIVE DISABILITIES.

THOSE LIVING ALONE WERE NOT AS MUCH KNOWLEDGEABLE AS COMPARED TO THOSE LIVING IN FAMILY AND NURSING CARE FACILITY, THEREFORE APPROPRIATE MEASURES ARE TO BE TAKEN TO MAKE THEM MORE AWARE OF COVID.

ONLINE COURSE REPORT

USING CLINICAL DATA FOR BETTER HEALTHCARE

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2019- 21

1.NAME OF THE COURSE:

USING CLINICAL DATA FOR BETTER HEALTHCARE.

2.COURSE DESCRIPTION:

This course covers the use of ongoing digital health surroundings, environment, and correctly utilizing and identifying many uses in collecting data from sources using the digital health technologies, emerging use of health workforce in digital world and the importance of data analytics in making appropriate decisions in healthcare.

3.OBJECTIVES OF THE COURSE:

- THE OBJECTIVE OF THE COURSE IS TO EXPLORE HOW DIGITAL DATA AFFECTS THE HEALTHCARE AND ROLE OF HEALTH INFORMATICS.
- TURNING RAW DATA INTO ACTIONABLE INFORMATION.
- IDENTIFYING THE IMPORTANCE OF DATA LIFE CYCLE.
- IDENTIFYING AND UNDERSTANDING THE KEY STATISTICAL CONCEPTS FOR INTERPRETING DATA.
- UNDERSTANDING THE MANY STAKEHOLDERS, POSITIONS, AND PRIVILEGES LINKED WITH THE USE OF DIGITAL HEALTH TECHNOLOGIES AND SYSTEMS.
- EXPLORE ADVANTAGES OF CHALLENGES OF CONTEMPORARY DIGITAL HEALTH SYSTEMS AND DATA USE.

4.COURSE CONTENTS:

Module 1: 1.five ways digital data is changing health care (video) 2.data driven care (video and informatics) 3.do healthcare professionals really need to know data analytics(video) 4.the potential of health data to drive healthcare transformations: Digital health CRC(Video).	Module 2: Meaning of health data and health data classification (video) data life cycle(video) what is Quality health data and its importance (video) Data governance and privilege. (reading) Terminology and key concepts for interpreting data (reading)
Module 3: Key steps in the analysis of data (video) Data tools (reading) Make sense of a data Report (video) Carry out a simple health data analysis task (video)	Module 4: best practice for communicating health data. (video) use of data visualizations for collaborative decision making (video) Data visualization – Making data meaningful (reading) Sharing data for research purposes(video) Case example of sharing health data(video) Case study: Real time data use- pascal metrics project, NSW Health. (video)

5.LEARNING METHODOLOGY

- READING AND
VIDEOS

6.KEY LEARNINGS:

Ways digital data is changing healthcare

Increased informed treatment

Decreased burden on administration.

Increased coordination of care

Decreased unnecessary hospital admissions

1.Easier access to patients irrespective of environment via video consultations and telehealth services.

2.Increased participation of patients using new and latest technologies and applications.

3.Some of the many uses of big data analytics are avoiding diseases which are preventable, Decreasing the waste, predicting pandemics and epidemics and enhancing quality of life.

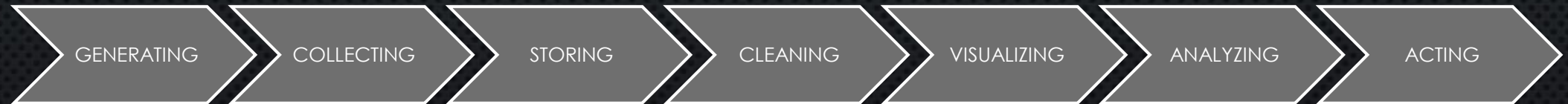
Role of digital workplace:

Data literacy and efficiency

Remaining updated with digital innovations.

Skill mix of data analysts, clinical report writers, health informatics, chief clinical officers

STEPS TO DATA LIFECYCLE



Mean, median, mode, variance, SD, CI, types of error, metadata, time series data, correlation and causation, confidentiality are few of the key statistical concepts for interpreting data.

Key steps in analysis of data
Understanding the nature and scale of the issue
formulating a good query
collect and prepare data
analyzing the data
interpreting the data
Sharing and communicating
acting on results.