

Summer Training Report

By

ASHLESHA BENIWAL

MBA (Hospital and Health Management)

2019-21



ACKNOWLEDGEMENT

I acknowledge this open way to offer my noteworthy thanks and significant regards to Prof. Veena Nair Sarkar, Assistant Professor, IIHMR university for her praiseworthy direction over span for this report.

I am additionally appreciative to my siblings for their helpful conversations, diligence, and support. I earnestly recognize the endeavours of every one of the individuals who have legitimately or by implication helped me in finishing my report effectively.

PART – A (WORK FROM HOME REPORT)

IMPLEMENTATION OF E-HEALTH

TABLE OF CONTENT

<u>S. No</u>	<u>content</u>	<u>Page No.</u>
PART A	List of tables for part a	4
a.1	Abbreviations	4
1	Introduction	5
1.1	Definition of e-Health	5
1.2	10 e's of e-Health	5-6
2	Objective	7
3	Methodology	7
3.1	Inclusion criteria	7
3.2	Exclusion criteria	7
4	Literature review	8-11
5	Result	12
5.1	For objective 1	12
5.2	For objective 2	14
6	Discussion	15
6.1	Diseases and Technologies	15
6.2	Barriers	16
7	Recommendations	17
8	Conclusion	17

9	Reference	18
<u>Part</u> <u>B</u>	<u>Course report</u>	20
b.1	Patient safety (course 1)	20
b.2	Covid 19 (course 2)	23
b.3	E-health (course 3)	26

ABBREVIATIONS

COPD – chronic obstructive pulmonary disorder

ICT - information and communication technologies

HCP – health care professionals

VVV - virtual video visits

IBD - inflammatory bowel disease

BCT- behaviour change technique

ECG – electrocardiogram

INTRODUCTION

eHealth involves a broad group of activities that use electronic means to deliver health-related information, resources, and services: it is the use of information and communication technologies for health. According to the WHO [1].

The utilization of innovation and Internet network gives new techniques to using and improving general wellbeing administrations. For instance, eHealth can be utilized to give treatment to patients without the need to go to a specialist; to instruct wellbeing experts through web based learning; to follow pandemic episodes; to encourage wellbeing advancement activities; and to help general wellbeing. eHealth is one of the quickest developing areas in the general social insurance showcase and can be utilized at the nearby, national, territorial, and worldwide levels as a clever way to advance and reinforce wellbeing frameworks and wellbeing data.

The 10 E's in "e-health"

1. **Efficiency** - e-wellbeing is to expand efficiency in medicinal care, reducing expenses. One potential method of reducing expenses would be by staying away from duplicative or pointless symptomatic or remedial intercessions, through upgraded correspondence prospects between medicinal services foundations, and through patient contribution
2. **Enhancing quality** - expanding effectiveness includes diminishing expenses, and yet improving quality. E-wellbeing may improve the nature of medicinal services for instance by permitting examinations between various suppliers, including customers as extra force for quality confirmation, and guiding patient streams to the best quality suppliers.
3. **Evidence based** - mediations should be confirmation arranged one might say that their reasonability and capability should not be acknowledged at this point showed by careful intelligent appraisal. Much work notwithstanding everything must be done around there

4. **Empowerment** of consumers and patients -.by making the information bases of medication and individual electronic records available to buyers over the Internet, e-wellbeing opens new roads for understanding focused medication, and empowers proof based patient decision
5. **Encouragement** it is a connection between patient and his/her doctor and the trust between them that doctor will advise what is best for patient
6. **Education** of doctors is important. So, they are up to date with the new technology and innovation in healthcare like training, through online articles.
7. **Enabling** there should be an easier way to communicate and exchange data between health facilities
8. **Extending** e-Health should not be limited to an area or region. It should be global so that everybody can have access to healthcare
9. **Ethics** – consent to health information is critical and important to the patient. Privacy of patient is important, it should be between patient and doctor
10. **Equity** - to make human services progressively even-handed for everyone e-wellbeing, and they have significant danger that e-wellbeing may extend the hole between "those who are well off" and "the poor". Individuals, [2].

OBJECTIVE

To review the literature on the implementation of e-health:

1. To identify diseases that can be improved by using m-Health
2. To identify the barriers for implementing e-wellbeing

METHODOLOGY

STUDY DESIGN- I did descriptive study on the topic e-health

STUDY POPULATION – All countries were opted for my research

DURATION OF THE STUDY – 1 month (June)

INCLUSION CRITERIA - Article published from year January 2018- January 2020

EXCLUSION CRITERIA - Articles which were not open access.

I conducted literature review search on diseases that can be improved by using m-health and barriers of e-health in PubMed from January 2018- January 2020.

I reviewed 60 articles for the objective 1, out of which I used 30 articles for my study, for this I used the keyword “e-health technologies”.

For objective 2, I reviewed 30 articles out of which I used 15 articles for my study and used the keyword “e-health barriers”.

LITERATURE REVIEW

<u>Title</u>	<u>Author name</u>	<u>Year</u>	<u>Study design</u>	<u>Objective</u>	<u>Methods</u>	<u>Finding/outcome</u>
eHealth as a next generation perinatal care	josephus fm van den heuvel, T katrien groenhof, han hw veerbeek	2018		eHealth improvements in pregnancy to evaluate this new age of perinatal consideration	eHealth innovation in perinatal consideration in PubMed and EMBASE in June 2017	In spite of the difficulties of security, risk, and expenses, eHealth is probably going to scatter all around in the following decade, and it can possibly convey a transformation in perinatal consideration [3].
Use of eHealth and mHealth Technology by Persons with Multiple Sclerosis	Ruth ann Marrie, Stella Leung, gary r cutter, amber salter,	2018	surveyed 6423 participants	planned to look at the utilization of eHealth innovations among people with various sclerosis, including the selection of portable Health, applications, and telehealth, saw advantages of utilizing mHealth applications, and sociodemographic and clinical attributes related with utilization of these advancements	eHealth advances and multivariable calculated relapse to assess factors related with utilization of electronic gadgets, utilization of mHealth applications, telehealth use	Utilization of mHealth applications is seen to have medical advantages. Be that as it may, utilization of eHealth and mHealth advancements fluctuates significantly with sociodemographic variables, and human services suppliers should know about these inconsistencies as these advances are progressively utilized in medicinal services settings [4]

eHealth Technologies, Multimorbidity, and the Office Visit: Qualitative Interview Study on the Perspectives of Physicians and Nurses	Graham G Macdonald, Anne F Townsend, Paul Adam, Linda C Li, Sheila Kerr, Michael McDonald, Catherine L Backman	2018	health care professionals {12 physicians and nurses}	analyze HCP viewpoints on how eHealth influences their associations with patients living with various incessant conditions, just as its moral and viable consequences	in-depth interviews, and follow-up interviews	HCPs aim to act to the greatest advantage of their patients; the test is to profit by developing advancements that may improve persistent HCP communications and powerful consideration, while maintaining guidelines, managing the injuries. [5]
The Use of Cancer-Specific Patient-Centred Technologies Among Underserved Populations in the United States: Systematic Review	Will L Tarver, David A Haggstrom	2019	3-step inclusion process in study titles, abstracts, and full-text papers for assessment of inclusion criteria	The aim of the utilization of disease explicit patient-focused advancements among different underserved population	(1) PubMed (cancer subset), (2) MEDLINE, (3) PsycINFO, and (4) CINAHL computer-based search were conducted	these advances appear to be successful, particularly when custom-made, in improving patient and care-related results. In spite of the capability of patient-focused advancements and the receptivity of underserved population, provokes still exist as for their powerful use and ease of use [6]

Patients' Needs and Requirements for eHealth Pain Management Interventions: Qualitative Study	Ingrid Konstans e Ledel Solem, Cecilie Varsi, Hilde Eide, Jelena Mirkovic, Elin Børøsun d, Mette Haaland-Øverby, Karina Heldal	2019	Twenty patients living with chronic pain and five spouses participated in individual interviews.	This study aimed to investigate the encounters of patients with chronic pain as to data and correspondence innovation, see how an eHealth mediation is the regular needs and difficulties of patients	The study used qualitative thematic analysis	Member were for the most part for utilizing an eHealth self-administration mediation and thought of it as a conceivably worthy method of social affair information and backing for pain management. Accessibility, personalization, and ease of use were underlined as significant components for an eHealth device. [7]
Aging barriers influencing mobile health usability for older adults: A literature-based framework	G A Wildenbo s, Linda Peute, Monique Jaspers	2018		This examination plans to advanced (wellbeing) PC use, and clarify, plan, and imagine these boundaries comparable to the ease of use of mHealth by methods for a system.	It revealed physical and useful age hindrances corresponding to advanced (versatile) wellbeing applications use. Maturing boundaries detailed in the writing were planned onto ease of use perspective s classified	the paper identifies a key need for future research on inspirational obstructions hindering mhealth utilization of more seasoned grown-ups. More bits of knowledge are required specifically to disaggregating typical age-related useful changes from explicit ailments that impact experienced value of mHealth by these grown-ups [8]

Going global: do consumer preferences, attitudes, and barriers to using e-mental health services differ across countries	Bonnie A Clough, Mostafa Zarean, Ilse Ruane, Niño Jose Mateo, Turana A Aliyeva, Leanne M Casey	2018		The purpose was to look at perspectives and saw obstructions to e-emotional wellness use across four nations: Australia, Iran, the Philippines, and South Africa.	An online study was finished by 524 grown-ups living in these nations, evaluating past contact with e-psychological well-being administrations, eagerness to utilize e-emotional wellness administrations	Across nations, members showed a readiness to utilize e-psychological well-being programs whenever advertised. With proper examination and cautious usage, e-psychological well-being can possibly be an important piece of mental human services in creating nations. [9]
Managers' experience of success criteria and barriers to implementing mobile radiography services in nursing homes in Norway	Elin Kjelle, Kristin Bakke Lysdahl, Hilde Merete Olerud, Aud Mette Myklebust	2018		The purpose of this study was to investigate barriers during the time spent actualizing portable radiography administrations, from the perspective of the emergency clinic	Eleven semi-organized meetings were directed with administrators from five emergency clinics and six regions in Norway where portable radiography administrations had been executed.	The supervisors experienced barriers like money related, auxiliary. The primary achievement standards in the process were financing, and the help and commitment from the people in the associations. [10]

RESULT

FINDINGS

FOR OBJECTIVE 1, I reviewed 30 articles, out of which 19 articles showed the result in favour of implementing e-health. M-health apps are great tool for improving health conditions as they are simple and cost-effective, which makes them preferable for helping larger population globally.

According to the articles many diseases can be treated by using m-health. Utilization of mHealth applications is seen to have medical advantages. Treatment of Gestational Diabetes can be improved by using phone screening, which can be used to prevent postnatal depression which leads to gestational diabetes, web based psychological treatment, mHealth Applications & exercise program shows less gestational weight gain, increment in sync check and decrement in smoking [3]. Sclerosis disease have many health benefits if we use m-health.

Electronic devices, m-health, telemedicine are effective methods in treating cancer patient and it also promotes physical activity in cancer survivors. these innovations appear to be successful, particularly when custom-made, in improving patient and care-related results. Despite the capability of patient-focused innovations and the receptivity of underserved populaces, provokes still exist as for their viable use and ease of use. For chronic pain, e-health self-management intervention were beneficial. For improvement of e-Health medication of such patients, planning and creating e-Health interventions (for self-administration) shows improvement.

E-health have potential for improving fast-track hip and knee arthroplasty by using m-Health and e-health medication for self-administration pain level of patients that can be reduced. Psoriasis patients show improvement after using m-health apps

For mindfulness and relaxation, e-health apps have positive effect. physical activity and diet field can use for weight loss. Feedback, monitoring, and goals were core behaviour techniques. Reminders, personalization, and rewards were also helpful.

Use of m-health is possible for early diagnosis and treatment of atrial fibrillation with the appropriate utilization of mHealth, early analysis and treatment of atrial fibrillation is possible. Effective utilization of mHealth could add to altogether decreasing the expense of sickness of atrial fibrillation

IoT based Systems, smart homes, wearable technology helps to assess sleep, gait analysis, posture defection. For COPD patients we use wearable and unobtrusive sensors. These devices are capable of measuring parameters like ECG, heart rate, blood pressure and body temperature

E-health improves IBD. No investigations have announced a negative effect on any of the above mentioned. there is a requirement for additional approval and improvement, from both a clinical and patient point of view.

VVV follow up increases after using e-health. The article suggests that although there is no change in regular check-up, but virtual videos visits has increased.

For mental health patients it is easy to use video sessions at any time. Online consultation facilitators that promote effective and convenient remote treatment. For treating depression, anxiety and disorders e-Therapy interventions are useful.

Buprenorphine can be successfully conveyed by telemedicine to patients with narcotic use issues in a provincial medication treatment program [11]

FOR OBJECTIVE 2, I reviewed 15 articles for the keyword “e-health barriers”. After reviewing, most article suggested cost and accessibility as the major concerns especially for developing countries videoconferencing, telemedicine are hardest to implement. Some barriers of using e-health are:

For older adults’ cognition, motivation, physical ability, and perception were the major barriers

E=health technology should improve diagnosis, clinical management, and patient-centred care. The security of the patients is consistently a worry. Regardless of whether the security of the emergency clinic is high, there are chances that records might leaked. That is the principle reason electronic wellbeing records are made into move to safeguard the records of every patient in advanced organization.

Sociodemographic factors play a very important role in providing e-health opportunity to everyone. These factors include age, income, education

Guaranteeing information security and information insurance was featured as the greatest test. HCP needs to learn new technology for effective use and usability.

Most article stated that changing societal perspective is very important. We should come up with cost effective solutions. the E-Health records will spare our time and work however the expense of buying the gadget might be high. For rural areas, connectivity is the root cause. rural areas were found to have less access to eHealth, and the usage of eHealth is less viable. We need high internet speed in every part so insure e-health for all.

For impaired patients, it is difficult to use e-health. So, we need to make sure we make m-health easier and more accessible. While making certain kind of apps we need to keep in mind that design should be simple.

DISCUSSION

DISEASES IMPROVED BY USING M-HEALTH ARE –

Gestational diabetes, emotional well-being, chronic pain can be treated by using m-health. COPD can be treated by using m-health. Sclerosis disease have many health benefits if we use m-health. Using m-health shows improvement in cancer patient and it also promotes physical activity in cancer survivors. For mindfulness and relaxation, e-health apps have positive effect. physical activity and diet field can use for weight loss feedback, monitoring and goals were core behaviour techniques

TECHNOLOGIES-

- Collecting your own data by using wearable devices that interact with apps
And we can also use Holter meter which records 24 hours of ECG
- Mobile apps and social media like virtual games, blogs, collaborations, can be helpful because nowadays people are interested in knowing about their own health
- Video games can also be used for improving health and making it more exciting
- Human computer interaction (HCI) – positive computing, the design and technology to support psychological well being
- Digital health records- so that doctors can analyse your data
- Homomorphic encryption- can be utilized for security saving redistributed stockpiling and registering. It intends to empower new administrations by expelling security hindrances repressing information sharing
- For cancer and tele-health models we should schedule video conferencing for supporting young people

BARRIERS-

- One of the major concerns of using e-health is all the wellbeing related information of individuals will store on electronic databases then it may be defenceless against a few digital assaults, for example, cyberbullying, malware assaults, and so forth
- The training of health professionals is time-consuming and for using technologies patients should be able to understand how to efficiently use eHealth technology
- It changes the mode of communication between hospital staff
- Clinical offices must contribute a significant sum, frequently estimated in a great many dollars, to arrangement, keep up, and train individuals. Framework updates may have an expense to them

Some of the other problems are

1. Implementation- how to implement e-health services effectively and efficiently
2. Mind shift- changing the minds of people is very crucial
3. Accessibility, speed, and better education is important

RECOMMENDATIONS-

Most of the article suggested to train the health care professional on using technology so that it becomes easier for us to change the mind of people and implementation would be better

Awareness about technology is important especially in the health sector. Training of healthcare professionals around importance of m-health related technologies and use of wearable devices would be beneficial

Some articles suggested we should focus on the ethical aspects when implementing e-health. Privacy is main concern that who should get access of your health records

In rural areas, people should be able to understand the importance of e-health and should know how to use wearable devices

Further studies should be done

CONCLUSION

Based on the articles reviewed, there are some existing technologies that help in improving the overall health of a person, but we still need to innovate new ways and implement them for better results. M-health apps are the most preferred e-health technology which is simple to use and cost-effective. According to article, the diseases which can be improved by using m-health are chronic pain, COPD, mental health, psoriasis, gestational diabetes, sclerosis, cancer patient, IBD, hip and knee arthroplasty. Application content about treatment, procedure, and history of the disease should be correct and reliable. For better results customizing is very good option. It helps to maintain individuality for each person and results would be more accurate.

There are some barriers in implementing e-health like cost, perspective, connectivity, education, and accessibility. For better awareness and connectivity, education and training should be promoted. We also need new innovative technology to increase patient satisfaction. The government should focus on new health care models for the hospitals and should start providing funds. We should focus on reducing the barriers of implementing e-health. This would be the change in the health care industry. Further research should focus on understanding and improving eHealth.

Bibliography

- [1] "Health topics," [Online]. Available: <https://www.euro.who.int/en/health-topics/Health-systems/e-health/e-health-readmore>.
- [2] "ehealth india," 29 May 2017. [Online]. Available: https://www.nhp.gov.in/e-health-india_mty.
- [3] T. K. G. J. H. V. W. W. v. S. A. T. L. A. F. M. N. B. Josephus FM van den Heuvel, "eHealth as the Next-Generation Perinatal Care: An Overview of the Literature," 2018.
- [4] S. L. g. r. c. r. f. a. s. Ruth ann Marrie, "Use of eHealth and mHealth technology by persons with multiple sclerosis," 2018.
- [5] A. F. T. P. A. L. C. L. S. K. M. M. C. L. B. Graham G Macdonald, "eHealth Technologies, Multimorbidity, and the Office Visit: Qualitative Interview Study on the Perspectives of Physicians and Nurses," 2018.
- [6] D. A. H. Will L Tarver, "The Use of Cancer-Specific Patient-Centered Technologies Among Underserved Populations in the United States: Systematic Review," 2019.
- [7] C. V. H. E. O. B. K. J. M. E. B. M. H.-Ø. K. H. Ingrid Konstanse Ledel Solem, "Patients' Needs and Requirements for eHealth Pain Management Interventions: Qualitative Study," 2019.
- [8] L. P. ., M. J. G A Wildenbos, "Aging barriers influencing mobile health usability for older adults: A literature based framework (MOLD-US)," 2018.
- [9] M. Z. ., I. R. ., N. J. M. ., T. A. A. ., L. M. C. Bonnie A Clough, "Going global: do consumer preferences, attitudes, and barriers to using e-mental health services differ across countries," 2018.
- [10] K. B. L. H. M. O. ., A. M. M. Elin Kjelle, "Managers' experience of success criteria and barriers to implementing mobile radiography services in nursing homes in Norway: a qualitative study," 2018.
- [11] A. D. G. ., J. C. ., S. H. ., C. W. Eric Weintraub, "Expanding access to buprenorphine treatment in rural areas with the use of telemedicine," 2018.
- [12] K. T. W. E. V.-G. Hassan Khader Y Almathami, "Barriers and Facilitators That Influence Telemedicine-Based, Real-Time, Online Consultation at Patients' Homes," 2020.
- [13] W. W. G. A. L. B. M. L. B. C. A. H. B. E. v. E. M.-J. K.-J. ara S van den Wijngaart, "Barriers and Facilitators When Implementing Web-Based Disease Monitoring and Management as a Substitution for Regular Outpatient Care in Pediatric Asthma," 2018.
- [14] A. D. G. ., J. C. ., S. H. ., C. W. Eric Weintraub, "Expanding access to buprenorphine treatment in rural areas with the use of telemedicine," 2018.
- [15] L. P. ., M. J. G A Wildenbos, "Aging barriers influencing mobile health usability for older adults: A literature based framework," 2018.

- [16] B. G. F. M. H. C. A. P. J. F. P. G. T. W. Sara Simblett, "Barriers to and Facilitators of Engagement With Remote Measurement Technology for Managing Health: Systematic Review and Content Analysis of Findings," 2018.
- [17] W. J. M. A. J. Conceição Granja, "Factors Determining the Success and Failure of eHealth Interventions: Systematic Review of the Literature," 2018.
- [18] M. Z. ,. I. R. ,. N. J. M. ,. T. A. A. ,. L. M. C. Bonnie A Clough, "Going global: do consumer preferences, attitudes, and barriers to using e-mental health services differ across countries," 2018.
- [19] G. B. A. ,. A. M. H. ,. K. C. C. E. C. Jennifer L Fang, "A Mixed-Methods Study on the Barriers and Facilitators of Telemedicine for Newborn Resuscitation," 2018.
- [20] J. H. Annalise Baker-Whitcomb, "Benefits and Barriers to Telehealth Credentialing by Proxy," 2018.
- [21] K. B. L. H. M. O. ,. A. M. M. Elin Kjelle, "Managers' experience of success criteria and barriers to implementing mobile radiography services in nursing homes in Norway," 2018.

PART B – COURSE REPORT

I have done 3 courses over the course of 3 months:

- Patient safety and quality improvement
- Contact tracing of covid-19
- E-health: more than just an electronic record

COURSE 1

1. **NAME OF THE COURSE:** PATIENT SAFETY AND QUALITY IMPROVEMENT

2. **COURSE DESCRIPTION:** In this course I understood how to develop a framework see for understanding security and quality improvement in medicinal services, characterizing the extent of the issue of preventable errors. which leads into the historical backdrop of the work that has been done to improve preventable damage.

We will able to:

- Describe at least four key occasions throughout the entire existence of patient security and quality improvement
- Define the key qualities of high unwavering quality associations
- Explain the advantages of having procedures for both proactive and responsive frameworks thinking.

3. **OBJECTIVES OF THE COURSE:**

- Actively takes an interest in emergency clinic advisory groups and wellbeing activities
- Identifies and shows basic activities that add to mistake decrease and patient security

4. **CONTENT:**

- Four -tiered approach
- Quality improvement
- Harm

- Risk
- Error
- Quality
- Safety
- Culture
- High reliability
- Cusp principle
- Proactive or reactive systems thinking
- systems

5. **LEARNING METHODOLOGY:**

- Lectures
- Video
- Assignments
- Reading material

6. **KEY LEARNING:**

Root Cause Analysis

A systemic process design for investigating what, how and why something happened and to figure out how to prevent the same thing from happening again.

Tools –

1. Process map
2. Swim lane diagram
3. Cause an effect (fish bone diagram)
4. Five Why's

Benefits

1. Focuses on system not people.
2. It decreases recurrence
3. Provide a systematic approach

Disadvantage

1. Labour intense
2. Implementing the proposed fixes

3. Finding time for key individual to participate in the process

Quality

How much a lot of intrinsic characteristics satisfies a lot of prerequisites.

Level of perceived greatness or predominance.

Safety

Opportunity from those condition that cause demise, injury, disease, harm to loss of gear, property, or harm to the surroundings.

7. CONCLUSION:

We cannot change the human condition, but we can change the conditions under which humans work. Change the system not the people

1. **NAME OF THE COURSE:** CONTACT TRACING OF COVID-19

2. **COURSE DESCRIPTION:**

In this course I learned about the basics of COVID-19, some of the tools being used to stop the spread: contact tracing, isolation, and quarantine and the use of these critical public health tools.

3. **OBJECTIVES OF THE COURSE:**

- Describe what contact tracing is and how it stops transmission of SARS-CoV-2
- Define a case of COVID-19 and a contact
- Explain the meaning and purpose of isolation and quarantine
- Calculate how long a case should isolate and how long a contact should quarantine
- Describe the connection between the infectious period and isolation and quarantine
- Identify high risk settings for transmission that require extra action

4. **CONTENTS:**

- SARS-CoV-2 virus (history, risk factor)
- Contact tracing for covid- 19 prevention
- Case, contact, isolation, and quarantine duration
- Protocol for speaking to cases and contacts
- Ethics of contact tracing and technological tools
- Skills for effective communication

5. **LEARNING METHODOLOGY:**

- Videos
- Reading
- Quiz
- Lectures

6. **KEY LEARNING:**

SARS-COV-2

SIGNS- Temperature

Breathing faster than usual

SYMPTOM- Fatigue

Nausea

Loss of taste

Muscle ache

INCUBATION PERIOD- 2-14 DAYS

5% by 2 days

50% by 5 days

95% by 14 days

RISK FACTOR FOR SEVERE

Older adults >65years of age

Obese patient

Diabetes

Hypertension

Weakened immune system

TESTS

1. DIAGNOSTIC- PCR

2. ANTIBODY

TRANSMISSION

1. Mouth
2. Nose
3. Throats
4. Surfaces

Up to 6 feet

Window of opportunity is very short

REPRODUCTIVE NO

The no. of people one infectious person will infect. For covid-19 = 2-3 person

1. NAME OF THE COURSE: EHEALTH MORE THAN JUST AN ELECTRONIC RECORD

2. COURSE DESCRIPTION: " is multidisciplinary in nature and expects to prepare the worldwide crowd of wellbeing clinicians, chiefs, executives, and scientists to think about the general effect of eHealth on the reconciliation of care. It investigates the expansiveness of innovation application, flow and developing patterns, and exhibits both nearby and global eHealth practice and exploration.

3. OBJECTIVES OF THE COURSE:

- The fundamentals of eHealth and where it is heading
- What sort of wellbeing information we are at present gathering and how it will change medicinal services later?
- How new advances are helping patients participate in taking care of their own health
- How eHealth can improve the coordination and effectiveness of medicinal services and what the obstructions we are facing all around the world

4. CONTENTS:

- eHealth
- Health in our Hands
- Data and the "Quantified Self"
- Interacting with Health Professionals using New Technologies
- eHealth in Professional Practice

5. LEARNING METHODOLOGY:

- Videos
- Practice quizzes
- Assignments
- Readings
- Lecture

7. KEY LEARNING:

E-health impacts on practice, teaching and research

1)health in the hands of customers- wearable devices, apps, internet, and social media

2)interacting with and between health professional- telehealth, shared care, rehabilitation, coaching and professional support

3)data records- BIG data, genomics, predictive and precision healthcare

CHALLENGES –

- Implementation
- Mind shift
- Seamless
- Connected
- Accessibility
- Speed
- Better education

TELEHEALTH MODELS

Examples rural and remote: Supporting stroke care

Resources

High data consuming

Time consuming

Videoconferencing

HUMAN COMPUTER INTERACTION

Positive computing, the design and technology to support psychological well being