Wash practices and its effect on pregnancy

Critical Review

Submitted by: Rajat Pratap Singh

Roll No: 0968

Introduction

Maternity period is a special time for all the families but for some of the pregnant women it proves to be a difficult one as they lose their babies because of the numerous reasons. It could be spontaneous miscarriage, abortion and reasons are so on. Few ladies face various problems due to hygiene or sanitation, poor nutrition, lack of healthcare facilities which results in underweight at birth, overall poor health of baby and mother. A miscarriage, additionally known as an abortion, is the spontaneous finishing of a being pregnant. Approximately 1/3 to 1/2 of all gestation end in miscarriage earlier than a female misses out a menstrual cycle or perhaps is aware of she is pregnant The population-based research carried out in India is to find out whether poor wash practices have any relation to adverse being pregnant outcomes such as premature birth and underweight at birth. Sanitation is among the critical elements crucial for the health of mom and to be born infant. One of the biggest fears in India is lack of proper healthcare and sanitation centers for pregnant women as sanitation is one of the leading factor for adverse pregnancy outcomes. We can also say that in India there is lack of education among pregnant women regarding the overall health and nutrition which is required during the pregnancy.

Introduction…

The WHO/UNICEF (2016) Joint Monitoring Programme for Water Supply and Sanitation estimates that, globally, 1.1 billion people defecate in the open, a practice that can expose individuals to contact with human feces containing infectious organisms and that can contaminate food and water. There is good evidence that poor sanitation can promote hookworm infestation which is a risk factor for maternal anemia, which, in turn, is directly linked to APOs

OBJECTIVES

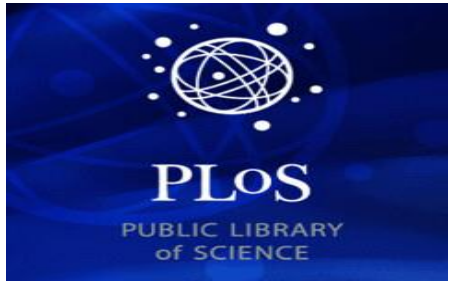
- The aim of the study is to find out the link between adverse pregnancy outcome and sanitation in the pregnant women also the frequency of hygiene, sanitation and adverse pregnancy outcome.
- The review also studies on several parameters such as oral health during maternity, reproductive tract infection, link between drinking water arsenic exposure and maternal health symptoms, impact of social capital and harassment on women during the pregnancy time.
- This study also wants to aware the Indian society to bring the attention on sanitation hygiene factors in adverse pregnancy outcomes which are continuously being ignored specially in the rural areas of the country and there are other several factors which can affect adverse pregnancy outcomes and to improve the hygiene behaviors and protect the pregnant women and upcoming generation of India and also improve the mortality rate which is decreasing day by day that are described in the review.
- The overall purpose of the study program is to research on wash practices and poor water sanitation which includes the impact of open defecation and wash impacts on non-infectious adverse birth outcomes.

METHODS

Keywords: Access to toilet, Low birth weight, adverse pregnancy outcomes, national family health survey, sanitation.

We identified 10 articles based on sanitation and pregnancy outcomes - together, these articles form the primary database on which most recommendations are based. All the articles published are primarily based on a survey carried out on pregnant women all around the world by various authors and writers.

All the articles selected are based on wash and its impact on pregnancy in India and are collected from google scholars, PubMed and PLOS.



CRITIQUE

- In evaluating information quality in each study, we considered selection bias, selection bias is the bias introduced with the aid of the selection of individuals, corporations, or statistics for analysis in the sort of manner that right randomization isn't always achieved, thereby ensuring that the sample acquired isn't representative of the population intended to be analyzed. it's miles sometimes known as the choice impact, statistics bias (also known as observation bias or dimension bias) happens while key statistics are either measured, accumulated, or interpreted inaccurately., and confounding. There is some biased information found that it only access to sanitation but does not include accession to safe clean water which also affect sanitation, some information is also missing from the study like maternal death and the reason for the child mortality. Information extracted used to examine the availability of toilet in the family ignores that humans preferred open defecation even they've lavatory within their domestic which affect the quality of research.

SUMMARY

Pregnancy outcomes speak about that life-changing eventuate to the new-born little one from the age of viable (twenty-eight weeks) to the first week of life. Thus, pregnancy outcomes include normal birth and APOs. Adverse pregnancy outcomes include early fetus deaths, stillbirth, underweight at birth, and premature birth.

The adverse pregnancy outcomes result from extremely low WASH access, tract Infection, open defecation, and thus, there arises a requirement to escort a change in attitude of society as no matter having Individual Household Latrines, people feel better to defecate in open. India, unveil that around one in every five women in India, with no access to latrines or having shared bathrooms, affected the adverse pregnancy outcomes.

The analysis upon a dataset found that the mothers who had access to the restroom within their household premises had consequential lower chances of APOs contrast to the mothers who didn't have access to lavatories. After adjusting the effect of all the specified confounder variables within the model of multivariable, the supply of hand wash didn't seem to affect adverse pregnancy outcomes because of a less known factors and unavailability of health care centers. Women in India found out believe the normal methods of hand washing. Since the districts having inadequate sanitation coverage even have higher cases of adverse pregnancy outcomes. Various available literature within the property right have stated not one but multiple risk threats for APOs like Obesity, anemia, diabetes, ANC, history of abortion, environmental pollution, consumption of tobacco, high blood pressure, and lots of others. Unsafe water exposure, unsanitary conditions, and poor management of waste during their pregnancy is related to the higher chance of infection within the mother, which can cause underweight at birth and early deliveries. Difficulties in accessing to wash beverage are known to end in largely preventable water-related diseases like typhoid and chronic hookworm infestations which will cause adverse pregnancy outcomes.

The study also states that worse dental health during a pregnant mother can go an extended way in spreading infancy caries in children. It's found that there's vertically spread the MS and lactobacilli from the pregnant ladies to the baby. The maternally originated MS and lactobacilli could also be a widely known cariogenic bacterium which highlights this form of communication. MS and lactobacilli may furthermore inhabit in a newborn’s mouth from delivery or can also be transferred through the saliva and is responsible for the opening of hollow space in an infant.

Discussion

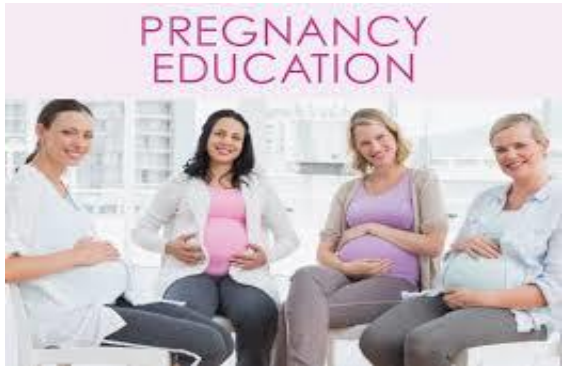
- Outcomes of our review which are evaluated if there was any available link between pregnancy sanitation behavior and APO by using Demographic and Health Survey data, also known as NFHS in the country. It was proved that wash and hygiene are leading factors in adverse pregnancy outcomes and some other factors are also seen that affect pregnancy in a harsh way.

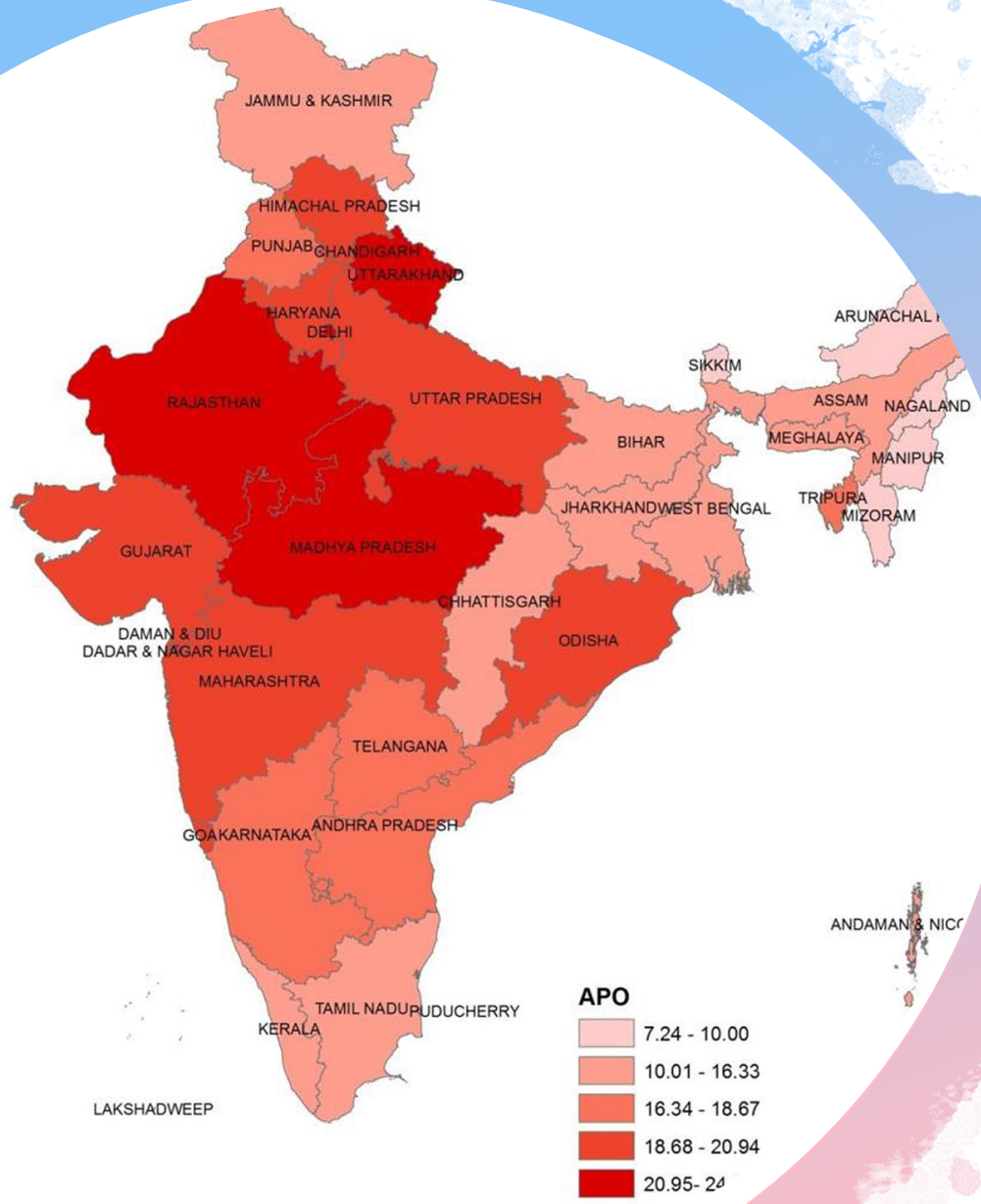
- Arsenic, a general subsurface water filth, is linked with unfavorable reproductive health but very less number of surveys have found its impact on mother health. Population can be vulnerable to arsenic from regular and usual daily operations, having contaminated food items, and from industrial and commercial resources. The most usual and common way of disclosure, however, is from having groundwater that is contaminated and polluted with naturally occurring arsenic. Indian ladies to illustrate the significance of absence of access to close by water resources, lack of access to a toilet, crime, and harassment as threat factors for PTB and LBW.

Discussion

Additionally, the findings stated that sexual harassment and social discrimination, poverty are key factors of exposure to PTB and LBW amongst Indian pregnant ladies. There are very few studies which clearly shows stress risk factors and maternal reproductive health outcomes in LMICs, although stress and anxiety is a part of daily routine for many of the families where high levels of poverty require people to interact in sharing infrastructure, like water sources and toilets.

Education is one of the foremost factors for the pregnant women to eliminate the adverse effect on pregnancy. Study also states that increase in mother's education can easily decrease the adverse pregnancy outcomes. Educated pregnant women can easily save her child's health and also take care of her in a healthy way but in India education is a still a question for the society, many women who lives in rural part of India are uneducated thus suffering.

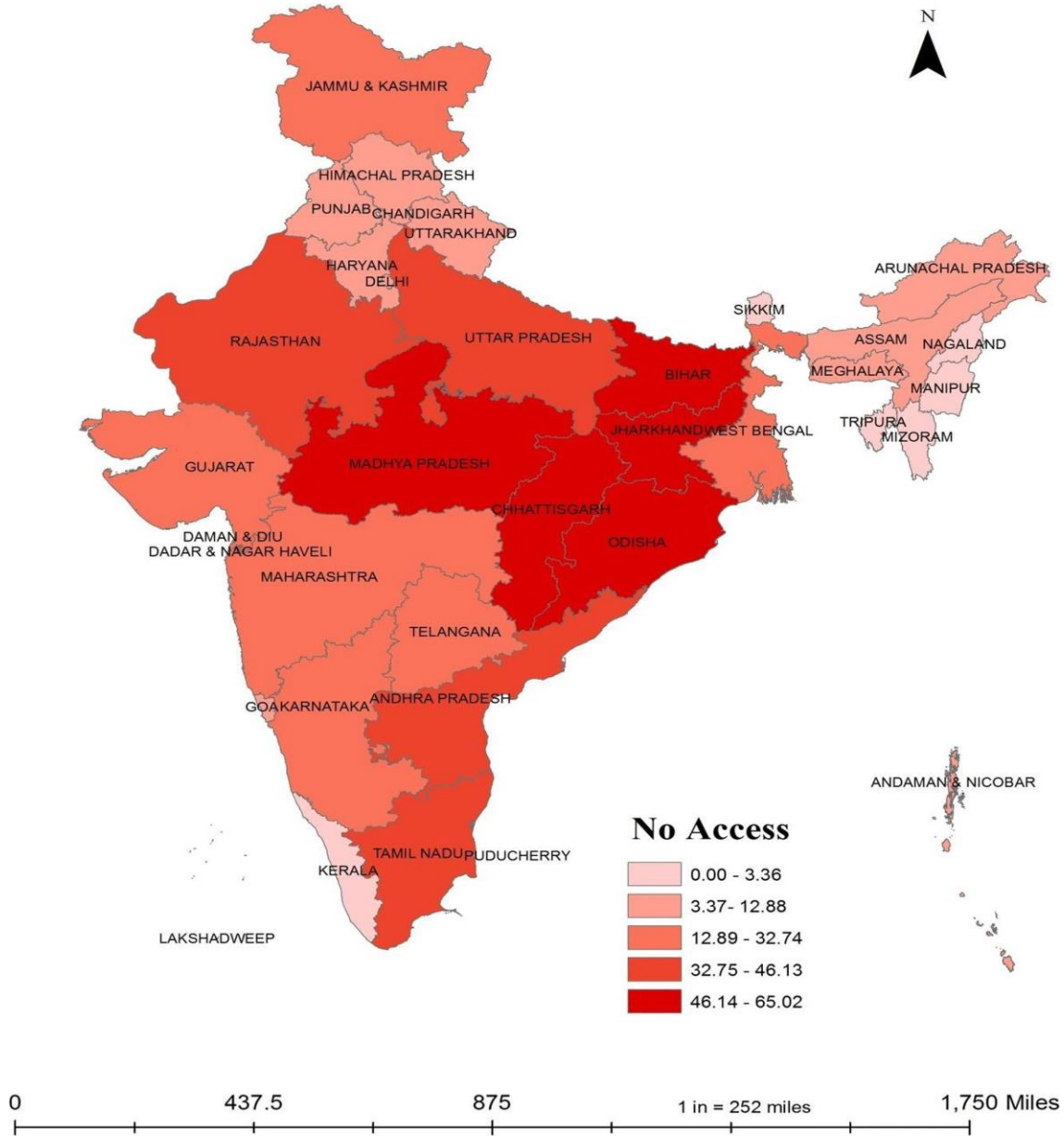




Map shows the prevalence of Adverse Pregnancy Outcomes in India.

- The APOs are more prevalent in North India and least pervasive in North-Eastern states of India. In states like Uttarakhand, Madhya Pradesh, Rajasthan, Odisha, Uttar Pradesh, Haryana, and Goa, one in every five pregnancy turned out to be adverse. The national prevalence of 18.44 was better than ten states of the country.

Map shows the percentage of households having access to toilet facility in India.



- More than half of the households in Jharkhand, Odisha, Bihar, Chhattisgarh, and Madhya Pradesh did not have access to toilet facility, either within household premises or on shared basis.

- In India, nearly 37% of households did not have access to the toilet.

CONCLUSION

People who live without potable water and lack of adequate sanitation impact on childbearing health and pregnancy outcomes.

Water has a essential effect at the improvement of a everyday gestation and properly-being of the mother. Maternal hydration allows each pregnant woman and embryo to react to changes as a way to maintain the regular state in the body. eating water impacts the amniotic fluid extent, fetal wellness, and eliminates toxic byproducts from the body, preventing exposure to arsenic-contaminated water during pregnancy be able to enhance the mother's health.

The poor sanitation associated with the further possibility of APOs, it's also anticipated that race and poverty are also related with poor sanitation practicing unfavorable pregnancy results, rural women with particularly low wash attain and lived distant from fitness care centers with diagnostic laboratories, results in reproductive tract infections that impact on being pregnant results. It is also confirmed that ladies who did not have the reach to the washroom in the residence had a higher danger of APOs because of open defecation women face with many bacterial infections which adversely impact on pregnancy. The lack of bathroom and consumption of uncooked or unwashed fruits were identified as self-reliant hazard elements that considerably improve intestinal helminths in pregnant ladies.

Credits

I would really like to express my special thanks of gratitude to Dr. Prahlad Rai Sodani (Pro- President, Dean IHMR, Professor for Indian Institute of health management research university) in addition to Dr. Piyush Kant Pandey (Professor, Chairperson, New tasks and improvement) who gave me the golden opportunity to do this critical review work on wash and pregnancy which helped me in doing a variety of studies and I sought out to recognize approximately such a lot of new things I'm truly thankful to them.

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THANK YOU

E HEALTH: MORE THAN JUST AN ELECTRONIC RECORD

COURSE OFFERED BY

UNIVERSITY OF SYDNEY

PREPARED & SUBMITTED BY

RAJAT PRATAP SINGH

CONTENTS

WHAT IS e-HEALTH?

e-health is an emerging field in the intersection of medical informatics, public health and business, referring to health services and information delivered or enhanced through the Internet and related technologies. In a broader sense, the term characterizes not only a technical development, but also a state-of-mind, a way of thinking, an attitude, and a commitment for networked, global thinking, to improve health care locally, regionally, and worldwide by using information and communication technology.

The first known use of e-health was in 1999. In November, John Mitchell gave a presentation at a professional conference in England – the International Congress on Telemedicine and Telecare – about public-sector research in Australia. At a time when the Internet and volume of digital data were small fractions of what they are now, and the hard copy was much more dominant, Mitchell's argument was economic.

OBJECTIVES

- To provide specialized health care consultation to patients in remote locations,
- To facilitate video-conferencing among health care experts for better treatment & care,
- To provide opportunities for continuing education of health care personnel.

OBJECTIVES…

- Encourage students to take into account methodological processes that may be applied to the improvement, checking out and evaluation of eHealth, mHealth and Telecare technologies.
- Introduce the idea of assessing the value-effectiveness of electronic health, mobile health and telecare applications highlight the significance of user involvement and user reports within the layout, development and examination of electronic health, mobile health and telecare technologies.

e-HEALTH PRATICAL USES

The World Health Organization describes three primary ways in which e- health is used:

- The systems are used to disperse healthcare information to patients and clinicians via the Web or local IT.
- They are used to make government health programs better, such as through online training of hospital staff.
- The technology is used by healthcare executives to improve the operation of the organization.

PATIENT APPS IN e HEALTH

- **WebMD Pain Coach** Research conditions, check your symptoms with our Symptom Checker, access drug and treatment information, get first aid essentials, check local health listings, and find the latest health news on the go, from the most trusted brand in health information.
- **Glucose Buddy** This free app is a data storage utility that allows users to manually enter glucose numbers, carb consumption, insulin dosages and activity, and then view their log on their online account. Push reminders help keep users accountable.
- **Clinical Trial Seek** Pharmaceutical giant Novartis has turned to smartphones for clinical trial recruitment with this new app that aims to help patients and physicians search for cancer clinical trials sourced from the National Institutes of Health's Clinicaltrials.gov database. The app is available for both iPhone and Android devices.

PATIENT APPS IN e HEALTH…

- **Healthy Heart 2** For patients with high risk of heart disease, this free patient app serves as a heart health journal, allowing users to record blood pressure, pulse, cholesterol, blood glucose, medications and more, and analyzes data in graph format for patients to share with their physicians. Healthy Heart 2, developed by Ringful Health, is available on iTunes.

- **Kardia Mobile (EKG)** For patients with an even greater likelihood or a history of heart disease, the FDA-cleared Kardia mobile app, developed by AliveCor, provides a pocket-sized electrocardiogram machine. For use with the fingertip Kardia Mobile heart monitor pads (one-time charge of $99), this sophisticated medical app is intended for medical professionals and prescribed patients only.

- **CDC** for patients who want a full library of medical information, access to journals, disease tracking information, public health blogs and 24/7 newsroom feeds, the Centers for Disease Control and Prevention provides a host of resources via the CDC Mobile App.

COURSE OUTCOMES

- Demonstrate knowledge and information of the idea of eHealth, mHealth and Telecare, along with ‘actual life’ research and scientific packages of such technology.
- Demonstrate knowledge of examples of advanced eHealth, mHealth and Telecare efforts in a number of disease contexts, such as most cancers and long-term conditions and in special medical care contexts, along with number one care and acute care.
- Take into account ways wherein eHealth, mHealth, and Telecare technologies can be evolved, tested, and applied inside health and social affairs contexts relevant to their concern regions.

COURSE OUTCOMES…

- Recall ways wherein eHealth, mHealth and telecare technology can affect on patient fitness and social affairs consequences.
- Take into account facilitators and obstacles to the implementation of eHealth, mHealth, and telecare technology in fitness and social affairs contexts.
- Significantly examine the effect, such as the price-effectiveness, of eHealth, mHealth, and telecare interventions to improve fitness and social care.
- Critically appraise and synthesize studies proof to guide assessment.

Methods used for teaching the course

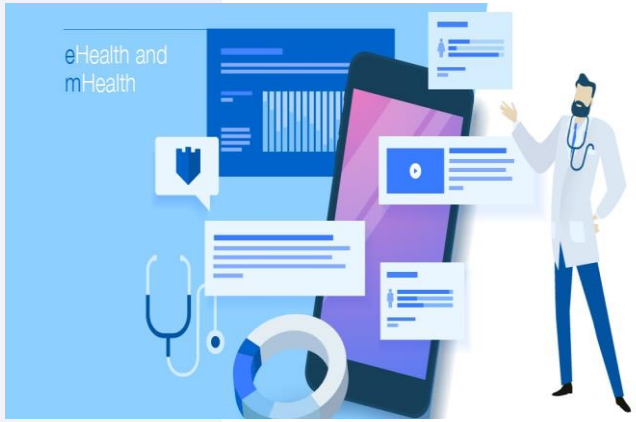
01 Use of e-learning platform.

02 Group seminars and presentation.

03 Lectures (along with e-Lectures)

04 Usage of on-line assets for organization sports.

05 Applied demonstrations of present eHealth, mHealth and Telehealth technology, wherein feasible and in which suitable.



KEY LEARNINGS

The basics of electronic health and in which it's far heading.

How new technologies are helping health clients participate of their personal healthcare.

What form of health data we're currently accumulating and the way it's going to rework healthcare in the future.

In what way eHealth can enhance the coordination and performance of medical and what the obstacles might

The 10 E’s of E-Health

1. **Efficiency** in healthcare with the aim of reducing fees. Telehealth packages meet this purpose by using reducing overhead charges in an exercise, lowering wait minutes for appointments, and also reducing encounter amount of time.
2. **Enhancing** quality of health care by educating people to participate in their own treatment while also increasing convenience but cutting travel time and costs to and from a provider.
3. **Evidence**-medicines provided are quality controlled and consumers are escaped from the frauds which lead to play with the health of the public.
4. **Empowerment** of clients with the aid of increasing their expertise base and allowing get entry to digital fitness records over the net presenting more patient-centered.
5. **Encouragement** of affected people involvement in more effective care.

The 10 E's of E-Health….

6. **Education** of patients and their health care through the use of Internet research and online video or written health education information.
7. **Enabling** easy way of exchanging of information online between health care professionals and their sufferers.
8. **Extending** e health crosses the boundaries and extend to all the levels and reach in the rural areas where even primary health care is not reachable.
9. **Ethically** addressing new issues tied to patient-physician interaction, privacy, informed consent, and equity issues.
10. **Equitable**, providing health care in rural areas where specialty or professional care treatment may be lacking as compare to the urban areas. equity in care could also be related to the idea of e fitness as an intersection of business and healthcare. Or even, the ability of consumers to search the professionals online according to their choice and needs.

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