SUMMER TRAINING

1st April 2020 to 31st May 2020

"Vaccine hesitancy among parents of children between 0-5 years of age in India"

By

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2019-21

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ACKNOWLEDGEMENT

This report would not have been possible without the essential and gracious support of my Respected Mentor Dr. J. P. Singh, Associate Professor IIHMR University, Jaipur. His willingness to motivate me contributed tremendously to my report. I also would like to thank him for correcting me and helping me by solving my queries related to the topic of this report.

Besides I would like to thank the authority of IIHMR University, Jaipur for providing the digital library RemoteXs and the facilities to complete this report.

Also, I would like to take this opportunity to thank my family, friends and colleagues for their understandings and support towards me for completing this report.

Finally, I would extend my sincere thanks to all the parents who helped me, to complete the report, by sharing their information. However, it would not be possible without all of you.

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ABBREVIATIONS

1. WHO = World Health Organization

2. UNICEF = United Nations International Children's Emergency Fund

3. BCG = Bacilli Calmette-Guerin
4. OPV = Oral Polio Vaccine
5. PCV = Pneumococcal Conjugate Vaccine
6. MCV = Meningococcal Vaccine

INTRODUCTION

Vaccine hesitancy defines as, according to WHO “refusal or delay in acceptance of vaccines despite of availability of vaccination services.”

Vaccine hesitancy should be dealt as an important issue, as it carries both individual and as well as community level risk. Population with more vaccine hesitancy are more likely chance of spreading and contracting the vaccine-preventable diseases.

As World Health Organization and UNICEF report 2019 has announced vaccine hesitancy one of the top 10 threats to global health in 2019. Ten countries account for 11.7 of the 19.4 million under and unvaccinated children in the world (60%), and India is one of them. Following table gives the data of neonatal mortality rate and under five mortality rates in India during

2014 - 2018

INDIA

YEAR	Neonatal mortality rate (per 1000 live births).	Under five mortality rates (probability of age 5 per 1000 live births).
2014	36.1%	63.1%
2015	37.29%	62.71%
2016	37.64%	62.36%
2017	38.02%	61.98%
2018	38.33%	61.67%

The coverage of vaccination in India has remained average to low throughout the years. Several factors have been said to influence vaccine hesitancy including religious beliefs, socio-cultural context, traditional values and mistrust, beliefs and attitudes, and lack of knowledge/awareness about vaccines.

The Parental knowledge/ awareness towards the Childhood vaccines scale of vaccine hesitancy and beliefs in traditional values towards the Childhood vaccines scales were used to measure the Vaccine hesitancy among parents.

This understanding will help to inform the India’s vaccination policy for further improving the coverage rates.

RATIONALE:

Infants and childhood vaccines prevents them from serious and deadly diseases. Some examples are:

- ⇨ MEASLES – can cause swelling in brain, which can lead to death or brain damage.
- ⇨ MUMPS – can cause deafness permanently.
- ⇨ MENINGITIS – can leads to both permanent deafness and brain damage.
- ⇨ POLIO – can cause permanent paralysis.

There are no other treatments or cures for these diseases like measles, mumps and polio. The only proven way to protect the infants and children are with vaccines.

An online questionnaire was prepared, and survey was conducted. The survey had collected information on demographic data, factors influencing vaccine hesitancy among parents, knowledge /awareness about vaccine, attitude and beliefs towards the traditional values regarding the vaccines.

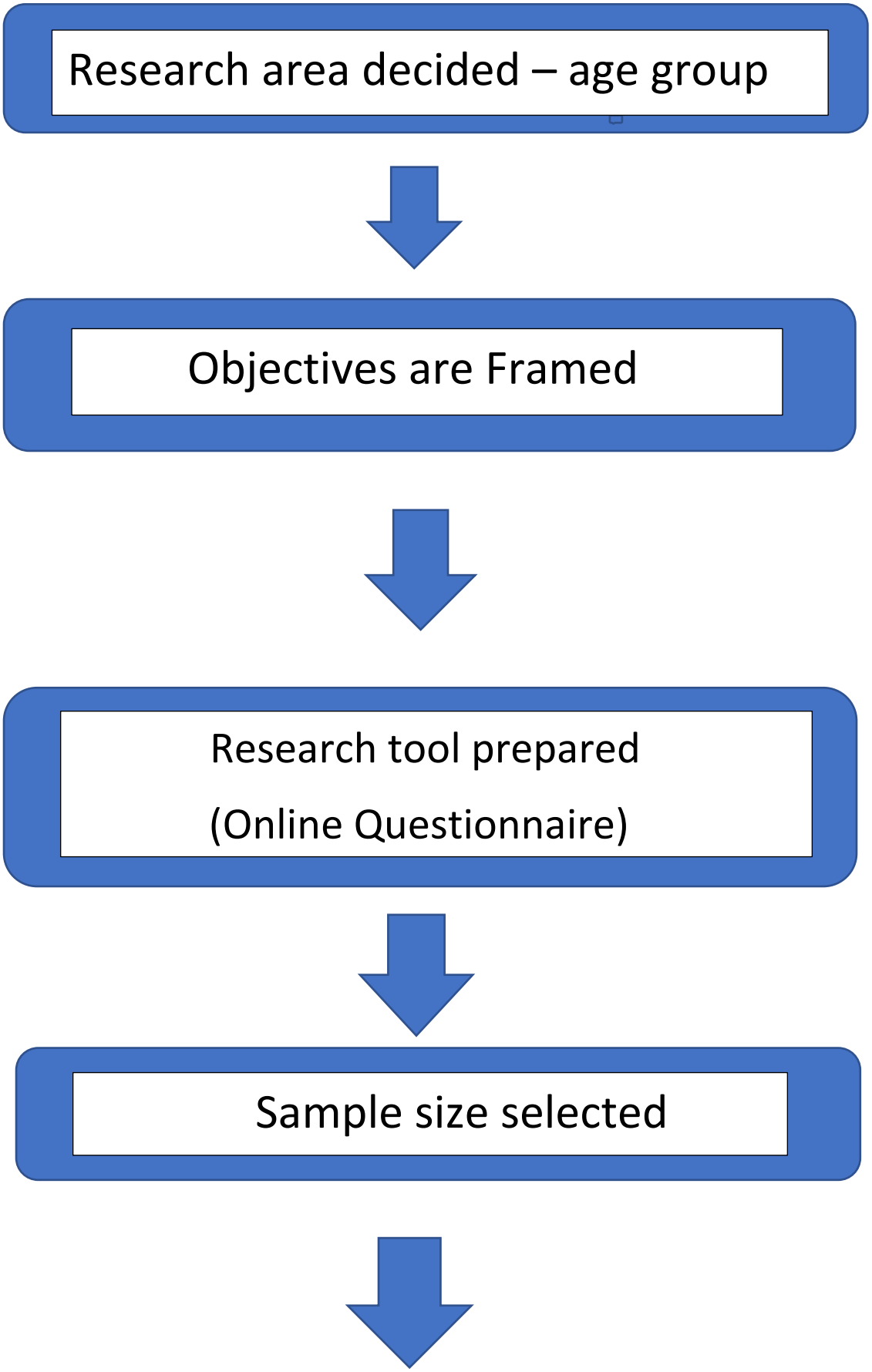
RESEARCH QUESTION: -

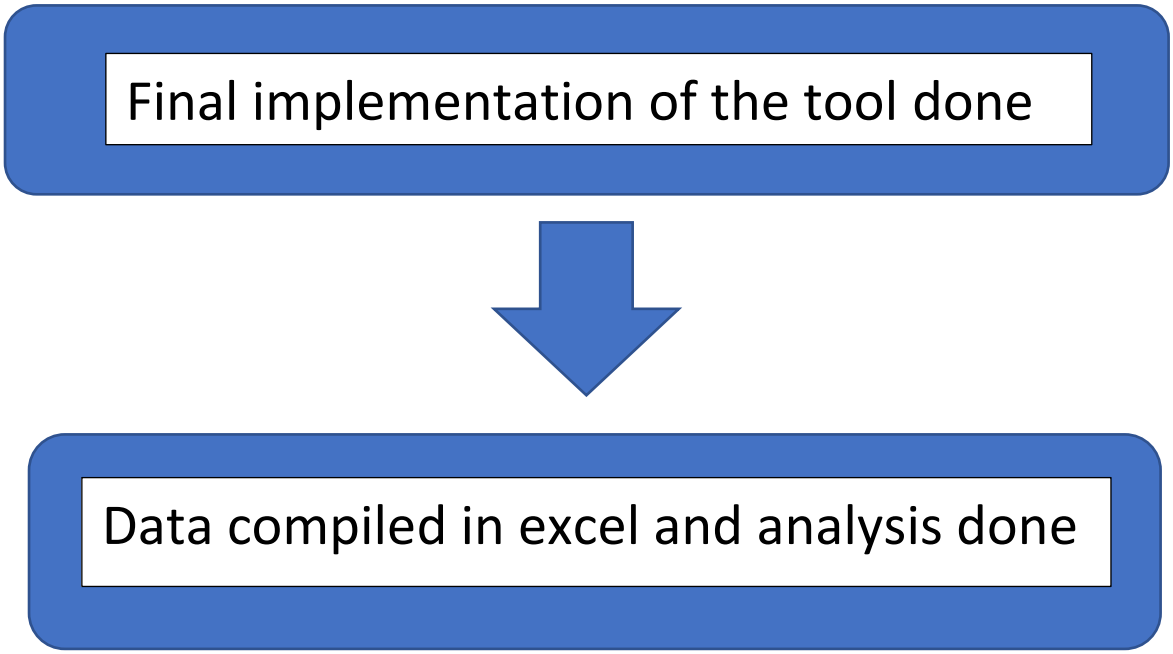
What is the reason of vaccine hesitancy among parents of children which associates their knowledge/awareness about the vaccines and their attitude and beliefs towards the traditional values regarding the vaccine?

0BJECTIVE:-

- ⇨ To find the reason of vaccine hesitancy among parents of children between 0-5 years of age in India.
- ⇨ To find the parents knowledge/awareness and their attitude and beliefs towards their traditional values regarding the vaccine.

METHODOLOGY





DATA COLLECTION

STUDY TOOL	:	Online Questionnaire
STUDY DESIGN	:	Cross-Sectional Observational Study
SAMPLING METHOD	:	Convenient Sampling
STUDY AREA	:	India
STUDY POPULATION	:	Parents of children between 0-5 Years of age
DURATION OF THE STUDY	:	2 months
SAMPLE SIZE	:	A total of 385 parents of children were chosen between 0-5 years of age.

This study was including 385 respondents, and the respondents are the parents of children between 0-5 years of age. However, 220 samples are eligible for the analysis.

Data collection tool is attached in annexure.

DATA COMPILATION AND ANALYSIS

COMPILATION:

Data compiling had been done by using Microsoft excel. 385 respondents were taken as sample size from India. All the information and answers of the questionnaire gathered through this survey is kept confidential and password protected. All the data was checked and verified before analysing.

ANALYSIS:

The purpose of the study was to know the reason behind the vaccine hesitancy among parents of the children between 0-5 years of age. Analysis done by using Microsoft excel.

INTERPRETATION

1) SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS

The study had 385 responders, out of which 220 samples were eligible for analysis. Many of the respondents were female (75%) and most of the respondents were married (98%). Majority of the respondents are from Madhya Pradesh (35%) followed by Rajasthan (15%). Most of the respondents has a single child under 5 years of age (72%). Girl child (55%) are more in no: compared to boy child (45%).

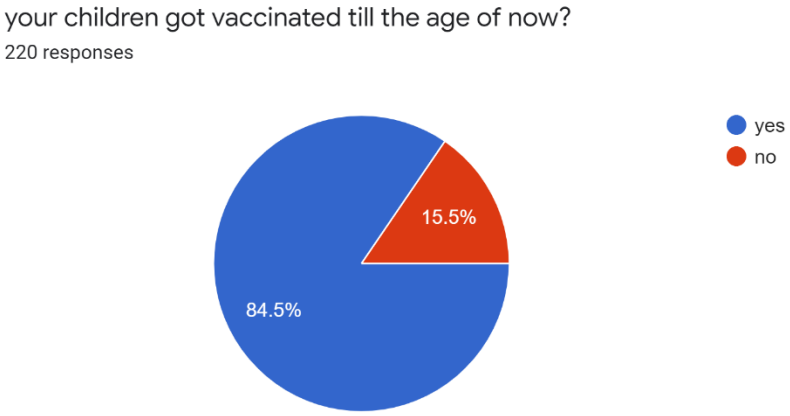
The demographic profile of the sample is shown in the table below: -

Table: - Demographic variables (n=…….

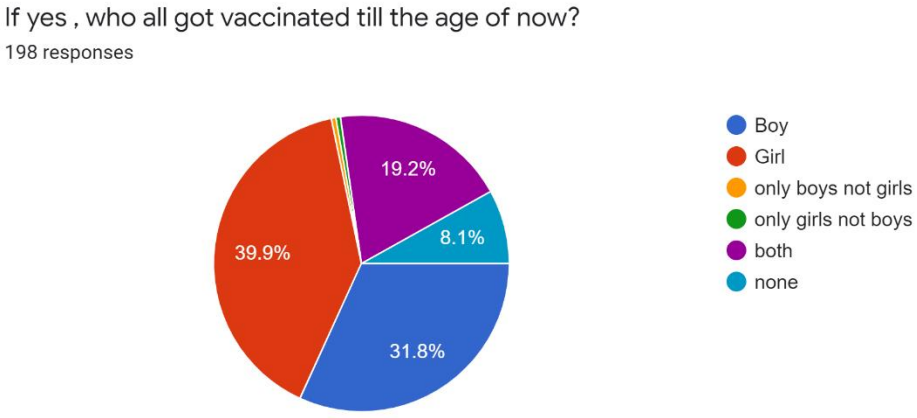
VARIABLES	**SUBGROUPS**	**n (%)** **n = 220**
Gender	Female	75%
	Male	25%
Marital Status	Married	98%
	Unmarried	-
	Divorced	2%
State	Madhya Pradesh	35%
	Rajasthan	15%
	Uttar Pradesh	12%
	Delhi	9%
	Bihar	7%
	Maharashtra	6%

	Uttarakhand	6%
	Kerala	4%
	Himachal Pradesh	3%
	Jammu & Kashmir	2%
	Telangana	1%
No: of children's have under 5 years of age	1	72%
	2	28%
	3	-
	none	-
No: of girl child have under 5 years of age	1	33%
	2	22%
	3	-
	none	45%
No: of boy child have under 5 years of age	1	31%
	2	14%
	3	-
	none	55%

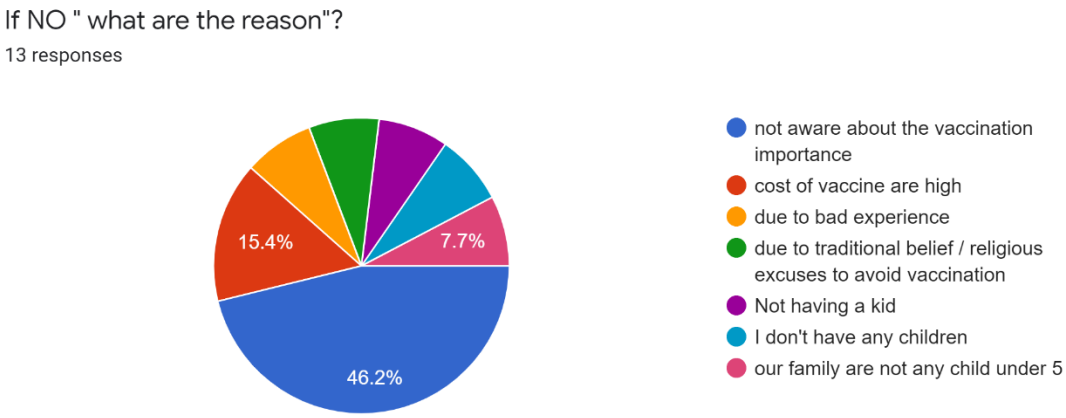
2) Attitude, traditional beliefs and awareness towards vaccination among parents: -



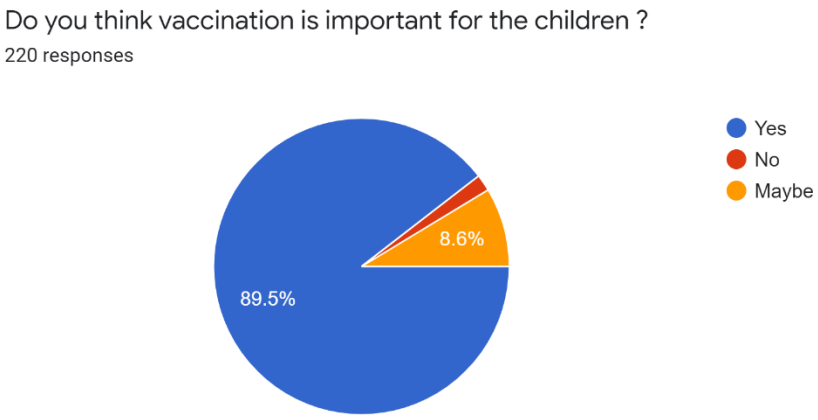
Approx.84.5% of parents in India got their children vaccinated and 15% are not. This indicates that approx.85% parents are aware about the importance of vaccination.



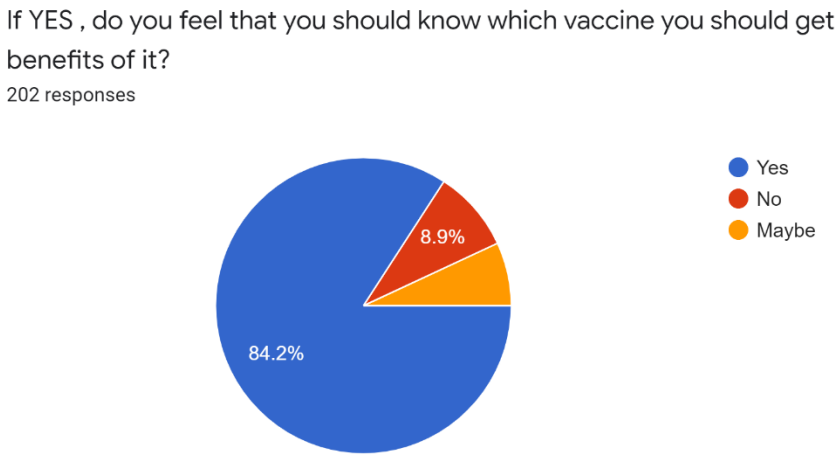
Approx. 40% of girl child got vaccinated and 32% of boy child got vaccinated, and the parents who have both boy child and girl child, they both got vaccinated and only 1% can be seen in discrimination between boys and girls. This indicate that traditional belief has eliminated from India. Parents in India knows well that vaccination has no discrimination. Only 8% of children's parents are unaware of importance of vaccination.



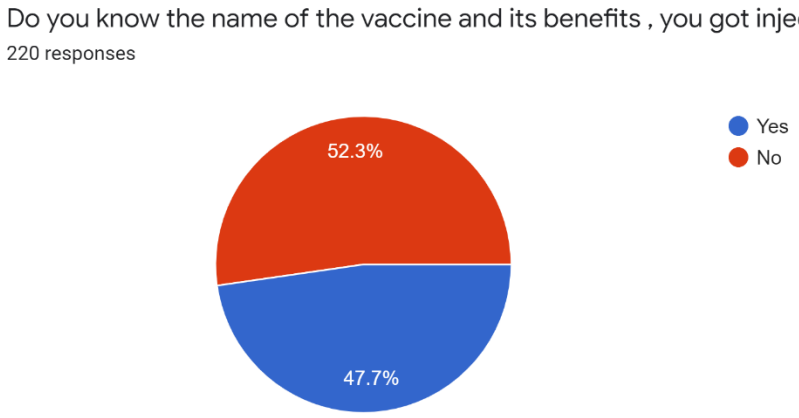
As on previous pie-chart, it indicated that 8% of children not got vaccinated, and the above pie-chart shows the reason for that. Approx. 46.2% parents are does not aware about the vaccination importance and its benefits. Approx. 15.4% parents do not afford vaccine.



Approx. 90% of parents are aware about the importance of vaccination in their children's life. And approx. 9% of parents are still not aware about the vaccination importance.



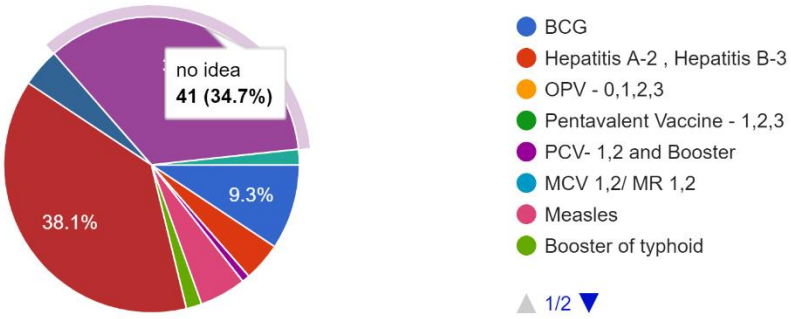
About approx. 85% of parents got their children vaccinated, but they are unaware with the benefits of the vaccination shot which their children are getting, and they are willing to know it. Approx. 9% does not want to know.



Approx. 47% of parents knows the name of the vaccine and its benefits, it might be 1 or 2 or may be more than that. But 52% are unaware with the name and benefits of the vaccination.

If YES, choose the vaccine?

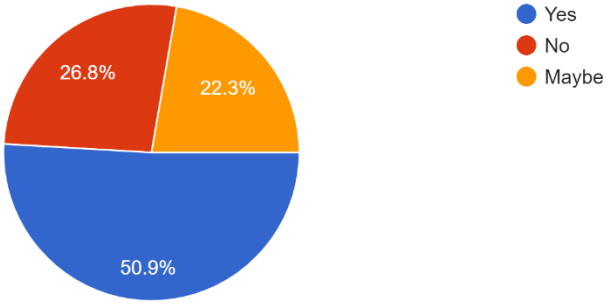
118 responses

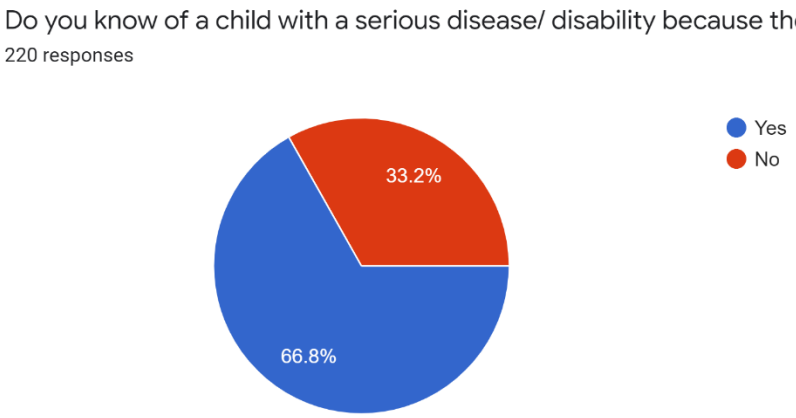


In the above pie-chart approx. 38% of parents only know about hepatitis shot benefits. And approx. 9.3% of parents knows the name and benefits of BCG in their children life. And approx. 34.7% have no idea about the name and the benefits.

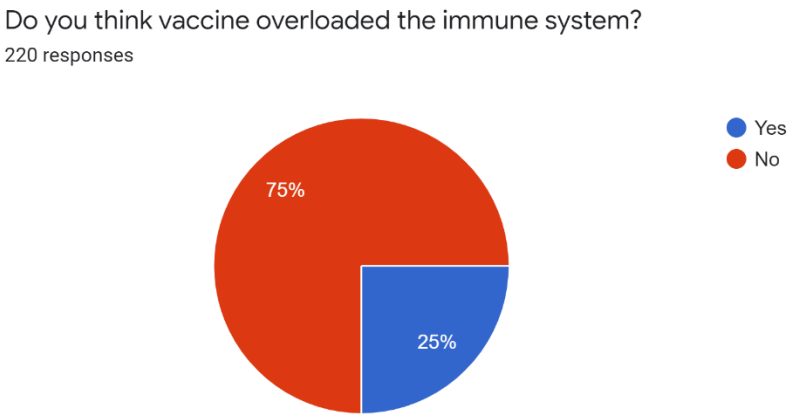
Do you consider that some vaccines are not important than other?

220 responses

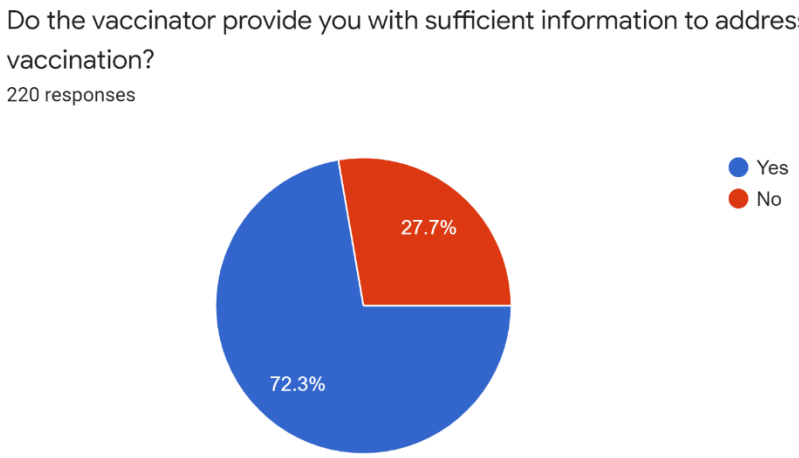




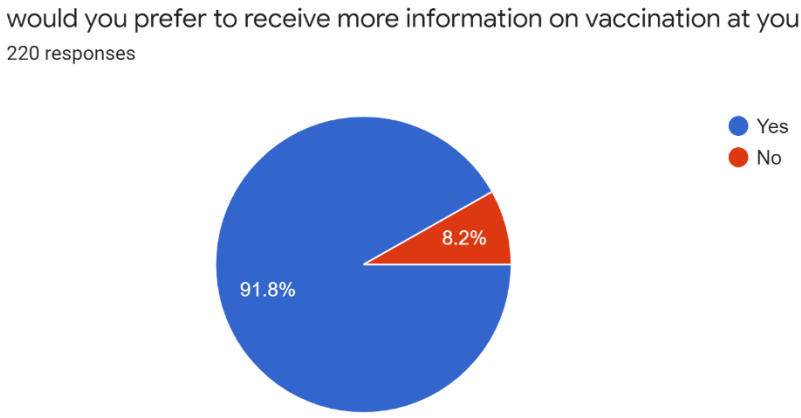
In the above pie-chart, it indicates that approx. 69% of parents has seen a child with the disability because they were not vaccinated. May be this could be one the reason why people are getting their child vaccinated. And 33% of parents haven't seen the child which are facing the problems when not get vaccination on time or not even got vaccinated ever.



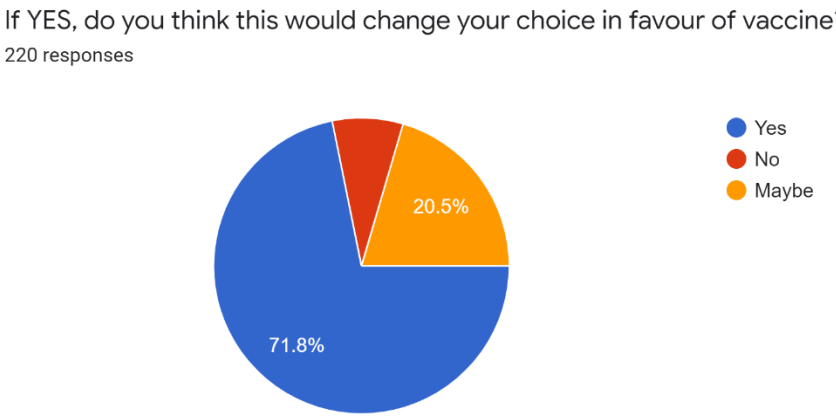
Approx. 75% of parents think vaccine does not overload the immune system. And approx. 25% parents think vaccine does overload the immune system, may this belief of them stops them to get their children vaccinated.



The above chart indicates that approx. 72% of parents get the enough information regarding the vaccine shot which they children get by the vaccinator. And 28% of parents didn't receive the information to address the concern around vaccination.

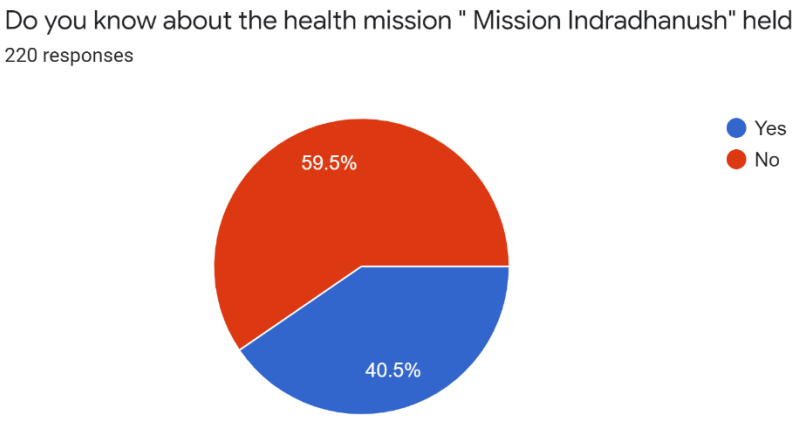


The above pie-chart indicates, that approx. 92% would prefer to receive more information on vaccination at their health centre. So that they will have the knowledge and be aware of consequences if not get your child vaccinated. And the rest 8% of parents are not interested in getting information regarding vaccination.



About approx. 72% of parents thinks that getting information of the vaccine can encourage them, for getting the vaccine shot. And about 21% thinks that they will not going to change their decision of not getting their child vaccinated.

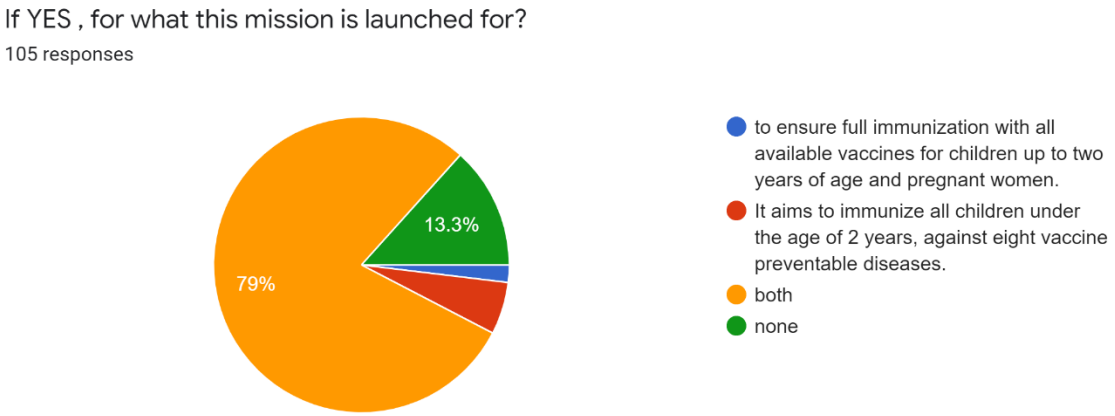
3) Awareness of health mission regarding vaccination of children.



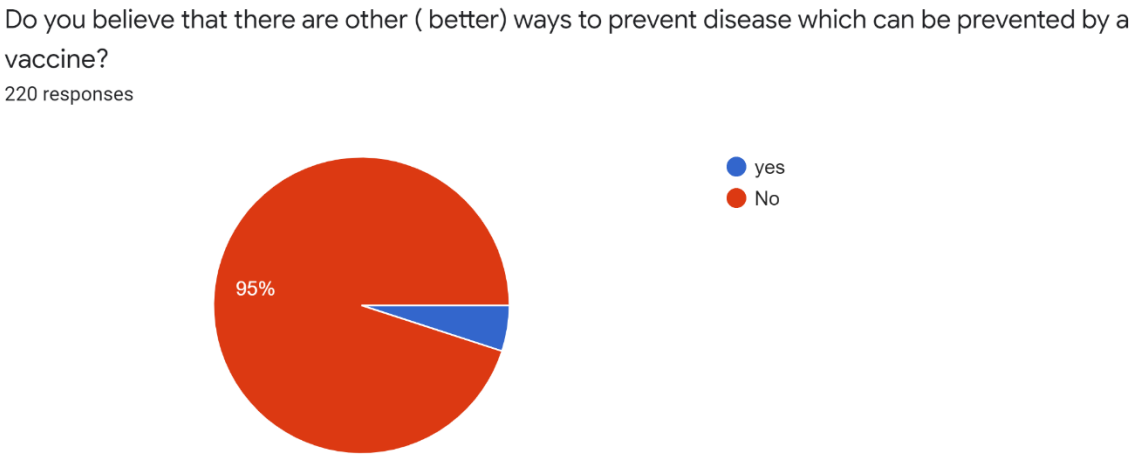
About approx. 60% of parents know about the “Mission Indra Dhanush”, It’s a heath mission which was launched on 25 December 2014 by the health minister J.P. Nadda in India. It is to target diphtheria, whooping cough, tetanus, polio, tuberculosis, measles and hepatitis B.

This mission’s target is to get vaccinated the unvaccinated children, almost up to 5% of the country every year.

And it also aims to immunize the pregnant women.



Among the people who heard about the mission, approx. 79% of parents knows exactly what the mission aims, and purpose are. And 14% of them have no idea they just heard the name.



About 95% had believed that there are no other better ways to prevent disease other than vaccination for their children.

DISCUSSION OF THE FINDING

This study aimed to determine the reason of vaccine hesitancy among parents of children between 0-5 years of age in India. An online survey was conducted in the past 2 months. The survey had collected information on demographic data, factors influencing vaccine hesitancy among parents, knowledge /awareness about vaccine, attitude and beliefs towards the traditional values regarding the vaccines.

This study included 385 respondents. Unfortunately, we got only 220 responses. This study shows that in India, about 89% of parents thinks that vaccination is important for the children in their early age, but they hesitate for getting their children vaccinated. Because they do not know the consequences their child will going to face, if not get vaccinated timely. About 47% of parents are still unaware with the names of the vaccines and its benefits towards their child health. Even the vaccinators do not provide the proper information regarding the vaccination shot. And one of the major reasons could be, that about 25% of the parents have that taboo that getting their child vaccinated will going to overload their immunity system. These were the various findings that the parents hesitate to get their children vaccinated.

This study also shows that parents have lack of awareness regarding the policy made by government regarding vaccine. They know about the “Mission Indra Dhanush” but they are unaware with its purposes and aims. About 60% of the parents are unaware about the health mission launched for pregnant women’s and children. This shows that government needs to generate awareness and its benefits when made any policy for the people.

This study also shows the positive attitude and belief towards the traditional values regarding the vaccines, as only 1% of parent’s belief that they do not get their girl child vaccine shot because of their traditional values.

CONCLUSION AND RECOMMENDATIONS

Our study has established that vaccine hesitancy among parents of children between 0-5 years of age, has caused respondents to strive towards the importance of vaccine. Respondents have developed positive attitude towards vaccine and enhancing the knowledge over it. Many of the parents thinks that vaccination is important for their children but they don't know what vaccine should be given at what age and what is the name and benefits of that vaccine is, if not given that particular vaccine what are the consequences a child could face . Our finding suggested that vaccine hesitancy can be prevented by generating awareness/knowledge to the parents for their children.

In order to maintain the positive attitude of the parents to get their child vaccination shot without any hesitancy. Proper education should be given, and communication campaigns need to be conducted for the parents, to raise awareness of vaccination importance and its benefits. Moreover, our survey has pointed out the need to provide them information, through the numerous providers.

Specific limitations of the study are linked to the data gatherings methods. Online surveys are cheap, simple to set up and do not require a physical contact between the interviewers and the respondents that was the parents of the children between 0-5 years of age, on vaccine hesitancy. They provide a large view of children's vaccination-related issues. However, an online survey raises the limit of sampling method: - they cannot reach people that are not comfortable with technology or don't have access to technology or the people, such as low income, poorly educated persons and language barriers. Moreover, online surveys do not allow a depth analysis of the results. This can be achieved through online qualitative studies. However, a huge limitation of our study is that our sample size was 375 respondents but due to lockdown, online survey was conducted, and we could receive only 220 responses.

In conclusion, our study contributes to a better understanding how vaccine hesitancy among parents of children between 0-5 years of age affects their child health when not given the vaccine shot in proper time and its necessary as well. And to make the mid-term and long-term improvements in vaccine hesitancy among parents should be reduced.

Taken together, our study has shown the positive influence for vaccine hesitancy among parents towards the importance of vaccine in their children's life. Our finding

have pointed out the need to implement Government incentive mechanism including information campaigns, to help the parents to get the know about the health mission made for their awareness and for their benefits, they will get to know the name of the vaccines and its benefits for being shot to their children's. Information is one of the most widely implemented approach for promoting the necessity of vaccination in the child life. Information can increase the vaccination awareness, which reduces the no: of disability of children's in India.

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Annexure: -

Questionnaire

1. Gender

2. Marital status

3. State

4. How many children’s do you have you under 5 years of age?
    - 1
    - 2
    - 3
    - 4
    - None

5. No: of girl child you have under 5 years of age?
    - 1
    - 2
    - 3
    - None

6. No: of boy child you have under 5 years of age?
    - 1
    - 2
    - 3
    - None

7. Your children get vaccinated till the age of now?
    - Yes
    - No

8. If yes, who all got vaccinated till the age of now?
    - Boy
    - Girl
    - Only boys not girls
    - Only girls not boys

- Both
- None

9. If no, what are the reason?

* not aware about the vaccination importance.

* cost of vaccine is high

* due to traditional belief/religious excuses to avoid vaccination for your children

* I don’t have any children.

* Our family have not any child under 5.

10. Do you think vaccination is important for the children?

* yes

* no

* may be

11. If YES, do you feel that you should know which vaccine you should get for your children and the benefits of it?

* yes

* no

* may be

12. If YES, choose the vaccine?

* BCG

* Hepatitis A-2, Hepatitis B-3

* OPV – 0,1,2,3

* Pentavalent Vaccine – 1,2,3

* PCV – 1,2 AND Booster

* MCV 1,2 / MR 1,3

* Measles

* Booster of typhoid

* All the above

* none

* no idea

* other

13. Do you consider that some vaccines are not important than other?

* yes

* no

* may be

14. Do you know of a child with a serious disease/ disability because they were not vaccinated?

* yes

* no

15. Do you think vaccine overloaded the immune system?

* yes

* no

16. Do the vaccinator provide you with enough information to address your concern around vaccination?

* yes

* no

17. would you prefer to receive more information on vaccination at your health care?

* yes

* no

18. If YES, do you think this would change your choice in favour of vaccine?

* yes

* no

* May be

19. Do you know about the health mission “Mission Indra Dhanush” held by the government of India?

* yes

* no

20. If YES, for what this mission is launched for?

* to ensure full immunization with all available vaccines.

* it aims to immunize all children under the age of 2 years, against eight vaccines preventable disease.

* both

* none

21. Do you believe that there are other (better) ways to prevent disease which can be prevented by a vaccine?

* yes

* no

PART -2

Online Course Report

“HEALTHCARE ORGANISATIONS AND DELIVERY MODELS”

By

Akansha Gupta

Under the guidance of

Dr. J. P. Singh

MBA Hospital and Health Management

2019-21

INSTITUTE OF HEALTH MANAGEMENT RESEARCH, JAIPUR 2020

COURSE NAME:

Healthcare Organization & Delivery Models

COURSE DESCRIPTION:

In this course, I will analyses how delivery system improve and disruptive innovation are the key guidance of the topics in healthcare. Recognizing the structure of the organization, and its current delivery systems help leaders to understand why there are poor result and the need to change. Exposure to other more structured and cost-beneficial systems in all parts of the world permits the opportunity for leaders to include these ideas into the next renewal of their own healthcare delivery.

I will examine the structures of the U.S, and other global healthcare systems and how healthcare is provided worldwide, their effect on health outcomes, and comparative analysis of their strengths and weaknesses.

OBJECTIVES:

1. To examine the U.S. and other global healthcare systems.
2. To differentiate the healthcare delivery systems across the globe.
3. To analyze the healthcare delivery systems part on patient health outcomes.
4. To prepare a plan to incorporate revolution into high performance healthcare delivery systems.

COURSE CONTENT:

This course “Healthcare Organization and Delivery Models” is administered by Doane University on edX e-learning platform. It is the course of 15 hour, self-paced course. Course instructor is Dr. Kimberley Meisinger.

SECTIONS	SUBSECTIONS
1. US and Global Health Comparison	1> Healthcare in U. S 2> Healthcare in Switzerland 3> Healthcare in Norway 4> Healthcare in China 5> Healthcare in Canada 6> Healthcare in Germany

2. The Role of Healthcare Leaders	1> Roles of Leaders in Healthcare
3. Health Disparities and Health Literacies	1> Health Disparity Vs Health Literacy
4. Facets of Patient and Health Outcomes	1> Measured Outcomes 2> Case Study Peer Review
5. High Performing Health Systems in the US and Abroad	1> Readings 2> Discussion
6. Strategic Planning for Innovation	1> Key Developers 2> Discussion on Strategic Planning

METHODOLOGY:

In this course, a combination of videos, PPTs, Case Studies, Reading Material and Discussion was done.

SECTION 1- US AND GLOBAL HEALTH COMPARISON

In this section, 'Multinational Comparisons of Health Systems Data,2017 by The Commonwealth Fund. (PPT.) was done.
Video lectures on Healthcare in US, Switzerland, Norway, and China was given.
Research Paper was also given on Comparison of Health Care Systems in the United States, Germany and Canada.

SECTION 2 - THE ROLE OF HEALTHCARE LEADERS

Research Papers were given regarding "Middle Managers' role in healthcare innovation implementation" and "Leader roles for innovation and strategic thinking and planning.
Article on Power of Positive deviance and case study based on Positive Deviance to improve patient safety was given.
Article was also given on Leaders' dual roles when managing innovation.

SECTION 3 – HEALTH DISPARITIES AND HEALTH LITERACIES

Concepts and Measures of Health disparities and health equity was given. And research paper on “An Examination of Changes in Social Disparities in Health Behaviors in the US” was also given.

To understand the link between health literacy and physical health, a research paper was given.

“No Equity, No Triple Aim: Strategic Proposals to Advance Health Equity in a Volatile Policy Environment” research paper was given on it.

SECTION 4- FACETS OF PATIENT AND HEALTH OUTCOMES

Article on Healthcare Delivery Performance: Service, Outcomes, and Resource Stewardship was given.

The Strategy to Transform Health Care and The Role of Outcomes was explained using a PowerPoint presentation.

Case study on “A Strategy for Health Care Reform- Toward a Value Based System” was also given.

SECTION 5- HIGH PERFORMING HEALTH SYSTEMS IN THE US AND ABROAD

In this section, I learned how to create High-Reliability in health care organizations through research papers.

Ten recommendations for policy makers on Designing a high performing healthcare system for patients with complex needs was given.

A research paper on a comparative international analysis on Health system frameworks and performance indicators in eight countries (Australia, Canada, Denmark, England, Scotland, New Zealand, Netherlands and United States) was given.

SECTION 6- STRATEGIC PLANNING FOR INNOVATION

Research paper on Advancing the State of the Art in Healthcare Strategic Planning was given. Article explaining “Will Disruptive Innovations Cure Health Care?” was given.

KEY LEARNINGS:

1.When we did **US AND GLOBAL HEALTH COMPARISON,** we found that

In US-

- Healthcare system is complex and expensive.
- Healthcare spending per capita is highest ($9892 in 2016).
- Medicare (provides health services to people above 65 years and individuals with documented disabilities), and Medicaid (provides health services to low income population) are present.
- Strengths include Advanced State of Technology, High Life Expectancy after 80, and World leader in Pharmaceutical Innovation.
- Major disadvantage of US healthcare system is that more than 42 million people are not assured and cost of treatment is very high.

In Switzerland-

- Mandatory Medical Health Insurance is universal, and resident are legally required to buy insurance within 3 months of entrance in the country.
- Decentralized Health Care, so Health Care System governments exist mainly at the state level.
- Dental care is excluded from the insurance.

In Norway-

- Healthcare is provided to population with equal approach to care irrespective of age, gender, race, income or area of residency.
- Agencies like The Norwegian Institute for public health and others guide the healthcare process and policies.
- Dental care for children up to age 18 and some populations that have chronic medical diseases are covered by govt.

In China-

- The National Health and Family Planning Commission are the main entity that provides oversight and executes the delivery of healthcare services to the people.

- Hospitals can be private or public, profit or for nonprofit and are paid through out of pocket payments, health insurance compensation, or govt. subsidies.

In Canada-

- Healthcare system is called Medicare (different from US).
- Canada has NHI (National Health Insurance) Program i.e., govt. runs health insurance system for entire population.
- Health Insurance System is universal and single payer.
- In 1984, Canada Health Act was passed according to which Health coverage is accessible to all the citizens with not out of pocket charges. For uncovered services such as dental services and prescription drugs, private insurance was done.

In Germany-

- In 1883, Sickness Insurance Act was passed representing the 1st social insurance program at the national level.
- All individuals are required by the laws to have health insurance. Those earnings less than $35000 must join, the illness funds for their health care coverage and those earnings are exceeding this limit may prefer private insurance instead.
- Healthcare system is like US (No direct govt. intervention).
- Drawbacks includes Reliance on third party payment and tendency to use resources inefficiently.

When we compared healthcare system of US, Canada and Germany, we found that medical care expenditure in US is highest in the world, both in per capita terms and as the percentage of GDP.

And no: of physicians per 1000, no: of hospital beds per 1000, and average length of stay (Days) are greatest in Germany and lowest in U.S.

Consumer satisfaction was highest in Canadians and lowest in US citizens.

Also, presence of a National Health Care Plan doesn't ensure high level of consumer satisfaction. For example, in Germany 48% consumers are not satisfied by the healthcare services provided to them.

2. **THE ROLE OF HEALTHCARE LEADERS-**

In this section, we learnt that Healthcare Leaders have double roles, when managing innovation. In a bottom-up role, they encourage innovative results as they support the ideas and initiative coming from teams and teams. C A fundamental challenge is to balance these two roles.

Also, Teamwork intentions have become popular in healthcare organizations. Because middle managers supervise these team initiatives, their potential to persuade innovation implementation has developed by diffusing information, consolidating information, intervening between strategy and day-to-day activities, and selling innovation implementation.

We have also learnt about Positive Deviance (uncommon practice that gives advantage to the people who practice it, too compared with the rest of the community. Such norms are acceptable, affordable and sustainable because they are already skilled by risk people, do not struggle with local culture and they work.) and how this approach is adopted to improve quality and safety within healthcare.

3.**HEALTH DISPARITIES AND HEALTH LITERACIES-**

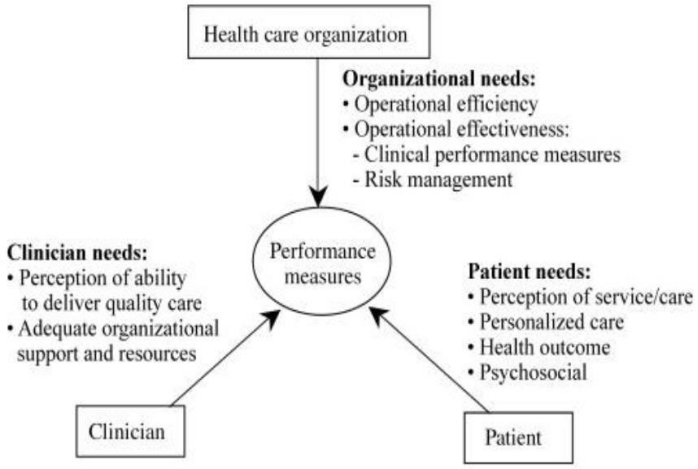
In this section, we learnt concepts and measurements of Health Disparities and Health Equity.
Acc. To Margaret Whitehead in the early 1990s Health disparities/ inequities are different in health that are “avoidable,” “unjust, and “unfair”.
Equity in health defined as, that all the person has fair chances to accomplish their full health potential, to the extent possible.
Apart from this, there are several other meanings of health disparities and health equity.

To measure Health disparity, we use “RATE RATIO” (the rate of a given health indicator in one group divided by the rate in another group) or “RATE DIFFERENCE”
More complex methods, such as the population attributable risk, the slope and relative indices of inequality, and the concentration curve and index also have been used.

We also learnt about Health Literacy and its alliance with physical health. Health literacy is defined as the “capacity to acquire, process, and know basic health information and services needed to make relevant health decisions. Health Literacy is evaluated by the Rapid Estimate of Adult Literacy in Medicine (**REALM**; Davis et al., 1993), the Test of Functional Health Literacy in Adults (**TOFHLA**; Parker, Baker, Williams, & Nurss, 1995) and the Newest Vital Sign (**NVS**).

The REALM is a word recognition test which involved a person to pronounce a series of
Health - related words. It is presumed that, if attendees cannot pronounce the word correctly, they are unlikely to appreciate it.
TOFHLA asks people to fill word intervals in health-related passages, and execute numerical tasks frequently encountered in health management.
In NVS, attendees are introduced with a nutrition label from an ice cream package and urged six questions about it. Furthermore, displaying comprehension and numeracy abilities, attendees must process and extract applicable information while ignoring distracters.
Lower REALM, S-TOFHLA and NVS scores were affiliated with worse scores on all health outcomes.
Low health literacy, or learning capacity in general, would be associated with lower physical fitness, higher BMI, and lower number of natural teeth because they may show poor care of one's health.

4. FACETS OF PATIENT AND HEALTH OUTCOME-.



The three main players in the service trio are the health care organization, the clinician (team of general practitioner, nurses, medical assistants, and office staff), and the patient. Each of these three existences has a unique but interrelated point of view on the needs associated with health care presentation.

Patient satisfaction, service quality, and capable resource management are providing the important basis for measuring patient, clinician, and organizational outcomes.

Health Outcomes are the most evident information for patients. Outcomes defined as success for every clinician and health care organization. Outcomes are essential elements of any value-based payment model. Outcomes validate cost reduction that is truly value-enhancing. Outcomes collaborate the areas for service line growth and affiliation.

In US, to rectify the Health care, central focus must be on growing value for patients i.e., the health outcomes accomplished per dollar spent. True reform will need for both moving toward universal insurance coverage and reconstructing the care delivery system.
For universal coverage,

- Firstly, we must change the nature of health insurance competition. Insurers, whether public or private, should multiply only if they improve their subscribers' health. In addition, health plans should be needed to measure and report their subscribers' health Outcomes.
- Secondly, we must keep employers in the insurance system.
- Thirdly, we need to address the unjust burden on people who have no approach to employer-based coverage, who therefore face higher premiums and greater adversity securing coverage.
- Fourthly, to make individual insurance economical, we need large statewide or multistate insurance pools.
- Fifth, income-based subsidies will be needed to help lower income people purchase insurance.
- Finally, once a value-based insurance market has been created, everyone must be required to buy health insurance.

For reconstructing the healthcare towards value-based system,

- First, measurement and broadcasting of health outcomes should become compulsory for every provider and every medical condition.
- Second, we need to radically re-examine how to assemble the delivery of prevention, screening, wellness and routine health maintenance services
- Third, we need to restructure care delivery around medical conditions.
- Fourth, we need a reimbursement system that line up everyone's interests around improving value for patients.
- Fifth, we must expect and anticipated providers to compete for patients, based on value at the medical-condition level, both within and across state borders.
- Sixth, electronic medical records will allow value improvement, but only if they support no segregated care and outcome measurement.

5. HIGH PERFORMING HEALTH SYSTEMS IN THE US AND ABROAD

High-reliability science is the study of organizations in industries like commercial aviation and nuclear power that operate under hazardous conditions while maintaining safety levels that are far better than those of health care. Adapting and applying the lessons of this science to health care offer the promise of enabling hospitals to reach levels of quality and safety that are comparable to those of the best high reliability organizations.

Hospitals can make substantial progress toward high reliability by undertaking several specific organizational change initiatives in increments.

To improve reliability, which also includes interventions to improve culture, focuses on valid rate-based measures. This includes

(1) Identifying evidence-based interventions that improve the outcome.
(2) Selecting interventions with the most impact on outcomes and converting to behaviors.
(3) Developing measures to evaluate reliability.
(4) Measuring baseline performance.
(5) Ensuring patients receive the evidence-based interventions.

Also, we learnt 10 recommendations for Designing a High-Performing Health Care System for Patients with Complex Needs-

1. Make care coordination a high priority.
2. Identify patients in greatest need of proactive, coordinated care.
3. Train more primary care physicians and geriatricians.
4. Facilitate communication between providers—for example, through clinical record integration.
5. Engage patients in decisions about their care.
6. Provide better support for caregivers.
7. Redesign funding mechanisms to meet patients' needs.
8. Integrate health and social services, and physical and mental health care.
9. Engage clinicians in change and train and support clinical leaders.
10. Learn from experience and scale up successful projects.

A comparative international analysis of 8 different countries regarding Health system frameworks and conducting indicators were also given in this course. Countries involved are Australia, Denmark, Canada England, Scotland, Netherland and the U.S.

Method: Identification of comparable international indicators and survey of their characteristics were done. Two dimensions of indicators are – that they are nationally compatible and locally applicably were deemed important.

Results: The most commonly used province in performance frameworks were safety, efficacy and access. There were 401 indicators that satisfied, the 'nationally consistent and locally relevant' criteria. Of these, 45 indicators are

reported in likewise one country. Mental health and cardiovascular surgery were the most frequently reported disease groups.
Conclusion: These comparative data advise researchers and policy makers internationally when outlining health performance frameworks and indicator sets.

6. STRATEGIC PLANNING FOR INNOVATION

Strategic planning has become an authorized and common management discipline, both outside and inside of healthcare.
A recent survey of the state of strategic planning among healthcare organizations signify that planners are executive believe that healthcare strategic planning practices are adequate and provide the proper focus
Based on analysis, research and field experience, ten best practices in healthcare strategic planning are as follows :-

1. Accomplished a Unique, Far-Reaching Vision.
2. Attack critical issues.
3. Make clear strategies and develop focused.
4. Differentiate from competition.
5. Obtain real benefits.
6. Establish preplanning.
7. Forming effective participation.
8. Think strategically.
9. Managing implementation.
10. Conducting strategically.

THANK YOU