

Summer Training Report
Work from Home (Assigned by Faculty)
and
Report on Online Course

By
Subrata Rudra Pal
MBA (Hospital and Health management)
2019-21



Acknowledgements: -

- I would like to express my heartfelt gratitude to Professor Neetu Purohit, who personally give me suggestions and guidance at every steps of this research project 'role of WhatsApp in health communication amid Covid-19' of my interest.
- I express special thanks to Dr. SD Gupta for designing this integrated course on 'quality assurance in healthcare' available online, and IIHMR University of for providing free moocs platform for such a course. This course really enhances my knowledge and skill level.
- I am also thankful to my fellow colleagues, friends and others for participating in the research survey.

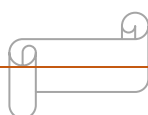


Table of Contents: -

➤ Acronyms/Abbreviations-----	2
➤ Figures-----	2
➤ Tables-----	2
➤ Part A: Report on Work from Home Assigned by Faculty Mentor:	
▪ Introduction-----	3
▪ Review of Literature-----	4
▪ Rationale-----	5
▪ Research Question-----	5
▪ Objectives-----	5
▪ Methodology-----	5
▪ Results-----	6
▪ Conclusion-----	10
▪ Appendix 1-----	11
▪ Reference-----	13
➤ Part B: Report on Online Course:	
▪ Course Description-----	14
▪ Objectives of the Course-----	14
▪ Course contents-----	14
▪ Learning Methodology used in the Course-----	15
▪ Key Learnings from the Course-	
○ Chapter-1 (Quality Assurance Concepts) -----	15
○ Chapter-2 (Quality Assurance Approach) -----	17
○ Chapter-3 (Setting Standards) -----	17
○ Chapter-4 (Monitoring Quality and Supervision) -----	18
○ Chapter-5 (Assessment of Quality) -----	19
○ Chapter-6 (Quality improvement tools) -----	20
○ Chapter-7 (Medical Audit) -----	21
○ Chapter-8 (Leadership) -----	22
○ Chapter-9 (Team Building) -----	23
○ Chapter-10 (Plan of Action) -----	24

Acronyms/Abbreviations: -

QA	Quality Assurance
CQI	Continuous Quality Improvement
TQM	Total Quality Management
QI	Quality Improvement
QM	Quality Management
SOP	Standard Operating Procedures
OPD	Outpatient Department
PFA	Financial Planning Association

Tables: -

Table 1:	Characteristic of participants, N (Total participants) =194.
Table 2:	Comparison of messages before 22 march & after 22 march within WhatsApp groups.
Table 3:	WhatsApp access of participants on average during lockdown.
Table 4:	Type of Covid-19 messages circulating within WhatsApp groups.
Table 5:	Most often Covid-19 messages received.
Table 6:	Opinions on WhatsApp messages.
Table 7:	Most Liked Covid-19 messages.
Table 8:	Types of Covid-19 messages deleted or ignored instantly.
Table 9:	Risk perception of Covid-19 infection and action to protect against it, post-lockdown.
Table 10:	Different Sources of Covid-19 Updates
Table 11:	QA Framework
Table 12:	QI Tool (Pareto Chart)

Figures: -

Figure 1:	Pattern in no of Covid-19 messages within those four WhatsApp groups.
Figure 2:	Elements of Quality
Figure 3:	QA Cycle
Figure 4:	QI Tool (Flowchart)
Figure 5:	QI Tool (Fish Bone Diagram)
Figure 6:	Leadership Styles

-: Report on Work from Home Assigned by Faculty Mentor: -

Role of WhatsApp in Health Communication amid COVID-19 Pandemic

Introduction:

WhatsApp is a freeware, cross-platform messaging and Voice over IP (VoIP) service. It allows users to send instant text messages and voice messages, make voice and video calls, group chat, status updates, broadcast, share images, documents, user locations, and other media. Assessable from both mobile and pc with internet connection and registered mobile number.

It is popular among more than one billion people worldwide and multiple reason behind this popularity. When WhatsApp was rolled out in 2009, people complained about the price of SMS texts. WhatsApp solved this problem by allowing you to send SMS messages to other WhatsApp users with push notification, all for free without any ads. It affected Skype, which excelled at voice and video calling, but Skype was for the PC and made a late entry into mobile phones. WhatsApp went one step further by identifying people through their phone numbers and you cannot hide behind a fake identity. No need to ask for a username, if you have someone's phone number in your contacts, it means they're in your WhatsApp contacts if they use the app. This makes it easier for texting than Skype. WhatsApp Works on multiple platforms Android and iOS mobile phones, tablets and PC, windows Phones, Nokia phones, Jio and many more. Again, it pleased its users with group chat and the ability to send pictures and other multimedia files along with messages, its free-calling feature and then, its video calling and recorded voice messages feature. WhatsApp was made for mobile devices and not for computers, it came when smartphone adoption was booming. Also, 2G and 3G data became more accessible and cheaper in many places. Features like encrypted messages and status of any message makes it more popular.

If we see its history from launch at 2009 to current time many things are added continuously. WhatsApp was founded in 2009 by Brian Acton and Jan Koum. In June 2009, Apple launched push notifications, and Koum also changed WhatsApp with this feature. WhatsApp 2.0 was launched with the idea of logging in with just a phone number and sending messages to contacts using the internet and people loved it. The application launched in November 2009, exclusively on the App Store for the iPhone, then a Blackberry version after two months. In December 2009, the ability to send photos was added. By February 2013, WhatsApp had about 200 million active users and 50 staff members. On February 19, 2014 Facebook Inc. announced it was acquiring WhatsApp for US\$19 billion. By early January 2015, WhatsApp had 700 million monthly users and over 30 billion messages every day. Voice calls between two accounts were added to the app in March and April 2015. On January 18, 2016, WhatsApp's co-founder Jan Koum announced that it would no longer charge users a \$1 annual subscription fee. He also said that the app would not display any third-party ads. More than 100 million voice calls per day were being placed on WhatsApp by June 2016. On November 10, 2016, WhatsApp launched a two-step verification system. Later that month, video calls between two accounts were introduced. In January 2018, WhatsApp launched WhatsApp Business for small business use. Later in 2018, WhatsApp introduced new form of status updates, group audio and video call features.

Some of the nuisance value of WhatsApp are communalism, lynching, and wrong information, etc. A new suggests that the spread of fake news in India that sparks mob lynching is largely done out of “reasons of prejudice and ideology”, rather than “ignorance or digital literacy”. Misinformation and propaganda have flooded this messaging apps, and little is being done by law enforcement agencies, the government, and WhatsApp to fix this. Since May 2018, WhatsApp-borne rumours have allegedly led to at least 19 deaths in India. Fake messages, claiming that child traffickers and robbers have entered cities and towns, have had a menacing effect, purportedly responsible for at least 13 incidents of fatal mob-violence across eight Indian states. In Uttar Pradesh, child-lifting rumours have led to mob violence and 82 arrests. Law enforcement agencies shut down the Internet to prevent the forwarding of messages and possible riots. In august 2018 WhatsApp officially rolled out a limit of just five forwards at a time for Indian users to curb fake news. This measure led to a 25% decrease in message forwards globally. Now, WhatsApp is taking this one step further, with the introduction of a new limit allowing the viral messages forwarded to one chat at a time. In addition to this latest limit. In March 2020 Telangana government said admins of WhatsApp groups will be held responsible and will be tried as per law if any member indulges in publicising fake news, misinformation or rumours. Amidst rampant misinformation around the Covid-19 outbreak, WhatsApp is testing a feature that will help users verify the authenticity of forwarded messages. There are many good fact checking websites like Snopes.com, FactCheck.org, Hoax-Slayer.net, PolitiFact.com etc. In this ongoing Covid-19 crisis gov. also started a free WhatsApp helpdesk for helping people getting the correct information on Covid-19.

Review of Literature:

A study published on International Journal of Medical Science and Public Health on “Role of WhatsApp in improving learning among medical students” shows that 78% of the learner's knowledge improved as shown below after using WhatsApp for 5 months for communication and discussions.

Feedback/ Knowledge:

	Slow learners n=25 (%)	Fast learners n=57 (%)	Total n=82 (%)
Improved	20 (80)	44 (77)	64 (78)
Same	5 (20)	13 (23)	18 (22)
Worsened	0 (0)	0 (0)	0 (0)

Another study on the “Role of a WhatsApp clinical discussion group as a forum for continuing medical education in the management of complicated Clinical cases in a group of doctors” shows that use of WhatsApp in a medical setting as an effective means of communication, long distance learning and support between peers and specialists.

Rationale:

Amid COVID-19, at few places, like MP, UP, mobs attacked health workers due to fake news, In Mumbai, people collected at railway station after getting message on WhatsApp. The purpose is to know if WhatsApp could play any helpful role and how it has contributed in building awareness, increasing knowledge, not forgetting message during COVID-19.

Research Question:

Can WhatsApp be an important platform for awareness and behaviour change in Health Communication Campaigns?

Objectives:

- Broad objective:

To know the use and role of WhatsApp usage in Health communication during Covid-19 Pandemic.

- Specific objective:

1. To find out if there is a trend in WhatsApp usage among groups, after major Government announcement related to Covid-19.
2. To analyse the kind of messages, those were circulating through WhatsApp groups during Covid-19 Pandemic.
3. To study the type of Covid-19 messages people like/dislike the most on WhatsApp.
4. To some extent predict the post lockdown behaviour of people against Covid-19.
5. To compare the importance of WhatsApp with other mediums in creating awareness about Covid-19.

Methodology: Primary researchTwo approaches:

- In one approach, messages of four WhatsApp groups were collected from 1st March to 14th April and analyzed them based on daily count of messages and different types of messages. Analyzed the pre and during Lockdown messages trend.
- In second approach, the group members were asked to fill an online questionnaire regarding WhatsApp messages as shown in [Appendix 1](#). This collect information about basic demographic of participants, Sources of getting covid-19 updates, WhatsApp usage trend, kind of covid-19 messages received, their perception on these messages, either liked or disliked, and risk perception of Covid-19 post lockdown. Then analyzed and interpreted the responses based on objectives of this study.

Results:

Demographic characteristic-

Participant's demographic details are shown in [Table 1](#), a total of 194 WhatsApp users from India across different geographic location agree to participate in this survey. There are a greater number of male participants around (60%). Around two-third (64%) of participants are between the age of 20 to 30 years and rest one-third around (36%) are between 30 to 70 years. Almost all (99%) of them are holding either bachelor's degree or master's degree. We have similar number of participants in both student (43%) and working (39%) class and few (18%) in none of them category. Majority of the participants are closely working with healthcare field.

Table 1: Characteristic of participants, N (Total participants) =194.

Variable	Frequency	Percentage (%)
Gender-		
• Male	118	60.8
• female	76	39.2
Age group-		
• Up to 25	65	33.5
• 26-30	60	30.9
• Above 30	69	35.5
Educational qualification-		
• Up to Higher Secondary	2	1.0
• Graduation completed	109	56.2
• Post-Graduation completed	83	42.8
Employment status-		
• Student	84	43.3
• Working	76	39.2
• None	34	17.5
• Total	194	100

Interaction/Engagement pattern on WhatsApp-

After analyzing the total number of messages (both Covid-19 & non-Covid related) of all 4 groups and comparing them before and after 22 march as shown in [Table 2](#), we can clearly see the increase in no of messages in text, image, and video category. A total of (33%) increase in Covid-19 related and (36%) increased in non-Covid related messages after 22 march. Survey result from [Table 3](#) is also showing that most of the participant's (50%) WhatsApp access has increased, and only few participant's (9%) decreased during nationwide lockdown (which started first at 22 march). So, it shows the increase of WhatsApp usage during lockdown.

Furthermore, after counting number of Covid-19 messages day to day from 1st March to 14th April of all four groups we see a clear trend in [Figure 1](#), which shows spikes in sudden days due to higher number of messages resulting from Covid-19 related major announcement. For example, on 15th march due to government declaration of Covid-19 as disaster a greater number of messages were circulating.

Figure 1: Pattern in no of Covid-19 messages within those four WhatsApp groups.

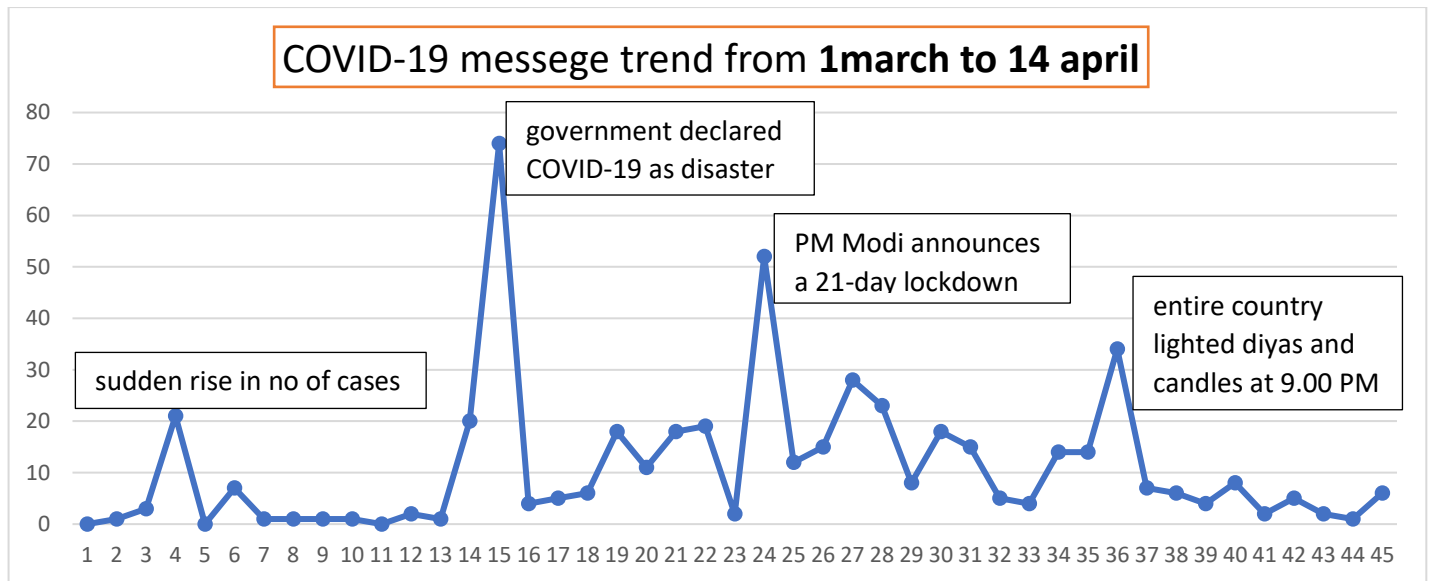


Table 2: Ccomparison of messages before 22 march & after 22 march within WhatsApp groups.

	covid-19, 1 march to 22 march	From 23 march to 14 april	non-covid, 1 march to 22 march	from 23 march to 14 april
Text	130	153	1423	1880
images	55	81	185	136
Videos	29	51	23	206
Total	214	285	1631	2222
		33% increased		36% increased

Table 3: WhatsApp access of participants on average during lockdown.

Responses	Frequency (N=194)	Percentages (%)
• Increased	96	49.5
• Same as before	80	41.2
• Decreased	18	9.3

Kind of Covid-19 Information Spreading-

Most of the Covid-19 messaged (43%) are in the form of videos and images, rest (57%) are texts (which are merely discussions). And after analyzing both WhatsApp group data in [Table 4](#) and Survey results in [Table 5](#) we can see approximately (30%) of the messages are educational/informative. On average (20%) of the messages are informative and funny as well, and around (12%) are just funny/jokes related to Covid-19 pandemic. Only few less than (3%) messages are bringing fear among users. There are more numbers of misinformation/rumors circulating through personal messages than group messages. And more discussions are

happening within WhatsApp groups (46%) than personal levels (9%). So, we can say that WhatsApp play a role in creating awareness among its users, either by informative and funny contents or by discussions within groups.

Table 4: Type of Covid-19 messages circulating within WhatsApp groups.

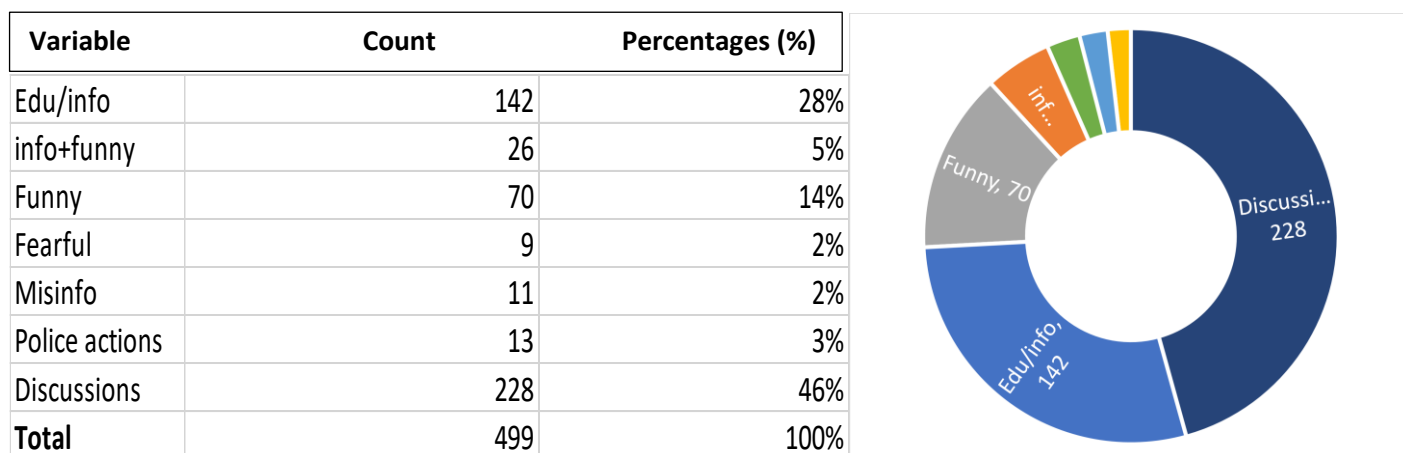


Table 5: Most often Covid-19 messages received.

Responses	Frequency (N=194)	Percentage (%)
• Factual/Educational	60	30.9
• Factual+funny	50	25.8
• funny/jokes	21	10.8
• Discussions	18	9.3
• Misinfo/Rumors	40	20.6
• Fearful	5	2.6

Perception and Attitude towards Covid-19 Messages-

Users find WhatsApp messages very useful. Majority of the participants (69%) believe that WhatsApp messages easily create awareness as shown in Table 6. Most of the participants (40%) also believe that creativity helps remember the messages, and few participants them (19%) find the messages very funny.

If we investigate Table 7 And Table 8 together, we can find out the type of message people like and dislike. Cumulatively (80%) of the participants gives either 1st or 2nd rank to educational/factual type of messages and (72%) of the participants gives 2nd or 3rd rank to factual & funny type of messages, and Only few of the participants deleted or ignored instantly this kind of messages. Funny/jokes messages ranked between 1st to 4th by (92%) of the participants and deleted/ignored by almost 1/3 of the participants. More than (75%) of the participants gives 4th, 5th or 6th rank to discussions, fearful and rumors types of messages, also these type of messages (especially rumors) are either deleted or ignored by most of the participants.

Table 6: Opinions on WhatsApp messages.

Responses	Frequency (N=194)	Percentages (%)
• Easily create awareness	134	69.1
• They tickle your funny bone	37	19.1
• Creativity in messages helps remember it	77	39.7

Table 7: Most Liked Covid-19 messages.

Rank	Percentage (%) of (N=194)					
	Factual/Edu	Factual+funny	funny/jokes	Discussions	Misinfo/Rumors	Fearful
1 st	49.5	14.9	29.4	.5	2.6	4.6
2 nd	30.4	34.5	17.5	2.1	12.9	3.1
3 rd	16.5	37.6	23.7	5.7	11.9	3.1
4 th	1.5	8.2	21.6	18.6	26.3	23.2
5 th	1.5	3.6	5.2	37.6	25.8	26.3
6 th	.5	1.0	2.6	35.6	20.6	39.7

Table 8: Types of Covid-19 messages deleted or ignored instantly.

Variable	Frequency (N=194)	Percentage (%)
• Factual/Educational	7	3.4
• Factual+funny	29	15.3
• funny/jokes	72	36.1
• Fearful	83	41.7
• Discussions	40	20.1
• Misinformation/Rumors	178	88.4

Prediction about post-lockdown behavior-

We ask participants about their opinion on chances of getting Covid-19 infection. Most of them (38%) are uncertain about it as shown in [Table 9](#), around (49%) give response of little to medium chances, and few (13%) think they have higher chances of getting the infection. When we ask about the actions, they will take to protect themselves post lockdown majority of them (72%) says they will take precaution all the times and (27%) in most of the times, shown in [Table 9](#).

Because most of the participants (74%) think of medium to high chances and uncertain of getting the infection, almost all the participants (99%) says will always take precaution or most of the times.

Table 9: Opinion on chances of getting CORONA infection and action to protect against it, post-lockdown.

Responses	Frequency (N=194)	Percentage (%)
Chances of infection-		
• Little chances	50	25.8
• Medium chances	46	23.7
• High chances	25	12.9
• Can't say about it	73	37.6
Action for protection-		
• Will do Nothing	1	.5
• Will take Precautions most of the times	53	27.3
• Will take Precautions all the time	139	71.6
• will take Precautions maybe sometimes	1	.5

Importance of WhatsApp in creating awareness-

WhatsApp play a major role in creating awareness about Covid-19 pandemic as we can see in Table 10, (58%) of participants were getting updates on WhatsApp along with other sources. Few of them (5%) heard about Covid-19 first time at WhatsApp, and (12%) were getting most of updates from WhatsApp.

Table 10: Different Sources of Covid-19 Updates.

Percentages (%) Responses-	Getting Covid-19 updates from-	Heard first time at-	Heard most of the times-
• Social Media	61.8	23.2	28.9
• WhatsApp	58.3	4.6	11.9
• Paper/E-News	80.4	49.5	36.1
• Radio, TV	63.3	18.0	19.1
• Word of mouth	38.2	4.6	3.6
• Poster/flyer	15.6	0	.5

Conclusion: -

The results of the study convey that WhatsApp could be used as an important platform for circulating health messages. Messages could be designed by weaving in the elements funny and factual as reported by the people. Since the acceptability and reach factor of this medium is high, it could be clubbed with other channels and used innovatively to generate awareness among people. WhatsApp could play a significant role in increasing awareness and knowledge about diseases in addition to risk perception.

Appendix-1

Questionnaire: -

1. Do You agree to be a Contributor to this (complete anonymous) survey?
 - a) Yes
 - b) No
2. Age-
3. Sex-
 - a) Male
 - b) Female
 - c) Prefer not to say
4. Please mention your Educational Qualification.
 - a) Up to Higher Secondary
 - b) Graduation completed
 - c) Post-Graduation completed
5. your Employment Status?
 - a) Working
 - b) Student
 - c) None of the above
6. You heard about COVID-19- (A)first time at (B)most of the times at-
 - a) Social media
 - b) WhatsApp
 - c) Newspaper/e-news
 - d) Radio/TV
 - e) Word of mouth
 - f) Poster/flyer
7. Please mark all the sources from where you are getting Updates about COVID-19?
 - a) Social media
 - b) WhatsApp
 - c) Newspaper/e-news
 - d) Radio/TV
 - e) Poster/flyer
 - f) Word of mouth
8. Your WhatsApp access on average during Lockdown
 - a) Same as before
 - b) Increased
 - c) decreased

9. Out of all COVID-19 Messages on WhatsApp most often are-
- a) Educational/info
 - b) Info+ funny
 - c) Funny/jokes
 - d) Fearful
 - e) Text/discussions
 - f) Misinformation/rumors
10. Please Mark all the COVID-19 Messages You have forwarded to others
- a) Rumors
 - b) Funny
 - c) Educational
 - d) Funny+ factual
 - e) Fearful
11. Mark all the Messages You have deleted or ignored instantly
- a) Factual/Educational
 - b) Funny/Jokes
 - c) Discussions/Text
 - d) Factual and Funny
 - e) Rumors/Misinformation
 - f) fearful
12. Please Rank the most liked messages on WhatsApp amid COVID-19
- a) Funny/Jokes
 - b) Factual/Educational
 - c) Factual+ Funny
 - d) Misinformation/Rumors
 - e) Discussions
 - f) Fearful
13. What do you think WhatsApp messages did on COVID-19?
- a) Easily create awareness
 - b) They tickle your funny bone
 - c) Creativity used in messages helps to remember it
14. What do you think your chance of getting CORONA infection Post lockdown?
- a) Little chances
 - b) Medium chances
 - c) High chances
 - d) Can't say about it
15. What will you do to protect yourself Post Lockdown (when everything Opens)?
- a) Will do Nothing
 - b) Will take Precautions most of the times
 - c) Will take Precautions all the time
 - d) will take Precautions maybe sometimes

References: -

1. <https://web.whatsapp.com/>
2. <https://forms.office.com/>
3. <https://en.wikipedia.org/wiki/WhatsApp>
4. <https://www.whatsapp.com/features/?lang=en>
5. <https://www.feedough.com/history-of-whatsapp/>
6. <https://www.lifewire.com/reasons-why-whatsapp-is-popular-3426372#:~:text=WhatsApp%2C%20the%20enormously%20popular%20messaging%20and%20Voice%20over,180%20countries%20use%20WhatsApp%20to%20stay%20in%20touch.>
7. <https://www.lynda.com/WhatsApp-tutorials/Understanding-how-WhatsApp-replaces-SMS/534638/562662-4.html>
8. <https://versus.com/en/skype-vs-whatsapp>
9. <https://techcrunch.com/2019/07/26/whatsapp-india-users-400-million/>
10. <https://thewire.in/communalism/mob-lynchings-whatsapp-fake-news>
11. <https://communalism.blogspot.com/2018/07/india-should-whatsapp-be-held.html>
12. <https://jia.sipa.columbia.edu/online-articles/communal-violence-social-media-and-elections-india>
13. <https://www.thequint.com/news/india/lynchings-due-to-rumours-spreading-on-whatsapp>
14. <https://www.buzzfeednews.com/article/pranavdixit/whatsapp-destroyed-village-lynchings-rainpada-india>
15. <https://www.bbc.com/news/world-asia-india-44709103>
16. <https://indianexpress.com/article/india/uttar-pradesh-child-lifting-rumours-whatsapp-bachcha-chor-aa-gaya-5975940/>
17. <https://www.livehindustan.com/tags/bachcha-chor-gang>
18. <https://www.oneindia.com/india/whatsapp-forwards-limited-to-just-5-here-is-how-it-works-2752488.html>
19. <https://wersm.com/whatsapp-limits-message-forwarding-to-one-chat-at-time/>
20. <https://www.thehindu.com/news/national/other-states/whatsapp-admins-are-liable-for-offensive-posts-circulated/article18185092.ece>
21. <https://socialnetworkingprp.weebly.com/literature-review-on-social-networking.html>
22. <https://www.thenewsminute.com/article/1-year-jail-spreading-fake-news-whatsapp-group-admins-responsible-telangana-govt-121504>
23. <https://electrons.co/find-whatsapp-message-forward-real-fake/>
24. <https://www.digit.in/news/internet/whatsapp-testing-a-feature-to-verify-authenticity-of-frequently-forwarded-messages-report-53101.html>
25. <https://socialnetworkingprp.weebly.com/pros-and-cons.html>
26. Reema Karasneh, et al., Research in Social and Administrative Pharmacy, <https://doi.org/10.1016/j.sapharm.2020.04.027>
27. <https://www.researchgate.net/publication/330235166> Role of WhatsApp in improving learning among medical students
28. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6739533/> Role of a WhatsApp clinical discussion group as a forum for continuing medical education in the management of complicated Clinical cases in a group of doctors.

Name of the Course: Quality Assurance in Health Care.

Course Description: It's a 60 hours long self-placed course on Quality Assurance (QA), Consist of 10 self-learning Chapter, ppt and set of assignment for each chapter. This Course is designed by Prof. S.D. Gupta, Public Health expert with a distinguished academic and research career. The Course is freely available online at IIHMR University's Moocs platform powered by open edX.

http://moocs.iihmr.edu.in/courses/course-v1:IIHMR-University+QAH-1+2017_QAH/about

Objectives of the Course: -

Broad objective-

To improve participants' knowledge of the concept of quality and develop their skills in the implementation of the Sustainable Quality Assurance Program in the Health Systems and Hospitals.

Specific objectives-

- To familiarize and understand the of Quality Assurance (QA) and its importance in the context of Health System and Hospitals.
- To understand the scope of QA.
- To understand the importance of standards, indicators, benchmarks in QA.
- To learn basic skills of assessment and measurement of QA.
- To understand the QA process and develop skills to use various quality improvement tools.
- To develop skills of monitoring and supervising the quality of services.
- To increase leadership effectiveness and learn the process of building effective teams for quality.
- To plan and implement QA Program in the health system and hospitals.

Learning Objectives-

- Define quality and describe dimensions of quality in health care.
- Assess and measure quality using a set of standards and indicators.
- Define problems in QA.
- Develop alternative measures to solve the problems.
- Use selected quality improvement tools.
- Develop action ideas to enhance leadership effectiveness and build teams.
- Develop a plan of action for quality improvement for their respective areas/hospitals.

Course contents: -

- *General concepts:* historical background of QA, dimensions of quality, scope, and process of QA, different terminology used in QA, the definition of quality.
- *Frameworks for quality of care:* perspectives of the community, individual/clients, providers of health care, and managers.
- *Quality Assurance Process:*
 1. *Setting standards:* Need for standards, the process of setting standards, communicating standards, developing indicators.

2. *Assessment and measurement of quality*: Frameworks for quality assessment, and methods and tools of quality assessment.
3. *Monitoring and Supervising Quality*: Quality monitoring process, and collection of data and analysis, supervising the quality, Indicators of quality, Identifying quality problems and gaps.
4. *Quality Improvement Interventions*: Quality Assurance (QA), Continuous Quality Improvement (CQI), and Total Quality Management (TQM).
5. *Use of tools*: for problem identification, prioritizing problems, and developing solutions to the problem. QI tools including brainstorming, consensus, criteria/ matrix, flow chart, fishbone diagram, and Pareto chart.
6. Leadership and teambuilding in quality.
7. Medical Audit.
8. Planning for and Implementing QA in health care organizations.

Learning Methodology used in the Course: - Self-placement and self-learning methods.



Reading material (text)- 10 Chapters in total with different objectives and reference material for the same.

Ppt- One in each Chapter

Assignment- Each Chapter has set of exercise with expert's review.

Key Learnings from the Course: -

Chapter-1 (Quality Assurance Concepts)

Importance: For improving efficiency, Effectiveness, and patient satisfaction.

Difference with others industry:

- In health care service is the product.
- Outcome is difficult to measure.
- Industry model ignores the relationship.
- Less importance in education, training, and support.
- Healthcare deals with humans not product.

W. Edward deeming in 1950 formulated the principles and techniques of quality improvement.

- Introduced the concept of total quality management (TQM).
- Focus on process, rather than structure.

Dr. Donna Baden in 1966 proposed system framework with three dimensions



- Quality assurance is not a luxury, it can be improved using same resources.
- Quality Care is competent, carrying, cost effective, timely, minimizing risk, and Achieve benefit.
- Quality can be improved to any level by continuous quality improvement (CQI).

The concept of quality is different to different group of people: -

For patient- Effectiveness, Accessibility, Relationship, Continuity, and Amenities.

For provider - Technical competence, Effectiveness, and Safety.

For managers - Efficiency and effectiveness, Program goals, Technical components of staff, and Performance indicators.

Quality is multi-dimensional:

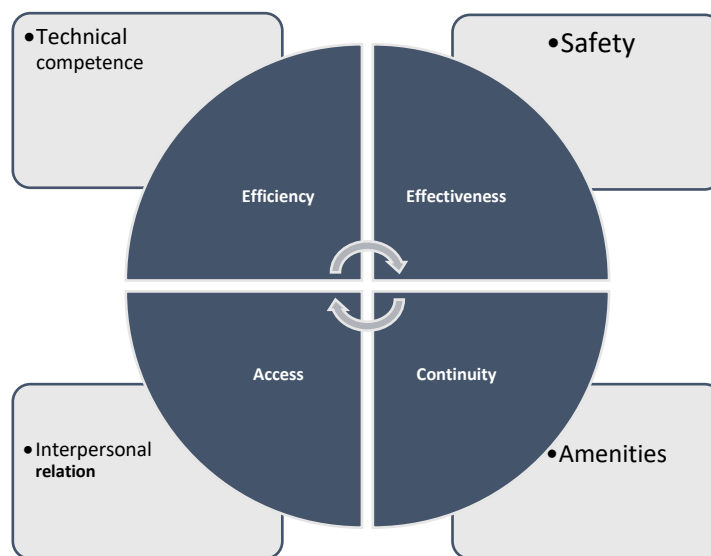


Figure 2: Elements of Quality

Quality improvement approaches are:

- Quality control (QC)
- Quality assurance (QA)
- Quality management (QM)
- Continuous quality improvement (CQI)

Three models of healthcare delivery: -

First professional model - physical content

Bureaucratic model - accreditation

Industrial model

“quality is doing the right thing right the first time and better the next time”

Chapter-2 (Quality Assurance Approach)

Principles: -

There are 5 basic principles of QA we as a manager, need to follow-

1. Commitment and Support- Managers must communicate the importance of quality to staff, and mutual support among them.
2. Customer focused services- To satisfy both internal clients/staffs and external clients/patients.
3. Focusing on process to solve problems- Continuous improvement of process or system rather than ineffective staff.
4. Respecting staff's ability- Empower staff and increase job satisfaction.
5. Decision making based on collecting and using data- Determine the nature and size of the problems, suggest solutions, and justification for the same.

Quality Assurance Cycle:

QA is 10 steps cyclical, dynamic, and ever improving process-

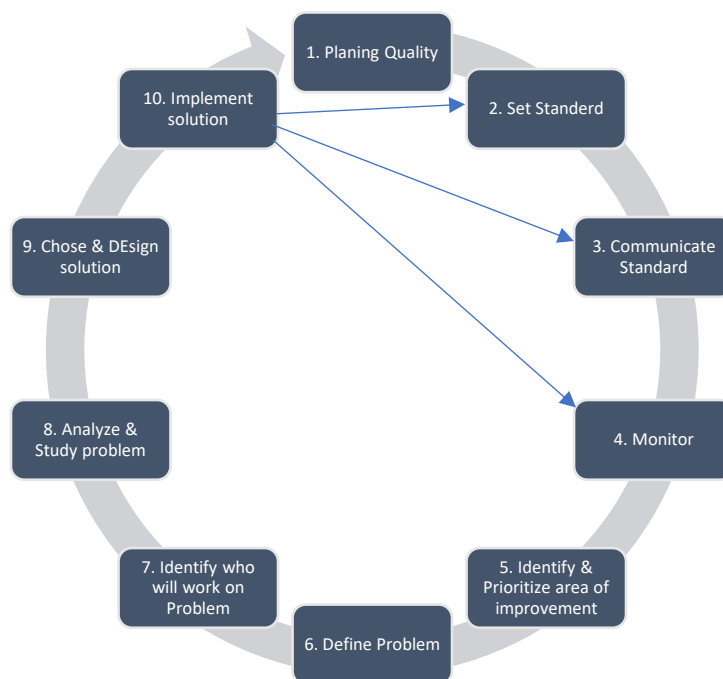


Figure 3: QA Cycle

Chapter-3 (Setting Standards)

What is Standard?

- Standard is a statement of expectations for Inputs, Process, and outcomes at the health system.
- The standards are written & Explicit, these are specific, measurable, achievable, reliable, and valid.

Indicators and Threshold:

- Indicators are measurable variable that can determine degree of achievement of standard.
- It can be clinical or non-clinical.
- Minimum and maximum levels of standards are called Threshold levels.

Standard can also be written as: -

- Guidelines- Steps described by an expert for a procedures/performing task.
- Protocol- More precise & detailed process used for research activities.
- SOP- Statement of expectation from staff towards administrative procedures.

Purpose:

- It provides benchmark for monitoring in QA process
- Important for reducing variation

Process of developing Standard: -

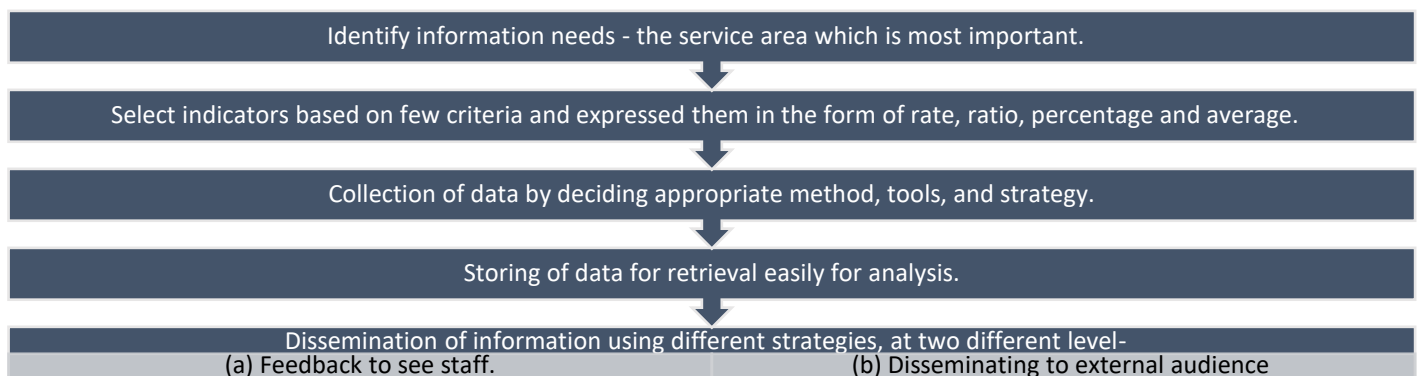
- Step 1- Identification of function or service and the prioritizing based on indicators like- high volume, high risk, problem prone, ability, economic feasibility, and impact.
- Step 2- Identifying inputs, process, and outcomes for the function or services chosen.
- Step 3- Define quality characteristics for 'key elements' in inputs, process, and outcome.
- Step 4- Develop standard by expert in different formats (e.g. statement, guidelines, Algorithm, pathway etc).
- Step 5- Access appropriateness of standard whether it is workable, reliable, and convergent.

Chapter-4 (Monitoring Quality and Supervision)

Purpose and process:

- It's a routine repetitive procedure of collection, analysis, and interpretation of data on some indicators.
- To see if activities and their effects are as expected.

Process of establishing quality monitoring system:



Ways to improve performance:

- Feedback
- Training
- Additional resources
- Provide incentives
- Checklist for observations,
- Involve in process solving

Supervision:

- It's a routine scrutiny of work of subordinate.
- Effective supervision involves providing support, technical assistance, motivation, encouragement etc.
- It can be done by- Observations, Record review, Discussion with staff and community, and People's opinion.
- An effective supervisor must show good Technical and interpersonal skills and show his/her leadership skills in different situation.

Chapter-5 (Assessment of Quality)

- The main purpose is to identify the gaps between expectation and actual service.
- Framework includes assessment of structure/input, Process, and Outcomes.

Structure	Process	Outcomes
• Organizational structure • Physical facilities • Human resources • Equipment • Finances	• Timelines & regularities of activities • Accessibility & Utilization of services	• Morbidity • Mortality • Complication • Client satisfaction

Table 11: QA Framework

Quality assurance approaches: -

1. Situational analysis-

- This can be done by- Visiting Service delivery points, Inventory assessment, Survey statistics, Interviews and observations.
- Uses of situational analysis- Assess training need and equipment requirement, Facility renovation, Supply and Logistics, Data for policy formulation etc.

2. Mystery client studies-

- Useful for accessing users' perspective, it may be real Patient or trained to pose as client. The identity is not disclosed.
- Limitations are- Problems of recalling detail, and Bias of client's views.

3. Client satisfaction studies

- This can be done by-Surveys, focus group discussions, Direct observations of Service delivery, Exit interviews.

4. Patient flow analysis-

- Carried out specially in clinics, OPD, Diagnostic and lab services.
- PFA helps Clinic run more efficiently by reducing waiting time.

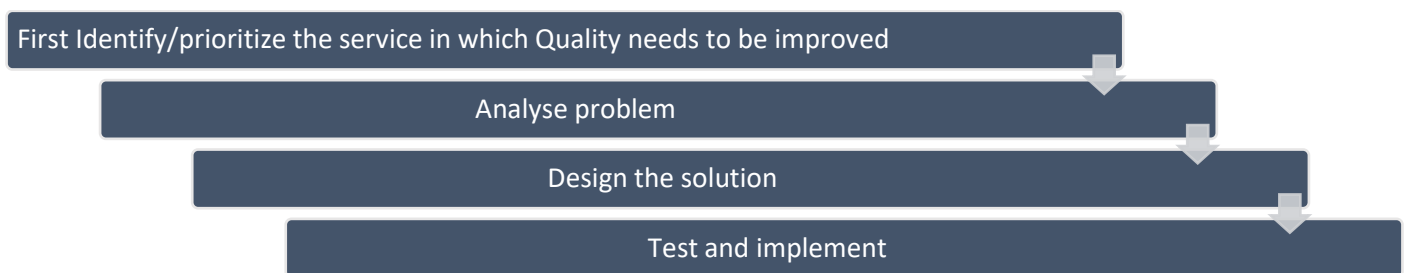
5. Focus group discussions-

- Important in collecting in-depth information.
- Guidelines is prepared and discussions are conducted on planed Tropic and issues.
- Discussions are tape-recorded, Decode and analysed

6. Operation research-

- Useful for- Problem solving, access efficiency and effectiveness, improve quality of service, Improve accessibility and availability
- Steps involves-
 - a. Problem identification & definition
 - b. Strategy intervention selection
 - c. Experimentation and evolution
 - d. Information dissemination
 - e. Utilization of findings

Chapter-6 (Quality improvement tools)



The team can use various quality improvement tools: -

1. Brainstorming- It is a supportive tool and an excellent technique for generating ideas of all the possible causes.
2. Flowchart- Used to analyse the sequence of activities and break up it into sub-steps.

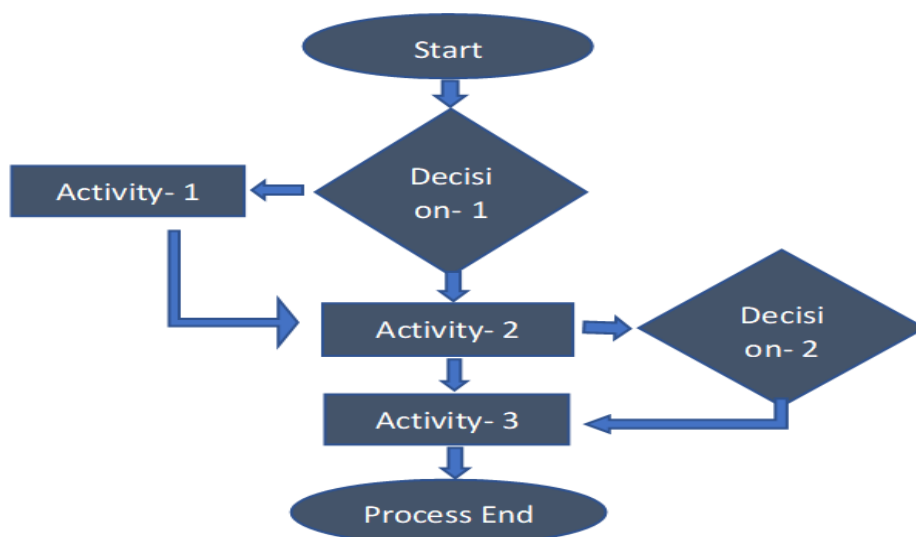


Figure 4: QI Tool (Flowchart)

3. Cause effect/Fish bone diagram- Helpful in determining both the primary and the secondary causes of a problem and analysing ideas generated from brainstorming.

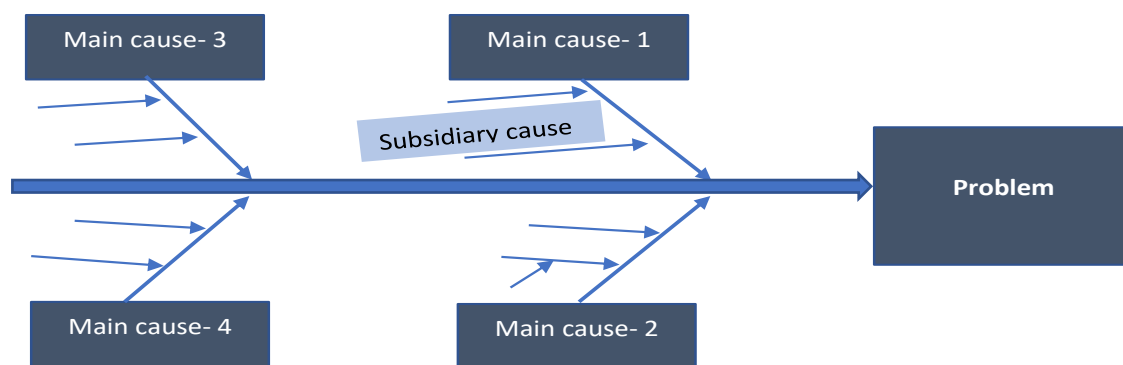


Figure 5: QI Tool (Fish Bone Diagram)

4. Pareto chart- Few vital factors are identified so that resources can be concentrated in those areas for quality improvement.

Cause	Number	% of Total	Cumulative %
A	32	44	44
B	26	27	77
C	8	11	82
D	6	8	90
E	4	5	96
F	3	4	100

Table 12: QI Tool (Pareto Chart)

- A & B are vital (few) causes seventy-seven percent of total.
- Rest is useful (many) Causes 23% of total.

Chapter-7 (Medical Audit)

Needs:

- It is important because Hospital deals with human beings.
- And medical deficiency can cost lives and loss of Health.

Definition:

- Medical Audit is the evolution of Medical Care, through analysis of medical record.

Pre-Requisites for conducting Medical Audit:

- Should be carried out by peer group or clinician working in the same Department.
- Initiative must come from this stuff themselves.
- Good system of medical record-keeping.
- Disease-related criteria must be well defined.

Methodology:

There are six major steps in conducting medical audit-

1. Selection of a disease and criteria development
2. Selection of cases with diagnoses
3. Work sheet preparation
4. Case sheet evaluations and tabulation
5. Analysis of data
6. Preparation and presentation of reports

On-the-spot medical audit:

- The team goes to a ward and carried out audit, when patient & treating team is available.

Chapter-8 (Leadership)

- Leadership is the process of influencing others in a desired direction.
- It is a function of three factors- the leader, the team, and the situation.
- People at different levels are empowered to take up leadership rule.

Leadership function: -

Transactional	Transformational
• Policymaking & Planning • Developing systems • Monitoring performance • Coordinating • Coaching & rewarding • Work is done based on agreed plan	• Vision • Modelling • Setting standards • Building culture and climate • Performance from people beyond expectation

Four basic Leadership style:

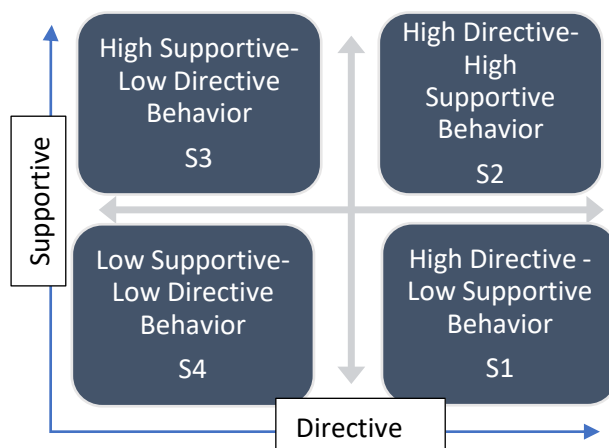


Figure 6: Leadership Styles

- There is no universally best leadership style, it's all depends on the situation.
- Directive/supportive behaviour of a leader depends on the task-relevant development level of the team members.

Developmental levels and Preferred Leadership style:

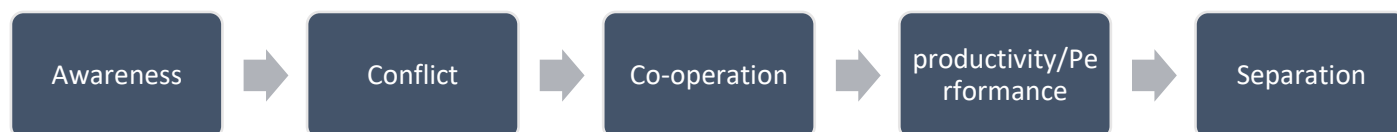
Developmental Levels-	D-1	D-2	D-3	D-4
Characteristics-	High competency High commitment High teamwork	Any 2 High 1 Low	Any 2 Low 1 High	Low competency Low commitment Low teamwork
Leadership Style-	S1- Directive	S2- Coaching	S3- Supportive	S4- Delegating

Chapter-9 (Team Building)



- A team is a group of people working for a common purpose and goal.
- Teams are different from groups.
- Four essential elements of teams are common goal, interdependence, commitment, and accountability.

Process of building team:



Overcoming blockage to team building:

- Most teams have a set of characteristics, which is a sign of mature team- Clear objective, Openness, Support and trust, Cooperation, Standard guidelines, Regular review, Individual development, Interpersonal relation etc.
- And the lack of these characteristics poses as blockage.
- The blockage should be overcome as they arise.

Chapter-10 (Plan of Action)

- The Plan of Action is the final step in the process of developing and implementing Quality Assurance in Health care Organizations.

Process of Developing a Plan of Action:



Implementation Plan:

Activities	Time frame	Resources	Responsible person	Monitoring	Outcome
What activities will be performed	Time period for each activity	What kind of resources needed and their source	Team / person responsible for activity	Who would monitor that activities are conducted as planned and achieving the objective/goal	What is the outcome of each activity

***** *