

REPORT

E-ITEC COURSE ON SUPPLY CHAIN MANAGEMENT

(For Maldives officials)

13th-17th June 2022



SUPPORTED BY
INDIAN TECHNICAL AND ECONOMIC COOPERATION,
MINISTRY OF EXTERNAL AFFAIRS, GOVERNMENT OF INDIA



ORGANISED BY
DEPARTMENT OF COMMUNITY MEDICINE AND SCHOOL OF PUBLIC HEALTH,
POST GRADUATE INSTITUTE OF MEDICAL EDUCATION
AND RESEARCH, CHANDIGARH



CONTENTS

1

PREAMBLE

2

**GOAL AND
OBJECTIVES**

3

**PARTICIPANTS AND
RESOURCE FACULTY**

4

**TEACHING
METHODOLOGY**

5

SCHEDULE

6

**PROGRAM
PROCEEDINGS**

18

**PROGRAM
ASSESSMENT**

19

FEEDBACK



PREAMBLE

Supply chain management is the management of the flow of goods and services and includes all processes that transform raw materials into final products. The supply chain process is the essential link for all programs and services offered by a hospital, and hence any improvement in managing the supply chain can positively impact bottom line profitability of any hospital's operations. Hospital supply chain management has become an important topic these days in the medical field, and its importance seems to be growing exponentially. Most hospitals are faced with very tight budgets, thus in addition being cost-effective in every area as possible. They are responsible for providing highly effective and efficient health care services. Improving healthcare quality in a public or private sector depends directly on its supply chain management efficiency.

Healthcare Supply Chain Management comprises of several processes, involvement of different team members, movement of pharmaceutical drugs, medical devices, and other essential items. The role of healthcare supply chain management is to identify and remove bottlenecks, and other emerging issues arising in the entire supply chain while simultaneously getting control over pointless spending. Health care facilities can respond quickly to any events like natural calamities and pandemics when supply chain activities are managed well by well-trained staff.

In this context, a 5 day online 'e-course on Supply Chain Management' under International Public Health Management Development Program (IPHMDP) was conceptualized in the year 2022 by Department of Community Medicine and School of Public Health with support from Indian Technical and Economic Corporation (ITEC) under Ministry of External Affairs, Government of India. The course aimed at enhancing the supply chain management and procurement related skills of senior procurement officers, hospital managers, senior administrative officers and store managers under Ministry of Health, Government of Maldives. The course was scheduled from 13th June 2022 to 17th June 2022.

This course is first of its kind in the country being conducted for foreign Ministry of Health officials in order to enhance their knowledge and skills in the area of supply and procurement in health sector. The course was fully sponsored by Ministry of External Affairs, Government of India under Indian Technical and Economic Cooperation, Ministry of external Affairs, GOI.

GOAL AND OBJECTIVES

Goal

To improve the skills and competencies required in managing the supply chain system through building their capacity regarding basic concepts, principles and techniques of supply chain by illustration of context specific case studies and real life examples of similar scenarios.

Course Objectives

- To orient the senior procurement officers, hospital managers, senior administrative officers and store managers in concept and principles of supply chain management and efficient procurement procedures.
- To illustrate with relevant context specific case studies, how supply chain can improve overall competitiveness within and outside the organization.
- To equip participants with various strategies and techniques for effective supply chain management.

PARTICIPANTS AND RESOURCE FACULTY

Program Audience

This course is designed for procurement officials, supply chain managers, administrative officials who are organizational leaders working in the domain of supply and procurement and who are responsible for improving the efficiency and effectiveness of their organization. In the current program, a total of 21 participants participated to enhance their skills in supply chain management.



Cohort of supply chain management course

Faculty

The program faculties are eminent experts from premier government medical institutes of India.



Resource persons of supply chain management course

TEACHING METHODOLOGY

Teaching Methodology

The teaching was done through a multi-pronged adult learning pedagogy comprising of live e-lectures, reading materials, assignments, and interactive sessions. Besides this, the participants were engaged with their peers in the discussion forums during the program.



Course Contents

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|----------|--|
| Topic 1- | Demand generation & Assessment: Guesswork or Science? |
| Topic 2- | Specifications: What we want? |
| Topic 3- | Purchase Process: Common pitfalls |
| Topic 4- | Receipt & inspection: Look carefully |
| Topic 5- | Inventory management and equipment utilization |
| Topic 6- | Condemnation: Final destination |
| Topic 7- | Legal and Ethical issues in Procurement: Knowledge is safety |
| Topic 8- | Quality Assurance based procurement: A new approach |
| Topic 9- | What an Auditor looks for? |

Course Duration and Venue

Duration: The duration of program was 5 days (13th June 2022 to 17th June 2022)

Venue: Online on zoom platform

SCHEDULE

Supply Chain management Course

Organized by: Department of Community medicine and school of Public Health, PGIMER, Chandigarh

Sponsored by: Indian Technical and economic Cooperation (ITEC), Ministry of external Affairs, GOI

Program Schedule

Dates: 13-17 June 2022 (5 Days)

Platform: Zoom

Duration: 2:00-5:00 PM (Except on day 1 and day 5)

DATE	TIME	ACTIVITY / TOPICS	RESOURCE PERSON
Day 1 13.06.22	1:30-1:40 PM	Registration	PGIMER team
	1:40-1:50 PM	Welcome and introduction to the course	Dr. Sonu Goel
	1:50-2:00 PM	Pre test	PGIMER Team
	2:00-3:15 PM	Demand generation &	Dr. Pankaj Arora
	3:15-3:30 PM	Mobility break	
	3:30-4:45 PM	Specifications: What we want?	Dr. Shweta Talati
	4:45-5:00 PM	Feedback cum social media break	
Day 2 14.06.22	2:00-3:15 PM	Purchase Process: Common pitfalls	Dr. Vipin Koushal
	3:15-3:30 PM	Mobility break	
	3:30-4:45 PM	Receipt & inspection: Look carefully	Dr Pankaj Arora
	4:45-5:00 PM	Feedback cum social media break	
	2:00-3:15 PM	Legal and Ethical issues in Procurement: Knowledge is safety	Dr. Sidharth Satpathy
Day 3 15.06.22	3:15-3:30 PM	Mobility break	
	3:30-4:45 PM	Condemnation: Final destination	Dr. Navneet Dhaliwal
	4:45-5:00 PM	Feedback cum social media break	
	2:00-3:15 PM	Quality Assurance based procurement: A new approach	Dr. Sonu Goel
Day 4 16.06.22	3:15-3:30 PM	Mobility break	
	3:30-4:45 PM	Inventory management and equipment utilization	Dr. Manjushree Sharma
	4:45-5:00 PM	Feedback cum testimonial break	
	2:00-3:15 PM	What an Auditor looks for?	Mr. Kumar Abhay
Day 5 17.06.22	3:15-3:30 PM	Mobility break	
	3:30-4:45 PM	Value for Money in purchases	Dr. Shankar Prinja
	4:45-5:00 PM	Feedback cum testimonial break	
	5:00-5:10 PM	Post test	PGIMER team
	5:10-5:25 PM	Certificate distribution ceremony	Guest of honor
	5:20-5:30 PM	Vote of thanks	PGIMER team

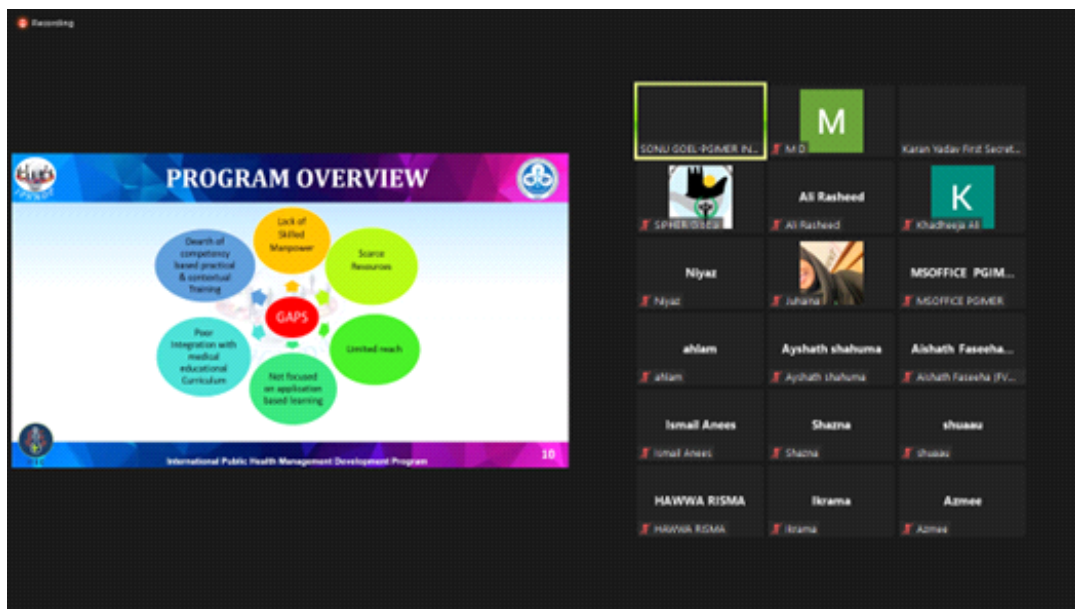
PROGRAM PROCEEDINGS

Day 1

Introductory session

The introductory session started with registration of the participants. This was followed by a pre-test to assess the baseline knowledge of the participants. Following the pre-test, the Program Director Dr. Sonu Goel from PGIMER, Chandigarh, India welcomed the participants and beautifully explained the intricate similarities between the two countries India and Maldives. He also spoke about the relief and rescue efforts of the Indian government during the tsunami that shook the island nation. He urged the participants to take active part and ask interact and discuss with the experts regarding problems and possible solutions in the area of supply and procurement in Maldives and India.

The First Secretary HCI, Male Shri Karan Yadav while highlighting the importance of the premiere institute of India PGIMER, Chandigarh spoke on how the participants will learn the details of procurement from the carefully chosen experts from diverse medical institutions. He mentioned that in coming times both countries can organize a physical course and wished the best to all the participants.



Dr. Sonu Goel welcoming all the course participants

Session 1 - Demand Generation & Assessment: Guesswork or Science?

Dr. Pankaj Arora, Associate Professor, Department of Hospital Administration, PGIMER, Chandigarh.

The first session was taken by Dr Pankaj Arora in which he explained the procurement cycle. While underlining the importance of condemnation he discussed on the topics of demand and specifications. The speaker gave examples from his own experiences of procurement in his work area. He shared the example of Covid vaccination and explained how repeated demands generated for Covid vaccine during the pandemic was successfully managed at PGIMER, Chandigarh. The various forecasting methods were explained with real life examples. The major types of qualitative and quantitative forecasting methods along with their advantages and disadvantages were also discussed. Through real life examples, he showed how one method complements the others as no method is fool proof. Each method of demand forecasting has its own set of challenges and a lot depends on the person or people dealing with demand forecasting. The lecture was followed by group activity which was completed by the participants.

The image shows a video recording of a session. On the left, a presentation slide titled "Demand forecasting" is displayed. The slide content is as follows:

- Forecasting techniques
- Qualitative Methods
 - Grass roots/ user
 - Complete Enumeration
 - Sample
 - Test
 - Sales force composite
 - Panel consensus

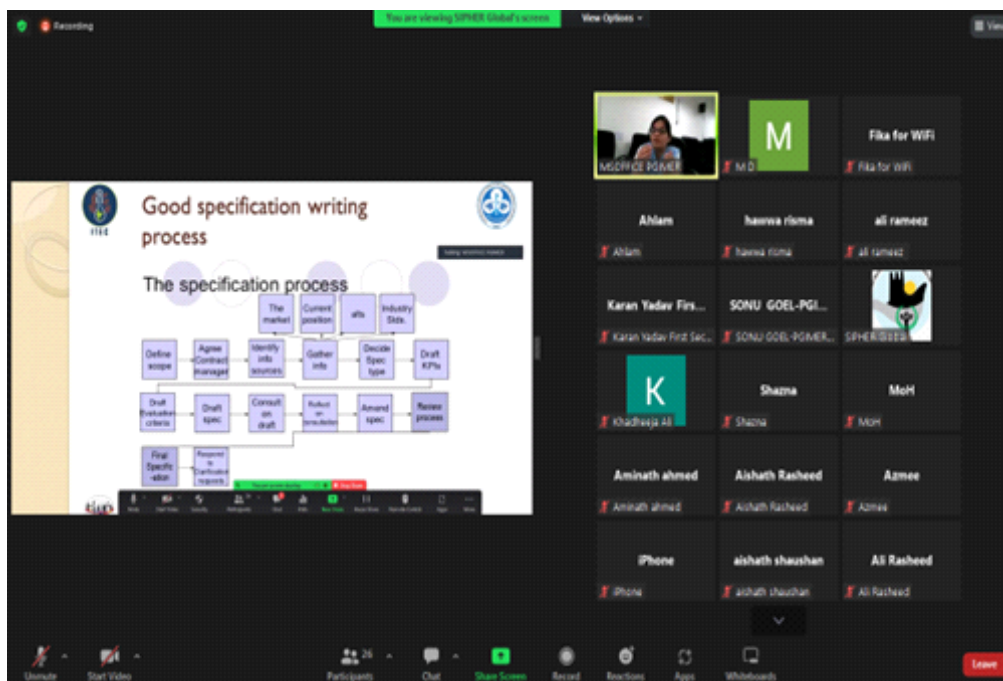
On the right side of the screenshot, a video feed shows Dr. Pankaj Arora, a man with a mustache wearing a white shirt, sitting in a black office chair and speaking.

Dr.Pankaj Arora taking his session on Demand forecasting

Session 2-Specifications: What we want?

Dr. Shweta Talati, Associate Professor, Department of Hospital Administration, PGIMER, Chandigarh.

In the next session, Dr. Shweta Talati gave a group assignment to the participants. All the participants completed the activity very enthusiastically. Building on the assignment, speaker spoke on the importance of specifying ones needs and the various problems that might arise if we over specify or under specify. She gave the example of Sandwich maker and other routine items in the household which she highlighted for accurate specifications. Good specification writing process was also explained with a flow chart. She also mentioned about the pre-bid as one of the way to get as more precise specification in certain situation. Examples of bed sheets, Auto analyser, plasma steriliser, evacuated tubes were discussed in details which made the participants understand the importance of specifications. Later, she asked the participants (in groups) to design the specification of hospital based product services which was discussed at the end.



Dr.Shewta Talati conducting lecture on specifications

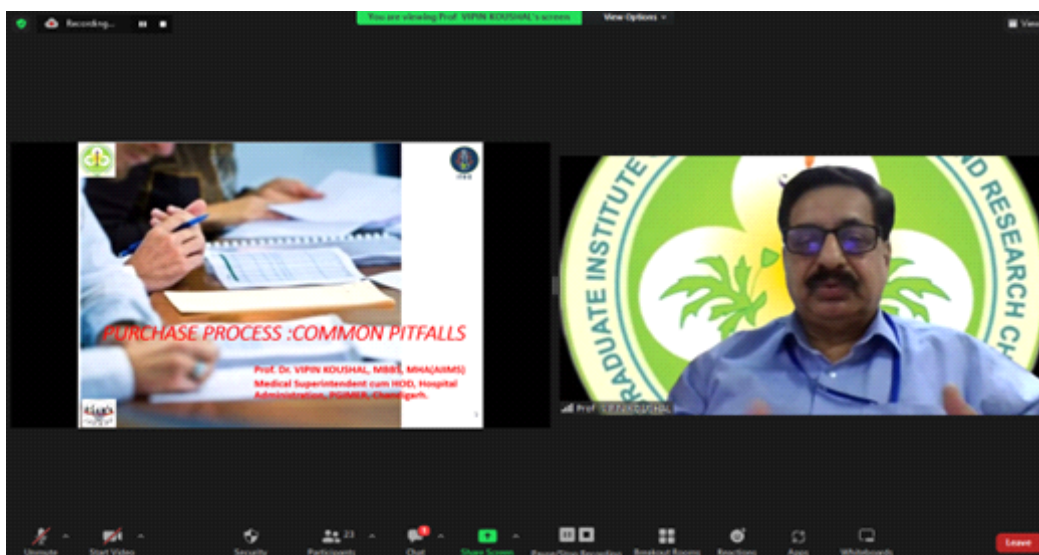
Day 2

The second day began by a brief recap of the previous days learning by the participants. This was followed technical sessions.

Session 1- Purchase Process: Common pitfalls

Dr. Vipin Koushal, Professor and Head, Department of Hospital Administration, PGIMER, Chandigarh.

The first session of the day began with introduction of the very important topic of scheduling procurement which was explained in detail by Dr.Vipin Koushal. He explained the need to plan procurement beforehand. After explaining tendering process in sufficient details (with examples) and the steps involved in tendering, he demonstrated the importance of money and time in the process. The speaker also explained about important component of tendering viz. cost of tender, date of issue, general terms and conditions and instructions to bidders. Dr.Koushal showed how purchase of goods are done by obtaining bids and the different types of bids were also discussed. The very important topic of scrapping of tender was also taught and he discussed at length the reasons wherein scrapping of tender can be done with the help of suitable real life examples. Towards the end of the session Dr.Koushal interacted with the participants regarding the problems in procurement process that they are facing in their country and discussed suitable ways to overcome those problems.



Dr.Vipin Koushal during his session on purchase process

Session 2- Receipt & inspection: Look carefully

Dr. Pankaj Arora, Associate Professor, Department of Hospital Administration, PGIMER, Chandigarh.

This session covered the functions of receipt and the process of receiving materials that are of different qualities as well as ways to avoid pilferage during the procurement. Dr. Pankaj outlined the need to ensure right material and right quantity during receipt. He also described the importance of receipt and inspection area which is not planned in several departments creating huge bottleneck. All the steps of receipt and inspection were then explained. The pre-receipt inspection scenarios were discussed with examples. Dr. Pankaj also elaborated on the several ways of carrying out inspection. Some of the main ways of carrying out inspection depending upon the condition which were discussed were-virtual inspection, inspection of documents, in-house inspection and inspection through external sources. The concept of in-house inspection was explained with the help of example of GSM paper, surgical gloves etc. the lecture was followed by active discussion with the participants wherein the common pitfalls of receipt and inspection was discussed and potential solutions suggested by the expert.



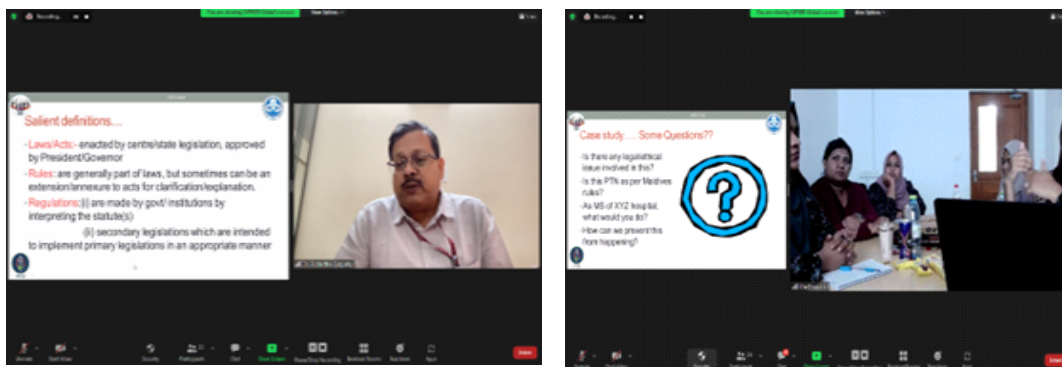
Dr. Pankaj arora explaining Receipt and inspection process

Day 3

Session 1 - Legal and Ethical issues in Procurement: Knowledge is safety

Dr. Sidharth Satpathy, Professor and Head, Department of Hospital Administration, AIIMS, New Delhi.

This session focused on legal and ethical issues in procurement. Taking perspective of both India and Maldives, the speaker introduced the participants to definitions of laws, rules and regulations taking appropriate examples. Dr. Satpathy explained in details about the need for knowledge of legal and ethical issues in procurement. He cited several examples from Maldives while teaching the participants about the need for ethical behaviour in procurement. The scores of Maldives and India in the Corruption Perception Index 2022 was also discussed. The five rights of public procurement which are- correct rules and regulations, right items and specifications, right quantity and quality, right payment and right documentation were explained in sufficient detail. Several related acts including the Drugs and Cosmetics Act, Narcotic and psychotropic substance act which are currently applicable in India were also discussed. The CVC guidelines 2007 and that are in place in India was also discussed (ethical guidelines for store personnel). Towards the end, a case study on equipment procurement was discussed with the participants and questions from participants were taken up and discussed in details.

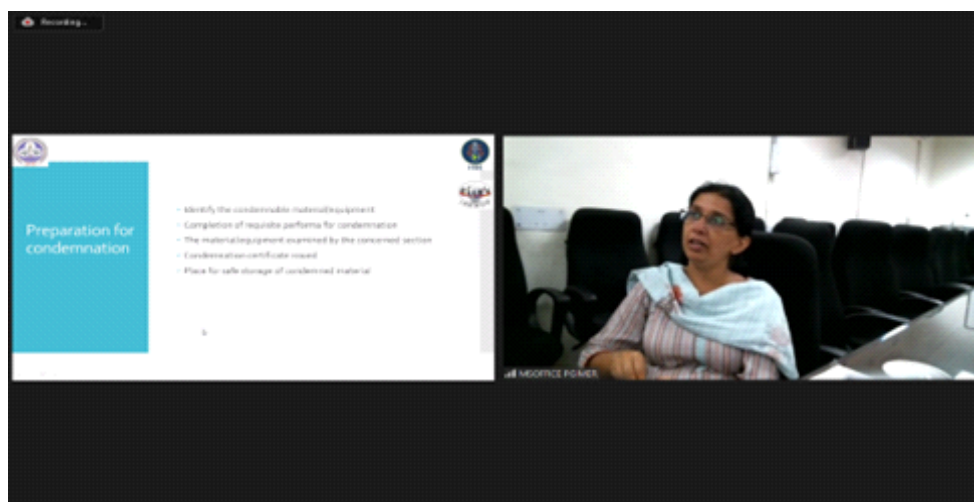


Dr.Sidharth Satpathy presenting his session and discussion with participants on case study

Session 2- Condemnation: Final destination

Dr. Navneet Dhaliwal, Associate Professor, Department of Hospital Administration, PGIMER, Chandigarh.

The speaker spoke on the need for condemnation with special focus on equipment condemnation. The several reasons for condemnation like –shelf life over, usage over, serviceability over, change in technology, becoming hazardous or having surplus were outlined. The process for preparation of condemnation were discussed step by step. The identification of appropriate items of condemnation, followed by completion of the Performa, examination by the concerned section, issuance condemnation certificate issue and finally safe storage of material for condemnation were discussed. The authorized person for condemnation along with condemnation committee constitution were also deliberated. Thereafter, the entire process of condemnation was discussed at length starting from fixing date, time and space for condemnation, type of item for condemnation, physical evaluation of items, creation of separate lots, entry into records, value of stock to finance division. The disposal mechanisms like buy back, tendering, local disposal, public auction, transfer, salvage of parts was elaborated upon with suitable examples. Dr.Navneet also explained the concept of Earnest Money Deposit and Reserve Price to the participants. The lecture was followed by giving assignment for designing a condemnation certificate and on spelling out terms and conditions for e-waste disposal to the participants.



Dr.Navneet Dhaliwal explaining condemnation process

Day 4

Session 1 - Quality Assurance based procurement: A new approach

Dr.Sonu Goel, Professor, Department of Community Medicine and School of Public Health, PGIMER, Chandigarh.

The first session of the day was conducted by Dr.Sonu Goel . He shared his experiences as linen manager and logistics manager at PGIMER to drive home the need for quality management in procurement. He explained quality assurance is important in every step of supply chain management. He emphasised that procurement should be done with the aim of effective purchasing, safety, and quality and it should not be focused on price alone. He defined quality assurance as a part of overall quality management. And he highlighted that quality assurance provides confidence that the products are of quality required for intended use. Further he also emphasized the need to think of quality purchase take consumer demand into consideration. The 10 determinants of healthcare product quality- quality control, raw materials, manufacturing process, packing and labelling, regulatory approval, transportation and distribution and storage were dealt at length. The quality assurance framework for procurement was taught with suitable examples. Internal and external quality assurance techniques were discussed in details and inputs of participants sought.

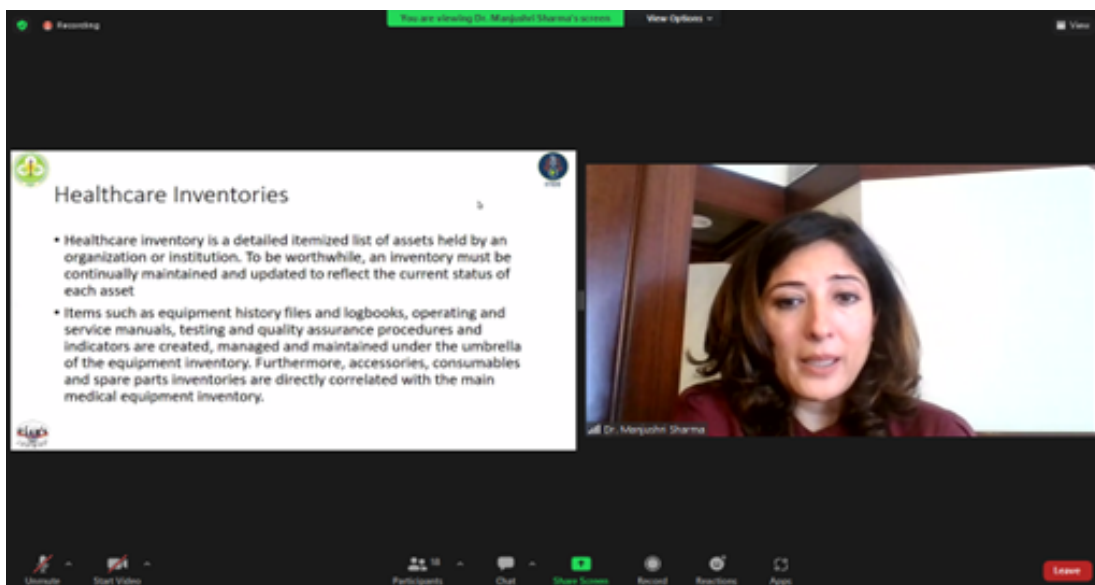


Dr. Sonu Goel explaining the techniques of Quality assurance in procurement process

Session 2- Inventory management and equipment utilization

Dr. Manjushree Sharma, Assistant Professor, UIAMS, Panjab University, Chandigarh.

Dr. Manjushree spoke on the very important topic of healthcare inventory ,its components and the items constituting it. The issues of hospital inventory management like tricky trade-off between inventory costs and level of service required; management of surgical supplies and instruments with due consideration to surgeons request were also explained. The speaker elaborated regarding decision making approaches in hospital inventories like inventory oriented models and supply chain oriented models. The important terms like order cost, inventory carrying cost, shortage cost ,dead time, lead time ,consumption stock and safety stock were explained to the participants. The economic order quality (EOQ) , ABC analysis technique, its definition and the Pareto principle was deliberated with participants. VED classification was also explained with examples of paracetamol tablets and adrenaline injection. The ideal method of ABC-VED matrix analysis was then explained to the participants. Thereafter, equipment utilization, dimensions of equipment planning, selection procurement, training of personal and utilization audit were taught. The concept of equipment audit in terms of total cost of ownership and utilization coefficient was also taught. The session ended with assignment on inventory management which the participants completed with much enthusiasm.



Dr. Manjushree Sharma taking session on inventory management

Day 5

The penultimate day of the entire course started with recap of the previous day sessions by the participants.

Session 1-What an Auditor looks for?

Mr.Kumar Abhay , Financial Advisor , PGIMER, Chandigarh.

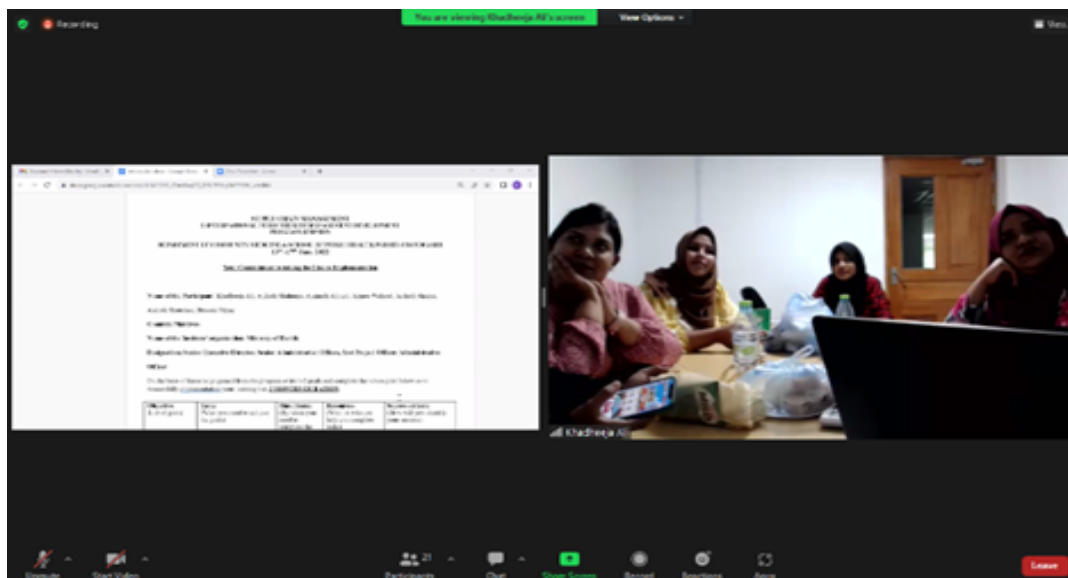
In this session Mr. Kumar Abhay spoke about the need for audit and its relevance to procurement as this involves public money. Besides many reasons for conducting audit, he told it gives motivation and reasons to work. He explained that an auditor look for deviation from accepted standards and violations of principles of legality, efficiency, effectiveness and economy of financial management which leads to early identification of problems and helps in taking corrective action. He explained that nowadays audit is not limited to financial and accounting but it has become an independent act to measure overall performance vis a vis its mandate. Property audit and certification audit were also explained. The differences between internal and external audit were discussed and advantages and disadvantages were also explained. Audit process including audit, planning execution ,reporting and follow up with action taken was explained. The remote location audit was also explained.



Mr.Kumar Abhay during his session

Session 2-Development and Discussion of Action plan by participants

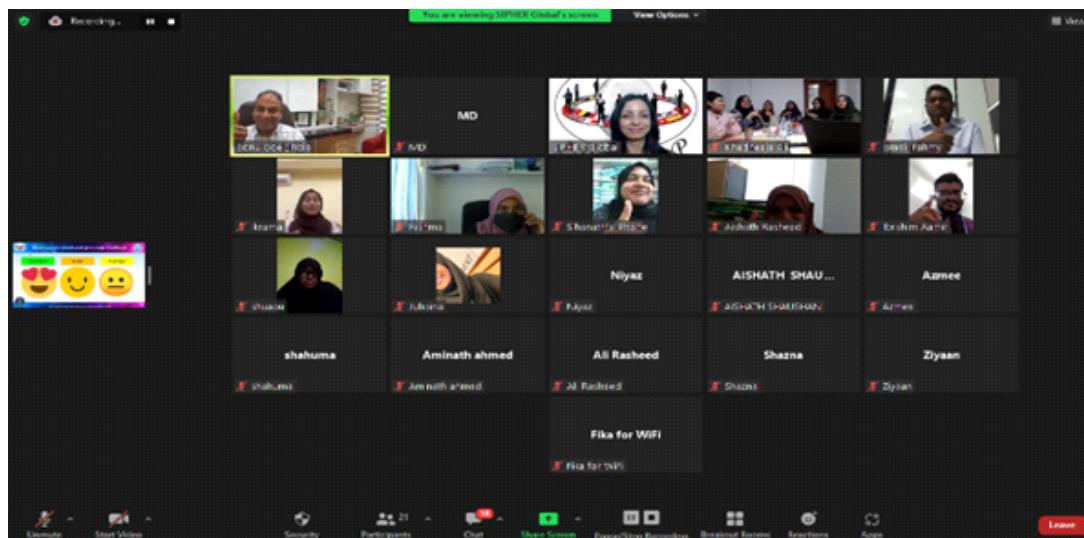
The session was followed by development of action plan by the participants in which they laid down their idea to implement the learnings in their settings. The first participant to discuss her action plan was Ms Ikrama, Senior Procurement Officer, Maldives. She explained that her action plan objective is condemnation of assets based upon the principles learnt in the current course. For this, she would first identify items, list them, enter in records and time frame was within 2 weeks. Thereafter, participants from Ministry of Health which included senior executive director, senior admin officer ,assistant project officer and admin officer ;they shared their action plan on development of inventory management software. They shared that they will need info from health facilities and IT professionals for development of the software. Another participant Ms Khadeeja Ali shared her action plan to develop e-tendering and outlined the steps for making a digital platform.



Course participants discussing their Action plan

Felicitation Ceremony

This session was followed by speech by Guest of Honour Sri Karan Yadav, First Secretary HCI, Male who mentioned the need for training on e-tendering and said he will take up this with the International Division of Ministry of Health so that Senior officials from Maldives can visit PGIMER, Chandigarh and vice versa to obtain training in e-tendering. He recommended that e-tendering training, there is a need for development of efficient HMIS like software for inventory management which can also be taken up with eminent institute of India.



All participants during their feedback session for the course

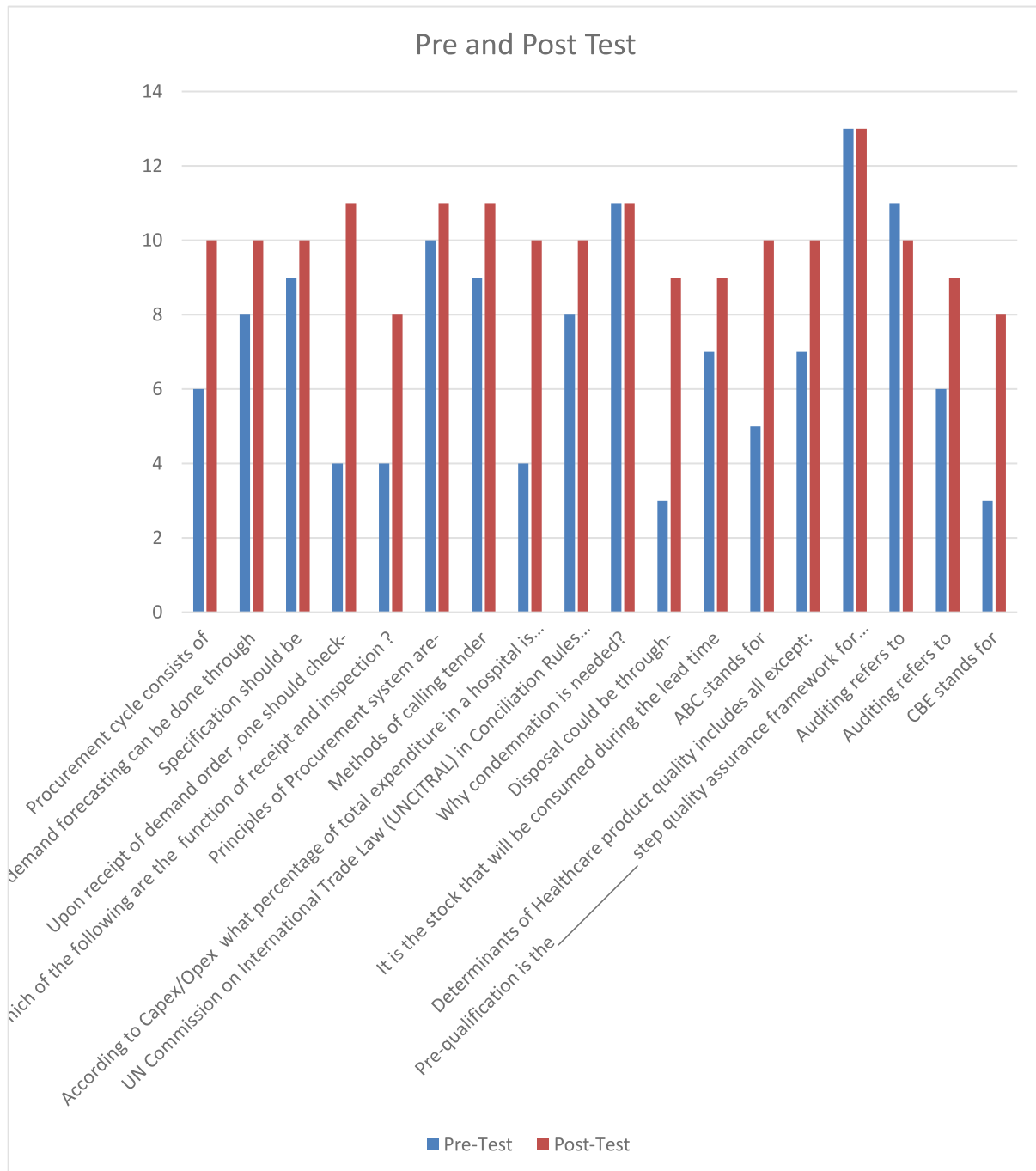
After the speech of Guest of Honour, participants shared their feedback by giving testimonials. They shared that they liked all the lessons taught under the course and as everyone works in procurement, they will be very helpful for them. They expressed their gratitude towards ITEC for giving them the opportunity to learn and mentioned that they will look forward to more of such courses on supply chain management.

This was followed by post test in which the learnings of the participants was tested. All participant scored well in the post test. Finally the valedictory ceremony with distribution of certificates to all the successful participants was done and also the contest winners were announced for the best voracious reader and most active participant. Lastly, Mr.Karan Yadav thanked all the participants and ITEC MEA, PGIMER, Chandigarh for a very insightful course. He mentioned that he looks forward to a physical training of Maldives Officials in PGIMER, Chandigarh.

Dr. Sonu Goel offered the vote of thanks and thanked Mr. Karan Yadav for his commitment and initiative. He said that both PGIMER and AIIMS New Delhi are premier institutions and program provided mutually benefited learnings of participant and faculty. He informed the participants about several upcoming courses offered by ITEC and asked them to apply for the same. He mentioned that he would follow up with ITEC- MEA regarding physical trainings.

PROGRAM ASSESSMENT

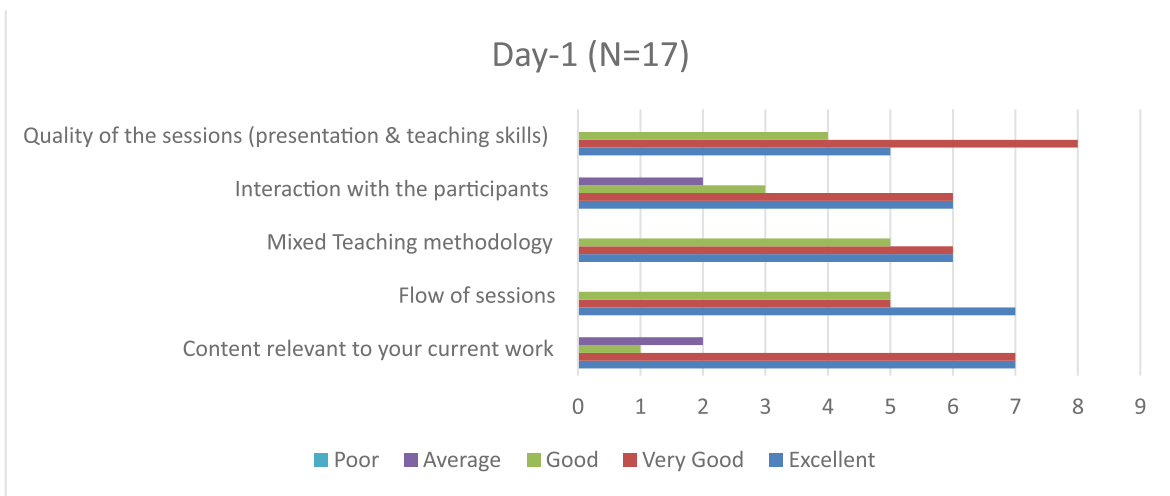
The pre and post test scores of the course participants were used for assessment of the course. It was found that majority of the participants had significantly improved their scores after attending all the course modules.



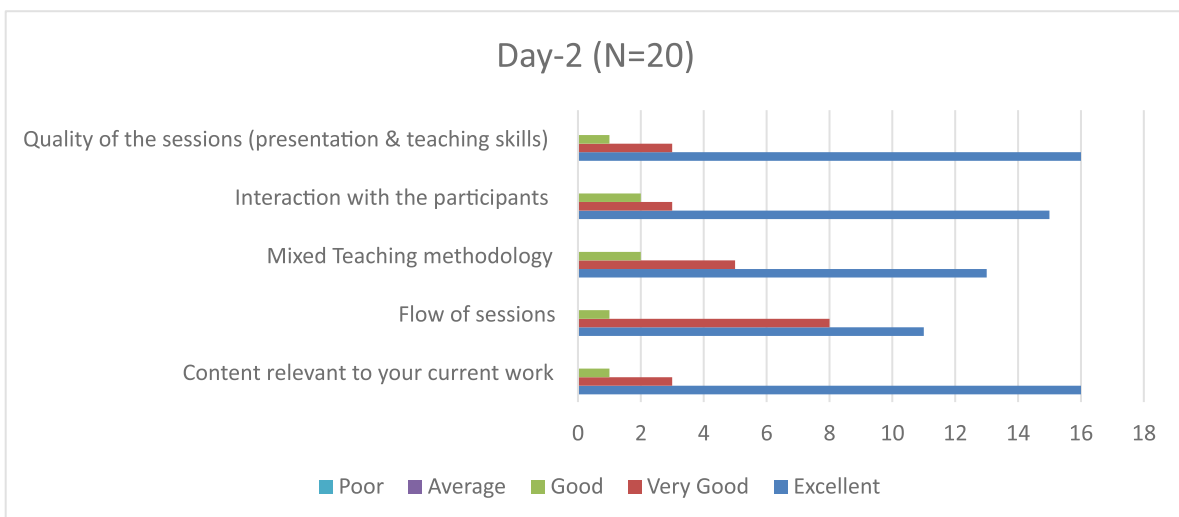
FEEDBACK

The course feedback received showed majority of the participants strongly agreed that the presentations, teaching pedagogy and learning were very relevant. They also agreed that the facilitators of the course were well prepared and the online platform was user friendly.

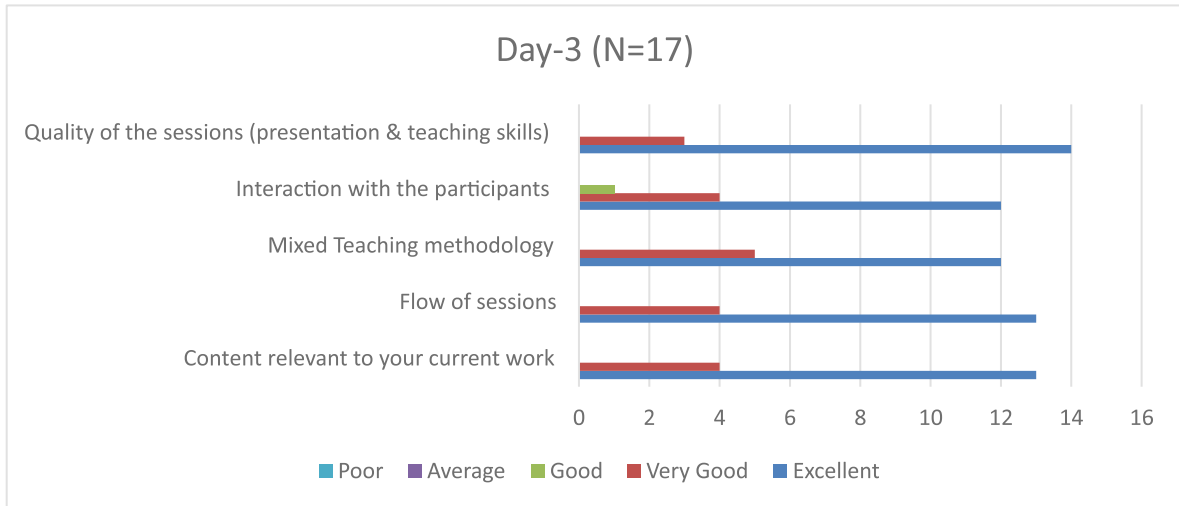
Day 1 Feedback



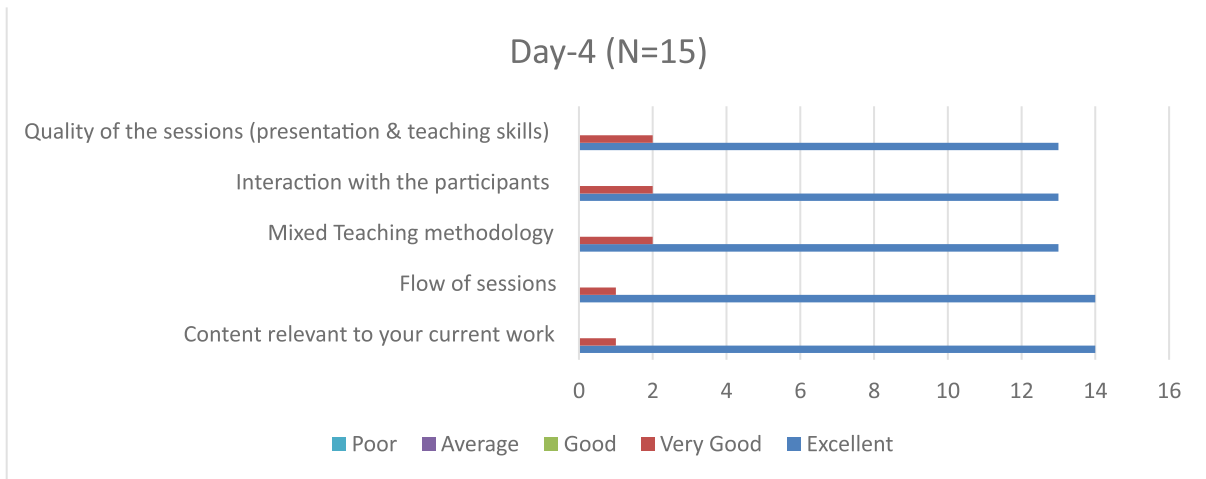
Day 2 Feedback



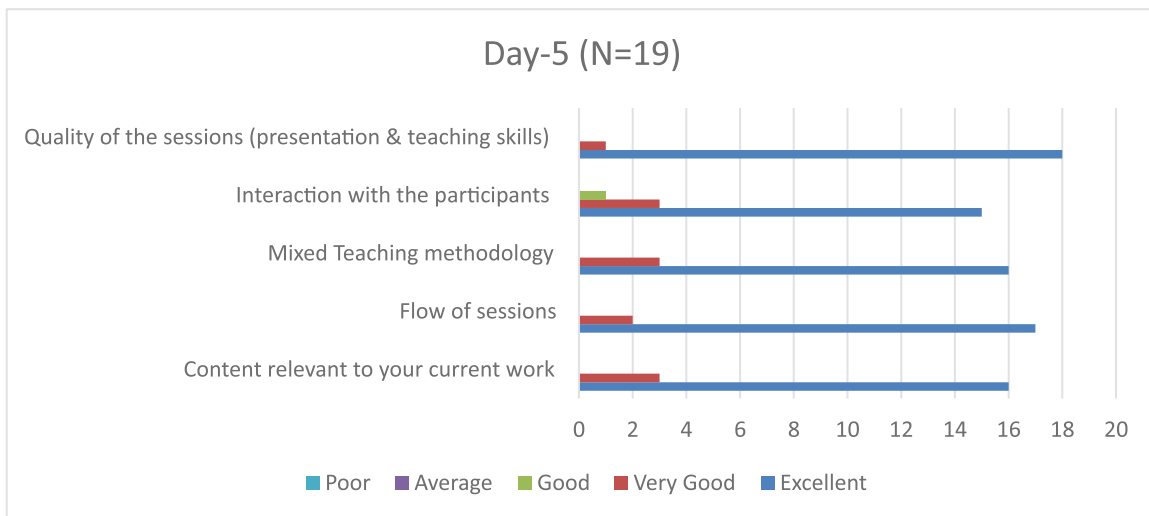
Day 3 Feedback



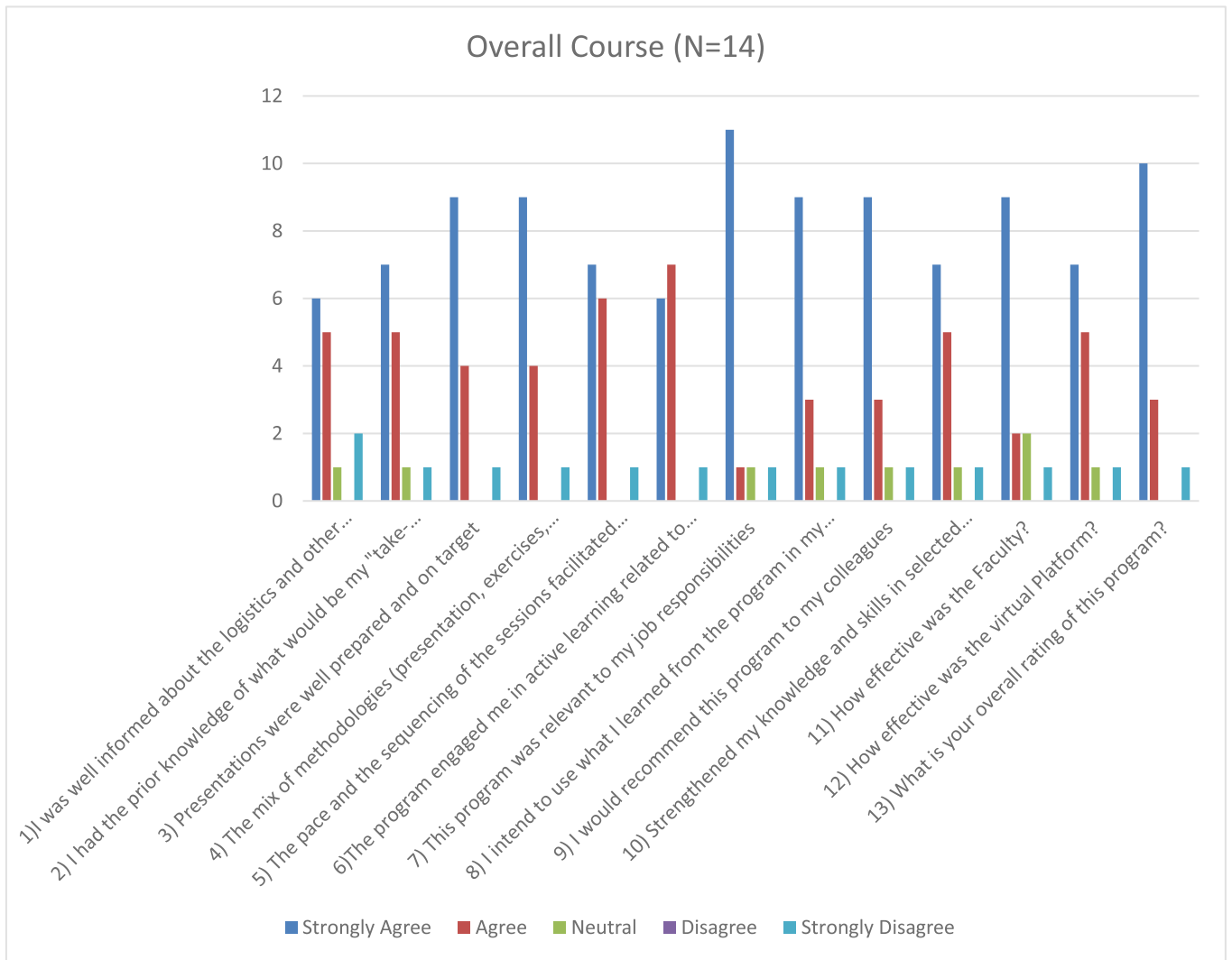
Day 4 Feedback



Day 5 Feedback



OVERALL FEEDBACK



ABOUT US

Post Graduate Institute of Medical Education & Research, Chandigarh

Who We Are

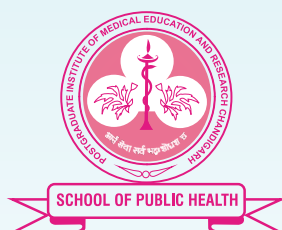
The Postgraduate Institute of Medical Education and Research (PGIMER) is based in Chandigarh (city beautiful in North India) and was established in 1962 by then Prime Minister of India, Pt. Jawaharlal Nehru. It was declared as an Institute of National Importance by an Act of Parliament of India on 1st April 1967 and is currently an autonomous body functioning directly under the Ministry of Health and Family Welfare, Government of India. PGIMER has almost all specialties and super-specialties departments. The Department of Community Medicine was instituted in 1977 with the purpose of developing effective models of health service delivery for rural communities and for providing community health orientation to public health professionals. To address emerging challenges in public health education and research, the Department of Community Medicine was upgraded to School of Public Health (SPH) in the Tenth Five Year Plan of India (2002-06).

What We Do

Department of Community Medicine and School of Public Health conduct post-graduate teaching programmes and short-term training courses on various public health issues. Besides, we are also involved in several research projects in collaboration with national and international organizations (like DBT, ICMR, WHO, UNICEF, UNFPA, DFID, MOH & FW, and MOE&F etc.) and state governments. We also provide consultancy services to state and central health services on public health matters and national programs/projects. Each year nearly 45 training programs are conducted with an average attendance of 30 participants per course. We also deliver population based health services to approximately 80,000 population in rural, urban and slum communities of Haryana, Punjab and Chandigarh. SPH has developed various public health models which have been successfully scaled and replicated across country.

What We Offer

We offer regular Doctor of Philosophy (PhD), Doctor in Medicine (MD), Post Graduate Diploma in Public Health Management (PGDPHM), and Masters of Public Health (MPH) along with various short-term courses in areas of epidemiology, health management, health promotion, communicable and non-communicable diseases.



Department of Community Medicine and School of Public Health,
Post Graduate Institute of Medical Education and Research, Chandigarh (India)

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