

Internship training  
At  
NATIONAL BOARD OF EXAMINATIONS

(Feb 09 – May 1, 2015)

Evaluation of Utility of CME Workshops - Among Residents Doctor in  
Cardiology

By

Dr. Jyoti Saini

PG/13/030

Under the Guidance of

Dr. Ashok Agarwal

Post graduate program in Hospital & Health Management

(2013-2015)



INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT RESEARCH  
NEW DELHI

To Whomsoever It May Concern

Date:

This is to certify that Dr. Jyoti Saini in recognition of having successfully completed his internship in the department of "Training & Monitoring" and successfully completed her project On Evaluation of Utility of CME Workshops Among Cardiology DNB Trainees



B.N. KHATRI

Deputy Director

National Board of Examinations

बी०एन० खत्री / B.N. KHATRI  
उप निदेशक / Deputy Director  
राष्ट्रीय परीक्षा बोर्ड / National Board of Examinations  
स्वास्थ्य एवं परिवार कल्याण मंत्रालय, (भारत सरकार)  
Ministry of Health & Family Welfare, (Govt. of India)  
ए-207, अर्थ विभाग / Arsal Nagar, New Delhi-110002

TO WHOMSOEVER MAY CONCERN

This is to certify that Dr. Jyoti Saini student of post Graduate Diploma in Hospital and Health Management (PGDHM) from International Institute of Health Management Research, New Delhi has undergone internship training At National Board of Examinations from 09/2/2015 to 1 /05/2016.

The Candidate has successfully carried out the study designated to her during internship training and her approach to study has been sincere, scientific and analytical.

The internship is in fulfillment of the course requirements.

I wish her all success in all his future endeavors.



Dr. A.K Agarwal  
Dean, Academics and Student Affairs  
IIHMR, New Delhi

Name of Mentor  
IIHMR, New Delhi

Certificate of Approval

The Following Dissertation Titled "Evaluation of Utility of CME workshops Among Cardiology DNB Trainees" at National Board Of Examinations is hereby approved as a certified study in management carried out and presented in a manner satisfactorily to warrant its Acceptance as a prerequisite for the award of Post Graduate Diploma in Health and Hospital Management for which it has been submitted . It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein but approve the dissertation only for purpose it is submitted.

Dissertation Examination Committee for Evaluation of dissertation

Name

Prof A K Aggarwal

Prof S. Satpathy

VINAY TEJADU

Signature

Aggarwal

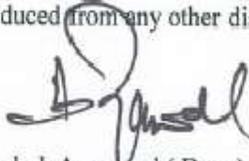
Satpathy

Vinay

Certificate from Dissertation Advisory Committee

This is to certify that Dr. Jyoti Saini, a graduate student of Post- graduate Diploma in Health and Hospital Management has worked under our Guidance and supervision. He / she is submitting this Dissertation titled "Evaluation Of Utility Of CME Workshop Among Cardiology DNB Trainees" At National Board Of Examination in partial fulfillment of Requirements for the award of Post Graduate Diploma in Health and Hospital Management.

This dissertation has the Requisite standard and to best of our knowledge no part of it has been reproduced from any other dissertation, monograph, report or book.



Dr. Ashok Aggarwal ( Dean)  
IIHMR, New Delhi

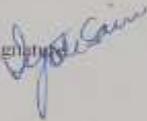


Dr. Bipin Batra  
Executive Director  
National Board Of Examinations

INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT RESEARCH  
NEW DELHI  
CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled "Evaluation of Utility of CME Workshops among Cardiology DNB Candidates" and Submitted by Dr. Jyoti Saini Enrollment No. PG/13/030 under the supervision of Dr. Ashok Agarwal for award of Postgraduate Diploma in Hospital And Health Management of Institute carried out during the period from 09/2/2015 to 01/5/2015 embodies my original work and has not formed the basis for award of any degree, Diploma associate ship, fellowships, titles in this or any other Institute or other similar institution of higher learning.

Signature



FEEDBACK FORM

Name of Student: Dr. Jyoti Saini

Dissertation Organization: National Board of examinations

Area of Dissertation: Training & Monitoring

Attendance: Complete

Objectives Achieved: *Satisfactorily*

Deliverables: Evaluation of Utility of CME Workshops Among Cardiology  
DNB Trainees

Strengths:

Suggestions for Improvement:

*B.N. KHATHU*  
Signature of Officer

बी.एन. खठु / B.N. KHATHU  
उप निदेशक / Deputy Director  
राष्ट्रीय परीक्षा बोर्ड / National Board of Examinations  
स्वास्थ्य एवं परिवार कल्याण विभाग, भारत सरकार  
Ministry of Health & Family Welfare, Govt. of India

Date:

Place:

## ABSTRACT

CME is educational activities that serve to maintain, develop, or increase the knowledge, skills, and professional performance and relationships that a physician uses to provide services for patients, the public, or the profession. Understanding what CME tools and techniques are most effective in disseminating and retaining medical knowledge is critical to improving the effectiveness of CME and thus Diminishing the gap between evidence and practice.

To assess the effectiveness of CME Workshops among Cardiology Trainees, the Study was taken with prime Objective to measure the Benefits gained by trainees in Cardiology Workshops through the feedback taken from them through the Questionnaire. Questionnaire was forwarded to Residents Doctor in Cardiology with sample size of 200 trainees. Study Results have shown positive results indicating that trainees are able increase their knowledge, skills and performance to provide services for patients. Trainees are able to learn about new and developing areas of their field. Thus it is necessary to conduct CME Workshops to update the knowledge of health personnel.

## ACKNOWLEDGEMENT

Any attempt at any level cannot be satisfactorily completed without the support and guidance of learned people. I owe a great debt to all the professionals at National Board of Examinations, New Delhi for sharing generously their knowledge and time, which inspired me to do our best during my internship training.

I would like to express my immense gratitude to Dr. BIPIN BATRA, Executive Director of National Board Of Examinations , New Delhi , NBE for its excellent guidance, constant support and encouragement without which the successful completion of this project would have been a distant reality. His critical approach, guidance, and encouragement have helped me to bring this subject to a successful completion

I am glad to acknowledge Prof. Dr.Ashok Agarwal Dean, Academic and Students' Affairs, IIMR for incorporating right attitude into me towards learning and for helping and supporting whenever required. His tireless pursuit for perfection and professional insight were source of constant inspiration to me.

I would like to extend my sincere thanks and profound gratitude to Mr. B.N. KHATRI, Deputy Director, and NBE for providing me with a good environment and facilities to complete this project.

## TABLE OF CONTENTS

Preface	
Abstract.....	8
Acknowledgement.....	9
Table of contents.....	10
List of Figures.....	11
List of Abbreviations .....	12
Chapter 1: Internship Report.....	13
1.1 Organization profile.....	14-15
Chapter 2: Dissertation Report.....	16
2.1 Introduction.....	17-18
2.2 Title of study.....	19
2.3 Objectives.....	19
2.4 Review of literature.....	20
2.5 Methodology.....	21
2.5.1 Study area.....	21
2.5.2 Study Design.....	21
2.5.3 Study Sample.....	21
2.5.4 Tools & Technique.....	21
2.6 Study Results.....	22-26
2.7 Discussion.....	27
2.8 Limitation of study.....	28
2.9 Conclusion.....	29
2.10 Recommendations.....	29
2.11 Annexure.....	30

List of Figures

Figure 2.6.1 Showing Benefits gained by CME to Residents Doctors in Cardiology.

## List of Abbreviations

NBE	National board of Examinations
DNB	Diplomate of National Board
MIC	Medical council of India
CME	Continuous medical Education
AAMC	American Association Of Medical Colleges
ACCP	American College of cardiology Physicians
EPC	Evidence based practice center
KQ	Key questions

# *CHAPTER 1: INTERNSHIP REPORT*

## **1.1 ORGANIZATIONAL PROFILE**

Since 1982 NBE has been functioning in the field of post graduate medical education. NBE is the only examining body of its kind in the country in the field of medical sciences. Continuing evaluation of quality and validity of the measurement mechanism and standards of examinations by constant interaction with experts in various disciplines of modern medicine and allied specialties are among its important activities.

NBE conducts examinations in 65 disciplines and subspecialties of modern medicine and has accredited approximately 470 institutions/hospitals in public and private sector all over the country for Broad specialty, Super specialty and Fellowship courses.

Considering the fact that India has the expertise in various sub-specialty areas with centers having high tech equipment and trained manpower performing exceptional quality work and also keeping in mind the need to increase manpower that can render highest degree of professional work, the National Board is also conducting Fellowship programme in 16 sub-specialties.

NBE at present conducts postgraduate and postdoctoral examinations in approved specialties leading to the award of Diplomate of National Board. The Medical Council of India has laid down standards for postgraduate examinations conducted by various medical colleges and affiliated to concerned universities and other institutions, yet the levels of proficiency and standards of evaluation vary considerably in these institutions. NBE provides a common national standard for assessment of postgraduate and postdoctoral training.

The Diplomate qualifications awarded by the National Board of Examinations have been equated with postgraduate degree and postdoctoral level qualifications of universities by the Government of India, Ministry of Health and Family Welfare. The holders of NBE qualifications awarded after an examination are eligible to be considered for specialists' posts in any hospital and for teaching positions at academic institutions. The holders of NBE qualifications awarded after an examination i.e. DNB, are eligible to be considered for specialists post / faculty in any hospital including training / teaching institution on a teaching post / as faculty members / teacher / Assistant Professor/ lecturer.

National Board of Examinations conducts DNB CET, CET-SS, PD-CET, Screening Test and Fellowship Entrance Examination maintaining a candidate interface of over 1,50,000 candidates per year and more than 2000 faculty members and specialty experts from leading medical institutions of the country.

National Board of Examinations in its continuous endeavor to undertake capacity building and strengthen the Post Graduate Medical Education in the country conducts Continuing Medical Education Programme, Knowledge assessment workshops, satellite based interactive teleconference & radio sessions, Formative assessment and local appraisal for the benefit of post graduate trainees, faculty and specialists/ consultants.

# CHAPTER 2: DISSERTATION REPORT

## 2.1 Introduction

Continuing medical education programmes help health professional to be in touch with rapid advances in biomedical knowledge like newer methods, research, technology and clinical practice. Changing Expectations of physicians as effective communicators and team members, enhanced awareness of role of physicians in disease prevention, incorporation of evidence-based medicine, accountability and financial advances into daily medicine practice, changes work environments as more care moves to ambulatory settings make the necessity of CMEs to be organized regularly.

CMEs are used as evidence of competence for medical practice when granting re- licensure to medical institutions, hospital privileges, specialty recertification, professional society membership and recognition for selected other professional activities.

Topic of a CME may be selected depending on learning needs of delegates. Need for better coalition of educational content and goals with evolving societal needs, practice patterns and scientific developments. Actions must take place at national, local and individual levels. There is need for rigorous analytic approach, where CME content is determined according to assessed needs and CME is evaluated using outcome measures. In an article the authors have tried to define the action steps to enact a new vision of CME where in they have indicated the need to collaborate to develop and implement new systems to measure learning. They have mentioned that CME outcomes assessment, measures to validate educational effectiveness, and efforts to promote the educational evaluation research will expand our thinking. They have recommended developing resources using available and new information to define outcomes and assess them, developing an inventory of evaluation resources and tools that can be used in CME efforts and developments and testing of new assessments tools, with training to use them.

The evaluation should reflect not only whether physicians have learned from participating in a CME program, but whether they have practice behaviors/ patient outcomes have changed as a result.

If CME directors cannot show the effectiveness of their programme in meeting such needs, physicians should question the usefulness of attending CMEs and accrediting body, which may represent the physicians, should restrict its accreditation of such programs

There will be concerns about whether CME works or how we should present it. New forms of CME must incorporate and take advantage of new technology based on its intrinsic capacity to foster learning, not merely on convince factors.

Concern has been expressed about the need to demonstrate the effectiveness of CME in improving physician's performance and outcomes for patient's health.

CME must be evaluated and that we should not permit ourselves the luxury of not pursuing the question of its worth simply because it is too compels or may be too full of negative findings.

## **2.2 Title of the study**

Evaluation of Utility of CMEs Workshops Among Residents Doctor in Cardiology.

## **2.3 Objectives**

1. To evaluate the effectiveness/ benefits gained by doctors by CME Workshops
2. In response to the survey, to put forward further initiatives to improve the Workshops.
3. To generate evidence on Impact of CME's.
4. Qualitative Assessment of Effectiveness of CME's.

## 2.4 Review of literature

1. Effectiveness of CME on “Pediatric emergencies and management. Among the health professional in Community health centre, karikalampakkam, puducherry. This study was conducted at karikalampakkam village of puducherry. Karikalampakkam is a Community health center with seven subcenters under it. The research design was one of the quasi Experimental design pre and post test with one group . All the health professional like ANM,PHn, health educators were considered as subjects for study. The sample size was 40 and selected by purposive sampilin technique. Pretest was conducted before the CME programme with structured interview schedule. Post test was conducted after completion of programme with the help of same tool.Study finding were the pretest mean percentage 7.8% among the health personnel whereas posttest percentage was 11.7% . The Z value was – 2.555 and p value was 0.011 ( $p < 0.005$ ) which was significant at 0.005 level.

Thus , there is necessity to conduct inservice training programmes to update knowledge and skill of health personnels.

2. Effectiveness of a planned teaching program on knowledge and skill in use of partograph among the nurses working in maternity unit. The research approach for the study, was that of an evaluative one with one grioup pretest and post test design. The study compromised of 30 nursed working in maternity unit of KLES Dr. Prabhakar kore hospital and medical research center, belagum. The tool used for gathering relevant data was a structured questionnaire on knowledge and skill in use of partograph. Study results was found that the overall pretest mean knowlege scores was 13.9 and post tyest was 21.83 . the range between highest and lowest score in pre test was 15 and which was decrease to 5 after administration on planned teaching program in post-test. The over all pretest mean skill scores were 5.57, where as post test was 12.63.

Conclusion of study was based on analyses of findings of study, the following inference was drawn . There was evident increase in knowledge and scores in all areas included in study after admimistation of planned teaching program.

Thus it was inferred that the planned teaching programs was effective and while the gain in knowledge and skill score is commendable, there is still room for improvement.

## **2.5 Methodology**

### 2.5.1 Study Area:

Resident's doctors pursuing Training in Cardiology were approached by structured questionnaire.

### 2.5.2 Study Design

Cross- sectional Study

### 2.5.3 Study Sample

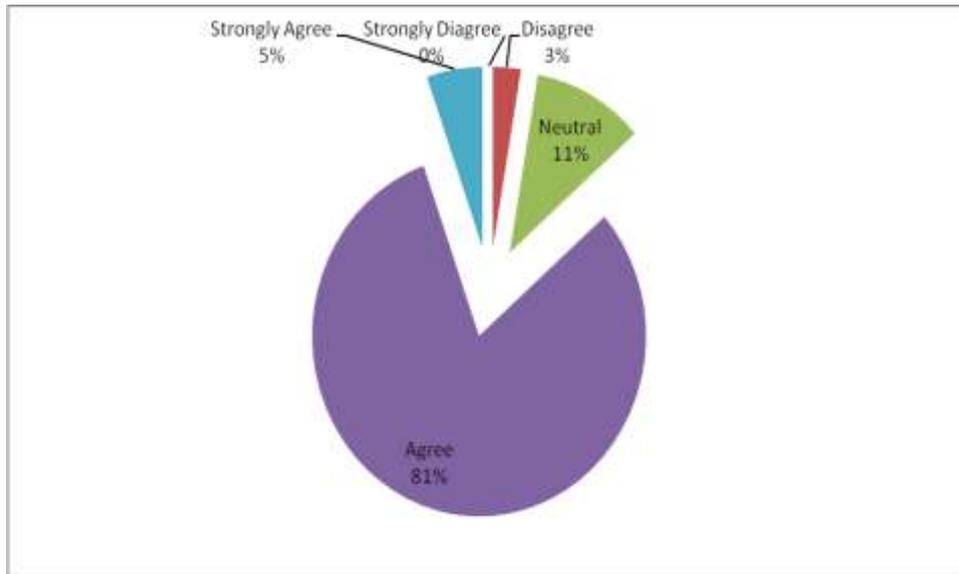
Total of 200 DNB trainees has given their feedback .

### 2.5.4 Tools & technique

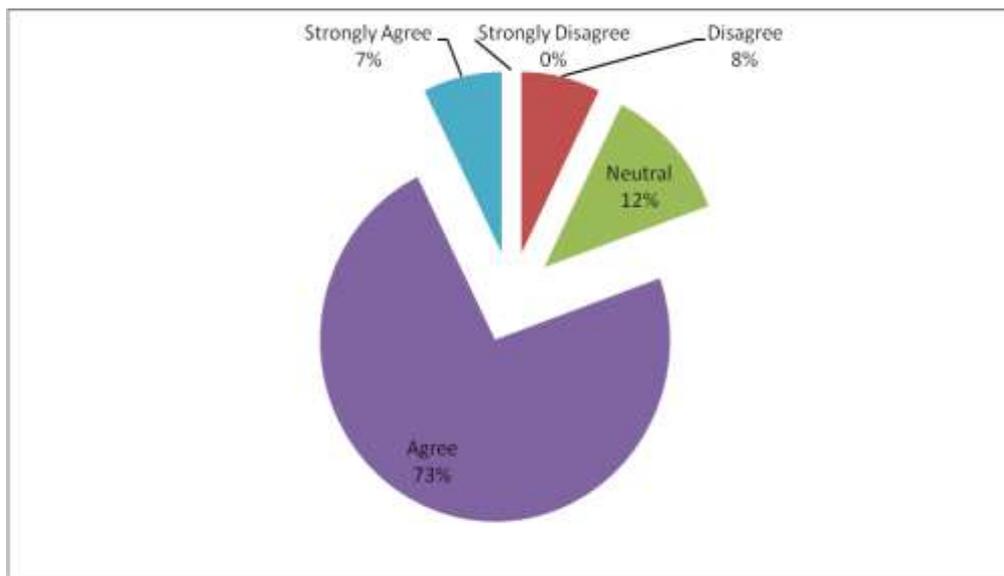
- Questionnaire of total 10 Questions were administrated to DNB Trainees.
- Microsoft excels 2007 .

## 2.6 Study Results

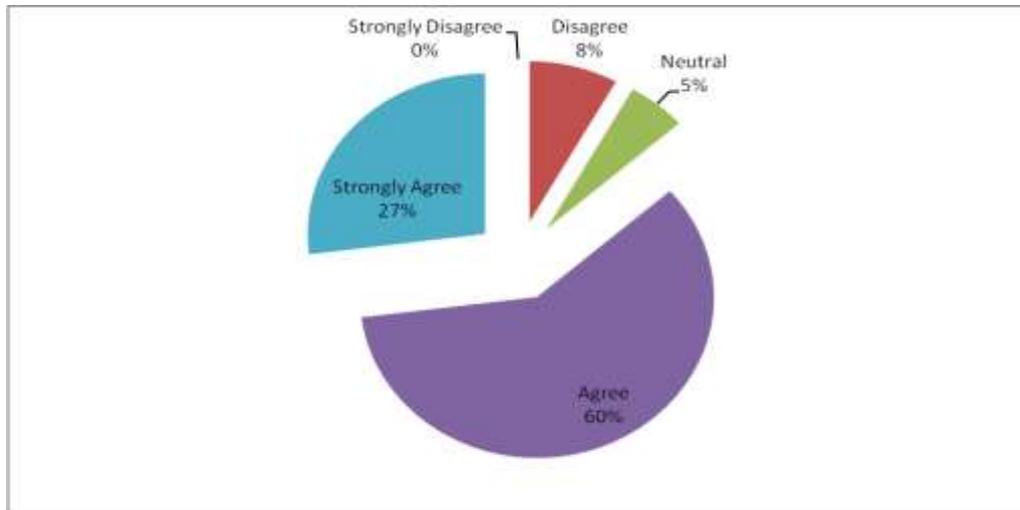
### 1) The Content of CME's s as per my expectations



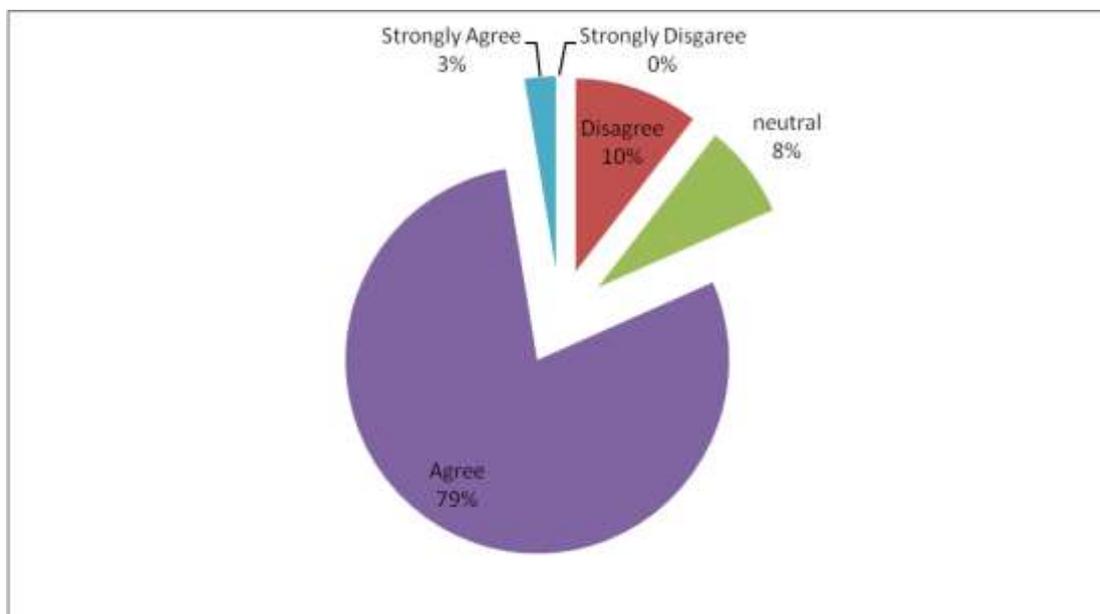
### 2) I gained substantially from workshops



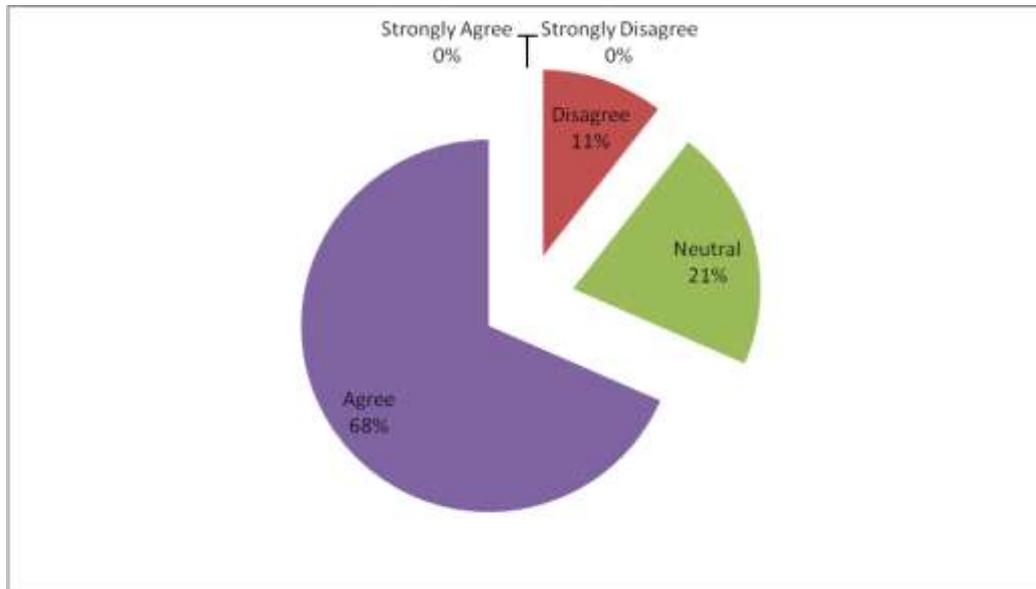
3) CME shall help me in improve my teaching abilities in near future



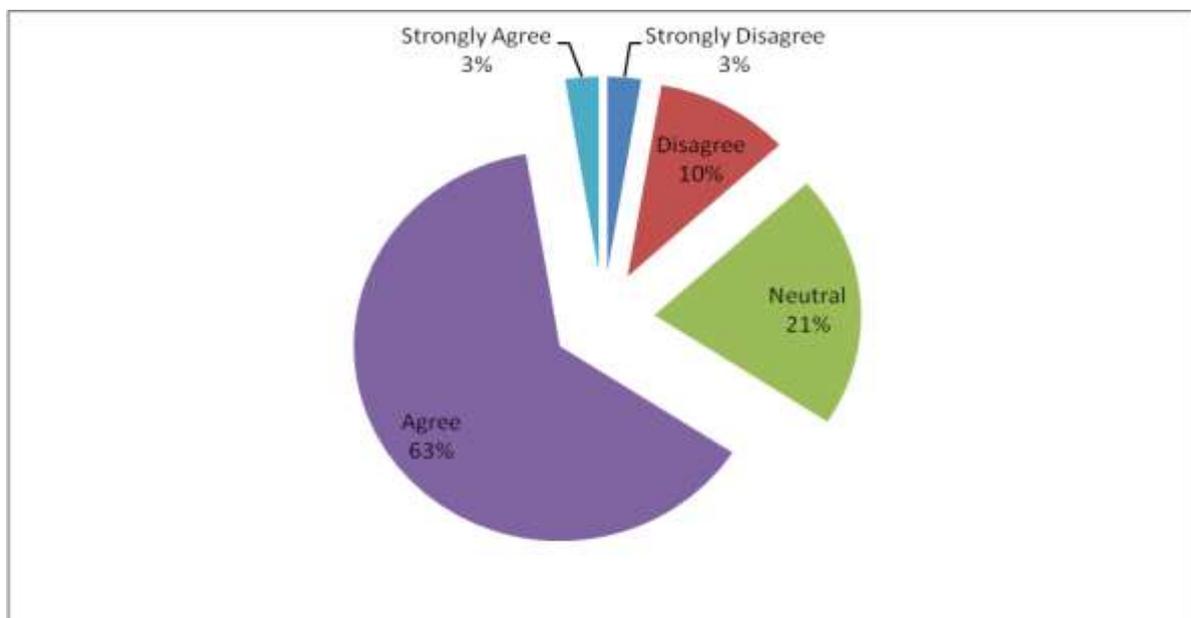
4) Reading material was given in advance



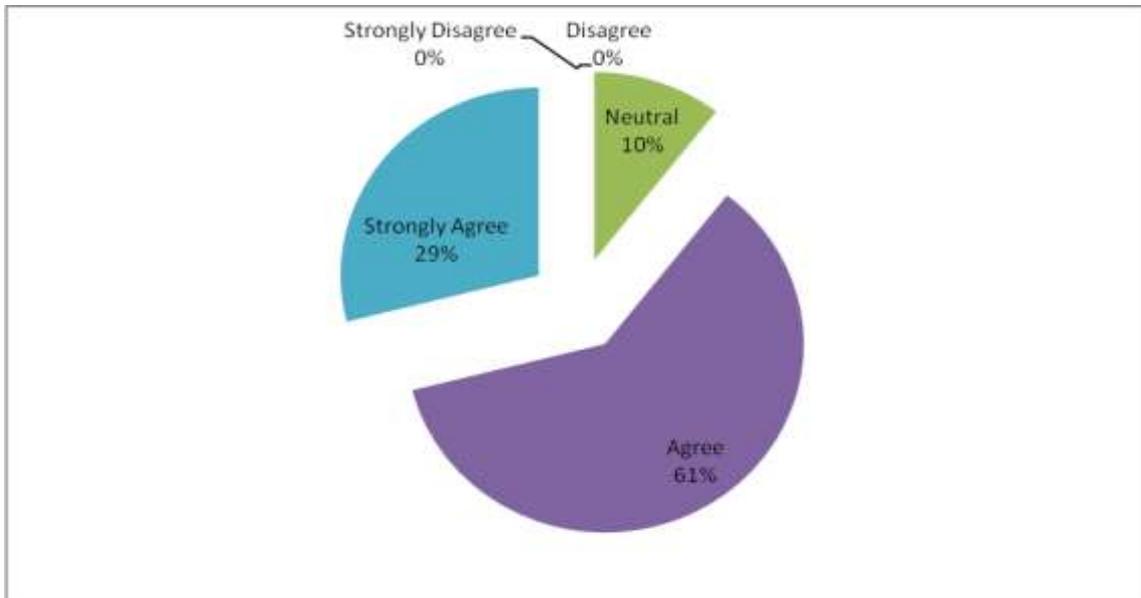
5) Duration of sessions in the CME was



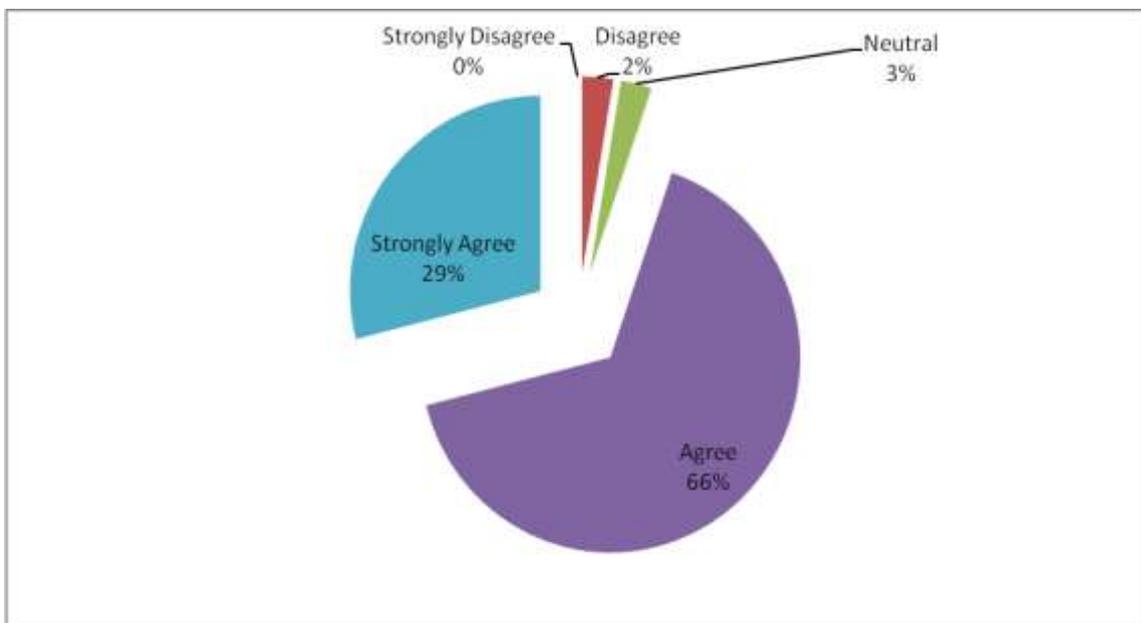
6) Presentation was adequate



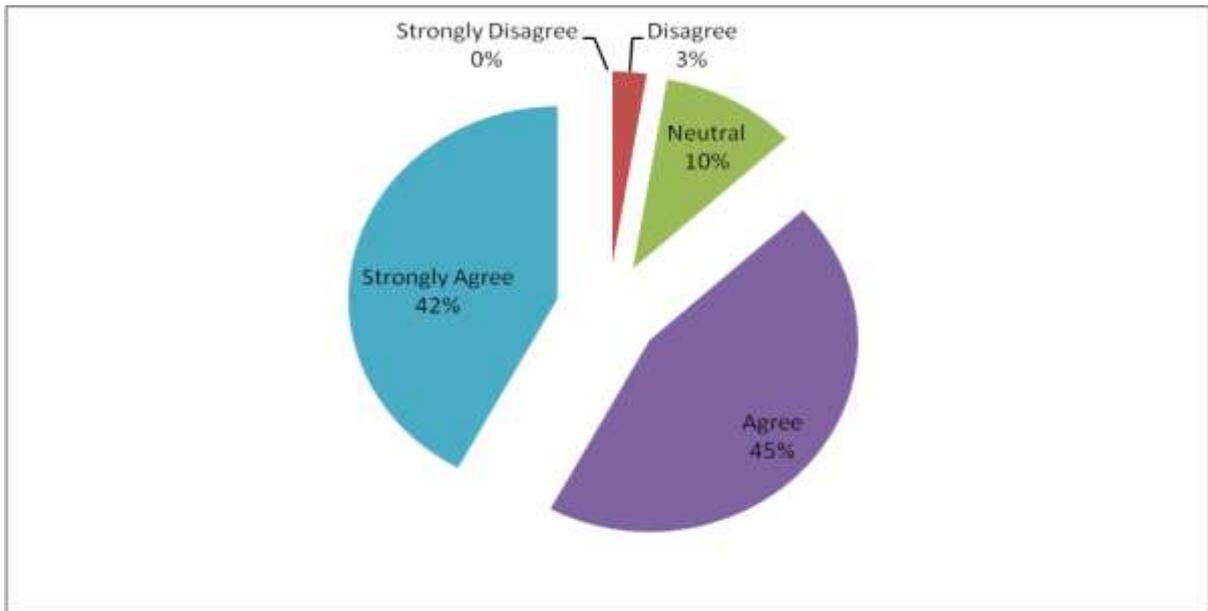
### 7) Time Allotted for Doubt Session was Adequate



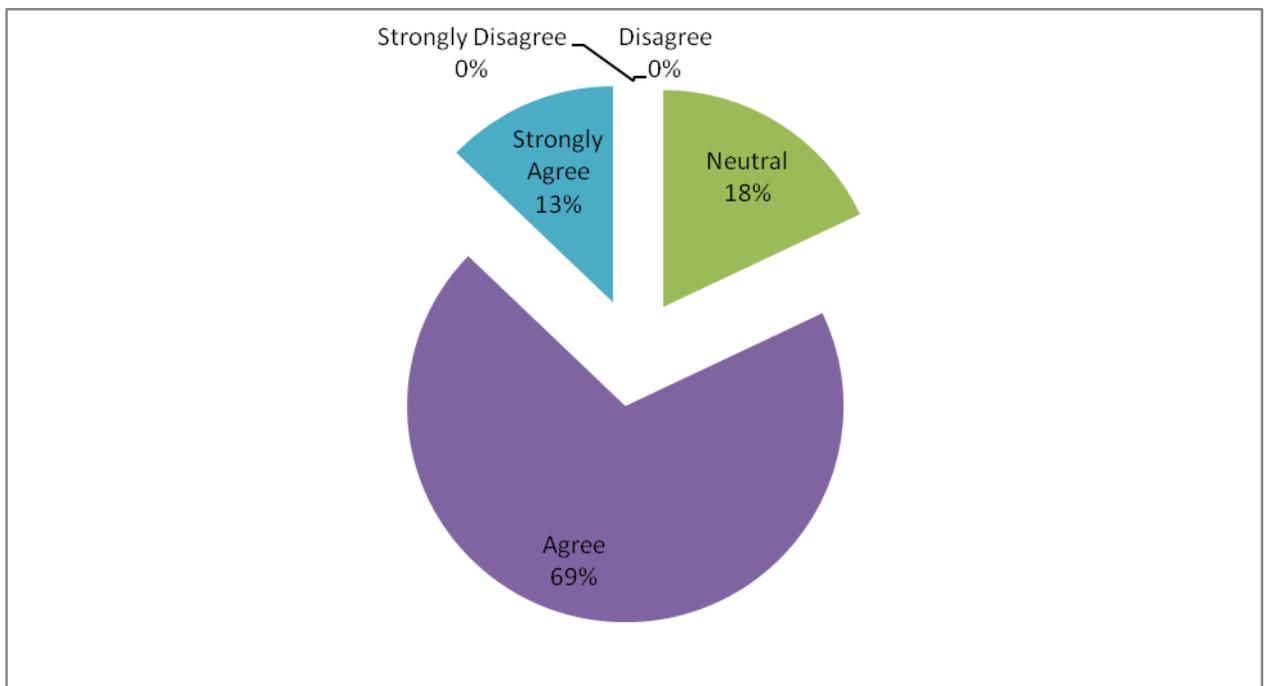
### 8) Improved My skills



9) Wish to attend more CME's in future



10) Will you suggest to attend CME's in future



## **2.7 Discussion**

The Study was conducted among 200 DNB Trainees, Results has shown that CME's are really useful and beneficial for the Trainees. Trainees are able to increase their Competencies in the field. They are able to keep themselves updated in the field with the latest technologies. CMEs are evidence of competence for medical practice for specialty recertification, professional society membership and recognition for selected other professional activities. CME helps in outcomes assessment, measures to validate educational effectiveness, and efforts to promote the educational evaluation research will expand our thinking. The evaluation should reflect not only whether physicians have learned from participating in a CME program, but whether they have practice behaviors/ patient outcomes have changed as a result. The feedback also taken from them regarding improving the CME's further in the future.

## **2.8 Limitation of Study**

- Only the knowledge aspects of Trainees were reviewed in the study to prove the effectiveness of CMEs.
- Skills gained & change in physician attitudes; behavior & Clinical practice outcomes were not reviewed in Study.
- Time constraint which allowed us to only analyze data form only a single specialty.

## **2.9 Conclusion**

It has been found that the CMEs help improve the Knowledge, Skills, performance of physicians to provide the services to patients. The physicians are able to update themselves with newer methods and clinical practice. Thus it is necessary to conduct the Continuing medical Education to update with knowledge of health personnel.

## **2.10 Recommendations**

- More time for interactive sessions should be enhanced.
- Participation should be encouraged.
- CME should provide opportunity for follow up sessions.
- Pre –circulation of Contents.

## **ANNEXURE**

### **2.11 CME EVALUATION SURVEY**

- ANSWER ALL THE QUESTIONS
- ANSWER QUESTION BY USING (\*)IN SPACE PROVIDED.SELECT STRONGLY DISAGREE(SD),DISAGREE(D),NEUTRAL(N),AGREE(A),STRONGLY AGREE(SA)
- THANKS TO YOU IN ADVANCE

### **QUESTIONS**

- 1) The content of CME's was as per my expectation
- 2) I gained substantially from the workshops
- 3) CME shall help me in improve my teaching abilities in near future
- 4) Reading material given in advance
- 5) Presentation adequate
- 6) Time allotted for CME's sessions
- 7) Time allotted for Doubt session was adequate
- 8) Improved skills
- 9) Wish to attend more CME'S in future
- 10) Will suggest others to attend CME'S .