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Continuing Medical Education / e-neurology

Plan of my talk

- **Learning and relearning**
- **Conventional learning**
- **Origin of E-Learning**
- **Definitions and types of E-Learning**
- **Advantages and disadvantages of each**
- **Blended Learning and its advantages**

The Value of Continuing Medical Education and e-learning

"Wisdom is not the product of schooling, but the lifelong attempt to acquire it"

Albert Einstein

Definition

- **CME is a continuing process that involves practicing physicians, practice environments, learning resources, and interventions designed to improve the ability of physicians to provide better medical care to patients**

Davis DA, Fox RD. The Physician as Learner: Lining Research to Practice. American Medical Association, Chicago, Ill, 1994

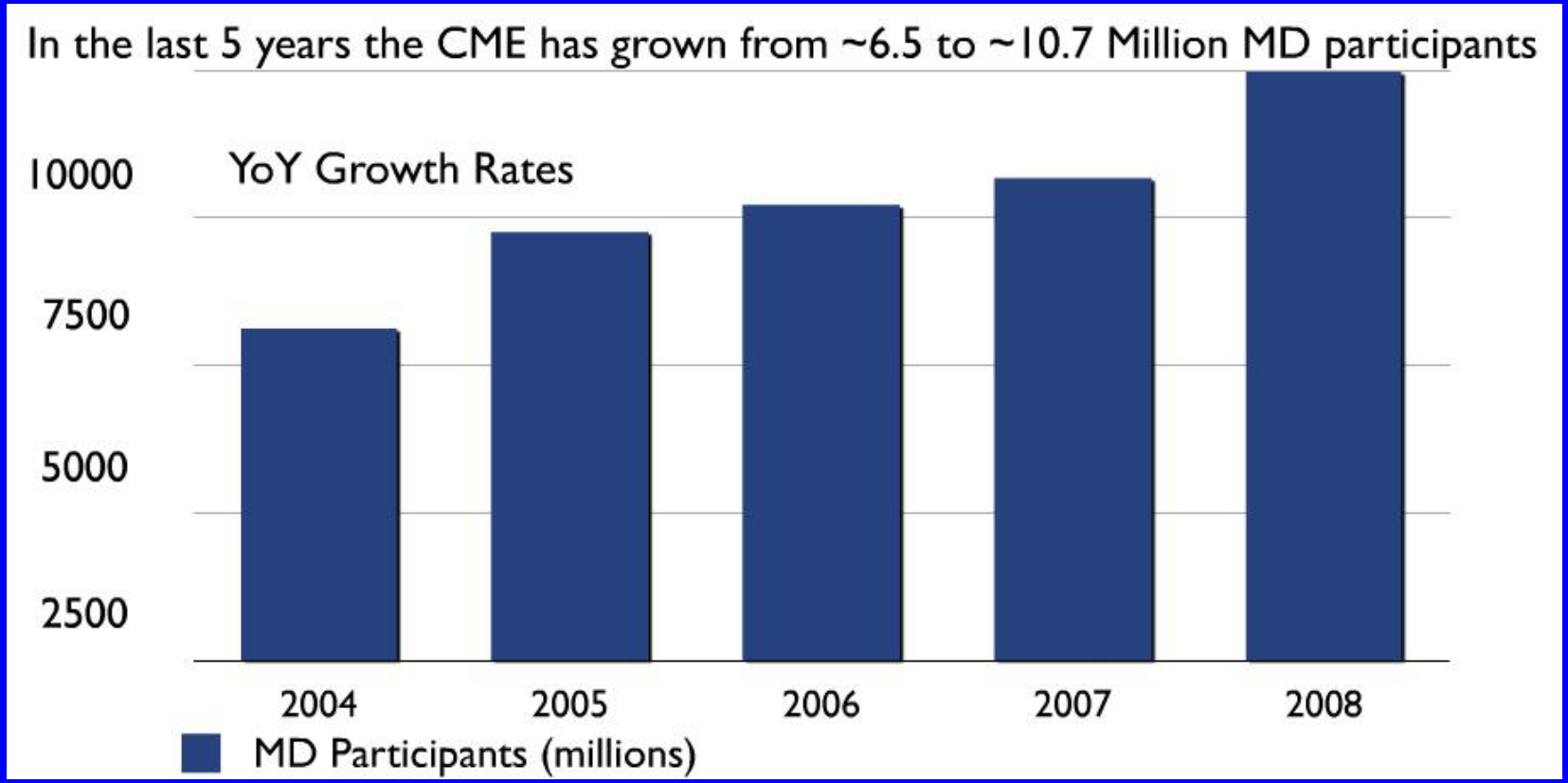
CME delivers meaningful benefits

- **Accelerates the translation of science to appropriate clinical use**
- **Positively influences the speed & effectiveness of diagnosis and treatment decisions**
- **Improves patient compliance & adherence**

Contd.

- **Helps mitigate the medical errors that might impact organizational risk and liability**
- **Yield valuable insights for the entire organization through independent and rigorous measurement of clinical attitudes, knowledge & performance**
- **Improves the quality of patient care to align with vision/mission statement**

CME's value for physician remains unquestionable



Source: ACCME 1998-2008 Annual Reports

CME is Measurable and Improves Physicians Decision

- **CME is both measurable and proven to positively impact physician treatment and diagnosis decision consistent with clinical guidelines and evidence-based medicine**

- **Proven methods exist to measure the impact of CME on physician practice choices related to diagnostic and therapeutic decisions**

Value of CME

- **EFFECTIVE**

CME is measurable and is proven to positively impact a physician treatment and diagnosis decisions consistent with clinical guidelines

- **VALUED**

Physicians value CME as a critical and objective means to stay current

- **GROWING**

Physician participations in certified education programs has grown 60% over the last five years

- **EFFICIENT**

Education is an efficient way to improve physician's decision-making

Shift towards learner-centred education

- **Old think**
  - Passively listening to lectures
  - Educator decides topic
  - Read a journal or text book
  - Errors should be forgotten / denied
- **New think**
  - Actively participate in learning
  - You decide the topic
  - Problem solving, simulated cases
  - Errors are a learning experience

Wyatt JC. Clinical Knowledge… in the Information Age London: RSM, 2001

A Technological means of acquiring it

(Technological refers media other than the class room)

Electronic learning

Learning with the aid of computer technology or Communication Technology

The Internet Is the Top Health Resource

86% of physicians have used the Internet to gather health, medical, or prescription drug information

The Internet ***far exceeds*** the following resources for gathering health, medical, or prescription drug information:

- **Online CME courses – 78%**
- **Peer Reviews Journals – 77%**
- **Pharmaceutical sales representatives – 77%**
- Colleagues – 67%
- Books – 56%
- Health-related organization/association – 54%
- Magazines – 35%
- Video/DVDs – 20%

thinkhealth with Google

Base: Total Physicians n=458
Source: Hall & Partners and Google Custom HCP Study, August 2009

Internet use by doctors

- **86% of U.S. physicians use the Internet to gather health, medical or prescription drug information**
- **92% -accessed it from their office**
- **21% - in the patients room**
- **88% said they looked for health information online from home**
- 59% reported doing so from a mobile device

American Medical News 2010

DON'T BELIEVE EVERYTHING YOU READ ON THE NET

Memory - The Brain

Old Days' Memory:

- "Central Nervous System"
- We used to use the book, managed by a teacher store the knowledge in our memory, and retrieve them as required. It was an educational system of memorization and spoon – feeding of information.

Today's Memory:

- "Digital Nervous System"
- The knowledge is downloaded. The teacher is a full-time facilitator to manage information and construct knowledge to deliver skills.

Physicians Believe the Internet is a Benefit

86% Quality of online information has **improved** over the last few years.

80% Use the Internet to **verify information** from a patient.

73% Consider the Internet to be a **standard part** of clinical practice.

83% **Rely more** on the Internet than in the past for clinical practice.

78% Believe the Internet has made **practicing medicine easier**.

69% **Trust** clinical information online.

thinkhealth with Google

Question: Using the scale bellow, please indicate how much you agree or disagree with each of the following statements about using the internet in your clinical practice? Top 2 box.
Base: Total Physicians n=411
Source: Hall & Partners and Google Custom HCP Study, August 2009

Other terminologies

- **Computer based learning**

  Refers to presenting courses on a computer. The computer does not provide links to learning resources outside the course. Often, the computer is not connected to a network.

- **Technology based learning**

  Refers to any learning through media other than the classroom. It includes computers, television, audio, tape and print.

- **Web based learning**

  A form of computer based learning, referring to courses on the internet or internet and that are linked to learning resources outside the course, such as references, electronic mail and discussions and video conferencing.

- Online learning

  Refers to learning and other supportive resources that are available through a computer (any media that permits interactive learning)

E-learning is all:

- is networked, instant updating, storage and retrieval, distribution and sharing of information
- is delivered to the end user via a computer using standard internet technologies
- focuses on the broadest view of learning: learning solutions going beyond the traditional paradigms of training.

Types of E-learning

	Near in place	Partly distant in place	Distant in place
Distant in time	Asynchronous e-learning. For example, taking a self-paced course, exchanging e-mail messages with a mentor and posting messages about a topic to a discussion group.		
			Trainers and trainees never meet. For example, courses are distributed via the internet and communication via e-mail only
Partly distant in time	Face-to-face training is combined with for example electronic conferencing within one organization or campus.	Trainers and trainees meet for a kick off, and for an evaluation. The learning goes on at a distance in time and place.	Trainers and trainees use for example IRC or other tools to communicate about a problem or the courseware.
Near in time	Synchronous e-learning: communication occurs at the same time between individuals and information is accessed instantly. For example, real time chats, audio or video conferencing.		
			Trainers and trainees do not meet physically, but by using for example a video conferencing system a course is given or students are able to ask questions.

BLENDED LEARNING

- **A mixture of traditional learning and technology based learning.**
- **Combines e-learning tools with traditional classroom training to ensure maximum effectiveness.**

BLENDED LEARNING OFFERS

- Social benefits from classroom training, focusing on learning that gains the most from face-to-face interaction.
- Individualization benefits of self-paced, online learning for content that requires minimum interaction.
- Cost savings through minimizing the time away from the job and travel/classroom/instructor expenses.
- Improved retention and reinforcement through follow-up mechanisms on the Web.
- Greater flexibility to meet the different learning styles and levels of the audience.

Paper Based Teaching Rosters

SEMINAR W.E.F. AUGUST 2006

THURSDAY : 3.00 P.M..

DATE	S. RESIDENT	CONSULTANT	*TOPIC*
03.08.06	Dr. Puneet	DR. V. PURI	*NEUROPHYSIOLOGY OF MUSCLE TONE*
10.08.06	Dr. Avinash	DR. MEHNDIRATTA	*SPASTICITY*
17.08.06	Dr. Rajesh	DR. GEETA	*APPROACH TO A PATIENT WITH ATAXIA*
24.08.06	Dr. Jyoti	DR. NEHRU	*SPINOCEREBELLAR ATAXIAS*
31.08.06	Dr. Anurag	DR. DEBASHISH	*ANATOMY, PHYSIOLOGY & FUNCTION OF BASAL GANGLIA*
07.09.06	Dr. Ramsingh	DR. NEERA	*MYOCLONUS- NEUROPHYSIOLOGY & CLINICAL APPROACH*
14.09.06	Dr. Sunil	DR. BAJAJ	*PROGRESSIVE MYOCLONIC EPILEPSY*
21.09.06	Dr. Sushil	DR. V. PURI	*ANATOMY & PHYSIOLOGY OF ANS*
28.09.06	Dr. Kewal	DR. MEHNDIRATTA	*CLINICAL & ELECTROPHYSIOLOGICAL TESTING OF ANS*
05.10.06	Dr. Nisheeth	DR. GEETA	*NEUROPHYSIOLOGY OF BLADDER & MANAGEMENT OF BLADDER DYSFUNCTION*
12.10.06	Dr. Shailendra	DR. NEHRU	*CT ANGIOGRAPHY & CONVENTIONAL ANGIOGRAPHY*
19.10.06	Dr. Siddharth	DR. DEBASHISH	*THROMBOLYTIC THERAPY IN ACUTE STROKE*
26.10.06	Dr. Avinash	DR. NEERA	*ANTICOAGULANTS & ANTIPLATELET THERAPY IN STROKE*
02.11.06	Dr. Jyoti	DR. BAJAJ	*ANATOMY & PHYSIOLOGY-FRONTAL LOBE*
09.11.06	Dr. Puneet	DR. V. PURI	*FRONTAL LOBE SYNDROMES*
16.11.06	Dr. Rajesh	DR. MEHNDIRATTA	*ANATOMY & PHYSIOLOGY- PARIETAL LOBE*
23.11.06	Dr. Anurag	DR. GEETA	*PARIETAL LOBE SYNDROMES*
30.11.06	Dr. Ramsingh	DR. NEHRU	*ANATOMY & PHYSIOLOGY-TEMPORAL LOBE*
07.12.06	Dr. Sunil	DR. DEBASHISH	*TEMPORAL LOBE SYNDROMES*
14.12.06	Dr. Sushil	DR. NEERA	*EPILEPTOGENESIS*
21.12.06	Dr. Avinash	DR. BAJAJ	*OCCIPITAL LOBE: ANATOMY & PHYSIOLOGY*
28.12.06	Dr. Jyoti	DR. V. PURI	*OCCIPITAL LOBE SYNDROMES*
04.01.07	Dr. Puneet	DR. MEHNDIRATTA	*LIMBIC SYSTEM*
11.01.07	Dr. Rajesh	DR. GEETA	*NEUROPHYSIOLOGY OF MEMORY*
18.01.07	Dr. Anurag	DR. NEHRU	*APRAXIA*
25.01.07	Dr. Ramsingh	DR. DEBASHISH	*AGNOSIA*
01.02.07	Dr. Sunil	DR. NEERA	*APHASIA*
08.02.07	Dr. Sushil	DR. BAJAJ	*CSF DYNAMICS & VENTRICULAR SYSTEM*
15.02.07	Dr. Avinash	DR. V. PURI	*THALAMUS – ANATOMY AND PHYSIOLOGY*
22.02.07	Dr. Jyoti	DR. MEHNDIRATTA	*THALAMIC SYNDROMES*
01.03.07	Dr. Puneet	DR. GEETA	*NEUROPHYSIOLOGY OF SLEEP*
08.03.07	Dr. Rajesh	DR. NEHRU	*SLEEP DISORDERS*
15.03.07	Dr. Anurag	DR. DEBASHISH	*CV JUNCTION: NORMAL &ABNORMAL RADIOLOGY*
22.03.07	Dr. Ramsingh	DR. NEERA	*MTP*

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Case discussion
(For Cases presented by you)

Preparation time before case allotment .....

No. of days prior to the class the Case is allotted .....

Time dedicated to history taking and examination of case.....

Preparation time after taking case.....

Source of study % of help from Books.....
Journals.....
Internet resources.....
Other resources.....
Please specify Other .....

Post discussion study time.....

(For Cases presented by others)

Do you examine the cases to be presented.....

% of cases you examined last year before presentation.....

Preparation time before case discussion.....

Source of study % of help from Books.....
Journals.....
Internet resources.....
Other resources.....
Please specify Other .....

Post discussion study time.....

Seminars

(For Seminars presented by you)

Interaction with Moderator prior to Seminar .....(days/weeks)

Preparation time making slides..... (days/weeks)

file://localhost/Volumes/MMM 2013/WCN 2013 Talks/Continuing Medical

Android

IOS

Windows Blackberry

Future of e- Learning

- **Nobody has the exact answer**
- **Graduates will be exposed to new information in one year than their grandparents in a lifetime.**
- **Memorizing facts will have lower value, than utilizing information for decision-making.**

Future of e- Learning, cont'd

- **Multi-career.**
- **Change of career.**
- **Lifelong learning.**
- **Just-in-Time (JIT) learning.**
- **Career development: learning by the corporate**
- **Telecommuting learning: distance**

第十四届亚洲及大洋洲神经病学大会
14th Asian & Oceanian Congress of Neurology (AOCN 2014)

2 - 5 March 2014 • Macao, China
Venue: The Venetian® Macao

Organizer: Asian and Oceanian Association of Neurology

Host Organizer: The Hong Kong Neurological Society

Supported by: Chinese Society of Neurology

Important Dates

Deadline for Submission of Abstracts
15 September 2013

Deadline for Early-Bird Registration
1 December 2013

Website: **www.aocn2014.org**

SAVE THE DATE

XXII World Congress of Neurology

Santiago - Chile 2015

Changing Neurology Worldwide

Thanks