



# Continuous Professional Development through eLearning System for Sri Lankan Health Professionals

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# Summary

- History of Sri Lankan Medical Profession.
- Transformation of medical learning.
- Continuing Professional Development (CPD).
- Integration of ICT to deliver CPD.
- Advantages and Drawbacks of eLearning.
- Importance of eLearning to Sri Lanka
- eLearning development programme at HEB.
- Conclusion.



# History of Sri Lankan Medical Profession

- Although we are professionals who practice western medicine today, we are descendants of a civilization which had advanced field of medicine.
- Ancient Sri Lankans are responsible for introducing the concept of hospitals (Sivikasotthi-Sala -- lying-in-homes) to the world.
- 5<sup>th</sup> century B.C. Mihintale Hospital is the oldest in the world. (Müller-Dietz.H.E(1975) Historia Hospitalium.)



## Ancient Sri Lankan Hospitals



# Transformation of medical learning

- Ancient medical data were written on Ola leaves, later in books, and currently on the computer hardware.
- Ancient medical training given on individualized basis in monasteries, which later changed in to lecture based university system and finally to a computer based education which can be accessed anywhere in the world.





# Importance of life-long learning

- A century ago Abraham Flexner emphasised the importance of educating health professionals according to the changing health needs of the community.
- The amount of biomedical knowledge available doubles every 20 years (Stewart, D. et al. 2008).
- A doctor's practice could become rapidly outdated without activities that allow doctors to refresh current knowledge and skills.

Stewart, D. et al. (2008) Continuing Professional Development for Surgeons. **Surgeon**, 6 (5), pp .288-292.



# Continuing Professional Development (CPD)

- CPD refers to the education of professionals following completion of formal training.
- The term CPD acknowledges the improvement of wide-range of competencies needed to practice high quality patient care , that include the development of knowledge, skills, attitudes and behaviour.
- CPD is a continuous process.





# CPD vs CME

- Continuing Medical Education (CME), is generally taken to refer only to expanding the knowledge and skill base required by doctors.
- CPD incorporates the concept of CME.







# Integration of ICT to deliver CPD

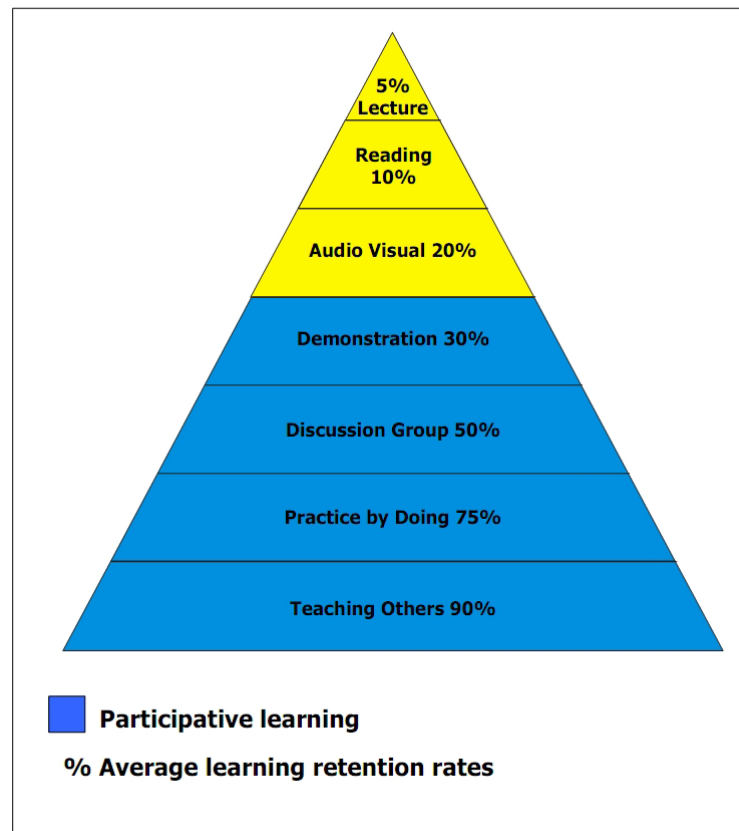
- **eLearning** can be described as a learning process facilitated and supported through the use of ICT.
- e-learning has revolutionized the CPD programmes making it accessible health professionals from rural areas.





# Advantages of eLearning

- eLearning based CPD offers wide range of advantages over traditional methods.
- Generate new knowledge and promotes higher achievement.





## Advantages of eLearning..cont.....

- Professionals are satisfied with the flexibility and convenience offered.
- Barriers such as lack of time and geographical isolation can be minimized.
- Choice of course can be based on content.
- Reduce travelling costs & loss of productivity due to travel time.
- Increase recruitment to rural areas.
- Increased opportunities to virtual interaction with peers, academics and experts.
- Give opportunities for cross cultural learning.



# Importance of eLearning to Sri Lanka.

- Healthcare professionals in the rural areas of Sri Lanka are at a disadvantage when accessing CPD programmes which are held in main cities.
- Lack of access to professional education can have a significant influence on recruitment and retention of healthcare professionals in rural areas.
- eLearning will provide a flexible, convenient and interactive format that will fulfill the CPD requirements of health professionals in any part of Sri Lanka.



# Drawbacks of eLearning

- The lack of infrastructure in some areas.
- Technological issues such as poor Internet access problems, insufficient computer skills.
- Frustration experienced by the learner due to above reasons.
- Lack of human interactivity.
- Mistrust on e-commerce.





# Why Health Education Bureau (HEB) needs distance learning

- ❖ A wide variety of health sector staff members are trained at HEB on new health concepts to promote health of Sri Lankans.
- ❖ Health sector staff members have to travel long distance from peripheries to HEB to participate in these programmes.
- ❖ This process leads to unnecessary travelling time and cost for the government.
- ❖ Implementation of distance Learning system will dramatically cut down the travelling and accommodation expenses.



# Objective

To identify and to develop a cost effective CPD process for the healthcare providers.

# Methodology

Interdisciplinary social networking process with brain storming, focus group discussions and educational needs analysis of participants in training programmes.

Ethical clearance was granted from Medical Research Institute, Colombo.



# Results

- eLearning was identified as cost effective in delivering CPD.
- Software requirements specifications (SRS) were developed.
- Learning needs and user patterns of programme participants identified.





# Important requirements specifications

Customization of latest stable version of Moodle LMS.

Customization with **mobile compatibility**

**Tri-Lingual** language compatibility.

Sharable Content Object Reference Model (**SCORM**) **compatible**

Content will include videos, text, podcasts, interactive games, flash animations..etc.

Support for multiple user classes ( with and without login)

Automated notification to mobile

Video conferencing and online comments.

Function as an alert system for the general public.



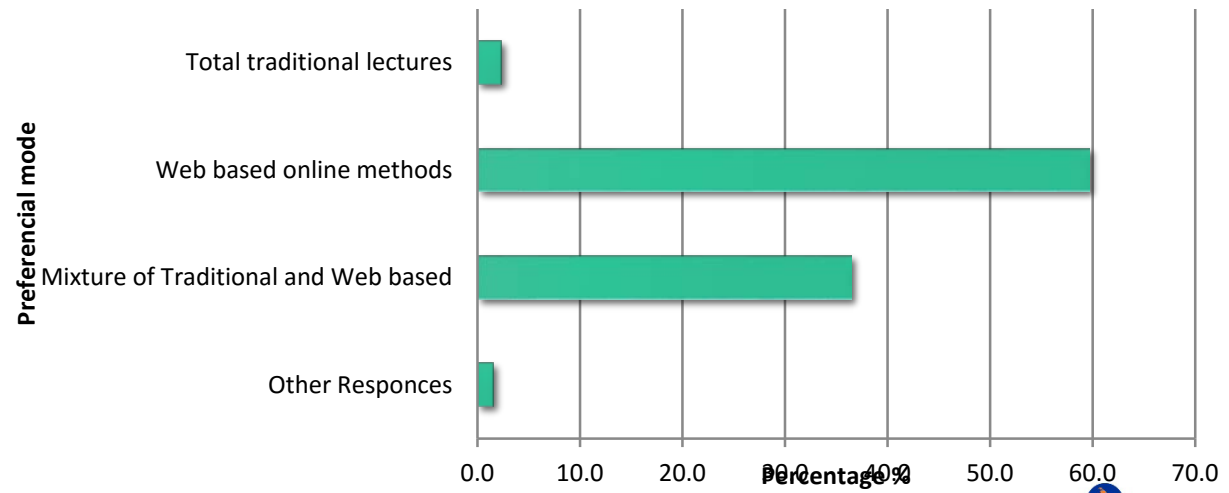
# Need analysis results

- Study was done on health professionals participating in training at HEB.
- Study group included MOHs, HEOs, PHNS, Health education nurses.
- CPD programmes were thought to be important to all the participants.
- 93 % preferred total web based or hybrid methods for CPD delivery.
- Only about 53% preferred laptop as the port of access for eLearning CPD programmes.
- Access to internet at workplace was around 60% and about 65% at home.
- Most preferred topics were health promotion and infection prevention/control.
- Data is continuously collected up to end of the year.



# Previous study results on CPD

- Study on SLMA members done earlier ( Kulatunga, G.et al. (2013) showed that CPD programmes are important to all the participants.
- 96 % preferred total web based or hybrid methods for delivery of CPD, even though 58% of have not followed any online courses before.





## Previous study results on CPD...cont....

- Almost all participants' (99%) home computers are connected to internet compared to 88% of workplace computers.
- Most preferred port of access for web based CPD is the laptop (84%).
- General medicine (37%) and public health (18%) are the preferred subject areas in the future CPD programmes.

( Kulatunga, G., Marasinghe, R., Karunathilake, I., & Dissanayake, V. (2013). Development and implementation of a web-based continuing professional development (CPD) programme on medical genetics. *Journal of Telemedicine & Telecare*, 19(7), 388-392. doi:10.1177/1357633X13506525 )



# Conclusion

- Meeting the educational needs of professionals already in medical practice remains a challenge.
- Solution for this is the eLearning based CPD courses which are cost effective, convenient and offers the professionals flexibility when fulfilling educational requirements.
- Hybrid methods are most preferred and there is a need to develop ICT facilities at peripheries.
- eLearning based CPD will play a major role in meeting the high demand for the continuous professional development health sector.



# Acknowledgements

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# Thank you

