Tools For Online Education

Ajay Singh, MBBS, FRCP, MBA

Senior Associate Dean

Harvard Medical School

Postgraduate Medical Education

Jennifer Livengood, PhD

Instructional Designer

Harvard Medical School

Postgraduate Medical Education

Outline

- Examples of Learning Management Systems at Harvard Medical School
- Tools and ideas for building interactivity in an online course

Part I: Teaching in an LMS

- A Learning Management System (LMS) is going to be one of your most frequently-used pieces of technology when teaching online.
 - An LMS can feature:
 - Assignments
 - Grades
 - Videos
 - Assessments
 - Multiple points of communication
 - Interactive pieces
 - Written content
 - Images

• Let's look at some examples of these elements in HMS classes

Part I: Teaching in an LMS

LMS Platforms

- Moodle
- Blackboard
- Canvas
- Sakai
- EdX and Open EdX
- HBX
- Angel
- Docibo

HMS PGME - Moodle LMS

- Customizable with plugins
- Open-source
- Our team configured video players and added programs
 - H5P, Vimeo, Poodl, captioning, and others

Entry page for Management of Infections in Advanced Dementia

Management of Infections in Advanced Dementia

Launched / 736109-2002

Welcome to the Course



Start Date: 10/4/2018

End Date: 1/19/2021

Course Outcomes

Welcome to *Management of Infections in Advanced Dementia* (MIAD2020). This course focuses on the appropriate use of antimicrobials in advanced dementia patients. Over the course of the four virtual patient cases that follow, you will be presented with consensus-based algorithms for antimicrobial initiation, guidance on how to integrate resident preferences into treatment decisions, and tips for communicating with families about infection management in advanced dementia.

This course is designed for primary care and specialty physicians, physician assistants, nurses, and nurse practitioners.

Management of Infections in Advanced Dementia focuses on improving the management of infections in advanced dementia by merging best practices in infectious diseases and palliative care. By the end of this course, you should be able to:

Entry page for General Psychiatric Management for Borderline Personality Disorder

Course Information



Start Date:

End Date:

Course Outcomes

Welcome to General Psychiatric Management for Borderline Personality Disorder. This 6-hour course offers training in an empirically validated treatment approach to borderline personality disorder (BPI known as Good or General Psychiatric Management (GPM).

By the end of this course, you will be able to:

- Explain the diagnosis to patients and families and establish reasonable expectations for change (psychoeducation)
- Manage the problem of recurrent suicidality and self-harm while limiting personal burden and liability
- Expedite alliance-building via use of medications and homework
- Identify when to prioritize BPD's treatment and when to defer until a comorbid disorder is resolved

Course module blocks

1: Background	2: Interpersonal Hypersensitivity	3: Overall Principles	4: Disclosing the Diagnosis & Psychoeducation
5: Getting Started	6: Managing Suicidality	7: Case Discussion I (Laura)	8: Pharmacotherapy and Comorbidity
9: Case Discussion II (Roger)	10: Multimodal Treatments	11: Case Discussion III (Melanie)	12: Conclusion

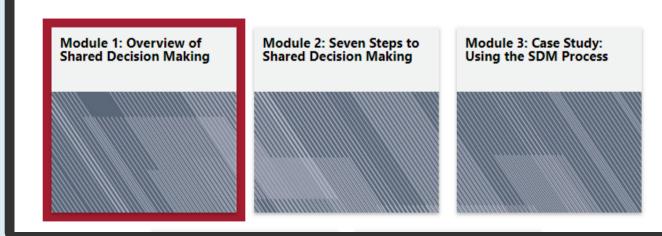
Instructions

- Select Topic 1 below to begin and select Next to navigate through each topic.
 Play each video and answer the embedded knowledge questions, then complete the topic quiz before advancing to the next topic.

Course entry page with a welcome video and course module blocks

Leigh Simmons, MD Physician, Massachusetts General Hospital (MGH) Nedio: 00:35 of or Health Decision Sciences Center, MGH or of Internal Medicine Clerkship, Harvard Medical Schoo

- · Select the first topic below to begin. Play each video and interactive slide deck, and answer the knowledge guestion correctly before selecting Next to continue. Correct answer explanations contain learning content.
- Pass the posttest with a score of at least 75% to earn a CME certificate.







HARVARD Jennifer Livengood ≡ MEDICAL SCHOOL Navigation GPM / Sections / 2: Interpersonal Hypersensitivity / 2: Interpersonal Hypersensitivity as BPDs Core GPM 2: Interpersonal Hypersensitivity as BPDs Core Grades Topics Course Information 1: Background 2: Interpersonal Hypersensitivity 3: Overall Principles 4: Disclosing the Diagnosis & Psychoeducation 5: Getting Started Video in **SECTION 2** 6: Managing Suicidality INTERPERSONAL HYPERSENSITIVIT 7: Case Discussion I (Laura) the course 8: Pharmacotherapy and Comorbidity 9: Case Discussion II (Roger) content ÷ 30/13:10 🚯 📣 💽 🌼 . 2: Interpersonal Hypersensitivity as BPDs Core with When a patient gets angry at you, you should: pauses to O Lean back (give them space) ask O Lean in (don't leave, sort out why they are angry and what it means) knowledge O Remain neutral and see what happens check Check questions Э 🗱 **10:49** / 13:10 🔅 📣 💽 🔅 . ¥ Rights of use <> Embe

ά-

Questions after module content

= HARVARD			
Navigation	GPM / Sections / 3: Overall Principles / Topic 3 Quiz / Preview		
GPM			
Grades	Question 1 Not yet	The GPM therapist will convey the follow interpersonal relationships and employm	
Topics 👻	answered Marked out of	Select one:	
Course Information	1.00 또 Flag question	 A. The BPD patient should focus on c treatment and put work or school on 	
1: Background 2: Interpersonal Hypersensitivity	question	 B. GPM suggests patients focus on b responsibilities first before prioritizing foundation of their self-esteem. 	
3: Overall Principles		 C. GPM believes a patient should hav in place as a support before looking f 	
4: Disclosing the Diagnosis & Psychoeducation		 D. The BPD patient will need to have simultaneously in order to function w 	
5: Getting Started			
6: Managing Suicidality	Question 2 Not yet	In GPM, what kind of advice should prov	
7: Case Discussion I (Laura)	answered	Select one or more:	
8: Pharmacotherapy and	Marked out of 1.00	\Box A. Providers should give advice abou	
Comorbidity	V Flag question	\Box B. Providers of GPM should avoid adv	
9: Case Discussion II (Roger)	Edit question	C. Providers should give advice about	
10: Multimodal Treatments		D. Providers should give advice about	
	1		

GPM therapist will convey the following about the priorities of personal relationships and employment:

t one:

- . The BPD patient should focus on dating at the beginning of eatment and put work or school on hold
- GPM suggests patients focus on building work or other major sponsibilities first before prioritizing romance as the grounding undation of their self-esteem.
- . GPM believes a patient should have at least one special friendship place as a support before looking for work
- . The BPD patient will need to have romance and work multaneously in order to function well
- M, what kind of advice should providers give?

t one or more:

- . Providers should give advice about avoiding stressors
- . Providers of GPM should avoid advice
- . Providers should give advice about managing relationships
- . Providers should give advice about investing

Live online courses at Harvard Medical School

- Postgraduate Course in Advanced Cardiology
- Challenging Cases in Toxicology
- General Psychiatric Management for BPD
- Shared Decision Making

Part Two: Tools for interactivity

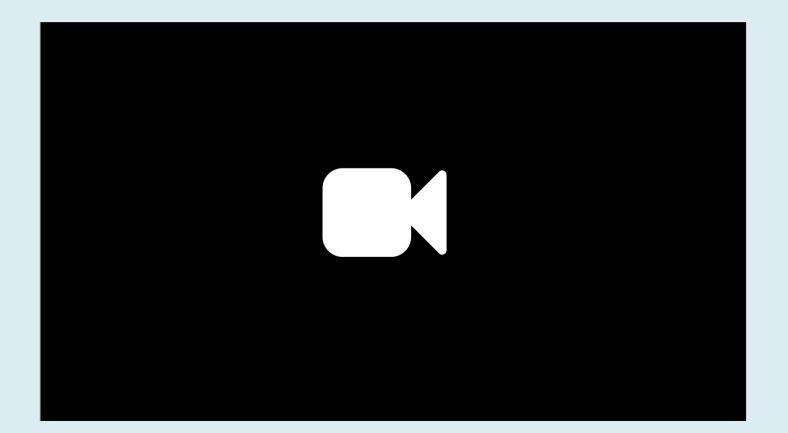
- An LMS can host a variety of course content
- It is a good practice to build in interactive content to engage learners
- There are many ways to engage learners in the course content
 - Interactive case studies Storyline
 - Screen recordings Zoom, PlayPosIt, Edpuzzle
 - Virtual writing boards Explain Everything
 - Polling PollEverywhere or Zoom
 - Other tools Thing Link and Edpuzzle

Interactive case studies

- Shared Decision Making
- Thrombotic Disorders
- General Psychiatric Management for BPD

Screen Recordings

- EdPuzzle
- Zoom (example below)
- PlayPoslt and H5P



Virtual Writing Boards

https://expl.ai/XLGCSNH

Polling

- PollEverywhere
- https://pollev.com/livengood

https://pollev.com/livengood?_ga=2.112384524.909379859.1591297347-2036989218.1588956896

Polling

- Survey Monkey
- https://www.surveymonkey.com/r/JRMXC6R

https://www.surveymonkey.com/r/JRMXC6R

Other tools

- Thinglink
 - Add notations to images or videos
 - 360 degree images can also be noted



Building an Online Course

- Invite you to an instructional design website with further tools and ideas for creating an online course
 - Pedagogy
 - Links to additional tools
 - Content development
 - Course mapping and curriculum development

https://jenniferlivengood.com/Design_Online_Courses/i ndex.html

Free Resources

End of Part II Questions?