Dissecting the Placebo Effect

Selective Description, Schedule & Contact Information

This selective explores the many roles the placebo has occupied throughout history and the present day: as a deceptive tool in research and practice, as a control in clinical trials, and as a therapeutic agent. We will look at the recent growth of scientific research related to the placebo effect, ethical questions surrounding its use in controlled trials and in clinical care, and its associations with pseudoscience, asking what place it should have in medicine today.

Each session will consider a particular theme related to the placebo effect: 1) the placebo effect over time 2) placebo mechanisms 3) placebos and deception 4) controlling the placebo effect 5) placebos and charlatans 6) pinning down placebos.

For Schedule information, please see <u>one45</u>.

For Contact Information, please see the **Course page** > Contact Information section.

First Day Orientation

Date Monday, March 21st, 2022

Time 9:00 am Location TBD

Selective Learning Objectives

At the end of this selective, students will be able to:

- Understand the many ways the placebo effect has been conceived of throughout history and today (MDCM 7.2)
- Develop an awareness of the role the placebo effect plays within both medical practice and medical research, so they are able to recognize it within their own training and career (MDCM 7.3)
- Critically examine arguments for and against the use of placebo treatments in medicine and the use of placebo controls in research (MDCM 7.2)

Selective Learning Activities, Learning Resources & References

The student is responsible for attending all scheduled academic activities. Throughout the course, the student is expected to read broadly on topics related to the course to expand his/her knowledge base. In addition, the student will attain course objectives through the following academic activities:

- 1. Small Group Sessions
- 2. Individual Presentation

1. Small Group Sessions

Activity	Free form (MDCM objective) (MCC presentation when	Resources	
	presentation when applicable)		
In this introductory session, we will consider the roles the placebo effect has played throughout history and take a look at the current resurgence of placebo studies and scholarship.	 Understand the many ways the placebo effect has been conceived of throughout history and today (MDCM 7.2) Develop an awareness of the role the placebo effect plays within both medical practice and research (MDCM 7.3) Critically examine arguments for and against the use of placebo treatments in medicine and the use of placebo controls in research (MDCM 7.2) 	PPT Questions - DOC Readings (Required) • Greenberg, Gary. What if the Placebo Effect Isn't a Trick? New York Times Nov 7, 2018 Link. • Harrington, Anne. "The many meanings of the placebo effect: Where they came from, why they matter." Biosocieties 1.2 (2006): 181-193 PDF Readings (Optional) • Shorter, Edward. "A brief history of placebos and clinical trials in psychiatry." The Canadian Journal of Psychiatry 56.4 (2011): 193-197 PDF • Miller, Franklin G., et al. The placebo: A reader. Johns Hopkins University	
Placebo Mechanisms	Understand the	Press, 2013. <u>PPT</u>	
In this session, we will examine the mechanisms that underlie placebo effects, considering the ways in which classical conditioning, beliefs and expectations,	many ways the placebo effect has been conceived of throughout history and today (MDCM 7.2)	Readings (Required): • Enck, P. et al., "The placebo response in medicine: minimize, maximize, or personalize?"	

characteristics of practitioners and social learning influence placebo responses.

- awareness of the role the placebo effect plays within both medical practice and research (MDCM 7.3)
- Critically examine arguments for and against the use of placebo treatments in medicine and the use of placebo controls in research (MDCM 7.2)

- *Nature Review*(2013): 191-204. **PDF**
- Howe, L. et al., "When your doctor "gets it" and "gets you": the critical role of competence and warmth in the patient-provider interaction" Frontiers in Medicine (2019) PDF

Readings (Optional):

- Schledowski et al., Neuro-Bio-Behavioral
 Mechanisms of Placebo
 and Nocebo Responses:
 Implications for Clinical
 Trials and Clinical
 Practice. Pharmacological
 Reviews. (2015) 697-730. PDF
- Placebo Effects:
 Understanding the
 mechanisms in health and
 disease. (2009) Oxford
 University Press. PDF

Placebos and Deception

In this session, we will consider the age-old association between deception and the placebo effect. We will examine arguments for and against the deceptive use of placebo treatments, and how such treatments present a conflict between patient autonomy and beneficence. We will also look at a new body of research that involves non-deceptive, open label placebo treatments

- Understand the many ways the placebo effect has been conceived of throughout history and today (MDCM 7.2)
- Develop an awareness of the role the placebo effect plays within both medical practice and research (MDCM 7.3)
- Critically examine

Readings (Required)

- Alfano, Mark. "Placebo effects and informed consent." *The American Journal of Bioethics* 15.10 (2015): 3-12. PDF
- Kaptchuk, Ted J., et al. "Placebos without deception: a randomized controlled trial in irritable bowel syndrome." *PloS one* 5.12 (2010): e15591, 1-7. PDF

Readings (Optional):

arguments for and against the use of placebo treatments in medicine and the use of placebo controls in research (MDCM 7.2)

- Miller, Franklin G., David Wendler, and Leora C. Swartzman. "Deception in research on the placebo effect." *PLoS medicine* 2.9 (2005): e262, 0853-0859. PDF
- Charlesworth, James EG, et al. "Effects of placebos without deception compared with no treatment: A systematic review and meta-analysis."

 Journal of Evidence-Based Medicine 10.2 (2017): 97-107. PDF
- Friesen, Phoebe. "Placebos as a Source of Agency:
 Evidence and
 Implications." Frontiers in
 Psychiatry 10: 721 (2019),
 1-10. PDF

Controlling for Placebo Effects

In this session, we look to challenges that the placebo effect poses for evidence based medicine, including differential placebo responses, the rise of the placebo effect, and the efficacy paradox. We will also examine two cases in which developing a placebo control poses significant challenges to investigators: psychotherapy and psychedelics.

- Understand the many ways the placebo effect has been conceived of throughout history and today (MDCM 7.2)
- Develop an awareness of the role the placebo effect plays within both medical practice and research (MDCM 7.3)
- Critically examine arguments for and against the use of placebo treatments in medicine and the

Readings (Required):

- Burke, M.J. et al.,

 "Challenges of Differential
 Placebo Effects in
 Contemporary Medicine:
 The Example of Brain
 Stimulation" *Annals of*Neurology (2018). PDF
- Hendy, Katherine.

 "Placebo Problems:
 Boundary Work in the
 Psychedelic Science
 Rennaisance" Plant
 Medicines, Healing and
 Psychedelic Science, Eds.
 Labate, B., Cavnar, C.
 PDF

Readings (Optional):

• Zhang, W. and Doherty, M. "Efficacy Paradox and

use of placebo controls in research (MDCM 7.2)

- Proportional Contextual Effect (PCE)" *Clinical Immunology* (2018), 82-86. - PDF
- Kirsch, Irving, Bruce Wampold, and John M. Kelley. "Controlling for the placebo effect in psychotherapy: Noble quest or tilting at windmills?." Psychology of Consciousness: Theory, Research, and Practice 3.2 (2016): 121. PDF
- Olson, J., Suissa-Rocheleau, L., Lifshitz., L., Raz., A., & Veissière, S. P. Tripping on nothing: Placebo psychedelics and contextual factors. (2020) -PDF

Placebos and Charlatans

In this session, we will look to another classical association with placebos: the charlatan. We will consider how the link between placebos and pseudoscience shaped the development of evidence-based medicine and how this relationship is being considered today.

- understand the many ways the placebo effect has been conceived of throughout history and today (MDCM 7.2)
- Develop an awareness of the role the placebo effect plays within both medical practice and research (MDCM 7.3)
- Critically examine arguments for and against the use of placebo treatments in medicine and the use of placebo

PPT

Readings (Required):

- Stengers, Isabelle. "The doctor and the charlatan." *Cultural Studies Review* 9.2 (2003): 11-36. PDF
- Benedetti, Fabrizio. "The Dangerous Side of Placebo Research: Is Hard Science Boosting Pseudoscience?." Clinical pharmacology and therapeutics (2019), 1-3. PDF

Readings (Optional):

• Kaptchuk, Ted J. "Placebo studies and ritual theory: a comparative analysis of Navajo, acupuncture and biomedical healing."

Philosophical Transactions

controls in research (MDCM 7.2)

- of the Royal Society B: Biological Sciences 366.1572 (2011): 1849-1858. - PDF
- Friesen, Phoebe. "Mesmer, the placebo effect, and the efficacy paradox: lessons for evidence based medicine and complementary and alternative medicine."

 Critical Public Health 29.4 (2019): 435-447. PDF
- Callahan, Daniel, ed. The role of complementary and alternative medicine: Accommodating pluralism. Georgetown University Press, 2001.

Pinning Down Placebos

This session will involve a big picture look at the placebo, reflecting on what we've learned. We will ask how we should define the placebo effect, what role it should play in research and in practice, and what future work related to the placebo effect should look like.

- Understand the many ways the placebo effect has been conceived of throughout history and today (MDCM 7.2)
- Develop an awareness of the role the placebo effect plays within both medical practice and research (MDCM 7.3)
- Critically examine arguments for and against the use of placebo treatments in medicine and the use of placebo controls in

PPT

Readings (Required):

- Blease, C., and Annoni,
 M., "Overcoming
 Disagreement: A Roadmap for Placebo Studies"
 Biology & Philosophy
 (2019) 34:18, 1-26. PDF
- Nunn, R., "It's time to put the placebo out of our misery" *BMJ* (2009), 1015.
 PDF
- Moerman, D., and Jonas, W., "Deconstructing the Placebo Effect and Finding the Meaning Response"
 Annals of Internal Medicine, 136, no. 6
 (2002): 471-476. PDF

Readings (Optional):

• Thompson et al., "Reconsidering the Placebo

research (MDCM 7.2)	Response from a Broad Anthropological Perspective" <i>Culture, Medicine, and Psychiatry</i> (2009) 33(1): 112–152 PDF Corns, J., "The Placebo Effect", Chapter 5, Philosophy of Pain
	Effect", Chapter 5, <i>Philosophy of Pain</i> , Routledge, 95-119 PDF

2. Individual Presentation

Activity	Free form (MDCM objective)	Resources
	(MCC presentation when	
	applicable)	
In-Class Presentation	 Understand the many 	Presentation
	ways the placebo effect	Schedule -
An in-class presentation during one of the	has been conceived of	PDF
small group sessions (alone or in pairs,	throughout history and	
depending on class size). These	today (MDCM 7.2)	
presentations should be based on	 Develop an awareness 	
independent research and reading that goes	of the role the placebo	
beyond the assigned readings for the class,	effect plays within both	
but is consistent with the focus of the class.	medical practice and	
Presenters will be given a brief prompt to	research (MDCM 7.3)	
inspire their research and presentation.	 Critically examine 	
	arguments for and	
If you prefer to write a short paper instead	against the use of	
of giving an in class presentation, let me	placebo treatments in	
know and we can arrange that.	medicine and the use of	
	placebo controls in	
	research (MDCM 7.2)	