

SUMMER TRAINING REPORT

BY

DR. SWAHILI MISHRA

MBA (HEALTH AND HOSPITAL MANAGEMENT)

2019-21

PART-01

REPORT ON WORK FROM HOME

TOPIC : LIVING WITH OCD DURING THE PANDEMIC

RESEARCH QUESTION :

*What are the trigger factors of OCD during Pandemic, and
How can it be controlled?*

TABLE OF CONTENTS

ABSTRACT	3
INTRODUCTION	3
AIM	4
OBJECTIVE	4
METHODOLOGY	5
DISCUSSION	6
RESULT	7
CONCLUSION	9
REFERENCES	12

ABSTRACT

Many restraint have been computed to reduce the progression of the COVID-19 pandemic is increasing , growing concern of ill mental health, especially obsessive-compulsive disorder (OCD) . The fear of being infected and emphasis given to strict personal hygiene really have a negative impact on the psychiatric group. The group of OCD patients who had completed an evidence-based therapy for OCD before the lockdown, the given review based study evaluated the changes on OCD symptoms during the quarantine and gave a concise conclusion of its management after reviewing various articles and literature reviews.

Revocation status on OCD symptoms and having contamination symptoms before the lockdown was significantly associated with more elevated OCD symptoms worsening during the quarantine . It is very crucial to focus on psychiatric conditions that may be initiated or exacerbated by disaster . The advancement of the COVID-19 pandemic is brutally increasing the mortality but also demonstrating the potential to bleak mental health. It is very important to provide appropriate attention to specific psychiatric conditions that are being triggered by the pandemic .

INTRODUCTION

The pandemic COVID-19 triggered severe mental health issues. There has been a rising amount of studies in recent months about the increasing rates of anxiety and depression both in psychiatric patients and in general population. Vital interventions such as quarantine, social distancing and self-isolation, implemented initially to minimize the risk of infection while causing extreme mental health consequences due to the alienation from the loved ones, the lack of distress sensation. These interventions can exacerbate depression and reduce social experiences, which are risk factors for various mental illness, often in individuals who have mental health problems already. Even in healthy people the Quarantine can lead to many mental health issues. Because of financial concerns, frustration, boredom, lack of supplies, and poor communication, the major symptoms include depression, insomnia, emotional distress, fear and panic. In addition, if these concerns last long, they may increase the risk of severe and disabled mental health conditions, including OCD.

AIM

The rising mental health issues is discerning due to world-wide lockdown in response to the pandemic. Since WHO has already declared a pandemic with a strict notice on washing and sanitizing, numerous media articles reported the distress of OCD group, the report stated an increase number of patients with OC symptoms in OPD across countries like China, United States, United Kingdom, Italy, and India but scientific literature on the statistics is awaited.

Pandemics is not just a biological or medical phenomena . It has immense psycho-social inference and can widely affect population. Patients already with mental disorders history are more prone to relapse, medication default, stress , lack of self-care and pandemic suicidality. It also leads to “mental-distrust” , anxiety , depression exacerbated by lonesome and social distancing. In past outbreaks such as Severe Acute Respiratory Syndrome (SARS), Middle East Respiratory Syndrome (MERS), and Influenza, the exacerbation of OCD was well known, especially within 6-12 months after the epidemic ceased to occur. It carries the risk of growing obsessional problems if the interventions against an infection include repeated behaviour. In the early stages of the pandemic, it might not be apparent because of denial, under-detection, interruption of public care and alternate health goals. Mental health concerns cannot be at the forefront, particularly during the active period of a pandemic, leading to an aggravation of symptoms and. Late diagnosis. Some OCD patients may be aware of this, but they are hesitant to seek support either because of shame or lack of knowledge of what is “excess” washing and bathing activity.

OBJECTIVE

The key objective of this paper is to answer the research question i.e, What are the trigger factors of OCD symptoms during Pandemic?, and How can it be controlled? Also, to conclude by reviewing numerous literature in the selected area of study, by synthesizing the knowledge in the selected literature into a summary, by analysing the information collected from identifying gaps in updated knowledge, by formulating areas for further research and finally presenting the literature in an organized and concise way .

METHODOLOGY

This is the secondary research publication. The field of observations that have been published by different authors are re-interpreted and re-written as a secondary research paper . It provides a different perspective and the additional analysis of the current reviews

and future directions . The research methodology for the paper is review of the Secondary Data Analysis/ Archival study . The step by step research methodology is followed in this paper .

Step-1: Identification of relevant research papers, articles and journals

The relevant research paper were identified and search using basic keywords search and this step was done in five iteration to cancel out irrelevant papers in this process .

Step-2: The initial review

The initial review was done in order to understand the perspective of the author and finding of the research .

Step-3 Screening

The initial screening of almost 7 articles, 5 systematic review based papers , objective, inference, challenges and concerns . Further few more articles and papers were studied to build the idea of each category .

Step-4 Inference

The inference was drawn by collecting, reading, analysing and summarizing various research papers. This in turn helped to form a conclusion and add my own perspective and ideas for the future study.

DISCUSSION

The number of OCD patients is increasing at various set-ups. In an effort to subdue the disease, non-essential emergency facilities are often discontinued in many areas. Even clinicians still have their teleconsultations challenges and reservations. In developing countries such as India, where OC symptoms are often considered culture-bound and religion-laden in some regions, it is difficult to sensitize people and their families to what is “excessive” washing in a situation where everyone panics to obey the precautionary instructions. Nonetheless, the need for the hour is perception. Psychoeducation of patients and families, eradication of pandemic misinformation, facilitation of consultations and e-psychotherapy, use of psychiatric social work support to monitor severe and therapeutic. Explaining the circumstances of washing is important and making everyone realize what’s

‘out of proportion’. Similarly, any unwanted detail must be minimised. Uncontrolled obsessions and compulsions can lead to dermatological conditions, chronic stress, insomnia, and high suicide risk. If a pandemic’s general hysteria and terror is at its height. Lack of inhibitory regulation in OCD can result in a brutal cycle leading to increased susceptibility to the infection, hence increasing contamination thinking and increasing washing. We need to be prepared for the possible rise in these situations, especially in the next 3-6 months. Primary health workers need to be trained at different sites to identify OC complaints and the necessary referrals. The pandemic will finally vanish, but this alarming psychiatric disorder’s heightened prevalence and severity will be troublesome for several months to come.

This paper analysed changes in OCD symptoms in a population of patients with OCD during the pandemic and studied the consequences of infection symptoms and suspensions before the OCD symptoms improve during quarantine, Regulation of quarantine related factors (i.e., using social networking sites as a way of sustaining social connections, staying with a partner in the same room, working from home).

Generally, there is an rise in paranoia and frequency of addiction at the onset of pandemic. Symptoms of infection are exacerbated. Continuous coverage on television, radio and social media mixed with hygiene advice may have been a challenging situation for this susceptible population, particularly those with pre-existing symptoms of infection. I found that prior to quarantine, revocation status of OCD symptoms was correlated with higher OCD symptoms deteriorating during quarantine. As per my study, mental health providers will have the appropriate resources not just for the care of patients who already experience symptoms, but also for the enhancement of avoidance of relapse during the time of social isolation, which will continue long after full lockdown.

For example, health providers would consider restricting exposure to news, or reading information only from reputable outlets, investing time on fun or active activity on a regular basis that may help relax from negative thinking and decrease anxiety rates. In fact, the lockdown and inadequate access to hospitals for mental treatments may have hindered people in finding assistance. One of the most convincing causes of the findings is the drop of care provided to OCD patients during the time of lockdown. It is also really important to increase awareness and encourage all patients to seek support from mental health providers. They should also concentrate on developing new approaches such as remote therapy and electronic consultation. Although the use of emerging technology can be helpful during a lockdown time,

the use of the Internet to provide therapies can, as recently started, trigger symptoms to escalate, particularly if carried out without adequate guidance.

Finally, I emphasize the importance of recurrence prevention approaches to be adopted, particularly at the conclusion of cognitive behavioural treatment, because they can lead to minimizing the likelihood of recurrence, which is usually very high among OCD patients outside of the pandemic. The evaluation of reassurance-seeking through medical information on the Internet is a future area of investigation. It might also be important to examine other factors potentially associated with deteriorating symptoms such as family housing conditions during quarantine.

Another important argument may be the presumption of accountability for evaluation as a balance between the effects of infection and deteriorating effects because they become OCD-specific cognitive/maintenance risk factors. This should be expected that people with OCD who have exaggerated feelings of duty and heightened obsessions with infection would escalate at home during the quarantine, whereas others who have only signs with infection without fear of actually contaminating others do not.

In conclusion, this paper evaluated the triggering of symptoms in patients with OCD during quarantine. My review suggests that this stressful period is associated with a significant worsening of symptoms, particularly among patients with symptoms like, fear of getting contaminated and a pre-quarantine remission state.

RESULT

TABLE 1

OCD TRIGGERS DURING PANDEMIC	BEHAVIOURS CONTRIBUTED BY TRIGGERS	CONTROL MEASURES
---	---	-------------------------

Advice to wash the hands more frequently .	Frequently reminding family members to wash hands.	Limit news and social media .
Need to sanitize every time a person returns home .	Surfing information about the virus stays active .	Seek e-therapy .
Advice for leaving the house only when it is necessary .	Normalizing frequent washing and bathing .	Practice self-compassion

SOURCE; MEDICAL NEWS TODAY

Medically reviewed by Timothy J. Legg, Ph.D., CRNP — Written by Jessica Caporuscio, Pharm.D. on May 7, 2020

TABLE 2

OCD SPIRALING FACTORS	OCD AMIDST A PANDEMIC	CONTROL MEASURES
Time	Obsessing over your own health or loved ones health.	Cut social media hours.
Anxiety	Compulsively washing hand again and again.	Implement self care practices.
Impact and Concern	Following the news cycle, compulsively logging into social media	Speak with a professional.

SOURCE; VERY WELL MIND

By

Wendy Rose Gould

Medically reviewed by

Daniel B. Block, MD

Updated on April 14, 2020

CONCLUSION

There is no better time in history than the present to suffer from OCD. After reviewing many articles, journals and papers, it is clear that we need to continue advancing OCD treatment in both adults and young people. To help manage these growing concerns during the COVID-19 pandemic, this review paper recommends the following :

Set a Safety Plan

With the help of your therapist or support group, including friends and family, create a basic safety plan for maintaining personal hygiene and decreased social contact. Once this is done, try not to add more to it . Recommendations from trusted health organizations including the CDC and WHO include the following:

- Wash your hands with soap and water for 20 seconds of being in public, chewing or blowing your nose, coughing, sneezing. Avoid excessive hand washing which may injure your skin and strip the barrier that protects against infection . Use 60% alcohol hand sanitizer when soap and water are not available.
- Disinfect regularly accessed objects, including door handles, light switches, phones and countertops, everyday. Do this once or twice a day and always think about whether you truly need to clean this surface .
- Cover with a towel while coughing or sneezing or use the inside of your forearm.
- Evite near touch with others (keep about 6 feet) and stay as long as possible at home.

If you struggle with contamination fears, this safety plan may help relieve some anxiety over how extensive your routine for protecting against COVID-19 truly needs to be. If you would like to do more than this or you find yourself repeatedly adding more to this list, pick a person who can help you decide what are rational safety measures for you to follow.

If you struggle with perfectionism or fears of harming others, remember that no one expects you to be able to protect yourself or others “perfectly” and that there is no way you can. Lean on your support system to help navigate the uncertainty and sometimes lack of specific guidelines that could create room for your OCD behaviors and worries to take over.

Allow Room for Change

The protective measures we are taking against COVID-19 are our new normal but they are only temporary, and at some point, we will return to our normal lives. Until then, we have to be open to change. For those undergoing or seeking in-person services, talk to your health provider about how your treatment plan might change .

Telehealth

Given the need for social isolation to limit the transmission of COVID-19, talk to your health provider about temporarily transitioning your therapy to a video teleconferencing service. Research has found that ERP therapy can be effectively provided via video teleconferencing for children and adults with OCD. Not all therapists can provide these services, however, and not all health insurance will cover it. Check-in with your therapist and health insurance to discuss your options. You may have to temporarily see a different therapist if your current one does not offer teletherapy. Many state Medicaid and Medicare plans cover teletherapy while private insurance coverage varies from state to state, and by insurance plan.

Therapy Goals

The protective measures we are asking everyone to follow might not fall in line with your current goals for treatment, especially if you suffer from contamination fears. Look to your therapist for guidance in creating a new baseline. It may feel like a setback, but remember this change is temporary, and with support, you will be able to get back on track. If you are not currently seeking treatment, consider reaching out to a provider that can help prepare you in case worsening or changing of OCD symptoms.

Practice Self Care

Remember to be kind to yourself and those around you. This isn't easy. Make time for mental rest, relaxation, and physical activity to help keep your mind and body busy.

Limit your Social Media Intake

- Spend 5-10 minutes a day gathering new information on COVID-19. That should be enough information to stay up to date on protective measures and social isolation guidelines.
- Setting a time limit will help prevent your OCD from taking over and getting hooked on learning all there is to know about COVID-19. Decreasing exposure to stressful content will also help reduce fears that could worsen OCD behaviors

Stay Physically Active

- Try a new fitness workout
- Master new yoga moves
- Dance to your favorite music
- Schedule walks at home or outside

Relaxation (e.g., meditation, mindfulness, hobbies, board/card games)

Reading, writing, or painting

Watching movies or TV with family and friends

Stay Connected

Reach out to loved ones via FaceTime, Skype, Google Hangouts, phone

Join an online support group to see how others are managing their OCD symptoms

Reach out to spiritual groups and co-workers.

References

1. Franklin ME, Foa EB. Obsessive-compulsive disorder. In: Barlow DH, editor. Clinical handbook of psychological disorders. 4th ed. New York, NY: Guilford Press; 2007. pp. 164–215. [[Google Scholar](#)]
2. Lack CW, Storch EA, Murphy TK. More than just monsters under the bed: Assessing and treating pediatric OCD. *Psychiatric Times*. 2006;23:54–57. [[Google Scholar](#)]
3. American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 4th ed. Arlington, VA: Author; 2000. [[Google Scholar](#)]
4. Foa EB, Kozak MJ, Goodman WK, Hollander E, Jenike MA, Rasmussen SA. DSM-IV field trial: obsessive-compulsive disorder. *Am J Psychiatry*. 1995;152:90–96. [[PubMed](#)] [[Google Scholar](#)]
5. Barrett PM, Healy LJ. An examination of the cognitive processes involved in childhood obsessive-compulsive disorder. *Behav Res Ther*. 2003;41:285–299. [[PubMed](#)] [[Google Scholar](#)]
6. Swedo SE, Rapoport JL, Leonard H, Lenane M, Cheslow D. Obsessive-compulsive disorder in children and adolescents. Clinical phenomenology of 70 consecutive cases. *Arch Gen Psychiatry*. 1989;46:335–341. [[PubMed](#)] [[Google Scholar](#)]
7. Last CG, Strauss CC. Obsessive-compulsive disorder in childhood. *J Anxiety Disord*. 1989;3:295–302. [[Google Scholar](#)]
8. Kessler RC, Berglund P, Demler O, Jin R, Merikangas KR, Walters EE. Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Arch Gen Psychiatry*. 2005;62:593–602. [[PubMed](#)] [[Google Scholar](#)]
9. Zohar AH. The epidemiology of obsessive-compulsive disorder in children and adolescents. *Child Adolesc Psychiatr Clin N Am*. 1999;8:445–460. [[PubMed](#)] [[Google Scholar](#)]

10. Ruscio AM, Stein DJ, Chiu WT, Kessler RC. The epidemiology of obsessive-compulsive disorder in the National Comorbidity Survey Replication. *Mol Psychiatry*. 2010;15:53–63. [[PMC free article](#)] [[PubMed](#)] [[Google Scholar](#)]
11. Okasha A, Saad A, Khalil AH, el Dawla AS, Yehia N. Phenomenology of obsessive-compulsive disorder: a transcultural study. *Compr Psychiatry*. 1994;35:191–197. [[PubMed](#)] [[Google Scholar](#)]
12. Fontenelle LF, Mendlowicz MV, Marques C, Versiani M. Trans-cultural aspects of obsessive-compulsive disorder: a description of a Brazilian sample and a systematic review of international clinical studies. *J Psychiatr Res*. 2004;38:403–411. [[PubMed](#)] [[Google Scholar](#)]
13. Chavira DA, Garrido H, Bagnarello M, Azzam A, Reus VI, Mathews CA. A comparative study of obsessive-compulsive disorder in Costa Rica and the United States. *Depress Anxiety*. 2008;25:609–619. [[PubMed](#)] [[Google Scholar](#)]
14. Himle JA, Muroff JR, Taylor RJ, Baser RE, Abelson JM, Hanna GL, Abelson JL, Jackson JS. Obsessive-compulsive disorder among African Americans and blacks of Caribbean descent: results from the National Survey of American Life. *Depress Anxiety*. 2008;25:993–1005. [[PubMed](#)] [[Google Scholar](#)]
15. Weissman MM, Bland RC, Canino GJ, Greenwald S, Hwu HG, Lee CK, Newman SC, Oakley-Browne MA, Rubio-Stipec M, Wickramaratne PJ. The cross national epidemiology of obsessive compulsive disorder. The Cross National Collaborative Group. *J Clin Psychiatry*. 1994;55 Suppl:5–10. [[PubMed](#)] [[Google Scholar](#)]
16. Matsunaga H, Maebayashi K, Hayashida K, Okino K, Matsui T, Iketani T, Kiriike N, Stein DJ. Symptom structure in Japanese patients with obsessive-compulsive disorder. *Am J Psychiatry*. 2008;165:251–253. [[PubMed](#)] [[Google Scholar](#)]
17. Lemelson R. Obsessive-compulsive disorder in Bali: the cultural shaping of a neuropsychiatric disorder. *Transcult Psychiatry*. 2003;40:377–408. [[PubMed](#)] [[Google Scholar](#)]
18. Greenberg D. Cultural aspects of obsessive compulsive disorder. In: Hollander E, editor. *Current insights in obsessive compulsive disorder*. New York: Wiley; 1994. pp. 11–21. [[Google Scholar](#)]
19. Abramowitz JS, Deacon BJ, Woods CM, Tolin DF. Association between Protestant religiosity and obsessive-compulsive symptoms and cognitions. *Depress Anxiety*. 2004;20:70–76. [[PubMed](#)] [[Google Scholar](#)]

20. Rosmarin DH, Pirutinsky S, Siev J. Recognition of scrupulosity and non-religious OCD by Orthodox and non-Orthodox Jews. *J Soc Clin Psychol*. 2010;29:930–944. [[PubMed](#)] [[Google Scholar](#)]
21. Geller DA. Obsessive-compulsive and spectrum disorders in children and adolescents. *Psychiatr Clin North Am*. 2006;29:353–370. [[PubMed](#)] [[Google Scholar](#)]
22. Labad J, Menchon JM, Alonso P, Segalas C, Jimenez S, Jaurrieta N, Leckman JF, Vallejo J. Gender differences in obsessive-compulsive symptom dimensions. *Depress Anxiety*. 2008;25:832–838. [[PubMed](#)] [[Google Scholar](#)]
23. Torres AR, Prince MJ, Bebbington PE, Bhugra D, Brugha TS, Farrell M, Jenkins R, Lewis G, Meltzer H, Singleton N. Obsessive-compulsive disorder: prevalence, comorbidity, impact, and help-seeking in the British National Psychiatric Morbidity Survey of 2000. *Am J Psychiatry*. 2006;163:1978–1985. [[PubMed](#)] [[Google Scholar](#)]
24. Stewart SE, Rosario MC, Baer L, Carter AS, Brown TA, Scharf JM, Illmann C, Leckman JF, Sukhodolsky D, Katsoyich L, et al. Four-factor structure of obsessive-compulsive disorder symptoms in children, adolescents, and adults. *J Am Acad Child Adolesc Psychiatry*. 2008;47:763–772. [[PubMed](#)] [[Google Scholar](#)]
25. Storch EA, Jones AM, Lack CW, Ale CM, Sulkowski ML, Lewin AB, De Nadai AS, Murphy TK. Rage attacks in pediatric obsessive-compulsive disorder: phenomenology and clinical correlates. *J Am Acad Child Adolesc Psychiatry*. 2012;51:582–592. [[PubMed](#)] [[Google Scholar](#)]
26. Piacentini J, Peris TS, Bergman RL, Chang S, Jaffer M. Functional impairment in childhood OCD: development and psychometrics properties of the Child Obsessive-Compulsive Impact Scale-Revised (COIS-R) *J Clin Child Adolesc Psychol*. 2007;36:645–653. [[PubMed](#)] [[Google Scholar](#)]
27. Geller DA, Biederman J, Griffin S, Jones J, Lefkowitz TR. Comorbidity of juvenile obsessive-compulsive disorder with disruptive behavior disorders. *J Am Acad Child Adolesc Psychiatry*. 1996;35:1637–1646. [[PubMed](#)] [[Google Scholar](#)]
28. Lack CW, Storch EA, Keeley ML, Geffken GR, Ricketts ED, Murphy TK, Goodman WK. Quality of life in children and adolescents with obsessive-compulsive disorder: base rates, parent-child agreement, and clinical correlates. *Soc Psychiatry Psychiatr Epidemiol*. 2009;44:935–942. [[PubMed](#)] [[Google Scholar](#)]
29. Fontenelle IS, Fontenelle LF, Borges MC, Prazeres AM, Rangé BP, Mendlowicz MV, Versiani M. Quality of life and symptom dimensions of patients with obsessive-compulsive disorder. *Psychiatry Res*. 2010;179:198–203. [[PubMed](#)] [[Google Scholar](#)]

30. de Mathis MA, Diniz JB, do Rosário MC, Torres AR, Hoexter M, Hasler G, Miguel EC. What is the optimal way to subdivide obsessive-compulsive disorder. *CNS Spectr*. 2006;11:762–768, 771-774, 776-779. [[PubMed](#)] [[Google Scholar](#)]
31. Robinson G. UK poll finds young people's mental health hit by coronavirus. *The Guardian* [Internet] <https://www.theguardian.com/society/2020/mar/31/young-peoples-mental-health-hit-by-coronavirus-uk-poll> [cited 2020 Mar 31]; Available from:
32. Hobfoll S.E., Watson P., Bell C.C., Bryant R.A., Brymer M.J., Friedman M.J. Five essential elements of immediate and mid-term mass trauma intervention: empirical evidence. *Psychiatry*. 2007;70(4):283–315. [discussion 316-369] [[PubMed](#)] [[Google Scholar](#)]
33. World Health Organization Rolling updates on coronavirus disease (COVID-19) <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/events-as-they-happen> Available from.
34. Adam D. The hellish side of handwashing: how coronavirus is affecting people with OCD. *The Guardian* [Internet] <https://www.theguardian.com/society/2020/mar/13/why-regular-handwashing-can-be-bad-advice-for-patients> [cited 2020 Mar 31]; Available from:
35. Apergis-Schoute A.M., Gillan C.M., Fineberg N.A., Fernandez-Egea E., Sahakian B.J., Robbins T.W. Neural basis of impaired safety signaling in obsessive compulsive disorder. *Proc Natl Acad Sci USA*. 2017;114(12):3216–3221. 21. [[PMC free article](#)] [[PubMed](#)] [[Google Scholar](#)]
- 36 Gottwald J., de Wit S., Apergis-Schoute A.M., Morein-Zamir S., Kaser M., Cormack F. Impaired cognitive plasticity and goal-directed control in adolescent obsessive-compulsive disorder. *Psychol Med*. 2018;48(11):1900–1908. [[PMC free article](#)] [[PubMed](#)] [[Google Scholar](#)]
37. World Health Organization ICD-11 - Mortality and Morbidity Statistics. Geneva. April 2019. <https://icd.who.int/browse11/l-m/en>
38. Pellegrini L, Maietti E, Rucci P, Casadei G, Maina G, Fineberg NA, Albert U. Suicide attempts and suicidal ideation in patients with obsessive-compulsive disorder: a systematic review and meta-analysis. *J Affect Disord*. (Submitted for publication March 2020).
39. Posner K., Brown G.K., Stanley B., Brent D.A., Yershova K.V., Oquendo M.A. The Columbia-Suicide Severity Rating Scale: initial validity and internal consistency findings from three multisite studies with adolescents and adults. *Am J Psychiatry*. 2011 Dec;168(12):1266–1277. [[PMC free article](#)] [[PubMed](#)] [[Google Scholar](#)]
40. Skapinakis P., Caldwell D.M., Hollingworth W., Bryden P., Fineberg N.A., Salkovskis P. Pharmacological and psychotherapeutic interventions for management of obsessive-

compulsive disorder in adults: a systematic review and network meta-analysis. *Lancet Psychiatry*. 2016 Aug;3(8):730–739. [[PMC free article](#)] [[PubMed](#)] [[Google Scholar](#)]

41. Wheaton M.G., Gallina E.R. Using cognitive-behavioral therapy to treat obsessive-compulsive disorder with co-occurring depression. *J Cogn Psychother*. 2019;33:228–241. doi: 10.1891/0889-8391.33.3.228. [[CrossRef](#)] [[Google Scholar](#)]

42. Drummond L.M., Edwards L.J. Cambridge University Press; 2018. Obsessive compulsive disorder: all you want to know about OCD for People living with OCD, carers, and clinicians. (157 p) [[Google Scholar](#)]

43. Schuch F.B., Vancampfort D., Richards J., Rosenbaum S., Ward P.B., Stubbs B. Exercise as a treatment for depression: a meta-analysis adjusting for publication bias. *J Psychiatr Res*. 2016 Jun;77:42–51. [[PubMed](#)] [[Google Scholar](#)]

44. Wegner M., Helmich I., Machado S., Nardi A.E., Arias-Carrion O., Budde H. Effects of exercise on anxiety and depression disorders: review of meta- analyses and neurobiological mechanisms. *CNS Neurol Disord Drug Targets*. 2014;13(6):1002–1014. [[PubMed](#)] [[Google Scholar](#)]

45. Abrantes A.M., Farris S.G., Brown R.A., Greenberg B.D., Strong D.R., McLaughlin N.C. Acute effects of aerobic exercise on negative affect and obsessions and compulsions in individuals with obsessive-compulsive disorder. *J Affect Disord*. 2019;245:991–997. 15. [[PMC free article](#)] [[PubMed](#)] [[Google Scholar](#)]

PART- 2

REPORT ON ONLINE COURSE

NAME OF THE COURSE:

HEALTHCARE MARKETPLACE

TABLE OF CONTENT

1) COURSE DESCRIPTION.....	3
2) OBJECTIVE OF THE COURSE.....	3
3) COURSE CONTENT.....	3
4) LEARNING METHODOLOGY.....	3
5) KEY LEARNINGS.....	4
6) KEY LEARNINGS.....	5
7) KEY LEARNINGS.....	6
8) REFERENCE.....	6

COURSE DESCRIPTION:

This course recognizes and explains the heterogenicity of the healthcare sector and outlines potential corporate and public policy approaches to the problem posed by the need for health services in the society.

OBJECTIVE OF THE COURSE:

The course offers outstanding strategies for promoting any healthcare company by using clear healthcare messaging, assessing online customer experience, creating a robust health platform, monitoring marketing plan, making medical devices available to everyone, and focusing on medical equipment and the pharmaceutical industry.

Course Content:

1) EVOLUTION OF THE HEALTHCARE MARKETPLACE

2) INSURANCE MARKET

3) PHARMA AND DEVICE CONVERGANCE

4) HEALTH INFORMATION TECHNOLOGY

5) GLOBAL MEDICAL INNOVATION VALUATION

Learning Methodology:

Methods used to deliver the concepts: PowerPoint presentations, online lectures, videos with a description, and reading material. For a better understanding of this course, they have conducted a quiz at the end of every week.

Key Learnings:

Health care quality trends;

It is the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge’.

‘It is, Doing the right thing at the right time in the right way for the right person and having the best possible result’.

Two important terms : (i) Clinical quality (ii) Consumer satisfaction

Clinical quality is something one can see that help outcome would truly improve by looking at a clinical test.

Consumer satisfaction asks “ Do you feel better about this or not? ”. There are many factors involved in consumer satisfaction.

Another term is Trade-offs.

“People not always get all the resources that they need. They might start rationing care. Say for cancer services, for access there’s going to be decisions whether you are going to get the piece or not. “On the other hand, if you say, quality is going to be on focus. Then we’re not going to compromise with quality. Again, it’s going to be trade-off against access”.

This concludes this module of Healthcare Marketplace Specialization.

Physician Market;

Electronic medical records are advancing, and because of which medical care has to be at least documented, wherever you go. And then pay for performance, the idea being that if you’re not achieving adequate quality of care, your reimbursement rate will be less.

Broker. They plays a crucial role in terms of making sure all the connections across this whole industry work. In many cases, we can have someone who is the primary care physician and they’re going to be sending people off to hospitals, they could be sending them off to another MD, they could be sending them off to a skilled nursing facility, they could be going off to the pharmacy.

Financier. They function as Entrepreneurs. They can fund themselves new technologies. They can create their sub-specialties in different areas. Surgery has a lot of that, orthopedics as well. They can lead development in new institutions in terms of the fundraising required to move an institution up in ranking or to just get new dollars to go into a different type of care. They could be an incubator for new medical technologies of their resources and bench science innovations for either profit or glory.

Medical Technology Evolution;

When we talk about medical equipments , it's been a long history . Medicare comes into action, Medicare as we call it is a public insurance program targeted first at the elderly, but also there's disabled population. But what really happens is as the Medicaid Program begins, it acts as the rocket fuel for a low tech device industry, wheel chairs, crutches and other pieces out there. Dollars for a new elderly consumer. To start controlling that medical cost inflation in the Nixon administration, there is a Certificate of Need Act that is passed that creates the notion of these local health planning agencies, which are basically a network of 274 agencies across the United States that grants locally hospitals the permission to build or acquire a new piece of technology.

Pharma And Device Convergence:

Medical devices are crossing this metabolizing threshold. So for example, there are what's known as bare-metal stents which if you've seen a stent before it's essentially a metal mesh that goes into an artery, and it expands to actually hold back the blockage that might have been in that artery once it's been cleaned through balloon angioplasty . And when that actually expands out there, the bare metal stent will hold it back, there was a technology developed called a drug eluting coating the actual metal with a drug substance and so the thought is that that will keep essentially the plaque build-up down . Now, there's been clinical studies showing that that may not be as effective as people thought given the additional cost, but it illustrates how essentially a drug designed to metabolize will be part of a medical device .

So there is a pipeline that Pharma has and the thought is that there's going to be increased convergence where devices that will enable drugs and vice versa could become a brand new product line that needs to be thought of in this concept of convergence .

It may encourage less innovation with the possible reduction of small firms that aren't able to fund FDA trials .

Health Information Technology;

There's this issue about what care is available to a given patient.

And so, we know that here, we have these systems of care that are available here for say, one person in one care delivery system .

But the concern is that if there are other care delivery systems that are not necessarily part of that care system, all that information is not connected . Now, interestingly enough, that's the case for the provider but for the insurer, they would see all this information .

Global Medical Innovation Valuation:

Trends for health procedures are strong indications that this technology is going to be pretty successful . We just look over a period of time and then extrapolate it out even further.

Looking at 2% annual growth rates for heart valve procedures in the United States today . What we would think about for this technology is about a 12-year lifecycle component where the technology is now ramping up and growing in its market share.

Now if we look at the intellectual property or IP landscape, it's you know it's crowded, but there's not necessarily things that can't be surmounted here .

SOURCE;

<https://coursera.org/share/f9bbadb979649da1ab1cf141c29e6e9d>