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## Contents

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## OPINION REVIEW

- 405 COVID-19 and psychiatry training: A cross-national trainee perspective  
*Gnanavel S, Mathur R, Sharma P, Parmar A*

## REVIEW

- 411 Current and future of anterior cruciate ligament reconstruction techniques  
*Takahashi T, Watanabe S, Ito T*
- 438 Weight regain after bariatric surgery: Promoters and potential predictors  
*Demerdash HM*

## MINIREVIEWS

- 455 Review of the effects of SARS-CoV2 infection and COVID-19 on common pediatric psychiatric illnesses  
*Balaram K, Ahmed M, Marwaha R*

## META-ANALYSIS

- 462 Maturation of robotic liver resection during the last decade: A systematic review and meta-analysis  
*Ishinuki T, Ota S, Harada K, Meguro M, Kawamoto M, Kutomi G, Tatsumi H, Harada K, Miyanishi K, Takemasa I, Ohyanagi T, Hui TT, Mizuguchi T*

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## COVID-19 and psychiatry training: A cross-national trainee perspective

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### Abstract

The coronavirus disease 2019 pandemic has significantly altered many aspects of our professional lives, including how psychiatry as a medical discipline is taught and learnt. Training in psychiatry relies on developing competencies through observing and interacting with patients, developing empathic consultation skills and seeking feedback from colleagues derived from cognitive and constructivist theories of learning, in a time-bound manner. The pandemic has drawn attention to the dual role of psychiatry residents as both trainees and physicians, with a pressing identity crisis at an inopportune time. This paper aims to illustrate some of the emerging themes in psychiatry training during the pandemic and some solutions for the same.

**Key Words:** COVID-19; Psychiatry; Training; Teleconsultation; Review

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**Core Tip:** There is an urgent need to streamline processes for entry and exit to a psychiatry training program, where it does not exist. Utilizing alternative modes of assessment including anonymized colleague, peer and patient feedback can supplement online assessment tools. Curricular adjustments taking current circumstances into

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account would be well appreciated by trainees. The most important recommendation we propose is provision of formalised intensive training around teleconsultation skills, using simulated scenarios followed by assessment, in addition to guidelines and modus operandi around remote working.

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## INTRODUCTION

The coronavirus disease 2019 (COVID-19) pandemic has significantly altered many aspects of our professional lives, including how psychiatry as a medical discipline is taught and learnt. Training in psychiatry relies on developing competencies through observing and interacting with patients, developing empathic consultation skills and seeking feedback from colleagues derived from cognitive and constructivist theories of learning, in a time-bound manner.

The pandemic has drawn attention to the dual role of psychiatry residents as both trainees and physicians, with a pressing identity crisis at an inopportune time. This paper aims to illustrate some of the emerging themes in psychiatry training during the pandemic and some solutions for the same[1].

## PROFESSIONAL IDENTITY

Many residents have been expected to assume roles that are not a prescribed part of their specialty training. Further, in some cases residents have also been compelled to acquire skills on the job that were not an expectation when they began residency in psychiatry. While this has resulted in identity crisis in terms of speciality, there is also the additional fear of delay in gaining competencies relevant to psychiatry. Also, due to staff shortages there have been other cases where a premature or an inappropriate delegation of increased responsibility (though within psychiatry) but without the associated privileges including monetary compensation or malpractice indemnity coverage. This results in "Role Confusion", in which a trainee is considered competent to take on a more senior role but actually this may result in a significant delay in their professional development[2]. This is a common theme noted both in both developed and developing countries. In a way, the pandemic has been a masterclass for trainees on practical leadership skills by testing their ability to cope with uncertainty and to make difficult decisions amid heightened anxiety and incomplete information.

## CLINICAL SUPERVISION AND DIRECT OBSERVATION

Psychiatry trainees often rely on direct clinical observation and supervision to develop their clinical competencies. This can be an important tool to understanding the complexities of clinical psychiatry. However, this aspect of the training has been significantly compromised during the pandemic. It is currently unclear if virtual means of observation are as effective[3]. However, on a positive note, some residents have reported that the virtual world has opened up and improved lines of communication bringing down the threshold for impromptu teaching or brief ad hoc supervision for specific cases[4].

However, there is a rather unanimous consensus that direct supervision of trainees by psychiatrists has been significantly affected by the pandemic. Trainees seek feedback regarding their interview style, approach, and clinical decision making for which direct observation is imperative. When done virtually, there are inherent problems including difficulty in observing certain subtleties of the mental status examination or non-verbal communication. Also, technological issues like weak internet signals and poor video/audio can compromise on the quality of the



interaction[3]. Similarly, wearing personal protective equipment (PPE) adds a physical barrier between trainees and patients that often obstructs observation of facial expressions that can be crucial for a quality assessment[5].

While most of the clinical care transitioned to the virtual format during the pandemic in developed countries, it was more of a challenge in developing countries due to the 'digital divide' characterised by lack of access to quality internet[6]. This also meant that psychiatric training in developing countries was disproportionately affected during the pandemic. Softening of regulations involving tele-mental health *e.g.*, Health Insurance Portability and Accountability Act, 1996 in United States have significantly expanded the scope of virtual care provisions, particularly in developed countries[7].

Also, most of the mental health services in public sector are through teaching hospitals in tertiary centres in developing countries (including South Asia) through self-referral unlike the tiered mental health provisions that exist in developed countries like United Kingdom. Hence, COVID related factors including lock downs and social restrictions are likely to have a disproportionate impact on our patients in developing countries. This also translates to a corresponding disproportionate impact on psychiatric training in developing countries due to the significantly reduced foot fall in tertiary psychiatric institutions, typically located in metro cities (during lockdown periods).

Previous literature emphasises how personalized feedback systems facilitate change. The more subjective perception and experience is assessed and reconsidered, the more significant change can actually take place. Differential steps may be considered to promote motivation, provide more security in disruptive times, and make change possible while supervising trainees. Triangulated research designs and domain knowledge can be considered together with an idiographic assessment of subjective values, subliminal affect perceptions, attitudes, values and beliefs to better facilitate this process[8].

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## CURRICULAR CHANGES INCLUDING ASSESSMENTS:

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In United Kingdom, the Royal college of Psychiatry (RCPsych) has been actively working with the trainees to ensure the quality of training is not significantly compromised and are provided the right support with appropriate leeway (in terms of curricular adjustment) at the same time. With most conferences being cancelled, RCPsych has successfully trialed a free webinar series by experts on different topics including but not limited to COVID-19 related topics. A variety of other organisations have also run several webinars useful for psychiatry trainees. Similar examples from developing countries include different divisions of Indian psychiatric society (IPS) and Psychiatrists association of Nepal (PAN) have been actively running webinar and virtual sessions, more aimed at trainee psychiatrists that have been well received. The local teaching programs have transitioned online in most institutions in all the three countries. In fact, an off shoot of this has been some well received local teaching sessions are now rolled out virtually across institutes or even different nations globally. In United States, the National Neuroscience Curriculum Initiative produced a "quarantine curriculum", which has been well-received by trainees, including lectures ranging from complex trauma, borderline personality disorder to child psychiatry and psychosis[9].

In United Kingdom, at a national level, examinations, including Clinical assessment of skills and competencies (CASC) and appraisal have all moved to virtual platforms [10]. The online CASC exam successfully rolled out recently was possibly the first of its kind globally. Standardized role players and simulation techniques have been successfully utilized for these exams. Plenty of thought and consideration has been provided to provide leeway to trainees in terms of career progression including reduction in number of work-place assessments (WPBA) needed and encouraging pieces of self-reflection (including on coping with complex work environment in the background of COVID-19) in portfolio to compensate in lieu of WPBA's.

Similarly, IPS and PAN recommend utilizing virtual platforms for assessment and examinations. However, it is concerning to note a persisting ambiguity in decisions on entry/exit exams in different institutions in South Asia. It is even more concerning to note a possible delay in completion of the training period for trainees in some of the institutions that results in increase in apprehension among trainees.

Previous literature demonstrates how synergistically combining textbook, e-learning cases and a simulated patient course in psychiatry education can be achieved

using a trans-disciplinary case-based blended learning framework. The same framework can be used to conceptualise assessments in mental health competencies as well[11]. The added advantage is that this can be helpful for curricular development and harmonization with corresponding mental health curricula in other institutes/countries. E-case based blended learning approaches can expedite the transfer of declarative knowledge to procedural knowledge in practice *via* fostering the understanding of pathophysiological concepts[12]. Similarly, standardized patients have been successfully utilized in medical education to train students' communication skills and this paradigm can be successfully employed for the purpose of assessments as well[13].

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## RESEARCH

Psychiatry trainees across the globe are encouraged to utilize this period for honing theoretical research skills and to consider taking up literature reviews on topics of interest in lieu of ongoing research that has been stalled. However, it is worth noting that some of the institutions traditionally mandate a piece of original research (not literature reviews) as a prerequisite for completion of even general psychiatric training. Those trainees who have been the most affected in this regard are those who have already embarked on research that requires patient contact. Hence, exploring other research projects at this critical juncture is proving increasingly stressful for these trainees[14]. In institutes where case series can be considered as research activity, facilitating e-collection of academic cases with a step wise feedback system provides a dynamic platform to link recent basic research to clinical practice and familiarizing students with research questions and the current research approach[15].

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## PERSONAL WELL- BEING AND PASTORAL SUPPORT:

In United Kingdom, it is heartening to note a number of trainee well-being initiatives including the psychiatrist support service, support from psychiatrists trainee committee and a number of local/regional initiatives including mindfulness-based sessions, pastoral support and peer support. Similarly, IPS and PAN have come out with resources and initiatives to support trainee psychiatrists. This is crucial when viewed from the lens of Abraham Maslow's 'hierarchy of needs' since the basic needs including safety need to be met first before any higher order needs including educational/training needs[16].

This approach also included education about good hygiene habits to prevent cross-contamination, access to PPE, surge planning throughout the health system, childcare arrangement, and housing in case of sickness or quarantine. The most helpful interventions were specific or targeted as opposed to general reassurances. For example, sharing institutional dashboards relating the number of occupied beds, number of COVID-related admissions, and detailed contingency plans helped in maintaining a steady flow of accurate information in a transparent manner.

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## RECOMMENDATIONS

There is an urgent need to streamline processes for entry and exit to a psychiatry training program, where it does not exist. Utilizing alternative modes of assessment including anonymized colleague, peer and patient feedback can supplement online assessment tools. Past interim assessments can also be used to project the final outcome. Simulated role plays or objective structured clinical examination conducted virtually may be a good method for summative assessment. Trainee's research competencies need to be evaluated considering the unprecedented circumstances, to prevent any unfair disadvantage. Curricular adjustments taking current circumstances into account would be well appreciated by trainees. Standard operating procedures need to be chalked out for the current circumstances to contain trainee's anxiety and apprehension on new modes of working.

The most important recommendation we propose is provision of formalised intensive training around teleconsultation skills, using simulated scenarios followed by assessment, in addition to guidelines and *modus operandi* around remote working. Involving trainee psychiatrists as active stake holders in the entire process from

consultation to implementation as well as providing a uniform and consistent message is likely to significantly improve trainee confidence. Also, making clear the roles and expectations of trainee psychiatrists through open and honest discussions at an individual and collective (organisational) level would be the way forward to allay any anxiety[17].

## CONCLUSION

The most important recommendation we propose is provision of formalised intensive training around teleconsultation skills, using simulated scenarios followed by assessment, in addition to guidelines and modus operandi around remote working. Involving trainee psychiatrists as active stake holders in the entire process from consultation to implementation as well as providing a uniform and consistent message is likely to significantly improve trainee confidence. Also, making clear the roles and expectations of trainee psychiatrists through open and honest discussions at an individual and collective (organisational) level would be the way forward to allay any anxiety.

## REFERENCES

- 1 **Richards M**, DeBonis K. Psychiatric Training During a Global Pandemic: How COVID-19 Has Affected Clinical Care, Teaching, and Trainee Well-Being. *Psychiatr Serv* 2020; **71**: 1300-1302 [PMID: 32600183 DOI: 10.1176/appi.ps.202000277]
- 2 **Shapiro MA**. Competence vs. Identity, Trainees vs. Physicians: How COVID-19 Has Highlighted Role Confusion in Residency Training. *Acad Psychiatry* 2020 [PMID: 33098027 DOI: 10.1007/s40596-020-01346-2]
- 3 **Bahadur A**, Rosen B, Preisman M. Challenges facing medical education in psychiatry during the COVID-19 pandemic. *Can Med Educ J* 2021; **12**: e111-e112 [PMID: 33680245 DOI: 10.36834/cmej.71020]
- 4 **Coe WH**, Millard H. The Impact of COVID-19 on Inpatient Psychiatry Resident Supervision. *Acad Psychiatry* 2020; **44**: 687-688 [PMID: 33106950 DOI: 10.1007/s40596-020-01343-5]
- 5 **Pal A**, Gupta P, Parmar A, Sharma P. 'Masking' of the mental state: Unintended consequences of personal protective equipment (PPE) on psychiatric clinical practice. *Psychiatry Res* 2020; **290**: 113178 [PMID: 32535497 DOI: 10.1016/j.psychres.2020.113178]
- 6 **Vassilakopoulou P**, Hustad E. Bridging Digital Divides: a Literature Review and Research Agenda for Information Systems Research. *Inf Syst Front* 2021; 1-15 [PMID: 33424421 DOI: 10.1007/s10796-020-10096-3]
- 7 **Office For Civil Rights (OCR)**. HIPAA and COVID-19. [cited 15 May 2021]. Available from: <https://www.hhs.gov/hipaa/for-professionals/special-topics/hipaa-covid19/index.html>
- 8 **Löffler-Stastka H**, Wong G. Learning and competence development via clinical cases – what elements should be investigated to best train good medical doctors? *World J Meta-Anal* 2020; **8**: 178-189 [DOI: 10.13105/wjma.v8.i3.178]
- 9 **Ross DA**; National Neuroscience Curriculum Initiative “Quarantine Curriculum” Committee. Creating a “Quarantine Curriculum” to Enhance Teaching and Learning During the COVID-19 Pandemic. *Acad Med* 2020; **95**: 1125-1126 [PMID: 32744816 DOI: 10.1097/ACM.0000000000003424]
- 10 **Royal College of Psychiatrists**. CASC guide for candidates. [cited 15 May 2021]. Available from: <https://www.rcpsych.ac.uk/training/exams/preparing-for-exams/casc-guide-for-trainees>
- 11 **Türk B R**, Krexner R, Otto F, Wrba T, Löffler-Stastka H. Not the ghost in the machine: transforming patient data into e-learning cases within a case-based blended learning framework for medical education. *Procedia Soc Behav Sci* 2015; **186**: 713-725 [DOI: 10.1016/j.sbspro.2015.04.106]
- 12 **Himmelbauer M**, Seitz T, Seidman C, Löffler-Stastka H. Standardized patients in psychiatry - the best way to learn clinical skills? *BMC Med Educ* 2018; **18**: 72 [PMID: 29625572 DOI: 10.1186/s12909-018-1184-4]
- 13 **Türk B**, Ertl S, Wong G, Wadowski PP, Löffler-Stastka H. Does case-based blended-learning expedite the transfer of declarative knowledge to procedural knowledge in practice? *BMC Med Educ* 2019; **19**: 447 [PMID: 31796049 DOI: 10.1186/s12909-019-1884-4]
- 14 **Gnanavel S**, Orri M, Mohammed M, Dray J, Baroud E, Kato H, Jui GT, Rajalakshmi AK, Hansen AS, Seker A, Ori D, Munjiza A, Martsenkovskyi D. Child and adolescent psychiatry research during the COVID-19 pandemic. *Lancet Psychiatry* 2020; **7**: 735 [PMID: 32828155 DOI: 10.1016/S2215-0366(20)30314-X]
- 15 **Wadowski PP**, Litschauer B, Seitz T, Ertl S, Löffler-Stastka H. Case-based blended eLearning scenarios-adequate for competence development or more? *Neuropsychiatr* 2019; **33**: 207-211 [PMID: 31696411 DOI: 10.1007/s40211-019-00322-z]
- 16 **Center for the Study of Traumatic Stress**. Sustaining the Well-Being of Healthcare Personnel



During Coronavirus and Other Infectious Disease Outbreaks. [cited 15 May 2021]. Available from: [https://www.cstsonline.org/assets/media/documents/CSTS\\_FS\\_Sustaining\\_WellBeing\\_Healthcare\\_Personnel\\_during\\_Infectious\\_Disease\\_Outbreaks.pdf](https://www.cstsonline.org/assets/media/documents/CSTS_FS_Sustaining_WellBeing_Healthcare_Personnel_during_Infectious_Disease_Outbreaks.pdf)

- 17 **Alberto GE**, Rosen BJ, Ho PA. Narrative Reflections on the Role of Psychiatry Residents in the Early Days of the COVID-19 Pandemic. *Acad Psychiatry* 2020; **44**: 679-680 [PMID: [32700237](#) DOI: [10.1007/s40596-020-01288-9](#)]



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