



Observational Study

Embracing different languages and local differences: Co-constructive patient simulation strengthens host countries' clinical training in psychiatry

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Specialty type: Psychiatry

Provenance and peer review:

Unsolicited article; Externally peer reviewed.

Peer-review model: Single blind

Peer-review report's scientific quality classification

Grade A (Excellent): 0
Grade B (Very good): B, B
Grade C (Good): 0
Grade D (Fair): 0
Grade E (Poor): 0

P-Reviewer: Alkhatib AJ, Jordan;
Wang Q, China

Received: August 31, 2023

Peer-review started: August 31, 2023

First decision: October 24, 2023

Revised: October 30, 2023

Accepted: December 22, 2023

Article in press: December 22, 2023

Published online: January 19, 2024



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Abstract

BACKGROUND

Global education in psychiatry is heavily influenced by knowledge from Western, high-income countries, which obscures local voices and expertise.

AIM

To adapt a human simulation model to psychiatric education in a context that is specific to local languages and cultures.

METHODS

We conducted an observational study consisting of six human simulation sessions with standardized patients from two host countries, speaking their native languages, and following an adaptation of the co-constructive patient simulation (CCPS) model. As local faculty became increasingly familiar with the CCPS approach, they took on the role of facilitators – in their country's native language.

RESULTS

Fifty-three learners participated: 19 child and adolescent psychiatry trainees and 3 faculty members in Türkiye (as a group that met online during 3 consecutive months); and 24 trainees and 7 faculty in Israel (divided into 3 groups, in parallel in-person sessions during a single training day). Each of the six cases reflected local realities and clinical challenges, and was associated with specific learning goals identified by each case-writing trainee.

CONCLUSION

Human simulation has not been fully incorporated into psychiatric education: The creation of immersive clinical experiences and the strengthening of reflective practice are two areas ripe for development. Our adaptations of CCPS can also strengthen local and regional networks and psychiatric communities of practice. Finally, the model can help question and press against hegemonies in psychiatric training that overshadow local expertise.

Key Words: Human simulation; Standardized patients; Medical education; Psychiatric education; Capacity building; Local languages

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Core Tip: The co-constructive patient simulation (CCPS) model harnesses human simulation as a novel way of psychiatric education and training that is immersive, experiential, and uniquely tailored to (and by) its intended learners. For a globally under-resourced field like psychiatry, developing and strengthening vibrant communities of practice can have enduring and long-lasting returns, including in workforce recruitment and retention. The adaptations of CCPS that we describe, through their train-the-trainer components, have the potential to sustain and even replicate themselves; they can become vehicles of local capacity building.

Citation: Çamlı ŞE, Yavuz BE, Gök MF, Yazgan I, Yazgan Y, Brand-Gothelf A, Gothelf D, Amsalem D, Martin A. Embracing different languages and local differences: Co-constructive patient simulation strengthens host countries' clinical training in psychiatry. *World J Psychiatry* 2024; 14(1): 111-118

URL: <https://www.wjgnet.com/2220-3206/full/v14/i1/111.htm>

DOI: <https://dx.doi.org/10.5498/wjp.v14.i1.111>

INTRODUCTION

Psychiatric education worldwide is heavily – often exclusively – influenced by the prevailing paradigms of Western, high-income countries. As a result, local voices and expertise are often obscured or ignored altogether. The discrepancy between local and “expert” knowledge can be particularly jarring around the granularities of clinical care embedded in the specificities of place and language[1]. For example, the norm is for books, scholarly articles, and training manuals to be translated into local languages, with only a minority of countries having a robust native language literature of its own. In an age of artificial intelligence and powerful software such as DeepL, Google Translate, and Chat GPT, translation into local languages is easier than could have been imagined just a decade ago – arguably too easy, in that it may have stifled the development of local resources. Moreover, the ubiquity of the Internet has made access to up-to-date literature easily available to global users.

Despite these remarkable advances, challenges and limitations remain. For one, translation, no matter how precise, does not necessarily imply relevance or applicability to local realities. For another, theoretical knowledge is hard to apply at a practical, clinical, “on the ground” level. Making scientific knowledge clinically applicable, moving it from development into practice (the T3 transformation)[2] is challenging enough within languages and countries; translation, cultural adaptation, and geographic distance all add significant layers of complexity.

We have taken on these challenges by harnessing two innovations: First, we have used simulation using standardized patients (alternatively named simulated participants, hereafter SPs). We have used SPs from host countries, speaking their native languages, and following an adaptation of a high-fidelity simulation model we recently developed, co-constructive patient simulation (CCPS)[3]. Second, we used synchronized videoconferencing with Zoom to describe the model to our partners, to prepare the initial sessions together, and at one site, to conduct the experiential sessions virtually. Local capacity building was our ultimate goal in sharing the model[4]: For each of the sites to be able to continue using the adapted model of learning and supervision without further external help. In brief, to use local knowledge, local realities and language, and the texture of their unique expertise, to improve on their reflective clinical practice, and to help train their next generation of mental health practitioners.

We go on to describe our application of the CCPS model as conducted in the native language of two Middle Eastern countries (Turkish and Hebrew, respectively, for Türkiye and Israel). Our goals were to: (1) Prove the feasibility of conducting the model overseas and in a native language; (2) Use the model flexibly, during either consecutive months or on a single day; and (3) Explore barriers and opportunities for the replication and self-sustainability of the approach.

MATERIALS AND METHODS

Participants, settings, planning, and sessions

We conducted six CCPS sessions between January and June 2023.

Three sessions took place online in Türkiye, separated six weeks from each other. For those sessions, we worked in collaboration with the training director of child and adolescent psychiatry (CAP) at Bursa University. All first and second year fellows and faculty members actively involved in training were invited to participate.

In the case of Israel, we conducted three sessions simultaneously, in parallel groups, each with a different case, facilitator, and scriptwriter. The three sessions were part of a training retreat held on June 19, 2023 at the Eitanim psychiatric hospital for children and adolescents, in Jerusalem. The retreat was sponsored by the Israel Psychiatric Society, which convened and supported the attendance of all trainees in CAP from throughout the country.

Each of the six sessions was planned well in advance, typically two to four weeks ahead of time. To that end, each of the volunteer learners (hereafter scriptwriters) was provided with background literature^[3,5,6] and sample scripts. They were encouraged to think back to a case (or cases) that had proven emotionally challenging, frustrating, or taxing in some way. In fostering their writing, we encouraged scriptwriters with a gentle editing hand to identify something that was personally meaningful, and to generally steer away from technical aspects such as diagnostic or treatment details. Once they created a first draft, we regrouped together with the scriptwriter and their designated SP (scriptwriters knew in advance the gender, age, and basic demographic characteristics of their SP). As local faculty became familiar and increasingly comfortable with the CCPS model, they went to take on the role of facilitators—in their native language. Case writing included a role-play with the scriptwriter standing in the "hot seat" in order to try out the emotional legitimacy of the case, and to adapt as needed until reaching its verisimilitude.

On the day of the session, participants knew nothing about the case, except for a brief "door note," which set the stage for the encounter. Two participants interviewed the SP-in-role, each for 20 min, and transitioning without interruption between one another. They did not re-introduce themselves at the transition point: Both doctors in Türkiye were "Dr. Korkmaz", and both in Israel were "Dr. Cohen", just as in the United States they are a generic "Dr. Jones". The point is to make the action seamless and continuous, and for the interviewers to scaffold clinically on each other. Following the session, the entire group debriefed for an hour, following best practices in healthcare^[7-9].

Adaptations to the CCPS model

We applied CCPS adhering to our original description of the model and in keeping with our experience during its first three years of implementation, representing over twenty unique sessions. Still, in order to conduct the experience across distance, language, and cultural differences, we had to make several adjustments. In [Table 1](#) we summarize highlights of the adaptations we found necessary to make.

Theoretical framework

We conducted the two CCPS series in the context of Design-Based Research (DBR), an approach that seeks to bridge the gap between practice and research, and in which real-life settings (or clinical interactions) take place^[10]. It can tackle clinical problems and advance theoretical knowledge; critically, it is intended to "unleash the power of reflection^[11]". Three of DBR's key components^[12] are particularly well aligned with those of CCPS and of reflective functioning: (1) *Culture*: Building collaborations in a psychologically supportive setting; (2) *Connecting contexts*: Making participants understand each other's worldviews and activities; and (3) *Making the implicit explicit*: Having supervisors as fellow participants (of note, CCPS emphasizes the non-hierarchical relationship between trainees and supervisors).

Ethics approval

This study was approved by the Yale University Institutional Review Board (Protocol # 2000026241). All actors were 18 years or older and compensated for their performance. In three cases, young adult actors were able to realistically "pass" for adolescents 15-17 years of age.

RESULTS

Fifty-three learners participated: 19 CAP trainees and 3 faculty members in Türkiye (as a single group); 24 trainees and 7 faculty in Israel (divided into 3 groups). The same local facilitator participated in the three Turkish sessions; after planning the first one in English, she was comfortable planning the next two in Turkish; all three sessions and debriefings took place in Turkish. In the case of Israel, two facilitators planned their sessions and conducted their simulations in Hebrew. The third facilitator planned and conducted the session in English. Given that the three sessions in Hebrew took place simultaneously, we allocated an extra half hour for a rapporteur from each of the three groups to share their case and debriefing highlights with their peers; that final debriefing spanned both Hebrew and English, depending on

Table 1 Adapting co-constructive patient simulation to a native language and local setting

Components	Possible adaptations
Actors/standardized patients/SPs	Hire actors through local drama schools or theater programs when no SP programs are available Adjust compensation to local market fees (averaging in the US approximately \$ 25 per hour per actor, 4-h minimum) Consider alternatives to professional actors, <i>e.g.</i>, non-professional actors, other mental health professionals who are not part of the same peer group
Delivery <i>via</i> synchronized videoconferencing	Chat feature in Zoom can be useful for a bilingual native speaker to translate key points to any outside guests, particularly during early stages of CCPS development Geographic distance can result in wide time zone variance, an added logistic challenge during early planning stages Consider that some international and non-academic Zoom accounts can limit session time or number of participants
Facilitation	Transition of leadership as sessions progress: From an outside “guest” to a local “host” facilitator

SPs: Simulated participants; CCPS: Co-constructive patient simulation.

participants’ preference and comfort.

In **Table 2** we summarize the six cases, including each clinical scenario, their associated learning objectives, and salient statements made by their participants.

Developed independently of each other – within and between countries – the scripted scenarios evinced notable similarities. For example, comparable clinical challenges faced by trainees included the conveying of difficult news, such as an unanticipated diagnoses, or the forestalling of an inpatient discharge; the complexities of being a mandated reporter in the context of interfamilial sexual abuse and an active police investigation; or survivor guilt, whether in the setting of a natural disaster or of the unexpected recent death of a spouse. Alternatively, the local specificities of certain cases made them uniquely culture- or setting-bound. For example, in one of the Turkish cases, much of the background familial tension revolved around the competition between two siblings attending a Quran memorialization school; in one of the Israeli cases, a teenager’s inability to leave the hospital for a visit home for the Sabbath set many of the cases’ challenges in motion. The specifics of time were also relevant, most notably in one of the Turkish cases: Its script had been nearly finalized by February 6, 2023, the date of a devastating 7.8-magnitude earthquake that affected Southeastern Türkiye. In the weeks that followed, as the participants and the entire country responded and adapted to the calamity, the script was adjusted as well: Incorporating relevant daily realities, such as the massive loss of life, the influx of refugees, and the lack of sufficient material and human resources to address the population’s needs and mitigate the trauma.

DISCUSSION

In this study we replicated and expanded the use of a new approach to human simulation in a CAP training context. Specifically, we changed the CCPS model from its original use at a single site into one encompassing various locations (*e.g.*, Bursa, Istanbul, and New Haven for the Turkish series); from the exclusive use of English into two local languages (Turkish and Hebrew); from reliance on in-person meetings to using synchronized videoconferencing; and from consecutive sessions over months to several sessions running in parallel at the same time and place (in the Israeli series). Notwithstanding these logistic differences from the model as originally described, most of the educational benefits carried over from the original to the adapted versions. Moreover, the adapted versions had unique educational benefits, mostly around upending and challenging traditional modes of post-graduate medical education.

We go on to describe the benefits and pedagogic innovations that ensued from these six, locally adapted, language-specific CCPS sessions.

Creation, immersion, reflection: Simulation in psychiatric education. The CCPS model harnesses human simulation as a novel way of psychiatric education and training that is immersive, experiential, and uniquely tailored to (and by) its intended learners. Insofar as its participants are at once its developers and its target beneficiaries, the model can be considered a form of participatory action research (PAR)[13-15].

Human simulation has had a limited, but far from trivial role in psychiatric education and training[16,17]. However, in most instances it is used to depict certain types of psychopathology or clinical interactions, and used on an *ad hoc* basis rather than as a standing curricular component associated with specific competencies. We are not aware of other instances in which learners take an active role in crafting their cases and learning objectives. Another feature that sets CCPS apart is its emphasis on structured debriefing, with the explicit goal of enhancing and refining reflective practice. Specifically, the model follows the tenets set forth by Donald Schön in *The Reflective Practitioner*[18], adapting them to the psychiatric context: Reflection *in* action (“while doing”); *on* action (“having done”); and *for* action (“toward doing”). Stated alternatively, learners – like all session participants – exercise self-awareness by hovering between their own

Table 2 Application of co-constructive patient simulation in two Middle Eastern countries

Country	Session	Clinical scenario	Salient quote(s)	Learning objective(s)
Türkiye (online)	1	A 17-year-old young woman overdoses after being denied access to her phone when her deeply religious parents find out she has been having unsupervised contact with boys her age	"We love you, but not more than God. So, if you oppose our faith, we understand if you decide to end your life"	Navigate divergent religious world views in the context of their impact on a family member's acute psychiatric emergency
	2	A 15-year-old adolescent girl is met with disbelief and anger by her mother when confiding details of long-standing sexual abuse by her brother, the family's breadwinner and "man of the house"	"She said, 'his hand might have accidentally touched [my] body,' and so I might have misunderstood his love for me. Besides, as far as she knows, 'he has a girlfriend already and so he wouldn't need me'"	(1) Lead patient to understand that as a clinician you need to contact the authorities (today, as she is still at active risk), and to do so in as collaborative a fashion as possible with her mother; and (2) Ensure the patient's safety and notify the authorities, while not alienating the child and her family in the process
	3	A 16-year-old gender fluid adolescent struggles with suicidality in the context of rejection by peers and non-acceptance by their family. As a major earthquake affects the country and their immediate family, they blame themselves for the natural disaster	"My grandma kept saying that the earthquake happened because of rebels and godless people like me, that wherever there are degenerates, bad things like this happen"	(1) Appreciate challenges affecting non-binary youth developing in culturally conservative settings; and (2) Explore the roots and psychological function of pathological and survivor guilt
Israel (in person)	1	The mother of a hospitalized adolescent is confronted with the news that, for reasons unknown, her weekend pass and forthcoming discharge are being put on hold. Unbeknownst to the mother is her daughter's revelation of having been recently assaulted sexually at home, by her brother. As the police investigation proceeds, the physician is forbidden from sharing information with the family	"We gave you our perfect daughter and now you have broken her completely. As if cutting herself was not bad enough, she won't even come home to us for <i>Shabbat</i> (the Sabbath)"	On being unable to tell the "whole story," balance the competing demands of sharing limited information with providing sufficient support and not sacrificing the therapeutic alliance along the way
	2	A young widow is informed that her 4-year-old son has autism. Although she had long suspected something was amiss given differences from her normally developing older child, this is the first time she is informed of her "worst fear"	"At such a young age, his father's death was a tragedy. This news feels like another tragedy, a compounded catastrophe"	(1) Convey a realistic sense of hope, optimism, and a path forward in the face of challenging information; (2) Disentangle losses, and disambiguate permanent, from addressable losses (death, from a chronic diagnosis); and (3) Start mourning the loss of the expected/idealized/anticipated child in order to permit accepting and loving the realities of the actual child
	3	A young father is informed that his 15-old-son's loud ways, provocative comments, lack of sleep, and concerning behaviors landing him in increasing troubles with family, school, and now the legal system, are neither due to his extroverted personality or possible use of drugs. Rather, the doctor is now certain of a diagnosis of bipolar disorder and is recommending treatment with mood stabilizers	"Is this my doing? Bipolar disorder runs in my family." "He was always the liveliest, literally the life of the party. How did I not see this coming, this liveliness having a dark side?" "He is now doomed to take medicines forever, isn't he?"	(1) Consider spontaneous <i>vs</i> more structured ways (e.g., SPIKES ²⁸) of sharing difficult news; and (2) Address uncertainty about lifelong questions and prognosis; provide hopefulness without trivializing unknowns or dismissing concerns

thoughts, feelings, and actions and those of their interlocutors, refining their interactions in real time, and when confronted with a similar clinical situation in the future.

Geolocation: Strengthening local and regional networks: By design, we approached the two CCPS applications in different ways, each exemplifying variations of similar goals. In the case of Türkiye, our aim was to strengthen a local training program (in Bursa) and to link it to regional resources and expertise (in Istanbul). For its initial iteration it was conducted through videoconferencing, though in moving forward it could be delivered in person or through hybrid approaches as well, whether in Türkiye or any other location. By contrast, the Israel approach took advantage of the very specific availability of a resident training day. Such single-day opportunities can be well-suited to disseminate new information or clinical skills through this novel training approach—one that comes closer to the day-to-day granularity of practitioners in general, and of trainees in particular. Alternatively, to a date set aside for training, with all the attendant logistic challenges, a CCPS sample session(s) can be embedded into local or regional society meetings.

Despite their differences in timing and delivery, both approaches have as a common goal the strengthening of CAP professional networks, whether at the hyperlocal (e.g., single site), local (e.g., citywide), national, or regional levels. We originally designed CCPS as a way to develop and strengthen not just individual clinical skills, but communities of practice (CoP) as well[19-21]. As such, the goal of CCPS is just as much to gain hands-on reflective practice, as it is to foster the development of a group of like-minded learners supporting one another, developing and growing professionally together, and becoming comfortable in sharing with one another their vulnerabilities as much as their strengths. For an under-resourced field like CAP, developing and strengthening vibrant CoPs can have enduring and long-lasting

returns. The models that we describe, through their train-the-trainer components, have the potential to sustain and even replicate themselves; they could become vehicles of local capacity building. Longer term replication is needed to determine the feasibility of these optimistic projections.

Celebrating differences: Questioning hegemonies in psychiatric training: We conceptualize these two applications of the CCPS model as a way to welcome, celebrate, foster, and learn from local realities and innovations in clinical practice. By resisting, or at the very least by questioning, an over-reliance on models of psychopathology, diagnostic paradigms, and treatment interventions developed by high-income countries in the West, learners can proudly lean into the heterogeneity of their own practices. In this way, participants can value and stand to gain by learning from their (near-) experience rather than by mostly relying on (distant-) expertise. Fostering partnerships based on equity and mutual benefit, such as those exemplified by CCPS, can support local capacity-building, and promote culturally sensitive care in CAP.

Our experience with CCPS in two very different international settings can be viewed through the lens of anti-neocolonialism in medical education[22-26]. Clinicians are often subject to curricular and knowledge biases, ones in which goals and curricula are solely designed based on Western standards and perspectives, often neglecting local context and healthcare needs of specific regions or countries. Such biased approaches can marginalize local medical knowledge and practices, reinforcing the dominance of Western medical models. CCPS is not intended to invite “either or” but rather “both and” thinking: It seeks to become a pedagogic vehicle to welcome and foster local innovations in clinical practice, benefit from hard-earned and important sources of information, while at the same time resisting neocolonial approaches that privilege over-reliance on hegemonic models of education.

Limitations

We recognize four main limitations to this work. First, our colleagues lived and practiced in high- and middle-upper-income countries (Israel and Türkiye, respectively). Important inroads as these partnerships represent, we also consider them as proofs-of-principle that can pave the way for work with low-resource and high-demand areas, particularly in the Global South, where most of the world’s children live. Adaptations of the CCPS model in such locations could benefit from welcoming a wide array of child-facing professional and lay participants. Second, we have no follow up data on the self-sustainability, replicability, or longer-term adoption of the CCPS model. Similarly, we have no outcome data from individual participants’ experiences; qualitative methods may prove useful in addressing this limitation in future studies. Third, the number of sessions was small toward the goal of strengthening a CoP. For example, in our previous experience, the same group of participants attended six sessions in as many months – compared to three sessions in the case of Türkiye and only one in that of Israel. Despite this difference, our anecdotal experience from informal “exit interviews” in this and previous studies[27] is that even a single session of CCPS was able to provide something pedagogically unique and clinically helpful. Finally, cost is a potential limitation. Even as professional actors can be relatively costly, the major expense to consider with CCPS are time and opportunity costs, *e.g.*, what responsibilities will trainees need to forego, or who will cover for relevant clinical services.

CONCLUSION

Despite these and other shortcomings we demonstrated the feasibility of adapting the CCPS model in two different countries and languages, and to use the model flexibly, whether during consecutive months or on a single day, in person or *via* videoconferencing. Next steps include the replication of the model in these and/or other sites; we are currently exploring the adaptation of the CCPS model into international partnerships and global partnerships.

ARTICLE HIGHLIGHTS

Research background

Human simulation has a long tradition in medical education, but has made limited inroads in psychiatric education, particularly as pertaining to child and adolescent clinical scenarios.

Research motivation

We sought to expand human simulation applications in child psychiatry. Specifically, we explored the adaptation of simulation in two international settings by embracing different languages and local differences.

Research objectives

We examined: (1) The replicability of a simulation model into international settings; (2) The ability to develop a train-the-trainer approach toward local capacity building in child and adolescent psychiatry (CAP) simulation; and (3) The feasibility of conducting sessions using synchronized videoconferencing.

Research methods

We conducted six human simulation sessions with standardized patients from two host countries, using their native languages (Turkish and Hebrew), and adapting the co-constructive patient simulation (CCPS) model. As local participants became increasingly familiar with the CCPS approach, they took on the role of facilitator – in the country’s

native language. We conceptualize these two applications of the CCPS model as a way to welcome, celebrate, foster, and learn from local realities and innovations in clinical practice.

Research results

Fifty-three learners participated: 19 in Türkiye and 24 in Israel. Through the CCPS model we were able to harness human simulation as a novel way of psychiatric education and training that is immersive, experiential, and uniquely tailored to (and by) its intended learners. We were able to approach the two CCPS applications in different ways, each exemplifying regional variations of similar goals.

Research conclusions

Our approach describes a pedagogic vehicle to welcome and foster local innovations in clinical practice, benefit from hard-earned and important sources of local and regional expertise, while at the same time resisting neocolonial approaches that privilege over-reliance on hegemonic models of education.

Research perspectives

Human simulation is a powerful pedagogic approach to improve reflective practice and enhance clinical care. It provides a safe and risk-free environment in which to practice and refine skills. By involving learners in the creation of learning goals and associated scenarios, the CCPS approach is particularly relevant to psychiatry in general, and to CAP in particular.

FOOTNOTES

Author contributions: All authors made substantial contributions to the conception and design of the work; as acquisition and interpretation of the data for the work; they all were part of drafting the work and revising it critically for important intellectual content; they all provided final approval of the version to be published. The corresponding author takes final responsibility for the accuracy and integrity of the work.

Institutional review board statement: This study was approved by the Yale University Institutional Review Board, No. 2000026241.

Informed consent statement: All study participants provided informed written consent prior to study enrollment.

Conflict-of-interest statement: The authors have no conflicts of interest to declare.

Data sharing statement: The data that support the findings of this study are available from the corresponding author (Andrés Martin), upon reasonable request.

STROBE statement: The authors have read the STROBE Statement-checklist of items, and the manuscript was prepared and revised according to the STROBE Statement-checklist of items.

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S-Editor: Fan JR

L-Editor: A

P-Editor: Xu ZH

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