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**Cross-cultural telepsychiatry: an innovative approach to assess and treat ethnic minorities
with limited language proficiency**

by

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Summary

Current refugee crisis within European Union (EU) challenges mental health care systems in each EU country. For ethnic minorities in EU access to mental health care is a problem due to lack of clinicians who understand their language, culture and special needs. Linguistic, cultural and even racial differences between patient and provider can have an impact on the therapeutic alliance. Therefore communication between providers (mental health professionals) and cross-cultural patients is even more complicated with a third person i.e. interpreter, involved. However, refugees and asylum seekers still receive the most of treatment provided via interpreters. Innovative solution for this problem might be “cross-cultural telepsychiatry model” within various settings. Since 2004. “cross-cultural telepsychiatry” has been tested, developed and established in outskirts areas of Denmark through various pilot projects. Overall high patient satisfaction was reported by patients as

well as by involved professionals.

Key words: *e-Mental Health; telepsychiatry; asylum seekers, refugees and migrants; access to care; language barriers; interpreters; cross-cultural (tele)psychiatry.*

Introduction

Accessibility and availability of culture-appropriate care are critical pathways to establishment of an effective care system. However, the access to relevant care is not always an easy task for e.g. asylum seekers, refugees and migrants within EU. Language and cultural barriers are among greatest obstacles for cross-cultural patient population to access adequate care. The patients with limited language proficiency are less likely to receive empathy, establish rapport, receive information and encouragement to participate in decision making [1,2,3,4,5,6,7]. Language barriers are associated with lower rates of patient satisfaction and poor care delivery in comparison with care received by patients who speak the language of the care provider [8,9]. The patients who face language barriers are less likely than others to have a usual source of medical care; frequently receive preventive services at reduced rates; have an increased risk of non-adherence to medications; are less likely than others to return for follow-up appointments after visits to the emergency room; and have higher rates of hospitalization and drug complications [10]. The presence of a third person i.e. an interpreter, in a confidential relationship affects patient satisfaction, as it influences both transference and countertransference between individuals involved, with unavoidable consequences on a doctor-patient relationship [11]. Further, interpreter mediated communication is linked to increase risk of loss of confidentiality which is why the most asylum seekers, refugees and migrants exposed for such kind of communication tend to be suspicious wondering :”How soon will everyone in this little city speak about my illness?” [12]. It is not unusual as among ethnic and racial minorities, in comparison to the majority group, mental illness may be even more stigmatized [13].

Further, no matter whether the treatment is acute or long term, the consequences of interpreter provided care are increased treatment expenses and much longer time used to assess and/or treat each patient. Consequently, patient satisfaction, treatment alliance as well as compliance are affected.

On the other hand, adequate language concordance is significantly associated with higher reporting of past experience of traumatic events and of severe psychological symptoms, contrasting with much fewer referrals to psychological care when language concordance is inadequate [14]. Clearly, language- and even racial-concordance are associated with better patient compliance, better adherence to treatment, and higher patient satisfaction within mental health as well as in other health-care settings [15,16,17].

“Ethnic matching” appears to be the most desirable model used in addressing language barriers and cultural disparities in mental health-care provision of cross-cultural patient population. The term covers over the use of culturally competent bilingual clinicians who have the same ethnic and cultural background as their respective patients. Ethnic matching, supplemented by culture-competency training, has been proved as a common strategy to address a number of barriers in cross-cultural related health-care provision [18,19].

However, ethnic matching is not that easy to implement. When the patient and the ‘matching’ clinician are located in different places then a consultation is likely to require travel, either for the patient or the clinician. Effective responses to issues mentioned above require innovation, the capacity to “think outside the box”, culturally competence, and institutional support. One solution is to bring “cultural expertise” to the patient by use of the e-Mental Health (eMH). eMH is the use of telecommunication and information technologies to deliver mental health services at a distance [20]. eMH interventions have a number of advantages: They are easily accessible, provide anonymity to the user and are less expensive than patient-provider contacts in-person [21].

Telepsychiatry is the most described and evidence based form of eMH that enables patient and doctor to see and hear each other and interact regardless the distance.

While various telepsychiatry applications have been tested and developed over the last five-six decades, there are relatively few published reports describing the use of telepsychiatry in the provision of mental health care to cross cultural patients [22,23,24,25]. Innovative model of telepsychiatry is “Cross Cultural Telepsychiatry” (CCT). It covers the delivery of culturally appropriate mental health care from a distance. It can be done in “real-time” by the use of videoconferencing (*synchronous telepsychiatry*) and more recently developed *asynchronous telepsychiatry* (“store and forward” model), where we speak about a transmission of recorded clinical related material i.e. assessment , psychiatric interview/consultation between referring physicians and specialist). The clinical service may include the interview, other assessment, psychiatric consultation between referring physicians and specialist, and other components [26].

“Cross-Cultural Telepsychiatry Model”

The first CCT pilot project in Denmark was developed in period 2004-2007. The aim of the project was to overcome the burden of poor service access for ethnic minorities in Denmark and promote a new way of delivering mental health care by use of videoconferencing in real-time [23]. Thereafter, different approaches have been described dealing with specific needs of Hispanics/Latinos and Asians [27,28,29,30] and Native American [31,32].

The hypothesis behind the development of CCT in Denmark was that *the majority of cross-cultural patients would prefer contact in their mother tongue, even when provided via telepsychiatry, rather than interpreter provided in-person contact with a Danish doctor.*

Little Prince Treatment Centre in Copenhagen has telepsychiatry cross-cultural expertise more than other places in Europe [33]. The Centre is a private clinic specialized in treatment of ethnic

minorities where affiliated clinicians are bilingual, cultural competent mental health professionals.

Four stations (i.e. two hospitals, one asylum seekers centre and one social institution for rehabilitation of refugees and migrants) were connected via videoconference with Little Prince Treatment Centre in Copenhagen. Bilingual clinicians affiliated to the Centre assessed and/or treated patients via their own language, providing reliable assessment and valid treatment for a wide variety of psychiatric disorders. A patient satisfaction questionnaire was special designed (Table 1) for completion at the end of the visit. High acceptance and satisfaction regardless the patients' ethnicity or educational level was reported [34]. All patients preferred "remote" contact compared to in-person care with a interpreter, due to perceived higher anonymity, confidence/trust in providers and self-efficacy to express intimate thoughts and feelings without a third person involved. As expected, there was a clear correlation between the number of sessions, reported satisfaction level, and quality of care [34].

A sustainable telepsychiatry service between Psychiatric department on island Bornholm and Little Prince Treatment Centre remained functioning after the first pilot project ended in 2007. It is to our knowledge the only such service in EU.

Telepsychiatry Within Hospital Setting

CCT assessments of hospitalized suicidal cross-cultural patients are particularly useful especially when it comes to patients that have had a telepsychiatric contact prior to unvoluntarily admission. Narratives from daily clinical work may significantly increase the understanding and acceptance of telepsychiatry among professionals with no telepsychiatry related experiences or professionals that are still in doubt. The following episode occurred within the first telepsychiatry pilot project :

- *NN, 38 y.o. male, refugee from Bosnia-Herzegovina, diagnosed with PTSD and treated via telepsychiatry for 1 year prior to involuntary hospitalization caused by increased suicide risk and suicidal threats that NN presented for his general practitioner who decided to send*

NN to psychiatric emergency department located on the island where NN lives. There NN was assessed by Danish psychiatrist via Bosnian interpreter and involuntarily hospitalized. A day after NN was seen by the psychiatrist who treated NN via telepsychiatry prior to hospitalization. It was convenient for psychiatric department located on isolated island to call the psychiatrist that speak the same language as the patient in order to assess the patient's mental state, including the current risk of suicide. Despite the fact that the consultation has been done remotely NN could disclose much more via videoconference on mothertongue than via interpreter provided in-person consultation with Danish doctor the day before.

Telepsychiatry Shared-Care Model

Involuntary admissions are relatively frequent among mentally ill ethnic minorities compared to domicile population. This might be due to poor contact with General Practitioners (GPs) and outpatient psychiatric services, and thus at greater risk of serious deterioration in mental illness before treatment is started [35,36,37]. Most often GPs, are not provided by equal access to psychiatric supervision and expertise. The necessity of sending patients onwards in the system often ends with long waiting time during which patients are usually not given any help, and their mental condition worsens. According to scientific research, there is increasing recognition that improving the detection, treatment and outcomes for mental health problems requires service models that integrate mental health care within primary health care practice [38]. “Shared care” covers a broad spectrum of collaborative treatment arrangements and there is no standard definition in the literature [39,40]. Nevertheless, shared care successfully integrate and link mental health services with primary care [41]. When joint primary and specialist level collaborative care models have been evaluated using RCT designs, a range of clinical and service benefits are reported [42].

The Little Prince Psychiatric Centre was in charge of a project which offered an alternative approach by applying telepsychiatry provided *shared care* model i.e. collaborative care model via

videoconference.

Little Prince Treatment Centre in cooperation with 6 GP clinics on the outskirts of Denmark conducted a *shared-care pilot project* in period July 2010-December 2015. Patients were both "domestic" (of danish origin) and ethnic minorities. The results has shown that collaboration via use of videoconferencing across levels of health care sectors can be a useful alternative that offers learning, leads to continuity, reduces costs and improves the quality of care. Telepsychiatry has been well received by patients and general practitioners as a method reducing waiting time and bridging the distance between patients and specialized psychiatric care. GPs involved in the project perceived the service as a valuable and effective supplement to already existing practice.

Telepsychiatry in Vocational Rehabilitation

A study of the Danish labour market showed that mental illnesses and psychological difficulties are some of the main reasons impeding a growing number of unemployed individuals from entering and integrating into the labour market [43]. Further, active functioning in the labour market has been identified as one of the seven targets for successful integration of foreigners into the Danish society [44].

The *Job Centers* in Denmark are responsible for providing help in finding jobs and granting disability pensions. One of the specific responsibilities of a job center is to implement a vocational rehabilitation offer, which is usually relevant for individuals with physical, psychological and/or social difficulties. A vocational rehabilitation offer in Denmark means implementation of different activation programs such as education or job training and state financial support. In order to offer a vocational rehabilitation program or grant a disability pension, a caseworker at the job center has to explore and confirm, that a working capacity of the individual in question is reduced. In case of suspected mental illness, the clarification of vocational capacity requires a professional statement from a psychiatrist.

A total of ten job centers, located in different parts of Denmark, 64-299 km away from Little Prince

Treatment Center in Copenhagen, have agreed to participate in the project. Twenty caseworkers were selected by the job centers. A three-phase pilot project was carried out in period July 2010 - January 2012. Ten job centers, located in different parts of Denmark, participated by referring their clients to Little Prince Treatment Center. Mental health specialists with the relevant language skills conducted the assessment interviews via videoconference and generated an assessment report. A satisfaction questionnaire was completed by the caseworkers and the clients. Forty nine unemployed individuals were referred by caseworkers during a period of 19 months. A variety of psychiatric diagnoses was disclosed. The overall satisfaction with the telepsychiatry service was reported by both the clients and the caseworkers.

International Telepsychiatry

The most comprehensive *international telepsychiatry service* in the world was established in Denmark in mid-2006 (May 2006–October 2007) as a part of cross-cultural telepsychiatry pilot-project mentioned above [45]. Because resources with cross-cultural skills were more readily available in Sweden than in Denmark, it was desirable to involve cross-cultural clinicians from Sweden. Videoconferencing equipment connected the Swedish Department of the Little Prince Psychiatric Centre with above mentioned 4 stations during period of 18 months. Overall, high patient satisfaction was reported and minor disadvantages of telepsychiatry were offset by the fact that the doctor-patient language and cultural matching acceptance. The use of bilingual clinicians with a similar ethnic and cultural background to their patients compensates for the distance and lack of physical presence.

The crucial indicators of patient satisfaction were:

- ! Accessibility of culturally competent care via mother tongue;
- ! Ability to express intimate thoughts and feelings from a distance, without third person involvement;
- ! Perceived safety and comfort by the service;

- ! High quality of sound and picture;
- ! Time savings associated with no need for travel;
- ! Reported willingness to use telepsychiatry again and recommending it to others;
- ! Preference for telepsychiatry in comparison to interpreter-assisted care.

Discussion

Commonly, clinicians prioritize in-person contact with the patient. When the communication is preceded by long travel, long waiting time or involvement of an interpreter then both the clinicians and the patients may benefit by use of telecommunication technology. The large majority of the patients accepted the CCT model regardless the type of the service setting. The patients' judgment of enhanced safety and comfort by telepsychiatry might be due to less likelihood of meeting the doctor on the street and the risks of spreading rumors in the patients' neighborhood; this is similar to Native American populations in small tribes in the U.S. [46]. Ethnicity did not appear to be associated with the patients' attitudes towards telepsychiatry. Differences in perception of the service were identified with respect to the patients' previous experiences with the mental health system in Denmark. Patients who had earlier received treatment via interpreters in Denmark were more favourable to mother tongue-provided telepsychiatry, compared to patients without previous interpreter-related experiences. It was easier for the patients to express themselves from a distance, and they actually felt more secure and could control the situation which resulted in them being more open.

However, there is no doubt that some patients will prefer remote consultations due to controlling the presence of the psychotherapist, so as to feel less influenced by the clinician i.e. having the opportunity to "switch off" the therapist.

Continuity remained by seeing the same doctor no matter where the patient is located is probably one of above described services most important advantages compared to traditional mental health

care provision.

Conclusion

Even before current refugee crisis in EU, it has become increasingly evident that standard treatment approaches require modification or adaptation in order to ensure that cross-cultural patient population with limited language proficiency receive effective mental health care. The use of videoconference enables opportunity to build the bridges over cultural and linguistically barriers by connecting patients with professionals who "match" culturally and linguistically. Promising results of the first international telepsychiatry project, might pave the way for potential development of an international service where bilingual professionals all over the globe would be able to share their knowledge and expertise in order to assess and/or treat mentally ill ethnic minorities via respective mother tongue. Clinical and scientific objectives and goals of such international telepsychiatry service as well as the potential outcomes are endless [47]. Within clinical practice, we have never been presented with the tool that requires so little investment while it in turn gives us so much.

Table 1.

		Yes, in high degree (%)	Yes, in some degree (%)	No, only in less degree (%)	No, not at all (%)
1	Did you get enough information about telepsychiatry?				
2	Do you perceive "contact via TV" as uncomfortable?				
3	Did you feel safe under telepsychiatry contact?				
4	Have you been satisfied with sound quality?				
5	Have you been satisfied with picture quality?				
6	Did you achieve your goal via telepsychiatry / could you express everything you wanted to?				
Wb	Would you recommend telepsychiatry to others?				

8	Would you prefer contact via translator in future?				
9	What advantages did you perceive by telepsychiatry contact?				
10	What disadvantages did you perceive by telepsychiatry contact?				

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