1. **Title**: Interpreter-mediated psychotherapy with refugees and immigrants

2. **Status of the project**: project will begin 1.1.2017


4. **Investigator(s)**: Rikke Sander Jensen (medical and research year student)

5. **Supervisors and collaborative partners**
   Main supervisor: Associate Professor, Chief Psychiatric Consultant and Head of Research at Competence Centre for Transcultural Psychiatry (CTP) Jessica Carlsson Lohmann.
   Collaborative partners: Professor Erik Lykke Mortensen (University of Copenhagen), Signe Lund Skammeritz, MD (CTP) and Henriette Laugesen (PhD Student and Research Coordinator at CTP).

6. **Background**
   In the past decade there has been an increased migration to Denmark. In 2015, 97,878 migrated to Denmark and out of these 21,316 applied for asylum(1). Multiple studies indicate increased incidents of psychiatric disorder among immigrants and in particularly among refugees. The increased incidents of psychiatric disorder include both trauma-related disorders but also psychotic disorders(2-5). Therefore it is expected that the share of psychiatric patients in Denmark with immigrant background will increase.

   Competence Centre for Transcultural Psychiatry (CTP) was established in 2008 as a part of the Mental Health Services in the Capital Region of Denmark. CTP offers treatment of mental illness among immigrants and refugees. The referral criteria to receive treatment at CTP include 1) being 18 years old or older and 2) suffering from a trauma-related psychiatric disorder, typically post-traumatic stress disorder (PTSD) or 3) suffering from a psychiatric disorder in which cultural factors play a significant part in the development, diagnostic and treatment of the disorder(6). In this project, the group of patients that fulfil item 1 and 2 is described as ‘trauma-affected refugees’, and the group of patients that fulfil item 1 and 3 is described as ‘other transcultural patients’. Psychotherapy is a part of the treatment that CTP offers. The greater part of the patients at CTP only speaks limited Danish and approximately 50% of the patients are in need of an interpreter during treatment to be able to communicate sufficiently(7).

   The knowledge about how the involvement of an interpreter in psychotherapy affects the treatment outcome is limited. In the few existing studies, there are no significant difference in the treatment results between the group of patients that receives interpreter-mediated psychotherapy and the group of patients that receives psychotherapy without interpreter(8-10). The existing studies have small populations, unclear descriptions of the inclusion of patients and the procedure of treatment differs, which make the results of the studies difficult to generalise. Furthermore, there is an ongoing debate about whether patients in need of an interpreter in psychotherapy receive poorer treatment and thereby show poorer treatment outcome due to the fact that part of the session is used for the translation between the parties. It has been questioned why patients with the need for an interpreter in psychotherapy are not offered more sessions to gain the same amount of treatment as patients that do not need interpretation in psychotherapy.(11)

   Due to the limited evidence in this research area, combined with the increased amount of patients in need of interpreters in psychiatric treatment, there is a need for further investigations on whether the involvement of interpreters in psychotherapy affects the treatment outcome.
7. **Aim/s**
The aim of this project is to investigate if there is a correlation between the involvement of an interpreter in psychotherapy and the treatment outcome measured by comparison of outcome on a collection of rating scales.

Therefore, it is the aim to test the two following hypotheses, which reflect the two groups of patients at CTP:

1) There are significant differences in treatment results measured by comparison of outcome in rating scales between trauma-affected refugees that receive interpreter-mediated psychotherapy and trauma-affected refugees that receive psychotherapy at CTP without an interpreter.

2) There are significant differences in treatment results measured by comparison of outcome in rating scales between other transcultural patients that receive interpreter-mediated psychotherapy and other transcultural patients that receive psychotherapy at CTP without an interpreter.

8. **Methods**
The project is designed as a retrospective, comparative cohort study and consists of two studies that reflect CTP’s two groups of patients as described above.

1) **Study 1:** Interpreter-mediated psychotherapy with trauma-affected refugees.
2) **Study 2:** Interpreter-mediated psychotherapy with other transcultural patients.

In each of the two studies, two cohorts of patients are created: one cohort with patients in interpreter-mediated psychotherapy and one cohort with patients in psychotherapy without interpreter.

8.1 **Number of participants (N)**

1) Study 1: 772 patients included in the time period 15.6.2009-1.10.2015
   These patients have participated in the randomised clinical trials at CTP called Psychiatric Trauma Research (PTF).

2) Study 2: 230 patients included in the time period 1.7.2014-1.7.2016
   These patients have not participated in PTF.

8.2 **Population:** please see 8.1

8.3 **Description of data and data collection**
In both studies, standardised rating scales have been used to demonstrate treatment outcome. The rating scales used are Harvard Trauma Questionnaire (HTQ), part IV(12); Hopkins Symptom Check List-25 (HSCL-25), which is a short version of Symptom Checklist-90 (SCL-90) and consists of 25 items(13). Besides HSCL-25, SCL-90’s part about somatization, which consists of 12 items, is included(14); WHO-5 well-being Index(15); Sheehan Disability Scale (SDS)(16); Visual Analog Scale (VAS)(17); Global Assessment of Function regarding symptoms (GAF-S) and regarding function (GAF-F)(18).

Besides the rating scales above study 1 includes The Hamilton Depression Rating Scale (HAM-D)(19) and The Hamilton Anxiety Rating Scale (HAM-A)(20), which both are blinded. Study 2 includes Health of the Nation Outcomes Scales (HoNOS)(21).

The rating scales are completed twice for all the patients. One set is filled out before the treatment begins (R1) and will provide the baseline scores and the other set is filled out after treatment ends (R2) and will demonstrate the treatment results.
The data collection in both studies consists of data from patients, who have already participated in psychotherapy at CTP. All patients have finished their treatment.

8.4 Application/acceptance from the Danish Data Protection Agency, the National Committee on Health Research Ethics
The project is conducted in accordance with the Declaration of Helsinki. All patients in the project have prior to participation in research projects at CTP signed a declaration of consent, which allow data collection and the use of it in research. Additional permission from the National Committee on Health Research Ethics is therefore not necessary. There is already permission from the Danish Data Protection Agency to store the actual data, and seek of permission to the current data processing is in progress.

8.5 Analysis
In the analyses, the differences in the different rating scales between the start of treatment (R1) and the end of treatment (R2) are used as measures of treatment outcome. Multiple linear regressions analyses are performed to explore a potential correlation between treatment outcome and the use of an interpreter in psychotherapy. Differences between the group of patients in interpreter-mediated psychotherapy and the group of patients in psychotherapy without interpreter will be considered. Therefore variables like gender, age, geographical background, labour force status, time in Denmark, amount of therapy session and baseline score (R1) in each rating scale will be included in the models. The statistical analyses are performed with STATA 14.

9. Expected results
It is expected that the analyses will show significant differences in treatment outcomes between the two cohorts in each of the two studies. It is expected that the cohort that involve interpreter-mediated psychotherapy will show lesser improvement in mental health status than the cohort that involve psychotherapy without an interpreter.

10. Dissemination of results
The project results will be presented in one or two articles, at international conferences and at the website of CTP.

11. References