Observation based assessment of ADL performance amongst Danish asylum seekers: A cross-sectional study

Anne-Le Morville, OT MSc1, 2, Lena-Karin Erlandsson, PhD, Associate Professor 3, Bente Danneskiold-Samsøe, MD, DMSc, Professor 1, Mona Eklund, PhD, Professor 3, Kirstine Amris, M.D., Senior Researcher 1

1, The Parker Institute, Department of Rheumatology, Copenhagen University Hospital, Frederiksberg, Denmark
2, Metropolitan University College, Institute of Rehabilitation and Nutrition, Dept. of Occupational Therapy, Copenhagen, Denmark
3, Department of Health Sciences, Lund University, Sweden

Introduction
Illness and chronic health problems, are in general known to impact on physical ability and the performance of activities of daily living (ADL). Asylum seekers show a high prevalence of pain and psychological symptoms. Most of them have been subjected to traumatic incidents and experience post-migration stress. Moreover, asylum seekers who have been subjected to torture show increased health problems compared to asylum seekers who have not been subjected to torture. Considering the exposure to torture and trauma and the general health in the asylum seeking population, ADL performance could very well be affected by the asylum seekers that had not been subjected to torture. The study results showed that measures of ADL skills were lower in the overall study population as compared to a previously composed reference sample of healthy people of same age. The age norms for AMPS process skills is 2.08 and for motor skills 2.21. Further a statistical significant and clinical relevant difference in ADL motor skills between tortured and non-tortured were observed. There was no difference in ADL process skills. ADL motor skill measures below the 1.50 ADL motor cut off and/or below the 1.00 ADL process cut off indicate a need for minimal assistance for community living.

Aim
The aim of this study was to describe whether exposure to torture, as defined by the Tokyo Declaration (4), was related to the ability to perform daily activities (ADL) and if the torture survivors differed from a group of asylum seekers that had not been subjected to torture.

Methods
Participants, aged 20-50, were recruited through the Danish Red Cross. Data was gathered through interviews and observation-based assessment of 47 asylum seekers from Iran, Afghanistan and Syria. Written information about the project had been prepared in Dari, Arabic and Farsi. The observation-based test Assessment of Motor and Process Skills (AMPS) was used to assess ADL performance. The questionnaires WHO-5 Well-being Index, Major Depression Inventory ICD-10 (using the ICD-10 algorithm, grouped into 1, no depression, 2, distress and lighter depression, 3, moderate depression, 4, severe depression), Pain Detect and a questionnaire covering age, country of origin, civil status, education, exposure to torture and other traumatic events were used.

Results
Torture 37 of the 47 participants reported exposure to torture. The most common physical methods were unsystematic beatings, suspension from extremities and forced positions. Others were isolation, sleep deprivation and deprivation of basic needs.

Motor and process skills in ADL
The study results showed that measures of ADL skills were lower in the overall study population as compared to a previously composed reference sample of healthy people of same age. The age norms for AMPS process skills is 2.08 and for motor skills 2.21. Further a statistical significant and clinical relevant difference in ADL motor skills between tortured and non-tortured were observed. There was no difference in ADL process skills. ADL motor skill measures below the 1.50 ADL motor cut off and/or below the 1.00 ADL process cut off indicate a need for minimal assistance for community living.

Pain, well-being and depression
Scores below 50 on the WHO-5 showed that both the tortured and non-tortured as a whole suffers from stress and low well-being. This was also found with the MDI, where 18 showed signs of severe depression, 8 showed signs of moderate depression and 5 had signs of distress and milder depression. The remaining 16 persons showed no sign of depression. Neither the MDI nor WHO-5 indicated any differences between groups.

Neck Pain.

Correlations There were no correlations between the MDI process score or AMPS motor score and torture. Statistically significant, but weak correlations were found between process skills and MDI. There were also statistically significant, but weak correlations between motor skills and MDI, age and presence of pain. Stronger statistical significance and correlations were found between motor skills and VAS average pain, and between both motor and process skills and WHO-5.

Discussion
The results regarding health and wellbeing did not differ from earlier research. However, the prevalence rate of exposure to torture was higher than expected based on published epidemiological studies. This might be due to the inclusion of study participants from few and selected countries.

This is the first study evaluating functional ability in survivors of torture using performance based assessments. A statistically significant and clinically relevant difference between the tortured and non-tortured regarding motor skills was observed. As literature mostly describes psycho-social sequelae from torture, we expected to find differences primarily in AMPS process as opposed to the motor skills. As with other chronic pain populations a significant although weak correlation with psychological distress was present as well and current and average level of pain. The finding of ADL motor skills below expected age-norms and a more pronounced motor skill in-efficency in the tortured population, underlines the need for multi-disciplinary rehabilitation also focusing on the physical aspects, including performance of activities of daily living.

This study included asylum seekers that had just arrived in Denmark. It still remains to be elucidated whether the time spent at the centres have any bearing on the ability to perform ADL, as many studies show that the general health declines depending on time spent at a centre.

Conclusions
A significant difference between tortured and non-tortured asylum seekers concerning ADL motor skills was observed, but none regarding pain or psychological distress measures.

The observed impairment of physical ability, especially in the tortured population, underlines the need for multi-disciplinary rehabilitation also focusing on the physical aspects, including performance of activities of daily living.

Acknowledgements
This study was supported by grants from The Oak Foundation, The Metropolitan University College, The Danish Association of Occupational Therapists

Also a thanks to the health personnel at Danish Red Cross and the participants in the study.

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