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Assessment of mental health symptoms in new refugees

ORIGINAL ARTICLE

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Background

Refugees have a higher prevalence of mental disorders than the general population. The Norwegian Directorate of Health recommends screening for traumatic experiences and assessing mental health symptoms three months atter arrival when deemed relevant. However, it is uncertain whether this recommendation helps identify individuals at increased risk of a mental disorder. The aim of the study was to investigate whether assessing mental health symptoms and the risk of mental disorders in newly arrived refugees can help identify individuals who subsequently experience mental health problems.

Material and method

We conducted a retrospective study based on the medical records of refugees who underwent a health assessment at Hommelvik Medical Centre in the period 2016–2019 and the Centre for Migration Health (SEMI) in Bergen in 2022. The risk of mental disorders was categorised as high, moderate or low. Symptoms of mental disorders were recorded during the follow-up period, which was two years and one year, respectively.

Results

A total of 123 refugees were included in the study. Based on the health assessments, 50 participants (41 %) were retrospectively assessed as having a low risk of a mental disorder, 30 (24 %) a moderate risk and 12 (10 %) a high risk. There was insufficient medical documentation to perform a risk assessment for 31 participants (25 %). During the follow-up period, mental health symptoms were observed in 9 of the 12 high-risk participants, compared to 5 of the 50 low-risk participants.

Interpretation

Conducting health and risk assessments three months atter arrival in Norway can help identify refugees who subsequently experience symptoms of a mental disorder.

Main findings

Based on a retrospective review of medical records from health assessments of 123 refugees three months after arrival in Norway, 50 (41 %), 30 (24 %) and 12 (10 %) were considered to have a low, moderate and high risk of a mental disorder, respectively.

A quarter of the refugees had insufficient medical records for a risk assessment.

Mental health symptoms were subsequently reported for 9 of the 12 refugees assessed as having a high risk of a mental disorder.

Refugees have a higher prevalence of mental health symptoms and mental disorders than other immigrants and the majority population in Norway (1). Early detection of mental health problems is desirable (2–4) in order to prevent them progressing and to provide a better foundation for benefiting from the Introduction Programme, the government's main integration initiative (4). In the national guidelines *Health Services for Asylum Seekers, Refugees and Reunited Family Members*, the Norwegian Directorate of Health recommends that local authorities carry out a health assessment of newly arrived asylum seekers and refugees as soon as possible after their arrival in Norway (so-called *early assessment*), followed by a more comprehensive and structured assessment three months later (2). The early assessment is intended to identify known and/or acute illnesses requiring immediate attention, in addition to the statutory screening for tuberculosis.

The health assessment three months after arrival covers somatic symptoms, known illnesses and vaccination status. Where deemed relevant, screening for traumatic experiences and mental health symptoms is recommended, with a proposed classification into high, moderate or low risk based on the number of symptoms (Appendix 1). Early health assessments tend to be carried out at reception centres or arrival centres, while the three-month assessment is typically conducted in the municipality where the refugee is living.

The assessment form in the guidelines is based on the Harvard Trauma Questionnaire (HTQ) and the Post-Traumatic Symptom Scale (PTSS)-10 (2). Both are widely used to identify mental health problems related to traumatic experiences. However, as with

other screening, the benefit of screening for psychiatric conditions is subject to debate (5, 6). For refugees, the validity of HTQ and PTSS-10 screening is uncertain due to the heterogeneity of the refugee population and differences in the timing and method of screening (7, 8). Other methods for assessing mental health symptoms in refugees have previously been attempted. The Refugee Health Screener-15 (RHS-15) (9) was initially effective in identifying common mental disorders, but low specificity has proven problematic in later studies (10). In any case, it is uncertain whether refugees will disclose mental health problems or traumatic experiences to a stranger with whom they have not established trust (11). Stigma and taboos surrounding mental illness (12), along with early assessment soon after resettlement, may contribute to the underreporting of symptoms. Many refugees also experience a temporary improvement in mental health following their arrival in Norway (13–15).

Local authorities determine the organisational model for assessments. There is little to no systematic knowledge about how health assessments and health services for refugees in Norway are organised. A recently published study on health assessments of unaccompanied minor refugees suggests there is no systematic implementation of such assessments (5). No studies have been conducted that evaluate the effect of the Norwegian Directorate of Health's screening recommendations, despite them being applied since 2015.

The aim of our study was to investigate whether mental health assessments and risk assessments for mental disorders conducted three months after arrival can identify subsequent mental health problems that manifest after refugees have been resettled.

Material and method

The study is a retrospective, descriptive investigation of the medical records of refugees who underwent a health assessment three months after arrival in Norway at Hommelvik Medical Centre (Malvik municipality) between 2016 and 2018 and the Centre for Migration Health (SEMI, Bergen municipality) in 2022. Inclusion criteria were: over 18 years of age at the time of assessment and resettled in Malvik or Bergen municipality during the follow-up period. Exclusion criteria included return of the information letter, death, relocation out of the municipality, or transfer of medical records to another medical centre during the follow-up period. The follow-up period was two years for Hommelvik and one year for the Centre for Migration Health.

Information on sex, age, country of origin (Centre for Migration Health only), education, marital status, previous illness and traumatic experiences was obtained from the refugees' medical records and completed assessment form where available: either the Norwegian Directorate of Health's *Health Examination for Asylum Seekers, Refugees and Reunited Family Members* form (Hommelvik, Appendix 1), or a shorter assessment template (Centre for Migration Health, Appendix 2), both stored in the patient's medical record. Where information was missing, the variable was recorded as 'Unknown'.

Somatic illness was defined as a previously known somatic diagnosis or condition requiring medical treatment at the time the health assessment was conducted. Mental disorder was defined as a psychiatric diagnosis or a diagnosis of mental disorder symptoms with a documented impact on daily functioning and/or ongoing or completed

treatment. Normal reactions such as distress, worry and sadness related to war and seeking refuge were not recorded as mental disorders. Both past traumas and current traumas related to the migration process were recorded as trauma. As recommended in the Norwegian Directorate of Health's assessment form, traumatic experiences were defined as being subjected to or witnessing physical violence, torture or murder, as well as forced separation from family, experiencing life-threatening situations, or other extreme stressors. Fleeing from war was not, in itself, defined as a trauma.

The study participants were retrospectively categorised with a low, moderate or high risk of a mental disorder based on the risk assessment criteria for mental health in the Norwegian Directorate of Health's guidelines (Hommelvik, Appendix 1) or on separate criteria (Centre for Migration Health, Appendix 2). If the criteria were insufficiently documented, the participant was recorded as 'Not risk-assessed'.

Mental health symptoms during the follow-up period were recorded if the clinician at the study centre had made a psychiatric diagnosis and/or noted mental health symptoms in the medical records.

Data were processed using Microsoft Excel (Microsoft Corporation) and stored on a secure server at UiT The Arctic University of Norway.

The Regional Committee for Medical and Health Research Ethics (REK) assessed the project as a quality assurance study, and the Norwegian Directorate of Health granted an exemption from the requirement for informed consent. The data protection impact assessment, conducted in collaboration with Sikt – the Norwegian Agency for Shared Services in Education and Research – concluded that the benefits of the study outweighed the potential disadvantages for participants. This assessment was approved by UiT The Arctic University of Norway. Potential participants received written information about the study and contact details for the study centre, and were informed of their right to withdraw. None of the authors had responsibility for treating participants during the study period.

Results

Ninety refugees at the Centre for Migration Health met the inclusion criteria. One of them withdrew from the study and 14 were excluded due to returning the information letter. At Hommelvik Medical Centre, 48 refugees met the inclusion criteria. None of these withdrew from the study. A total of 123 refugees were included in the study. All participants at the Centre for Migration Health were from Ukraine.

The average age was 36 years (minimum 18, maximum 75), 75 (61 %) were women and 51 (41 %) had a higher education. Participant characteristics by study centre are shown in Table 1.

The number of participants assessed as having a low, moderate and high risk of a mental disorder was 50 (41 %), 30 (24 %) and 12 (10 %), respectively. Thirty-one participants (25 %) were not risk-assessed due to insufficient documentation.

Table 2 summarises the number of participants with traumatic experiences, previous somatic illness and a known mental disorder at the time of the health assessment, distributed by risk group. At Hommelvik, all three participants with a moderate or high risk of a mental disorder had previous traumatic experiences, compared to nine (50 %)

with a low risk. At the Centre for Migration Health, nine (82 %) participants in the high-risk group had previous traumatic experiences, compared to four (13 %) in the low-risk group, and five (45 %) in the high-risk group had a known mental disorder. None of the participants assessed as low risk had a known mental disorder (at both study centres).

During the follow-up period, 36 participants (29 %) were recorded as having one or more mental health symptoms. Nine of the 12 participants assessed as high risk for a mental disorder and five of the 50 assessed as low risk were recorded as having mental health symptoms during the follow-up period (Table 3).

Discussion

In our study, three out of four newly arrived refugees who were retrospectively assessed as high risk for mental disorders – based on health assessments conducted three months after arrival in Norway – were later recorded as having mental health symptoms, compared to just 10 % of the low-risk group. The risk of a mental disorder could not be assessed for a quarter of the participants due to insufficient medical record documentation.

Incomplete or missing health assessments, and consequently the ability to retrospectively assess the risk of a mental disorder in the future, appeared to be more common at Hommelvik Medical Centre than the Centre for Migration Health. At Hommelvik, the health assessments were carried out by general practitioners (GPs) and specialty registrars, whereas the Centre for Migration Health has a multidisciplinary team consisting of doctors, (public health) nurses, a physiotherapist, a psychologist, a social worker and language consultants. This may provide a better foundation for a structured health assessment. Several local authorities, including Malvik, have established multidisciplinary migration health teams in recent years. However, little is known about whether such teams or GPs are better equipped to follow up on symptoms identified during assessments. It is reasonable to assume that the proportion of incomplete health assessments has decreased as local authorities have gained more experience in conducting them.

Our study does not provide a basis for evaluating the validity of the Norwegian Directorate of Health's recommended assessment, partly because the Centre for Migration Health used its own assessment template rather than the Directorate's form. Furthermore, little is known about whether it is the introduction of the guidelines or the organisation of the services that has the greatest impact on how refugees with mental health problems are identified and followed up. Unsystematic implementation of health assessments can also lead to unsystematic follow-up (16). A European systematic review from 2019 found underuse of mental health services among refugees, despite a higher prevalence of mental disorders (17). This could be due to various barriers (18).

Our study has several limitations, including its retrospective design and differences in assessment methods, study period and follow-up times between the two study centres. The study also has a limited sample size. A calculation of statistical power was conducted prior to the study to estimate how many participants would be needed to demonstrate a difference in the prevalence of mental health symptoms of 10 % or more between the risk groups. The calculation estimated a need for 246 participants. This

quickly proved to be unrealistic. Contributing factors included a change in the medical record system at the Centre for Migration Health, which led to a shorter inclusion period and follow-up time. As a result, we were unable to conduct the planned regression analyses. Our findings should therefore be interpreted with caution, as potential confounding factors were not factored in. A larger study would enable the stratification of participants by country of origin, a more detailed analysis of diagnoses during the follow-up period, follow-up in the specialist health service and examination of the correlation between findings from the health assessment and the degree of subsequent integration.

We did not have access to medical records from other GP practices, primary care services or the specialist health service in this study. Potential underreporting of mental disorders must therefore be taken into consideration. Furthermore, the distinction between normal reactions and mental health symptoms during assessment is based on subjective judgements to a certain extent, which can lead to misclassification. It must also be considered that individuals with mental health symptoms during the follow-up period may not necessarily have had contact with the health service.

The Norwegian Healthcare Investigation Board (Ukom) published a report in 2021 on the health and care service provision for newly arrived refugees (19). The investigation was prompted by the so-called Tromsø tragedy, in which a refugee drowned herself and her three children. The report concluded that the Norwegian Directorate of Health's guidelines are one of several instruments that have been 'insufficiently applied'. We therefore believe that a thorough review is needed to determine whether the Directorate's guidelines are being followed by municipal migrant health services and GPs, the organisation of these services, and the implications. This will provide a basis for determining the most appropriate organisational model.

In this study, we sought to examine whether health assessments for trauma and mental health symptoms conducted three months after resettlement can help identify refugees who subsequently experience mental health symptoms. Despite several limitations, the results suggest that such assessments can identify individuals who will subsequently require follow-up due to mental health symptoms. The study highlights the need for further research to improve knowledge about health assessments and healthcare services for refugees.

The article has been peer-reviewed.

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