# Predisposing, need and enabling factors for service utilization amongst newly arrived youth in Sweden

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#### Abstract

Purpose - The reasons for and experiences during migration, as well as additional stressors in the new host country, may give rise to mental health problems and additional need for public services. The purpose of the study was to investigate factors related to service utilization among newly arrived refugee

Design/methodology/approach - Cross-sectional data were gathered in Sweden where 37 youth aged between 19 and 23 reported on factors related to service utilization, encompassing health-care and support services in school. These factors included predisposition (demographic), need (migration status and mental wellbeing) and enablement (living situation). Service utilization was estimated using multiple logistic regression analysis.

Findings - About a fourth of the sample used psychosocial services. Use of general support was more common. Neither predisposing, need nor enabling factors were associated with the use of psychosocial or general health-related services.

Originality/value - Self-reported factors related to use of health-related services have previously not been investigated for refugee youth, which is important in assuring access to appropriate services for this exposed youth population.

**Keywords** Newly arrived youth, Mental health, Service utilization, Immigrant

Paper type Research paper

## Background

During the last decade, a substantial number of youth, both migrating unaccompanied or together with family members, were seeking asylum status in different countries worldwide [United Nations Children's Fund (UNICEF), 2017], including the European Union (EU). Overall, youth below the age of 18 represent one-third of all asylum seekers in the EU (Eurostat, 2018). These youth constitute a vulnerable group in society. They have often experienced traumatic events both before and during the migration to the recipient country, including loss of relatives, being persecuted, involved in armed conflicts and torture and exposed to violence (Fazel et al., 2012; Pacione et al., 2013). In addition, arriving in a new country, which is associated with uncertainty about the future, is challenging for these individuals (Vervliet et al., 2014; Jensen et al., 2019). Cultural changes, housing issues, language difficulties and potential exposure to discrimination in the recipient country are additional factors that can be perceived as burdensome (Fazel et al., 2012; Pacione et al., 2013; Vervliet et al., 2014; Jensen et al., 2019). The asylum process itself can also be very stressful as it often involves uncertainty and long waiting times for notification of a residence permit (Gleeson et al., 2020). Insecure residence status, such as temporary residence permits, has been shown to have a substantial impact on mental health (Steel et al., 2011; Bogic et al., 2012).

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Since 2015, when a large number of refugees arrived in Sweden, society has also been faced with integration challenges. Studies show that access to work promotes integration among newly arrived individuals and that this may have health-promoting effects (Montgomery, 2011; Kosny et al., 2020). In Sweden, many refugee youths received a temporary residence permit to complete upper secondary school, with possibility of a permanent residence status if obtaining a full-time employment, no less than six months after graduating from high school. This factor may further increase stress and impact on mental health [Justitiedepartementet (Department of justice), 2017]. In the Swedish context, municipalities have been assigned responsibility for receiving newly arrived migrants and supporting them in their integration process. The municipalities are responsible for financing the schooling of newly arrived youth and providing language support and teaching assistants (Aflaki and Freise, 2021). All newly arrived youth migrants have the same access to health care and dental care as Swedish born (Leinander and Olsson, 2019). Research show consistently high levels of mental health problems among newly arrived children and youth (Salari et al., 2017; Kien et al., 2019), including posttraumatic stress disorder, depression, anxiety and emotional and behavioral problems. Consequently, there is a great need for detecting these individuals at an early stage, and making sure that mental health care services and other types of public support for these vulnerable youth are accessible. To equitably target, offer and deliver services to individuals in need, there is a need to identify predictors of mental health service use.

A behavioral model to conceptualize health care utilization was developed by Andersen, and includes three components: predisposition, enablement and need (Andersen, 1968, 1995). While predisposition entails sociodemographic factors including age and gender, enablement encompasses availability of services or facilitators to service use, such as personal or family resources including income. Need refers to underlying health problems that objectively or subjectively indicates somatic or mental health problems. Studies have frequently put a focus on the "need" component of service utilization, and have found low levels or no predictive power of general and mental health service use in relation to the prevalence of psychiatric disorders in adult asylum seekers (Laban et al., 2007; Führer et al., 2020; Kindermann et al., 2020). Predisposition and enablement have been found to predict the use of mental health services among asylum seekers previously (Kindermann et al., 2020). Yet, previous studies on the utilization of care for immigrants have largely analyzed register-based data and focused on psychiatric service utilization (Barghadouch et al., 2016; Abebe et al., 2017; Gubi et al., 2022). Less is known regarding self-reported mental health problems rather than diagnosed conditions of youth who have recently immigrated, and whether it is associated with utilization of different types of available services not only mental health-care services. The aim of the paper is to describe the mental health state (mental wellbeing) and service use, and to assess which factors may be associated with the use of psychosocial and general health care of newly arrived youth.

#### Methods

## Study design

We used a cross-sectional design through a self-reported survey to investigate newly arrived youths' mental health state and utilization of different types of public services. Data analyzed in this study comprised of baseline data from a pilot trial assessing the right to work (RTW) method, which aims at promoting access to the labor market and enabling opportunities for employment for newly arrived youth in Sweden, organized by the NGO Right By Me (RBM) (Right By Me, 2023). Thus, the current study stems from a collaboration project between Uppsala University and RBM for which the parties received a joint research grant from Vinnova. In this project, Uppsala University was responsible for evaluation of the RTW method.

# Right to work

RBM specifically targets newly arrived young people, 16–24 years in the Stockholm County. Most of the youth who join RBM originate from the Middle East (e.g. Afghanistan, Iran, Iraq or Syria), Africa (Ethiopia, Eritrea or Somalia) and South America (e.g. Peru). The gender distribution is fairly even with about 46% of girls and 54% of boys. The types of residence permit vary with some youths having permanent residence permits and others having temporary residence permits. A smaller proportion have Swedish citizenship (Elise Brune, employed at RBM, personal communication 2022-11-17).

When joining RBM, youths have the possibility to sign up for the RTW method. The RTW method includes capacity-building activities such as workshops or seminars for developing CVs and personal letters, preparing for interviews, improving language and communication skills and gaining knowledge about the Swedish labor market. In addition, RTW includes sport and social activities to facilitate a sense of belonging to the program as well the overall community.

#### Power calculation

With an estimated power of 0.80, medium effect size (0.50) and a confidence level at 0.05, the approximate number of individuals were estimated at 34 at least, to detect significant associations for the trial, seen as correlations between the RTW method and study outcomes.

## Participants and eligibility

Youth were recruited to the RTW method through the Facebook page of RBM. The youth could themselves apply to join the Facebook group, which provided information about the RTW method and its activities. Once the youth had joined the Facebook group, and RBM, they could sign up for the RTW program and the various activities. Participation in RBM, RTW and the activities was, therefore, voluntary.

Participants of the current study were recruited among youth who had signed up for the RTW method. During initial RTW activities, information meetings were held by the RTW staff where the youth were given written and oral information about the study and were invited to participate. For this study, the RTW staff were three people, selected to recruit participants, due to their extensive experience in delivering the RTW-method and working with newly arrived youth. Prior to the information meetings, all recruiters were instructed by the research team to thoroughly explain the study objectives, ethical aspects and questionnaire items (if needed) to the participants, as well as ensuring that all questionnaire items were filled in.

At the information meetings, the written and oral study information was provided by the RTW staff in Swedish since many of the youth were highly proficient in Swedish. If needed, the staff were available to translate the information. The written information was constructed by the principal investigator of the study and comprised information about the purpose of the study, procedure, ethical aspects as well as contact details to the principal investigator.

All youth participating in RTW activities and who met the inclusion criteria were invited to participate in the study. To be included, youth had to be between 18 and 24 years of age, foreign born and currently living in Stockholm County. In addition, the youth had to have resided in Sweden for less than or equal to seven years, defined as being newly arrived. Prior to recruitment, potential participants were screened for inclusion criteria through a checklist. All participants provided written informed consent to participate in the study.

The recruitment and data collection took place in December 2020 until January 2021 and at RBM premises located in Stockholm. Thus, the recruitment period lasted for two months and was terminated when a sufficient number of participants (see below) had been recruited according to the power calculation. All youth were informed that their participation was voluntary, that nonparticipation would not influence their support from RBM in any way, that answers would remain confidential and that they could withdraw from the study at any

time during the assessment, without further explanation. The questionnaire used for the study (see below) was administered in Swedish, as many youths either had high proficiency in Swedish, or the RTW staff were available to assist with any translations or help during the data collection. All participants responded independently and privately to the questions through their mobile phones or computers, using a Web-link, which allowed online submission of data in Survey Monkey. All participants were given a unique code to enable completion of the questionnaire. From Survey Monkey, data were extracted and safely stored at Uppsala University. Only researchers affiliated with Uppsala University had access to the data.

The participants filled in the questionnaires on one occasion. Responding to all items took approximately 40 min. If participants reported that they were feeling mentally unwell, they were informed that they could contact to the student health services and/or health care services of the Stockholm County for support.

The study was approved by the Ethical Review Board in Sweden (DNR 2020–05372).

#### Measurements

All measurements were collected via a questionnaire provided in Swedish. RTW staff were available to participations if they requested help in understanding any questions or formulations.

## Sociodemographic and socioeconomic variables

Background information was collected from participating youth, including age and gender, date of migration, ethnicity, living arrangement, migration status, education/employment status and perceived difficulties in finding and attaining employment.

#### Service utilization

The main outcome was service utilization, divided into two types of support: general support and psychosocial support. Participants were asked about a range of services used in the three months prior to the administration of the questionnaire. The services included in general support comprised of at least one visit to a physician/nurse/psychologist or counsellor within the Swedish health-care system or at school. Psychosocial support included at least one visit to a psychologist or counsellor within the Swedish health-care system or at school. The questions in the questionnaire related to service utilization are outlined in Table 1.

## Factors explaining service utilization

The following factors were chosen based on Anderson model of health-care utilization (Andersen, 1968, 1995), which has extensively been used in similar research and is the foundation of other, more contextualized theories (Gliedt et al., 2023).

## Predisposing factors

These factors were identified as sociodemographic factors that explain why individuals seek care, which in this study included gender, age and country of origin.

# Enabling factors

This component was represented through the observation of individuals' living situation, which was regarded as a facilitator to service use. It was hypothesized that co-habiting

Table 1 Questions regarding resource use				
Questions	Alternatives			
Have you received any support/help from any organization/person in the past three months?     Yes/no     If yes, how many times?	<ul><li>a. Red cross</li><li>b. Stadsmissionen (Swedish NGO)</li><li>c. The Church</li><li>d. Other (name which)</li></ul>			
If you answered yes to the previous question (question 1), what kind of support/help have you received?	<ul><li>a. Help with homework</li><li>b. Other (name what)</li></ul>			
3. Have you met any of the following in the past three months?  Yes/no  If yes, how many times?	In primary care/at a hospital:  a. Physician (primary care) b. Physician (hospital) c. Psychologist d. Nurse e. During inpatient care In school: f. School nurse g. School physician h. School counsellor i. School psychologist j. Special needs teacher			
4. Have you received any support/help from Stockholm Stad (the municipality) in the past three months? Yes/no If yes, how many times?	<ul><li>a. Living support</li><li>b. Contact person</li><li>c. Legal guardian</li><li>d. Other (what role)</li></ul>			
Source: Table by authors				

individuals may get support and encouragement to seek help from the people they live with, affecting utilization.

## Need factors

Need factors were identified as migration status and mental health state. Not having a permanent residence permit was through to impact on individual stress levels which might result in both physical and mental health problems occurring, indirectly affecting the need for services.

Mental health state was measured using the Mental Health Continuum – short form (MHC-SF) (Keyes, 2009). The MHC-SH is a positively defined instrument that fits well with the WHO definition of mental health (World Health Organization, 2004), and measures three types of wellbeing: emotional, psychological and social. It consists of 14 items that participants respond to on a six-point Likert scale from "never" to "every day." Based on the responses to specific MHC-SF items, individuals can be categorized according to mental health state: languishing (low levels of mental wellbeing and a feeling of emptiness), flourishing (mental wellbeing with positive emotions with mental and social functions) and moderate mental health (neither languishing nor flourishing). The MHC-SF has demonstrated high to very high reliability with acceptable test-retest reliability in a sample of Swedish adolescents (Södergvist and Larm, 2021). In addition, it has demonstrated high reliability among adult migrants in Australia (du Plooy et al., 2019). Internal consistency for the total scale in this sample, measured as Cronbach's alpha, was very high ( $\alpha = 0.92$ ).

# **Analyses**

A total of 40 youths were asked to participate in the survey. Three chose not to partake, thus, the sample consisted of 37 consenting participants. Descriptive statistics were analyzed and presented according to means, standard deviations, numbers and percentages. Multiple logistic regressions were thereafter conducted on participants without missing data (n = 29), to explore which factors were associated with service utilization. Results of the regression analyses are presented as odds ratios (OR) with respective 95% confidence intervals (CI). All analyzes were performed in SPSS Statistics 27.

#### Results

#### Characteristics of the sample

Table 2 presents the baseline demographics, mental health state and service utilization for all the respondents in the sample. The mean age of the population was 20.9 and on average, they had arrived to Sweden six years prior, i.e. at age 15 (range: 4-7 years prior). Two-thirds of the sample were boys, and a majority were born in Afghanistan (73%). About half of the population had a temporary residence permit. Most youth lived alone, while the most common people to live with were friends. Roughly 60% of the sample reported moderate or languishing mental health, with only two of these individuals reporting languishing mental health. One-fourth of all individuals used psychosocial support. General support, including visits to a physician, nurse, psychologist or counsellor, were used at a higher rate.

## Psychosocial service use of refugee youth according to factors of predisposition, enablement and need

Several factors theoretically related to service utilization were investigated with results presented in Table 3. Neither gender nor age significantly predicted use of psychosocial services. Factors related to need and enablement were not significantly associated with the use of psychosocial support either. Originating from Afghanistan had the largest odds for service use (OR = 3.04), but showed to be insignificant (95% CI 0.15–61.19).

# General service use of refugee youth according to factors of predisposition, enablement and need

Factors associated with general service use are presented in Table 3. No predisposing or enabling factors had a significant impact on whether or not individuals used general support. Individuals with a temporary residence permit had the largest odds for general service use (OR = 1.34), but results showed to be insignificant (95% CI 0.27–6.64). Mental health did not significantly predict service use either.

#### Discussion

In the present study, we investigated whether factors associated with predisposition, enablement and need was associated with utilization of psychosocial and general healthcare support in refugee youth. We found that neither age, gender nor country of origin, which were factors related to predisposition, significantly predicted service utilization. Neither were factors associated with enablement. Importantly from this study, refugee youth with moderate or languishing mental health did not seem to use more resources than their peers who indicated higher levels of mental health.

This study seeks to look at newly arrived youths' self-reported mental health and the association to self-reported service utilization from various kinds of support functions. Many previous studies have largely focused on care utilization within mental health services, such as specialized outpatient care (Barghadouch et al., 2016; Abebe et al., 2017; Gubi et al., 2022). A study on an adult population of asylum seekers and refugees shows predisposing factors, such as younger age, to be associated with higher mental health problems but

Variables	n (%)
Gender identity Boy Girl Other Age, M (SD) Age at arrival to Sweden, M (SD)	28 (75.7) 8 (21.6) 1 (2.7) 20.9 (0.84) 15.0 (2.1)
Country of origin Afghanistan Iran Peru/Sri Lanka/Somalia Missing data	27 (73.0) 5 (13.5) 3 (8.1) 2 (5.4)
Migration status Residence permit/Swedish citizenship Temporary residence permit Missing data	14 (37.8) 19 (51.4) 4 (10.8)
Living situation Live alone Live with friends Live with parents and/or siblings Live with partner or foster parents Missing data MHC-SF score for mental health, M (SD)	18 (48.6) 11 (29.8) 5 (13.5) 2 (5.4) 1 (2.7) 3.0 (1.0)
MHC-SF two category diagnosis of positive mental health Flourishing mental health Moderate or languishing mental health	13 (35.1) 24 (64.9)
MHC-SF three category diagnosis of positive mental health Flourishing mental health Moderate mental health Languishing mental health	13 (35.1) 22 (59.5) 2 (5.4)
Service utilization, psychosocial support <sup>a</sup> At least one visit No visits One visit Two visits Four visits Five or more visits	9 (24.3) 28 (73.7) 3 (7.9) 2 (5.3) 1 (2.6) 4 (10.5)
Service utilization, general support <sup>b</sup> At least one visit No visits One visit Two visits Three visits Five or more visits	17 (45.9) 20 (54.1) 6 (16.2) 4 (10.8) 1 (2.7) 6 (16.2)
<b>Notes:</b> <sup>a</sup> Visits to a psychologist or counsellor within the Swedish health-cduring the last three months. <sup>b</sup> Visits to a physician/nurse/psychologist Swedish health-care system or at school during the last three months <b>Source:</b> Table by authors	care system or at school or counsellor within the

lower service utilization (Biddle et al., 2019), while it has also been shown that younger age is associated with higher frequency of use (Kindermann et al., 2020). Similarly, studies on gender show opposing results, with females using more resource while in resettlements (Weiss et al., 2011), and males using more once in their new host countries (Kindermann et al., 2020). For the general population, a recent review has shown that there is scarce evidence for the association between enabling factors and health care utilization for

Table 3 Multiple logistic regressions for associations between predisposition, need and enabling factors and service utilization  $(n = 29)^a$ 

Factors potentially explaining service utilization	Psychosocial support <sup>b</sup> OR (95% CI)	General support <sup>c</sup> OR (95% CI)
Predisposition factors Gender Girl (ref)		
Boy	0.19 (0.01–4.77)	0.45 (0.03–6.85)
Age	1.23 (0.33–4.59)	0.82 (0.26–2.52)
Country of origin Other (ref) Afghanistan	3.04 (0.15–61.19)	0.91 (0.10–8.35)
Need factors		
Migration status Permanent residence permit/Swedish citizenship (ref) Temporary residence permit	2.00 (0.29–13.77)	1.34 (0.27–6.64)
MHC-SF two category diagnosis of positive mental health Flourishing mental health (ref) Moderate or languishing mental health	0.42 (0.05–3.62)	0.77 (0.13–4.50)
Enabling factor Living situation Live with friends/parents and/or siblings/partner or foster parents (ref)		
Live alone	0.44 (0.07–2.76)	0.68 (0.14–3.37)

Notes: a Eight participants were excluded from the analysis due to missing data for some of the independent variables. At least one visit to a psychologist or counsellor within the Swedish health-care system or at school during the last three months. cAt least one visit to a physician/nurse/psychologist or counsellor within the Swedish health-care system or at school during the last three months Source: Table by authors

> common mental health problems (Roberts et al., 2018). For adult asylum seekers and migrants, income has been shown to enable service use in the host country (Alemi et al., 2017; Ayele et al., 2020). Need factors, which is often a clinical measure of health problems, have shown either to have low levels or no predictive power of general and mental health service use in adult asylum seekers (Laban et al., 2007; Führer et al., 2020; Kindermann et al., 2020). However, a recent study conducted in Finland with three immigrant groups showed that mental health problems caused by past traumatic events were associated with increased mental health service utilization (Schubert et al., 2019). This study indicates that trust in mental health services was significant for the immigrant population's use of the service.

#### Implications for care of refugee youth

With regards to Andersen's model of health-care utilization, the present study identified no factors explaining utilization of services related to health and psychosocial care. Since utilization of these services did not depend on mental health status, it becomes important to assess whether refugee youth actually seek care and access services needed, which has been pointed out as factors contributing to inequalities (Cookson et al., 2021). Since we were unable to control for other health problems which may affect the use of general health care services, we are unable to distinguish the health-related reasons for seeking care. There is, thus, a need to identify and distinguish between different types of need, to facilitate access to the most adequate type of health care. Language issues, long waiting lists and health literacy may be important factors to consider, in addition to knowledge of and information regarding which services are offered within the health-care system of the host country (Wångdahl et al., 2014; Kohlenberger et al., 2019). Given these, the

professionals that meet these individuals, such as within primary care, and teachers and counsellors at school, need to be informed and alert of languishing mental health, and knowledgeable of how and where to refer individuals in need of specialized services.

## Strengths and limitations

A strength of this study is that it adds to a previous gap in the literature, as it examines selfreported health in newly arrived youth and their utilization of not only mental health care, but help and support from a range of actors. Furthermore, we were able to use the MHC-SF to measure mental wellbeing, which showed excellent internal consistency in our sample, despite the small sample size. As previous studies have shown that insecure residence status, such as temporary residence permits, has a substantial impact on mental health (Steel et al., 2011; Bogic et al., 2012), to the best of the authors' knowledge, this study is the first to explore whether this potential need factor may be associated with service utilization. A few limitations of the study may also be noted. The small sample size introduces bias, resulting in representability issues as well as issues with Type I and II errors. We aimed at reducing Type II error by recruiting more individuals than necessary according to a power calculation. However, as data was missing on some of the predictor variables, the analyses were slightly underpowered. In addition, selection bias is probable, as the sample is composed of newly arrived youth engaged in activities organized by an NGO. It is likely that individuals who do not participate in these types of activities would differ from our sample. Also, a few individuals who were invited to fill out the survey chose not to participate. The direction and magnitude of this selection bias is difficult to estimate but it is likely that the participants of the current study had higher levels of motivation to find a full-time employment and a better health status than other samples of newly arrived youth. Nonetheless, we had no possibilities of further analyses to assess the actual impact of this potential bias. The fact that the participants were recruited by RTW staff could potentially have introduced a pressure to participate in the study. However, all RTW staff thoroughly explained that participation in the study was voluntary and that nonparticipation would not influence their support from RBM in any way. In addition, all participants signed an informed consent form. Thus, voluntariness of study participation was ensured.

A large limitation of the study was the lack of additional relevant variables for assessing health-care utilization. Research has pointed out the complexities of needs and utilization of care, and the circular process of care-seeking rather than a linear relationship between need and utilization (Place et al., 2021). This corresponds to both supply-side factors, such as approachability, acceptability, availability and appropriateness, as well as demand-side factors such as ability to seek, reach and engage. Models other than Anderson's care utilization model have extended the factors that may be of relevance to understand utilization (Gliedt et al., 2023). Some may be particularly relevant for the migrant population, to understand relevant barriers (Gulliver et al., 2010). First, predisposing factors of relevance could include a cultural concept of mental health. Cultural interpretation of mental health influences people's mental health-seeking behavior (Ma-Kellams, 2014). In some contexts and cultures, mental health problems are understood to be God's will, punishment or witchcraft (Guerin et al., 2004; Moreno and Cardemil, 2013; Wolf et al., 2016). Another aspect that may influence people's mental health-seeking behavior is the interpretation of mental health problems as somatic health problems (Ma-Kellams, 2014; Wolf et al., 2016). Thus, it is possible that our participants' perceptions of mental health might have influenced their mental health service utilization.

Second, enabling factors relevant for the study could include availability and accessibility, which was not included as enabling factors as immigrant children and youth are offered health-care services free of charge, and accessibility was not possible to measure. Lastly, the need factor could have included components relevant for any population with mental health problems, such as general knowledge and understanding of mental health problems.

#### Conclusion

Mental health of newly arrived refugee youth in Sweden varies, with more than half presenting moderate-to-low mental health. It was, however, not a predictor of health care or school health service use. Neither were other need, predisposing or enabling factors. Accessibility to service for mental health care needs to be further explored, to provide adequate services for vulnerable populations, such as refugee youth.

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