

THE MENTAL HEALTH OF IMMIGRANTS: RECENT FINDINGS FROM THE OSLO HEALTH STUDY



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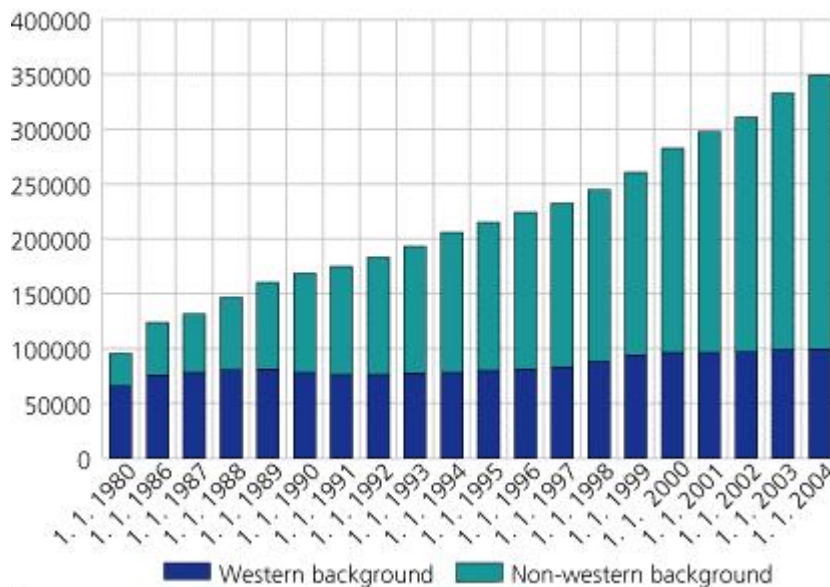
Content

- **Background: Immigration in Norway, recent epidemiological studies of mental health among immigrants in Europe**
- **The Oslo Health Study: description and findings**
- **the Oslo *Immigrant* Health Study: description and findings**
- **Discussion and conclusions**

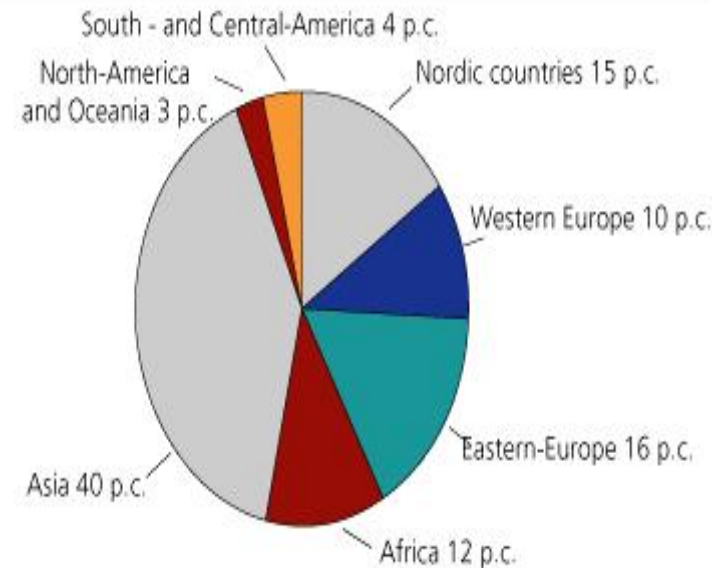
Background

■ Immigrant population in Norway (Source:SSB)

Immigrant population after western/non-western background.
1.1.1980-1.1.2004



Immigrant population in per cent. 1st January 2004





Examples of previous European studies

- **A Norwegian study among refugees**
- **Swedish epidemiological studies**



A community cohort study of Vietnamese refugees

**The study identified a prediction model of
mental health problems:**

- **Female gender**
- **Extreme traumatic stress in the country of origin**
- **Negative life events in the resettlement country**
- **Lack of close confidant**
- **Chronic family separation**

(Hauff and Vaglum, 1995)



Swedish population studies

The Swedish survey of immigrants (1996-97) has been extensively reported. It focused in particular on immigrants from Poland, Turkey, Chile and Iran. A low sense of coherence, poor sense of control and economic difficulties in exile seemed to be stronger risk factors for psychological distress than exposure to violence before migration.

(e.g. Sundquist et al., 2000)



Objectives

- **To compare the psychological distress between immigrants from high- and low-income countries**
- **To investigate whether pre- or post-migration factors best explain any such differences**



Objectives

- **To compare psychological distress between men and women among immigrants from low and middle-income countries living in Oslo**
- **To identify factors associated with psychological distress for men and women, separately**



Objectives..

- **Examine the hypothesis that lack of control is an important mediator between the experience of being an immigrant and their mental health**

Material and Methods-

The Oslo Health Study

- **Cross-sectional survey among 40 888 Oslo inhabitants- born in 1970, 1960, 1955, 1940/41, 1924/25**
- **Participation rate 46% in general and 40% among immigrants**
- **Of 18,770 participants, there were 17.4% immigrants (1536 from low & middle income countries and 812 from high-income countries)**
- **The Hopkins Symptom Checklist (HSCL-10) to measure psychological distress**
- **Negative and traumatic life events**
- **Integration (reading paper and getting visits and help from Norwegian friends)**
- **Possible discrimination (Denial of job or housing)**
- **Control (generalised self-efficacy and a power-powerlessness factor)**

Psychological distress (HSCL-10)

	mean (SD)	< 1.85
Middle- and low-income countries	1.53 (0.65)	10.3 %
High-income countries	1.33 (0.41)	24.3 %

Odds of psychological distress among immigrants from low-income countries by using various multivariate models (n=1258)

Immigrants	Unadjusted	Model 1	Model 2	Model 3
from	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR(95%CI)
High-income countries (Reference)				
Low-income countries	2.38 (1.37-3.28)	2.25 (1.58-3.21)	1.86 (1.28-2.69)	1.33 (0.88-2.01)
p value	<.001	<.001	<.001	.176

Model 1: adjusted for gender, age, religion, marital status and education

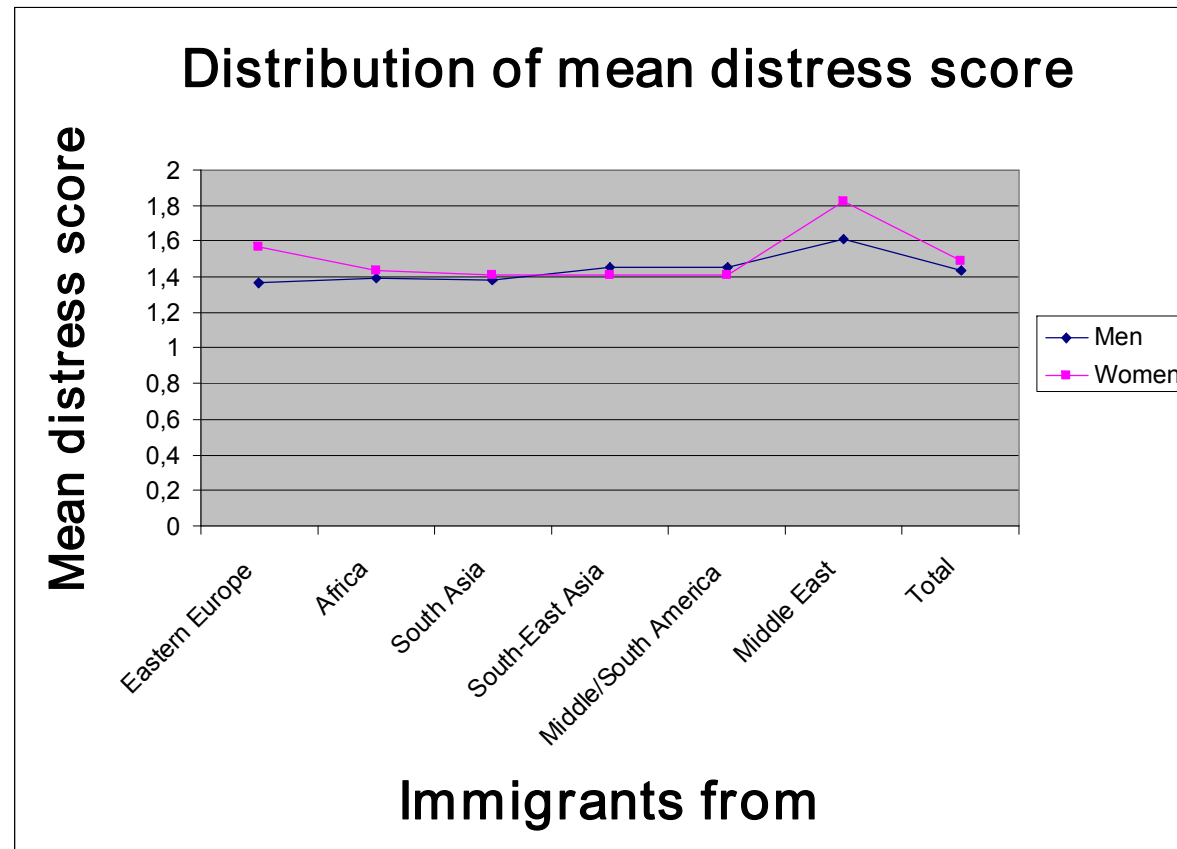
Model 2: adjusted for gender, age, religion, marital status, education, pre-migration variables such as torture, imprisonment and war experiences

Model 3: adjusted for gender, age, religion, marital status, education, torture, imprisonment and war experiences, and post-migration variables such as recent negative life events, paid job, annual family income

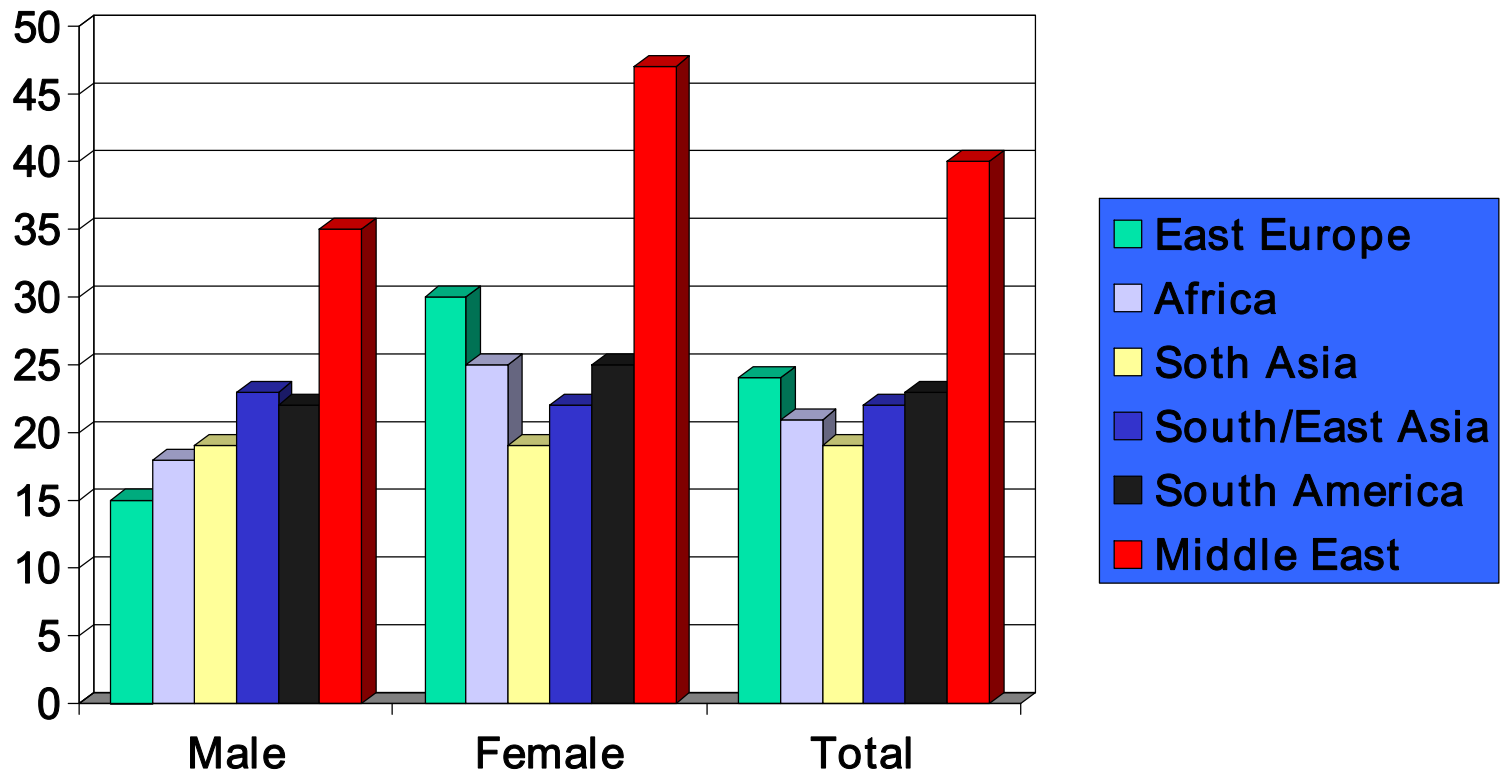


Gender and mental health

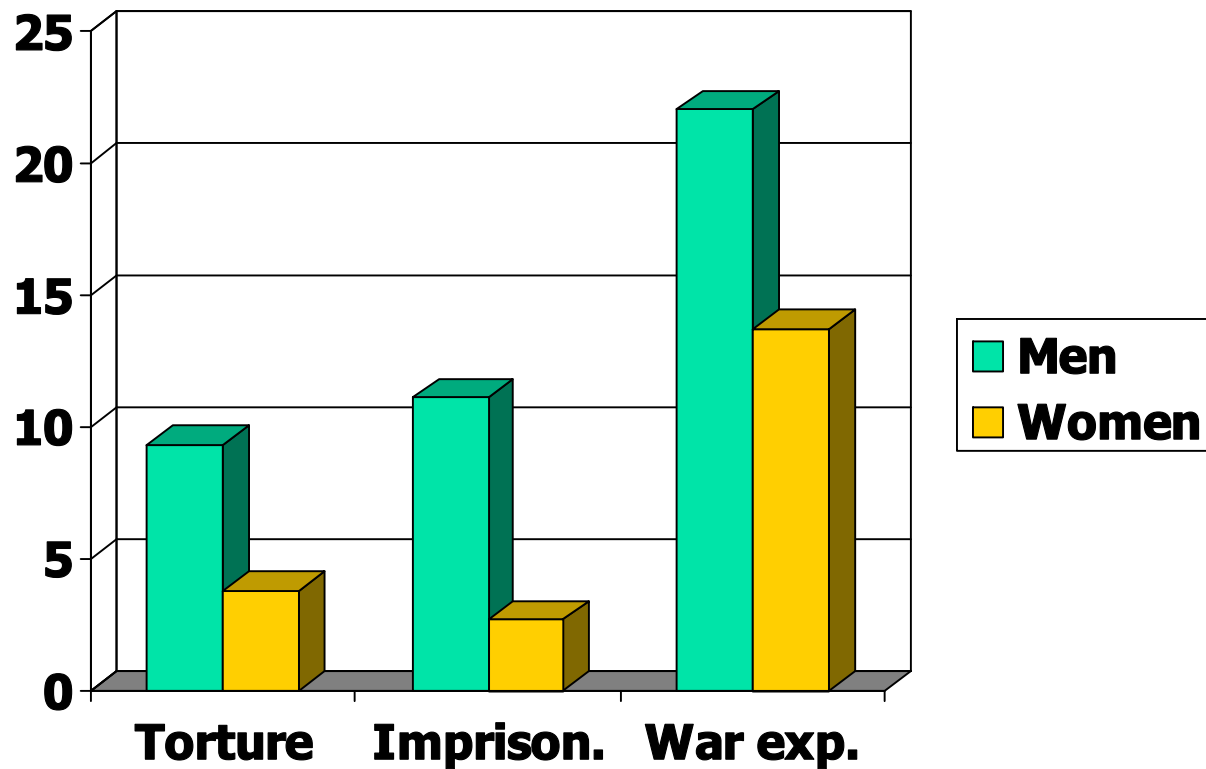
Mean distress scores according to regions



Prevalence of distress according to gender and regions



Traumatic experiences



Findings from multivariate regression analysis (n=1536)

Variables	β	Men (756)		β	Women (780)	
		95% C I	p		95% C I	p
Age	-.001	-.003 - .002	.885	.005	.003 - .008	<.001
Living without a partner.	.010	-.041 - .062	.690	.085	.033 - .137	.001
Lack of paid job	.187	-.130 - .244	<.001	.093	.045 - .143	<.001
Middle East background.	.052	-.006 - .112	.079	.154	.081 - .228	<.001
Refugee status	-.011	-.08 - .057	.740	-.042	-.124 - .039	.31
Negative life events (0-12).	.041	.026 - .057	<.001	.046	.027 - .065	<.001
Traumatic events (0-3)	.038	.002 - .074	.038	.029	-.024 - .083	.280
Visit by Norwegians	-.115	-.189 - -.041	.002	-.042	-.120 - .037	.296
Help by Norwegians	.016	-.005 - .087	.657	.017	-.060 - .094	.668
Experience of						
denial of job	.084	.013 - .155	.020	.070	-.012 - .152	.092
denial of housing	-.022	-.098 - .053	.555	.094	.004 - .185	.042

Note: Log transformed mean distress score was used as a dependent variable to run this multivariate model, and except for age, negative life events and traumatic events, all other dichotomous independent variables in the model were coded as no = 0 and yes =1.



Summary of results

- **The prevalence of psychological distress among immigrants from low- and middle-income countries was significantly higher than among the immigrants from high-income countries**
- **Both pre- and post-migration factors were associated with distress. However, the post-migration factors were the most important indicators for the difference between the two groups of immigrants**



Summary of results..

- **The prevalence of distress was almost the same among men and women**
- **Lack of salaried job and recent negative life events were independently associated with psychological distress for both genders**
- **Experience of denial of job and past traumatic experiences were other associated negative factors among men while visits made by Norwegians appeared as a protective factor against distress among men**
- **Older age, Middle East (incl. Iranian) background, living without a partner, and experiencing denial of housing were other associated negative factors among women**



Summary of results...

- **The increased distress among immigrants from low-income countries could partially be explained by a strong sense of powerlessness**
- **This association was strong even when controlling for low social support, low household income and lack of salaried employment**



**The Oslo Immigrant Health
Study: A comparative study of
five national groups**

Oslo Immigrant Health Study: Overview



- **A cross-sectional study with self-administered questionnaires, was conducted in 2002 with these main objectives:**
- **To collect health data from the 5 largest national groups in Oslo**
- **Tailor the survey to better study some of the major health problems among immigrants**
- **No major changes or alterations in design and methods were made from the OHS, so that comparisons with the ethnic Norwegian population could still be made**
- **Give the ability to identify the health needs and priorities within the immigrant community as the additional research questions were more relevant and appropriate than in the main OH study**



Participants

Individuals born in Pakistan, Sri Lanka, Turkey, Iran and Vietnam between 1942 and 1982 were invited, except for selected age groups already included in HUBRO. Also a random 30% sample of Pakistanis, the largest immigrant group, was invited.

3019 subjects of the by mail invited 7607, gave their written consent and met the criteria of inclusion, reaching a final response rate of 39, 7% of those reached by mail.

Rates according to country as follows: Turkey 32, 7 %, Sri Lanka 50,9 %, Iran 38,8%, Pakistan 31,7 % and Vietnam 39,5 % respectively.

The participation rate was positively associated with age, female gender, married, educational status and income.

Oslo Immigrant Health Study: Instruments



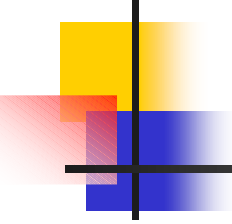
- **The main questionnaire contained among others following topics: Self-reported mental distress, physical health, environment while growing up, social network and social support, quality of life, education, work and housing, use of health services and use of medication**
- **In a supplementary questionnaire the participants were asked about life events and winter depression, how they cope in Norway and their reason for coming to Norway and whether they have experienced any discrimination**



Mean HSCCL-10 score by national origin and gender

<i>Country</i>	<i>score (SD)</i>	<i>Men N</i>	<i>Mean (SD)</i>	<i>Women N</i>	<i>Mean (SD)</i>	<i>p</i>
Turkey	1,67 (0,74)	231	1,62 (0,75)	212	1,73 (0,72)	0,098
Vietnam	1,50 (0,63)	226	1,42 (0,58)	297	1,56 (0,65)	0,012
Iran	1,62 (0,71)	316	1,55 (0,70)	233	1,71 (0,71)	0,009
Sri Lanka	1,28 (0,46)	503	1,27 (0,47)	410	1,28 (0,45)	0,627
Pakistan	1,46 (0,61)	236	1,40 (0,59)	195	1,53 (0,62)	0,048

Experience of torture



	<i>Mental distress (%)</i>	<i>Chi sq.</i>	<i>p</i>
Turkey	Yes 57.1 % No 28,3 %	5,181	0,023
Vietnam	Yes 27,3 % No 17,7 %	1,216	0,270
Iran	Yes 40,7 % No 22,5 %	9,744	0,002
Sri Lanka	Yes 20.0 % No 8,9 %	12,777	0,002
Pakistan	Yes 80,0 % No 18,2 %	11,711	0,001

Employment status

	<i>% with mental distress</i>	<i>Chi sq.</i>	<i>p</i>
Turkey			
Fully employed	20,7 %		
Part time employee	25,7 %		
Unemployed	43,5 %	24,123	0,000
Vietnam			
Fully employed	15,0 %		
Part time employee	25,4 %		
Unemployed	31,3 %	16,954	0,000
Iran			
Fully employed	20,5 %		
Part time employee	32,2 %		
Unemployed	40,4 %	22,189	0,000
Sri Lanka			
Fully employed	8,8 %		
Part time employee	13,3 %		
Unemployed	16,3 %	9,201	0,010
Pakistan			
Fully employed	14,5 %		
Part time employee	21,7 %		
Unemployed	27,8 %	9,349	0,009



Some variables without uniform association with mental distress (countries with sign. ass.)

- **Experience of war trauma (Pakistan)**
- **Experience of political persecution (Iran, Sri Lanka)**
- **Reasons for immigration, i.e. refugee or other reasons (Sri Lanka)**
- **Poor knowledge of Norwegian language (Iran, Vietnam)**
- **Not living with spouse/partner (Pakistan, Sri Lanka)**



Summary of findings in Oslo immigrant health study

- **The study revealed major differences in prevalence of mental distress among five different groups of non-Western immigrants in Oslo**
- **More participants are labelled “distressed” with the use of dichotomized cut-off on HSCL-10 than report so when directly asked**
- **The pre-immigration factor of experience of torture is shown to be the only identifiable factor for distress in all groups, except the Vietnamese, and unemployment is the post-immigration factor associated with mental distress in all five national groups**
- **Knowledge of Norwegian language is directly associated with mental distress scores for Iranians and Vietnamese only**



General Discussion

- **The odds of psychological distress among immigrants from low-income countries were markedly higher than that of immigrants from high-income countries. To our knowledge, this is the first study that has compared in a large sample distress between two different groups of immigrants**
- **The risk of psychological distress among immigrants from low-income countries seems to be mediated mostly by the post-migration experiences. This is in line with the Swedish studies.**
- **The health hazards of torture, war experience and exposure to other types of pre-migration traumatic stress is well documented. Torture appears to be the experience which has the most pronounced association with distress. Our findings do not contradict these studies, but rather support the clinical impression and that the post-migration condition is of major importance in the rehabilitation of these survivors**



Discussion ..

- **The strong association between unemployment and distress is similar to earlier reports about refugee immigrants in Oslo. There is also a higher registered unemployment rate (17%) among immigrants from low-income countries compared to immigrants from high-income countries (5%)**
- **Similarly the recent negative life events in the host country also explained some of the variance of psychological distress. The significant association between recent negative life events in the host nation and psychological distress is in accordance with the previous studies among refugees**



Discussion: Limitations

- **Cross-sectional studies with a high non-response rate**
- **The outcome measure and the other research instruments were not culturally adapted and validated for the specific national groups**



Conclusions

- **Migration is a highly complex phenomenon and the individual migrant goes through several dynamic adaptation processes, both concurrently and over time**
- **The migration is a gendered phenomenon**
- **There is a marked variation between subgroups (e.g. cultural and forced/voluntary) within the immigrant populations regarding prevalence as well as risk factors**
- **Recent studies, including the OHS, indicate that adverse living conditions in the country of resettlement, largely related to structural barriers, are central to impaired mental health among segments of the immigrant population**
- **Considering the fairly low explained variance in these studies, other factors, such as constitutionally based resilience and vulnerability factors, are likely to have a major impact on the mental health of migrants**



Future studies of the mental health of migrants in Europe

- **Studies of specific groups (e.g. Middle Eastern immigrants)**
- **Long-term longitudinal studies (e.g. to identify long-term resilience factors)**
- **Development of more culturally adapted instruments**
- **More theoretically based studies, examining the relationship between relevant mediating and outcome variables**
- **Studies comparing immigrants in the emigration and immigration countries**
- **Studies of the relationship between specific psychiatric disorders and migration (e.g. schizophrenia)**
- **Studies integrating physical and psychological aspects of health**
- **Studies of health seeking behaviour, pathways to care and service provision for patients with immigrant background**



SOME REFERENCES:

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