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Review Paper

Migrant children within Europe: a systematic review of children's perspectives on their health experiences

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ABSTRACT

Objectives: To review the extant literature to explore what is known about children's own perspectives on their health experiences, focussing on children and young people who have migrated into, and within, Europe.

Study design: A systematic review with narrative synthesis.

Methods: A review of English language articles was performed in June 2016 using the following databases: MEDLINE, CINAHL, Cochrane and Web of Science. Included articles had to report data generated directly with children, up to 18 years of age, who had migrated across national borders into, or within, Europe during their own lifetimes. Extraction from articles was undertaken by all authors, and quality assessment of included reviews was performed using the Mixed Methods Appraisal Tool.

Results: The articles in the final data set included research based on four broad areas: alcohol, smoking and substance use; diet, eating disorders and overweight; emotional, psychological and mental health issues; and children's views and experiences of health and health services. Most studies were cross-sectional analytic or incidence or prevalence studies.

Conclusion: There is a general lack of clarity in the literature regarding the reporting of children's own migration status. Children's voices are often subsumed within those of their adult parents or carers. There is a need to promote more child-focussed research which gives voice to migrant children to better understand the complex and multidimensional factors that contribute to their (ill)health.

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Introduction

International migration over recent decades has been characterised by the diversification of migrants from non-European backgrounds, concentrated in a ‘shrinking pool of prime destination countries’, particularly within Europe and the Americas¹(p.238). Migration to Europe has been steadily increasing and, indeed, the European Union (EU) has been described as a ‘global migration magnet’¹(p.294). In the last decade, in what has been labelled a ‘migration crisis’, the EU has received unparalleled numbers of migrants, refugees and asylum seekers. In 2014, 1.9 million people migrated into the EU from non-member countries with a further 1.8 million migrating between member states.² While migration is increasing across Europe, this trend has been particularly marked in Western Europe, where nations have also experienced what has been referred to as a ‘surge’ of inward migration from Eastern Europe over recent years.¹

The 10th European Forum on the rights of the child defines children in migration as those

‘in search of survival, security, improved standards of living, education, economic opportunities, protection from exploitation and abuse, family reunification or a combination of these factors. They may travel with their family or independently (unaccompanied child) or with an extended family or a non-family member (separated child)’³(p.4).

The population of child migrants is therefore highly diverse, and while the United Nations Children’s Fund (UNICEF) suggested, in 2016, that there were 5.4 million child migrants in Europe,⁴ it is difficult to establish the number of children who enter Europe for reasons other than to seek asylum. UNICEF notes that across the globe, 50 million children have migrated, over half of whom have been forcibly displaced because of conflict.⁴ Within the EU, just under one-third of first-time asylum seekers in 2015 were children, aged younger than 18 years.² Given this ‘crisis’⁴ for children, it is not surprising that child migrants’ health has been the subject of increasing concern. In 2008, the World Health Organisation drew attention to the need to promote the health of all migrants,⁵ and the particular needs of vulnerable groups, including children, within migrant populations have been further highlighted.^{4,6} In this article, focussing on children and young people who have migrated into and within Europe, we therefore review the extant literature to answer the following question: ‘What is known about children’s own perspectives on their health experiences?’

Methods

A systematic review with narrative synthesis was undertaken as defined by Grant and Booth.⁷

Data sources

A systematic literature search was conducted using the following databases: MEDLINE, CINAHL, Cochrane and Web of

Science. A defined search strategy was devised for electronic databases covering all main terms associated with definitions of child migrants (child*, young, adolescent, teenage, migra*, emigra*, immigra*, transcient, refugee, asylum seek*) and health (including ‘health care’, ‘quality of life’, ‘health promotion’, ‘mental health’, ‘sexual health’, tobacco, drug and alcohol use, ‘dental health’, diet and nutrition). A time span of January 2007 (when Bulgaria and Romania joined the EU) to 2016 (June) was selected. Electronic database searching was supplemented by reference checking. The bibliographies of literature reviews were reviewed to ensure that all relevant empirical studies had been identified and included.

Study selection

The articles included in the review had to meet three criteria. They were (1) literature reviews or empirical studies reporting data generated directly with children aged up to 18 years; (2) articles reporting data on the health experiences of first-generation migrant children, who had migrated across national borders into or within Europe¹ (defined as the EU, Scandinavian countries and Switzerland) during their own lifetimes; and (3) articles published in English. All authors were involved in the screening of studies, scanning for relevance and assessing full texts against eligibility criteria. Where there was disagreement, articles were discussed until consensus was reached.

Search results

The search identified 1304 articles. After scanning of titles and abstracts for relevance, 327 full articles were retrieved and reviewed in detail. Most excluded articles were rejected because they either conflated children’s migration status with their parents’ migration status or because it was not possible to differentiate findings relating to children who had migrated in their own lifetimes from children whose parents had migrated before their birth. After application of all inclusion and exclusion criteria, 47 articles were retained and subjected to critical appraisal.

Quality assessment

An assessment of the methodological quality of the studies that met all inclusion criteria was carried out by P.C. and verified by J.T. using the Mixed Method Appraisal Tool (MMAT).⁸ This provides method-specific assessment questions, which can then be scored, allowing concomitant appraisal of quantitative, qualitative and mixed methods empirical studies. MMAT scores range from 1* (weak) to 4*

ⁱ The authors acknowledge that there are ambiguities in the assignation of generational status. Urquia and Gagnon argue that only those who migrate should be termed ‘first generation,’ while “‘second generation’ refers to persons born inside the receiving country with at least one parent born in another country”.⁷¹ The authors have, therefore, used the term ‘first-generation’ migrant to characterise children and young people who have migrated across national borders during their own life time. The authors do, however, recognise that other terms (such as the 1.5 generation^{72,73}) are also evident in the literature.

(strong). As our aim was to understand the range of health issues for which data from migrant children were available and how children experienced these, rather than to review the effectiveness of clinical or service interventions, we set a minimum 2* quality criterion. One study was, therefore, excluded after quality appraisalⁱⁱ. The main shortcomings arose from the failure to report response rates. Other limitations were associated with underreporting of study contexts in qualitative studies. Forty-six full-text articles were, therefore, included in the thematic review and narrative synthesis (Fig. 1).

Thematic review

Data extracted from the 46 articles comprised children's country of origin, children's country of settlement, methods, sample size, age range of children included and key findings areas (Table 1). Findings sections from each article were then subjected to thematic analysis. Four overarching themes were identified: alcohol, smoking and substance use; diet, eating disorders and overweight; emotional, psychological and mental health issues; and children's views and experiences of health and health services. While these resonate with some of the search terms used in the study, it is notable that not all search terms generated relevant articles.

Results

Types of empirical studies

Most studies generated self-report, quantitative data with children and were cross-sectional analytic studies (23). Of these, 60% (14) reported survey data, often school based. Migrant children were not deliberately or preferentially recruited to these studies, and they, therefore, constituted relatively small proportions of larger data sets. The remaining 13 quantitative articles reported descriptive incidence or prevalence studies. One mixed methods study was included, which used an embedded design as was one randomised controlled trial. Of the eight qualitative studies, seven were qualitative descriptive studies and one used a phenomenological approach. Given the diversity of study types, it is not surprising that sample sizes of first-generation migrants varied considerably, from 12,432 in a Spanish study⁹ to three in a qualitative study undertaken in Sweden.¹⁰

Table 1 includes the quality scores of each of the included articles, and Table 2 illustrates the study types with the associated mean quality scores for each type.

ⁱⁱ The main quantitative element of the study reported by Fazel, Doll and Stein (2009)⁷⁵ was appraised as 4*. The only data generated with children derived from the qualitative element described as a 'simple self-report questionnaire'. This was appraised as 1* and, therefore, not included in the thematic analysis.

ⁱⁱⁱ The generic term migrant is used in preference to alternatives such as 'immigrant' in acknowledgement of the pejorative connotations, noted by Salway et al.,⁷⁴ of such terms in some cultural contexts.

Who are the migrantⁱⁱⁱ children?

Although there was notable variability in the age range of children who participated in the studies, most children were in late middle childhood or adolescence: 32 of the 47 articles (68%) reported data from children aged between 10 and 18 years, and of these, 21 reported data only from adolescents aged 13 years or older. Most articles (25) were concerned with refugee and/or asylum-seeking children. Fourteen studies considered refugee children, of which eight focussed on or included unaccompanied refugee minors. Twelve studies were concerned with asylum-seeking children, of which seven focussed on or included unaccompanied minors. One study recruited both refugees and asylum seekers (RAS). However, in the remaining 21 studies, definitions of first-generation migrant children varied considerably (Table 3).

Children's countries of origin and their destination^{iv} countries

Children's countries of origin also varied considerably. A minority of studies focussed on children from one or two specified countries of origin. However, most studies included children from many different countries of origin. In these studies, analyses either compared all migrants or grouped categories (such as Asian, African) of migrants with indigenous and/or second-generation migrant children.

Countries of settlement also varied, but articles evidence a clear Northern and Western European focus. Most articles considered migrant health issues within country-specific contexts, although three articles provided comparisons between two or more European destination countries (Table 4).

The health and well-being of child migrants

Alcohol, smoking and substance use

Three articles^{9,11,28} reported data from children relating to alcohol and/or substance use. These compared prevalence of and factors influencing self-reported alcohol and substance use among migrants and non-migrants. All three studies demonstrated decreased prevalence of some harmful health practices among young migrants, when compared with the majority population. The drinking of alcohol was less prevalent among first-generation migrants in Norway,¹¹ Sweden²⁸ and Spain.⁹ Prevalence of cannabis use was also lower among migrants in Norway and Spain, and there was lower use of stimulants/sedative hypnotics by Spanish migrants than by their indigenous peers. However, illicit drug use (hashish, marijuana, amphetamine and heroin) by first-generation migrants (categorised as Nordic, non-Nordic European and non-European) in Sweden was significantly higher than among ethnic Swedes; the risk was especially high for girls born in other Nordic countries and for boys born in non-

^{iv} For convenience, the authors use the terms 'host country', 'country of settlement' and 'destination country' interchangeably to refer to the countries in which children were resident at the time that they participated in the research studies. However, the authors recognise that the country in which research was sited may not be a child's final destination country.

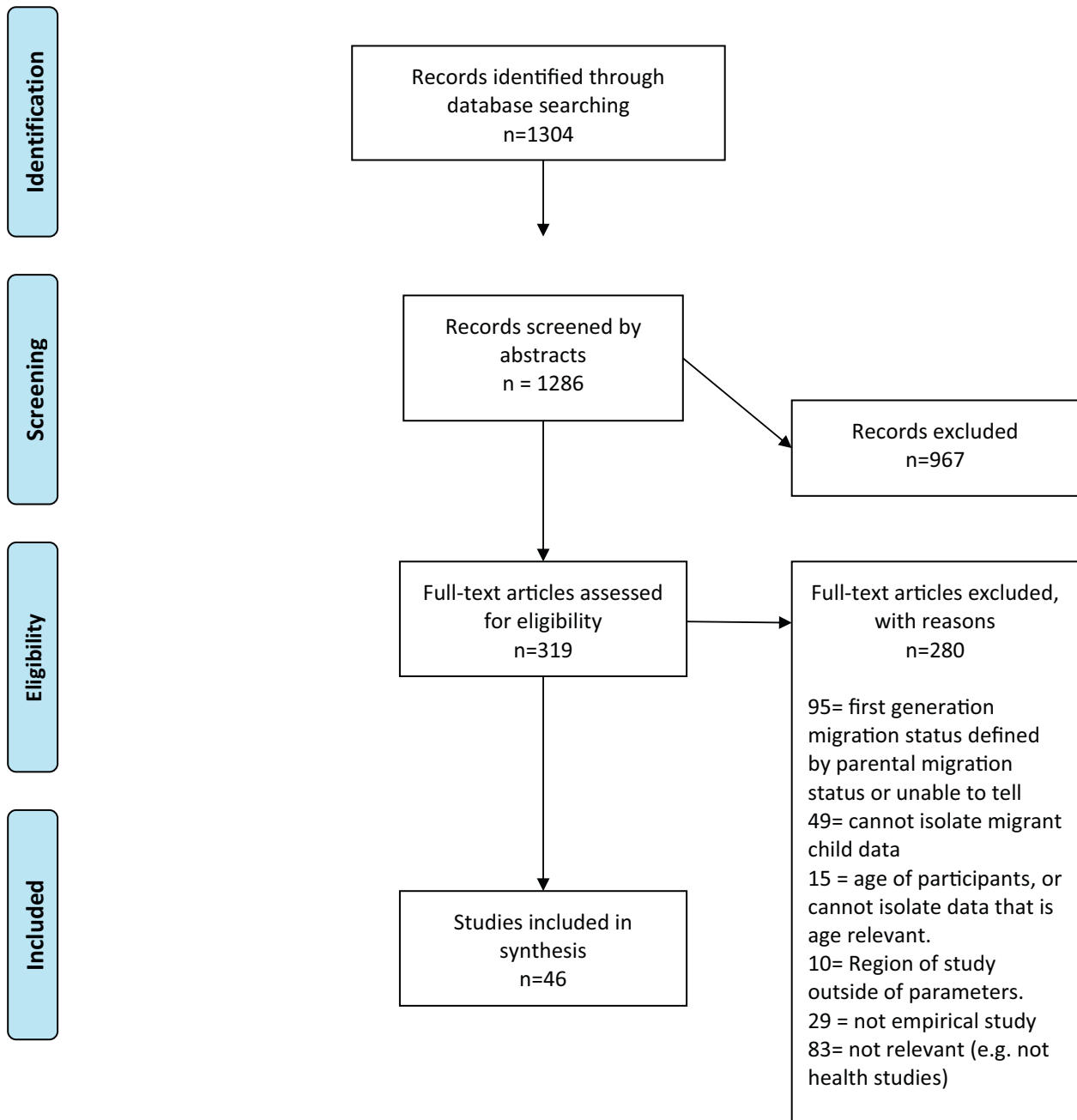


Fig. 1 – PRISMA flow diagram.

European countries.²⁸ Two studies also considered tobacco use. While no difference in smoking between migrants and indigenous young people was found in Norway,¹¹ migrant children who also had foreign-born parents were significantly less likely to smoke than their Spanish-born peers.⁹

Differences between migrant groups were also noted. Asian migrants had particularly low rates of cannabis use in Norway¹¹ and were least likely to drink alcohol in both Norway and Spain. In Sweden, drinking prevalence was lowest among non-European migrants (mainly from Iran, Iraq, Lebanon and Thailand): this difference was accounted for by the low alcohol use of girls from these countries of origin.²⁸ Explanations for the differences in health practices between migrant young people and their indigenous peers in host

countries acknowledge that alcohol- and drug-related norms and values from migrants' countries of origin may be implicated. Lower risk of engaging in binge drinking, tobacco and cannabis use was seen for migrants born in countries where Islam is the most common religion, low/medium-income countries and from countries with low/medium substance use.²⁸ All authors pay particular attention to familial, social and community factors in the host nations. The transmission of religious norms and attitudes to alcohol within Muslim families and communities may help to explain the lower rates of drinking reported by non-European migrants in Svensson and Hagquist's²⁸ study. Abebe et al.¹¹ highlight 'strong family attachment and social support' (p.999) as a protective factor for young Asian migrants in Norway who are able to access an

Table 1 – Description of the included studies.

Author and date	Category of first-generation migrants	Children's home country	Children's host country	Methods	First-generation migrant sample size	Participants' age	Main findings area	MMAT score (possible range 1*–4)*
Abebe et al. 2015 ¹¹	First-generation migrants	Asia (predominantly Pakistan, Vietnam, Sri Lanka and India), Middle East (predominantly Iraq, Iran and Turkey), Europe and the USA and Africa (predominantly Somalia and Morocco)	Norway	Quantitative - questionnaire	1079	14–17 years	Alcohol, tobacco and cannabis use	4
Bean et al. 2007 ¹²	Unaccompanied refugee minors and accompanied immigrants/refugees	Dutch sample: 48 countries, (predominantly Angola, Sierra Leone and China) Belgium sample: 111 countries (predominantly Morocco, Ghana and Turkey; no information was given about home country of Dutch reference sample of migrants)	The Netherlands and Belgium	Quantitative - questionnaire	2297	Younger than 18 years	Emotional, psychological and mental health	3
Briones 2012 ¹³	First-generation migrants	Morocco and Ecuador	Spain	Quantitative - questionnaire	437	11–18 years	Emotional, psychological and mental health	2
Bronstein and Montgomery 2013 ³²	Unaccompanied adolescent asylum seekers	Afghanistan	UK	Quantitative - questionnaires	222	13.14–17.97 years; (mean 16.34 years)	Emotional, psychological and mental health	4
Bronstein et al. 2012 ³⁴	Unaccompanied adolescent asylum seekers	Afghanistan	UK	Quantitative - questionnaire	222	13–18 years old	Emotional, psychological and mental health	3
Bronstein et al. 2013 ³⁵	Unaccompanied adolescent asylum seekers	Afghanistan	UK	Quantitative - questionnaire.	222	Mean age 16.34 years	Emotional, psychological and mental health	4
Chase 2010 ⁴⁸	Unaccompanied asylum seekers	18 different countries, males most commonly from Afghanistan and females most commonly from Eritrea	UK	Qualitative - interviews	54	9–17 years at the time of arrival in the UK. Age at time of interview was 11–23 years. (responses from older than 18 years were identifiable in the study)	Emotional, psychological and mental health	3

(continued on next page)

Table 1 – (continued)

Author and date	Category of first-generation migrants	Children's home country	Children's host country	Methods	First-generation migrant sample size	Participants' age	Main findings area	MMAT score (possible range 1*–4)*
Daud and Rydelius 2009 ¹⁴	Refugees	Iraq, Egypt, Syria and Morocco	Sweden	Quantitative - questionnaire	80	7–16 years (mean 12.1 years)	Emotional, psychological and mental health	3
Derluyn et al. 2008 ³³	Accompanied and unaccompanied adolescents, refugees and other migrants	93 different countries of origin mostly Africa, Asia, Eastern Europe, South and Central America.	Belgium	Quantitative - questionnaire	1219	11–18 years	Emotional, psychological and mental health	4
Derluyn et al. 2009 ¹⁵	Accompanied and unaccompanied adolescent refugees	Unaccompanied: 39 different countries (mainly Angola, Albania and Afghanistan). Accompanied: number of countries not noted, mainly from Morocco, Angola and Turkey.	Belgium	Quantitative - questionnaire	1234	11–18 years	Emotional, psychological and mental health	4
Esteban-Gonzalo et al. 2014 ¹⁶	First-generation migrants	Mostly Latin America and Eastern Europe	Spain	Quantitative - questionnaire	335	13–17 years	Diet, eating disorders and overweight	4
Esteban-Gonzalo et al. 2013 ¹⁷	First-generation migrants	Mostly Latin America and Eastern Europe	Spain	Quantitative - questionnaire	335	13–17 years	Diet, eating disorders and overweight	4
Esteban-Gonzalo et al. 2015 ¹⁸	First-generation migrants	Mostly Latin America and Eastern Europe	Spain	Quantitative - questionnaire	335	13–17 years	Diet, eating disorders and overweight	4
Fandrem et al. 2009 ¹⁹	First-generation migrants	Home countries for all immigrants mainly Pakistan, Sweden, Denmark, Vietnam, Iraq, Somalia, Bosnia-Herzegovina. No specific data were given for child migrants	Norway	Quantitative - questionnaire.	216	13–15 years	Emotional, psychological and mental health	4
Goldin et al. 2008 ³⁶	Refugees	Bosnia-Serbia-Croatia	Sweden	Quantitative – questionnaire	48	7–20 years (data for migrants aged younger than 18 years were identifiable)	Emotional, psychological and mental health	4
Groark et al. 2010 ⁵⁴	Unaccompanied asylum-seeking adolescents	Africa and Asia	UK	Primarily qualitative - interpretative phenomenological analysis (IPA)	6	16–18 years	Emotional, psychological and mental health	2

Hernando et al. 2013 ²⁰	First-generation migrants	18 different countries: mainly Morocco, Ecuador, Moldova, Romania, Ukraine and Brazil	Spain and Portugal	Quantitative - questionnaire	108	10–17 years (mean 13.77 years)	Emotional, psychological and mental health	3
Hodes et al. 2008 ²¹	Unaccompanied and accompanied refugee minors	24 different countries. Unaccompanied: predominantly from the Balkans and Africa. Accompanied: mainly from the Middle East	England	Quantitative - questionnaire.	78	13–18 years	Emotional, psychological and mental health	3
Hollins et al. 2007 ⁴⁶	Unaccompanied refugee minors	Albania and Kosovo	England	Mixed methods: questionnaire +24-h diary + interview	99	16–18 years	Emotional, psychological and mental health	3
Hopkins and Hill, 2010 ⁴⁹	Unaccompanied asylum seekers	Mostly from Africa, the remainder from Asia and Eastern Europe	Scotland	Qualitative - Interviews + group work	31	15–17 years	Diet, eating disorders and overweight	2
Jensen et al. 2015 ³⁷	Unaccompanied asylum seekers	14 different countries, predominantly Afghanistan, Eritrea, Somalia and Sri Lanka	Norway	Quantitative – questionnaire	93	10–16 years (mean 13.8 years)	Emotional, psychological and mental health	3
Kalverboer et al. 2009 ³⁸	Asylum seekers	Not stated	The Netherlands	Quantitative – questionnaire	52	Not clearly stated. Appears to be up to the age of 18 years	Emotional, psychological and mental health	2
Laurens et al. 2008 ²²	First-generation migrants	Africa and Asia	England	Quantitative - questionnaire	85	9–12 years	Emotional, psychological and mental health	2
Lindstrom et al. 2014 ²³	First-generation migrants	Outside Sweden in Europe or outside Europe	Sweden	Quantitative - questionnaire	584	15–16 years	Views and experiences of health and services	4
Lorek et al. 2009 ³⁹	Detained asylum seekers	Difficult to identify for the older children who provided self-assessment data. Appears to be predominantly Africa (Democratic Republic of Congo, Ghana, Nigeria and Uganda) + Pakistan + Jamaica	England	Quantitative study - clinical interviews and self-report questionnaire	24	Up to 17 years	Emotional, psychological and mental health. Views and experiences of health and services	2
Majumder et al. 2015 ⁵⁰	Unaccompanied refugee and asylum-seeking minors	Afghanistan, Somalia, Iran and Eritrea	England	Qualitative - interviews	15	15–18 years	Emotional, psychological and mental health. Views and experiences of health and services	4

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Table 1 – (continued)

Author and date	Category of first-generation migrants	Children's home country	Children's host country	Methods	First-generation migrant sample size	Participants' age	Main findings area	MMAT score (possible range 1*–4)*
Neto, 2010 ²⁴	Return migrants	Portugal (and had previously migrated to France) or France	Portugal	Quantitative - questionnaire	360	14–19 years (mean 16.8 years)	Emotional, psychological and mental health	2
Nielsen et al. 2008 ⁴⁰	Asylum seekers	Predominantly from former Yugoslavia and Iraq	Denmark	Quantitative study - questionnaires	260	4–16 years	Emotional, psychological and mental health	4
Pinto Weise and Burhost 2007 ⁴¹	Accompanied and unaccompanied asylum seekers	Mainly Africa and Asia with a small proportion from Eastern Europe	The Netherlands	Quantitative study – questionnaire completed from client records (recorded from interviews with children)	129	Up to 18 years	Emotional, psychological and mental health	4
Ruf et al. 2010 ⁴⁷	Refugees	Turkey, Balkan, Syria, Chechnya, Russia and Georgia	Germany	Quantitative study - questionnaires	26	7–16 years	Emotional, psychological and mental health	4
Sanchez-Gao et al. 2012 ⁴²	Unaccompanied asylum seekers	Mainly Africa (predominantly the Horn of Africa and Sub-Saharan Africa) and Europe (mainly Kosovo)	England	Quantitative - questionnaire	71	Up to 18 years	Emotional, psychological and mental health	4
Sarasa-Renedo et al. 2015 ⁹	First-generation migrants	Predominantly from Latin America (outside South-Cone) and non-Eastern Europe	Spain	Quantitative - questionnaire	12,432	14–18 years	Alcohol and substance misuse	4
Sime 2014 ⁵¹	Migrant children	Mainly Poland + other Eastern Europe	Scotland	Qualitative - interviews and focus groups	57	7–16 years	Views and experiences of health and services	4
Sinha and Uppal 2009 ⁵²	Asylum seekers	Predominantly Africa (mainly Democratic Republic of Congo)	England	Qualitative study – interviews and focus groups.	17	15–18 years	Emotional, psychological and mental health	4
Sleijpen et al. 2016 ⁴³	Refugees and asylum seekers	Predominantly Iraq, Armenia, Syria, Afghanistan and Somalia	The Netherlands	Quantitative study - questionnaire	111	12–17 years	Emotional, psychological and mental health	3

Stefanek et al. 2012 ²⁵	First-generation migrants	Not defined (however, authors note that apart from German speakers, the largest language groups were Serbian, Turkish, Croatian Polish and Albanian speakers)	Austria	Quantitative - questionnaire	120	14–19 years	Emotional, psychological and mental health	3
Steinhausen et al. 2009 ²⁶	First-generation migrants	Northwestern Europe (Austria, Germany, UK), South Europe (Italy and Spain), Southeastern Europe (former Yugoslavia, Turkey) and other continents (Africa, Americas, Asia, Australia).	Switzerland	Quantitative - questionnaire	188	10–17 years (mean 13.8 years)	Emotional, psychological and mental health	4
Stevens et al. 2015 ²⁷	First-generation migrants	Multiple countries noted. Varied for each host country	Denmark, Germany, Greece, Iceland, Ireland, Italy, the Netherlands, Spain, the United States and Wales	Quantitative - questionnaire	4035	11, 13 and 15 years	Emotional, psychological and mental health	4
Svensson and Hagquist, 2010 ²⁸	First-generation migrants	Nordic, Europe (non-Nordic) and non-Europe	Sweden	Quantitative - questionnaire	1046 (stated only as 8% of 13,070)	13–16 years	Alcohol and drug use	4
Svensson et al. 2009 ¹⁰	Refugees	Central Asia	Sweden	Qualitative - children's own photos guiding interviews	3	17, 17 and 12 years	Emotional, psychological and mental health	4
Van Geel and Vedder 2010 ²⁹	First-generation migrants	Predominantly Turkey, Surinam, Morocco and the Netherlands Antilles	The Netherlands	Quantitative - questionnaires	152	12–19 years	Emotional, psychological and mental health	3
Vathi and Duci 2016 ⁵³	First-generation return migrants	Greece	Albania (children's place of birth)	Qualitative - in-depth interviews and participant observation	81	11–19 years	Emotional, psychological and mental health	3
Vervliet et al. 2014 ³⁰	Unaccompanied refugee minors	Predominantly Afghanistan, Guinea, Congo, Somalia and Morocco	Belgium	Quantitative - questionnaires	307	15–18 years	Emotional, psychological and mental health	4
Vieno et al. 2009 ³¹	First-generation migrants	Not stated	Italy	Quantitative - questionnaire	481	11, 13 and 15 years	Emotional, psychological and mental health	4
Volkl-Kernstock et al. 2014 ⁴⁴	Unaccompanied refugees	Africa, predominantly Gambia, Somalis and Nigeria	Austria	Quantitative - questionnaire	41	15–18 years (mean 16.95 years)	Emotional, psychological and mental health	2
Auke Wieggersma et al. 2011 ⁴⁵	Asylum seekers	Near east (mainly Afghanistan, Iran and Iraq), Eastern Europe (mainly Azerbaijan, Armenia and former Yugoslavia), Africa (mainly Angola or Sudan)	The Netherlands	Quantitative - questionnaire	267	4–16 years	Emotional, psychological and mental health	4
MMAT, Mixed Method Appraisal Tool.								

Table 2 – Study types and mean MMAT scores.

Study type	Mean MMAT score
Cross-sectional analytic ^{9,11–33}	3.5
Descriptive incidence/prevalence ^{32,34–45}	3.3
Mixed Methods (embedded design) ⁴⁶	3
RCT ⁴⁷	4
Qualitative descriptive ^{10,48–53}	3.4
Qualitative phenomenology ⁵⁴	2
MMAT, Mixed Method Appraisal Tool.	

Table 3 – Definitions of child migrants.

Self-identified as from another country ¹⁹
'Natives' or nationals of other countries ^{20,51}
Nationals of another country—excluding those with dual nationality ²⁶
Born outside of the host country ^{11,13,16,17,18,23,27,31}
Born outside of the host country with at least one parent born outside the host country ^{9,22}
Born outside of the host country and both parents born outside the host country ^{25,28}
Born in a non-Western country and both parents born in non-Western countries. ²⁹
Newly arrived non-native language speakers ^{15,33}
Reverse migrants: formerly resident in country A (either born in country A or born in country B) and migrated to country B ^{24,53}

Table 4 – Destination countries.

Albania ⁵³
Austria ^{25,44}
Belgium ^{15,30,33}
Denmark ⁴⁰
Germany ⁴⁷
Italy ³¹
Norway ^{11,19,37}
Portugal ²⁴
Spain ^{9,13,16–18}
Sweden ^{10,14,23,28,36}
Switzerland ²⁶
The Netherlands ^{29,38,41,43,45}
UK ^{21,22,32,34,35,39,42,46,48–52,54}
Comparisons between two or more countries:
• The Netherlands and Belgium ¹²
• Spain and Portugal ²⁰
• Denmark, Germany, Greece, Iceland, Ireland, Italy, The Netherlands, Spain, the US, Wales ²⁷

ethnic community that is already well established within the host country. Whether through choice, economic hardship or segregation, Sarasa-Renedo et al.⁹ (p.124) also point out that migrant young people's 'less frequent socialisation in leisure environments and less association with substance-using peers' (compared with young people born in the host country) may also be an important protective factor.

Diet, eating disorders and overweight

Four articles reported data relevant to this theme, of which three present findings from a survey of 13- to 17-year olds in Madrid, Spain.^{16–18} The diets of these young migrants adhered

poorly to national recommendations for most food groups but conformed more closely to guidelines for vegetable consumption than did the diets of Spanish adolescents,¹⁷ although this difference disappeared for migrants resident for more than 6 years. Migrant young people were also more likely to consume sweets and soft drinks than ethnic Spanish adolescents,¹⁷ and they had a higher prevalence of overweight (20%, based on body mass index calculated from self-reported height and weight) than the general adolescent population (17%), although this difference was not statistically significant. Prevalence of overweight and prevalence of eating disorders among female adolescent migrants were higher for those who had lived in Spain for 6 or fewer years than it was for migrants who had resided for longer than 6 years.^{16,18} These findings contrast with those from other studies (see Abebe et al.¹¹; Svensson and Hagquist²⁸), which have associated longer residence with negative health impacts as migrants adopt the 'unhealthier' practices of host nations. A number of possible contributing factors are suggested.^{16–18} Eating disorders among new female migrants in Spain may be associated with stress during acculturation compounded by pressure to adapt to new cultural body shape norms. Poor adherence to national dietary recommendations may reflect a transition, within lower income migrant families, to 'more processed, energy-dense foods (which) are replacing less calorific foods because they are cheaper and quicker to prepare'¹⁷ (p.1935). This parallels findings of Hopkins and Hill⁴⁹ (p.403), illustrated through the experience of one unaccompanied asylum-seeking minor in Scotland who reported 'surviving' by 'eating KFC every day'. However, Esteban-Gonzalo et al.¹⁸ speculate that changes in lifestyle over time that may be associated with greater integration into host societies could account for the reduction in the consumption of high-sugar goods and the increase in vegetable consumption and, potentially, for the reduced risk of overweight among migrants with longer residence in the host country, which they note in their study.

Emotional, psychological and mental health issues

Thirty-eight articles reported findings of relevance to this theme. There was substantial heterogeneity in the tools used to measure mental health and emotional and psychological issues. In addition to dedicated survey questionnaires, 23 different measurement tools were used, making comparisons between studies problematic and prevalence rates difficult to assess with confidence.

Twenty-five articles focussed on RAS children's mental health.^{10,12,14,15,21,30,32,34–47,49,50,52,54} This population of migrants is noted to be at elevated risk of mental health problems. The experience of stressful events and their impact on RAS children's mental health—predominantly post-traumatic stress disorder (PTSD)—have been explored extensively.^{12,14,15,21,30,32,34,35,37,43,44} Reports of prevalence of PTSD within RAS populations vary widely, with between 20% and 84% of children demonstrating clinically significant symptoms, and these symptoms appear to be positively associated with the number of stressful events that individuals have experienced. Unaccompanied children are also at greater risk of PTSD than accompanied children.^{21,41} The effect of age and gender, as potentially moderating factors, is unclear. Most

articles do not report on age differences; however, Hodes et al.²¹ note that older unaccompanied children in their sample showed more PTSD symptoms than younger unaccompanied children. In contrast, Jensen et al.³⁷ found no age-associated differences in PTSD symptoms. Boys tend to dominate in samples of RAS children, making the influence of gender on PTSD risk difficult to determine with confidence. Findings are contradictory, with reports of no gender difference^{14,37} and of higher prevalence among girls.^{15,21,44} Stress, anxiety and depression are also of notable concern among RAS children and have been reported to be more prevalent among girls than boys.¹⁵ High levels of anxiety and depression are common among newly arrived RAS children.^{10,30,36,37,39,45} Psychosocial difficulties may manifest differently for girls and boys and at different ages: girls are described as having more emotional problems and loneliness,^{15,40} while boys show more behavioural problems;^{14,40} older boys, however, are described as more lonely than younger boys.⁴⁶ In addition to premigration factors and those associated with the migration journey, additional stressors may impact on RAS children, over time, within host countries.^{10,21,30,38,46,48,50,52} Their lack of, or limited, citizenship status^{48,50,52} is associated with social, material and legal insecurity³⁰ and frequent dislocations including changes of accommodation, schools and support networks.^{21,30,38,46,52} These cumulative stressors, alongside discrimination against RAS populations, may explain the worsening of mental health issues for some RAS children over time.^{30,38,46}

Psychological well-being is also of concern in the broader population of migrant children.^{19,25–27} In general, migrant children have poorer mental health than their indigenous peers. Stress, anxiety and depression in non-RAS children are strongly influenced by psychological adaptation within the host country.^{13,27} Two key factors have been argued to mitigate against migrant children's psychological adaptation:^{13,25,26,31,53} the experience of cultural dissonance and belonging to a devalued migrant group within the host country. Whether or not age and gender mediate this process within the broader migrant population is, however, contested. While gender differences were not found in some studies,^{20,22} others note higher rates of mental health problems among girls than boys,^{19,24,25} although as Steinhausen²⁶ points out, as with RAS children, psychosocial difficulties tend to manifest differently in the broader migrant population, with girls experiencing more internalising problems and boys experiencing more externalising problems. Similarly, no age differences in mental health problems or psychological adaptation are reported for some studies,^{20,26,33} while Neto²⁴ notes that older return migrants experienced significantly more mental health problems than did younger return migrants. Briones et al.¹³ also report that older children are more likely to have poor adaptation, as are more recent arrivals. However, where there are high levels of perceived discrimination, adaptation may not improve over time when young people feel excluded from peer activities and from social life.¹³

Importantly, not all migrant children experience poor mental health outcomes, and the resilience and coping strategies of some RAS and other migrant children are acknowledged by a number of authors.^{10,24,30,34,36,37,42,54} However, research, such as that undertaken by Hodes et al.,²¹ which

focuses directly on resilience, is rare. Factors that promote mental health among migrant children may be the obverse of those that challenge mental well-being. In particular, the ability to participate in social activities⁵⁴ and in schooling⁴⁶ allows children to build up their social capital⁴⁹ and develop a sense of belonging within the host country.^{29,32,34,35,54} Having a secure home is highlighted by a number of authors^{21,34,40,46,54} as an important protective factor, providing a base from which young people can make a successful transition to living in the host country.⁵⁴

Children's views and experiences of health and health services Eight articles reported material of relevance to this theme, six of which present findings from the UK. Both Chase⁴⁸ and Svensson et al.¹⁰ reflect on the reluctance of migrant children to discuss their health, or the health of their siblings, suggesting that this may be largely due to the stigma associated with their status as migrants. However, where self-reports are available, these note high levels of ill health and unmet healthcare needs.^{39,42,46,50,51} Lorek et al.,³⁹ for example, describe high levels of health complaints among migrants in the UK, associated with both chronic and recent-onset conditions. In Sweden,²³ self-reported health is noted to be considerably poorer for boys born outside of Europe than boys born in Sweden. Experiences of health services are often unsatisfactory for RAS children: difficulties and delays in registering with General medical Practitioners (GPs),⁴⁶ difficulties securing medical appointments and missed follow-up appointments³⁹ are reported. Majumder et al.⁵⁰ note the potential for dissonance between migrants' understandings of health issues and those that dominate in their country of residence. They speculate that such dissonance might contribute to the general distrust of the UK health services among RAS children and their poor understanding of available services and of their right to access these. This confusion is also evident among non-RAS migrants,⁵¹ for whom treatment differences between host and home countries, compounded by language barriers, may be contributory factors in the reporting of distrust in health services.

Discussion

This review has considered published research reporting findings derived from data generated directly with child migrants about their health. The research focussed on four broad areas, namely alcohol, smoking and substance use; diet, eating disorders and overweight; emotional, psychological and mental health issues; and children's views and experiences of health and health services.

It is important to recognise and acknowledge the limitations of this review. First, definitions of migrant status vary substantially, and identifying appropriate data in articles was problematic. Second, the quality of the available evidence varied, and we used a somewhat arbitrary cut-off point of 2*, using the MMAT appraisal tool.⁸ The authors consider that this enabled inclusion of a breadth of findings, derived from data generated directly with children, while maintaining scrutiny over research quality. Third, the articles included in the review illustrate a clear geographical bias. Of the 43

articles reporting data from single countries, 35 were from Northern (23) or Western Europe (12)⁵⁵. This undoubtedly reflects a significant English language bias and an over-representation of research from countries with a tradition of English language publishing (in particular, the UK, Nordic countries and the Netherlands, which together contributed 28 of the 43 [65%] single-country articles in the review). Among the top five receiving countries, Germany (with the highest number of migrants in 2015²) was the location for only one article, and although France is also within the top five receiving countries,² no studies located in France were identified. Importantly, because of the time required for research to be undertaken and published, this review also does not reflect recent significant migratory trends from conflict countries in Western Asia. Finally, it is difficult to assess the extent to which any selection bias in the studies included in this review might have influenced the findings reported in this article. Diverse recruitment methods were used across the different studies. It is possible that studies that recruited through schools and other organisational contexts (such as RAS support groups) may not have accessed the most hard-to-reach children, who might be expected to have poorer health experiences. While this may have led to underreporting of health issues, by contrast, it is also possible that children who had experienced health issues associated with migration were more invested in commenting on these, raising the contrary possibility of overreporting.

A notable finding from this review is the relative paucity of research reporting children's own perspectives and experiences. The principle reasons for article exclusions were all associated with a lack of clarity about children's own migration status. The largest number of exclusions was related to articles that inferred children's migration status from parental migration status or which did not specify a migration status for the children. Furthermore, a number of articles reported collated data from migrant and non-migrant children. Vathi and Duci⁵³(p.55) point out that 'the inclusion of children in migration research contests a tradition in which children have been considered as just an appendage to (the migration of) adults.' This tradition renders children largely invisible in a significant proportion of migration research. Spallek et al.⁵⁶ point to the importance of factors that can influence the health of migrants in the country of origin, during migration and in the host country. Where children's own migration trajectories are unclear or parents' experiences stand as proxies for children's, the significance of their own premigration factors and those encountered during the migration journey, as well as in the host country, is also obscured. Such a focus has particular implications for unaccompanied child migrants. However, parents, indeed adults in general, do not necessarily make good proxies for children, as has been evidenced in other areas of health research.^{57,58} Scott,⁵⁹ for example, has pointed out that proxy information is clearly inadequate when children's own viewpoints are being sought, and adult and child perspectives may vary to an important degree. Although this article considered data generated with children and did not seek to compare children's and adults' perspectives on health, there are, nevertheless, indications that adult and child migrants' views may similarly diverge. Neilson et al.,⁴⁰ for example, reported that

adults underestimated the effect that migrant children's emotional and psychological difficulties had on their daily lives, with children identifying these as much more burdensome than did teachers.

Where research has accessed migrant children's own perspectives on, and experiences of health, the dominant designs used have been cross-sectional surveys and incidence and prevalence studies. These can and do enable many children to comment on their own lives and experiences, but responses are often limited through the use of closed- or fixed-choice response categories. It is notable that only one mixed methods and eight qualitative studies were included in the review. Given migrant children's reluctance to discuss their health, which was noted by both Chase⁴⁸ and Svensson et al.,¹⁰ there would appear to be an ongoing need to augment quantitative research with detailed, sensitive and child-focussed qualitative research, which enables children to engage fully in the research process and to voice the experiences and concerns that are important to them.

Moreover, it is clear that research that has, to date, sought to access and illustrate migrant children's perspectives has focussed on a restricted number of health issues and in some cases, has been highly localised. Research reporting children's views and experiences of health and health services, for example, derives predominantly from the UK. While this evidence suggests a need for greater emphasis, in both policy and practice, on the monitoring of migrant children's health, further research is required to understand whether difficulties and delays in accessing services are also evident in other healthcare contexts.

The overwhelming majority of research that has generated health-related data with, rather than on, migrant children has been concerned with mental health and psychosocial adaptation of migrants, with a strong focus on RAS children. Much smaller bodies of literature were available to illustrate health-related factors associated with lifestyle issues including the use of alcohol, tobacco and other substances, diet nutrition and overweight (predominantly located in Spain) and understandings and use of health services. The absence of significant bodies of work examining other health issues from the perspectives of children is noteworthy. For example, during the early phase of the literature review, we had noted work examining the oral health of migrant children and an association between children's immigration status and dental ill health^{60,61} but could identify no reporting of children's own perspectives. Similarly, despite the acknowledged high risk faced by young migrants of gender-based and sexual violence,⁴ we were unable to identify relevant research focussing on sexual health issues. Furthermore, although Child et al.³ argue that the challenges faced by children with disabilities 'increase in scale and may become Sisyphean if the necessary supports and responses are not in place' (p.8); research exploring their perspectives seems not to be available.

Where self-reports are available, however, these suggest high levels of ill health and unmet healthcare needs⁴² among some groups of migrants. Although estimates of the risk of PTSD in RAS children vary between studies, there is consensus that PTSD symptoms increase with the number of traumatic events experienced before and during migration.

Levels of depression and anxiety are also generally higher among young migrants than indigenous peers. The significance of social and community factors in the host country was highlighted in all mental health studies, which draw attention to the challenges posed for those child migrants who experience discrimination and social exclusion, who have limited if any control over their day-to-day lives and who struggle to maintain a coherent sense of identity and purpose.^{21,29,32,34,35,40,46,49,54} It is, of course, noteworthy that for some cultural groups, host countries have become considerably less welcoming to migrants over recent years,^{13,62,63} suggesting that perceived discrimination and psychological adaptation by child migrants may become even more challenging. Discussing young people's mental health as a global public health issue, Patel et al.⁶⁴ argue

'The key to promoting youth mental health is through strengthening of the fundamental nurturing qualities of the family system and community networks while explicitly acknowledging the rights of young people. Such action would mean recognition of families and communities as major players in determining the mental health of young people. Young people themselves must be at the centre of all policy-making, focusing on their concerns' (p.1310).

This contention would seem to have particular resonance for populations of migrant children within host countries, both as a supportive strategy for promoting mental health and for promoting migrant engagement with healthy lifestyles. Cultural and religious norms and attitudes have been argued to underwrite differences between the health behaviours of some groups of migrant children for whom protective cultural practices may be maintained throughout the migration process. A key example is the lower rates of alcohol use for young people from Muslim families and for those from countries of origin with relatively low rates of drinking.^{11,28} These patterns have been reported elsewhere.^{65–67} Social and community integration, and religious and community norms, may, therefore, act as protective factors for young migrants, mediating stressors during the acculturation process as children adapt within their host countries.

However, as some authors are at pains to point out, not all child migrants experience mental health problems and not all migrants experience the detrimental health outcomes associated with unhealthy lifestyle practices. Yet, despite research such as that undertaken by Hodes et al.²¹ and Groark et al.,⁵⁴ which focusses directly on resilience, there are limited insights into the factors that are important to migrant children in helping them overcome adversity. Hodes et al.²¹ described factors that might ameliorate the effects of trauma on unaccompanied asylum-seeking children and thereby drew attention to individual resilience. However, as Almedom and Glandon⁶⁸ have pointed out, resilience is not just the absence of PTSD and, furthermore, although resilience is often considered in terms of the 'innate qualities and differences in an individual that enable them to overcome adversity'⁶⁹(p.4), in reality, resilience is multidimensional, manifesting at the intersection of the 'personal, biological and environmental or systemic'⁷⁰(p.258).

In conclusion, this review has clearly demonstrated the need to make more visible what is currently largely invisible; migrant children's perspectives on their experiences of health. This will require further child-focussed research which gives voice to migrant children in order that more nuanced insights are available into the complex, multidimensional factors that contribute to health and ill health and which intersect to promote resilience within this diverse population.

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