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Potential barriers to the use of health services among ethnic minorities: a review

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Background. Ethnic minority patients seem to be confronted with barriers when using health services. Yet, care providers are often oblivious to these barriers, although they may share to some extent the burden of responsibility for them. In order to enlighten care providers, as to the potential pitfalls that may exist, there is a need to explore the different factors in the creation of the barriers.

Objective. Therefore, the objective of this paper is to present an overview of the potential barriers and the factors, which may restrict ethnic minority patients from using health services, according to the literature available.

Methods. Articles published from 1990 to 2003 were identified by searching electronic databases and selected through titles and abstracts. The articles were included if deemed to be relevant to study health services use by ethnic minorities, i.e. the different factors in the creation of a barrier.

Results. There were 54 articles reviewed. They reported on studies carried out in different countries and among different ethnic minorities. Potential barriers occurred at three different levels: patient level, provider level and system level. The barriers at patient level were related to the patient characteristics: demographic variables, social structure variables, health beliefs and attitudes, personal enabling resources, community enabling resources, perceived illness and personal health practices. The barriers at provider level were related to the provider characteristics: skills and attitudes. The barriers at system level were related to the system characteristics: the organisation of the health care system.

Conclusion. This review has the goal of raising awareness about the myriad of potential barriers, so that the problem of barriers to health care for different ethnic minorities becomes transparent. In conclusion, there are many different potential barriers of which some are tied to ethnic minorities. The barriers are all tied to the particular situation of the individual patient and subject to constant adjustment. In other words, generalizations should not be made.

Keywords. Potential barriers, health services use, ethnic minorities.

Introduction

Populations in western industrialized countries become increasingly multi-ethnic as a result of the internationalization of the market place and the successive opening of borders.[1] The rise in migration is, contrary to popular belief, not a new phenomenon. It has taken on many forms, from labour migration in countries like the UK and France to the immigration of settlers in the USA, Canada and Australia. There has been the migration of refugees fleeing from hostilities and of asylum seekers seeking refuge in countries such as Sweden and the

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United States.[2–4] In receiving countries, newly arrived migrants have often been concentrated in poor, low status regions of major cities. They usually live in low standard accommodation and under less favourable living conditions and health.[5] The World Health Organizations objective of 'Health for all by the year 2000' suggests that we should ensure that 'ethnic minorities' also have equal access to health services, regardless of their standing in society.[1] Equal access to health care is a fundamental human right.[6]

Although migration is the norm and health care a natural right of every individual, ethnic minority patients seem to be confronted with barriers when using health services. Their use of health services is also lower, when compared with their non-immigrant counterparts.[4,7–10] Yet, care providers often are oblivious to these barriers, although they may share to some extent the burden of responsibility for them. Most of their attention is directed towards language discordance and cultural differences, which can lead to biased or false conclusions.[1] Language and culture are by no means the only factors that may act as a barrier. In order to enlighten care providers, as to the potential pitfalls that may exist, there is a need to explore the different factors in the creation of the barriers. Therefore, the objective of this paper is to present an overview of potential barriers and the factors, which may restrict ethnic minority patients from using health services, according to the literature available.

Methods

Definitions

Potential barrier. If patients' expectations or health beliefs are not in line with what is proposed by the care provider, they may experience barriers to the use of health services. When the end result is not in line with the treatment received, barriers may also come into existence. A barrier, as it is used in this paper, restricts the use of health services. It is a wall or limit that prevents people from going into an area or doing what they want to do. The lack of health insurance, for example, can prevent people from using health services. The limitation to speak the local language, for example, can prevent people from communicating adequately with their physician.

A potential barrier is a barrier that only afflicts us under certain circumstances or only afflicts some of us, mostly the socioeconomic vulnerable ones. As we will see, a barrier that only afflicts us under certain circumstances is, for instance, irregular public transport. If there is no need to use the public transport, irregular public transport does not act as a barrier (e.g. to car owners). If public transport is needed, irregular public transport acts as a barrier. A barrier that only afflicts some of us is for instance health insurance coverage. For the socioeconomic vulnerable ones, the price of health services can act as a barrier if a health service is not covered by their health insurance, or is only partly reimbursed.

Use of health services. The use of health services is defined as the process of seeking professional health care and submitting oneself to the application of regular health services, with the purpose to prevent or treat health problems. In this paper we focus on all possible barriers in relation to this process. Although the decision to use health services is stated to be an individual choice, we imagine that these choices are mostly framed in the social context through cultural, social and family ties; especially for ethnic minorities.[11] Many ethnic minorities first try to solve health problems on their own, or in the circle of family members and friends. If one does not succeed, the help of a 'great' man in the community is usually called upon (preachers, spiritual healers). The help of regular health services is often only called upon after an escalation of the complaints of illness.[12]

Ethnic minority. The concept 'ethnic minority' is broadly defined in this paper. It refers to many different ethnic groups of extreme heterogeneity. The concept is used for groups that share minority status in their country of residence due to ethnicity, place of birth, language, religion, citizenship and other (cultural) differences. It sets apart a particular group in both numerical and (often) socioeconomical terms. Members of these groups are considered to practice different cultural norms and values from the majority culture and (often) a different mother tongue.[1,4,13] Ethnic minorities vary in duration of stay and acculturation and between different ethnic minorities there exist different degrees of access to the majority culture. The concept 'ethnic minority' includes groups from newly arrived immigrants to (minority) groups that have been a part of a country's history for hundreds of years. Examples of the second type of these groups are the Aboriginals in Australia or American Indians in the USA. They are in fact the original inhabitants of the country.

Patient, provider and system level. Barriers can present themselves to patients, health care providers and the organization of health services, in other words the health care system itself. Therefore we say that barriers occur at patient level, provider level and system level. By patient level we mean related to patient characteristics, such as sex, ethnicity, income, etc. By provider level we mean related to provider characteristics, such as sex, skills, attitudes, etc. By system level we mean related to system characteristics, such as policy, organizational factors, structural factors, etc.

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Search and selection

Research question. The research question of the literature research was 'What is known about the factors that hinder the use of health services among ethnic minorities?'

Search strategy. To answer the research question, articles were identified by searching the databases Medline, Embase, Psycinfo, Cinahl and Web of Science. The searches were limited to articles published between 1990 and 2003 and performed by the first author of this paper in September 2003. The databases were searched using keywords that covered the domains 'health services', 'use' of health services and 'ethnic minorities'. The different keywords used to search are presented in the appendix.

Selection. The articles were selected through titles and abstracts by the first author of this paper. The selection was based on inclusion and exclusion criteria. The results of the search were completed by tracking references from studies already included.

Inclusion criteria. The articles had to report on the results of research and contain information pertaining to migrants, health care and factors that may hinder health services use. The following inclusion criteria were employed in this study. Publication date: 1990–2003. The articles had to be published between 1990 and 2003. Type of population: ethnic minorities. The articles had to report on the use of health services by ethnic minorities. Type of study: all types of health research. The study of potential barriers to the use of health services among ethnic minorities is still a relatively uncharted course. Therefore, not only articles on quantitative research were included, but also articles on qualitative research, as well as literature reviews and a few published essays too. The studies had to report on health research, i.e. the use of health services. Type of outcome measures: potential barriers and the factors. Outcome measures had to be factors that hinder the use of health services and that can act as a barrier.

Exclusion criteria. The following exclusion criteria were employed in this study. Type of study: summaries. Articles in summary form only were not included in this study. Type of intervention: health education. Articles on health education were excluded.

Analysis

Quality assessment. Due to the heterogeneity of the included studies, the studies are not sufficiently comparable to each other. Therefore, the assessment of the methodological quality of each study seemed not appropriate to us. Although the literature search, the selection of studies and the extraction of data were done systematically, the review cannot to be compared with a systematic review; there was no quality assessment done. The aim of the study was to explore and identify as many (potential) barriers as possible. Also, the extracted (potential) barriers are not exclusively evidence-based phenomena.

Data extraction. Data extraction of the articles was compiled by the first author of this paper. The first author read the available titles and abstracts identified in the different database searches, as well as the selected articles. The articles were screened for the different variables as presented by the theoretical framework used.

Theoretical framework. We used Andersen's behaviour model of health services use as the theoretical framework.[14–16] The aim of using the Andersen-model is to reveal conditions that hinder the use of health services. The model is a valuable tool to select, identify and sequence the relevant variables in the process of health services use.

In the Andersen-model the use of health services is related to four main components: (i) 'Population characteristics'; (ii) 'Environment'; (iii) 'Health Behaviour' and (iv) 'Health outcomes'. (i) Population characteristics consists of 'predisposing characteristics' (demographic variables, social structure variables and health belief variables), 'enabling characteristics' (personal or family enabling resources, community enabling resources) and 'need characteristics' (individual perceived need, professional evaluated need). (ii) Environment consists of 'external environment' (physical, political and economic) and 'health care system' (policy, resources and organization). (iii) Health behaviour consists of 'use of health services' (type, site, purpose and time interval) and 'personal health practices' (do-it-yourself remedies). (iv) Health outcomes consist of 'consumer satisfaction' (convenience, availability, financing, provider characteristics and quality), health status' and 'perceived health status'.[14–17]

The Andersen-model was also used by us to help arrange the potential barriers. We present the barriers under the subject headings of the Andersen-model. We condensed the subject headings into three main groups which we have called 'Patient level', 'Provider level' and 'System level'. By doing so, the myriad of potential barriers is easier to oversee.

Results

Out of the 309 titles and abstracts, a total of 56 articles were selected for inclusion. Finally, 54 articles were reviewed, as 2 of the articles were not available through Dutch university libraries.

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The articles were classified into four different types of studies: Quantitative studies (n = 28); Qualitative studies (n = 10); Combined studies (n = 6), that combine quantitative and qualitative methods and Other studies (n = 8), like literature studies and essays. The reviewed studies were carried out in 11 different countries and a great number of ethnic minorities were involved. Different types of health services were studied. The different types were Health care in general; Preventive care; Dental care; Prenatal care; Primary health care; Care for the children; Care for the elderly and Mental health care.

A great number of potential barriers were identified. The identified potential barriers referred to population or patient characteristics (i.e. predisposing characteristics, enabling characteristics and need characteristics); health behaviour (i.e. patients' personal health practices); health outcomes (i.e. provider characteristics) and environment (i.e. the organizational factors of the health care system). The barriers are presented in three groups of barriers: (1) potential barriers at patient level; (2) potential barriers at provider level and (3) potential barriers at system level. An inventory of the potential barriers can be found in Table 1. The characteristics of the articles reviewed are summarized in Table 2.

Potential barriers at patient level

Demographic variables

Age. Being of younger age can act as a barrier for non-immigrant as well as immigrant patients.[9] Being younger than 24, acted as a potential barrier to ethnic minority gravida's beginning prenatal care in the later stages of pregnancy.[18]

Gender. Being a male or a female can act as a barrier for non-immigrant and immigrant patients.[9] Males and females have many similar life experiences and opportunities, but as they occupy different positions in the home and in the labour market they are exposed to different health risks.[19] Being an ethnic minority male and having a low acculturation level together with some kind of social support, acted as a potential barrier to the (hypothetical) notion of entering a nursing home.[20]

Marital status. Being unmarried can also act as a barrier, although marital status may be less of a barrier than a predictor of need.[8,20,21] Being married was one of the most influential determinants of health care access among ethnic minority patients. This is the conclusion of an analysis of the relationship between traditional health beliefs and practices, and the access to health care and use of preventive care. The predictive power of marital status was attributed to the fact that pregnancy and childbirth provide a point of entry into health care.[21]

Social structure variables

Ethnicity. One's ethnic background can act as a barrier and this may account for the less frequent use of more specialized services.[22]

Education. Low education can act as an barrier to the access of health care, health publicity and the measures it incorporates.[8,23,24]

Social class and economic status. Lower social and socioeconomic status can act as a barrier to health care and health advertising.[9,21,23,25–27] There can be a communication breakdown due to the difference in social status between the ethnic minority patient and care provider. These problems indeed have a disadvantageous effect on the patient's perceptions towards the use of services provided.[25]

Living conditions. Insecure living conditions can act as a barrier, especially in the case of pregnant women and their foetuses. Signs of insecurity include having to live in slum-like dwellings where there are drugs and crack houses within the neighbourhood. Even with burglar bars on windows and doors, the sense of insecurity in these environments is still very much apparent. If prenatal clinics are situated in such unsafe environments, the attendance figures may be in serious jeopardy. To raise attendance figures protection is needed to provide a safe and secure environment.[28]

Life style. Poor state of health due to drug addiction can be seen as a barrier to prenatal health care. Prostitutes and pregnant drug users often do not get prenatal care because of their plight. They are receiving assistance for substance abuse and this help is not offered in prenatal clinics.[28]

Eating habits that do not conform with medical dietary recommendations, like the use of traditional dishes, can also act as a barrier. People using high fat and high sugar in traditional diets may not accept a diet that is low in fat and low in sugar as they find it unappetizing because of its tastelessness.[29]

Family and social support. Lack of family and social support can act as a barrier to health care. Clearly family support is advantageous in providing emotional support to the (ethnic minority) patient.[30] Clearly kinship can furnish assistance, companionship and of course stability,[28] even though family support can be viewed only in an unconstructive way when collective family responsibilities take precedent to individual needs.[29,30]

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TABLE 1 *Inventory of potential barriers to the use of health services among ethnic minorities*

Patient level	Provider level	System level
Demographic variables	Provider characteristics	Medical paradigm[44]
Age[9,18]	Medical procedures and practices[9,18,37,50,62]	Consumerist approach[42]
Gender[9,19,20]		Organisational factors
Marital status[8,20,21]	Orientation on immediate complaint[42]	Referral system[10,38]
Social structure variables		Intake procedure and opening hours[27,35,62]
Ethnicity[22]	Program orientation and ethnic matching[40]	Consultancy appointments and waiting time[7,8,10,12,18,24,28,31,34,35,37]
Education[8,23,24]	Skills[1,8,27,28,31,35,36,48,63,64]	The length of consultation and treatment[7,18,27,28,35]
Social class and economic status[9,21,23,25–27]	Behaviour[7,8,27,28,35–38,44,48,64]	Printed materials and other media forms[38]
Living conditions[28]	Communication style[62]	Translation[7,30,35,62]
Life style[28,29]	Style of providing information[38]	
Family and social support[28–30]	Client approach[30,51]	
Culture[31]	Bilingualism[40,47,62]	
Duration of stay[8,11,12,26,32–34]	Translation[23,43]	
Acculturation[10,20,24,32,35,36]	Cultural knowledge[9,25,30]	
	Family involvement[25,30,51]	
	Religion/spirituality[10,28]	
	Parallel sets of belief and practices[9,26–28,36,49]	
Local language skills[1,8–10,26,28,30,31,33–35,37–45]		
Communication[42,43,46,47]		
Translation[9,23,35,38,39,42,43]		
Health beliefs and attitudes		
Time orientation and concepts of achievement[8,10,30]		
Values concerning health and illness[5,8–10,12,21,26–28,36,44,48–53]		
Perceptions and attitudes towards health services and personnel[9,18,24,26,27,30,35,38]		
Knowledge about physiology and disease[9,29,30,37,50]		
Personal enabling resources		
Immigration rules[9,25,30,35]		
Income/financial means[8,10,24,25,28–31,35,37,38,54–57]		
Entry to health insurance[25,37]		
Health insurance benefits[8,9,18,21,24,25,35,55,57,58]		
Sources of advise and regular source of care[8,21,30]		
Knowledge of health services and how to use them[27,28,31,37,39,44,49,59,60]		
Available time and stress constraint[9,10,29,35,37,50]		
Community enabling resources		
Availability and delivery of services[8,54]		
Price of health services[29,35,38]		
Transportation and travel time[8,9,10,18,28,31,35,37,54]		
Perceived illness		
Perceived cause[31]		
Personal health practices		
Traditional remedies and self-treatment[8,10,21,28,30,51,60,61]		

Table 1 shows an inventory of potential barriers as indicated by the literature reviewed. The objective of the review was the presentation of an overview of potential barriers to the use of health care services among ethnic minorities.
The potential barriers identified are presented under the subject headings of the Andersen's model of health services use. We condensed the subject headings into three main groups which we have called: 'Patient level', 'Provider level' and 'System level'. By doing so, the myriad of potential barriers is easier to oversee.
Potential barriers at patient level incorporate: demographic variables, social structure variables, health beliefs and attitudes, personal enabling resources, community enabling resources, perceived illness and personal health practices. Potential barriers at provider level incorporate: provider characteristics. Potential barriers at system level incorporate: organisational factors.

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TABLE 2 *Characteristics of the articles reviewed: health care sector, country, ethnic minority, level of occurrence and potential barrier, type of study, first author and reference*

HC sector	Country	Ethnic minority	Level of occurrence, potential barrier	Type of study	First author	Ref
HCG	Australia	Thai migrant women	Patient level Local language skills Translation Perceptions and attitudes towards health services and personnel Income/financial means Price of health services Provider level Behaviour Style of providing information System level Referral system Printed materials and other media forms	Combined study	Jirojwong (2002)	38
	Canada	Immigrants: born outside Canada or whose mother tongue (still understood) was neither French nor English	Patient level Local language skills Provider level Skills	Quantitative study	Blais (1999)	1
		Newcomers: Arab 42%; Spanish 19%; Polish 15%; Chinese 6%; East Indian 2%; Vietnamese 2%; Eastern Europe/South and Central America/Africa 14%	Patient level Duration of stay Local language skills System level Consultancy appointments and waiting time	Quantitative study	Matuk (1996)	34
	Germany	Turkish (im)migrant women	Patient level Values concerning health and illness	Other study	Berg (1997)	52
	The Netherlands	First generation immigrant groups: Surinamese, Netherlands Antilleans, Turkish and Moroccan people	Patient level Ethnicity	Quantitative study	Stronks (2001)	22
	New Zealand	Cambodians	Patient level Social class and economic status Duration of stay Local language skills Values concerning health and illness Perceptions and attitudes towards health services and personnel Provider level Parallel sets of beliefs and practices	Quantitative study	Cheung (1995)	26
	Switzerland	(Im)migrant patients in general	Patient level Local language skills Communication Translation Provider level Translation	Combined study	Singy (2003)	43

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	Thailand	Khmer and Burmese labour migrants	Patient level Traditional remedies and self-treatment	Quantitative study	Entz (2001)	61
HCG, PC	UK	Different ethnic groups: Carribeans, African Carribeans, West/South Africans, East Africans, South Asians, Indians, Indians form the subcontinent, Pakistanis, Bangladeshis, British Asians, African Asians, Indian Asians, Chinese, Scots, Irish, Europeans	Patient level Culture Local language skills Income/financial means Knowledge of health services and how to use them Transportation and travel time Perceived illness Provider level Skills System level Consultancy appointments and waiting time	Other study	Smith (2000)	31
HCG	UK	Migrants in general	Patient level Values concerning health and illness Provider level Skills Behaviour	Other study	Eshiett (2003)	48
	USA	(Im)migrants in general	Patient level Age Gender Social class and economic status Local language skills Translation Values concerning health and illness Perceptions and attitudes towards health services and personnel Knowledge about physiology and disease Immigration rules Health insurance benefits Available time and stress constraint Transportation and travel time Provider level Medical procedures and practices Cultural knowledge Parallel sets of belief and practices	Quantitative study	Garret (1998)	9
		American Indians and Alaska natives	Patient level Income/financial means Availability and delivery of services Transportation and travel time	Quantitative study	Cunningham (1995)	54
		Blacks, other races, Hispanic origin	Patient level Duration of stay	Quantitative study	Leclere (1994)	11

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TABLE 2 *Continued*

HC sector	Country	Ethnic minority	Level of occurrence, potential barrier	Type of study	First author	Ref
		American Latino immigrants, adults: Hispanic Americans, Cuban Americans, Mexican Americans, Puerto Rican Americans, South or Central America Americans	Provider level Bilingualism	Quantitative study	Pérez-Stable (1997)	47
		American Latino children	Patient level Marital status Education Duration of stay Local language skills Time orientation and concepts of achievement Values concerning health and illness Income/financial means Health insurance benefits Source of advise and regular source of care Availability and delivery of services Transportation and travel time Traditional remedies and self-treatment Provider level Skills Behaviour System level Consultancy appointments and waiting time	Other study	Flores (1998)	8
		Mexican American: children of Mexican ancestry	Patient level Education Acculturation Perceptions and attitudes towards health services and personnel Income/financial means Health insurance benefits System level Consultancy appointments and waiting time	Quantitative study	Smith (1996)	24
		African Americans, Latinos, Asians and other	Patient level Health insurance benefits	Quantitative study	Mueller (1998)	58
		Caribbean immigrant adolescents	Patient level Duration of stay Acculturation	Quantitative study	Sonis (1998)	32

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		Working poor immigrant women; countries of origin: Haiti, Jamaica, Dominican Republic and the Soviet Union	Patient level Income/financial means Health insurance benefits	Quantitative study	Weitzman (1992)	57
		Chinese immigrants	Patient level Values concerning health and illness Knowledge of health services and how to use them Provider level Parallel sets of belief and practices	Combined study	Ma (1999)	49
		Hmong (Southeast Asian) patients (former refugees)	Provider level Behaviour System level Consultancy appointments and waiting time Length of consultation and treatment Translation	Qualitative study	Barrett (1998)	7
		Cambodian, Laotian and Navajo cultures	Patient level Acculturation Local language skills Time orientation and concepts of achievement Values concerning health and illness Income/financial means Available time and stress constraint Transportation and travel time Traditional remedies and self-treatment Provider level Religion/spirituality System level Referral system Consultancy appointments and waiting time	Other study	Panos (2000)	10
		Vietnamese	Patient level Marital status Social class and economic status Values concerning health and illness Health insurance benefits Sources of advise and regular source of care Traditional remedies and self-treatment	Quantitative study	Jenkins (1996)	21
		Medicare beneficiaries	Patient level Income/financial means Health insurance benefits	Quantitative study	Gornick (1996)	55
MHC	Germany	Turkish migrants	Patient level Local language skills	Quantitative study	Grube (2001)	41
		Turkish families	Patient level Knowledge of health services and how to use them Traditional remedies and self treatment	Qualitative study	Schepker (1999)	60

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TABLE 2 *Continued*

HC sector	Country	Ethnic minority	Level of occurrence, potential barrier	Type of study	First author	Ref
	The Netherlands	Surinamese, Netherlands Antillean, Turkish and Moroccan women immigrants	Patient level Social class and economic status Values concerning health and illness Perceptions and attitudes towards health services and personnel Knowledge of health services and how to use them Provider level Skills Behaviour Parallel sets of belief and practices System level Intake procedures and opening hours Length of consultation and treatment	Quantitative study	Have (1999)	27
		Surinamese outpatients	Patient level Duration of stay Values concerning health and illness System level Consultancy appointments and waiting time	Combined study	Knipscheer (2001)	12
	Sweden	Turkish born immigrant women	Patient level Values concerning health and illness	Qualitative study	Bắắrnhielm (2000)	5
	UK	Asian people of Pakistan and Bangladesh origin	Patient level Local language skills Values concerning health and illness Knowledge of health services and how to use them Provider level Behaviour System level Medical paradigm	Combined study	Hatfield (1996)	44
		Different ethnic groups; the most commonly reported aggregated categories were: Blacks, South Asians and Whites	Provider level Skills Behaviour	Other study	Bhui (2003)	64
	USA	Blacks	Patient level Values concerning health and illness	Quantitative study	Millet (1996)	53
		Low income Latinos	Patient level Values concerning health and illness Traditional remedies and self-treatment Provider level Patient approach Family involvement	Other study	Miranda (1996)	51

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		Hispanics, African Americans, Asian and other ethnic groups	Patient level Local language skills Provider level Program orientation and ethnic matching Bilingualism	Quantitative study	Snowden (1995)	40
DC	UK	Asians	Patient level Local language skills	Quantitative study	Williams (1995)	45
PC	USA	American Latino immigrants, adults: Hispanic Americans, Cuban Americans, Mexican Americans, Puerto Rican Americans, South or Central America Americans	Patient level Acculturation Local language skills Translation Perceptions and attitudes towards health services and personnel Immigration rules Income/financial means Health insurance benefits Available time and stress constraint Price of health services Transportation and travel time Provider level Skills Behaviour System level Intake procedures and opening hours Consultancy appointments and waiting time Length of consultation and treatment Translation	Other study	Diaz (2002)	35
		Low income Hispanic immigrant women	Patient level Social class and economic status Immigration rules Income/financial means Entry to health insurance Health insurance benefits Provider level Cultural knowledge Family involvement	Quantitative study	Jones (2002)	25
PNC	Canada	First nation tribes	Patient level Values concerning health and illness Knowledge about physiology and disease Available time and stress constraint Provider level Medical procedures and practices	Qualitative study	Sokoloski (1995)	50
PNC, G&O,	Germany	Turkish (im)migrant women	Patient level Education Social class and economic status Translation Provider level Translation	Other study	David (1997)	23

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TABLE 2 *Continued*

HC sector	Country	Ethnic minority	Level of occurrence, potential barrier	Type of study	First author	Ref
PNC	UK	Asians originating from the Indian subcontinent	Patient level Acculturation Values concerning health and illness Provider level Skills Behaviour Parallel sets of belief and practices	Combined study	Woollett (1995)	36
	USA	Low income Hispanic immigrant women	Patient level Age Perceptions and attitudes towards health services and personnel Health insurance benefits Transportation and travel time Provider level Medical procedures and practices System level Consultancy appointments and waiting time Length of consultation and treatment	Qualitative study	Byrd (1996)	18
		African Americans	Patient level Living conditions Life style Family and social support Local language skills Values concerning health and illness Income/financial means Knowledge of health services and how to use them Transportation and travel time Traditional remedies and self-treatment Provider level Skills Behaviour Religion/spirituality Parallel sets of belief and practices System level Consultancy appointments and waiting time Length of consultation and treatment	Qualitative study	Morgan (1996)	28
		African American and Mexican American mothers and their newborns	Patient level Local language skills Knowledge about physiology and disease Income/financial means Entry to health insurance	Quantitative study	Gray (1995)	37

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			Knowledge of health services and how to use them Available time and stress constraint Transportation and travel time Provider level Medical procedures and practices Behaviour System level Consultancy appointments and waiting time			
		Hmong women clinic patients	Provider level Medical procedures and practices Communication style Bilingualism System level Intake procedures and opening hours Translation	Qualitative study	Spring (1995)	62
PHC	Israel	Soviet immigrants	Patient level Local language skills Communication Translation Provider level Orientation on immediate complaint System level Consumerist approach	Qualitative study	Remennick (1998)	42
	Netherlands	Ethnic minority parents who visited the GP with a child-patient: the parents were born in different countries: Morocco, Turkey, Surinam, Pakistan, Cape Verdi, Bosnia etc.	Patient level Communication	Quantitative study	Wieringen (2002)	46
	UK	Chinese	Patient level Local language skills Translation Knowledge of health services and how to use them	Quantitative study	Watt (1993)	39
HC	Switzerland	(Im)migrant patients in general	Provider level Skills	Quantitative study	Perron (2003)	63
	USA	Blacks	Patient level Life style Family and social support Knowledge about physiology and disease Income/financial means Available time and stress constraint Price of health services	Qualitative study	El-Kebbi (1996)	29
		American Latino immigrants, adults: Hispanic Americans, Cuban Americans, Mexican Americans, Puerto Rican Americans, South or Central America Americans	Patient level Family and social support Local language skills Time orientation and concepts of achievement	Qualitative study	Lipton (1998)	30

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Health Care sector	Country	Ethnic minority	Type of level and potential barrier	Type of study	First Author	Reference
			Perceptions and attitudes towards health services and personnel Knowledge about physiology and disease Immigration rules Income/financial means Sources of advise and regular source of care Traditional remedies and self-treatment Provider level Patient approach Cultural knowledge Family involvement System level Translation			
CE	USA	Latinos, the elderly	Patient level Income/financial means	Quantitative study	Wallace (1994)	56
		Korean-Americans	Patient level Knowledge of health services and how to use them	Quantitative study	Moon (1998)	59
		Japanese Americans	Patient level Gender Marital status Acculturation	Quantitative study	McCormick (1996)	20
CC	USA	Culturally diverse children	Patient level Duration of stay Local language skills	Combined study	Tharp (1991)	33

Table 2 shows the characteristics of the articles reviewed.
The objective of the literature review was the presentation of an overview of potential barriers to the use of health care services among ethnic minorities, see Table 1.
Health Care sector: refers to the type of health service studied.
Country: refers to the country where the study was undertaken.
Ethnic minority: refers to ethnic minority studied.
Type of level and potential barrier: refers to the potential barriers as indicated in the articles reviewed and to their level of occurrence. Potential barriers occurred at three different levels: at patient level, at provider level and at system level.
Type of study: refers to the type of study presented in the articles reviewed. The studies are classified into four types of studies: the (1) quantitative study, the (2) qualitative study, the (3) combined study, these are studies that combine quantitative and qualitative methods, and the (4) other study: these are the literature study and the essay.
First Author: refers to the first author and the year the article was published.
Reference: refers to the identification number of the publication presented in the list of References.
Abbreviations: HCG: Health Care in General; MHC: Mental Health Care; DC: Dental Care; PC: Preventive Care; PNC: Prenatal Care; G&O: Gynaecology and Obstetrics; PHC: Primary Health Care; HC: Hospital Care; CE: Care for the Elderly; CC: Care for the Children.

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Culture. Ethnic minority patients' cultural perceptions about symptoms may act as a barrier, as their needs may be differently expressed. Ethnic minority groups may present classical symptoms in a different way, which could result in a missed diagnosis (e.g. the symptoms of a confirmed heart attack). Also, referral rates from a general practice to radiological examinations may be higher, although the outcomes less often report abnormalities. Due to cultural perceptions about symptoms it seems more difficult to arrive at an appropriate diagnosis.[31]

Duration of stay. Duration of stay shows mixed results. Some studies suggest that short stay durations can act as a barrier. They have a disadvantageous effect as it is an important predictor of both health-seeking behaviour and attitudes and strongly effect immigrants' access and volume of care.[11,12,26,32,33] Newcomers are the most in need of education in the utility of health services; especially the most vulnerable, less knowledgeable ones, who have less access to ambulatory care.[12,32,33] They are almost as restricted in their access to health care as those without any health insurance, regardless of their health insurance status.[11] On the other hand, however, other findings report that there is no discernable evidence to support this view.[8,34]

Acculturation. Low level of acculturation can also be restrictive and act as a barrier.[10,20,24,32,35,36] Acculturation or familiarity with western health practices can bring ethnic minority patients to gradually subscribe to western values and practices, along with their own traditional methods of health care.[36] Hypothetically at least, high levels of acculturation are reportedly a powerful predictor for the intention of ethnic minority patients to join long-term health services in the form of nursing homes.[20]

Local language skills. Lack of local language skills can act as a barrier. It is one of the major factors that prohibit the use of health services because it jeopardizes effective communication between ethnic minority patients and health care personnel.[1,8,9,26,28,33,35,37–43] In view of the fact that most messages and instructions are communicated in the local tongue, people may feel embarrassed to seek out services. Conversely they may feel hindered because of their own ineptness at expressing their feelings due to language difficulties and reading ineptitudes.[30,34,39,42] The inability to communicate in what is not their mother tongue inevitably leads to discrimination; due to the lack of a common language they struggle to express their inner feelings, to ask questions or to represent themselves or their families.[10,43,44] This is especially apparent where personnel bypass the patient in question only to communicate instead with a family member.[44] Poor language skills also have an adverse affect on the confidence of the patient. It causes yet additional emotional stress and discomfort to the normal stress that often accompanies medical consultations. Language difficulties can have a detrimental effect upon the patient's ability to comprehend proposed treatments and remedies. They also hamper the physicians' attempts at obtaining vital medical history. Patient's ability to comprehend what is being prescribed is essential to prevent any misunderstandings with regard to obtaining informed consent to medicine and treatments that could present medical risks.[45]

In contrast to all this, it is reported that difficulties due to language are less of a problem than they appear to be. In certain younger ethnic minority groups the ability to speak the local language is high and up to 80% of these groups may be registered with a physician of their own ethnicity, speaking the same mother tongue.[31]

Communication. Ineffective communication is another major barrier in the partnership that should exist between patients and practitioners. The relationship between an ethnic minority patient and a physician is essentially vertical due to social differentials forced by unevenness on linguistic, cognitive and institutional levels. This gulf separates patients and physicians and invariably benefits the physician more than the patient.[43] Parents of ethnic minority child-patients experienced the communication with the physician of their children more negatively, when compared with their socially dominant counterparts. Differences in experience were associated with differences in understanding each other.[46,47] The problem of ineffective communication caused by language difficulties often stays unsolved, leading to frustration and exasperation with patients feeling neglected and detached.[42]

Translation. Attitudes of disapproval towards translation by an interpreter can act as a barrier. For certain ethnic minority patients the interpreters are usually friends, spouse, children or other family members.[39,42] As they too often lack the necessary skills to fully communicate their message, they may fair little better and even sometimes worse than the person they are representing.[39]

The presence of a professional interpreter can improve the quality of the conversation whilst at the same time providing the patient with more lucid explanations of his case scenario, through enhancing patient–provider's face-to-face dialogue and patient rapport.[9,23,35,42,43] There is however suspicion, on the part of some patients, who consider the interpreter to sometimes be economical with the truth. This suspicion arises from the abruptness of dialogue the interpreter conveys when translating from the patient's mother

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tongue. Patients are concerned too about the accuracy of the translation. This dubiousness is exacerbated by the reluctance of patients to reveal to the interpreter confidential information.[38]

Health beliefs and attitudes

Time orientation and concepts of achievement. Future-oriented goals and emphasis on individual achievements and orientation can act as a barrier.[8,10,30] In western societies future-oriented perspective is common place and corresponding with goal settings, and inherent of the western health care system. Examples of setting goals are the planning of care, treatment and discharge; the implementation of quality standards of improvement, etc. The patient's concept of individual achievement is another major factor. In many western societies the role of the family and community takes second place to the individual's needs and objectives. Here, personal ownership is applauded and efforts to realize one's own individual needs and financial security are valued greatly. In other cultures these virtues are viewed differently. One may aim at bringing honour to the family and community through virtues such as generosity, hospitality and conforming to the share.[10]

Values concerning health and illness. Differences in health beliefs between the patient and the provider, i.e. the explanatory model of health, illness and healing methods, can act as a barrier to the detriment of the ethnic minority patients.[5,8–10,12,26–28,36,44,48–53] Ethnic minority patients may have one of the following sets of belief patterns. (i) The belief that western concepts should be holistically defined; a holistic view integrates the body, mind and soul.[44,49,51] (ii) The belief that personal problems and illness are caused by external factors such as family relationships and less by internal influences such as damaging childhood experiences.[12,26,28] (iii) The belief that external causes can be natural or supernatural by nature. Natural in this context means a so-called 'Act Of God' (e.g. the 'tsunami'). By supernatural is meant karma (consequences of good or wrong doings in another life), magic, sorcery and voodoo. (iv) The belief that the concept of (mental) health should include religious/spiritual dimensions as well as bodily dimensions and that mental illness and psychiatric hospital admission is to be avoided (taboo).[27,44,50,51,53] One study suggests that there is no evidence to support the view that traditional belief patterns and practices (the cultural attributes of individuals) have a detrimental effect on the access and use of health services.[21]

Perceptions and attitudes towards health services and personnel. Disapproving perceptions and attitudes with regard to health services and personnel can act as a barrier. This is especially apparent when ethnic minority patients are dubious about the benefits of health services or simply do not see the benefits of it.[9,18,24,26,27,30,35,38] Demand in health services is influenced greatly by consumer tastes and preferences and the desire to purchase health care. Ethnic minority patients may see providers as a rather alien or distant group of people and foster too much respect for medical personnel. This may, in turn, restrain them from asking important questions about medical instructions, etc. and this form of abstract subordination prevents them from questioning authority as they see it.[9,30,35]

Knowledge about physiology and disease. Different understanding of the workings of the body in the case of the food exchange system and the limited ability of some to interpret food labels can also act as a barrier to dietary therapy adherence.[29] Non-recognition of medical needs by the patient is another barrier we have to overcome.[9,30] It may lead to the patient not receiving optimal medical care, e.g. in the case of pregnancy. Women patients of certain ethnic minorities think that prenatal care attendance is only required in case of past or present problems with pregnancy.[50] Non-recognition is also apparent when the reality of pregnancy is overlooked or ignored.[37]

Personal enabling resources

Immigration rules. Not having the right visa's and work permits can act as a barrier as it can have a restricted impact on the use of health services or funding sources.[9,25,30,35] Migrant patients may be fearful that care providers are in some way associated with law endorsement agencies such as the police or government. Consequently these patients are frightened that in the case of chronic sickness their chances of gaining citizenship may be jeopardized, for example, if they were to apply for state or government health funding.[9,25,35]

Income/financial means. Lack of financial resources or abstract poverty can also become a barrier to health care, as economic circumstances affect the life of people and their ability to get care that is not sponsored or indeed provided for.[8,10,24,28–31,35,37,38,54–57] Lack of financial support and extreme poverty is more problematical for immigrants because they are in a much more vulnerable position.[25]

Entry to health insurance. The inability to acquire health insurance can act as a barrier to prenatal optimal care.[37] In order to prove that they qualify for such medical benefits the ethnic minority patient must first provide a significant amount of documentation and personal information. These include proof of residency,

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annual income, along with more contrived documentation and information that inhibits the ethnic minority patient from pursuing his primary objective. Even when ethnic minority patients are eligible for state and government funding, there is still a risk that they may not be fully conversant with the rules and the meaning of eligibility in this particular context.[25]

Health insurance benefits. The lack of adequate health insurance is yet another barrier in seeking or receiving health care treatment.[8,9,18,21,24,25,35,55,57,58] One's insurance status is the determining factor when it comes to entry and volume of care.[58] The lack of health insurance often leaves a person vulnerable and limited when it comes down to paying for health care costs. Even when one is insured, one may experience barriers if certain services are not covered or deductibles are set at unaffordable levels. Among ethnic minority patients the percentage of those uninsured is higher than among the urban white population.[25,58]

Sources of advice and regular sources of care. Non-professional advice and the lack of a regular source of care can act as barriers and be restrictive for ethnic minority patients and their children.[8,21,30] Health care practitioners believed their patients to be strongly influenced by recommendations and stories from friends and family members which proved not always to be entirely true. As a result of this, patients resisted the required increase of their medical dosage, based on the misinformed view that their illness might worsen or there could be complications.[30] Having a regular source of care was reported to be one of the strongest indicators of preventive health care use.[21]

Knowledge of health services and how to use them. Unawareness of service availability or a lack of knowledge about the services at one's disposal can act as a barrier to the use of health services.[27,28,37,39,44,49,59,60] When the ethnic minority patient has no knowledge of e.g. the function and availability of primary care workers other than the physician, then the use of primary health care will inevitably be restricted and inappropriate to his or her needs.[39]

It is also reported that the use of screening services (e.g. breast and cervical cancer screening) is low among ethnic minorities, due to a general lack of knowledge about such services and a different understanding of the nature of preventive care. However, as immunization rates are generally high among ethnic minorities, the findings that ethnic minorities lack knowledge about preventive services are contradicted.[31]

Available time and stress constraint. Time limitations because of commitments to work or family can act as a barrier and promulgate stressful situations which prohibit the use of health care or prenatal care for mothers and newborns.[9,10,29,35,37,50]

Community enabling resources

Availability and delivery of services. Regional disadvantages can act as a barrier to the use of health services.[8,54] This rural versus urban and suburban versus inner city conflict means that living in the most remote and most sparsely populated regions, where there are no, or at least very few, medical providers around, inevitably has a detrimental effect on the health services on offer. The availability of outpatient services naturally increases the number of visits by patients.[54]

Price of health services. High medical costs can act as a barrier, as they hinder immigrants that are not yet entitled to subsidies for medical benefits, because they have recently arrived.[38] People may also experience difficulty in the paying of medical bills as a result of having to adhere to certain therapies; for example therapies which they perceive to be of the high cost–high risk category, with recommended meal plans and dietary products.[29,35]

Transportation and travel time. Irregular public transport in both cities and suburbs, combined with prolonged travelling times, is yet another barrier to the health care for ethnic minority patients in their endeavours to seek medical help.[8,9,10,18,28,35,37,54] This is particularly so, without access to a car.[31]

Perceived illness

Perceived cause. Ethnic minorities' different perceptions of the severity of the symptoms can act as a barrier, as the validation of symptoms influences the degree of urgency in seeking care. In comparison with the ethnic majority, some ethnic minorities are more concerned about the symptoms (e.g. chest pain) and more prone to seek immediate care. Also, some ethnic minorities are more prone to seek immediate care for an ailing child.[31] Although this is not a barrier in the obvious sense; it affects the workload of the care provider.

Personal health practices

Traditional remedies and self-treatment. The do-it-yourself home remedy treatments and traditional medicine practices hindering the acceptance of health services by ethnic minority patients can act as a barrier.[8,10,28,30,51,60,61] One study reported that no evidence was found to suggest that traditional health beliefs and practices had a detrimental effect on the access and use of preventive health services.[21]

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Potential barriers at provider level

Provider characteristics

Medical procedures and practices. Intrusive medical procedures and standard practices applied with insensitivity to patients needs can act as a barrier to the use of health services.[9,18,37,50,62] The performing of certain medical tests and examinations can act as a barrier when ethnic minority patients are frightened or start to fear the unknown.[37] Female patients may be embarrassed with a physical examination, especially if performed by (several) male physicians. Pelvic and vaginal examinations cause the maximum amount of embarrassment and shame.[18,50,62]

Orientation on immediate complaint. Orientation focusing on the immediate complaint alone can be experienced as a barrier to the treatment of health problems. The physician in the home country of ethnic minority patients may assess his patient in much more of a holistic manner. His assessment explores the family ramifications along with the social context and other health problems that may prevail. To supplement conventional treatment, referrals may also include resorts where mineral waters, sulphur baths and natural healing resources are used.[42]

Program orientation and ethnic matching. Treatment programmes that serve a relatively small proportion of minority clients and the absence of ethnic matching of patient and provider can act as a barrier. Minority-serving programmes and ethnic matching of patient and care provider can make care more accessible to ethnic minority patients. Participation in ethnic minority oriented programs, in comparison with generic programs, resulted in fewer (emergency) service visits. So did ethnic matching of patient and care provider, in comparison with patients who were unmatched on the basis of ethnicity and language.[40]

Skills. Weak communication skills and incorrect practices can act as a barrier.[1,8,27,28,31,35,36,48,63,64] If the physician is not able to arrive at the correct diagnosis, the outcome of the consultation may be inappropriate. The outcome is influenced by patient characteristics (including social class) and provider characteristics. It is not easy to arrive at a correct diagnosis as the cultural perceptions about symptoms may differ, as we have discussed under 'Culture'.[31]

False perceptions by providers can probably result in the ethnic minority patient not receiving pain medication for long bone fractures and follow-up appointments, or referrals from emergency department visits.[35] There may also be a tendency of the primary care physician to refer the patient more quickly to a specialist if it becomes difficult to diagnose the concerns of the ethnic minority patient.[1] Incorrect care for children of ethnic minorities included suboptimal management plans, decreased likelihood of receiving prescriptions, reduced screening and missed possibilities for vaccinations.[8]

People from certain ethnic minority groups traverse more complex pathways to specialist mental health services, as opposed to people from other ethnic minority groups or the ethnic majority. Some of these differences could be explained by variation in primary care assessments or primary care involvement. These patients are less likely to be referred to specialist services due to the unlikelihood of recognizing a psychiatric problem.[64] Also, the labelling of problematical behaviour and ways to manage the behaviour showed that there were significant differences.[48] These differences in assigning diagnostic labels and referring patients caused ethnic differences in the use of mental health services.[35]

Behaviour. Discourteous care and stereotypical attitudes towards ethnic minority patients can act as a barrier and have a detrimental effect.[7,8,27,28,35–38,44,64] Because ethnic minority patients do not often speak the language fluently they are sometimes treated differently to other patients.[35] Studies indicate the use of racially explicit language by bad-mannered staff, whose hostile attitudes are obviously influenced by the social and ethnic status of those in their care.[8,35,37,38,44,48]

Discrimination can also act as a barrier, as it has a detrimental effect on mental health (discrimination combined with perceived discrimination). It places the discriminated ethnic minority group at higher risk and perhaps more frequent use of mental health services. Some ethnic minority groups on mental health in-patient units are four times more likely to be admitted compulsorily than the ethnic majority. This finding is consistent with research in forensic and prison services. Here, less satisfaction or fear with the mental health services could be the reason. Well-recognized sources of inequalities are local variations in clinical practice and service provision. Contextual effects (e.g. lower ethnic density) can lead to higher rates of schizophrenia, requiring greater service use. Some ethnic minority groups were more likely to be in contact with mental health services than members of the ethnic majority. The reason could be the effective delivery of necessary care or the care provider's anxieties about perceived risk.[64]

Communication style. The authoritative communication style of the care provider can act as a barrier. The confrontational way in which health care personnel sometimes approach the ethnic minority patient can result in shame and discomfort, for example, when routine references are made about missed appointments and other forms of non-compliance. Another example

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is the fear factor engendered by unsympathetic staff that if one did not attend obstetric clinics, then forthcoming delivery assistance maybe withheld.[62]

Style of providing medical information. The undiplomatic style of conveying information and the way it is expressed can act as a barrier. Disease prognosis which is conveyed in a direct manner and the use of medical terminology can cause discomfort to the ethnic minority patient.[38]

Patient approach. Impersonal patient approach can act as a barrier. For certain groups of ethnic minority patients a very formal and dispassionate approach by the care provider can deter them from using the health care facilities available. Furthermore, recruiting and retaining participants into treatment outcome studies are hindered too. These patients have come to expect a dignified, personal and warm approach from health care professionals. This includes the use of formal language, greetings and titles. For them a dignified and personal approach encompasses sympathy and respect particularly for male figures as well as older adults in general. They themselves seem to appreciate such an approach and respond warmly, whilst at the same time showing great respect for the professionals that are treating them.[30,51]

Bilingualism. Being bilingual without the skills to fully articulate ones views can act as a barrier. Bilingual physicians face substantial language difficulties that can lead to a communication breakdown.[47] Although some physicians are able to care for patients without translators, clinical interaction about complex issues requires advance levels of language fluency for an effective patient–physician communication. Language, together with ethnicity matching of patient and physician, was found to reduce emergency service visits.[40,62]

Translation. Care providers too are not over enamoured with the role of translators. The vast majority of care providers prefer a word-for-word translation and only a small minority prefer the interpreter to orientate on the content of the consultation. For them, cultural aspects in the definition of somatic and psychiatric troubles are substantial.[43] Intercultural patient–provider communication usually leads to unsatisfactory *ad hoc* arrangements.[23]

Cultural knowledge. Lack of cultural knowledge can act as a barrier. Cultural knowledge about, e.g. traditional family patterns and values, is regarded as essential to the provision of health promotion and preventive care.[9,25,30]

Family involvement. Neglecting the influence of the family through non-involvement can act as a barrier, because some ethnic minority patients foster strong and traditional family values.[25,30,51] Traditional family patterns include immediate family and extended family members. For these families the individual is less important than the family, which is central to the family members. Strong bonds of loyalty and commitment to a collective responsibility hold these families together. All family members are duty bound to retain this status quo throughout their lives. Within the hierarchical nature of a traditional family pattern it is usually the father who is the most powerful family member. He makes most of the major decisions and provides the financial and emotional stability, thus protecting the family from potential danger. Therefore, he should be included in discussions about the treatment of other family members.[30,51]

Religion/spirituality. Denying the aspect of spirituality and religion for some (ethnic minority) patients can act as a barrier. These influences can greatly affect the well-being of people.[10,28] They were reported to be an essential element in the lives of certain migrant women which enabled them to face life with a sense of equality.[28]

Parallel sets of belief and practices. Ignoring the existence of parallel sets of beliefs and practices can act as a barrier to the use of health services. The belief in, or commitment to, traditional practices does not hinder the (acquired) perception that western health care can be very beneficial too. Ethnic minority patients may operate with parallel sets of beliefs and practices, on one hand be committed to western health practices and on the other sometimes travelling to their country of origin for non-western practices.[9,26–28,36,49]

Potential barriers at system level

Medical paradigm

The strictness of the medical paradigm can act as a barrier as it is based upon the biomedical explanatory model of health, illness and healing methods. Some ethnic minority patients are dissatisfied with it, as the dimension of religion and culture on health and healing is not recognized. Where there is lack of a common language of communication, ethnic minority patients seem unable to convey their inner feelings and needs. As a result these patients may lack the confidence to ask important questions. Especially when admitted to hospitals and separated from their families and communities, this can lead to a profound sense of isolation. People may feel ignored by other patients and staff. In a number of such instances, people need religion as a source of support but when requesting such services they feel a sense of disloyalty and neglect.[44]

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Consumerist approach
The dispassionate consumerist approach can act as a barrier, particularly the impersonal and technical attitude of the physician. Patients feel physicians forego their responsibility for patients' health. To some immigrant patients the consumerist approach to medical services is a novelty. The patient is encouraged to be a more assertive patient, but this often runs against the grain of older, more vulnerable patients. There are complaints too that the physician treats his patients in a matter-of-fact formal manner. This is contrary to the warm and sympathetic way some patients are used to in their country of birth.[42]

Organizational factors
Referral system. The referral system can act as a barrier, as some patients feel uncomfortable with monitoring procedures that hinder them from obtaining adequate care.[10,38] For example, in their own country they can usually go directly to a health specialist. Sometimes this encourages them to bypass the referral system using the services in their own country. Such a decision is based upon the nature of the illness and the effect of previous treatments, aligned to the cost of the treatment itself. We should also take on board the treatment they have received from health care workers in their own country which may influence their attitude towards the services available here.[38]

Intake procedures and opening hours. Complex intake procedures can act as a barrier. Therefore simplifying intake procedures with the use of flexible clinic hours, particularly for immigrant patients, has been fairly successful in adapting care to the need and expectations of these patients.[27] Limited and inconvenient clinic hours are also disadvantageous with regard to the use of health services.[35,62]

Consultancy appointments and waiting time. The cumbersome process of making and obtaining appointments and the prolonged waiting times can act as a barrier. Difficulties in accessing health services stem from the making and obtaining of appointments, the scheduling problems that exist at present and the unavailability of an appointment at a convenient time.[12,31,34,35] Long waiting times for appointments and during visits to clinics hinder the patient from using the services that they are entitled to.[7,8,10,18,24,28,31,37]

Patients of certain ethnic minority groups have to wait longer for specialist intervention as their European counterparts (up to twice as long). Where this barrier occurs is not clear. As some ethnic minority groups are more concerned about the symptoms and more prone to seek immediate care for themselves or their ailing children, it is likely that the barriers are more related to the use of health services than to the approach of it.[31]

Indeed, for some ethnic minority groups obtaining an appointment with the GP is harder due to (physical) access difficulties, when compared with the ethnic majority. On the other hand, these groups are more frequently reported to have communicated their needs satisfactorily. They leave the doctor's surgery less frequently with follow-up appointments or with offered services (e.g. district nursing services), although they like to acquire such services.[31]

The length of consultation and treatment. Consultations and treatments that are too abrupt can act as a barrier as distrust can arise.[7,18,28,35] There is a fear on the part of the patient that they are not being taken seriously enough. This undermines the fabric of trust which is essential for improved relations to occur between patient and provider. Ironically however, in some cases, these short-term treatment possibilities have made health care more accessible to ethnic minority patients.[27]

Printed materials and other media forms. Impersonal communication through printed matter and other media forms can act as a barrier. It is preferable to make direct personal contact with the ethnic minority patient, the spouse, friends and family and not rely too heavily on printed materials or other media forms. These forms only seem to discourage the ethnic minority patient from finding out more about clinics and the types of services available.[38]

Translation. The lack of appropriate translated information and educative materials can also be a hindrance; particularly where information and education is critical to the needs of adequate patient management. Information and education with regard to ethnic minority patients must take into account the different idiosyncratic expressions and the varying levels of literacy within the ethnic minorities' subgroups. It must acknowledge the value of traditional practices, explaining technical procedures and their rationale, address the concerns reported by the patient and inform them of their legal rights.[30,35,62] Linguistic and cultural translation are seen as problematical, especially in the light of the different sets of values concerning health, illness and healing methods employed by the care providers and their patients.[7]

Discussion

Summary
This literature review presents potential barriers that exist in the use of health services among ethnic minorities. The health services are applied in many different countries and received by patients of a large number of different ethnic minorities. A great number

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of potential barriers were identified. Obviously the presented barriers vary from country to country and what is a barrier to one ethnic grouping is not necessarily so to another. The potential barriers have been summarized in Table 1. By checking the inventory, the care provider may become aware of whether a potential barrier can be identified in the environment that he or she is dealing with. The characteristics of the articles reviewed are summarized in Table 2. With the help of this table the type of health service in a particular country, used by a particular ethnic minority, is easily recognized along with the corresponding potential barriers. We used Andersen's behaviour model of health services use as the theoretical framework. The articles were screened for the different variables as presented by this model. The Andersen-model was also used by us, to help arrange the potential barriers. We condensed the subject headings into three main groups which we have called: 'Patient level', 'Provider level' and 'System level'. By doing so, the myriad of potential barriers is easier to oversee. Although our review reflects and supports the different studies included, this study differs discernibly from most other literature in that it presents many different barriers among many different ethnic minorities living in many different countries and using different health services. It presents a state-of-the-art inventory of potential barriers, according to the literature available.

Theoretical framework

We used Andersen's behaviour model of health services use as the theoretical framework. To us the application of the Andersen-model was very useful. The model presents a rather complete set of variables important to the study of health services use by general population or (ethnic) minorities. Application of the model results in a better understanding of the health behaviour of the studied populations.

The Andersen-model however, is criticized in the literature for several reasons. A few examples are the characteristics of decision-taking processes that lead to actual use of services are not incorporated and the characteristics of the social-psychological processes involved in the perception, evaluation and response towards health are missing.[17] In our opinion, the health professionals' point of view is quite robustly involved in the Andersen-model. Another way of reporting results could start from the individual patient's point of view. Also, reporting results through the processing of variables does not render an account of the individuals' behaviour. It explains what is happening, not why the patient chooses to behave in the way he does.

The processing of the results into the Andersen-model did lead to some difficulties. (1) The subject heading 'provider characteristics' is specified unsatisfactorily. In our opinion, the provider characteristics should be incorporated in the population characteristics. In that way the provider is more clearly a subject of investigation. (2) Some variables of the subject heading 'community enabling resources' double up as some variables of the health care system components (e.g. distribution). Availability of health personnel and facilities is stated to be a variable of 'community enabling resources' whereas it is also a component of the health care system resources, i.e. distribution. (3) Presentation of some results under the subject headings of the Andersen-model seems arbitrary. The consumerist approach, for example, clearly is associated with the health care system. The consumerist approach by itself is dispassionate to the patient, but the attitude of the provider that applies that approach does not have to be dispassionate. Here the question arises, if this barrier should be presented under barriers at system level or at provider level. This question is one of the many examples that can be given. The fact that some placements do seem arbitrary does not affect the quality of the results. The arbitrary placement does not change the content of what is stated. However, the reader should be warned and should interpret the placements with some reservation.

Barriers and their consequences for daily practice

Universality and specificity. Many of the barriers are 'universal' problems that can afflict all of us. Long waiting lists, for example, hinder all patients from using the services that they are entitled to. Potential barriers only afflict us under certain circumstances or only afflict some of us, mostly the socioeconomic vulnerable ones. As we have seen, a barrier that can only afflict us under certain circumstances is for instance irregular public transport. If there is no need to use the public transport, irregular public transport does not act as a barrier (e.g. to car owners). If public transport is needed, irregular public transport acts as a barrier. A barrier that only afflicts some of us is for instance, health insurance coverage. For the socioeconomic vulnerable ones, the price of health services can act as a barrier, if a health service is not covered by their health insurance or is only partly reimbursed. The group of socioeconomic vulnerable ones exists of members of the ethnic majority and ethnic minorities. Ethnic minorities are often part of the most vulnerable category due to their lower educational, social and socioeconomic status, and due to lower income and lack of financial means. Potential barriers may have a greater impact on ethnic minorities, because they are alien to most of the barriers. They may lack knowledge about the existing health services and how to use them. In addiction, medical costs, for example, can be higher for immigrants who are not yet entitled to subsidies for benefits during their first 2 years of residence.[38]

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Ethnic minority specificity. As we have seen, some potential barriers only afflict ethnic minority patients. They only afflict these patients as they relate to their cultural attributes and explanatory models, as e.g. the view that illness is caused by an act of God or nature.[28] Indeed, there also exist 'cultural' differences and differences in explanatory models between patients and providers that share the same cultural background. Frequently stated causes are the patient–provider difference in social class, education, gender identification or generation. These potential barriers between two ostensible members of the 'same' culture can be also caused by difference in clinical reality. The clinical reality of the patient consists of the layman's perception of illness, which is a subjective certainty. This reality may differ from the clinical reality of the physician, which consists of the professional evaluation of illness, which is an objective certainty.[65,66] The difference in ethnic norms and values between an ethnic minority patient and a provider of the ethnic majority is superseded to the 'normal' difference in clinical reality between a patient and a provider that share the same ethnic norms and values.

Situation specificity. Barriers can only be understood in reference to the specific situations individual patients find themselves in. However, the reviewed studies were performed within contexts that differed enormously. In some countries, for example, the health care system uses a referral system, in other countries the health care system does not. Ethnic minority patients may see health care as something of a luxury rather than the necessity that we consider it to be. In that case the use of a gatekeeper, who must refer to all other more specialized forms of services, is seen as a barrier. Also the waiting list for appointments creates barriers, as we have come to describe it. Thus, it is important to consider the specific context we are dealing with when identifying barriers to the use of health services.

Patient and time specificity. We can see that not only do the circumstances differ enormously; but ethnic minority patients differ considerably too. Even when the motives for migration and the immigrants' expectations of the receiving country are similar, there may be discernable differences in their approach to a given situation. Personal attributes such as the geographical region people are coming from, the size of their family, their marital status, standard of education, occupation and social class, are all factors that can seriously influence the eventual outcome. These factors influence a person's ability to deal with health problems and as such with illness. At the same time it must be understood that the ideas of ethnic minority patients and their evaluations of medical experiences are indeed subject to constant adjustment through the changes of social situations, medical settings or because of personal medical experiences.[36,52] Consequently, even the barriers that prevent them from using health services may also change.

Conclusion

This review has the goal of raising awareness about the myriad of potential barriers, so that the problem of barriers to health care for different ethnic minorities becomes transparent. In conclusion, there are many different potential barriers of which some are tied to ethnic minorities. The barriers are all tied to the particular situation of the individual patient and subject to constant adjustment. In other words, generalizations should not be made.

Limitation

There are limits to this review. Firstly, the review presents only journal articles. This is the result of the search strategy. Therefore, materials published in books and reports that do not appear in Medline searches are not included. Secondly, the authors of this article do not belong to an ethnic minority group, as are the majority of the authors of the articles under review. The results are thus interpreted from a western perspective. Authors of ethnic minorities may hold different views. Having a western background leads us to certain ideas about health care provision; the referral system, for example, is valued as an asset to the health care system. Having a non-western background (may) lead to having other ideas about health care provision; the use of a referral system, for example, may be valued as a barrier. This difference in opinion due to difference in cultural background may affect the interpretation of results.

Further research

There is a need for further research. On one hand there is a need for qualitative case studies to be commissioned; studies that contextualize the content of the patient–provider interaction to account for the development of barriers. Conversely, there is a need for quantitative research; studies that determine whether a potential barrier realizes its full potential. Or, whether a potential barrier remains exactly that and therefore does not adversely affect the (ethnic minority) patient after all.

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Appendix

The databases were searched using keywords that covered the domain 'health services', the domain 'use' (of health services) and the domain 'ethnic minorities'. The $ sign is used as the truncation symbol to replace one or more letters.

The keywords of the domain 'heath services' are Health services, Health care, Medical care, Rehabilitation, Rehabilitation medicine, Multi-disciplinary treatment.

The keywords of the domain 'use' (of health services) are Use, Utiliz$, Medical consum$, Acces$, Barrier, Hindrance, Obstacle, Exclusio$, Discrimina$, Compliance, Satisfact$.

The keywords of the domain 'ethnic minorities' are Ethni$, Minori$, Migran$, Immigran$.

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