

# Cultural barriers encountered by Norwegian community pharmacists in providing service to non-Western immigrant patients

Helle Håkonsen · Karine Lees · Else-Lydia Toverud

Received: 14 March 2014 / Accepted: 19 August 2014 / Published online: 4 September 2014  
© Koninklijke Nederlandse Maatschappij ter bevordering der Pharmacie 2014

**Abstract** *Background* Western societies' need for knowledge about how to meet the challenges in health care following increased immigration has emerged as studies have showed that non-Western immigrants tend to experience more obstacles to drug use and poorer communication with health professionals. *Objectives* To identify the cultural barriers encountered by Norwegian community pharmacists in providing service to non-Western immigrant patients and to outline how they are being addressed. *Setting* Community pharmacies in Oslo, Norway. *Methods* A qualitative study consisting of four focus groups was conducted. In total 19 ethnic Norwegian pharmacists (17 female and 2 male; mean age: 40.6 years) participated. They were recruited from 13 pharmacies situated in areas of Oslo densely populated by non-Western immigrants. The audio-records of the focus group discussions were transcribed verbatim. A thematic content analysis was conducted. *Main outcome measure* Cultural barriers identified by Norwegian community pharmacists in the encounter with non-Western immigrants. *Results* All the pharmacists were in contact with non-Western immigrant patients on a daily basis. They said that they found it challenging to provide adequate service to these patients, and that the presence of language as well as other cultural barriers not only affected what the patients got out of the available information, but also to a great extent what kind of and how much information was provided. Although the pharmacists felt that immigrant patients were in great need of drug counselling, there were large disparities in

how much effort was exerted in order to provide this service. They were all uncomfortable with situations where family or friends acted as interpreters, especially children. Otherwise, cultural barriers were related to differences in body language and clothing which they thought distracted the communication. All the pharmacists stated that they had patients asking about the content of pork gelatin in medicines, but few said that they habitually notified the patients of this unless they were asked directly. Ramadan fasting was not identified as a subject during drug counselling. *Conclusion* This focus group study shows that language and other cultural barriers, including differences in body language, non-Western gender roles, and all-covering garments, are of great concern for ethnic Norwegian community pharmacists in the encounter with non-Western immigrant patients. Although the pharmacists recognise their role as drug information providers for immigrant patients, large disparities were detected with respect to kind of and amount of information provided to these patients.

**Keywords** Cultural barriers · Ethnicity · Immigrant · Language problems · Medicine use · Pharmacy

## Impact on pharmacy practice

- Although community pharmacists realise that immigrant patients are in great need of drug counselling, there are large disparities in how much effort is put into it in practice.
- Community pharmacists need to be more aware of the patients' cultural barriers as well as their own, in order to provide more adequate services to immigrant patients.

H. Håkonsen (✉) · K. Lees · E.-L. Toverud  
Department of Social Pharmacy, School of Pharmacy, University of Oslo, Blindern, P.O. Box 1068, 0316 Oslo, Norway  
e-mail: helle.hakonsen@farmasi.uio.no

- Pharmacists should learn that the challenges they experience are not necessarily solved by other health personnel groups who may encounter similar barriers.
- Oral and written tools should be developed and tested in order to overcome the language barriers in counselling in community pharmacy in Norway.

## Introduction

The immigrant population of Norway has increased more than tenfold since the 1970s and constitutes currently 12 % of the country's population [1]. Half of the immigrants originate from countries outside Europe, of which the largest group comes from Pakistan, followed by Somalia, Iraq, and Vietnam.

A multicultural population leads to a broad spectrum of medical conditions and incites inequalities in the need for health care services as well as medication beliefs and health care system expectations [2–6]. Elevated risk of chronic diseases and thereby increased morbidity and mortality for certain ethnic minority groups are well documented in Western countries [7–9]. Norway is no exception [10–13], and in the case of for instance type 2 diabetes, which has received much attention in the literature, Syed et al. [10] have shown that the overall prevalence is almost five times higher in Pakistani immigrants when compared to the majority population. After adjusting for factors such as physical activity, education, body height, and fertility among women, Jenum et al. [14] found that the chance of having diabetes is six times higher in South Asian women and two times higher in South Asian men when compared with Western inhabitants of Oslo. Studies have also shown that ethnic minority patients achieve treatment goals less frequently than ethnic Norwegians in spite of regular contact with the health care system, being prescribed a high number of drugs, and the fact that chronic diseases tend to affect younger patients in this group [15, 16].

Besides the existence of genetic and physiologic variations across ethnic groups, health disparities can occur due to barriers with respect to the use of health care services including culturally insensitive health care providers and systems [17]. Research from general practice suggests that different cultural backgrounds influence the interaction between physicians and patients [18–21]. Ethnic minority patients without ethnic concordant physicians report less satisfaction with received care compared with patients with the same background as the physician [18–20]. It also seems that they are less likely to take part in medical decision making [21] and be adherent to prescribed therapy [6].

For a variety of reasons poor adherence remains to be a major obstacle in drug therapy [22, 23]. As Norway is

developing into a more multicultural diverse society, new challenges have started to be explored related to cultural views and traditions which may impact on adherence (e.g. religious fast and prohibition of certain drug excipients) [15]. Even though generic substitution is recognised as a challenge for drug adherence in the general population [22], additional mistrust in the quality of generic drugs is reinforced by experiences with counterfeit drugs in the emigration country [12].

Recent research shows that suboptimal care is also encountered in community pharmacies [24–26]. In Denmark, community pharmacy staff reported poorer counselling of immigrant customers [25]. Although the pharmacy staff is obligated to give adequate information to patients who purchase remedies over-the-counter (OTC), collect their prescriptions, or have general health enquiries such as counselling in cases of chronic diseases, about one-third of the staff admitted that they had refrained from counselling immigrant customers [25]. This is in accordance with the experience of chronically ill Pakistani immigrants living in Norway who reported that they often were dispensed drugs without any given information except what was written on the package label [15]. Furthermore, the study showed how common it is for immigrant patients, especially among women and in general among patients with low educational levels, to bring family members along to facilitate communication and to have a preference for pharmacists sharing their cultural background [15].

## Aim of the study

To identify the cultural barriers encountered by Norwegian community pharmacists in providing service to non-Western immigrant patients and to outline how they are being addressed by using a focus group methodology.

## Method

### Study population

The study population consisted of 19 ethnic Norwegian pharmacists recruited from 13 pharmacies situated in areas of Oslo with the highest density of non-Western immigrants. There were 17 female and 2 male participants in the age range 25–66 years (mean: 40.6 years). Their experience with pharmacy work varied from 0.5 to 45 years (mean: 14.2 years).

### Study design

Following formal consent from the three major pharmacy chains in Norway, managing pharmacists in eligible

pharmacies were contacted about the study and asked for permission to recruit one or two of their dispensing pharmacists. Potential participants then received a letter of invitation and a short oral presentation before they decided whether they would take part or not. For those who agreed, the time and place for the focus group was arranged. Pharmacies and pharmacists were recruited until saturation was considered to have been achieved.

All participants signed a statement of informed consent and filled in a brief questionnaire form about their background (gender, age, work experience (years) in a community pharmacy) upon arrival at the focus group venue. Four focus groups consisting of three to six persons were conducted during January and February 2012. The group interviews were audio-taped; each lasted between one and one and a half hours. All focus groups were led by the same moderator with an assistant moderator present to observe and take notes. An interview guide was developed based on topics previously identified in personal interviews with non-Western immigrants [12, 15] and structured according to e.g. Wibeck et al. [27] It was followed by the moderator to guide the discussion and probe for responses. All participants were encouraged to speak when they had something to say about the topic discussed. The main topics in the interview guide were:

- (1) Which ethnic immigrant groups the pharmacists most often meet at work,
- (2) Perceived drug utilisation and beliefs about medical therapy among the immigrants they meet,
- (3) The pharmacists' view on their role as drug information providers for immigrant patients, and
- (4) Special challenges in the counselling of immigrant patients (e.g. language and other cultural barriers) and how these are addressed

A pilot study was conducted. As no essential changes were made in the interview guide or how the focus groups were led, the pilot was included in the study. The study protocol was approved by the Norwegian Social Science Data Services. Approval from the Regional Committee for Medical and Health Research Ethics was not required.

#### Data analysis

The audio-records of the focus group discussions were transcribed verbatim before a thematic content analysis was conducted. The topics from the interview guide formed the basis of the coding framework which was further developed through iterative reading of the transcripts and identification of emerging themes (Table 1). All authors were involved in the process. The results are exemplified consecutively by quotes that were typical for the discussion and describe what were generally agreed by most participants.

**Table 1** Coding framework—main topics and emerging themes

| Main topic  | Emerging theme  |
|---|---|
| (1) Immigrant patients in Oslo pharmacies   | What is perceived by the term 'immigrant'<br>Who are the immigrant patients encountered in the pharmacy   |
| (2) Perceived drug utilisation and beliefs about medical therapy among immigrants                   | OTC drugs (efficacy; availability; antibiotics; analgesics)<br>Prescription drugs (disease prevalence; antidiabetics; cardiovascular agents; generic substitution; reimbursement)   |
| (3) Perceptions of the pharmacists' role as drug information providers for immigrant patients       | Information needed versus information given<br>Pharmacists' responsibilities versus physicians'<br>Personal motivation  |
| (4) Special challenging topics in the counselling of immigrant patients and how these are addressed | Language barriers (language (in) proficiency; illiteracy; translation; helpful means)<br>Cultural barriers (non-verbal communication; traditional garments; gender roles; pork gelatin as a drug excipient; Ramadan fast) |

#### Results

At the beginning of each focus group the perception of the term 'immigrant' was discussed to establish a common ground. The participants were told not to consider immigrants from any North-European country due to the ethnical as well as the health care and societal similarities. The pharmacists explained that when they used the term 'immigrant' they referred to persons from non-Western countries, and primarily from Pakistan, Somalia, Vietnam, India, Sri Lanka, Iran, and Iraq. All the pharmacists reported to be in contact with such immigrant patients on a daily basis.

#### Perceived drug utilisation and beliefs about drug therapy among immigrants

The participants had the general impression that the drug utilisation of immigrants is high both with respect to prescription and non-prescription drugs. It was a common experience that non-Western immigrants had high expectations of the drug therapy in a Western country, e.g. as one of the pharmacists explained: "*When they buy medicines, they're very preoccupied about an instant effect. It can be very challenging sometimes to explain that we do not have any such thing.*" The pharmacists agreed that many of these customers expect a wider selection of products sold

OTC than what is allowed in Norway (e.g. antibiotics), and that they are generally eager to use drugs also for minor conditions. A high consumption of analgesics, paracetamol in particular, often to small children with mild symptoms and/or unclear diagnosis was also reported.

In all the focus groups participants mentioned that they often encountered chronically ill immigrants who came to the pharmacy with what was described as “huge piles of prescriptions.” The use of antidiabetics was especially mentioned. The pharmacists were concerned about the high diabetes prevalence among South Asians, which was also notable in the younger age groups. Cardiovascular disease was also mentioned often, as the following quote illustrates: “*All the overweight women have diabetes and cardiovascular diseases. I think we have so much of it. And very young ones, too.*”

Participants in two focus groups talked about immigrants whom they suspected of sending drugs and medical equipment to family members in their native countries presumably due to Norway’s favourable reimbursement system. The reimbursement system was perceived as a delicate topic to explain to immigrant patients. A lot of frustration was aired regarding how to explain what expenses the National Insurance reimburses and what the patients themselves have to pay. Several said the following: “*When they can’t get the medicine for free, they say: ‘No, I live in Norway, free medicine, free, free, free.’*”

Generic substitution was another iterative theme. Most participants experienced that patients from non-Western countries associate cheaper generics with poorer quality, as one of them explained: “*When I explain that the medicine is cheaper, it’s often taken very negatively because cheaper medicine implies poorer medicine. I have the impression that very many want the most expensive. Because most expensive is automatically the best. That is perhaps how they’re used to regard generics in their home country.*” Five pharmacists pointed out that many immigrants were under the impression that they were being offered something cheap because they did not have the financial means to pay for the “proper” product. The pharmacists thought that the patients experienced this as an insult.

#### Language barriers

Language problems were unanimously reported as the main challenge in the counselling of immigrants. A majority of the pharmacists explicitly stated that they deliberately provided sparse drug information to patients who did not speak Norwegian. They would only inform the patients of the basics, even in instances where the pharmacists were aware of the patient’s lack of essential drug information. It was said to be easy to disclaim responsibility and count on the physician: “*I rather think about*

*trying to (contribute) to appropriate drug use than starting to get into issues such as side effects etc. I think I give up before that and just hope that the physician has gone through those things,*” or, as another explained: “*Some just tell them to go to the physician because it’s easier.*”

This did not only occur in situations where the immigrant patients have been living in Norway for a short period of time. One pharmacist told about an old couple who have been regularly visiting the pharmacy for many years: “*We have a couple I think it’s very difficult to communicate with. They do not speak (Norwegian) at all. (...) I think it should be the physician’s responsibility. I almost close my eyes and ears. What am I to do? I keep thinking that they must have talked with the physician. He must have explained how to use the medicines, what they are used for, and so on. I just dispense the drugs and say nothing.*”

Several pharmacists feared that patients with language problems did not receive sufficient information at the physician’s office either. They often felt unsure whether the patients understood the given information and were concerned that the patients might have been using the drugs incorrectly: “*They come to us and ask: ‘Why? What is this medicine for?’. Sometimes we ask: ‘Why did you go to the physician?’, ‘I don’t know’. Of course they know, I keep thinking, but they don’t know how to say it. (...) I might say that it’s usually used for this and that.*” Most participants said that they could give up if such problems occurred: “*The most difficult, I think, is when they say: ‘Yes, I understand’, and it does not seem like they understand at all. My personal challenge is not to give up. It’s so easy to think: ‘Okay, it’s their responsibility when they get home.’*”

Illiteracy was also mentioned. Although it was seldom spoken about in the pharmacy, the participants suspected that there are many illiterates. The pharmacists sometimes gave out written information or referred to the instructions written on the package without knowing if it would be understood. One participant said something while the others nodded in recognition: “*It’s a bit scary to think: ‘Oh yes, let us just give them some brochures’. And then they don’t feel like telling us that they don’t understand what’s written. I have hardly experienced that someone has told me that they cannot read.*”

Situations where immigrants brought family members or friends to the pharmacy for translational purposes were eagerly discussed. Most of the participants found it unpleasant to impart drug and health related information through non-professional interpreters. Especially in the case of child interpreters, the participants said that they doubted their abilities to pass on the information correctly, and that they usually only provided minimal information in order to spare the child of sensitive issues: “*I notice with myself that I treat them differently. (...) If a child is acting as an interpreter, or a man, I don’t manage to give the*

*general advices.*” This was considered an even bigger problem when children were sent alone to redeem the parents’ prescriptions. The pharmacists were also asked to provide drug counselling via the phone on some occasions. This was recognised as a valuable opportunity to provide information to the patient although this exercise did not always prove to be fruitful since the person at the receiving end would not always speak Norwegian fluently or in an understandable way. Three of the younger pharmacists made use of “Google translate,” but the usefulness of this service was disputed.

One focus group called for a medicine information phone service for immigrants and another asked for multilingual brochures that have previously been available in pharmacies.

#### Other cultural barriers

The participants emphasised that communicational barriers were not exclusively of verbal character. They discussed how different cultural backgrounds influenced the ways they would express themselves. This was recognised as a reason for misunderstandings: *“We know that they might have a bit different pitch on their voice and body language than us. (...) They may sound angry although they’re not. There are probably very many misunderstandings because of our body language as well.”*

The traditional Muslim garments were said to hamper communication. A couple of pharmacists were reluctant to communicate with women wearing a burqa and sometimes asked them to show their faces. Two focus groups pointed to the fact that male immigrants would take charge of the communication on behalf of their spouses: *“It’s obvious that the man takes care of business in a way. Although the medication is for his wife, it’s obvious that we’re supposed to talk to the man. If we talk to the wife, the husband interferes. It’s a bit... I get a bit, almost provoked because it should not be like that.”* A male pharmacist expressed his concerns with serving female immigrants since he was afraid that he would be misunderstood when trying to be nice: *“I think, as a man, you’re worried they’ll take it the wrong way. I don’t know. You get perhaps a bit more reserved and cautious.”*

All the pharmacists revealed that they had customers asking about the content of pork gelatin in capsules, but few said that they had the habit of notifying the patients of this unless asked directly. They had mixed feelings about this issue, as one participant wondered: *“Is this a professional question? I’m a bit like... trying not to spend too much energy on religious issues. ‘Okay, medically, it’s like this and that. If you have religious problems with that, you have to talk to your Imam.’”* Some participants said that they found it difficult to know what to say and to whom

since they were afraid of exerting undue pressure on or causing feelings of guilt in the patients. It was recognised that persons with the same religion could have different views on what is important, as this quote points to: *“You don’t know the person. All Muslims have an opinion of what’s important, what makes you a Muslim. Some think gelatin is horrible; others think gelatin in medicines is okay. I don’t give any information if they don’t ask me.”* Participants from a couple of pharmacies told that they had put up notices above the shelves telling if a product was “halal approved” and found this very helpful.

It was further discussed whether or not certain religions, e.g. Islam, requisite fasting also in patients with medical conditions: *“Often my (Muslim) colleagues try to say that if you’re ill, you have to take your medication. It says so in the Koran. But they don’t agree. Because the less you swallow during the fast, the better Muslim they believe you are. They would rather be an ill and good Muslim than a healthy and not so good one.”* Only a few had discussed changes in prescribed medicine regimens due to a religious fast with Muslim patients. The remaining majority claimed that they never got any questions regarding drug use during Ramadan and thought that *“if they come to the pharmacy to collect their medicine, I presume they’ll take it.”*

#### Discussion

The present study shows that ethnic Norwegian community pharmacists in areas of Oslo with high numbers of non-Western immigrants find it challenging to provide adequate service to these patients. The results indicate that the presence of language as well as other cultural barriers not only affect what the patients get out of the available information, but also to a great extent what kind of and how much information is given to them. Although the pharmacists felt that immigrant patients are in great need of drug counselling, large disparities were exposed in how much effort is put into it.

The current findings correspond well with previous studies where immigrant patients (from the same areas of Oslo) report receiving sparse information, if any, at the pharmacy counter [12, 15]. Alarmingly, the pharmacists counted to a high extent on the physicians to tell the patients what is important. Even if there was a long-term personal record in the pharmacy, the pharmacists could experience that the patient was unable to understand the given information or express the need for help. At the same time, it was revealed that sometimes the pharmacists themselves made only slight attempts to communicate if such problems occurred. The use of non-professional interpreters was not appreciated due to the pharmacists’ fear that the interpreter especially in the case of under-aged

children lacked the necessary skills to fully communicate the message. This was also perceived as problematic when the information to be provided consisted of sensitive topics. The lack of public interpreter services for use in community pharmacies is a dilemma since Norwegian regulations do not allow the use of unskilled persons to act as interpreters. This is in contrast to GP or hospital services where professional interpreters may be requisitioned.

As the focus group discussions in the present study evolved, frustration due to other cultural barriers came to surface. The participants spoke about how different body language, non-Western gender roles, and all-covering garments could hamper the communication. However, their concerns for the influence of religious issues on drug use were mixed and had to do with practical issues related to whether or not they should know if any product excipients (e.g. gelatin from pork) were prohibited for religious purposes. Essentially, they were apprehensive about engaging in what they considered as non-professional matters and they had not reflected on drug non-adherence during religious fast. This is a matter of concern since it is common among many Muslims to alter the drug therapy during Ramadan [15, 28]. Although some patients report that their condition is getting worse during the fast, there is also a general view that it contributes to improved well-being which according to the patients themselves is due to physiological (less sugary food), social (Ramadan is a pleasant event) and religious aspects (a blessing from God) [28]. It seems, however, that fasting is seldom a topic for discussion with health professionals [15, 28].

However, it is important for health care professionals to recognise the need for such discussions. In a comprehensive review of potential barriers to the use of health care services, Scheppers et al. [17] pointed out that a strict paradigm based on biomedical explanatory models for health and illness can act as a barrier for the use of health care services for patients who rely to a high extent on religion and other cultural traditions for the good of their health. Furthermore, different ethnic minority groups may have their own perceptions and ways of presenting symptoms which can make it challenging to arrive at a correct diagnosis and provide appropriate counselling [9]. There are different perceptions of what constitutes or leads to the symptoms as well as their severity, in particular when it comes to parents' perception of symptoms in young children. In the present study, it was thought that parents with a non-Western background were perhaps too eager to seek urgent help even for mild symptoms.

The present study underpins a pronounced need for community pharmacists to be more aware of the importance of achieving a certain level of mutual understanding with ethnic minority patients. Similar results from Denmark show that the pharmacy staff almost twice as often

experiences lack of understanding by non-Western immigrants compared with ethnic Danes [25]. In an American study by Bradshaw et al. [29], almost half of the pharmacy personnel surveyed were dissatisfied with the communication they had with patients with limited skills in the English language. The importance of employing multicultural staff was emphasised in order to overcome these language barriers [29]. However, we argue that to combat cultural barriers in general the focus should be on how to increase the cultural sensitivity among pharmacists. It is of increasing relevance for pharmacists to be aware of the diversity in cultural practices exercised by different ethnic groups (and that these also tend to vary within groups) [17], especially since many ethnic minorities already belong to the most vulnerable patient groups [10, 11, 14, 17, 21, 26]. It is also important for pharmacists to realise that the challenges they experience are not necessarily solved by other health personnel groups who may encounter similar barriers.

#### Groups under study

The terms 'ethnic minority' and 'immigrant' are broadly used in this article. In a generalisable way, these terms refer to all groups of non-ethnic Norwegians except North-Europeans who were initially excluded from the discussion due to the similarity of the health care systems and cultural resemblance. In the present study it is referred to non-Western immigrants, primarily from Pakistan, Somalia, Vietnam, India, Sri Lanka, Iran, and Iraq. Notwithstanding, the term refers to many different ethnic groups which vary widely with respect to origin, reason for migration, how long they have resided in the country, degree of acculturation, socioeconomic status etc. Therefore, the way the pharmacists refer to 'ethnic minorities' and 'immigrants' in these focus groups is a crude generalisation of the diversity of ethnicity in the Norwegian society. We also acknowledge that various cultures may exist within one ethnic group.

To use focus groups as a method was considered most advantageous since ethnicity and immigration may be regarded as sensitive topics. The intention of using this method was also that the participants could talk freely about their experiences and thoughts about the given topic, that they could jointly lead each other into the discussion and in that way address the topic from different angles. It was not considered to be less fruitful discussions in groups held with three participants compared to the larger groups. On the contrary, with groups of six it was more challenging to make everyone participate actively at the same level. This is considered a frequent challenge in focus groups [30]. In the current study, this was more or less solved by asking direct questions to participants who tended to fall

out of the discussion. None of the groups were dominated by any of the participants, which may often be the case. Since the participants in this study shared the same professional background and some were working in the same areas of Oslo, it happened that somebody knew each other. This did not seem to hamper the discussion; it seemed rather to contribute to an even more open and honest discussion.

At the completion of the fourth planned focus group, no new issues had been identified and no more focus groups were needed.

## Conclusion

This focus group study shows that language and other cultural barriers, including differences in body language, non-Western gender roles, and all-covering garments, are of great concern to ethnic Norwegian pharmacists in the encounter with non-Western immigrant patients in community pharmacies. Although the pharmacists recognise their role as drug information providers for immigrant patients, large disparities seem to exist with respect to the kind of and amount of information provided to these patients. The pharmacists were apprehensive about engaging in what they considered as non-professional matters related to religious aspects and had scarce reflections on drug non-adherence during religious fast.

**Acknowledgments** The authors would like to thank the pharmacists who participated in the study.

**Funding** Financial support was given by the Norwegian Pharmaceutical Society.

**Conflicts of interest** None.

## References

1. Statistics Norway. Immigrants and Norwegian-born to immigrant parents. 1 January 2013. <http://ssb.no/en/befolkning/statistikker/innvbf>. Accessed 12 Mar 2014.
2. Horne R, Graupner L, Frost S, Weinman J, Wright SM, Hankins M. Medicine in a multi-cultural society: the effect of cultural background on beliefs about medications. *Soc Sci Med*. 2004;59(6):1307–13.
3. Kumar K, Gordon C, Toescu V, et al. Beliefs about medicines in patients with rheumatoid arthritis and systemic lupus erythematosus: a comparison between patients of South Asian and White British origin. *Rheumatology (Oxford)*. 2008;47(5):690–7.
4. Lawton J, Ahmad N, Hallowell N, Hanna L, Douglas M. Perceptions and experiences of taking oral hypoglycaemic agents among people of Pakistani and Indian origin: qualitative study. *BMJ*. 2005;330(7502):1247.
5. Lip GY, Khan H, Bhatnagar A, et al. Ethnic differences in patient perceptions of heart failure and treatment: the West Birmingham heart failure project. *Heart*. 2004;90(9):1016–9.
6. van Wieringen JC, Harmsen JA, Bruijnzeels MA. Intercultural communication in general practice. *Eur J Public Health*. 2002;12(1):63–8.
7. Bleich SN, Jarlenski MP, Bell CN, LaVeist TA. Health inequalities: trends, progress, and policy. *Annu Rev Public Health*. 2012;33:7–40.
8. Hawthorne K, Robles Y, Cannings-John R, Edwards AG. Culturally appropriate health education for Type 2 diabetes in ethnic minority groups: a systematic and narrative review of randomized controlled trials. *Diabet Med*. 2010;27(6):613–23.
9. Smith GD, Chaturvedi N, Harding S, Nazroo J, Williams R. Ethnic inequalities in health: a review of UK epidemiological evidence. *Crit Public Health*. 2000;10(4):375–408.
10. Syed HR, Dalgard OS, Hussain A, Dalen I, Claussen B, Ahlberg NL. Inequalities in health: a comparative study between ethnic Norwegians and Pakistanis in Oslo, Norway. *Int J Equity Health*. 2006;29(5):7.
11. Tran AT, Straand J, Diep LM, Meyer HE, Birkeland KI, Jenum AK. Cardiovascular disease by diabetes status in five ethnic minority groups compared to ethnic Norwegians. *BMC Public Health*. 2011;11:554.
12. Håkonsen H, Toverud EL. Special challenges for drug adherence following generic substitution in Pakistani immigrants living in Norway. *Eur J Clin Pharmacol*. 2011;67(2):193–201.
13. Rabanal KS, Lindman AS, Selmer RM, Aamodt G. Ethnic differences in risk factors and total risk of cardiovascular disease based on the Norwegian CONOR study. *Eur J Prev Cardiol*. 2013;20(6):1013–21.
14. Jenum AK, Holme I, Graff-Iversen S, Birkeland KI. Ethnicity and sex are strong determinants of diabetes in an urban Western society: implications for prevention. *Diabetologia*. 2005;48(3):435–9.
15. Håkonsen H, Toverud EL. Cultural influences on medicine use among first-generation Pakistani immigrants in Norway. *Eur J Clin Pharmacol*. 2012;68(2):171–8.
16. Tran AT, Diep LM, Cooper JG, et al. Quality of care for patients with type 2 diabetes in general practice according to patients' ethnic background: a cross-sectional study from Oslo, Norway. *BMC Health Serv Res*. 2010;28(10):145.
17. Scheppers E, van Dongen E, Dekker J, Geertzen J, Dekker J. Potential barriers to the use of health services among ethnic minorities: a review. *Fam Pract*. 2006;23(3):325–48.
18. Murray-García JL, Selby JV, Schmittiel J, Grumbach K, Quisenberry CPJ. Racial and ethnic differences in a patient survey: patients' values, ratings, and reports regarding physician primary care performance in a large health maintenance organization. *Med Care*. 2000;38(3):300–10.
19. Tucker CM, Herman KC, Pedersen TR, Higley B, Montrichard M, Ivery P. Cultural sensitivity in physician-patient relationships: perspectives of an ethnically diverse sample of low-income primary care patients. *Med Care*. 2003;41(7):859–70.
20. Harmsen JA, Bernsen RM, Bruijnzeels MA, Meeuwesen L. Patients' evaluation of quality of care in general practice: what are the cultural and linguistic barriers? *Patient Educ Couns*. 2008;72(1):155–62.
21. Ferguson WJ, Candib LM. Culture, language, and the doctor-patient relationship. *Fam Med*. 2002;34(5):353–61.
22. Håkonsen H, Eilertsen M, Borge H, Toverud EL. Generic substitution: additional challenge for adherence in hypertensive patients? *Curr Med Res Opin*. 2009;25(10):2515–21.
23. Hov I, Bjartnes M, Slørdal L, Spigset O. Are drugs taken as prescribed? *Tidsskr Nor Laegeforen*. 2012;132(4):418–22.
24. Cleland JA, Watson MC, Walker L, Denison A, Vanes N, Moffat M. Community pharmacists' perceptions of barriers to communication with migrants. *Int J Pharm Pract*. 2012;20(3):148–54.
25. Mygind A, Espersen S, Nørgaard LS, Traulsen JM. Encounters with immigrant customers: perspectives of Danish community

- pharmacy staff on challenges and solutions. *Int J Pharm Pract.* 2013;21(3):139–50.
26. Young HN, Dilworth TJ, Mott DA, Cox ED, Moreno MA, Brown RL. Pharmacists' provision of information to Spanish-speaking patients: a social cognitive approach. *Res Social Adm Pharm.* 2013;9(1):4–12.
  27. Wibeck V. Fokusgrupper: om fokuserade gruppintervjuer som undersökningsmetod. 2nd ed. Lund: Studentlitteratur; 2011.
  28. Mygind A, Kristiansen M, Wittrup I, Nørgaard LS. Patient perspectives on type 2 diabetes and medicine use during Ramadan among Pakistanis in Denmark. *Int J Clin Pharm.* 2013;35(2):281–8.
  29. Bradshaw M, Tomany-Korman S, Flores G. Language barriers to prescriptions for patients with limited English proficiency: a survey of pharmacies. *Pediatrics.* 2007;120(2):e225–35.
  30. Halcomb EJ, Gholizadeh L, DiGiacomo M, Phillips J, Davidson PM. Literature review: considerations in undertaking focus group research with culturally and linguistically diverse groups. *J Clin Nurs.* 2007;16(6):1000–11.