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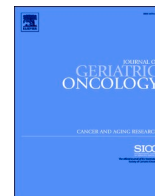
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Research Paper

Caring for older culturally and linguistically diverse patients with Cancer: Healthcare Providers' perceived barriers to communication

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ABSTRACT

Background: Due to various socio-cultural and language related factors, healthcare providers experience barriers when communicating with older culturally and linguistically diverse (CALD) patients with cancer, which can lower the quality of care received by patients and negatively impact healthcare providers. Studies focusing on communication barriers of older CALD patients with cancer and a systematic comparison of those barriers between different healthcare providers have been largely missing.

Objectives: In order to lay out the healthcare providers' perceived barriers to communication, the present study identified and compared communication barriers among different healthcare providers when caring for older CALD patients with cancer.

Methods: An online survey was conducted among healthcare providers in the Netherlands who identified as being involved in the care of CALD patients with cancer ($N = 191$), specifically; GPs ($N_{GPs} = 54$), specialists ($N_{Specialists} = 29$), oncology nurses ($N_{nurses} = 77$), and pharmacists ($N_{pharmacists} = 31$). Providers assessed twelve pre-specified factors on (i) importance and (ii) frequency of these factors as barriers to communication. A composite score by employing the QUOTE (Quality Of care Through the patients' Eyes) methodology was used to rank, and classify factors as either potential or influential barriers.

Results and conclusion: Overall, low Dutch language proficiency of older CALD patients with cancer, family interpreters providing inadequate translations, not knowing the extent of patients' informational needs, cultural differences in views about healthcare (i.e., illnesses and treatments) and family members blocking communication were found to be influential communication barriers. Healthcare providers showed several differences in what they perceived to be a potential or an influential barrier: Cultural differences in views about healthcare and patients getting treatment in their home countries were important barriers for GPs, while not knowing the patient's contact person was for pharmacists. Nurses perceived the highest number of influential barriers, while specialists perceived the least. We conclude that specific interventions that address differences in perceived barriers among providers are needed, and we highlight potential interventions that involve digital communication tools, such as the Conversation Starter.

1. Background

Due to adoption of Western lifestyles and aging populations, older culturally and linguistically diverse (CALD) patients' need for oncological healthcare is rising [1–4]. Caring for CALD patients is a complex process whereby a combination of language, sociocultural and age

related factors may cause serious communication barriers between patients and providers [5–8]. Identifying and addressing communication barriers between older CALD patients with cancer and healthcare providers is crucial to improve oncological care as these barriers may lower patient satisfaction and quality of care and cause challenging consultations for providers [9–10].

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Specifically, due to language barriers, healthcare providers may treat CALD patients differently by providing them with less information and omitting them from shared decision-making [11]. This in turn may impact the level of patients' engagement in healthcare, lower their confidence in managing their own health and limit the amount of information they receive [12–13]. Further, patients may feel they are being stereotyped and mistrust their providers [14,15]. Cultural differences between CALD patients and healthcare providers may also hamper communication [16]. CALD patients often perceive significant hierarchy between themselves and their healthcare providers [7]. Out of respect for their healthcare providers, patients might be hesitant to engage and ask questions during consultations [17]. Healthcare providers not aware of this power differential may expect CALD patients to share information and be active during consultations in a similar manner as non-CALD patients [18]. Moreover, due to age related decline older CALD patients experience difficulties with information processing [19–21]. Combined with language barriers, this further hampers their ability to adequately interact and actively participate during medical encounters [22]. Given that patient participation is crucial for high quality oncological care and is shown to enhance positive outcomes, such as recall, comprehension of information, and higher general satisfaction [23–26], older CALD patients remain at risk of receiving suboptimal care [19].

While these problems are mostly identified in studies conducted among CALD patients, only very few and primarily qualitative studies focus specifically on communication with older CALD patients with cancer [13,27–32]. Further, a systematic comparison of communication barriers among healthcare providers working in different disciplines is lacking. Given that different healthcare providers such as general practitioners (GPs) or medical specialists have unique roles in oncological care, they might also have different communication goals, which can impact the communication process with older CALD cancer patients differently [33]. Therefore, identifying potential differences in communication barriers experienced by different healthcare providers is crucial for developing adequate interventions tailored to specific medical disciplines to improve communication with older CALD patients with cancer.

The present study aims to fill the knowledge gap about the communication barriers experienced between older CALD patients with cancer and providers by aiming to answer the following research questions: (1) What are the communication barriers perceived by the healthcare providers? and (2) Do healthcare providers working in different disciplines differ in terms of the perceived importance and frequency of communication barriers?

2. Methods and design

2.1. Participants and procedure

An online survey aimed at identifying communication barriers between healthcare providers and older CALD patients (Turkish or Moroccan background) with cancer was conducted among healthcare providers working in different healthcare settings in the Netherlands. We focused on four healthcare provider groups with different roles and practical affordances: (1) GPs who, in the Netherlands, act as gatekeeper to the healthcare system and form the first point of contact and provide continuity during any period of illness for patients, (2) medical specialists (oncologists, hematologists, surgeons) that lead the oncological treatments at the hospitals, who typically spend limited time with patients, (3) oncology nurses that spend the most time with patients at the hospitals and provide care in broader areas than specialists, and (4) pharmacists or pharmacy assistants that provide patients' medications.

To be included in the final analysis, the participants were required to have treated at least one older (55 years and above) CALD patient with cancer with a Turkish or a Moroccan background (the two largest CALD groups in the Netherlands) in the last two years (see Table 1 for an overview). Participants who completed the survey had the opportunity

Table 1
Background characteristics of the participants.

Background characteristics	GPs	Pharmacists	Specialists	Nurses	Total
<i>N</i>	54	31	29	77	191
Age					
<i>M</i>	48.74 ^{a,b}	38.13 ^{b,c}	45.69 ^c	42.44 ^a	44.02
<i>SD</i>	9.46	12.56	11.35	10.63	11.29
Sex					
Woman	40 (74%)	26 (84%)	20 (69%)	66 (86%)	152 (80%)
Man	14 (26%)	5 (16%)	9 (31%)	11 (14%)	39 (20%)
Years of experience					
<i>M</i>	17.15	15.47	13.39	14.30	15.17
<i>SD</i>	9.33	12.34	9.50	9.29	9.90
Number of 55+ years old Turkish or Moroccan patients with cancer treated in previous two years					
1–2	18 (33%)	8 (26%)	6 (21%)	6 (8%)	38 (20%)
2–4	16 (30%)	8 (26%)	10 (34%)	16 (21%)	50 (26%)
5–10	15 (28%)	3 (10%)	8 (28%)	12 (15%)	38 (20%)
10 +	5 (9%)	6 (19%)	5 (17%)	43 (56%)	59 (30%)
Unclear estimate ¹	–	6 (19%)	–	–	6 (4%) ¹
Had intercultural communication training	32 ^{a,b,c} (59%)	4 ^a (13%)	6 ^b (21%)	21 ^c (27%)	63 (33%)

Note. Significant differences between groups are marked with identical superscript letters.

¹In the survey distributed among pharmacists and pharmacy assistants, and additional open-ended response option was included to enable participants to specify the number of their patients to account for the potential variability in patient numbers. However, this option led six participants to give imprecise answers (e.g., “too many”, “cannot give exact number”). GP, general practitioner; SD, standard deviation; M, mean.

to enter a raffle to win an iPad. Final sample (*N* = 191) included in the analyses consisted of *N*_{nurses} = 77, *N*_{specialists} = 29, (i.e., oncologists, hematologists, and surgeons), *N*_{GPs} = 54, *N*_{pharmacists} = 31) (See Fig. 1 for the flowchart).

2.2. Declarations

The study was approved by the Ethics Committee of the Amsterdam School of Communication Research, University of Amsterdam (W16_218 # 16.256), the Netherlands and The Ethical Review Board of the Amsterdam Medical Center (2017-PC-8527). All participants provided written informed consent. This study was funded by KWF Kankerbestrijding (UVAM 2015–7992).

2.3. Measures

2.3.1. Background characteristics

Sex, age, years of working experience, city of occupation, number of older CALD (Turkish/Moroccan background) patients with cancer treated in the last two years, and whether the provider followed an intercultural communication training were measured.

2.3.2. Importance and frequency ratings

The healthcare providers were presented with a list of twelve factors (Table 2) which may be perceived as barriers when communicating with older CALD patients with cancer (See Appendix A for details about the selection of items). Following the validated QUOTE (Quality Of care Through the patients' Eyes) methodology [34–35], we first asked

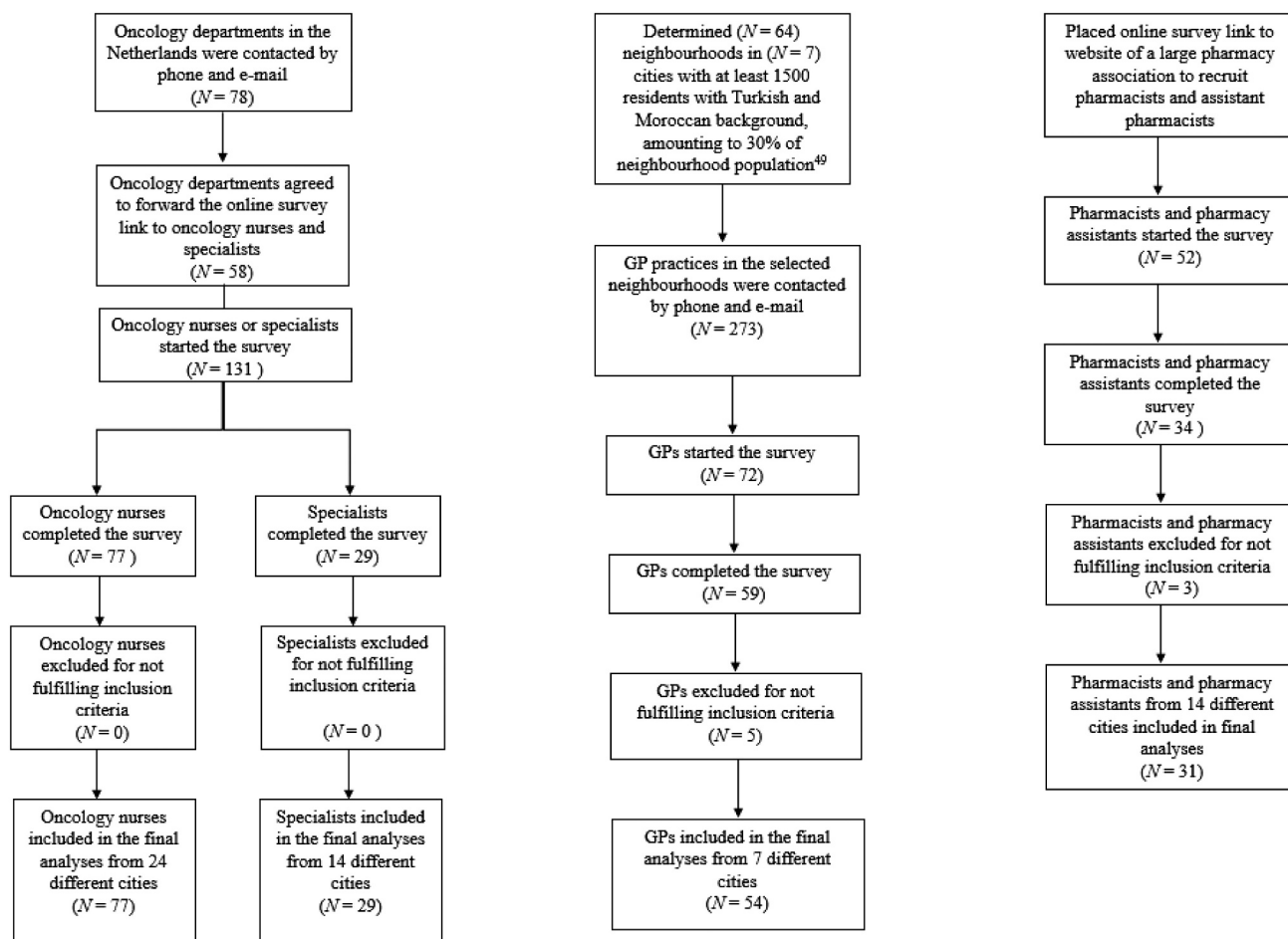


Fig. 1. Flow chart depicting recruitment of participants [49].
 [1] Total drop out among nurses and specialists: 19%.
 [2] Drop out among GPs (general practitioners): 18%.
 [3] Drop out among pharmacists and pharmacy assistants: 35%.

participants to rate the degree to which they think each of the twelve situations poses a barrier when communicating with older Turkish and Moroccan CALD patients with cancer (i.e., importance rating) (1 = *not at all*, 7 = *very much*). Next, they were asked to rate on a 4-point scale the frequency with which they experienced each situation (i.e., frequency rating) (1 = *never*, 4 = *all the time*).

2.3.3. Analysis

We have applied the QUOTE methodology to determine which items constitute potential, influential, or no barriers for communication. The QUOTE approach has been successfully used in the past to gain insights into the unmet needs of patients in various healthcare settings, as well as for determining barriers they experience in communication [34,35]. QUOTE uses the two indicators, importance ratings and frequency ratings, to calculate an index (QII) to determine whether a given situation poses a potential or influential barrier. Potential barriers identify situations that may need improvements, whereas influential barriers imply an urgent need for improvements [34].

We calculated Quality Impact Indices (QIIs) [34,35] for all twelve items following the QUOTE methodology by multiplying (1) mean importance rating with (2) percentage of participants that frequently experienced that situation (i.e., *occurrence* score) to determine influential and potential barriers.

First, we calculated mean importance ratings for each statement for every healthcare provider group. Next, the frequency ratings were recoded into two groups (i.e., 1 = *never* and 2 = *sometimes* were recoded as: 0 = *the barrier never/sometimes occurred*, response options 3 = *regularly* and 4 = *all the time* were recoded as: 1 = *the barrier often occurred*). For each item, *occurrence* score was calculated by determining the percentage of participants that had a score of 1 on the recoded frequency variable (i.e., 1 = *the barrier often occurred*). Following the formula, if a given factor received an average barrier rating of 4.50 and an occurrence score of 30%, then this barrier received a QII score of $4.50 \times 0.30 = 1.35$. This way, if a given factor is perceived strongly as a barrier but if it does not occur in the population often, or conversely, if it is not perceived strongly to be a barrier but does occur frequently in the population, the final QII scores would reflect this. QII scores of 0.60 or higher indicate a potential barrier whereas QII scores of 1.75 or higher indicate an influential barrier [34].

After calculating the QII scores we conducted two ANOVA's with post-hoc tests using Bonferroni corrections to see whether groups significantly differed ($p < .05$) in their importance and frequency ratings (using the original frequency rating, not the occurrence score) for each item. Relationship between participants' background characteristics and importance ratings were calculated by bivariate correlational analyses.

Table 2
Importance ratings, occurrence rates and QII scores.

Items rated by the providers	GPs (N = 54)			Pharmacists (N = 31)			Specialists (N = 29)			Nurses (N = 77)			All Healthcare Providers (N = 191)		
	Importance ratings M (SD)	Occur. %	QII score	Importance ratings M (SD)	Occur. %	QII score	Importance ratings M (SD)	Occur. %	QII score	Importance ratings M (SD)	Occur. %	QII score	Importance ratings M (SD)	Occur. %	QII score
(1) When the patient has a low Dutch language proficiency	5.26 (1.54)	83	4.38	5.58 (1.80)	90	5.04	5.79 (1.08)	62	3.60	5.78 (1.27)	86	4.95	5.60 (1.43)	82	4.60
(2) When family members act as interpreter for the patient and provide inadequate and/or incomplete translations	5.65 (1.23)	35	1.99	4.81 (1.74)	26	1.24	6.14 (1.33)	55	3.39	6.16 (1.19)	52	3.20	5.79 (1.40)	44	2.53
(3) When I do not know to what extent the patient wants to be informed about his/her illness	5.37 (1.38)	33	1.79	4.97 (1.49)	42	2.08	5.28 (1.71)	38	2.00	5.49 (1.33)	48	2.64	5.34 (1.43)	41	2.21
(4) When there are cultural differences in views about illness and treatment	4.13 (1.54)	61	2.52	4.77 (1.73)	35	1.69	4.31 (1.61)	31	1.34	4.39 (1.55)	53	2.34	4.37 (1.59)	49	2.15
(5) When family members stand in the way of communicating with the patient	5.94 (1.16)	28	1.65	4.87 (1.72)	16	0.79	6.24 (0.95)	48	3.01	6.09 (1.28)	42	2.53	5.87 (1.36)	35	2.03
(6) When I do not have enough time	4.76 (1.81)	22	1.06	4.48 (1.95)	26	1.16	4.76 (1.72)	28	1.31	5.05 (1.66)	34	1.71	4.83 (1.76)	28	1.37
(7) When the patient has strong religious views	3.46 (1.65)	48	1.67	3.87 (1.78)	23	0.87	3.45 (1.45)	21	0.71	3.75 (1.58)	43	1.61	3.64 (1.62)	38	1.37
(8) When patients do not trust their healthcare providers or the healthcare system.	5.41 (1.45)	18	1.00	5.74 (1.18)	32	1.85	5.55 (1.09)	14	0.77	5.71 (1.07)	19	1.11	5.61 (1.21)	21	1.15
(9) When I do not know the contact person of the patient	5.50 (1.42)	16	0.92	5.03 (1.62)	35	1.79	5.21 (1.61)	10	0.54	5.22 (1.52)	17	0.88	5.27 (1.52)	19	0.99
(10) When patients are also treated in their home country (Turkey or Morocco)	4.70 (1.57)	33	1.57	5.39 (1.61)	13	0.70	5.00 (1.10)	7	0.34	4.57 (1.74)	8	0.36	4.81 (1.60)	16	0.76
(11) When I do not know how I can show affection to the patient	3.89 (1.76)	16	0.65	4.48 (1.79)	26	1.16	4.10 (1.82)	7	0.28	4.60 (1.62)	14	0.66	4.30 (1.73)	16	0.68
(12) When patients use alternative treatment methods without informing me	4.83 (1.56)	15	0.72	5.32 (1.54)	13	0.69	5.31 (1.42)	3	0.18	5.32 (1.67)	8	0.41	5.18 (1.59)	10	0.52

Note: Occurrence rates denote the percentage of participants within that group that experience each factor as often (received a score of 1 on the recoded frequency rating variable). Importance ratings column presents the means and standard deviations for each factor (i.e., measured by “To what extent do you agree that this is a barrier?”, “1 = completely disagree”, “7 = completely agree”) within each group. QII scores are calculated by multiplying mean importance ratings with occurrence rates. A QII score of 0.60 or higher indicate a potential barrier whereas QII scores of 1.75 or higher indicate an influential barrier. GP, general practitioner; SD, standard deviation; M, mean.

3. Results

3.1. Background characteristics

Table 1 shows all background characteristics of the participants per group. The groups significantly differed in age and previous training on intercultural communication. Because age of the participants did not correlate with any of the importance ratings, and having had intercultural training only had a significant correlation with one item, none of the background variables were included as control variables in the main analyses (See Appendix B).

3.2. Overview of the barriers

The results revealed that all items except one (i.e., when patients use alternative medications without informing their providers) were perceived as either potential (QII score > 0.60) or influential barriers (QII score > 1.75) across all healthcare providers (See Table 2 and Fig. 2). Overall, all items received relatively high importance ratings across healthcare groups. Specifically, across all healthcare providers (N = 191), the factors with the highest importance ratings were: The low Dutch language proficiency of patients (M = 5.60), family interpreters providing inadequate translations (M = 5.79), not knowing the extent of patients' informational needs (M = 5.34), family members blocking communication (M = 5.87), patients not trusting their healthcare providers or the healthcare system (M = 5.61) and not knowing the contact person for the patient (M = 5.27). The factors that received the highest occurrence rate were: The low Dutch language proficiency of patients (82%), family interpreters providing inadequate translations (44%), not knowing the extent of patients' informational needs (41%) and cultural differences in views about healthcare (49%). Based on the QII score, the items rated as most influential were: The low Dutch language proficiency of patients (QII = 4.60), family interpreters providing inadequate translations (QII = 2.53), not knowing the extent of patients' informational needs (QII = 2.21), cultural differences in views about healthcare (QII = 2.15) and family members blocking communication (QII = 2.03). While the potential barriers concerned various practical and affective issues (e.g., time constraints, lack of trust from patients), the most influential barriers concerned language barriers with patients (i.e., low Dutch language proficiency of patients, inadequate translations by family interpreters).

3.3. GPs' perception of barriers

All twelve factors were perceived to be either potential (eight factors, QII score > 0.60) or influential (four factors, (QII score > 1.75) barriers by GPs. The most influential barrier was the patients' low Dutch language proficiency, followed by cultural differences in views about healthcare. The third most influential barrier was family interpreters providing inadequate translations and the fourth and final influential barrier was not knowing the extent of patients' informational needs.

3.4. Pharmacists' perception of barriers

All factors were perceived as either influential (four factors, QII score > 1.75) or potential (eight factors, QII score > 0.60) barriers by pharmacists. Four factors (low Dutch language proficiency of patients, not knowing extent of patients' informational needs, patients not trusting the healthcare system and not knowing the contact person of the patient) emerged as influential barriers for pharmacists.

3.5. Specialists' perception of barriers

Specialists perceived the fewest influential (four factors, QII score > 1.75) and potential (four factors, QII score > 0.60) barriers. Items relating to the ability to directly communicate with patients (i.e., low Dutch language proficiency, family interpreters providing inadequate translations, and family members blocking communication) were rated as the top-three most influential barriers. A fourth item, not knowing the extent of patients' informational needs was also seen as an influential barrier for specialists.

3.6. Nurses' perception of barriers

The highest number of influential barriers (five factors, QII score > 1.75) emerged for nurses. These barriers were related to the ability to directly communicate with patients, specifically patients' low Dutch language proficiency, family interpreters providing inadequate translations for patients, and family members blocking the communication. In addition, not knowing the extent of patients' informational needs and cultural differences in views about healthcare also emerged as influential barriers.

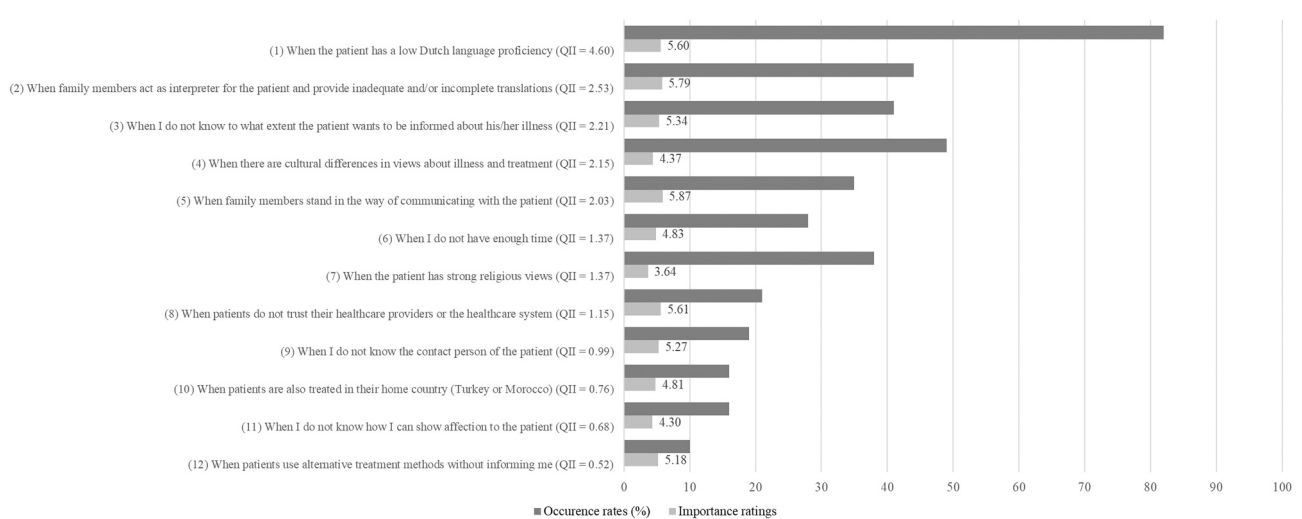


Fig. 2. Overview of mean importance ratings, occurrence rates (%) and QII scores for 12-items for all healthcare providers (N = 191).

Table 3
Comparison of importance ratings and frequencies between healthcare groups.

Items rated by the providers	Ratings	GPs	Pharmacists	Specialists	Nurses
		(N = 54)	(N = 31)	(N = 29)	(N = 77)
		M (SD), p	M (SD), p	M (SD), p	M (SD), p
(1) When the patient has a low Dutch language proficiency	Importance:	5.26 (1.54)	5.58 (1.80)	5.79 (1.08)	5.78 (1.27)
	Frequency:	2.87 (0.52)	3.03 ^a (0.48), p = .003	2.59 ^{a,b} (0.57)	2.91 ^b (0.43), p = .016
(2) When family members act as interpreter for the patient and provide inadequate and/or incomplete translations	Importance:	5.65 ^a (1.23), p = .032	4.81 ^{a,b,c} (1.74)	6.14 ^b (1.33), p = .001	6.16 ^c (1.19), p < .000
	Frequency:	2.31 (0.54)	2.13 ^{a,b} (0.72)	2.59 ^a (0.68), p = .035	2.55 ^b (0.64), p = .012
(3) When I do not know to what extent the patient wants to be informed about his/her illness	Importance:	5.37 (1.38)	4.97 (1.49)	5.28 (1.71)	5.49 (1.33)
	Frequency:	2.28 (0.56)	2.39 (0.67)	2.34 (0.55)	2.48 (0.50)
(4) When there are cultural differences in views about illness and treatment	Importance:	4.13 (1.54)	4.77 (1.73)	4.31 (1.61)	4.39 (1.55)
	Frequency:	2.76 ^{a,b} (0.75)	2.23 ^a (0.76), p = .005	2.24 ^b (0.58), p = .008	2.55 (0.66)
(5) When family members stand in the way of communicating with the patient	Importance:	5.94 ^a (1.16), p = .002	4.87 ^{a,b,c} (1.73)	6.24 ^b (0.95), p < .000	6.09 ^c (1.28), p < .000
	Frequency:	2.22 (0.52)	1.84 ^{a,b} (0.70)	2.45 ^a (0.59), p = .002	2.39 ^b (0.64), p < .000
(6) When I do not have enough time	Importance:	4.76 (1.81)	4.48 (1.95)	4.76 (1.72)	5.05 (1.28)
	Frequency:	2.02 (0.71)	2.03 (0.79)	2.17 (0.71)	2.22 (0.75)
(7) When the patient has strong religious views	Importance:	3.46 (1.66)	3.87 (1.78)	3.45 (1.45)	3.75 (1.58)
	Frequency:	2.46 ^a (0.60), p = .003	1.94 ^{a,b} (0.81)	2.14 (0.52)	2.32 ^b (0.66), p = .033
(8) When patients do not trust their healthcare providers or the healthcare system	Importance:	5.41 (1.45)	5.74 (1.18)	5.55 (1.09)	5.71 (1.07)
	Frequency:	2.09 (0.52)	2.32 (0.70)	1.93 (0.59)	2.09 (0.64)
(9) When I do not know the contact person of the patient	Importance:	5.50 (1.42)	5.03 (1.62)	5.21 (1.61)	5.22 (1.52)
	Frequency:	1.96 (0.61)	2.29 ^{a,b} (0.69)	1.79 ^a (0.62), p = .022	1.87 ^b (0.68), p = .017
(10) When patients are also treated in their home country (Turkey or Morocco)	Importance:	4.70 (1.57)	5.39 (1.61)	5.00 (1.10)	4.57 (1.74)
	Frequency:	2.26 ^{a,b,c} (0.59)	1.81 ^a (0.65), p = .033	1.86 ^b (0.52), p = .017	1.84 ^c (0.54), p < .000
(11) When I do not know how I can show affection to the patient	Importance:	3.89 (1.76)	4.48 (1.79)	4.10 (1.82)	4.60 (1.62)
	Frequency:	1.81 (0.70)	2.00 (0.82)	1.76 (0.58)	1.90 (0.62)
(12) When patients use alternative treatment methods without informing me	Importance:	4.83 (1.56)	5.32 (1.54)	5.31 (1.42)	5.32 (1.67)
	Frequency:	1.87 (0.65)	1.84 (0.64)	1.93 (0.37)	1.88 (0.52)

Note. Comparison of mean importance ratings and frequencies (i.e., original frequency rating ranging from 1 = never to 4 = all the time) between healthcare provider groups. Significant differences between groups are marked with identical superscript letters for each item (i.e., scores marked with an a are significantly different). GP, general practitioner; SD, standard deviation; M, mean.

3.7. Comparisons of barrier perceptions between healthcare providers

To investigate differences in QII scores between healthcare provider groups, we compared the healthcare providers on importance and frequency ratings. The analyses revealed significant differences between healthcare providers on seven frequency and two barrier ratings as outlined below (Table 3).

Cultural differences in views about healthcare were experienced as significantly more important as a barrier by GPs compared to pharmacists and specialists. This barrier appeared as the second most important influential barrier for GPs (QII score > 1.75), while ranking as the fifth influential barrier for nurses and being only a potential barrier (QII score > 0.60) for specialists and pharmacists. Another factor that was perceived to be especially important to GPs was patients getting treatment in their home country (QII_{GPs} = 1.57). Specialists and nurses did not perceive this as a barrier while pharmacists perceived it as a potential barrier on a smaller scale compared to GPs (QII_{pharmacists} = 0.70).

While the factors about family interpreters providing inadequate translations for the patients and family members blocking the communication emerged as influential barriers for nurses, specialists, and GPs, these two factors were seen only as potential barriers for pharmacists. This difference stems from both the perceived importance and frequency of experiencing these situations, as pharmacists had significantly lower barrier ratings compared to all other groups as well as significantly lower frequency ratings compared to specialists and nurses. On the contrary, not knowing the contact person of the patient appeared to be an especially influential barrier for pharmacists, while for other groups this was a potential barrier or a non-barrier. This difference appeared to

be related to the frequency of experiencing the barrier, as pharmacists experienced it significantly more often than specialists and nurses. Another significant difference in frequencies was found for religious beliefs, as pharmacists reported experiencing this barrier significantly less often than GPs and nurses. The final significant difference on frequencies was for Dutch language proficiency of patients. Specialists reported experiencing this significantly less often than pharmacists and nurses.

4. Discussion

The present study found both similarities and differences in perceived communication barriers across different healthcare providers when caring for older CALD patients with cancer. The main similarity relates to language-related barriers. Patients' low Dutch proficiency and the use of family members as interpreters who often lack the linguistic skills to render correct translations were found to be the most important communication barriers among all healthcare providers. These findings are in line with previous studies which have shown that one of the strongest impediments to good quality medical communication with CALD patients is the language barrier, which is often inadequately solved by means of family interpreters [36–38]. Additionally, not knowing the extent of patients' informational needs was as an influential barrier for all healthcare provider groups, which can be explained by the finding that CALD patients often behave in a passive manner during medical consultations and are disinclined to express their needs, as well as due to lack of understandable communication initiated by professionals [39].

The differences we identified between healthcare providers suggest that experiencing certain barriers may be related to a specific healthcare setting. For instance, a notable difference was found with regards to perceiving cultural differences in views about healthcare as a communication barrier. This was especially problematic for GPs compared to other provider groups. Culture-related barriers could relate to the practical choices patients need to make, such as choosing to get treatment in home countries, or to more deeply engrained cultural differences in values as shown in previous studies, such as perceived power differentials between patients and GPs and expectations about patient participation levels [40,41].

Another interesting difference is that specialists experienced the fewest barriers compared to other healthcare providers, while nurses perceived the most. Specialists were found to be the only healthcare provider group that did not perceive not knowing how to show affection as a barrier. This is especially striking considering that patients often report being less satisfied with their specialists and find them less adequate in their communications compared to nurses and GPs. Similarly, specialists did not perceive contextual issues like not knowing the contact person of a patient, patients not disclosing use of alternative medications, or receiving treatment in home countries as barriers. Comparative research using observational coding systems such as Medicode [42] and VR-CoDES [43] (Verona coding definitions of emotional sequences) is therefore needed to study to what extent the identified differences in perceived barriers might be explained by differences in the content of the medical consultations between different healthcare providers.

4.1. Practical implications

In general, differences in barrier perceptions between healthcare providers seem not to stem from perceiving a given situation as more or less important but rather due to how often the providers encounter these issues in their practice. The differences on emergent barriers mean that healthcare providers need tailored interventions or support that are centered around their own unique experiences. We suggest practical recommendations that are relevant for all healthcare providers as well as specific recommendations for different provider groups that can help bridge communication barriers they experience with their older CALD patients with cancer.

Firstly, the most pressing communication barrier that needs to be addressed is the low Dutch language proficiency of the patients. Typically, this barrier is dealt with by making use of family members as interpreters. This is partially due to interpreting budgets having been cut down by the Dutch government in 2012 [44]. However, using family members as interpreters has been shown to cause miscommunication due to interpreters providing incorrect or incomplete translations, as well as imposing their own agenda and taking control away from patients during consultations [37]. Indeed, the inefficiency of using family members as interpreters became apparent in the present study. Therefore, we recommend that the language barriers should be bridged by communication strategies other than using family interpreters, such as by utilization of professional interpreters and digital translation tools [39]. Combining professional interpreters with inexpensive digital applications and translation tools could eliminate serious health consequences by reducing the risk of incorrect translations, empowering patients, and enabling both patients and providers to stay fully informed during consultations and treatment processes.

Secondly, not knowing the extent of patients' informational needs was also seen as an influential barrier for all providers, while family members blocking communication was perceived to be an influential barrier for GPs, nurses, and specialists. These two influential barriers can be specifically addressed by identifying how much and in what way patients want to be informed and the role they want to assign to their family members before the treatment process begins. To this end, an easy to understand and short standardized questionnaire can be

administered via professional interpreters or via translation applications to determine patients' choices. An example of such a tool is the recently developed "Conversation Starter" application targeted at older CALD patients with cancer and their healthcare providers in the Netherlands [39]. This application can provide auditory information in the patients' mother tongue and let them choose among simple options to show their preferences to their healthcare providers about the extent to which they want to be informed about their health (e.g., choose to be informed about all aspects of their health, or leave out negative news), as well as the role they would like to attribute to their family members with regards to the decision-making process [38]. Determining patients' preference before their consultation provides clarity to healthcare providers and enables them to share information more confidently, as well as experience less decision-making related conflict by knowing the patient's preferred role of family members. Given that this patient group tend to have low health literacy skills, which is an important barrier on its own [45,46], incorporating user friendly digital tools that employ easy to understand narrative videos, images (i.e., simple representations of health situations) and auditory support have shown to be beneficial for patients [39].

Thirdly, we recommend that GPs discuss with their older CALD patients with cancer the potential risks they perceive when they get treatment in their home countries as soon as possible, and devise conjoint plans that enable their patients to carry out their treatment plans safely. Essentially, adopting a more patient-centered approach can help older CALD patients with cancer to open-up to their GPs more easily and share all information that is relevant to the treatment plan. Finally, our findings show that pharmacists and pharmacy assistants are highly concerned about not knowing the contact persons of these patients. Pharmacies therefore can benefit from a centrally distributed (e.g., via pharmacy associations) message or intervention that aims to raise their awareness about this issue and to encourage them to register the patients' contact person information more systematically and thoroughly.

4.2. Strengths and limitations

The present study is among one of the few that has investigated the perceived communication barriers of healthcare providers from different disciplines when caring for older CALD patients with cancer. Besides this innovative focus, another strength of the present paper is the employed methodology. We have developed survey items based on the results of two focus group studies with healthcare providers and applied a validated methodology (i.e., QUOTE) to analyze survey findings. Next to these strengths, the present study has some limitations. Firstly, the sample size for the pharmacist group is relatively small compared to the other groups as fewer participants in this group completed the survey. Higher dropout rates in this group (35% drop out rate compared to less than 20% for others) might suggest that the items included in the survey may have been less relevant for pharmacists. Indeed, this group was not included in the focus group studies that resulted in the final items selected for this survey. Future studies might benefit from inquiring about other possible communication barriers that might be more relevant for pharmacists. A second, related limitation is that the compiled list of items might not have been exhaustive, and there may be additional factors that may hinder the communication between healthcare providers and their patients, as this list of items were not further checked for validity. However, we added an open question asking respondents whether they perceived any other barriers, which did not lead to new information. Thirdly, the present study focused only on the providers' perspectives. While this was a necessary step, future studies should replicate the study with older CALD patients with cancer to provide a complete overview of barriers to the communication process, as patients' perspective can reveal different findings.

5. Conclusion

GPs, specialists, oncological nurses, and pharmacists concurrently found low Dutch language proficiency of patients as the most influential communication barrier when caring for older CALD patients with cancer. Further, all provider groups agreed that trying to solve this barrier via family interpreters led to additional influential communication problems. Besides the language related issues, healthcare providers showed diverging concerns. To improve geriatric oncological care for CALD patients, next to interventions that target language barriers, interventions that are tailored to different healthcare providers are recommended.

Appendix A

The list of items was compiled following the results of two separate focus group studies conducted prior to the present study with six GPs, one internist (N = 7) and oncology nurses (N = 5) and covered issues relating to language, culture and provider-related barriers [47]. The GPs were purposively recruited from researchers’ network while oncology nurses were recruited through a key figure in a Dutch hospital. Both focus groups were conducted in Dutch by the second author (BS), and notes were taken by the first author (HS) during the meetings. The focus groups were held separately and took about two hours to complete. The focus groups were audiotaped and transcribed verbatim. Codes from one focus group were double coded independently and codes were assessed on their similarity. Disagreements were discussed and all final codes were mutually agreed on. Data analysis was based on grounded theory [48]. Analyses resulted in twelve factors. While most of these factors relate directly to communication, item 10 (when patients are treated in their home country) and item 12 (when patients use alternative treatment methods without informing the providers) may appear to be related more to provision of care to the patients. However, we decided to include these items to the final list because they were specifically mentioned by providers during focus group studies as (1) issues stemming from communication problems and (2) more critically leading to further miscommunication (i.e., not being up to date with patients’ ongoing healthcare situation and decisions).

Appendix B

Correlation table

Correlations of Importance Ratings with Age of Participants and Receiving Intercultural training

Factors	Age Pearson’s r	Receiving Intercultural Training Pearson’s r
1. When the patient has a low Dutch language proficiency	-0.02	0.05
2. When family members act as interpreter for the patient and provide inadequate and/or incomplete translations	0.09	-0.08
3. When I do not know to what extent the patient wants to be informed about his/her illness	-0.02	0.00
4. When there are cultural differences in views about illness and treatment	0.02	0.10
5. When family members stand in the way of communicating with the patient	0.05	-0.05
6. When I do not have enough time	-0.12	-0.04
7. When the patient has strong religious views	0.02	0.10
8. When patients do not trust their healthcare providers or the healthcare system.	0.04	-0.01
9. When I do not know the contact person of the patient	0.03	0.07
10. When patients are also treated in their home country (Turkey or Morocco)	0.02	-0.00
11. When I do not know how I can show affection to the patient	-0.11	0.14*
12. When patients use alternative treatment methods without informing me	-0.03	0.08

Note. * p < .05.

References

[1] Shuldiner J, Liu Y, Lofters A. Incidence of breast and colorectal cancer among immigrants in Ontario, Canada: a retrospective cohort study from 2004-2014. *BMC Cancer* 2018;18:537. <https://doi.org/10.1186/s12885-018-4444-0>.
 [2] Mousavi SM, Fallah M, Sundquist K, Hemminki K. Age- and time-dependent changes in cancer incidence among immigrants to Sweden: colorectal, lung, breast and prostate cancers. *Int. J. Cancer* 2012;131:E122–8. <https://doi.org/10.1002/ijc.27334>.
 [3] KWF. Allochtonen en kanker. Sociaal-culturele en epidemiologische aspecten. [Immigrants and cancer. Socio-cultural and epidemiological aspects]. Amsterdam: Signaleringscommissie Kanker, KWF Kankerbestrijding. 2006. Retrieved from, <https://nivel.nl/nl/publicatie/allochtonen-en-kanker-sociaal-culturele-en-epidemiologische-aspecten>.
 [4] CBS. Prognose allochtonen kerncijfers; herkomstgroepering, generatie, 2014-2060. [Prognosis of immigrants key figures; origin grouping, generation, 2014–2060]. Netherlands, Centraal Bureau voor de Statistiek. 2014. Retrieved from: <http://data.overheid.nl/dataset/54798-prognose-allochtonen-kerncijfers-herkomstgroepering-generatie-2012-2060>.

Author contribution

H-S: Study conceptualization, data collection, writing of the manuscript.
 M.E.T.C. van den M: Study conceptualization, writing of the manuscript.
 J.C.M van W: Study conceptualization, writing of the manuscript.
 B.C.S.: Study conceptualization, writing of the manuscript.

Declaration of Competing Interest

No potential conflict of interest was reported by the authors.

[5] Ahmed S, Lee S, Shommu N, Rumana N, Turin T. Experiences of communication barriers between physicians and immigrant patients: a systematic review and thematic synthesis. *Patient Experience J*. 2017;4:122–40. <https://doi.org/10.35680/2372-0247.1181>.
 [6] Butow P, Bell M, Goldstein D, Sze M, Aldridge L, Abdo S, et al. Grappling with cultural differences; communication between oncologists and immigrant cancer patients with and without interpreters. *Patient Educ. Couns.* 2011;84:398–405. <https://doi.org/10.1016/j.pec.2011.01.035>.
 [7] Schouten BC, Meeuwesen L. Cultural differences in medical communication: a review of the literature. *Patient Educ. Couns.* 2006;64:21–34. <https://doi.org/10.1016/j.pec.2005.11.014>.
 [8] Dagevos J, Gijsberts M, Kappelhof J, Vervoort M. Survey integratie minderheden 2006. [Survey integration of minorities 2006]. Den Haag: Sociaal en Cultureel Planbureau; 2007. Retrieved from: <https://www.narcis.nl/publication/RecordID/oa:scp.nl:3c2917a6-2971-4b37-a814-3cbab9f01c1b>.
 [9] Harmsen JAM, Bernsen RMD, Bruijnzeels MA, Meeuwesen L. Patients’ evaluation of quality of care in general practice: what are the cultural and linguistic barriers? *Patient Educ. Couns.* 2008;72:155–62. <https://doi.org/10.1016/j.pec.2008.03.018>.

- [10] Wachtler C, Brorsson A, Troein M. Meeting and treating cultural difference in primary care: a qualitative interview study. *Fam. Pract.* 2006;23:111–5. <https://doi.org/10.1093/fampra/cm1086>.
- [11] Meeuwesen L, Harmsen JAM, Bernsen RMD, Bruijnzeels MA. Do Dutch doctors communicate differently with immigrant patients than with Dutch patients? *Soc. Sci. Med.* 2006;63:2407–17. <https://doi.org/10.1016/j.socscimed.2006.06.005>.
- [12] Alegria M, Sribney W, Perez D, Laderman M, Keefe K. The role of patient activation on patient–provider communication and quality of care for US and foreign born Latino patients. *J. Gen. Intern. Med.* 2009;24:534–41. <https://doi.org/10.1007/s11606-009-1074-x>.
- [13] Todd L, Harvey E, Hoffman-Goetz L. Predicting breast and colon cancer screening among English-as-a-second-language older Chinese immigrant women to Canada. *J. Cancer Educ.* 2011;26:161–9. <https://doi.org/10.1007/s13187-010-0141-7>.
- [14] Akhavan S, Karlson S. Practitioner and client explanations for disparities in health care use between migrant and non-migrant groups in Sweden: a qualitative study. *J. Immigr. Minor. Health* 2013;15:188–97. <https://doi.org/10.1007/s10903-012-9581-y>.
- [15] Jangland E, Gunningberg L, Carlsson M. Patients' and relatives' complaints about encounters and communication in health care: evidence for quality improvement. *Patient Educ. Couns.* 2009;75:199–204. <https://doi.org/10.1016/j.pec.2008.10.007>.
- [16] Ferguson WJ, Candib LM. Culture, language, and the doctor-patient relationship. *Fam. Med.* 2002 May;34(5):353–61.
- [17] Donnelly TT. Challenges in providing breast and cervical cancer screening services to Vietnamese Canadian women: the healthcare providers' perspective. *Nurs. Inq.* 2008;15:158–68. <https://doi.org/10.1111/j.1440-1800.2008.00409.x>.
- [18] van Eechedon IJ, Grypdonck M, Beeckman D, Van Lancker A, Van Hecke A, Verhaeghe S. Oncology health workers' views and experiences on caring for ethnic minority patients: a mixed method systematic review. *Int. J. Nurs. Stud.* 2016;53:379–98. <https://doi.org/10.1016/j.ijnurstu.2015.09.007>.
- [19] Gaismaier W, Gigerenzer G. Statistical illiteracy undermines informed shared decision making. *Z Evid Fortbild Qual Gesundhwes* 2008;102:411–3. <https://doi.org/10.1016/j.zefq.2008.08.013>.
- [20] Peters E. Aging-related changes in decision making. In: Drolet A, Schwarz C, Yoon C, editors. *The aging consumer: Perspectives from psychology and economics*. Routledge/Taylor & Francis Group; 2011. p. 97–124.
- [21] Reyna VF. A theory of medical decision making and health: fuzzy trace theory. *Med. Decis. Mak.* 2008;2:850–65. <https://doi.org/10.1177/0272989x08327066>.
- [22] Hawley ST, Morris AM. Cultural challenges to engaging patients in shared decision making. *Patient Educ. Couns.* 2007;100:18–24. <https://doi.org/10.1016/j.pec.2016.07.008>.
- [23] Courtot L, Ferre F, Reina N, Marot V, Chiron P, Berard E, et al. Patient participation during anterior cruciate ligament reconstruction improves comprehension, satisfaction, and functional outcomes: a simple way to improve our practices. *Orthop. J. Sports Med.* 2009;7. <https://doi.org/10.1177/2325967119841089>. 2325967119841089.
- [24] Dillon PJ. Assessing the influence of patient participation in primary care medical interviews on recall of treatment recommendations. *Health Commun.* 2012;27:8–65. <https://doi.org/10.1080/10410236.2011.569000>.
- [25] Richard C, Glaser E, Lussier MT. Communication and patient participation influencing patient recall of treatment discussions. *Health Expect.* 2017;20:760–70. <https://doi.org/10.1111/hex.12515>.
- [26] Ekdahl AW, Andersson L, Wiréhn AB, Friedrichsen M. Are elderly people with comorbidities involved adequately in medical decision making when hospitalised? A cross-sectional survey. *BMC Geriatr.* 2011;11:1–8.
- [27] Nguyen GT, Barg FK, Armstrong K, Holmes JH, Hornik RC. Cancer and communication in the health care setting: experiences of older Vietnamese immigrants, a qualitative study. *J. Gen. Intern. Med.* 2008;23:45–50. <https://doi.org/10.1007/s11606-007-0455-2>.
- [28] Butow PN, Goldstein D, Bell ML, Sze M, Aldridge LJ, Abdo S, et al. Interpretation in consultations with immigrant patients with Cancer: how accurate is it? *JCO* 2011; 29:2801–7. <https://doi.org/10.1200/JCO.2010.34.3335>.
- [29] Todd L, Harvey E, Hoffman-Goetz L. Predicting breast and Colon Cancer screening among English-as-a-second-language older Chinese immigrant women to Canada. *J. Cancer Educ.* 2011;26:161–9. <https://doi.org/10.1007/s13187-010-0141-7>.
- [30] de Graaff FM, Francke AL, van den Muijsenbergh ME, van der Geest S. "Palliative care": a contradiction in terms? A qualitative study of cancer patients with a Turkish or Moroccan background, their relatives and care providers. *BMC Palliat Care* 2010;9:19. <https://doi.org/10.1186/1472-684X-9-19>.
- [31] de Graaff FM, Francke AL, Van den Muijsenbergh ME, van der Geest S. Talking in triads: communication with Turkish and Moroccan immigrants in the palliative phase of cancer. *J. Clin. Nurs.* 2012;21:3143–52. <https://doi.org/10.1111/j.1365-2702.2012.04289.x>.
- [32] de Graaff FM, Francke AL, van den Muijsenbergh METC, van der Geest S. Understanding and improving communication and decision-making in palliative care for Turkish and Moroccan immigrants: a multiperspective study. *Ethn. Health* 2012;17:363–84. <https://doi.org/10.1080/13557858.2011.645152>.
- [33] Hsieh E, Pitaloka D, Johnson AJ. Bilingual health communication: distinctive needs of providers from five specialties. *Health Commun.* 2013;28:557–67. <https://doi.org/10.1080/10410236.2012.702644>.
- [34] Brandes K, Linn AJ, Smit EG, van Weert JC. Patients' reports of barriers to expressing concerns during cancer consultations. *Patient Educ. Couns.* 2015 Mar 1; 98(3):317–22. <https://doi.org/10.1016/j.pec.2014.11.021>.
- [35] van Weert JC, Jansen J, de Bruijn GJ, Noordman J, van Dulmen S, Bensing JM. QUOTEchemo: a patient-centred instrument to measure quality of communication preceding chemotherapy treatment through the patient's eyes. *Eur. J. Cancer* 2009 Nov 1;45(17):2967–76. <https://doi.org/10.1016/j.ejca.2009.06.001>.
- [36] Aelbrecht K, Hanssens L, Detollenaere J, Willems S, Deveugele M, Pype P. Determinants of physician–patient communication: the role of language, education and ethnicity. *Patient Educ. Couns.* 2019 Apr 1;102(4):776–81. <https://doi.org/10.1016/j.pec.2018.11.006>.
- [37] Zendedel R, Schouten BC, van Weert JC, van den Putte B. Informal interpreting in general practice: are interpreters' roles related to perceived control, trust, and satisfaction? *Patient Educ. Couns.* 2018 Jun 1;101(6):1058–65. <https://doi.org/10.1016/j.pec.2018.01.012>.
- [38] Schouten B. Toward a Theoretical Framework of Informal Interpreting in Health Care: Explaining the Effects of Role Conflict on Control, Power and Trust in Interpreter-mediated Encounters. In: Jacobs E, Diamond L, editors. *Providing Health Care in the Context of Language Barriers: International Perspectives*. Bristol: Blue Ridge Summit: Multilingual Matters; 2017. p. 71–92. <https://doi.org/10.21832/9781783097777-007>.
- [39] Sungur H, Yilmaz NG, Chan BM, van den Muijsenbergh ME, van Weert JC, Schouten BC. Development and evaluation of a digital intervention for fulfilling the needs of older migrant patients with cancer: user-centered design approach. *J. Med. Internet Res.* 2020;22(10):e21238. <https://doi.org/10.2196/21238>.
- [40] Schinkel S, Schouten BC, Kerpiclik F, Van Den Putte B, Van Weert JC. Perceptions of barriers to patient participation: are they due to language, culture, or discrimination? *Health Commun.* 2018 Jul 24. <https://doi.org/10.1080/10410236.2018.1500431>.
- [41] Yilmaz NG, Schouten BC, Schinkel S, van Weert JC. Information and participation preferences and needs of non-Western ethnic minority cancer patients and survivors: a systematic review of the literature. *Patient Educ. Couns.* 2019 Apr 1; 102(4):631–50. <https://doi.org/10.1016/j.pec.2018.11.018>.
- [42] Richard C, Lussier MT. MEDICODE: an instrument to describe and evaluate exchanges on medications that occur during medical encounters. *Patient Educ. Couns.* 2006 Dec 1;64(1–3):197–206. <https://doi.org/10.1016/j.pec.2006.02.002>.
- [43] Del Piccolo L, De Haes H, Heaven C, Jansen J, Verheul W, Bensing J, et al. Development of the Verona coding definitions of emotional sequences to code health providers' responses (VR-CoDES-P) to patient cues and concerns. *Patient Educ. Couns.* 2011 Feb 1;82(2):149–55. <https://doi.org/10.1016/j.pec.2010.02.024>.
- [44] Triemstra M, Veenvliet C, Zuizewind C, Kessel PV, Bos N. Noodzaak en omvang van de inzet van professionele tolken: een inventarisatie onder zorgverleners. 2016 [Need for and amount of involvement of professional interpreters in healthcare: An inventory among caregivers.] Retrieved from: https://niveel.nl/sites/default/files/bestanden/Rapport_Tolken.pdf.
- [45] Huijnk W, Dagevos J. Dichter bij elkaar? De sociaal-culturele positie van niet-westerse migranten in Nederland. 2012 [Closer to each other? The socio-cultural position of non-Western migrants in the Netherlands], https://www.scp.nl/Publicaties/Alle_publicaties/Publicaties_2012/Dichter_bij_elkaar.
- [46] Huijnk W, Dagevos J, Gijsberts M, Andriessen I. Werelden van verschil: Over de sociaal-culturele afstand en positie van migrantengroepen in Nederland. 2015 [Worlds of difference: About the socio-cultural distance and position of migrants in the Netherlands.] [Government report], <https://www.scp.nl/publicaties/publicaties/2015/12/16/werelden-van-verschil>.
- [47] Yilmaz NG, Sungur H, van Weert JC, van den Muijsenbergh ME, Schouten BC. Enhancing patient participation of older migrant cancer patients: needs, barriers, and eHealth. *Ethn. Health* 2020 Dec 8:1–24. <https://doi.org/10.1080/13557858.2020.1857338>.
- [48] Charmaz K, Belgrave L. *Qualitative interviewing and grounded theory analysis*. The SAGE handbook of interview research: The complexity of the craft 2012;2: 347–65.
- [49] CBS. *Kerncijfers wijken en buurten 2017*. [Key figures for districts and neighborhoods 2017]. Netherlands: Centraal Bureau voor de Statistiek; 2017. Retrieved from, <https://www.cbs.nl/nl-nl/maatwerk/2017/31/kerncijfers-wijken-en-buurten-2017>.