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Factors influencing intercultural doctor–patient communication: A realist review

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ABSTRACT

Objective: Due to migration, doctors see patients from different ethnic backgrounds. This causes challenges for the communication. To develop training programs for doctors in intercultural communication (ICC), it is important to know which barriers and facilitators determine the quality of ICC. This study aimed to provide an overview of the literature and to explore how ICC works.

Methods: A systematic search was performed to find literature published before October 2012. The search terms used were cultural, communication, healthcare worker. A realist synthesis allowed us to use an explanatory focus to understand the interplay of communication.

Results: In total, 145 articles met the inclusion criteria. We found ICC challenges due to language, cultural and social differences, and doctors' assumptions. The mechanisms were described as factors influencing the process of ICC and divided into objectives, core skills and specific skills. The results were synthesized in a framework for the development of training.

Conclusion: The quality of ICC is influenced by the context and by the mechanisms. These mechanisms translate into practical points for training, which seem to have similarities with patient-centered communication.

Practice implications: Training for improving ICC can be developed as an extension of the existing training for patient-centered communication.

Abbreviations

- Dr, doctor (plural—drs);
- Pt, patient (plural—pts);
- GP, general practitioner;
- AA, African American;
- SA, South-Asian;
- DM, decision making;
- US, United States;
- UK, United Kingdom

1. INTRODUCTION

Due to increasing worldwide migration since the 1960, healthcare in the modern Western world is confronted with the consequences of a multi-ethnic society [1]. One of the main areas where these consequences are apparent is in the interaction between doctors and patients. As research on communication in healthcare has shown, there is ample evidence that communication affects numerous outcomes, such as patient satisfaction and adherence, and, consequently, health outcomes [2] and [3]. One of the challenging areas of healthcare communication is communication with culturally diverse patients [4]. Intercultural doctor–patient contacts are potential sources of misunderstanding and low quality communication, which may reduce the quality of care [5].

Causes for misunderstanding and difficulties in intercultural communication (ICC) are sought in differences in perspectives, values and beliefs about illness between doctors and patients with different ethnic backgrounds [6], [7], [8] and [9]. Illness is culturally determined in the sense that how we perceive, experience and cope with disease is based upon our explanations of illness [7]. Hence, difficulties in intercultural doctor–patient communication could be explained by differences in culture rather than by a supposed inferiority of specific cultures [8]. Another possible influence on the quality of patient communication is that many doctors feel incompetent to communicate and relate to patients from different ethnic backgrounds due to a lack of adequate skills, language barriers or knowledge of communication with these patients [10] and [11]. For example, doctors behave less effectively when interacting with ethnic minority patients compared to ethnic majority patients [5] and [12]. Also, ethnic minority patients themselves are less verbally expressive and seem to be less assertive during the medical encounter than ethnic majority patients [12].

In recent years, medical education has paid more attention to ICC, or to cultural competence on a broader scale (see Table 1 for terminology). Although the necessity of training in ICC has been increasingly recognized [13], many countries with a multi-ethnic patient population have not structurally implemented training in this area in their medical curricula [14] and [15], even though there is a flourishing debate about appropriate training of health professionals to respond to ethnic diversity [16] and [17]. Next to the difficulties of implementing ICC in medical curricula, assessment of ICC remains challenging [18], and there is a risk that ICC and cultural competence training reinforce stereotyping [19]. The challenge, therefore, is to achieve a balance between theory and practice. Developing an appreciation of theoretical concepts of ICC is desirable for ‘generic learning’. However, such learning would fail without emphasizing its relevance to practice [16].

[TABLE 1]

The field of ICC in healthcare has been studied extensively. For example, Schouten et al. performed a systematic review in this field to gain more insight into the effects of ethnic background on the medical communication process [12]. Although their research was substantial, it was limited by including observational studies only. The authors concluded that there are differences in the communication with ethnic minority patients compared to ethnic majority patients, and they advised to focus further research on explanatory factors to advance knowledge about the origins of and solutions for problems in ICC [12].

Several studies recommended an exploratory review to reveal what factors influence the outcome of ICC [20], but as far as we know, such a review is still lacking. A systematic description of the influencing factors in ICC may inform the development and implementation of training and education for doctors, which could provide opportunities to facilitate communication of better quality [1] and [21]. Also, such research could give insight into the link between patient-centered communication and ICC, which was mentioned in several papers [13] and [17].

The present paper provides an overview of the literature on the perceptions and experiences of doctors and patients related to communication in an intercultural setting. Although ICC can include many contexts, we focused on the largest and perhaps most challenging group of intercultural encounters, i.e. those between doctors of the ethnic majority and their patients of the ethnic minority (see Table 1 for the used definition of ICC). Our research was guided by the following questions: Which factors influence the communication process between doctors and patients of different ethnic backgrounds? How do these factors influence the communication?

To apply the intended exploratory focus, we performed a realist synthesis, which could help us to gain insight into the complexity of communication between doctors and patients [22]. We tried to formulate a framework for medical education, which could be used for the development of ICC training for doctors. Our main focus was not on the misunderstandings, but on the broader concept of intercultural communication.

2. METHODS

We conducted a systematic review of the literature using the realist synthesis method guided by the RAMESES guideline, a realist review guideline [22]. A realist review is a strategy for synthesizing research that has an explanatory rather than a judgmental focus. It can include qualitative as well as quantitative studies, which enables us to focus on the content, i.e. meaningful and useful results, of the articles. The adjective realist refers to the philosophy of science called Realism, which is situated between positivism, i.e. the conviction that there is a real world and that we can apprehend this world directly through observation, and constructivism, i.e. the conviction that reality is a social construction and that we cannot know what the true nature of reality is [29] and [30].

A realist synthesis emphasizes how causal mechanisms are shaped and constrained by social context. The extracted data are described and explored using the model of context (C), mechanism (M) and outcome (O). For example, to evaluate the ICC process (O), a realist synthesis would examine its underlying mechanisms (e.g. the way a doctor behaves in a

conversation), and its contiguous contexts (e.g. a language barrier between the doctor and the patient) [22] and [30].

2.1. Data sources and searches

Literature searches were performed by an experienced information specialist, who searched MEDLINE, EMBASE, PsycInfo, Cinahl, Cochrane and Education Resources Information Center (ERIC) for relevant papers using Reference Manager 12. All studies published before October 2012 were included. No language restrictions were applied, and papers were translated if necessary. However, articles without English abstract were excluded, as were letters, reviews, comments, case reports, books, and editorials.

Databases were searched using keywords for both free text (tiab) and Medical Subject Heading (MeSH) terms. A combination of the following keywords and synonyms were used: *communication AND cultural AND ethnic AND healthcare worker*. The broad search terms were used to ensure that all studies which met the inclusion criteria were captured in initial searches. The search strategy for the main electronic search (MEDLINE) is presented in Appendix A. It was revised as necessary for the other databases. (Full searches for these databases are available upon request.)

2.2. Data selection

First, duplicates were identified and removed by the first author. Next, the titles of the articles were screened for inclusion by the first author (EP) and a group of seven second readers. Each second reader received written instructions that explained the research question, the inclusion and exclusion criteria and how to include articles based on the title. Any disagreement about inclusion of an articles based on the title was discussed and resolved through consensus between the first author and the second reader.

Second, two authors (EP and SD) assessed the inclusion by abstract. Articles without abstract were excluded. EP and SD discussed doubtful in- or exclusion. The focus was on empirical studies involving doctors of the ethnic majority and patients of the ethnic minority (Table 2).

[TABLE 2]

Finally, the full texts of the remaining articles were screened for in- or exclusion by a medical doctor (EP) and an intercultural communication specialist (CA). In case of disagreement between the two researchers, the first author (EP) discussed the papers with the authors FS or SD until consensus was reached. The definitive and complete reading of all the full papers was done by EP.

2.3. Data analysis and synthesis

The review team agreed on what type of data to extract from the included articles, and one reviewer (EP) extracted the data and identified the CMO configurations in each study. The following information was culled: participant characteristics, methods used (i.e. qualitative vs. quantitative), country of research, study design, main results, frame of reference and level of contribution.

We assessed the level of contribution based on relevance and rigor of the articles. This was not to judge the methodological quality of the articles, but to give insight into their degree of importance for answering our specific research question. The rigor was indicated by assessing whether 'the method used to generate that particular piece of data was credible and trustworthy' (high or low). The relevance was indicated by assessing whether 'the article contributed to answering our research question' (high or low). The two assessments were combined in one score for the level of contribution: high (high/high), medium (high/low or low/high) or low (low/low). For example, if the paper included clearly described and trustworthy methods, the level of contribution in terms of rigor was assessed as high. If a paper about ICC described only a small section of ICC between the doctor and the patient and answered the research question only partly, the level of contribution in terms of relevance was assessed as low.

Data synthesis was undertaken by the first author (EP), and synthesis results were regularly shared and discussed within the research team to ensure validity and consistency. The research team discussed all the extracted data to find overarching categories in the context–mechanism–outcome model. Specifically, we attempted to identify factors which could facilitate or hinder the communication and then sought to explain these and to formulate a relevant framework.

3. RESULTS

3.1. Characteristics

For this realist review we considered 51,179 articles, 145 of which met the final inclusion criteria. The included articles were written in English, French, German, Italian and Norwegian. All but 5 articles [31], [32], [33], [34] and [35] were from western countries. The 5 remaining articles were from Israel [31] and South Africa [32], [33], [34] and [35]. The selection process and subsequent categorization are summarized in Fig. 1. Appendix B presents the characteristics of the included articles and the level of contribution.

[FIGURE 1]

After discussion within the research team, we identified the emerging factors influencing ICC and categorized them in terms of contexts, mechanisms and outcomes of ICC. The context factors are the four major communication challenges of ICC: language differences, differences in perception of illness and disease, different perceptions of the social component of health communication, and doctors' and patients' prejudices and assumptions.

Following these challenges, we described the mechanisms by objectives, specific skills and core skills. Core skills can be regarded as the main skills of communication doctors should use in their consultation, for example listening. Specific communication skills are the skills a doctor needs in specific situations or contexts, for example in issues with gender, cultural and social diversity or end-of-life care [4]. The outcome is described as a barrier or facilitator for the communication (Fig. 2). These descriptions included the outcome in the perception of the doctor or the patient, for example feelings of frustration or satisfaction. The overall results are shown in Table 3. In the following paragraphs we describe the challenges and their mechanisms with examples.

[FIGURE 2][TABLE 3]

3.2. LANGUAGE DIFFERENCES

The influence of language on the communication was mentioned frequently. Language differences literally caused miscommunication [33], [34], [36], [37], [38], [39], [40], [41], [42], [43], [44], [45], [46], [47], [48], [49], [50], [51], [52], [53], [54], [55], [56], [57], [58], [59], [60], [61], [62], [63], [64], [65] and [66]. Language differences were seen as important barriers of ICC, because of their relation with misunderstandings, frustration and situations in which it is not possible for the doctor to achieve shared decision-making.

For doctors, the objectives during a consultation were found to focus on understanding the patient and on knowledge of languages. This did not mean that the doctor should be able to speak all the languages of their patients; communication was facilitated when a doctor knew a few words of the language of the patient, because this helped to build a relationship with the patient [67], [68], [69] and [70].

During an intercultural conversation, the doctor needed specific skills to facilitate the communication. These skills mainly involved various ways of providing explanations and the ability to use extra attributes, such as pictures or an interpreter, in case of language differences.

Besides these specific skills, the included articles mentioned many communication skills that are useful in any doctor–patient conversation. These core skills were, for example, listening [47], [71], [72], [73], [74], [75], [76], [77], [78], [79], [80], [81], [82] and [83] and explaining, or avoiding medical jargon. Also, both patients and doctors felt more satisfied when the doctor checked the patient's understanding [58], [72], [84], [85], [86], [87], [88] and [89]. For example, paraphrasing and repeating the patient's exact words encouraged the patient to elaborate on their concerns [90].

Together, the communication objectives, the core skills and the specific skills would help to facilitate successful communication between doctors and patients. This is confirmed by the large number of articles which reported that patients found it more important for the doctor to have good language skills than to have the same ethnicity as the patient [36], [52], [55], [65], [66], [82], [91], [92], [93], [94], [95] and [96].

3.3. DIFFERENCES IN CULTURAL PERCEPTION OF ILLNESS AND DISEASE

As described in many articles, language is not the only challenge in ICC. Even between patients and doctors who spoke the same language, misunderstandings were common if their ethnic background differed, because these doctors and patients had different cultural paradigms. Consequently, their perceptions of illness and health were influenced by different religions, norms and values [35], [45], [48], [95], [97], [98], [99], [100], [101], [102], [103], [104] and [105]. Patients who had a hierarchical worldview, for instance, were not used to reflecting on their own thoughts about illness, which made it difficult for them to answer some questions commonly asked by doctors [38] and [106]. Some patients used religious arguments to explain their condition. For example, they replaced the cause of a disease with another etiology which was more in line with their religious beliefs [100].

The objectives that need to be reached to deal with these challenges were identified as knowledge and awareness of cultural differences, management of the patient's expectations of the health care system, mutual understanding [40], [48], [75], [78], [81], [85], [91], [107], [108] and [109], and patient-centered care.

Cultural awareness entails specific skills such as recognizing and knowing one's own and other people's cultural identities and beliefs. ICC was influenced both by the doctor's level of self-awareness and by his or her level of awareness of the patient's culture. Two studies reported that ICC was hindered by the lack of cultural awareness of both patient and doctor, which prevented them from understanding each other's deeply entrenched attitudes [47] and [52]. In four studies, ICC was facilitated when the doctor was aware of his own culture [31], [43], [110] and [111].

For doctors, another main objective in ICC was to manage patients' expectations of the health care system. For example, it was often reported that patients with different ethnic backgrounds did not know how to enter the healthcare system, how to make an appointment with the doctor or which doctor they should visit. In this context, the patients' insufficient organizational and medical knowledge caused them, for example, to visit the wrong doctor, which led to unsatisfactory communication outcomes [35], [40], [45], [48], [67], [81], [102], [104], [112], [113], [114] and [115]. It also contributed to feelings of frustration among doctors [48], [68], [70], [116] and [117], indicating that it would be a valuable specific skill for doctors in ICC to be able to recognize misunderstandings caused by cultural differences and, at the same time, to recognize a patient's expectations of the health care system.

Some articles mentioned that patient-centered communication could be the solution to barriers in ICC [96], [114], [118], [119] and [120]. Many doctors learned to practice patient-centered communication in terms of shared decision-making [64], [121], [122], [123], [124] and [125] and activating patients [34], [91], [109], [126], [127], [128] and [129]. Some studies found that shared decision-making also facilitated communicationin ICC, but other articles showed that patients of ethnic minorities, especially the non-western minorities, viewed the doctor as a person with a high social status and regarded it as disrespectful to contradict the doctor (paternalism) [43], [72], [79], [88], [90], [97], [122], [123], [124], [127], [130], [131], [132], [133], [134], [135], [136], [137], [138], [139] and [140]. In these cases, patient-centered communication might be a effective approach for ICC.

To deal with cultural differences in the perception of illness and disease, doctors were found to need several core skills, such as an open attitude [141] and [142], empathic communication [79], [93], [108], [122], [128], [143], [144], [145], [146], [147], [148] and [149], showing trust [42], [47], [78], [79], [142], [150] and [151] and being respectfull to the patient [54], [73], [76], [78], [79], [80], [83], [84], [87], [105], [114] and [152]. Also, time management [54], [76], [79], [80], [81], [82], [83], [87], [89], [105], [107], [108] and [152], providing explanations [34], [73], [76], [80], [85], [100], [102], [107], [108], [119], [149] and [152] and giving appropriate information [63], [69], [84], [87], [110], [114], [121], [127], [131], [132], [147], [153], [154] and [155] were mentioned as core skills for a doctor to facilitate ICC communication.

3.4. Social component of communication

Another contextual (influencing) factor was the social component of ICC. Many ethnic minority patients considered it very important that the doctor showed interest in the wellbeing of the family or talked with the family when present [31], [40], [134] and [156] and tried to build trust in the relation with the patient [54]. This was an important contextual issue, but often the doctors did not recognize it, as they were used to directing their communication at the individual patient rather than at the family (specific skill) [38], [51] and [157]. For patients, their illnesses were connected to their community context and family; relations, culture and values were inseparable [39], [57], [64], [89], [156], [158], [159], [160] and [161]. Here miscommunication (outcome) occurred because doctors and patients had different perceptions of the role of the family. Therefore, knowledge about expectations and habits of the patient and his family [35], [81], [94], [102], [114], [162], [163] and [164] were described as specific skills. The core skills to reach the objectives were defined as building a relationship with and handling the emotions of the patients and their families. When the doctor knew the situation and context of the patient, he adapted his behavior to expectations of the patient, which improved the communication outcome [39], [40], [43], [57] and [113].

3.5. Prejudices and assumptions

The last identified challenges for the communication were the prejudices and assumptions of doctors about ethnic minority patients. This contextural factor had similar objectives as the context factor ‘differences in cultural perception’; i.e. knowledge and awareness of the cultural differences. For these objectives, the specific skills recognized in the included articles were demonstrating trustworthiness and the doctor's awareness of his or her own assumptions, sometimes caused by previous experiences [94]. Dealing with previous experiences of patients was seen as a core skill of the doctor. These experiences of patients were mostly negative and therefore recognizing them was important to facilitate the communication [32], [42], [76], [151], [165] and [166]. For example, some doctors generalized their thoughts about patients of one ethnicity under the same heading [141]. As a reaction to this mechanism, some patients felt discriminated and treated unequally [102], [118], [132], [167], [168] and [169]. ICC was influenced both by the doctor's lack of awareness and by the patient's feelings.

4. Discussion and conclusion

4.1. Discussion

The aim of this review was to summarize the current knowledge on the factors that influence ICC and to explore the mechanisms through which these factors influence ICC. The use of a realist synthesis provided the opportunity to include a broad range of papers and to explore the context, mechanisms and outcomes in each of the included articles. From a total of 145 included articles, we derived four communication challenges (contextual factors) and several objectives and communication skills (mechanisms) whose absence or presence constituted barriers or facilitators, respectively, for ICC (outcomes). The communication skills could be divided into core communication skills, which doctors should use in any interaction with patients, and specific communication skills for intercultural doctor–patient communication. Reflecting on our research question, we arranged the influencing factors in a framework (Fig.

2) that clarifies which skills should be trained to enable doctors to deal with each of the challenges of ICC.

One of the new insights of this realist review is that the findings of the ICC literature can be translated into an educational framework in response to 4 contextual challenges. Another new insight is that the framework distinguishes between core communication skills that are largely covered by training programs for patient-centered communication, and ICC-specific communication skills that can be developed as an extension of the existing training programs. Doctors who want to facilitate successful intercultural communication with patients should be aware of the contextual challenges and should acquire and use the core and specific communication skills to reach the communication objectives and overcome the contextual challenges. We do not mean to imply that doctors will need to develop proficiencies in each of the skills equally. For example, doctors who know nothing about the patient's culture (specific skills) might still provide excellent care by employing the appropriate core skills, which may well lead to a positive communication outcome. Also, the cultural content of some encounters may be more challenging than the content of others. Rather than one discrete skill, an integrated set of specific communication skills emerged as the key to successful ICC.

We have provided insights into the core communication skills and the specific communication skills that are important for ICC which can be translated into practical points for training. Since effective ICC seemed to have many similarities with patient-centered communication, the core communication skills are similar to the patient-centered communication skills as provided in the six function model of medical communication by de Haes and Bensing [170]. This finding is in line with findings of Teal et al. in their article about culturally competent communication [9]. However, while patient-centered communication emphasizes improving the quality of individual communication [170], ICC stresses equitable distribution of quality communication among diverse ethnic groups, highlighting a different focus. Since patient-centeredness is increasingly regarded as crucial for the delivery of high quality care by doctors [171], the recognition of the similarities between patient-centeredness and ICC is important.

Our findings in this review support earlier research in the area of ICC. The review of Schouten et al.

[12] showed five key predictors of challenges in ICC, two of which are comparable with our results: cultural differences in explanatory models of health and illness and linguistic barriers. Schouten et al., however, did not provide mechanisms for counteracting these challenges [12]. Furthermore, our results have similarities with the model of culturally competent communication (CCC) of Teal et al.

[9], who found four critical elements of CCC, i.e. repertoire, awareness, adaptability and knowledge, and gave a very clear summary of the main CCC skills [9]. In contrast to the study of Teal et al., however, we also found that language was a potential influencing factor of ICC. What our study added to the study of Teal et al. is the systematic search and the fact that we identified specific and core communication skills, which can be translated into communication training.

The anthropological research of Arasaratam et al.

[172] described several theories of ICC. One of these theories, the system theory approach [173], distinguishes between cultural competence and ICC competence. This approach explained that being competent in a particular cultural context does not necessarily imply ICC competence and that in an intercultural context the adaptability of a person is displayed in the ability to be flexible in unfamiliar cultural situations [173]. We think that this approach emphasizes the importance of our research on ICC and of the development of training in this specific area.

As described earlier, ICC has gained attention during the last years, but it has not yet structurally been implemented into all medical curricula of multi-ethnic societies. This situation does not comply with our multi-ethnic societies' demand for doctors with cultural diversity competences [13], [14] and [15]. Strategies to encourage reflective practice in the context of ICC skills training may be more successful than overt attempts to change attitudes [174]. A skill-based approach may therefore be less threatening than a theory-based approach and can be reinforced by assessment of competencies and behavior.

The realist perspective of this review provided the opportunity to examine a wide range of papers in the complex field of ICC and to look at this complex area. This helped to gain insight into the process of ICC. The results did not focus on healthcare outcomes, but on factors which influenced the communication process, in order to identify barriers and facilitators of effective communication in the context of ethnic differences between the doctor and the patient. A strength of this study was the broad research question and search, which enabled us to include many papers about ICC in healthcare. Also, the results were strengthened by the inclusion of studies on both the doctors' and the patients' perspectives, because both parties influence the communication and therefore both voices need to be heard. However, as the search was so broad, it was not possible to include the references of the included articles as well, although we expect that most of them were already included as primary results of our broad search. Another limitation was that the healthcare workers we focused on in this review were doctors; while there are many more healthcare workers who need to deal with the difficulties of ICC in practice, our special focus is due to our interest in developing training programs for doctors. This particular interest also explains why we limited our search to studies that did not include the use of interpreters, since this could influence the interaction and can give bias for answering our research question.

As in all systematic reviews, selection and publication bias is a possible limitation of the present study. However, we aimed to prevent this by extending our search beyond articles written in English and by placing no restrictions on the year of publication. Another limitation could be that we did not test our theory by means of secondary searches. Also, we were not able to distinguish between the different ethnicities within the included articles. As a consequence, we did not describe the interethnic differences. Nor did we investigate the effects of non-verbal communication per se, which also influences the outcome of intercultural doctor–patient communication.

This research identified a number of influencing factors that shape the ICC process between doctors and patients. Future research might focus on how these factors could be used and managed at a practical level. First, this would involve checking our findings by examining real-life consultations. Second, the mechanisms we identified could be used for the development of

communication training and assessment for doctors. As Kai et al. already stated in 2001, uncertainty about the assessment of cultural diversity still needs attention [16].

4.2. Conclusion

We identified communication challenges, objectives and skills that result in barriers or facilitators for intercultural doctor–patient communication. To overcome the challenges, training for doctors should focus on the core communication skills and the specific communication skills that can produce positive outcomes for ICC. The core communication skills required for ICC were similar to the skills for patient-centered communication, but ICC was more susceptible to imbalances in the communication process when cultural differences in the perception of illness and disease were ignored. The insights into the specific skills required to meet ICC challenges in health care provide important information for the development of communication training for doctors.

4.3. Implications for practice

Training programs for improving intercultural doctor–patient communication can be developed as an extension of the existing training programs for patient-centered communication. The description of objectives and specific and core communication skills can be used to translate of ICC theory into clinical practice.

The main educational objectives per contextual challenge are as follows:

- Language differences: knowledge of languages and recognizing misunderstanding.
- Difference in perception of illness and disease: patient centered communication, awareness of cultural differences, doctors' awareness of their own culture and expectation management.
- Social component of communication: knowledge about the role of the patient's family.
- Prejudices and assumptions: awareness of one's own assumptions.

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Ethical approval

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Conflict of interest statement

The authors report no conflict of interest, no financial competing interests and no non-financial competing interests. The authors alone are responsible for the content and writing of the paper.

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APPENDIX A EN B

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TABLES

of the used terminology.

gy*	Explanation
	Culture is a socially transmitted pattern of shared meanings by which people communicate, perpetuate and develop their knowledge and attitudes about life. An individual's cultural identity may be based on heritage as well as individual circumstances and personal choice and is a dynamic entity [23]
ural diversity	The diversity of people with different ethnic cultural and linguistic backgrounds [24]
kground	The fact or state of belonging to a social group that has a common national or cultural tradition: 'the interrelationship between gender, ethnicity, and class' [25]
mpetence	Knowledge, attitudes and skills required to provide good quality care to ethnically diverse patient populations [26]
al communication	Communication between doctors and patients with different ethnic backgrounds; a part of cultural competence [26,27]
ural communication	Comparison of communication across cultures [27]
al communication competence	The degree to which we actively monitor how we communicate with people from other ethnic cultures [28]
competent communication	Communication repertoire, situational awareness, adaptability and knowledge about core cultural issues [9]
al sensitivity	The degree to which we are actively interested in other people's cultural backgrounds, their needs and perspectives [28]

e explains the terminology used in our research. We are aware that this is one of the many operationalization's for these terms.

Table 2
Inclusion criteria.

Inclusion criteria
Doctor–patient communication (one-to-one)
Cultural difference: the doctor of the dominant ethnicity, the patient of the minor ethnicity
Medical setting
English abstract available
Empirical papers, qualitative or quantitative, except: letters, reviews, comments, case reports, books and editorials
No use of interpreter
No use of training the doctors or the patients
No language restriction

Fig. 1. Flowchart of the included articles. E. Paternotte et al. / Patient Education and Counseling 98 (2015) 420–445 423

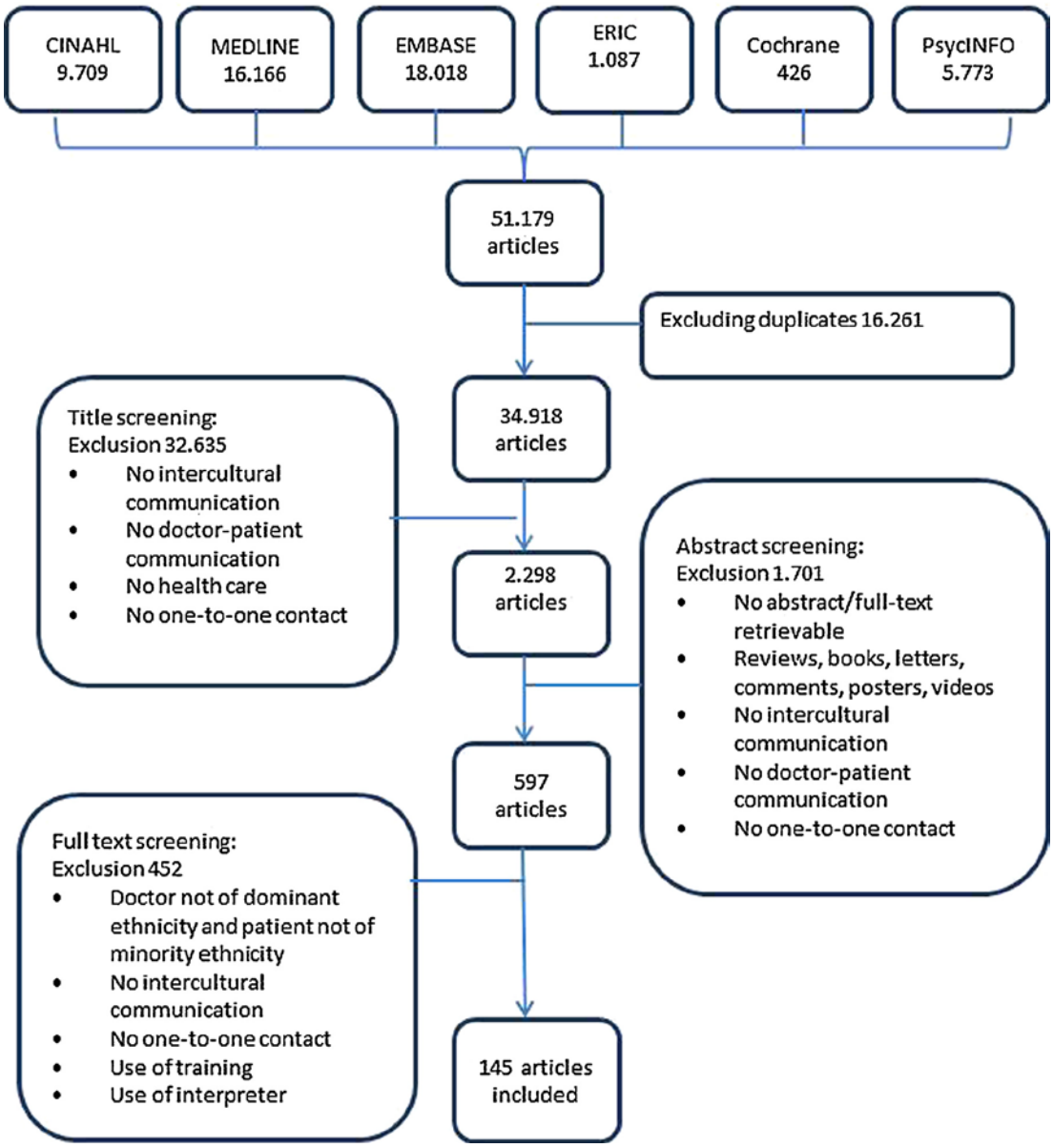

Fig. 2. Context–mechanism–outcome framework for Intercultural communication.

texts with the mechanisms of the communication process to facilitate the intercultural communication; summary of the results.

ural communication contexts → Mechanisms of the process of intercultural communication → Communication outcomes				
ation	Objectives	Specific skills	Core skills	Communication outcome
es	-Knowledge of languages -Understanding the patient	-Being able to speak a few words in the patient's language -Recognizing misunderstandings caused by language differences -Using attributes for explanation (pictures, interpreter) -Paying attention to pronunciation -Using various ways of providing explanations	-Giving information in pieces -Checking if the patient understood -Active listening -Sharing decision making -Avoiding unnecessary medical jargon -Adapting the explanation to the patient -Paraphrasing and repeating the patient's exact words	Barrier or facilitator for effective communication about substantive health care issues
in n of d disease	-Knowledge of cultural differences -Awareness of cultural differences (different paradigms) -Expectation management regarding the health care system -Mutual understanding -Respect -Patient-centered communication (shared decision making)	-Recognizing misunderstandings caused by cultural differences -Recognizing the patient's expectations of the health system -Awareness of one's own culture	-Respecting the patient's habits, norms and values -Becoming familiar with the situation and context of the patient -Understanding the patient (empathic communication) -Informing the patient about the medical procedures/system -Having an open attitude -Explaining -Time management -Active listening -Demonstrating trustworthiness -Handling emotions	
ponent unication	-Knowledge of position of relatives -Awareness of the role of relatives for the patient	-Knowing the relatives of the patient -Showing interest in the relatives	-Relation building with family and patient -Handling emotions	
and ons	-Knowledge of cultural differences -Awareness of cultural differences	-Awareness of one's assumptions regarding cultural differences -Dealing with a patient's negative previous experiences	-Learning from previous experiences -Open attitude -Handling emotions -Showing respect -Demonstrating trustworthiness	

APPENDIX A. EXAMPLE OF SEARCH STRING

Search string MEDLINE	
#1	Language*[tiab] OR communicati*[tiab] OR Communication[Mesh] OR "Professional–Patient Relations"[Mesh] OR contacting client*[tiab] OR medical consult*[tiab]
#2	"Internship and Residency"[Mesh] OR physician*[tiab] OR nurse*[tiab] OR doctor*[tiab] OR professional*[tiab] OR gp[tiab] OR gps[tiab] OR practitioner*[tiab] OR provider*[tiab] OR resident*[tiab] OR intern[tiab] OR interns*[tiab] OR postgraduate*[tiab] OR post graduate*[tiab] OR house officer*[tiab] OR house staff[tiab] OR registrar*[tiab] OR specialist training*[tiab] OR trainee*[tiab] OR clinician*[tiab] OR attending*[tiab] OR consultant*[tiab] OR medical specialist*[tiab]
#3	Patient[tiab] OR patients[tiab] OR client*[tiab] OR health consumer*[tiab]

Search string MEDLINE	
#4	Relation*[tiab] OR interaction*[tiab] OR interview*[tiab] OR communicati*[tiab]
#5	((#2) AND #3) AND #4
#6	(#1) OR #5
#7	“Delivery of Health Care”[Mesh] OR “Physicians, Primary Care”[Mesh] OR “Primary Care Nursing”[Mesh] OR “Primary Health Care”[Mesh] OR “Hospitals”[Mesh] OR healthcare[tiab] OR health care[tiab] OR primary care[tiab] OR hospital[tiab] OR hospitals[tiab] OR general practice*[tiab] OR family practice*[tiab] OR secondary care[tiab] OR medical practice*[tiab] OR medicin*[tiab]
#8	Cultur*[tiab] OR Crosscultural* OR Cross cultural* OR Intercultural*[tiab] OR Multicultural*[tiab] OR Transcultural*[tiab] OR Interracial*[tiab] OR Ethnic*[tiab] OR Diversit*[tiab] OR Migrant*[tiab] OR Immigrant*[tiab] OR Minorit*[tiab] OR Race[tiab] OR Racial*[tiab] OR Emigrants and Immigrants[Mesh] OR Emigration and Immigration[Mesh] OR Cultural Diversity[Mesh] OR Ethnic Groups[Mesh] OR Minority Groups[Mesh]
#9	((#6) AND #7) AND #8
#10	“Review” [Publication Type] OR “Ephemera” [Publication Type] OR “Comment” [Publication Type] OR “Case Reports” [Publication Type] OR “Editorial” [Publication Type]
#11	(#9) NOT #10
#12	#11 AND hasabstract