

Evidence of nonverbal communication between nurses and older adults: a scoping review

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Abstract

Background : Communication is an integral part of life and of nurse-patient relationships. Effective communication with patients can improve the quality of care. However, due to specific communication needs in older adults, the communication between them and nurses is not always effective. Additionally, though research has focused on communication, there is scant evidence on nonverbal communication between nurses and older adults with no communication impairment nor mental illness.

Methods : This scoping review describes the type of nonverbal communication used by nurses to communicate with older adults. It also describes the older adults' perceptions of nurses' nonverbal communication cues. It followed Arksey and O'Malley's framework. Relevant studies and grey literature were identified by searches in Pubmed, Science Direct, Sabinet, Academic search complete, CINAHL with Full Text, Education Source, Health Source- Consumer Edition, Health Source: Nursing/Academic Edition, and MEDLINE. Google Scholar, and World Health Organization library. The studies and grey literature were then filtered by two reviewers independently. Eligibility criteria for inclusion were: (i) studies focused on nurses' nonverbal communication with older adults; (ii) studies focused on older adults' interpretation of nurses' communication behaviors; (iii) any existing literature from 2000 to 2019 and (iv) literature in English and French.

Results : Twenty-two studies were included in this review. The results demonstrate limited published research addressing nonverbal communication between older adults and nurses. The review also revealed that haptics, kinesics, proxemics, and vocalics were most frequently used by nurses when communicating with older adults; while there was limited use of artefacts and chronemics. There was no mention of silence as a nonverbal communication cue used by nurses. Additionally, older adults had both positive and negative perceptions about nurses' nonverbal communication behaviors.

Conclusion : Nurses should be self-aware of their nonverbal communication behaviors as well as the way in which the meanings of the messages might be misinterpreted. In addition, nurses should identify their own style of nonverbal communication and understand its modification as necessary in accordance with patient's needs.

Background

Globally, the demographic trend is towards an increase in ageing populations (1). Improved nutrition, healthcare, sanitation, education and economic well-being are major drivers of population ageing (2). In 2017, the global estimate of older adults aged 60 years or over, was 962 million and is expected to reach 2.1 billion in 2050 (1). While many older adults live healthy, active lives and are engaged in their communities, the prevalence of chronic conditions and multimorbidities are rising (3). Additionally, as their number increase worldwide, issues with their healthcare increase (4). Older adults' healthcare needs tend to be more complex and chronic than younger population groups (3). This leads to a more frequent

use of health care services and a need for more healthcare workers to spend more of their working time with older adults (5), and thus communicating with them.

Communication is a multi-dimensional, multi-factorial phenomenon and a dynamic, complex process, closely related to the environment in which an individual's experiences are shared (6). Regardless of age, without communication, people would not be able to make their concerns known or make sense of what is happening to them (7). Communication links each and every person to their environment (8), and it is an essential aspect of people's lives (9). In relation with healthcare, communication is essential in establishing nurse-patient relationships which contribute to meaningful engagement with patients, and the fulfilment of their care and social needs (10). Effective communication is a crucial aspect of nursing care and nurse-patient relationships (11–13). In health care encounters with older adults, communication is important in particular to understand each person's needs and to support health and well-being (14). However, older adults may experience hearing deficits, changes in attention and coding of the information (15) and these communicative disabilities may restrict their interaction, participation and effective communication (16).

Communication occurs through verbal or nonverbal cues (17, 18). Nonverbal communication (NVC) is defined as a variety of communicative behaviors that do not carry linguistic content (19) and are the messages transmitted without using any words (20, 21). This form of communication overlaps with verbal messages, provides meaning in context by contradicting or reinforcing verbal content (19). Patients are particularly alert to nurses' nonverbal behaviors (22) as they discern their feelings about them or their condition, especially when they are anxious and feel uncertain (19). However, it has been shown that healthcare workers spend very little time to communicate with patients who are not satisfied with the information they receive and the method of communication (23). Though verbal communication behaviors of health care providers have been extensively studied, yet their NVC behaviors have received less attention from researchers (24). Verbal communication accounts for only 7% of communication, while 93% of communication is nonverbal comprised of 38% paralinguistic cues and 55% body cues (25).

Concern needs to be directed on NVC because it is critical to high quality care and plays a significant role in fostering trusting provider-patient relationships (26). The present review suggests the importance of understanding NVC between nurses and older adults, and underscores the need for focused research to address this major gap in the knowledge of communication in geriatric care. The primary aim of the study was to identify the type of NVC cues used by nurses to communicate with older adults in acute care settings or long term care settings.

Methods

In order to map evidence-based knowledge and gaps (27-29) related to NVC between nurses and older adults, a systematic scoping review was conducted. The study adopted the framework proposed by Arksey and O'Malley (30) and further refined by Levac et al. (31). The Preferred Reporting Items for

Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) Checklist (28) was followed for this review (Additional file 1).

Research questions

The main question for this review was: What is the evidence of NVC between nurses and older adults? The sub questions were: (i) What are the NVC cues used by nurses when communicating with older adults? (ii) What are the older adults' experiences of nurses' NVC behaviors? (iii) What is the quality of the included studies?

Eligibility criteria

The Population, Concept, Context (PCC) was used to determine the eligibility of the research question for this review (Table 1).

Table 1: PCC framework used to determine the eligibility of the research question

Criteria	Inclusion	Exclusion
population	Professional nurses, registered nurses, enrolled nurses, nurse aides, nursing students	Nurses working in community settings All other health care workers Informal geriatric care givers
Concept	Nonverbal communication between nurses and older adults (≥ 60 years)	Verbal communication between nurses and older adults Nonverbal communication cues of older adults Nonverbal communication with nurses and older adults with communication impairments or disorders or dementia.
Context	Acute settings, nursing homes, home care, long-term care	End-of-life / Terminal care unit; Psychiatric / mental health care unit; Communities

Population: Nurses including nursing students were considered in addition to qualified nurses and nurse aides because they are the largest population of health care workers (32).

Concept: The focus was non-verbal communication between nurses and older adults (≥ 60 years). For the purpose of this review, the United Nations cut-off of 60 years and older referring to the older adult population in Africa (33) was considered. Yet, most Upper Income Countries have accepted the chronological age of 65 years and older, the age of retirement, as a definition of an older adult (34), but for socio-economic and disease reasons it is not readily applicable to the African context (35).

Older adults with dementia were excluded although they are able to send and receive nonverbal information [39]. Dementia care combines comorbidities, cognitive and functional decline; leading to

complex needs and ever-increasing difficulty for the patient in articulating them (36). It is viewed as a challenging form of care.

Context: Hospital settings vs acute settings and nursing homes were included into the context. Home care is usually carried out by nursing staff with different levels of education and training (37). Furthermore, community settings were excluded from the context because hospitalization is potentially stressful and involves unpleasant experiences for patients and their families (6).

Search strategy

The search terms for this review originated from indexed subject headings, keywords of relevant studies, terms from this reviews protocol, that recurred repetitively and the Medical Subject Headings (MeSH) terms. The term 'nonverbal communication' was used as a starting point to develop a search string and identified other keywords to refer to NVC. The string/Boolean search terms for this review included "nurses" OR "registered nurse" OR "professional nurses" OR "students nurses" OR "nurse aides" AND "nonverbal communication" OR "kinesics" OR "proxemics" OR "artefacts" OR "chronemics" OR "haptics" OR "vocalics" OR "physical appearance" OR "active listening" OR "silences" AND "old people" OR "elder" OR "elderly" OR "older people" OR "aged" OR "geriatrics".

Database searching

A range of sources was sought to ensure a comprehensive coverage of the literature. The search was done using the following databases: Pubmed, Science Direct, Sabinet, Academic search complete, CINAHL with Full Text, Education Source, Health Source- Consumer Edition, Health Source: Nursing/Academic Edition, and MEDLINE. Google Scholar and Open Grey engines were also used to source relevant literature. Additionally, the reference lists of the included studies were used to add more studies. Only studies written in English and in French were retrieved.

Evidence on nurses' NVC cues or behavior while communicating with older adults, conducted in acute settings, and published in English or in French between 2000 and 2019 were included. Quantitative, qualitative, mixed-methods primary research studies, and reviews published in peer-reviewed journals, grey literature that addressed the research question such as book chapters, thesis and reports were also included. Evidence on communication with older adults suffering from communication impairment or dementia, in psychiatric units or communities, published in languages other than English or French were excluded. Evidence published before 2000 were excluded.

Study selection

The titles were reviewed against the eligibility criteria by EW. This initial search was monitored, exported on EndNote X8 reference manager for abstract and full text screening. The duplicated studies were

deleted. Then the abstracts were independently reviewed by EW and JK. Studies that were deemed 'unclear' were advanced to the subsequent screening stage. Assistance from the study university library services was requested when full texts could not be retrieved from the databases. Full text of 75 eligible studies were independently filtered by EW and JK using google forms. Additionally, a search of the reference list of all identified reports and studies for additional studies was performed by EW. The discrepancies that occurred during the abstract screening stage were resolved through discussion until a consensus was reached. The third reviewer (MJ) decided on discrepancies at the full text screening stage.

Data extraction

Information relevant to the aim of this study were extracted independently by EW and JK. A data extraction form was developed electronically using google forms. Extracted data included bibliographic details, country and setting, aim/objective, study design, targeted population, nurses' nonverbal cues used while communication with older adults, older adults' interpretation of nurses' nonverbal behaviors, and relevant outcomes of interest. Discussions refined the table of information extracted.

Quality appraisal

The Mixed Methods Appraisal Tool (MMAT), version 2018 (38) was independently used by EW and JK to critically appraise the quality of the included primary studies. Discussion was used to resolve discrepancies. The MMAT allowed for assessment of the appropriateness of the aim of the study, adequacy and methodology, study design, participant recruitment, data collection, data analysis, and the presented findings. The quality of studies was graded with a quality score ranging from $\leq 50\%$ as low quality, 51–75% considered as an average quality, and 76–100% considered as high quality.

Collating and summarizing the data

The results were synthesized using both a numerical summary outlining the relevant characteristics of the included studies and a narrative synthesis interpreting the results. The nurses' nonverbal cues were categorized under nine items namely (i) artefacts; (ii) chronemics; (iii) haptics; (iv) kinesics; (v) proxemics; (vi) vocalics; (vii) physical appearance; (viii) active listening; and (ix) silence. The summarized items were derived from Boggs (39) competent nurse's nonverbal behaviors; Wittenberg-Lyles et al. (40), Wold (25), Patterson and Berg (41), and Varcarolis (42) codes of NVC.

Results

Two hundred and forty (257) studies met the eligibility criteria following the deletion of 478 duplicates from the 735 studies identified at the title screening stage (Fig. 1).

Subsequently, 182 and 52 studies were excluded following abstract and full text screenings respectively. Reasons for exclusion were that 18 studies did not report on older adults only (6, 24, 43–58), 13 studies did not report on NVC (14, 59–70), 09 studies did not report on nurses and student nurses only (4, 71–78), and five studies did not report on nurses communicating with older adults (79–83). Additionally, six studies reported on older adults with communication impairment and/or mental illness (16, 84–88). The flow diagram (Fig. 1) following the PRISMA guidelines presents the selection process and all results and the final inclusion of 22 studies for data extraction.

Characteristics of included studies

Tables 2 and 3 summarize the characteristics of the 22 included studies. All included studies were published in English language and no eligible French studies were identified.

Table 2
Characteristics of the included studies (1)

Author(s) and year	Objective	Outcomes reported	Conclusions
Babikian 2000	Author's reflection on her encounter with an old person	Nurses' nonverbal communication cues: holding of hand, sitting next to	proxemics, haptics
Backhaus 2009	To examine the special nature of communication between residents and staff in a Japanese elderly care institution by taking a cross-cultural perspective	Nurses' nonverbal communication cues: kiss, hand shake, military tone	haptics, vocalics
Bush 2001	Author's reflection on active listening	Nurses' nonverbal communication cues: leaning over, holding hand, active listening, eye contact, spending more time, notes, learning tools, posture, physical proximity	haptics, kinesics, active listening, chronemic, artefacts, proxemics
Butts 2001	To examine whether comfort touch improved the perceptions of self-esteem, well-being and social processes, health status, life satisfaction and self-actualization, and faith or belief and self-responsibility	Patients' perceptions of nurses' nonverbal communication cues: improved perceptions of self-esteem, well-being, social processes, health status, life satisfaction, self-actualisation, and faith or belief	Haptics Positive perceptions
Calcagno 2008	To provide pointers to help clinicians listen to the needs and concerns of their clients	Nurses' nonverbal communication cues: greeting with a smile and handshake, sitting face-to-face, leaning forward, sitting close enough, listening, having an open posture	active listening, kinesics, proxemics
Carpiac-Claver and Levy-Storms 2007	To identify types and examples of nurse aide-initiated communication with long-term care residents during mealtime assistance in the context of residents' responses	Nurses' nonverbal communication cues: smiling, touching, laughing, singing, eye gazing, leaning forward, nodding, shaking hands, high pitch, soft tone	kinesics, haptics, vocalics
Daly 2017	To explore communication between nurses and older adults, with an emphasis on promoting effective communication in practice	Nurses' nonverbal communication cues: considering the environment, using touch appropriately, positioning oneself at the same level, active and compassionate listening	Artefacts, haptics, proxemics, active listening

Author(s) and year	Objective	Outcomes reported	Conclusions
Freitas 2014	To analyse the performance of nurses in nursing consultation for the elderly based on the theoretical framework of Hall	Nurses' nonverbal communication cues: posture-Sex, sociofugo-Sociopeto axis, distance evaluation, kinaesthetic, contact behaviour, visual code, thermal code, olfactory code, voice Volume	kinesics, vocalics, haptics, proxemics
Freitas 2016	To assess proxemics communication between nurse and elderly in nursing consultation	Nurses' nonverbal communication cues: posture-Sex, sociofugo-sociopeto axis, distance evaluation, kinaesthetic, contact behaviour, visual code, thermal code, olfactory code, voice Volume	kinesics, vocalics, haptics, proxemics
Gilbert and Hayes 2009	To examine contributions of older patients' and nurse practitioners' characteristics and the content and relationship components of their communication to patients' proximal outcomes and longer-term outcomes, and contributions of proximal outcomes to longer-term outcomes	Nurses' nonverbal communication cues: gaze, nod or shake of the head, eyebrow movement, smile, touch	kinesics, haptics
Kaakinen et al. 2007	To describe communication between nurse practitioners and elderly clients	Nurses' nonverbal communication cues: touch, time, flyers, listening, drawings, pamphlets, written instructions; books; education files	artefacts, chronemics, haptics, active listening
Johnson et al. 2018	To describe how nurses communicate with older patients and their relatives in a department of medicine for older people in western Sweden	Nurses' nonverbal communication: standing position, eye gaze, speaking faster, speaking louder, speaking with a friendly tone, kneeling down, closing the door, smiling, facial expressions, smiling	Proxemics, kinesics, vocalics
Jonas 2006	To explore the experience of being listened to for older adults living in long-term care facilities	Patients' perceptions of nurses' nonverbal communication cues: nurturing contentment, vital genuine connections, respect and benefit	Active listening Positive perceptions

Author(s) and year	Objective	Outcomes reported	Conclusions
Levy-Storms et al. 2011	To characterise the meaning of and experiences with individualized care from the perspectives of both nursing aides and nursing-home residents	Nurses' nonverbal communication cues: listening, touching the shoulder Patients' perceptions of nurses' nonverbal communication cues: respect, favouritism	haptics, active listening mixed perceptions
Linda 2002	To explore the skills that are required for effective communication with older people	Nurses' nonverbal communication cues: body movements, postures, gestures, touch, proximity, pace of approach, eye contact, demeaning tone, speaking too quickly	kinesics, vocalics, haptics, proxemics
Medvene and Lann-Wolcott 2010	To identify the communication behaviours and strategies used by socially skilled geriatric nurse aides working with residents in long term care facilities	Nurses' nonverbal communication cues: touching, smiling, spending time with, observing body posture;	haptics, kinesics, chronemics
Park and Song 2005	To determine and compare the communication barriers perceived by older inpatients and nurses caring for them, with the aim of identifying the disparities between the perceptions of the two parties	Nurses' nonverbal communication cues: speaking far away, without eye contact, with mask on, too loudly, too fast. Patients' perceptions of nurses' nonverbal communication cues: working without a sincere attitude, being unfriendly, showing no respect	proxemics, kinesics, artefacts, vocalics negative perceptions
Small et al. 2015	To explore the nature of communication between care staff and residents when they do not share the same language and ethno cultural backgrounds	Nurses' nonverbal communication cues: pointing, touching, eye gazing, smiling, sitting next, head nodding, playful gestures	kinesics, proxemics, haptics
Sorensen 2009	To demonstrate and discuss how personal competence, with emphasis on communication and empathy, can be developed by nursing students through international clinical practice	Nurses' nonverbal communication cues: body contact, pointing, nodding, smiling, laughing, active listening, voice pitch, thumbs up,	kinesics, vocalics, active listening, haptics
Tuohy 2003	To ascertain how student nurses communicate with older people	Nurses' nonverbal communication cues: talking louder and slower, eye contact, facial expressions, appropriate touch	vocalics, kinesics, haptics

Author(s) and year	Objective	Outcomes reported	Conclusions
Williams 2013	To review evidence-based strategies for effective communication with older adults across long-term care settings	Nurses' nonverbal communication cues: eye contact, facial expressions, singing, humming, touching. Patients' perceptions of nurses' nonverbal communication cues: dominance, disinterest	kinesics, haptics negative perceptions
Williams and Warren 2009	To explore how communication affects issues relating to residents maintaining cognitive and physical functioning so that they are able to remain in residence	Nurses' nonverbal communication cues: talk louder. Patients' perceptions of nurses' nonverbal communication cues: rudeness; disinterest in; disdain for; perceived hypocrisy; threats to noncompliance; infantilization of residents; adultification of residents;	Vocalics Negative perceptions

Table 3
Characteristics of the included studies (2)

Author(s) and year	Country	Setting	Design
Babikian 2000	USA	Long term care	Grey: authors' reflection
Backhaus 2009	Japan	Nursing home	Qualitative: Observations and non-recorded interviews
Bush 2001	Germany	Not reported	Grey: author' s reflection
Butts 2001	USA	Two nursing homes	Quantitative: questionnaire
Calcagno 2008	USA	Home care	Grey: theoretical article
Carpiac-Claver and Levy-Storms 2007	USA	Nursing homes and assisted living facilities in USA	Qualitative: videorecordings
Daly 2017	Ireland	Not reported	Grey: Continuous Professional Development
Freitas 2014	Brazil	Family health unit	Quantitative: questionnaire
Freitas 2016	Brazil	Family health unit	Quantitative: questionnaire
Gilbert and Hayes 2009	USA	Nurse practionners' offices	Mixed: videorecordings, questionnaires
Kaakinen et al. 2007	USA	Care facilities, clinics, and private practice	Qualitative: focus groups and in-depth interviews
Johnson et al. 2018	Sweden	Wards in a department of medicine for older people	Qualitative: participatory observations and semi-structured interviews
Jonas 2006	Canada	Long term care	Qualitative: semi-structured interviews
Levy-Storms et al. 2011	USA	Nursing home	Qualitative: focus groups
Linda 2002	UK	Not reported	Grey: Continuous Professional Development
Medvene and Lann-Wolcott 2010	USA	Assisted living facility and nursing home	Qualitative: semi-structured interviews
Park and Song 2005	Korea	Medical, surgical, and ophthalmology units	Mixed: interviews and questionnaires
Small et al. 2015	Canada	Long term care	Qualitative: videorecordings
Sorensen 2009	the Balkans	Nursing home and rehabilitation unit	Qualitative: nursing students' logs

Author(s) and year	Country	Setting	Design
Tuohy 2003	Ireland	Continuing care unit	Qualitative: participant observation and semi-structured interviews
Williams 2013	USA	Literature	Review
Williams and Warren 2009	USA	Assisted living facility	Qualitative: interviews and fieldwork

Timeline (dates) for research

The earliest identified study meeting our eligibility criteria was published in 2000 (89). A growth in NVC between nurses and older adults with no communication impairment or mental illness research occurred for the next 10 years (n = 13). There were two studies in 2001 (90, 91), and four in 2009 (92–95). Between 2010 and 2019, eight studies relevant to the topic were retrieved (9, 22, 96–101).

Location (country) of research

Evidence on NVC between nurses and older adults with no communication impairment or mental illness have largely been reported in the USA (22, 89, 91, 93, 94, 99, 101–104) (45.5%; n = 10). Research from American countries represented 63.6% of all studies which includes two Canadian studies (100, 105), and two in Brazil (96, 97). Research was also conducted in European countries such as Germany (90), Ireland (9), Sweden (98), and the Balkans (95). Only one study was conducted in Korea (106) and there was no mention of a study conducted in an African country. Two studies were not primary studies but were written by authors from the UK (8) and Ireland (9).

Study designs

Diverse research methods were employed within the 22 included studies. The majority (n = 11, 50%) were qualitative studies using individual interviews, focus groups, observations, participant logs, and video recordings. There were also three quantitative studies with one randomized controlled trial, as well as two mixed methods studies. The other three studies were a review (101) and two continuous professional development contents (8, 9).

Quality of evidence

Of the 22 included studies, 16 underwent methodological quality assessment using the MMAT version 2018 (38). The remaining six (8, 9, 89, 90, 101, 102) were excluded for quality appraisal because they were not primary studies. The 16 studies which underwent methodological quality assessment showed high methodological quality appraisal and scored between 80 and 100%. Of these, 15 studies (22, 91–100, 103–105, 107) scored 100%, and one (106) scored 80%.

Study results

Two outcomes were reported in the studies: the nonverbal cues used by nurses, and the older adults' interpretation of these cues.

Nurses' NVC cues

Of the 22 included studies, 20 reported on nurses' NVC cues including: haptics, kinesics, proxemics, vocalics, active listening, artefacts, and chronemics. There was no mention of physical appearance nor silences in all the included studies.

Haptics

Haptics were reported in 16 studies where nurses shook hands with older adults, held their hands, stroked their hands or touched their hands. Nurses also kissed older adults, hugged them or gave them a pat on the shoulder.

In a study aiming at examining the special nature of communication between residents and staff in a Japanese elderly care institution, haptics were referred to as a handshake given by a staff against one older adults will (92). This type of touch was used in a joking atmosphere in Japan where handshakes are uncommon but was forced on the older adult who did not appreciate it. In another study conducted on types and examples of nurse aide-initiated communication with long-term care residents during mealtime assistance, haptics referred to a handshake when staff praised the older adults for eating all their food or to a touch on the arm for attention getting (104). Stroking older adults' hands were reported to be a means of conveying attention when exploring the nature of communication between care staff and residents who did not share the same languages and ethno-cultural backgrounds (100).

Hugs were mentioned as a deliberate communication strategy used by a nurse practitioner to meet the unique needs of older adults in a study aimed at describing communication between nurse practitioners and older adults (103). Hugs were also mentioned as a strategy to establish rapport and prevent communication breakdowns between nurses and older adults (100). The nurses admitted that they consciously used NVC cues that are specific to each client. Additionally, a pat on the shoulder was mentioned as a caring gesture in a study aiming at characterizing the meaning of and experiences with individualized care from the perspectives of both nursing aides and nursing-home residents (99).

Touch had several connotations in a study aimed at exploring the nature of communication between care staff and residents with different languages and ethno-cultural backgrounds. Rubbing under the chin was used by the staff to stimulate sleepy older adults, holding his head back was used to appease a negative response from the older adult, and stroking the hand was used to convey affection (100).

Kinesics

Kinesics was reported in 13 studies. Pointing and thumbs up, as movements of the hands, were used by student nurses to communicate nonverbally when words were in short supply in a study aimed at demonstrating and discussing how personal competence can be developed by nursing students through

international clinical practice (95). Pointing was also reported in a study describing how nurses communicate with older adults and their relatives in a department of medicine for older adults in western Sweden. Pointing was used by nurses to communicate with a learning perspective (98).

Kinesics also referred to movements of the head, which included facial expressions, movements of the eyes, and head nods. In a study aimed at ascertaining how student nurses communicate with older adults, facial expressions and eye contact were described as components of effective communication with older adults (107). Facial expressions such as a smile and laughter were reported in a study where staff occasionally engaged in smiling with older adults to both quickly and amicably resolve disagreements over their respective actions. Smiles were then seen as enhancers of the communication between nurses and older adults (100). Smile was also seen as a way to convey the message (95) or to initiate communication with older adults (104). Furthermore, smiles were used by nurses in an attempt to create a positive atmosphere during the meeting with older adults (98).

Student nurses described head nodding as a means to convey their message nonverbally when communicating with older adults (95). Nodding was also used to convey communicative intent nonverbally, and to indicate acceptance or rejection of staff's actions (100), and to address or to praise the older adults (104). Additionally, nodding was used by nurses to show that they had understood what older adults and their relatives had said, in a study aiming at describing how nurses communicate with older adults and their relatives (98).

Eye gaze was seen as nurses' willingness to be engaged in conversation in a review on evidence-based strategies for effective communication with older adults across long-term care settings (101). Eye gaze was also used to get older adults' attention or as means to both connect relationally and instrumentally with the older adults (100). Additionally, eye gazing was used to get older adults' attention, when the nature of communication between care staff and residents with different language and ethno-cultural backgrounds was explored (100). Eye contact was also suggested as an advice to effectively communicate with older adults (8) or a means of improving communication skills with them (90).

Movements of the body included leaning over older adults to assess their progress (90) or to check on them, in a study conducted on types and examples of nurse aide-initiated communication with long-term care residents during mealtime assistance (104). Additionally, leaning forward was a means to indicate the nurses' eagerness and readiness to listen to the older adults' stories, in a study providing pointers to help clinicians listen to the needs and concerns of older adults (102).

Proxemics

Proxemics, defined as the social meaning of space and interactive field, which determines how relationships occur [115] were reported in 10 studies, and included physical proximity and physical distance. Speaking far away was mentioned as a nurse-related communication barrier perceived both older adults and nurses while determining and comparing the communication barriers perceived by older adults and nurses caring for them (106). Additionally, nurses remained standing while using a medical

voice to communicate with older adults, in a study describing communication with nurses and older adults in Sweden (98).

Sitting next to older adults was part of the playful gestures nurses engaged in, in a study which explored the nature of communication between care staff and residents with different languages and ethno-cultural backgrounds (100). Likewise, sitting at the older adult's side to hold her hand was mentioned in a reflection on the nurse's interaction (89), and sitting face to face was suggested to indicate the presence of the older adult and the readiness to listen while providing pointers to help clinicians listen to the needs and concerns of older adults (102). In a reflection on active listening, physical proximity was described as an enhancer to the ability to listen and a sign of interest in the older adults (90).

To create conditions for planning a good home return, a nurse sat down on her knee in front of the older adult (98). Kneeling down was also used by nurses to make eye contact with older adults', in a study describing communication between nurses and older adults (98). Nurses positioning themselves at the same level as older adults was described as a strategy to support nurses' communication with older adults when promoting effective communication in practice (9).

Vocalics

Vocalics were reported in nine studies where they described different aspects of the voice. A military tone with endearment was used to address an older adult, in a study examining the special nature of communication between residents and staff in a Japanese elderly care institution (92). The old adult did not appreciate the tone of the staff member, though she was joking. Conversely, though to no avail, a soft tone was used by a nurse to encourage an older adult to eat her food (104).

Speaking too quickly and in a demeaning tone were reported as barriers to effective communication when exploring the skills that are required for effective communication with older adults (8). Likewise, speaking too loudly and speaking too fast were nurse-related communication barriers as perceived by nurses and older adults (106). Speaking faster and with a monotonous tone was reported when nurses used a medical voice to communicate with older adults. When they used a power voice, they spoke louder and with great emphasis on selected words (98).

Conversely, speaking calmly contributed to create mutual trust in the student nurse-older adult relationships in a study demonstrating that communication and empathy can be developed by student nurses through clinical practice (95). Speaking slower was a means for student nurses to be understood by older adults in a study to ascertain communication between student nurses and older adults (107). Additionally, a friendly tone was used by nurses to increase the knowledge of older adults when communicating with them in Sweden (98).

Listening

Listening was reported in seven studies. In one instance, listening was reported as a means to help nurses assess older adults' physical condition more effectively (90). Active listening coupled with

compassionate listening was one of the strategies to support nurses' communication with older adults when promoting effective communication in practice (9). Active listening also was identified by nurse practitioners as one of the specific communication strategies proven to be helpful with older adults in a description of communication between nurse practitioners and older adults (103). To listen empathetically and nonjudgmentally while being aware of the body language the older adults used provided pointers to help nurses listen to the needs and concerns of their clients (102).

Actively listening to older adults' verbal and NVC behaviors was seen as leading to individualized care in a study characterizing the meaning of and experiences with individualized care from the perspectives of both nursing aides and nursing-home residents (99). In the same study, nursing aids reported that they indicated to the older adults that they were showing them respect by actively listening to them. For nursing students, active listening in relation to non-verbal communication was seen as an empathic response and an open-minded attitude (95).

Artefacts

Artefacts were reported in five of the 22 included studies. Artefacts included notes and hands-on learning tools seen as strategies to improve communication skills in a speech on active listening (90). They were also referred to as flyers, pamphlets, written instructions, books and education files in a study aimed at describing communication between nurse practitioners and older adults (103). Artefacts were communication supports and aids that can support nurses' communication with older adults (9).

When promoting effective communication in practice, it was advised that nurses should be mindful of the physical environment that can affect interactions between them and older adults (9). For instance, the nurse should avoid speaking whilst wearing a mask, as it is considered as an impediment to effective communication (106). Nurses closed the door on an older adult when using a pedagogical voice in Sweden (98). It avoided any disturbance of the communication exchange.

Chronemics

Chronemics were reported in three studies with nurses' NVC other cues. In a study aiming at identifying the communication behaviors and strategies used by socially skilled geriatric nurse aides working with residents in long term care facilities (22), spending time with older adults was described by the nurses as giving a positive regard to the older adults. Giving a positive regard meant being respectful, acknowledging and showing interest and approval to the older adults. In her reflection on active listening, Bush (90) mentioned spending more time with older patients as a means to promote feelings of acceptance. Yet, she acknowledged exercising patience as the most challenging part of the communication process. Likewise, Kaakinen (103) found that time positively affected nurse practitioners-older adults relationship when describing communication between nurse practitioners and older adults.

Old adults' perceptions of nurses' NVC cues

Six studies reported on the older adults' perceptions of nurses' NVC cues. The perceptions were either positive or negative.

Positive perceptions

Positive perceptions of nurses' NVC cues were reported in three studies. In the first study, comfort touch from nurses was shown to improve the perceptions of self-esteem, well-being, social processes, health status, life satisfaction, self-actualization, and faith or belief (91). In a study exploring the experience of being listened to for older adults living in long-term care facilities, results showed that older adults expressed their satisfaction, gratification, and unburdening that came with being listened to by nurses (105). They also described their relationships with the nurses who listened to them as being close like friends or family (105). A pat on the shoulder was perceived as a sign of respect and care by the older adults in a study aimed at characterizing the meaning of and experiences with individualized care from the perspectives of both nursing aides and nursing-home residents (99).

Negative perceptions

Negative perceptions of nurses' NVC cues were reported in three studies. In a study aimed at exploring how communication affects issues relating to residents maintaining cognitive and physical functioning in order to remain in the residence, vocalics were perceived by the nurses as rudeness, disinterest, "infantilisation" and "adultification" (94). In a study with the aim to determine and compare the communication barriers perceived by older adults and nurses caring for them, speaking far away, without eye contact, wearing a mask and too loud was perceived as being unfriendly, working without a sincere attitude, and showing no respect (106). In a review of evidence-based strategies for effective communication with older adults across long-term care settings, touching their buttocks or looming over them were perceived by old adults as dominance, while glancing at their watch or down the hall was perceived as a sign of disinterest (101).

Discussion

The systematic scoping review explored evidence on NVC between nurses and older adults, focusing on cognitively intact older adults with no mental illness nor communication impairment. A total of 22 studies were included. Haptics, kinesics, proxemics, and vocalics were the most frequently NVC cues used by nurses when communicating with older adults. This study's findings further demonstrated limited use of artefacts and chronemics as forms of NVC. Physical appearance regarding NVC were not mentioned in any of the included studies nor were silences. The results evidenced limited published research in the select topic and in particular for studies located in Asia and Africa. The dearth of studies was found to be not only geographically located, but also for intervention studies.

The majority of the studies included in this review illustrate the nature of NVC between nurses and older adults. The most cited NVCs were haptics perhaps because touch is an essential and often unavoidable part of nursing care (108). Haptics or communication by touch (71) can include aggressive touch,

accidental touch, playful touch, task related touch (41) or task-oriented touch, touch promoting physical comfort, and touch providing emotional containment (41, 108). In the included studies, touch was used to joke, to praise, to get attention, to convey attention, to stimulate, and to show care. In one instance, touch was not appreciated by the older adult (92), which highlights that touch can lead to either positive or negative outcomes, depending on the nurse's awareness and intention (55). Touch can be a nursing tool (109), but nurses need to use touch appropriately, taking into consideration preferences and avoiding its imposition on older adults.

Kinesics, as movements of the hands, movements of the head, and movements of the body, were used when words were in short supply, in order to convey the message, to indicate acceptance or rejection, to resolve disagreements amicably and with speed, to initiate communication, to get attention, and to praise. They are different from haptics in the sense that there is no contact with the older adults, only the body is in movement. Kinesics can express approval or disapproval by either party. Gesturing with a meaning of rejection or disapproval as well as abrupt gestures interrupts the exchange of messages (110). Therefore, nurses should ensure that kinesics are properly decoded (110).

Proxemics which include personal space and territoriality (111) were reported in the included studies. In the review, they included sitting next to, sitting face-to-face, sitting at the side of the person, kneeling, looming over, and speaking far away. Proximity can therefore indicate presence, readiness to listen, and a sign of interest in the older adults. Distance can be seen as barrier to effective communication with older adults. There should be a balance between distance and proximity. However, in light of the often-invasive nature of nursing, nurses are encouraged to create a therapeutic space where older adults' privacy is not violated.

Vocalics are often associated with "elderspeak", which in addition includes oversimplifying the language, speaking at a slow rate, loud, and with a demeaning tone (112). In this study, vocalics included speaking with a military or a demeaning tone, speaking too fast or too loud, which led to negative outcomes. Conversely, speaking with a soft tone also led to a negative outcome (104) while speaking calmly or slower led to positive outcomes (95). In light of the importance of nurses developing self-awareness of the tone that they use to communicate, an opportunity exists for them to use audio recordings to reflect on the tone they use (8).

Physical appearance was not mentioned in any of the included studies. Yet, the clothing worn in nursing is a form of NVC that frequently shapes people's judgments about others, regardless of whether or not the perceptions are true (113). Therefore, nurses should be aware of the fact that the way they look in their uniforms might indirectly communicate something about the care they give.

Implications for practice

Communication is ninety nine (99) per cent of the nurses' job (100). Awareness of NVC will lead to a greater understanding of the messages exchanged (113). When the essence of nursing care falls short, all other initiatives are more likely to fail as well (114). It implies that if communication with older adults

is hindered or tampered, everything else nurses engage in is likely to fail. Nurses need to be self-aware of their NVC as well as the way in which the meanings of the messages might be misinterpreted. Therefore, there is a need for interventions to aid nurses to interact and communicate holistically with older adults (115). Additionally, an emphasis should be put on teaching effective communication to prepare future healthcare providers, minimize miscommunication, and deliver safe, quality care.

Implications for research

This study shows that there is limited evidence specific to NVC between nurses and older adults with no mental illness nor communication impairment, indicating a gap in literature, in particular in the Asian and African countries. This review highlights the need for further research to provide an African insight on NVC and in so doing improve care to older adults and fight against ageism. We further recommend a study to determine the impact of nurses' NVC cues on older adults' satisfaction and safety care.

Strengths and limitations

This study possibly is the first scoping review to map evidence on NVC between nurses and older adults with no mental illness nor communication impairment. This study demonstrated a substantial gap in the literature NVC to guide future research on older adults with no mental illness or communication impairment. The study's methodology also allowed the inclusion of different study designs, and the identification of relevant studies methodically charting, and analyzing the outcomes. Though Medical Subject Heading terms were included in this study, it is possible that research on NVC probably existed under different terminologies which were not captured in this review. As only abstracts written in English and French were included, some relevant studies may have been missed. Several studies of NVC between nurses and older adults may have been reported only in contexts of mental illnesses or communication deficiencies, leading to their exclusion from this review. Additionally, studies on NVC between other healthcare workers and older adults have not been reviewed.

Conclusion

Nurses' NVC strategies are poorly understood, yet key to improving geriatric care. At times, communication with older adults is hampered because nurses create barriers (90) which can be avoided if nurses are aware that older adults are not a homogenous group subject to general assumptions of care (9). Though time constraints can sometimes prevent nurses from providing the attentive communication older adults seek, it is important that they identify their own style of NVC and understand how to modify their interactions with patients when necessary.

Abbreviations

MMAT	Mixed Methods Appraisal Tool
MeSH	Medical Subject Headings

NVC	Nonverbal Communication
PCC	Population, Concept, Context
PRISMA-ScR	Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews

Declarations

Ethics approval and consent to participate

(Not applicable)

Consent for publication

(Not applicable)

Availability of data and material

Data sharing is not applicable to this article.

Competing interests

The authors declare that they have no competing interests.

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Authors' contributions

EW conceptualized the study under the supervision of JK, and designed data the methodology. EW, JK, and MAJ contributed in writing the manuscript. MAJ critically reviewed the manuscript. All authors have read and approved the manuscript.

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References

1. United Nations Department of Economic and Social Affairs Population Division. World Population Ageing 2017 - Highlights (ST/ESA/SER.A/397). 2017.
2. United Nations Population Fund. Aging: UNPF; 2016 [Available from: <http://www.unfpa.org/ageing>]

3. World Health Organization. World report on ageing and health. Geneva: World Health Organization; 2015.
4. Marsden S, Holmes J. Talking to the elderly in New Zealand residential care settings. *Journal of Pragmatics*. 2014;64:17-34.
5. Flores R. Critical synthesis package: Kogan's attitudes toward old people scale (Kogan OP Scale). *MedEdPORTAL*. 2016(12).
6. Norouzinia R, Aghabarari M, Shiri M, Karimi M, Samami E. Communication barriers perceived by nurses and patients. *Global journal of health science*. 2016;8(6):65.
7. Casey A, Wallis A. Effective communication: Principle of Nursing Practice E. *Nursing Standard*. 2011;25(32):35-7.
8. Linda M. Effective communication with older people. *Nursing standard*. 2002;17(9):45-54.
9. Daly L. Effective communication with older adults. *Nursing Standard (2014+)*. 2017;31(41):55.
10. Wiechula R, Conroy T, Kitson AL, Marshall RJ, Whitaker N, Rasmussen P. Umbrella review of the evidence: what factors influence the caring relationship between a nurse and patient? *Journal of Advanced Nursing*. 2016;72(4):723-34.
11. Kounenou K, Aikaterini K, Georgia K. Nurses' communication skills: Exploring their relationship with demographic variables and job satisfaction in a Greek sample. *Procedia-Social and Behavioral Sciences*. 2011;30:2230-4.
12. Martin A-M, O'Connor-Fenelon M, Lyons R. Non-verbal communication between nurses and people with an intellectual disability: a review of the literature. *Journal of Intellectual Disabilities*. 2010;14(4):303-14.
13. Williams KN, Boyle DK, Herman RE, Coleman CK, Hummert ML. Psychometric analysis of the emotional tone rating scale: A measure of person-centered communication. *Clinical gerontologist*. 2012;35(5):376-89.
14. Hafskjold L, Sundler AJ, Holmström IK, Sundling V, van Dulmen S, Eide H. A cross-sectional study on person-centred communication in the care of older people: the COMHOME study protocol. *BMJ open*. 2015;5(4):e007864.
15. Sanecka A. Social Barriers to Effective Communication in Old Age. *The Journal of Education, Culture, and Society*. 2014(2):144-53.
16. Forsgren E, Skott C, Hartelius L, Saldert C. Communicative barriers and resources in nursing homes from the enrolled nurses' perspective: A qualitative interview study. *International journal of nursing studies*. 2016;54:112-21.
17. Araújo MMTd, Silva MJPd. Estratégias de comunicação utilizadas por profissionais de saúde na atenção à pacientes sob cuidados paliativos. *Revista da Escola de Enfermagem da USP*. 2012;46:626-32.
18. Zani A, Marcon S, Tonete V, Parada C. Communicative process in the emergency department between nursing staff and patients: social representations. *Online Brazilian Journal of Nursing*.

- 2014;13(2):11.
19. Fernández EI. Verbal and nonverbal concomitants of rapport in health care encounters: implications for interpreters. *Journal of Specialized Translation*. 2010;14:216-28.
 20. McEwen A, Harris G. Communication: fundamental skills. *Communication Skills For Adult Nurses*. 2010:1.
 21. Stickley T. From SOLER to SURETY for effective non-verbal communication. *Nurse education in practice*. 2011;11(6):395-8.
 22. Medvene LJ, Lann-Wolcott H. An exploratory study of nurse aides' communication behaviours: giving 'positive regard' as a strategy. *International journal of older people nursing*. 2010;5(1):41-50.
 23. Zarea K, Maghsoudi S, Dashtebozorgi B, Hghighizadeh MH, Javadi M. The impact of peplau's therapeutic communication model on anxiety and depression in patients candidate for coronary artery bypass. *Clinical practice epidemiology in mental health*. 2014;10:159.
 24. Xu Y, Staples S, Shen JJ. Nonverbal Communication Behaviors of Internationally Educated Nurses and Patient Care. *Research and Theory for Nursing Practice*. 2012;26(4):290-308.
 25. Wold G. *Basic Geriatric Nursing - E-Book*. 5th ed. Missouri: Elsevier Health Sciences; 2013.
 26. Lorié Á, Reiner DA, Phillips M, Zhang L, Riess H. Culture and nonverbal expressions of empathy in clinical settings: A systematic review. *Patient Education and Counseling*. 2017;100(3):411-24.
 27. Colquhoun HL, Levac D, O'Brien KK, Straus S, Tricco AC, Perrier L, et al. Scoping reviews: time for clarity in definition, methods, and reporting. *Journal of clinical epidemiology*. 2014;67(12):1291-4.
 28. Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, et al. PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and ExplanationThe PRISMA-ScR Statement. *Annals of Internal Medicine*. 2018;169(7):467-73.
 29. The Joanna Briggs Institute. *Joanna Briggs Institute Reviewers' Manual: 2015 edition / Supplement*. Adelaide: The Joanna Briggs Institute 2015.
 30. Arksey H, O'Malley L. Scoping studies: towards a methodological framework. *International journal of social research methodology*. 2005;8(1):19-32.
 31. Levac D, Colquhoun H, O'Brien KK. Scoping studies: advancing the methodology. *Implementation Science*. 2010;5(1):69.
 32. Rush K. Nurses' attitudes towards older people care: An integrative review. *Journal of Clinical Nursing*. 2017;26(23/24):4105-16.
 33. Kowal PR, Wolfson LJ, Dowd JE. Creating a minimum data set on ageing in sub-Saharan Africa. *Southern African journal of Gerontology*. 2000;9:18-23.
 34. Zverev Y. Attitude towards older people among Malawian medical and nursing students. *Educational Gerontology*. 2013;39(1):57-66.
 35. World Health Organization. *Health systems: WHO; 2016* [Available from: http://www.who.int/topics/health_systems/en/]

36. Evripidou M, Charalambous A, Middleton N, Papastavrou E. Nurses' knowledge and attitudes about dementia care: Systematic literature review. *Perspectives in Psychiatric Care*. 2019;55(1):48-60.
37. Bing-Jonsson PC, Hofoss D, Kirkevold M, Bjørk IT, Foss C. Sufficient competence in community elderly care? Results from a competence measurement of nursing staff. *BMC nursing*. 2016;15(5):1-11.
38. Hong QN, Pluye P, Fàbregues S, Bartlett G, Boardman F, Cargo M, et al. Mixed methods appraisal tool (MMAT), version 2018. IC Canadian Intellectual Property Office. 2018.
39. Boggs K. Variation in communication styles. In: Arnold E, Boggs K, editors. *Interpersonal Relationships: Professional Communication Skills for Nurses*. 7th ed. Missouri: Elsevier Health Sciences; 2015. p. 99-112.
40. Wittenberg-Lyles E, Goldsmith J, Ferrell B, Ragan S. *Communication in Palliative Nursing*. Oxford: Oxford University Press; 2013.
41. Patterson A, Berg M. Exploring nonverbal communication through service learning. *J Civic Commitment*. 2014;21.
42. Varcarolis E. *Essentials of Psychiatric Mental Health Nursing - E-Book: A Communication Approach to Evidence-Based Care*. 3rd ed. Missouri: Elsevier Health Sciences; 2016.
43. Corless IB, Michel TH, Nicholas M, Jameson D, Purtilo R, Dirkes AM. Educating health professions students about the issues involved in communicating effectively: a novel approach. *Journal of Nursing Education*. 2009;48(7):367-73.
44. Davidhizar R. LISTENING-A NURSING STRATEGY TO TRANSCEND CULTURE. *Journal of Practical Nursing*. 2004;54(2):22.
45. Fakhr-Movahedi A, Rahnavard Z, Salsali M, Negarandeh R. Exploring Nurse's Communicative Role in Nurse-Patient Relations: A Qualitative Study. *Journal of caring sciences*. 2016;5(4):267.
46. Fakhr-Movahedi A, Salsali M, Negharandeh R, Rahnavard Z. A qualitative content analysis of nurse-patient communication in Iranian nursing. *International nursing review*. 2011;58(2):171-80.
47. Finch LP. Patients' Communication with Nurses: Relational Communication and Preferred Nurse Behaviors. *International Journal for Human Caring*. 2006;10(4).
48. Hemsley B, Balandin S, Worrall L. Nursing the patient with complex communication needs: time as a barrier and a facilitator to successful communication in hospital. *Journal of advanced nursing*. 2012;68(1):116-26.
49. Henricson M, Ersson A, Määttä S, Segesten K, Berglund A-L. The outcome of tactile touch on stress parameters in intensive care: A randomized controlled trial. *Complementary Therapies in Clinical Practice*. 2008;14(4):244-54.
50. Kindblom-Rising K, Wahlström R, Ekman S-L, Buer N, Nilsson-Wikmar L. Nursing staff's communication modes in patient transfer before and after an educational intervention. *Ergonomics*. 2010;53(10):1217-27.

51. Kourkouta L, Papathanasiou IV. Communication in nursing practice. *Materia socio-medica*. 2014;26(1):65-7.
52. McGilton K, Sorin-Peters R, Sidani S, Rochon E, Boscart V, Fox M. Focus on communication: increasing the opportunity for successful staff-patient interactions. *International journal of older people nursing*. 2011;6(1):13-24.
53. McGilton KS, Sorin-Peters R, Sidani S, Boscart V, Fox M, Rochon E. Patient-centred communication intervention study to evaluate nurse-patient interactions in complex continuing care. *BMC geriatrics*. 2012;12(1):61.
54. O'lynn C, Krautscheid L. 'How should I touch you?': a qualitative study of attitudes on intimate touch in nursing care. *AJN The American Journal of Nursing*. 2011;111(3):24-31.
55. Pedrazza M, Berlanda S, Trifiletti E, Minuzzo S. Variables of Individual Difference and the Experience of Touch in Nursing. *Western Journal of Nursing Research*. 2017:0193945917705621.
56. Rödahl G, Innala S, Carlsson M. Heterosexual assumptions in verbal and non-verbal communication in nursing. *Journal of Advanced Nursing*. 2006;56(4):373-81.
57. Salt E, Rowles GD, Reed DB. Patient's perception of quality patient-provider communication. *Orthopaedic Nursing*. 2012;31(3):169-76.
58. Van Dongen E, Elema R. The art of touching: the culture of 'body work' in nursing. *Anthropology & Medicine*. 2001;8(2-3):149-62.
59. Black K, Emmet C. Nurses' Advance Care Planning Communication: An Investigation. *Geriatric Nursing*. 2006;27(4):222-7.
60. Chan EA, Jones A, Fung S, Wu SC. Nurses' perception of time availability in patient communication in Hong Kong. *Journal of clinical nursing*. 2012;21(7-8):1168-77.
61. de Almeida RT, Ciosak SI. Communication between the elderly person and the family health team: is there integrality? *Revista Latino-Americana De Enfermagem*. 2013;21(4):884-90.
62. Matusitz J, Breen G-M, Zhang NJ, Seblega BK. Improving nursing home resident integrity by optimizing interpersonal communication skills in clinical staff. *Journal of evidence-based social work*. 2013;10(2):63-72.
63. Morrow DG, Conner-Garcia T. Improving comprehension of medication information: Implications for nurse-patient communication. *Journal of gerontological nursing*. 2013;39(4):22-9.
64. Palacios-Ceña D, Losa-Iglesias ME, Gómez-Calero C, Cachón-Pérez JM, Brea-Rivero M, Fernández-de-las-Peñas C. A qualitative study of the relationships between residents and nursing homes nurses. *Journal of Clinical Nursing*. 2014;23(3/4):550-9.
65. Ruan J, Lambert VA. Differences in perceived communication barriers among nurses and elderly patients in China. *Nursing & health sciences*. 2008;10(2):110-6.
66. Schofield P. Pain assessment and management in older hospitalised patients: observation shows common themes relating to nurse-patient communication, pain management strategies,

- organisational aspects of care and the complex nature of pain. *Evidence Based Nursing*. 2013;16(4):123-4.
67. Sprangers S, Dijkstra K, Romijn-Luijten A. Communication skills training in a nursing home: effects of a brief intervention on residents and nursing aides. *Clinical interventions in aging*. 2015;10:311.
68. Sundler AJ, Eide H, Dulmen S, Holmström IK. Communicative challenges in the home care of older persons—a qualitative exploration. *Journal of advanced nursing*. 2016;72(10):2435-44.
69. Spencer E. Bringing the 'healing touch of human sympathy' into aged care. *Nursing New Zealand*. 2005;11(7):16.
70. Zwart E. *Forgotten Vision. The perception of elderly in a nursing home on the personal treatment by caregivers*. Netherlands: Utrecht University; 2011.
71. Bobby CS. Haptic Communication-The Unspoken Dialogue. *Language in India*. 2014;14(4).
72. Buhr GT, Paniagua MA. Update on Teaching in the Long-Term Care Setting. *Clinics in Geriatric Medicine*. 2011;27(2):199-211.
73. Clochesy JM, Dolansky MA, Hickman JR RL, Gittner LS. Enhancing communication between patients and healthcare providers: SBAR3. *Journal of health and human services administration*. 2015;38(2):237.
74. Grudzen M. *Cultural and Spiritual Diversity: Improving Our Communication and Understanding*. Geriatric Care Management. 2008:16.
75. Hall JA. Some observations on provider–patient communication research. *Patient Education and Counseling*. 2003;50(1):9-12.
76. Lum HD, Sudore RL. Advance Care Planning and Goals of Care Communication in Older Adults with Cardiovascular Disease and Multi-Morbidity. *Clinics in Geriatric Medicine*. 2016;32(2):247-60.
77. McGilton KS. Enhancing relationships between care providers and residents in long-term care: Designing a model of care. *Journal of Gerontological Nursing*. 2002;28(12):13-21.
78. Parrott R. Emphasizing “communication” in health communication. *Journal of Communication*. 2004;54(4):751-87.
79. Hammar LM, Holmstrom IK, Skoglund K, Meranius MS, Sundler AJ. The care of and communication with older people from the perspective of student nurses. A mixed method study. *Nurse education today*. 2017;52:1-6.
80. Ito M, Lambert VA. Communication effectiveness of nurses working in a variety of settings within one large university teaching hospital in western Japan. *Nursing & health sciences*. 2002;4(4):149-53.
81. Lomas C. The art of listening. *Nursing Older People*. 2015;27(3):41-.
82. Lu D-F, Hart LK, Lutgendorf SK, Perkhounkova Y. The effect of healing touch on the pain and mobility of persons with osteoarthritis: A feasibility study. *Geriatric Nursing*. 2013;34(4):314-22.
83. Madden C, Clayton M, Canary HE, Towsley G, Cloyes K, Lund D. Rules of performance in the nursing home: A grounded theory of nurse–CNA communication. *Geriatric Nursing*. 2017.

84. David Edvardsson J, Sandman PO, Rasmussen BH. Meanings of giving touch in the care of older patients: becoming a valuable person and professional. *Journal of clinical nursing*. 2003;12(4):601-9.
85. Happ MB, Paull B. Silence Is Not Golden. *Geriatric Nursing*. 2008;29(3):166-8.
86. Tinney J. Respecting the aging self: Communication in the nursing home. *Anthropology & Aging*. 2015;29(2):47-55.
87. Torvik K, Kaasa S, Kirkevold Ø, Saltvedt I, Hølen JC, Fayers P, et al. Validation of Doloplus-2 among nonverbal nursing home patients-an evaluation of Doloplus-2 in a clinical setting. *BMC geriatrics*. 2010;10(1):9.
88. Palmer R. Do you really listen? *Nursing Standard (through 2013)*. 2003;17(51):24.
89. Babikian MY. High touch. *Journal of gerontological nursing*. 2000;26(8):55.
90. Bush K. Do you really listen to patients? *RN*. 2001;64(3):35-.
91. Butts JB. Outcomes of comfort touch in institutionalized elderly female residents. *Geriatric nursing*. 2001;22(4):180-4.
92. Backhaus P. Politeness in institutional elderly care in Japan: A cross-cultural comparison. *Journal of Politeness Research Language, Behaviour, Culture*. 2009;5(1):53-71.
93. Gilbert DA, Hayes E. Communication and Outcomes of Visits Between Older Patients and Nurse Practitioners. *Nursing Research*. 2009;58(4):283-93.
94. Williams KN, Warren CAB. Communication in assisted living. *Journal of Aging Studies*. 2009;23(1):24-36.
95. Sørensen AL. Developing personal competence in nursing students through international clinical practice: with emphasis on communication and empathy. *Journal of Intercultural Communication*. 2009(19).
96. Freitas FF, de Oliveira Lima J, Bezerra Oliveira CD, Oliveira e Silva AC, Macêdo Silva J, Neyla de Freitas Macedo Costa K. Consultation performance of nursing for the elderly: Analysis based on the theory of hall *Journal of Nursing UFPE* 2014;8(12):4214-20.
97. Freitas FFQ, Mendes JMS, de Medeiros TM, da Costa TF, Fernandes MdGM, Costa KNdFM. Proxemic Assessment of Relations between Nurse and Elderly in Nursing Consultations. *International Archives of Medicine*. 2016;9.
98. Johnsson A, Boman Å, Wagman P, Pennbrant S. Voices used by nurses when communicating with patients and relatives in a department of medicine for older people—An ethnographic study. *Journal of Clinical Nursing* 2018;27(7-8):e1640-e50.
99. Levy-Storms L, Claver M, Gutierrez VF, Curry L. Individualized care in practice: Communication strategies of nursing aides and residents in nursing homes. *Journal of Applied Communication Research*. 2011;39(3):271-89.
100. Small J, Chan SM, Drance E, Globerman J, Hulko W, O'Connor D, et al. Verbal and nonverbal indicators of quality of communication between care staff and residents in ethnoculturally and

- linguistically diverse long-term care settings. *Journal of cross-cultural gerontology*. 2015;30(3):285-304.
101. Williams K. Evidence-based strategies for communicating with older adults in long-term care. *Journal of Science Communication*. 2013;20(11):507-12.
102. Calcagno KM. Listen Up... Someone Important Is Talking. *Home Healthcare Now*. 2008;26(6):333-6.
103. Kaakinen J, Shapiro E, Gayle BM. Strategies for working with elderly clients: a qualitative analysis of elderly client/nurse practitioner communication. *Journal of the American Association of Nurse Practitioners*. 2001;13(7):325-9.
104. Carpiac-Claver ML, Levy-Storms L. In a manner of speaking: Communication between nurse aides and older adults in long-term care settings. *Health Communication*. 2007;22(1):59-67.
105. Jonas-Simpson C, Mitchell GJ, Fisher A, Jones G, Linscott J. The experience of being listened to: a qualitative study of older adults in long-term care settings. *Journal of Gerontological Nursing*. 2006;32(1):46-53.
106. Park E-k, Song M. Communication barriers perceived by older patients and nurses. *International Journal of Nursing Studies*. 2005;42(2):159-66.
107. Tuohy D. Student nurse-older person communication. *Nurse education today*. 2003;23(1):19-26.
108. Pedrazza M, Trifiletti E, Berlanda S, Minuzzo S, Motteran A. Development and initial validation of the nurses' comfort with touch scale. *Journal of nursing measurement*. 2015;23(3):364-78.
109. Airosa F, Falkenberg T, Öhlén G, Arman M. Tactile massage as part of the caring act: A qualitative study in short-term emergency wards. *Journal of Holistic Nursing*. 2016;34(1):13-23.
110. Borges P, Wicto J, Magalhães Moreira TM, Braz da Silva D, Oliveira Loureiro AM, de Meneses B, et al. Adult nursing-patient relationship: Integrative review oriented by the king interpersonal system *Journal of Nursing UFPE*. 2017;11(4).
111. Azevedo ALd, Araújo STCd, Pessoa Júnior JM, Silva Jd, Santos BTUd, Bastos SdSF. Communication of nursing students in listening to patients in a psychiatric hospital. *Escola Anna Nery*. 2017;21.
112. Williams KN. Elderspeak in institutional care for older adults. *Communication in elderly care: Cross-cultural perspectives*. 2011:1-19.
113. Sudirman I, Sidin I. Does demography matter in nonverbal communication between physician and patient. *Research Journal of Business and Management*. 2016;3(1):1-10.
114. Feo R, Kitson A. Promoting patient-centred fundamental care in acute healthcare systems. *International Journal of Nursing Studies*. 2016;57:1-11.
115. Deane WH, Fain J. Incorporating Peplau's theory of interpersonal relations to promote holistic communication between older adults and nursing students. *Journal of Holistic Nursing*. 2016;34(1):35-41.

Figures

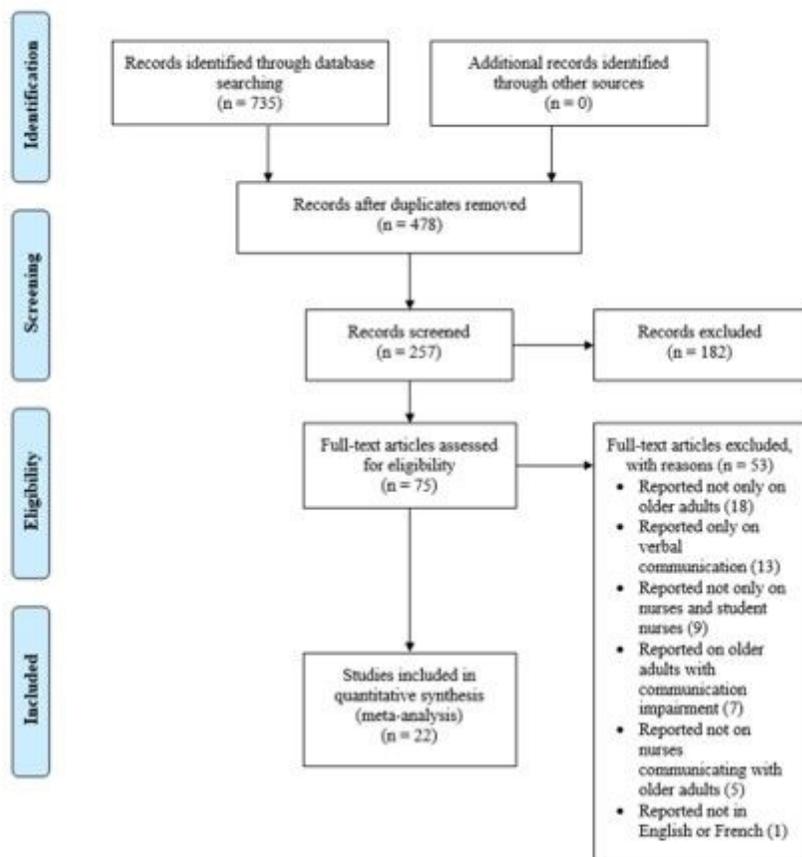


Figure 1: PRISMA 2009 Flow Diagram

Figure 1

PRISMA 2009 Flow Diagram

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