


Provider–Patient Interaction: Exploring Elderspeak in Simulated Preclinical Chiropractic Student Encounters

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Abstract

Objective: The purpose of this study was to identify whether or not elderspeak was evident in simulated provider–patient encounters in a chiropractic education program. This study was designed to answer the following three research questions (RQs):

RQ 1: Is elderspeak present in simulated patient encounters in a chiropractic education program?

RQ 2: If elderspeak is present, which categorization of elderspeak is most frequently used during simulated patient encounters?

RQ 3: If elderspeak is present, is gender an influencing variable?

Method: The presence of elderspeak in simulated chiropractic encounters was studied using a cross-sectional mixed methods observational research design. **Results:** A total of 331 occurrences of elderspeak were identified in 60 digitized recordings. The most common form of elderspeak was collective pronoun usage. **Conclusion:** Results indicated that the chiropractic industry is susceptible to elderspeak. Understanding elderspeak is important to prevent future ageist behaviors from affecting older adult patients and to improve their health outcomes.

Keywords

communication barriers, intergenerational relations, older adults, elderspeak, chiropractic

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A Boomer, formerly called a Baby Boomer, is an individual born between the years 1946 and 1964. Researchers estimate 10,000 Boomers reach the retirement age of 65 years daily (Heimlich, 2014). On average, adults aged 65 years and above see doctors 12 times per year and nearly 80% of these individuals see a primary clinician at least once per year (Davis et al., 2011). In the United States, health care providers observe that Boomers, as well as those in the generation before them, present with complex health care needs, such as chronic health conditions (i.e., cancer or diabetes) or may need to manage comorbidities (i.e., Alzheimer’s disease and high blood pressure). With this increased complexity, communication has become even more important within the patient–provider relationship. Positive, person-centered communication leads to trust between providers and patients, shared goal setting for treatment plans, and increased patient engagement (Naughton, 2018). According to Dews (2014), 75% of the workforce will

consist of millennials by 2030. Millennials are categorized as individuals born between 1980 and 2000. To complicate matters even further, retiring physicians are being replaced by younger providers. The shift in workforce composition, coupled with more complex patient needs, brings a call to action to improve intergenerational clinic encounters with a focus on effective communication.

Scientists who study how individuals age in Western societies have noticed the proliferation of elderspeak (Banister, 2018; Dampier, 2018; K. Williams et al., 2004). Elderspeak is defined as “a register of speech

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used with older adults, to be associated with negative health outcomes” (Corwin, 2018, p. 724). Specific characteristics defining elderspeak include the following: slow speech rate, exaggerated intonation, elevated pitch, elevated volume, simplified vocabulary, repetition, reduced grammatical complexity, and use of diminutives such as “hon and sweetie” (Corwin, 2018; K. Williams, Shaw, et al., 2017). Young health care practitioners may unknowingly communicate messages of dependence, incompetence, and control to older adults through the use of elderspeak (Fleischer et al., 2009; Wlodarczyk et al., 2017). Researchers have discovered that elderspeak increases resistance to care in hospital and chiropractic settings (Herman & Williams, 2009). Increased resistance could lead to increased time for providers to care for patients, resulting in job frustration, increased provider stress, job burnout, staff turnover, and an increase in the cost of delivering care (Reith, 2018; K. N. Williams, Ayyagari, et al., 2017).

The purpose of this study is to identify whether or not elderspeak is evident in simulated patient encounters in a chiropractic education program. Because communication behaviors are difficult to change, practicing and mastering patient–provider interactions without elderspeak is a necessary strategy when preparing health care practitioners to work in actual clinical settings. Minimizing the use of elderspeak is critical to reduce stereotype-based messages that older adults are incompetent and dependent (Banister, 2018; Wlodarczyk et al., 2017). Moreover, eliminating elderspeak in speech interactions with older adults could have potential health care benefits as well (Wlodarczyk et al., 2017). Researchers have focused on strategies for overcoming elderspeak, such as increased person-centered communication training; however, there is a lack of published research about how well prepared the chiropractic community is to address the forecasted landscape of care. An estimated 14% of patients in the United States aged 65 years and above are treated by doctors of chiropractic, and by 2030, nearly one in five U.S. residents is expected to be 65 years or older (Dougherty et al., 2012). Therefore, to successfully provide care to these patients, chiropractors must engage in rich communicative interaction when treating older adults. This study was designed to answer three research questions (RQs):

- **RQ 1:** Is elderspeak present in simulated patient encounters in a chiropractic education program?
- **RQ 2:** If elderspeak is present, which categorization of elderspeak is most frequently used during simulated patient encounters?
- **RQ 3:** If elderspeak is present, is gender an influencing variable?

Method

The presence of elderspeak in simulated chiropractic encounters was studied using a cross-sectional mixed

methods observational research design. Prior to the start of the study, it was approved by the Research Advisory Committee (RAC) and Institutional Review Board (IRB) at an accredited university.

Participants and Materials

The student–provider participants signed a consent form at the beginning of their chiropractic program allowing recorded encounters to be used for educational research benefiting their university. Standardized patients (SPs) were retrospectively asked to give their consent by signing an informed consent form designed specifically for the study. Participants were Year 1 and Year 2 preclinical chiropractic students enrolled in the Clinical Methods III course in Summer 2019. This research was based on traditional educational practices in a naturalistic setting. The data, in the form of digitized recordings of student–SP encounters, were not reviewed and analyzed until after the course ended. As such, the study did not adversely affect students’ learning. The encounters, while not anonymous, were held in the strictest confidence and were only referred to by a case number and not by the name of the students and/or SPs involved. The case number and any identifying information were stored in a password-protected computer accessible only to the researcher. The study used only digitized recordings with video and audio enabled where the encounter included a preclinical chiropractic student interacting with a SP who was ≥ 50 years of age and portraying a patient who was also an older adult.

Training of External Raters

To minimize bias, external raters were recruited to code the data. Five trained raters were selected from a sample of convenience using the researcher’s network of professionals with education and experience in intergenerational studies and/or gerontology. The researcher developed the training over a span of 20 weeks. The presentation was developed from a mixture of peer-reviewed articles and published guides on person-centered communication. The training covered the following topics: intergenerational communication, intergenerational health care, ageism, elderspeak, and the study design. The researcher felt it was important for the external raters to understand the context and reasoning behind the purpose of the study, as well as the impact of intergenerational communication in the health care landscape. Training was conducted over 3 days (8.5 hr total). External raters prepared for the research study by watching a series of Objective Structured Clinical Examination (OSCE) videos on YouTube (Mulcher81, 2010, 2013). This allowed the raters a chance to experience how a digitized recording of an encounter might look and sound. Each digitized recording encounter ranged from 15 to 20 minutes. Quizzes were used to assess whether

Leaves Speak Elderspeak Rating Form
 Created by Maurya Cockrell based on the literature of Williams et al. (2017b)

External Rater's Name/Credentials: Date of Review: Case Number (Encounter Date, Timeframe, and Room Number): Additional Video Identifiers: Student Gender: SP Gender:				
	Diminutives	Collective Pronoun Substitutions	Tag Questions	Reflective
Occurrence Description	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Timestamp:				
Occurrence Description	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Timestamp:				
Occurrence Description	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Timestamp:				
Occurrence Description	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Timestamp:				
Occurrence Description	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Timestamp:				

Adapted from Williams, K., Shaw, C., Lee, A., Kim, S., Dinneen, E., Turk, M., Jao, Y., & Liu, W. (2017b). Voicing ageism in nursing home care. *Journal of Gerontological Nursing, 43*(9), 16-20. doi:10.3928/00989134-20170523-02

Figure 1. Elderspeak rating tool notating digitized recording information, standardized patient/student demographics, and categorization of elderspeak.

Note. Created based on the literature by K. Williams, Shaw, et al. (2017).

raters could correctly identify the four categories of elderspeak: collective pronoun substitution, diminutives, tag questions, and reflective statements. Training was then conducted on a sample of actual chiropractic student–SP encounters to acquaint the external raters with the data collection form used when assessing the SP encounters. The data collection form is described in greater detail in the next section. External raters were trained on how to recognize what does and does not constitute elderspeak. The external raters were trained and retrained until 90% agreement was met on the categorization of elderspeak. External raters watched the digitized recordings at the university’s Assessment Center under the supervision of approved personnel. Trained external raters counted and recorded the number and types of elderspeak used in each encounter.

Measures

A rating form was used by the external raters to document the presence of elderspeak during the student–SP encounters (see Figure 1). The form was created based on the work of K. Williams, Shaw, et al. (2017). Raters used the form to collect demographic information of the student and SP and note if elderspeak was present, which category of elderspeak was heard, a verbatim response of what was heard, and the timestamp at which elderspeak was heard.

The research study focused on the four categories of elderspeak: diminutives, collective pronoun substitution, tag questions, and reflective statements. The definition of each category and examples are as follows:

Diminutives: modification of word or name to make small/short; *childlike* terms of *endearment* (e.g., hon, sweetie, granny).

Collective pronoun substitutions: using collective pronoun when singular pronoun is appropriate (e.g., “Should *we* eat our dinner now, Miss Lucy?” instead of “Can you eat your dinner today, Miss Lucy?”).

Tag questions: posing a question in a way that shows a preferred response (e.g., “You’re ready for a shower now, *aren’t you?*”).

Reflective: encouraging act to satisfy provider not the patient (e.g., “Take the Tylenol *for me?*”).

Data Analysis

Once all digitized recordings were viewed and interactions were documented, the researcher analyzed the quantitative data using SPSS. To answer RQ1 and RQ2, the researcher measured the frequency of elderspeak by type. To answer RQ3, the researcher conducted an Independent Samples *t* test. The *t* test was used to see whether there was statistical significance in the amount of elderspeak experienced based on the gender of the SP. Although RQ3

Table 1. Elderspeak Occurrences in Simulated Preclinical Chiropractic Student Encounters ($n = 60$).

Category	Minimum	Maximum	No. of occurrences	Average occurrences per encounter
Diminutives	0	2	3	0.05
Collective pronoun usage	0	9	183 (137) ^a	3.05
Tag questions	0	6	60**	1.00
Reflective	0	6	85	1.42

^aForty six occurrences of collective pronoun usage might be attributed to students being trained to use the phrase “we” at the end of an encounter to emphasize how the patient and doctor will work together to find a solution.

** $p = .002$.

was designed to assess whether the gender of the student and/or the gender of SP had an impact on the frequency of the use of elderspeak, only the gender of the SP could be assessed since the encounters included more than one student in the examination room at one time.

The researcher conducted qualitative coding of verbatim responses looking for elderspeak themes. The researcher reviewed and reread all qualitative responses to ensure all rating forms captured the essence of elderspeak and categorization was accurate. Occasionally, the rater wrote the right verbiage of elderspeak in the wrong category.

Results

The sample of digitized patient recordings included 42 male SP encounters and 18 female SP encounters. In total, 331 occurrences of elderspeak were identified in 60 digitized recordings (see Table 1). The most common form of elderspeak was collective pronoun usage such as, “We’re just gonna listen to a couple spots on your chest” and “We are going to sit up”; the least frequently used category of elderspeak was diminutives: “No problem with going #1 or #2 that kind of deal,” “Push on your tummy a little bit,” “I’m going to push on your belly right there.” In a given encounter, up to nine occurrences of collective pronoun usage were heard. Reflective statements almost always ended with “for me.” For example, “Next I’m going to have you bend your legs for me” and “Can you look slightly up for me?” There was statistical significance between the students’ use of one of the four categories of elderspeak when interacting with male versus female SPs. Male SPs experienced more tag questions than female SPs [$t(54.794) = 3.259, p = .002$]. Tag questions/statements included “Because this is keeping you up at night right?,” “You really can’t hear too much anymore (while student doctor shook head motioning no), and “Anything else? No diabetes?” There was no significant difference for diminutive [$t(58) = .883, p = .381$], collective pronoun usage [$t(58) = -1.137, p = .260$], or reflective questions [$t(58) = .1.793, p = .078$].

Discussion

Intergenerational communication is becoming increasingly important to the health care industry. Researchers

estimate 10,000 Boomers reach the retirement age of 65 years daily (Heimlich, 2014). The health care providers of today may not be prepared to treat the influx of older adults (Davis et al., 2011). The complexity that accompanies this patient demographic, such as chronic health conditions and comorbidities shows that positive health communication with providers is more important than ever (Herman & Williams, 2009). Elderspeak in provider–patient encounters threatens the chance of building a trusting relationship and leads to bias, stereotypes, and negative perceptions of older adult patients (Włodarczyk et al., 2017). Many health care providers and caregivers might not realize the harm in elderspeak and may inadvertently use negative phrases, which can then lead to poor health outcomes of older patients. According to Herman and Williams (2009), elderspeak can make older adults feel less competent and lower their self-esteem. Elderspeak makes individuals feel dependent, controlled, and child-like.

According to the results of the study, elderspeak is present in simulated chiropractic encounters. A total of 331 occurrences were found in the 60 digitized recordings. Collective pronoun substitution was the most frequently used type of elderspeak. This finding was similar to the findings by K. Williams, Shaw, et al. (2017) in nursing home settings. Unique to the chiropractic study, the only category influenced by SP gender was tag questions. After analyzing the findings, the researcher had the opportunity to present the data to chiropractic students as part of a geriatrics course. Interestingly, some students expected the number of occurrences to be higher. Many students agreed that if the study was conducted in a true clinical environment, the number of occurrences, especially diminutives, could be higher. It is possible that the use of diminutives (e.g., hon, sweetie, baby) is more likely to occur as the age of the patient increases (e.g., above 70 years), because the student doctors may liken him or her to their grandmother or grandfather. Some literature suggests the use of diminutives might be based on cultural values or on the health professions education training received (Fleischer et al., 2009). Other students were unaware that the phrases they used could be offensive to an older adult. A few students suggested that the high frequency of collective pronoun substitution was attributed to being taught by chiropractic faculty to use partnering language with

their patients. Based on the study findings, students discussed possible reasons for why male SPs encountered more tag questions than female SPs. Some students suggested that male SPs encountered more tag questions because, culturally, men are typically judged for showing pain or weakness. By answering the questions for the male SPs, the student doctors may not have given the patients an opportunity to express their true feelings.

Although not part of the original research aims, the external raters noted the use of verbal or physical distractors performed by the student doctors as they watched the digitized recordings and identified these distractors as having the potential to annoy patients during the encounter. Examples of these idiosyncrasies included constant clicking of the pen, swiveling in the chair, and gender bias. The research study showed student doctors tended to assume that female SPs were married and asked about the health of their husbands. This not only showed marital bias, but an assumption that the female SP was in a heterosexual relationship. Although these did not constitute elderspeak per se, annoyances can hinder the success of a chiropractic practice. Many chiropractic businesses are built on referrals. If a patient finds a health provider to be unprofessional and offensive, she or he may be less likely to refer prospective clients to that practice.

Study Limitations

All digitized recordings included more than one student in the exam room, and some videos had up to four students conducting the assessment making it impossible to evaluate the role of gender and elderspeak by the student doctors. The audiovisual quality, however, could have been clearer in that it was difficult for the researcher or external raters to read body language and facial expressions due to the angle of the cameras in the room. Students, SPs, and instructors broke character throughout the encounters, which often distracted the external raters and implied students did not view the encounters as a true simulated experience. Also, there was lack of diversity among the raters. Four of the raters were above the age of 55 years, and the fifth rater was below the age of 45 years. All five raters were of African American descent. Despite the limitations, the study provided valuable information that can lead to future research studies.

Areas of Future Research

This study exposed knowledge gaps and opportunities for future investigation. To examine elderspeak in health communication and its effect on the overall patient–provider relationship, future research should be conducted in the following areas:

1. Occurrences of elderspeak in other allied health professions, including but not limited to speech-language pathologists, physical therapists, occupational therapists, dietitians, and music therapists.

2. Educational interventions to decrease elderspeak before entering the clinical and/or preclinical environment.
3. Training to empower patients to educate their own health providers about elderspeak and the harmful effects of ageist stereotypes.

Conclusion

Elderspeak is common in provider–patient communication. This study builds upon previous research conducted in the nursing home setting and indicates that elderspeak also happens in chiropractic education settings. Understanding this type of biased communication is important to prevent future ageist behavior toward older adult patients and, thus, improve health outcomes for these patients. Effective communication between patients and providers improves trust and adherence to treatment plans (Herman & Williams, 2009). Health communication and cultural sensitivity training is crucial for incoming, young health providers. As Boomer clinicians age and retire, they will be replaced by millennials who will need to learn how to navigate intergenerational relationships with their new Boomer patients.

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Author's Note

Because the project entitled “Provider–Patient Interaction: Exploring Elderspeak in Simulated Pre-Clinical Chiropractic Student Encounters” collects and stores data that is not identifiable with any individual, the project is exempt from IRB review.

Declaration of Conflicting Interests

The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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