Inclusive language in medical communication – factors influencing linguistic attitudes in Polish healthcare

Język inkluzywny w komunikacji medycznej – czynniki wpływające na postawy językowe w polskiej ochronie zdrowia

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∎ Abstract

Introduction and Objective. The ability to speak inclusively and politely is very important for mutual understanding, especially with the increasing cultural diversity of societies. This inclusiveness is often underestimated as a tool for effective communication in the medical field. This study investigates the attitudes toward inclusive language among Polish medical professionals. It also examines how willingly this language is used in different situations and what factors influence this tendency.

Materials and Method. An analysis of answers to an online survey among members of Polish healthcare was conducted. The answers were collected from students, doctors, medical staff, and medical university employees.

Results. The results demonstrate that the topic of inclusive language is very controversial, and its practical application is differently understood. They highlight the influence of young age as well as female gender on the tendency to use inclusive terms. The results also showed that the language used strongly varies depending on the professional situation. In this study, the factors that influenced the extent of the use of inclusive language the most were the aims of the communicative situation and communicational priorities.

Conclusions. The ways and extent of the application of inclusive language strongly depend on the professional situation and on the aims of the speaker. Different speakers tend to reach the same communication goals by using different linguistic approaches.

Key words

healthcare, medical communication, linguistic attitudes, inclusive language

∎ Streszczenie

Wprowadzenie i cel pracy. Inkluzywność i uprzejmość wypowiedzi jest wyjątkowo ważną częścią komunikacji, zwłaszcza jeśli weźmiemy pod uwagę coraz większą różnorodność społeczeństwa. Inkluzywność bywa niedocenianym narzędziem językowym w dziedzinach medycznych. W tym badaniu zajęliśmy się postawami polskich pracowników ochrony zdrowia wobec języka inkluzywnego. Sprawdziliśmy, czy chętnie używa się tego języka w różnych sytuacjach oraz jakie czynniki na to wpływają.

Materiał i metody. Przeanalizowaliśmy odpowiedzi na pytania ankiety, która została przeprowadzona pośród członków polskiej ochrony zdrowia. Zebraliśmy odpowiedzi od studentów, lekarzy, personelu medycznego oraz pracowników uniwersytetów medycznych.

Wyniki. Wyniki wskazują na kontrowersyjność tematu inkluzywności w naszej grupie respondentów. Praktyczne zastosowanie języka inkluzywnego jest różne zależnie od grupy wiekowej, do której zalicza się osoba badana, oraz od jej płci, przy czym kobiety oraz młode osoby wykazują większą tendencję do jego używania. Język, którym posługują się respondenci, jest odmienny w poszczególnych sytuacjach zawodowych, a największy wpływ na inkluzywność wypowiedzi mają cele i priorytety komunikacyjne.

Wnioski. Sposoby i zasięg wykorzystania języka inkluzywnego w komunikacji medycznej są znacząco różne w zależności od sytuacji i celów mówiącego. Interesującym wnioskiem z naszego badania jest to, że różni nadawcy osiągają podobne cele komunikacyjne, używając różnych narzędzi językowych, a zatem nie dla każdego inkluzywność wypowiedzi jest w takim samym stopniu istotna w komunikacji.

Słowa kluczowe

ochrona zdrowia, komunikacja medyczna, postawy językowe, język inkluzywny

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INTRODUCTION

It is easy to observe that the language we use is indicative of our attitudes. Some research has already been conducted in the field of inclusive language, which is defined as language

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that is tolerant and avoids bias, and instead aims at integrating individuals and minorities into society. For example, as suggested, favouring gender-biased language is connected with past habitual use of such language and with explicit sexist beliefs [1]. A similar connection was found between the use of gender-inclusive language and attitudes toward transgender people among college students [2].

On the other hand, is it also possible that our use of language shapes our attitudes and opinions? As pointed out an article in *The New York Times*, 'If different languages influence our minds in different ways, this is not because of what our language allows us to think, but rather because of what it habitually obliges us to think about'[3]. This claim was made in the context of different mother tongues, but it can also illustrate the concept of inclusiveness: our language sometimes obliges us to express certain concepts or even prejudice, but it also allows us to change our attitudes because it is susceptible to change and development. Every living language evolves with its speakers.

In Poland, the topic of inclusive language itself is relatively new and unexplored, especially in the medical field. In 2020, the Council of Polish Language and Polish Society of Psychiatrists launched the campaign *Wrazliwi na slowa. Wrazliwi na ludzi* ('Sensitive about Words. Sensitive about People)' [4], which discusses the problem of inclusive language in encounters with patients treated for psychiatric diseases. The issue of inclusive language is important not only in the context of psychiatric patients, but for all patients. Medical communication reflects the ethical aspect of the relationship between the medical staff and the patient. According to E. Kołodziejek, ethical communication is based on empathy, respect, and kindness toward the interlocutor and the struggle for agreement [5]. These are the key values for the therapeutic alliance. Moreover, language can also contribute to stigmatization [6].

The main objective of this study was to determine the answers to the following questions:

Research Question 1 (RQ1). What are the attitudes of Polish medical professionals towards inclusive language in different situations?

Research Question 2 (RQ2). How are different elements of professional communication (comprehensibility, factuality, empathy, correctness, conciseness, and others) prioritized, and how is that connected with the tendency to use inclusive language?

Research Question 3 (RQ3). Among medical professionals, do some groups consider inclusive language a more important aspect of communication with patients than others?

RQ1. Traditional ways of speaking in the medical field. The group of medical academics and other staff naturally prefers traditional expressions. The average patient, who is mostly advanced in age, also naturally uses formulaic expressions, which are commonly understood by all generations. Given the specificity of the medical field and the fact that language is usually treated by medics solely as a means of efficient communication, they should be even more resistant to inclusive expressions in everyday usage. Furthermore, the Polish language is characterized by a type of grammar that often obliges the speaker to reveal or suggest gender. Hence, it requires new linguistic solutions to make the way we speak truly inclusive.

For the reasons mentioned above, it is expected that Polish society, which is usually tied to traditional expressions, will mostly prefer them to inclusive variants. Its significance was especially shown by the attitudes and language used toward people with mental illness [4]. These premises allow us to formulate the following hypothesis:

Hypothesis 1 (H1). Most respondents prefer short, formulaic expressions to inclusive ones, and consider comprehensibility and factuality more important than inclusiveness in professional communication.

RQ2. Influence of communication priorities on inclusiveness. What is prioritized by the speaker strongly influences communication, which is supported by studies that indicate that more empathy fosters more efficient communication, for example, Hardee (2003) [7]. The aspects of the language that are prioritized can depend on the individual characteristics of the speaker, such as personality, and so does the tendency to use inclusive terms. For example, a more empathetic speaker will put more stress on the feelings of others as an important aspect of communication. As inclusive language in principle concentrates on how the expressions used will affect the well-being of the ones spoken to or about, it is also expected to be used more often by speakers with a developed sense of empathy and caring.

What affects the priorities in communication is also the context and the characteristics of the one to whom the message is addressed, for example, the extent of the recipient's knowledge. This means that different expressions will be used while communicating within the team or during an academic presentation, and while communicating with a patient. In the medical field, brevity and factuality of the message are often priorities, especially when communicating with other specialists. However, empathetic speaking can be equally important for medics to prove their trustworthiness to the patient, which is crucial to getting the message across and ensuring compliance [8].

Hypothesis 2 (H2). The number of situations where inclusive expressions are implemented correlates with the greater importance ascribed to empathy in communication.

It is also hypothesized that there is no contradiction between the comprehensibility and inclusiveness of the language. Inclusive expressions are very precise, and, unlike the traditional ones, they strive for impartiality when naming persons and groups.

Hypothesis 3 (H3). The comprehensibility of the message is not less valued by the respondents who choose inclusive language in more situations.

RQ3. Different groups of medical professionals. Extended studies from recent years have shown an increase in the percentage of leftist political views among Poles aged 18–24 [9]. As leftist views favour using inclusive expressions, we decided to check whether different age groups have different inclinations toward inclusive language.

What is also extremely important in the language used is the experience in the profession. The more experienced groups (doctors, academics, and medical staff) will choose the expressions which have proven to be the most efficient in the past. Presuming that inclusive expressions are less known

to society than traditional ones, this would make groups of professionals are more likely to avoid inclusive language compared to students. Empathy should also be less important in communication for the more experienced generations; some studies have hinted at a decrease of empathy during medical training and residency [10].

Gender is associated with political and social worldviews, which influence the tendency to speak inclusively. Especially in young age groups, females admit to having leftist beliefs more often than males (also CBOS), which indicates more frequent use of inclusive terms by women than by men.

The next important factor believed to influence the tendency to use inclusive language is professional contact with other countries. The topic of inclusiveness has been discussed longer in those countries that have a highly multicultural structure. Furthermore, different native languages inspire different ideas as to how speech should adapt to new circumstances. Therefore, we would like to investigate the following hypotheses.

Hypothesis 4 (H4). The tendency to use inclusive expressions is more likely to be found in students, females, and people who have experience or a plan of working or studying abroad, compared to other groups of respondents.

Hypothesis 5 (H5). Empathy in communication is more important for students than for doctors and other medical professionals.

MATERIALS AND METHOD

The study was performed on a sample of medical professionals and students using the Polish language at least on the communicative level ($N = 139$). The sample was subdivided into four main groups.
- students ($n = 78$);
- doctors ($n = 31$);
- other medical professionals ($n = 28$);
- other employees of medical universities ($n = 2$).

The method in this study was based on selecting several expressions that represent three different styles of language: stigmatizing, non-inclusive, and inclusive (with the last being later subdivided into casual and official language). The choice of expressions and their classification into the three main groups were based on the findings of the *Wrazliwi na slowa. Wrazliwi na ludzi* campaign [4], and guidelines published by the Polish Language Council in cooperation with the Campaign against Homophobia [11]. The classification of some terms was consulted with the *Dictionary of the Polish Language*. Translations were made using the *Cambridge Dictionary* (2023) [12], being aware of the fact that it is difficult to translate accurately, especially common expressions. In such cases, direct translation was abandoned, and the English terms were chosen following the principle of similar connotations and a similar purpose of usage in the context.

Group A – stigmatizing terms. Expressions that are traditional and commonly used, but in their meaning are considered offensive, partial, or stigmatizing according to the guidelines.

Group B – non-inclusive terms. Expressions that are not considered offensive, but are also not perfectly inclusive according to the guidelines (e.g., identify a person with his/her disease, or unnecessarily emphasize age, gender, etc.).

Group C – inclusive terms. According to the guidelines and dictionaries, these are neutral and inoffensive terms. They fulfill the principles of *people-first language* by speaking about a person who has an attribute rather than characterizing a person by ailment [13].

As the topic is quite extensive, it was necessary to select a few discrimination-prone groups representative of the problem and relevant in the medical context. Hence, the expressions refer to:
- disabilities – *an invalid, a disabled person, a person with disabiliti*es;
- age – *a granny, an elderly lady, a senior citizen;*
- development disorders – *a problem child, a hyperactive child, a child with ADHD;*
- mental diseases – *a mentally disordered person, a schizo-phrenic;*
- race – *a black person, a person with black skin color, a person of African origin;*
- sexual orientation – *a person with sexual preferences, a homosexual, a gay, a lesbian, a homosexual person;*
- gender – *psychiatrists – when speaking of a group of different genders it is possible to use only a virile term or two terms, both a virile and a non-masculine one persons specializing in psychiatry.*

Words that are traditionally considered purely aggressive, hateful or penalized were not included in the study, as they are not considered debatable.

Table 1. Polish expressions used as examples belonging to the three groups

Group A – Stigmatizing
babcia – a granny
chory / chora psychicznie – a mentally disordered (of a man / woman)
dziecko specjalnej troski – a problem child
inwalida – an invalid
Murzyn / Murzynka – a Black (of a man / woman)
schizofrenik – a schizofrenic

Group B – Non-inclusive (moderate, correct)
dziecko nadpobudliwe – a hyperactive child
osoba czarna – a black person
osoba czarnoskóra – a person of the black skin color
osoba niepełnosprawna – a disabled person
osoba o preferencjach homoseksualnych – a person with homosexual preferences
psychiatrzy (used for a group including men and women) – psychiatrists (in Polish this word is of virile gender)
starsza pani – an elderly lady

Group C – Inclusive
dziecko z ADHD – a child with ADHD
gej / lesbijka – a gay / lesbian
homoseksualista / homoseksualistka – a homosexual (of a man / woman)
osoba z chorobą psychiczną – a person with a mental disorder
osoba homoseksualna – a homosexual person
osoba pochodząca z Afryki – an African person / a person of African origins
osoba z niepełnosprawnością – a person with disabilities
osoba ze schizofrenią – a person with schizofrenia
osoby specjalizujące się w psychiatrii – persons specializing in psychiatry
psychiatryczki i psychiatrzy – psychiatrists (of women) and psychiatrists (of men)
seniorka – a senior citizen

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The tool used to collect data was an online survey, which allowed us to select the desired group and to characterize it demographically. The survey was conducted between 10 January – 8 April 2022, and was spread using social media by posting it in the most popular thematic groups used by the majority of medical students and young medical professionals. Older generations of doctors and medics were reached individually by spreading the link from person-to-person.

The survey consisted of three parts.

1) We asked the respondents to tell which of the three or four expressions originating from a different group in the Table they would use in a given situation. Each set of expressions was to be considered in three different situations: Situation 1 – an official context (e.g., a lecture); Situation 2 – communication with a patient; Situation 3 – communication in the team.

2) We asked the respondents to choose their communication priorities—up to three aspects of communication they found most important. We gave them five answers and the possibility to type in one on their own choosing. The given priorities were:
   • clarity of the language and its adequacy to the recipient's competence (referred to as *comprehensibility* in this article);
   • *correctness* of the language;
   • *factuality* of the message.
   • care about the feelings of the one spoken to or about – *empathy;*
   • *conciseness.*

We also asked the respondents about their knowledge of the term 'inclusive language' and about their opinion about what it means. They were also asked whether it was the same as *non-discriminating language*.

3) In the last part, we asked questions about the gender and age of the respondents, the number of inhabitants in their place of residence, and whether they have had any experience working or studying abroad, or whether they have considered such a plan for the future.

Data analysis. Statistical analysis was made using Excel 2019 and Statistica 13. For the correlations between affiliation with different subgroups and the choice of expressions and communication priorities, we used the two-tailed X^2 test and Pearson's correlation in Statistica. To check the significance of the difference in the choices of expressions and priorities in different situations, we used the Cochrane test. We also checked the difference in the proportions of persons identifying as females to other respondents in different analyzed subgroups using the two-tailed X^2 test.

RESULTS

RQ1 (1). General observations. Starting from a general analysis of the whole group ($N = 139$), Table 2 depicts which one of the three or four parallel expressions was chosen the most often, in three different situations regardless of the situation.

Table 2. The percentage of respondents who chose a given expression in the three situations. The last two columns show the results of the Cochrane's Q test, verifying whether the proportion of respondents choosing a given expression is significantly different in the Situations 1 to 3, X^2(2, $N = 139$)

Expression	Regardless of the situation	Situation 1 – Official	Situation 2 – Conversation with a patient	Situation 3 – Communication in the team	Q	p
Invalid	8.63	0.00	0.00	8.63	24.00	< .001
Disabled person	52.52	15.11	30.94	33.81	18.97	< .001
Person with disabilities	89.21	83.45	71.94	45.32	66.18	< .001
Granny	20.86	0.72	0.72	19.42	46.62	< .001
Elderly lady	78.42	48.20	41.01	51.08	3.85	.15
Senior citizen	67.63	45.32	46.04	23.02	26.13	< .001
Psychiatrists (virile gender group)	85.61	43.88	74.10	71.22	50.38	< .001
Psychiatrists (of women) and psychiatrists (of men)	20.14	10.07	5.76	12.95	6.33	.04
Persons specializing in psychiatry	48.20	43.17	17.27	11.51	58.86	< .001
Black	15.83	0.72	1.44	15.11	36.29	< .001
Person of the black skin color	89.93	83.45	81.29	69.06	17.90	< .001
Black person	9.35	4.32	4.32	7.91	6.25	.04
African person / person of African origins	12.95	7.91	7.91	2.88	6.53	.03
Homosexual	25.18	4.32	11.51	17.99	16.94	< .001
Gay / lesbian	28.06	1.44	1.44	28.06	72.05	< .001
Person with homosexual preferences	34.53	29.50	17.99	7.19	37.95	< .001
Homosexual person	79.14	61.15	63.31	45.32	16.69	< .001
Schizophrenic	29.50	3.60	1.44	27.34	61.38	< .001
Mentally disordered	17.27	2.16	10.79	9.35	11.27	.004
Person with a mental disorder	48.20	33.09	33.81	14.39	28.12	< .001
Person with schizophrenia	72.66	57.55	48.92	43.88	8.94	.01
Problem child	10.79	2.16	4.32	6.47	3.86	.15
Hyperactive child	47.48	22.30	35.25	16.55	19.35	< .001
Child with ADHD	86.33	71.22	56.12	73.38	18.00	< .001

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Countering **H1**, that most respondents prefer short, formulaic expressions to inclusive ones, the data from Table 2 shows that, regardless of the situation, in some cases more respondents decided to choose the inclusive expressions (from Group C) than the shorter non-inclusive ones (from Groups A and B). For example, the Cochrane's Q test determined that a significantly larger proportion of respondents chose the expression *person with schizophrenia* than *schizophrenic*, $X^2(1, N = 139) = 48.65$; $p < .001$.

Nevertheless, in many cases, traditional expressions from Group B were preferred over Group C. For example, the Cochrane's Q test proved that more respondents chose the expression *person of black skin colour* than *person of African origin*, $X^2(1, N = 139) = 97.85$; $p < .001$; more respondents chose the expression *psychiatrists* (virile) than *psychiatrists* (of women) *and psychiatrists* (of men), $X^2(1, N = 139) = 80.40$; $p < .001$.

To answer RQ1 we also collected data on opinions about and knowledge of the concept of inclusive language itself. Most respondents were not acquainted with the concept of inclusive language, or were unsure of its meaning (43.17% and 21.58%, respectively).

RQ1 (2). Different aspects of communication. In order to answer the research question, it was required to gather data on whether and how the choice of expressions differed in different communication situations: official communication (e.g., a lecture), conversation with a patient, and conversation within the medical team.

Table 2 shows evidence that the choice of expressions differs significantly in different situations. The influence of changing situations on the choice of expression in almost every row was proven statistically significant by the Cochrane's Q test (exceptions. *elderly lady, problem child*). Later, using the findings mentioned above, Group C was subdivided into terms preferred in official and unofficial situations (Tab. 3).

Table 3. Inclusive expressions preferred in casual and official situations

Group C – Inclusive	
Fit for casual situations	Fit for official situations
a gay / lesbian	an African person / a person of African origins
a homosexual	a child with ADHD
a person with a mental disorder	a homosexual person
a senior citizen	a person with disabilities
	a person with schizophrenia
	persons specializing in psychiatry
	f psychiatrists and *m* psychiatrists

The choice of communication priorities showed a similar relation to the situations as the choice of expressions (Tab. 4).

The Cochrane's Q test showed that the influence of the situation on the choice of communication priority was significant, $X^2(2, N = 139)$. Comprehensibility, relevant in all situations, was chosen most often in Situation 3. Empathy was the most important in Situation 3 and the least important in Situation 1. Conciseness was chosen in Situation 2 more often than in the others.

The **H1** that most respondents consider comprehensibility and factuality more important in professional communication than inclusiveness, was possible to verify in each of the three situations.

In Situation 1, correctness was chosen proportionally more often than empathy, which was significant according to the

Table 4. Percentage of respondents who chose a given communication priority as one of the three most important ones. The last two columns show the Cochrane's Q test values, verifying whether the proportion of respondents choosing a given priority is significantly different in the Situations 1 to 3, $X^2(2, N = 139)$

Communication priority	Situation 1 – official	Situation 2 – conversation with a patient	Situation 3 – communication in the team	Q	p
Comprehensibility	66.91	91.82	64.03	41.01	< .001
Correctness	56.83	10.07	23.74	83.78	< .001
Factuality	90.65	72.66	85.61	21.23	< .001
Empathy	38.85	78.42	51.80	56.17	< .001
Conciseness	21.58	22.30	55.40	52.41	< .001

Cochrane's Q test, $X^2(1, N = 139) = 6.87$; $p = .01$. Factuality was also chosen proportionally more frequently than empathy, $X^2(1, N = 139) = 70.05$; $p < .001$. In Situation 2, on the other hand, correctness was chosen proportionally less often than empathy, $X^2(1, N = 139) = 84.35$; $p < .001$. In Situation 3, factuality was not chosen significantly more frequently than empathy, $X^2(1, N = 139) = 28.69$; $p < .001$. This indicated that factuality would not always be more important than inclusiveness, insofar as we can identify inclusiveness with empathy. To check whether this is the case, the next section analyzed whether the priorities chosen influenced the choice of expressions.

RQ2. Influence of communication priorities on inclusiveness. For every priority, we divided the whole group ($N = 139$) into two groups: Group 1 – who chose this priority in more situations, and Group 0 – the rest. Comparing the choices of expressions of Groups 1 and 0 for different communication priorities and in different situations, allowed for the observation of relationships.

H2 – that the number of situations where inclusive expressions are implemented correlates with more importance ascribed to empathy in communication, was verified using Pearson's r for $p < .05$ (value used for all correlation calculations in this study). The choice of empathy strongly correlated with the choice of Group C expressions in the following cases.
- *person with disabilities*, $r(138) = .22$; $p = .01$;
- *senior citizen*, $r(138) = .22$, $p = .19$; $p = .03$;
- *persons specializing in psychiatry*, $r(138) = .22$; $p = .01$;
- *person of African origins*, $r(138) = .18$; $p = .04$;
- *gay / lesbian*, $r(138) = .19$; $p = .03$;
- *child with ADHD*.
  - in the official situation, $r(138) = .19$; $p = .02$;
  - in conversation with a patient, $r(138) = .24$; $p = .004$;
  - in conversation in the team, $r(138) = .24$; $p = .01$.

H3 – which states that comprehensibility of the message is not less valued by the respondents who choose inclusive language in more situations, was also verified. It was confirmed, as the choice of comprehensibility did not correlate negatively with the use of expressions from Group A, or positively with the choice of most other expressions (Appendix).

H2 and **H3** were also verified with regard to other communication priorities for all expressions. Tables 5–9 show the results of the X^2 test for these expressions, which were chosen significantly more often by one of the groups.

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Table 5. Percentage of respondents from groups 0 and 1 who chose a given expression. The percentage of respondents from Group 0, "Comprehensibility0" ($n = 75$), who chose comprehensibility less often, and Group 1, "Comprehensibility1" ($n = 64$), who chose it more often. The last two columns show the results of the X^2 test, verifying whether the two groups differed significantly in the choice of expressions, $X^2(1, N = 139)$

Expression	Comprehensibility 0 (%)	Comprehensibility 1 (%)	X^2	p
Situation 1 – Official				
Homosexual	8.00	0.00	5.35	.02
Hyperactive child	30.67	12.50	6.58	.01
Child with ADHD	61.33	82.81	7.77	.01
Situation 3 – Conversation in the team				
Problem child	2.67	10.94	3.90	.05

Prioritizing comprehensibility had an ambiguous influence on the choice of inclusive language in a few cases (Tab. 5). In some cases, Group 1 chose the Group C expressions significantly more often (e.g., *child with ADHD*) than the Group A expressions (e.g., *problem child*). Hence, there is evidence supporting H3, as choosing comprehensibility does not strongly predispose to choosing either inclusive or non-inclusive language, according to the results.

Table 6. Percentage of respondents from groups 0 and 1 who chose a given expression. The percentage of respondents from Group 0, "Correctness0" ($n = 105$), who chose correctness less often, and Group 1, "Correctness1" ($n = 34$), who chose it more often. The last two columns show the results of the X^2 test, verifying whether the two groups differed significantly in the choice of expressions, $X^2(1, N = 139)$

Expression	Correctness 0 (%)	Correctness 1 (%)	X^2	p
Regardless of the situation				
Hyperactive child	40.95	67.65	7.34	.01
Situation 1 – Official				
Homosexual	1.90	11.76	6.05	.01
Situation 2 – Conversation with a patient				
Elderly lady	36.19	55.88	4.12	.04
Hyperactive child	29.52	52.94	6.17	.01
Child with ADHD	60.95	41.18	4.08	.04

As shown in Table 6, the group favouring correctness chose Group A and B expressions significantly more often (e.g., *hyperactive child*, *elderly lady*).

Table 7 shows that the group prioritizing factuality more, chose the Group C expressions significantly more often in many situations (e.g., *person with schizophrenia*, *person with disabilities*). However, in the official situation and in conversation with a patient, Group B was sometimes chosen significantly more often (e.g., *hyperactive child*).

The group who prioritized empathy chose the expressions from Group C significantly more often (*child with ADHD, senior citizen, gay / lesbian, person with disabilities, persons specializing in psychiatry*), and significantly less often chose Group A (*black, schizophrenic, problem child, mentally disordered*). This supports H2, which connects prioritizing empathy with the tendency to use inclusive language.

Conciseness influenced the choice of expressions in the largest number of cases. It was also the only conversation priority whose choice showed such a predominant relationship with choosing Groups A and B, and with not choosing Group C. The only situation where prioritizing conciseness did not

Table 7. Percentage of respondents from groups 0 and 1 who chose a given expression. The percentage of respondents from Group 0, "Factuality0" ($n = 51$), who chose factuality less often, and Group 1, "Factuality1" ($n = 88$), who chose it more often. The last two columns show the results of the X^2 test, verifying whether the two groups differed significantly in the choice of expressions, $X^2(1, N = 139)$

Expression	Factuality 0 (%)	Factuality 1 (%)	X^2	p
Regardless of the situation				
Black person	1.96	13.64	5.19	.02
Hyperactive child	70.59	34.09	17.25	< .001
Situation 1 – Official				
Person with schizophrenia	45.10	64.77	5.12	.02
Person with a mental disorder	45.10	26.14	5.24	.02
Child with ADHD	54.90	80.68	10.47	.001
Hyperactive child	37.25	13.64	10.39	.001
Situation 2 – Conversation with a patient				
Disabled person	41.18	25.00	3.95	.05
Child with ADHD	37.25	67.05	11.64	< .001
Hyperactive child	50.98	26.14	8.73	.003
Situation 3 – Conversation in the team				
Person with disabilities	33.33	52.27	4.67	.03
Child with ADHD	62.75	79.55	4.67	.03

Table 8. Percentage of respondents from groups 0 and 1 who chose a given expression. The percentage of respondents from Group 0, "Empathy0" ($n = 99$), who chose empathy less often, and Group 1, "Empathy1" ($n = 40$), who chose it more often. The last two columns show the results of the X^2 test, verifying whether the two groups differed significantly in the choice of expressions, $X^2(1, N = 139)$

Expression	Empathy 0 (%)	Empathy 1 (%)	X^2	p
Regardless of the situation				
Elderly lady	82.83	67.50	3.96	.05
Psychiatrists (virile)	89.90	75.00	5.13	.02
Schizophrenic	34.34	17.50	3.89	.05
Black	20.20	5.00	4.94	.03
Hyperactive child	55.56	27.50	8.99	< .01
Situation 1 – Official				
Senior citizen	39.39	60.00	4.88	.03
Child with ADHD	65.66	85.00	5.20	.02
Situation 2 – Conversation with a patient				
Mentally disordered	14.14	2.50	4.01	.05
Hyperactive child	40.04	22.50	4.00	.05
Child with ADHD	48.48	75.00	8.13	< .01
Situation 3 – Conversation in the team				
Person with disabilities	38.38	62.50	6.69	.01
Persons specializing in psychiatry	7.07	22.50	6.66	.01
Black	19.19	5.00	4.47	.03
Schizophrenic	32.32	15.00	4.30	.04
Child with ADHD	66.67	90.00	7.94	< .01
Problem child	9.09	0.00	3.89	.05

have a significant effect on the preferred language was in the case of expressions pertaining to sexual orientation.

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Table 9. Percentage of respondents from groups 0 and 1 who chose a given expression. The percentage of respondents from Group 0, "Conciseness0" ($n = 100$), who chose conciseness less often, and Group 1, "Conciseness1" ($n = 39$), who chose it more often. The last two columns show the results of the X^2 test, verifying whether the two groups differed significantly in the choice of expressions, $X^2(1, N = 139)$

Disabled person	44.00	74.36	10.37	< .01
Invalid	5.00	17.95	5.96	.02
Granny	15.00	35.90	7.42	.01
Mentally disordered	12.00	30.77	6.92	.01
Hyperactive child	39.00	69.23	10.28	< .01
Problem child	6.00	23.08	8.50	< .01
Situation 1 – Official				
Disabled person	11.00	25.64	4.69	.03
Person with disabilities	88.00	71.79	5.34	.02
Senior citizen	51.00	30.77	4.63	.03
Child with ADHD	77.00	56.41	5.80	.02
Hyperactive child	16.00	38.46	8.17	< .01
Situation 2 – Conversation with a patient				
Disabled person	24.00	48.72	8.02	< .01
Black	0.00	5.13	5.20	.02
Mentally disordered	7.00	20.51	5.32	.02
Hyperactive child	30.00	48.72	4.31	.04
Child with ADHD	63.00	38.46	6.86	.01
Situation 3 – Conversation in the team				
Person with disabilities	54.00	23.08	10.83	< .01
Invalid	5.00	17.95	5.96	.02
Granny	15.00	30.77	4.46	.03
Persons specializing in psychiatry	15.00	2.56	4.26	.04
Schizophrenic	22.00	41.03	5.11	.02
Person with schizophrenia	50.00	28.21	5.4	.02
Child with ADHD	81.0	53.8	10.59	< .01
Problem child	2.00	17.95	11.79	< .001

Table 10. Percentage of students ($n = 78$) and respondents from other groups ($n = 61$) who chose a given expression. The last column shows results of the X^2 test, $X^2(1, N = 139)$

Expression	Students	Other groups	X^2	p
Regardless of the situation				
Black	10.26	22.95	4.14	.04
Person with homosexual preferences	26.92	44.26	4.55	.03
Person with schizophrenia	80.77	62.30	5.88	.02
Situation 1 – Official				
Black person	7.69	0.00	4.90	.03
Person of African origins	3.85	13.11	4.36	.04
Homosexual person	67.95	52.46	3.46	.06
Person with homosexual preferences	21.79	39.34	5.07	.02
Situation 2 – Conversation with a patient				
Senior citizen	37.18	57.38	5.62	.02
Homosexual person	70.5	54.1	3.97	.05
Person with schizophrenia	58.97	36.07	7.19	.01
Situation 3 – Conversation in the team				
Disabled person	41.03	24.59	4.13	.04
Elderly lady	60.26	39.34	5.99	.01
Black person	11.54	32.79	3.21	.07
Black	8.97	22.95	5.12	.02
Person with schizophrenia	51.28	34.43	3.95	.05

Table 11. Demographic structure of the group of respondents

Age group (years)	Percentage of respondents
18–25	49.64
26–30	17.27
31–40	12.95
≥41	20.14

RQ3. Different groups of medical professionals. In the following part of the analysis, the group was divided into different subgroups in order to verify Hypotheses 4 and 5.

First, **H4** was verified, that students are more likely to use inclusive expressions than medical staff and medical academics (doctors, other medical professionals, academics). Table 10 compares the choice of expressions by students and other groups. As is indicated by results of the X^2 test, in official situations, students preferred expressions from Group C and the others preferred expressions from Group A. In conversations with a patient and in the team, this pattern was not always present. Hence, H4 could be confirmed, at least in the official situation.

We also verified **H5**, which states that empathy in communication is more important for students than for doctors and other medical professionals. Choosing empathy in conversation within the team was found to be correlated with being a student, $r(138) = .17; p = .045$.

The above analysis hints at the possibility that a similar correlation exists between the age of respondents and their choices in the questionnaire, as students are a significantly younger group than the rest. The demographic structure of our group is depicted in Table 11 (*Mdn.* 26–30 years old).

An analysis was conducted to verify whether age was indeed a significant factor in the choice of expressions. The following table shows the cases in which significance was found.

Table 12. Percentage of respondents from different age groups (18–25 years, n = 69, and ≥26 years, n = 65) who chose a given expression. The last two columns show the results of the X^2 test, $X^2(1, N = 139)$

Expression	18–25	≥26	X^2	p
Regardless of the situation				
Persons specializing in psychiatry	40.58	60.00	5.05	.02
Black	8.70	24.62	6.18	.01
Situation 1 – Official				
Persons specializing in psychiatry	34.78	55.38	5.75	.02
Person with African origins	2.90	13.85	5.32	.02
Situation 2 – Conversation with a patient				
Senior citizen	36.23	60.00	7.58	< .01
Situation 3 – Conversation in the team				
Elderly lady	63.77	41.54	6.64	.01
Black person	13.04	3.08	4.41	.04
Black	7.25	23.19	7.64	< .01
Person with homosexual preferences	2.90	12.31	4.29	.04

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In Situation 1, the youngest group chose the expressions from Group A significantly less often, and the expressions from Group C more often than in the group of other respondents. In other situations, it was often the other way around; hence, there are similar tendencies when comparing students with other groups.

Another factor that is suspected to be correlated with the use of inclusive language is gender. The percentages of respondents who identified with different genders were as follows. female gender – 77.70% ($n = 108$), male gender – 22.30% ($n = 31$), non-binary – 0.72% ($n = 1$), and the those who withheld the information – 1.44% ($n = 2$).

H4 – women are more likely to use inclusive expressions than men, was confirmed in many cases. Identification with female gender strongly correlated with the choice of Group C expressions:

- *gay / lesbian;*
  - in an official situation, $r(138) = .31$, $p < .001$;
  - in conversation with a patient, $r(138) = .31$; $p < .001$;
- *child with ADHD*, $r(138) = .17$; $p < .047$;
  Moreover this negatively correlated with the choice of expressions from Group A;
- *invalid*, $r(138) = -.24$; $p = .005$;
- *granny*, $r(138) = -.20$; $= .02$;
- *schizophrenic*, $r(138) = -.34$; $< .001$.

The last problem analyzed in this section was whether more contact with other cultures and languages influences the tendency to use inclusive language. The respondents were asked if they have a plan or experience of working or studying abroad, and the group that affirmed either of these was compared to the rest.

To verify **H4** – that people who have experience or a plan of working or studying abroad are more likely to use inclusive language, we once again calculated r. The plan or experience of working or studying abroad correlated strongly with the choice of expressions from Group C:

- *senior citizen*, $r(138) = .24$; $p = .004$;
- *child with ADHD*, $r(138) = .19$ $p = .02$;
  It also correlated negatively with the choice of an expression from Group A:
- *mentally disordered*, $r(138) = -.20$; $p = .02$.

This evidence supports **H4**, as inclusive language is used more by the expected group, although there are not many examples of expressions for which the choice significantly differs.

To exclude the possibility that gender disproportions within the groups influenced other correlations examined in this study, we analyzed the correlation factor between female gender, and belonging to the following groups: students, the age group 18–25, and the group with a plan to or had experience of working or studying abroad. No significant correlation was found ($p < .05$). No significant correlation was found between female gender and the choice of any communication priority, either (Appendix).

CONCLUSIONS AND DISCUSSION

The matter of inclusiveness has recently been vividly discussed in Poland, especially in the context of attitudes toward LGBTI people, as well as towards other minorities. According to native research, during 2018–19, the polarization of attitudes towards LGBTI increased [14]. Such a difference in opinions between members of the same society suggests that the stance towards inclusive language also differs. Our findings suggest that only about a third of respondents know what inclusive language is.

On the other hand, this does not mean that inclusive expressions are not used. They were very commonly chosen among our respondents, sometimes even more than the traditional expressions (H1). It was well demonstrated that when respondents want to avoid the most inclusive terms, they would rather pick the traditional and fairly neutral ones than the offensive ones. In a study analyzing the titles of medical articles published during 1976–2015, it was shown that the tendency to use patient-centered language had grown [15]. In our research, we can find examples of this tendency.

In general, comprehensibility and factuality are the most valued in communication in each situation by the respondents (H1). However, it can be concluded that priorities change significantly depending on the situation. So does the preferred language; the frequency of choice differs for the expressions depending on the situation. When it comes to Group A expressions, they are most often preferred in conversations within the team (Situation 3) which are the most unofficial. In this situation, comprehensibility was chosen most often as a priority. Also, empathy had a relatively high rank in Situation 3, which was probably because conciseness outranked it in conversation with a patient (Situation 2). This was counter-intuitive, but it hints at the importance of time in Polish public healthcare, a doctor has to minimize the timespan of each appointment. The mean time that Polish doctors spend on one patient was found to be ten minutes, according to a study by Irving et al. (2017) [16].

Moreover, it was found that priority choice correlated strongly with the choice of expressions in a larger number of cases than most other factors. The Tables above show that the importance of conciseness (negative correlation with inclusive language) and empathy (positive correlation with inclusive language) influence the choice of the largest number of expressions. Other priorities correlated positively, in many cases, with inclusive language. Some exceptions were found in conversations with a patient, where many respondents chose non-inclusive expressions (e.g., *hyperactive child*), and may be as a result of the belief that a patient needs to hear a message with no specialistic terminology, like ADHD.

Prioritizing empathy in Situation 3 correlated with being a student (H5), as did the choice of inclusive language in all situations (H4). A similar correlation was found in the case of the younger age group, although in fewer cases. This would suggest that being a student is more significant for the inclination to use inclusive language than being young.

Gender influenced the choice of language just as thought – females were more likely to choose Group C expressions. The same relation pertained to the respondents who had experience or a plan of working abroad (H4).

It should be mentioned that in our survey, there was a disproportion between males and females (28 to 108). This did not influence comparisons between the groups, as there were not significantly more females in any of the compared groups (Appendix). However, this disproportion influenced the the overall results. Moreover, we must account for the specificity of our group – healthcare professionals, including a large number of students. Hence, we should expect that

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in the general population, inclusive language would be less preferred than in our group. This would be more in line with the statistics. According to a survey conducted by the European Union Agency for Fundamental Rights, in Poland, significantly more people identifying as LGBTI avoid certain locations often or always for fear of being assaulted, compared to the EU average [17].

Due to the scarcity of Polish literature on this topic, we recalled a few Spanish sources. The Spanish language has certain similarities to Polish, for example, the gender-revealing nouns, so it will be suitable for a comparison. Contrary to our findings, a Spanish study on inclusive language showed that 'negative linguistic attitudes' were connected with correctness [18]. In our study, however, it correlated much more with conciseness. This might be due to the fact that correctness was one of the least prioritized factors; for medics, it is of value mostly in official situations (56.83%).

That students show a supportive attitude toward inclusive language was also confirmed in a study conducted in the Philippines, where two-thirds of the group expressed a positive attitude toward gender-inclusive language [19]. In line with the results of a study on the Spanish population in the United States, despite many voices favourable towards inclusive forms, their practical implementation is still being discussed. In both studies, nouns possessing a virile connotation to signify a group of more genders are preferred over more neutral solutions. The reason that students, unlike others, prioritize empathy in communication within the team could be explained by the difference in experience, older professionals have different beliefs on what is crucial in Situation 3. Moreover, this corresponds with the findings that empathy decreases as experience in medical practice increases [10].

Limitations of the study. First of all, the number of respondents was not large ($N = 139$) because medical professionals are not an easily attainable group. The second limitation was that there were certain disproportions in count between the compared groups, mostly the one already mentioned between females ($n = 108$) and males ($n = 28$), the former of which was therefore analyzed against all other respondents, three of whom did not admit to male gender. Moreover, it is important to consider the finding that the respondents were mostly unaware of the meaning of inclusive language. This could influence their choice of expressions (e.g., they could choose shorter expressions due to a lack of knowledge of the significance of the longer, inclusive ones). It would be worth extending the studies to explore the role of this factor.

The other matter was the tool of the study, a questionnaire, and hence was highly dependent on the respondents' will to cooperate and their honesty. The promotion of the form was mainly via social media, where mostly young people could be reached. Older generations were reached in different ways, which allowed for the collection of fewer answers and a less random selection of the examined.

Appendix
Correlation matrices as an online file for all correlations in this research.

Competing interests
The authors state that there are no conflicts of interest.

Data availability
The datasets generated during and/or analyzed during the current study are available from the corresponding author on reasonable request.

Ethical approval
Not applicable to the research of this nature

Informed consent
All respondents to the questionnaire were informed and consented to being a part of this research.

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