"COVID-19 treatment in the patient" vs. "Let's not ignore the infection of the corona": A Discourse Analysis of Professional Medical Publications and Lay Forum Posts in Polish

Magdalena Zabielska
Adam Mickiewicz University, Poznań, Poland
mzabielska@wa.amu.edu.pl

Abstract

The aim of the article is to determine preliminarily the character of the specialised medical discourse as well as of computer-mediated discourse about COVID-19 on the basis of Polish language professional publications and entries on an Internet forum. The intention here is to examine and then juxtapose the two discourses as used by medical professionals and lay people respectively, about the same disease event, described in particular cases. The proposed research will focus on the linguistic construction of the concept of the disease as well as of the patient and the consequences of linguistic choices selected as mediating illness experience with respect to different contexts, channels, authorship, and readership. While novel language items or metaphors related to COVID-19 in English have received researchers' attention, the present author knows of no study in which the discourse about COVID-19 in Poland would be analysed and compared in both professional and lay contexts. The data for the current study are constituted by scientific articles related to COVID-19 derived from Polish medical journals for professionals, as well as the entries from an Internet forum on which the issues connected with COVID-19 are discussed. The study was conducted following the principles of qualitative discourse analysis combined with some insights from a computer-aided examination of the corpus, and refers to cognitively and functionally based grammar of discourse, paying attention to such elements as patient and disease references and their co-texts, which may vary in the contexts from which the texts analysed were derived. The results demonstrate that the two groups of texts use different communicative accents, as well as linguistic means (e.g., vocabulary, phrases, or discourse structures, etc.), which, consequently, produce different effects.

Keywords: COVID-19, specialised discourse, Internet forum, patient, disease.

Streszczenie

„Leczenie COVID-19 u pacjenta" a „Nie lekceważmy zagrożenia 'koronką'": Analiza dyskursu zapośredniczonego komputerowo na podstawie polskojęzycznych fachowych publikacji medycznych oraz forów internetowych

Celem niniejszego artykułu jest wstępne zbadanie oraz porównanie specjalistycznego dyskursu medycznego oraz dyskursu zapośredniczonego komputerowo dotyczących COVID-19 na podstawie polskojęzycznych publikacji naukowych oraz wpisów na forum internetowym. Są to dyskursy tworzone odpowiednio przez profesjonalistów jak i przez laików, którzy opisują konkretne przypadki choroby. Badanie to skupia się na językowej konstrukcji takich elementów jak choroba czy pacjent oraz konsekwencji konkretnych wyborów językowych ukazujących doświadczenie choroby autorstwa różnych osób, w konkretnych kontekstach oraz różnymi kanałami, przeznaczonych dla różnych czytelników. O ile istnieje szereg badań dotyczących nowych jednostek leksykalnych oraz tych, które zyskały nowe znaczenie/nową rzeczywistość do opisu w języku angielskim, wydaje się, iż porównanie dwóch dyskursów dotyczących COVID-19 tworzonych przez profesjonalistów jak i laików w języku polskim nie zostało dotychczas przeprowadzone. Dane w niniejszym badaniu stanowią polskojęzyczne artykuły naukowe dotyczące koronawirusa oraz wpisy na forum internetowym o tej samej tematyce. Zastosowana metodologia to analiza z perspektywy jakościowej, uzupełniona o elementy badania korpusu wspartego komputerowo i odnosi się gramatyki dyskursu o podstawach kognitywnych oraz funkcjonalnych. Zwraca się w niej uwagę na tekstowe wyznaczniki pacjenta i choroby, oraz ich tekstowe uwarunkowania, które mogą się różnić w zależności od kontekstów, w których tworzone są teksty. Jak pokazują wyniki badania, obie grupy tekstów charakteryzują się innymi punktami ciężkości oraz użytymi środkami językowymi (np. słownictwo, frazy czy struktury dyskursywne), które odpowiadają za różny efekt końcowy językowej reprezentacji COVID-19.

Słowa kluczowe: COVID-19, dyskurs specjalistyczny, forum internetowe, pacjent, choroba.

1. Introduction

The new interpretation of the BC abbreviation, i.e., before COVID (Crystal 2020), testifies to the consequences the COVID-19 pandemic has had on global economies, health management but also our lifestyles. Starting as an endemic incident in Wuhan in December 2019, it was declared by the WHO a pandemic on 11th March 2020 (Wikipedia 2023) and so far, it has cost lives of around 7 million people while over 700 million cases have been reported (Worldometer 2023). Coronavirus disease (COVID-19) is an infectious disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). According to WHO (2023), most cases of the infections end in mild to moderate respiratory symptoms, however, people with comorbidities are more at risk. Although the worst pandemic period worldwide seems over, the events between 2020 and 2022 have had a long-lasting effect on various walks of our lives including communication. We encounter COVID-19 in newly coined items, e.g., 'covidiot', or

we renewed interest in previously less popular ones, e.g., 'quarantine'. This paper presents the results of a preliminary study of two modes of communication about COVID-19, i.e., expert and lay, in order to determine how one disease event can be discussed from two different perspectives, depending on the channel of communication, different aims, authorship, and audiences. In other words, the intention here is to offer a bird's eye view on the ways in which the same topic is communicated to/among different target groups with different purposes in mind, be it for knowledge exchange or support. These examples constitute particular social practices in crisis which contribute to the process of shaping ways of talking about the disease and the affected person, both at micro- and macro-levels, i.e., referring to words/phrases as well as to discourse structures respectively.

The article opens with a brief overview of the literature on the topic (section 2) and proceeds to the discussion of the theoretical and methodological backgrounds, including narrative, computer-mediated communication and its analysis, qualitative studies, etc. (section 3). Next, in section 4, the data examined, and the methods adopted are briefly discussed, followed by the presentation of the results of the analysis and their discussion. Finally, some conclusions are offered.

2. Literature review

The topic of the pandemic has attracted keen interest among linguists and communication scholars who have addressed a multitude of areas. At the very beginning, first research attempts targeted various media, e.g. *The New York Times* (Mu et al. 2021), Australian media (Sun 2021) and English-language newspapers in Japan and China (Parvin et al. 2020). Social media have been frequently subject to content analysis, e.g., topic modelling on Reddit (Stokes et al. 2020). Later, more studies followed focusing on science communication to lay audience (Hohaus 2022; Luzón Marco 2022; McClaughlin et al. 2022) or politicisation of the topic (Wrześniewska-Pietrzak and Kołodziejczak 2022; Koca-Helvaci 2022). Language-wise, Coluzzi and Riget (2002) focused on Malasian and Italian contexts, Diget (2021) and Nygren and Olofsson (2021) on Swedish and Péteri (2021) on German and Hungarian ones. In Polish-language studies, Chojnacka-Kuraś and Falkowska (2023) and Duda and Ficek (2022) focused on the COVID-19 lexicon. A separate body of research has centred upon the use of (military) metaphors and possible alternatives (e.g., Semino 2021; Musolff 2021). The aim of the current paper is to contribute to this broadly understood communication about and in the times of COVID-19, yet the intention here is to juxtapose already widely discussed communication in

(social) media with specialised one, which has not received significant attention, with the exception of Ovchinnikova et al.'s (2020) study of Russian specialised discourse and Ängsal's (2021) analysis of the 'expert' theme. In the case of the former, however, it was a sentiment analysis of various online texts, whereas in this paper the emotional character of the two analysed data sets is only one of the many aspects examined. The other study is based on Swedish media texts, while in this study scientific articles and discussion forum posts in Polish are under scrutiny, which, to the best of the author's knowledge, have not been compared yet.

3.   Theoretical background

The aim of the present study is to examine the discourses about COVID-19 as found in two different contexts – specialist and lay, which differ in their producers, audiences, and purposes, and these factors have a bearing on their form. While specialised communication is the one among specialists, using a specialised language variety and taking place in a specialised context (Gotti 2008: 15–16), lay communication is the one among people without expertise, who use everyday language, even when discussing specialised matters. Consequently, whereas the specialised variety is characterised by the presence of terminology, objectivity, and lack of emotion (Gotti 2008: 21, adapted from Hoffman 1984), lay language contains equivalents of professional terms, as well as elements of subjectivity and emotional undercurrent. For instance, Kokkinakis and Toporowska-Gronostaj (2006) demonstrate that professional texts may have a higher token/sentence ratio, longer nouns, more acronyms, more terms (in this case medical ones), and more Latin and Greek loan words. On the other hand, elsewhere the present author demonstrates that the language used by the participants of an online support group for people with cochlear implants is characterised by simplicity, emotionality, and subjectivity (Żelazowska-Sobczyk and Zabielska 2019). Widdowson (1979) makes a reservation here that specialised communication does not have to always involve specialists using a scientific variety exclusively. Other scenarios include the explanation of scientific issues, possibly also with the use of everyday language, which, though performed by specialists, is meant for lay people, and thus has to bear the features of lay language. Such communicative acts are intended for spreading knowledge to wider audiences, which has been studied for instance by Diget (2021), who focused on reader accessibility in public health communication about COVID-19 in Australia and Denmark, and by Molek-Kozakowska and Struchkova (2022) researching communication of risk in the context of anti-COVID-19 vaccine in Poland. Of interest may also be Luzón Marco's (2022) research on "explainers", i.e., texts intended to explain scientific

publications to lay audience, using specific linguistic means aiding comprehension, and Ängsal's (2021) study of the Swedish press coverage of the COVID-19 pandemic, centring on the discursive construction of the 'expert' theme.

In the present paper, while analysing the two types of discourses, both micro- and macro-perspectives will be adopted. Micro-wise, patient and disease references will be examined. From the macro-perspective, discourse structures such as narratives and their types will be scrutinised. Textual references to patients, i.e., patient indexicality, not only point to the topic of the text but also position the referents in a particular configuration of elements in a sentence structure. Thus, one may write 'The patient was diagnosed with …' or a disease 'was identified in the patient', which allows one to foreground or background chosen information (Zabielska 2014), referring to broadly understood functionally and cognitively-based grammar of discourse (Duszak 1987; Halliday 1994; Smith 2003; Gardner and Alsop 2016). Macro-wise, the texts may contain larger units, presenting a particular way of speaking about given matters or events, a given configuration of elements, either absent or present, which contributes to a given textual image. However, even here again the macro- and micro-perspectives can be adopted, with big and small stories (Baynham and Georgakopoulou 2006) respectively. As will be demonstrated, while scientific publications about COVID-19 contain accounts analogical to big stories, following the canonical structure (Labov and Waletzky 1967), small ones tend to characterise the forum posts analysed. They do not necessarily contain all their canonical elements, may be incomplete, co-produced and spontaneously elicited (Bamberg and Georgakopoulou 2008). Thus, following Baynham and Georgakopoulou (2006), small stories may be seen "as momentary and fleeting shifts into narrativity".

The small stories to be examined concern COVID-19 disease, thus belong to discourses of health and disease. According to Hunter, narrative structure underlies medical practice and education (1991: xvii). It is so, because the generalised knowledge acquired and applied by medical students and then professionals is practiced "in the care of myriad of single cases that are narratively described and studied one by one" (Hunter 1991: xvii). In other words, since "medicine's focus [is] on the individual patient, fitting general principles to the individual case, […] the knowledge possessed by clinicians is narratively constructed and transmitted" (Hunter 1991: xvii).

The online context is also the context for stories, some of them less structured, co-created, and produced spontaneously (Gordon 2015: 120–121), for example status updates on Facebook (Page 2010). The popularity of personal stories has also been attested in the pandemic times, when various Internet outlets offered users the opportunity to publish their COVID accounts

(e.g., BBC, British library, Reader's digest, etc.). The first group of data to be examined were not collected from such sources but appeared in the context of discussing COVID matters on online forums, which are platforms for the exchange of information, ideas, and opinions in the form of asynchronously posted messages (TechTerms). This type of communication can be subsumed under the label of computer-mediated communication and constitutes "the communication produced when human beings interact with one another by transmitting messages via networked computers" (Herring 2001: 612). While exchanging information, the interactants may also introduce narratives. They are not generated on purpose, but only when they are meant to be relevant by the authors, and are oftentimes incomplete. The other group of data to be analysed, i.e., scientific articles, as will be demonstrated, is not typically associated with storytelling, yet also contains accounts which, however, are closer to big stories.

4.   Analysis and discussion

4.1.   Data and methods

Data for the current study belong to two text types. Part of the data constitutes scientific articles related to COVID-19, derived from Polish medical journals for professionals via portal Viamedica.pl, between Nov. 2020-Mar. 2022. They were identified using the search window and typing in the words such as 'COVID-19', 'coronavirus', and 'SARS-coV-2'. This sample contains 37 articles belonging to different genres, e.g., research paper, review, case report, etc., published in 2020 and 2021, and containing 106,790 words in total. The shortest article is one page long and the longest 24 pages. All the articles were downloaded from the portal ViaMedica.pl, which has been publishing articles from various professional medical journals. At the moment, there are forty titles available there. Some of the publications are behind a paywall. The other part of the data comprises entries from the Internet forum GoWork.pl on which, among many other topics, especially job-related ones, issues connected with COVID-19 are discussed. Relevant comments were identified in the same way as the above-mentioned publications, i.e., through keyword search. The sample contains 117,497 words and the entries were published in 2020 and 2021.

The present study is a qualitative discourse analysis complemented with insights from a computer-aided exploration of the corpus. Qualitative research in the context of health and disease allows one to delve into the perception of what it feels like to be healthy/ill from the perspective of the individual, "looking for lay concepts and interpreting people's experiences" (forum posts) as well as "for patterns and the association between concepts" (scientific articles)

(Morse 2012: 20). Consequently, the data were carefully read with reference to cognitively and functionally based grammar of discourse (Duszak 1987; Halliday 1994; Smith 2003; Gardner and Alsop 2016), paying attention to linguistic resources such as patient/disease references and their co-texts, narrative character, etc. The identification of key words and n-grams was possible thanks to the SketchEngine® software and the corpus at hand was analysed against the reference corpus Polish Web 2019 (plTenTen19). This complement allowed the researcher to examine the entire collection (Gillings et al. 2023: 1) in order to look for linguistic patterns and their contribution to a particular textual presentation of the patient and the disease.

4.2. COVID-19 discourse in professional medical publications

4.2.1. Keywords

The top keywords of the sample of 37 scientific articles identified with the help of SketchEngine®, compared against the reference corpus Polish Web 2019 (plTenTen19), include: 1st 'COVID-19', 2nd 'SARS-CoV-2', 5th 'coronavirus' and 8th 'pandemic' (Pol. pandemia). Also, in terms of word frequency, i.e. the words occurring most frequently within the corpus, the most frequent content word is 'COVID-19', which, similarly to the Internet posts analysed (see subsection 4.3.1 below), clearly points to their topic.

4.2.2. Professional stories

As has been already discussed, communicating health/disease related matters is fundamentally narrative. As it turns out, the professional medical context is likewise rife with stories. As Hunter (1991: 5) points out, what the doctor makes of the patient's account is not the patient's story. This course of events is generally referred to as a discursive construction of a medical case, "the basic unit of thought and discourse" in medicine (Hunter 1991: 51). Thus, what can be found in communication among specialists are professional medical stories that are discursive constructs of cases, which means that they follow both content matter and structural conventions of the medical case presentation (Anspach 1988: 360–361), and, additionally, utilise the narrative format.

a) *An eighty-year-old female patient was admitted to cardiology clinic with suspected fresh myocardial arrest. The patient mentioned grinding pain in the right hypochondrium lasting for a week and a half, radiating to the chest. The symptoms were accompanied by diarrhoea, additionally the patient had a temperature 39 degrees the day before admission. Because of the ongoing pandemic, the patient refrained from visiting the doctor, she was afraid of contacting healthcare workers due to the risk of contracting the coronavirus. […] The patient was*

discharged in good condition on the seventh day. [*Osiemdziesięciopięcioletnia pacjentka została przyjęta do kliniki kardiologii z podejrzeniem świeżego zawału serca. Chora podawała nasilające się od około 1,5 tygodnia bóle w prawym podżebrzu, promieniujące do klatki piersiowej. Objawom towarzyszyła biegunka, ponadto dzień przed przyjęciem do szpitala pacjentka zagorączkowała do 39˚C. Z uwagi na panującą sytuację epidemiologiczną pacjentka nie zgłaszała się do lekarza, obawiała się kontaktu z pracownikami ochrony zdrowia z uwagi na potencjalne ryzyko zakażenia koronawirusem.* […] *W siódmej dobie chora w stanie ogólnym dobrym została wypisana do domu.*] KI1[12]

The example above features such a course of events – from admission, through examination, finally to the discharge, which is seen as analogical to a regular big story with orientation, complicating action, resolution, and coda (Labov and Waletzky 1967: 369).

4.2.3. Impersonality

In Brookes and Hunt's words, medical procedures are "carried out wordlessly by clinical technologies – stethoscopes, scanners, scalpels – and the chemical compounds that make up medications" (2021: 1). Thus, the focus of the discourse falls on what is done (to treat the patient) and how, and not on who does it and to whom. For instance, in case presentations (and other case-based genres), the sentences in which diagnostic procedures and treatment are described, are agentless. Consequently, technology, for instance medical equipment, becomes the agent of the actions performed as if by themselves (Anspach 1988: 366; Kenny and Beagan 2004: 1074). As a result, what is emphasised here is the actions and their correct choice, but not the person who performs them. The patient is presented here as the place where the procedure is carried out (the CONTAINER metaphor, Zabielska 2014, see examples (h-i) in section 4.2.4 below), changing the way the communicative accent is placed.

b) *In the study in a group of patients with COVID-19 a correlation has been observed…* [*W badaniach w grupie pacjentów z COVID-19 zaobserwowano korelację…*] (FZM1)

At the same time, the author and, from the narrative perspective, the narrator of the story is in a way "evacuated" (Geertz 1988). Additionally, it contributes to the impersonal character of

---

[1] For the list of all the analysed publications see the appendix. They are arranged alphabetically by their codes.

[2] All the excerpts of the data analysed are presented in its original form (Polish) and were translated by the author.

the discourse, which stands in stark contrast to more emotional nature of comments from the excerpts of discussions on forums analysed below (see subsection 4.3.2).

4.2.4. Metaphors

According to Bleakley (2017), medical discourse, though associated with "objectivity, impersonality and lack of emotion" (Gotti 2008: 21, adapted from Hoffman 1984) is "soaked in metaphor, and thinking with metaphor is central to diagnostic work, medicine – that is, medical culture, clinical practice and medical education". In this context, Giannoni (2009) emphasises the potential of metaphor of mediating the values associated with this discipline. For instance, certain metaphorical conceptualisations foreground and background particular information contributing to a given image of the disease and the affected.

Furthermore, some novel metaphorical aspects were identified in the corpus. The first of them is referring to disease as a process (c), which can be contrasted with imaging disease as a THING one has, also present in the sample at hand (see below for common aspects in subsection 4.4). In the examples below, COVID-19 is described as "developing", as in (d), therefore having a lasting character, as opposed to something that one can have and supposedly can get rid of. Analogical examples have also been found in the sample of excerpts from the discussion forums – see subsection 4.4.1 below.

c) *COVID course* [*przebieg COVID*] (PPN2)

d) *a big number of them develops virus lung inflammation* [*duża część z nich rozwija wirusowe zapalenie płuc*] (PP1)

Furthermore, a particular lexical field has been identified in which various activities of the work of the virus are described: "fusion" in (e), "transmission" in (f) and "penetrating" in (g). All these examples point to some form of activity, MOVEMENT.

e) *the fusion of these two proteins* [*fuzja tych dwóch białek*] (N1)

f) *The transmission of the SARS-CoV-2 virus among people* [*Transmisja wirusa SARS-CoV-2 między ludźmi*] (GPP1)

g) *a receptor making it possible for it to penetrate cells* [*receptor umożliwiający mu wnikanie do komórek*] (DB1)

These examples can be related to the moving water metaphor, identified by Neagu (2022: 263), such as "wave of infections", which, though includes the fluid element, shares the aspect of MOVEMENT.

Lastly, the conceptualisation of the patient as a CONTAINER ("in the patient") has been identified, when processes and procedures happen or are carried out, respectively. In detail, these are the following 3-grams: "in patient (literally the ill) with" (Pol. u chorego z) is the 2nd, "in patient with" (Pol. u pacjenta z) the 4th and "in the ill suffering from" (Pol. u chorego na) is the 8th. Additionally, in word sketch for 'the ill' (Pol. chory) and for 'patient' (Pol. pacjent), in their left contexts, they are most frequently preceded by the preposition 'in' (Pol. u).

These activities have an in-out orientation and, in order to perform them, often the boundary of the skin needs to be crossed.

h) *in determining disease severity in patients* [*ocenie ciężkości choroby u pacjentów*] (H1)

i) *The most common comorbidity in all the patients with COVID* [*Najbardziej typowe współistniejące schorzenie u pacjentów z COVID*] (FP1)

Instances of patients as CONTAINERS have also been identified in the discourse about COVID-19 on the basis of Polish scientific publications (Zabielska 2021: 31–32).

4.3. COVID-19 discourse on the internet forum

4.3.1. Keywords

The top keywords of the sample include: 4th 'coronavirus' (Pol. koronawirus); 5th 'covid'; 8th 'pandemic' (Pol. pandemia); 9th COVID-19, but also related ones, such as 12th 'Pfizer' (the name of the company producing one of the COVID-19 vaccines); and 16th 'olfaction' (Pol. węch). These words clearly demonstrate that the discussants were involved in the matters related to COVID-19, i.e., the very period of the spread of the disease, symptoms, vaccination, etc. In terms of word frequencies, the first 40 most frequent words do not include any words related to the pandemic, which may be because of the fact that these are not specialist publications about COVID-19 but lay discussions about the topic and related issues.

4.3.2. Small stories

The forum sample contains numerous small stories, which, as discussed in the theoretical part, are not necessarily complete narratives, but appear depending on the course of the discussion and thus differ in their character and functions.

The first group identified may be labelled as *justification* stories. With these stories their authors intend to provide evidence for the existence of the coronavirus in the form of their own accounts. Therefore, it should be assumed that one's experience of a given situation should be treated as the ultimate proof and should not be challenged.

j) *And I assure you that it exists, right now I am infected and have been struggling with it for five days now????* [*A zapewniam Cie ze istniej, akurat jestem zarazona I już 5 dzien się z nim uzeram????*] (GoWork.pl, *People who…*)

k) *I am undergoing COVID asymptomatically. I was hospitalised and I caught this bugger. The first cassette test was negative, the second smear test positive. Currently, I am home in quarantine. And waiting for the second smear test result .I am asymptomatic but they wanted to take me to Zgierz where more people die from this disease. I did not agree to that and I was brought back home to be in quarantine. I feel good, I have a lot of energy, I do not cough and most importantly I don't have a fever We feel it has been all hyped and even the doctor said so. So personally I don't care. Maybe they will cancel that quarantine if the result is still negative* [Ja przechodzę koronawirusa bez objawowo . Byłam w szpitalu i tam się tego cholerstwa nabawiłam . Pierwszy płytkowy test na Covid-19 wyszedł ujemny a drugi z wymazu dodatni . Jestem obecnie na kwarantannie domowej . I czekam na wynik z kolejnego wymazu . Mam bez objawowo a chcieli mnie zabrać do Zgierza gdzie tam umiera więcej osób zarażonych tą chorobą . Ja się nie zgodziłam i zostałam przewieziona do domu na kwarantanne . Czuję sie dobrze , mam dużo siły , nie kaszle i co najważniejsze nie mam gorączki . Uważamy że to wszystko jest rozdmuchane i nawet lekarz tak powiedział . Więc ja się osobiście nie przejmuje . Może zniosą tą kwarantannę jeśli wynik będzie nadal ujemny] (GoWork.pl, *Coronavirus does not exist*)

Of note is also the fact that the most frequent verb collocating with the word 'coronavirus' is 'exist' (Pol. istnieć), which reflects one the most widely discussed pandemic topic online, i.e., whether or not the virus actually exists.

What can also be observed is the emotional character of the quotes, e.g., the use of the words such as "struggle with" (Pol. użerać) and "bugger" (Pol. cholerstwo), which goes in line with the fact that the discussants use everyday language, characterised by greater display of emotions. This has also been attested in the study of Polish online support groups (Żelazowska-Sobczyk and Zabielska 2019), and, on a broader scale, constituted a topic of a significant body of research on communication about COVID-19, especially at the beginning of the pandemic (see section 2 above). At the same time, this feature is absent in professional medical

communication (see section 3 above and Zabielska 2022), where particular linguistic choices make it impersonal.

The second group of stories includes accounts in which the authors offer their experience of the disease, often very detailed, which may be viewed as their expertise, in this case derived directly from going through the ailment. This relates the idea of the importance of average people, i.e., the so-called *demotic turn* (Bouvier 2017: 8), in which also lay people may be in a way perceived as a source of knowledge. Related to that is Ängsal's (2021: 200) study of the 'expert' theme in Swedish texts about COVID-19 derived from dailies. He notices the phrase "I am not an expert", followed by some expression of mitigated opinion/judgement/advice.

l) *Hi, since 17.11 I have had a confirmed covid case. Below I present the course of my disease* [*Witam, od 17.11 mam potwierdzony covid. Później przedstawiam mój przebieg choroby*] (GoWork.pl, *People who…*)

The comment above exemplifies a situation where the experience gained by the discussant legitimises them making claims about reality.

One can also identify a sub-group here, i.e., the so-called case stories of *lived experience*, because they describe the lived experience of the discussants or their close ones and, unlike the previous group, they do it in a very detailed way, and not necessarily emphasise their expertise in the matter (cf. (l) above where the user observes that the case is "confirmed" and that they "present the course"). The concept of the lived experience is reminiscent of the concept of the lifeworld, proposed by Mishler (1984), who identified two types of voices that occur in doctor-patient communication. *The voice of the lifeworld* pertains to the subjective perception of the problem, which can be revealed in his/her narrative. The voice may be contrasted with *the voice of medicine* which is the biomedical perspective focusing on the condition rather than the patient.

As has been already mentioned, medicine revolves around cases which are generally seen as instances of diseases in patients and thus are discursive constructs (Zabielska 2015: 3; Radley and Chamberlain 2001: 326) in which the entire experience from the appearance of symptoms to treatment results, i.e., recovery or death, is enclosed. Such descriptions of cases can be encountered in both spoken and written medical communication, but also among lay audience/patients who share and discuss their illness experience, for instance in social media or on discussion forums, as in the case of the second group of the examined samples.

m) *So you were lucky. I work in a food factory and in my department there were 4 cases. Not to mention other departments. Indeed, 3 of them had a mild course, including fever, runny nose, diarrhoea, loss of smell. But the fourth one barely rose from bed for two weeks and even after recovery she feels weak. In total, she has been absent for a month now, and she will sure spend the next one off work. All of the people were covid positive. All of them thought from the very beginning that it was only a cold.* [*No to miałeś szczęście. Ja pracuję w zakładzie spożywczym i w moim dziale były 4 przypadki. Nie wspominając o innych działach. Owszem 3 miały przebieg dość łagodny, typu gorączka, katar, biegunka, utrata powonienia. Natomiast ta czwarta prawie 2 tygodnie ledwo wstawała z łóżka, a nawet jak już przeszła to jest osłabiona. Łącznie nie ma jej już miesiąc, a co najmniej spędzi następny tydzień na wolnym. Wszystkie osoby były zdiagnozowane jako pozytywne. Każda praktycznie na początku myślała, że to tylko przeziębienie.*] (GoWork.pl, *Coronavirus does not exist*)

n) *You are not normal you believe in conspiracy theories the virus exists and the government is not lying only in England and Germany isolation wards are full no one has a vested interest in the falling of economies think logically one can go through it asymptomatically because it is not a flu if someone is ailing or has chronic diseases or their immunity is weak is screwed I know two people who are in a serious condition because of covid and one of these people's children went through it more or less ok and the ventilator wasn't necessary* [*Jesteście nie normalni³ uwierzyliście w spiskowe teorie virus jest i nie rząd kłamie tylko w Anglii i w Niemczech też zakaźne pełne nikt nie ma biznesu w tym żeby gospodarka wszędzie upadała myślcie logicznie można to przechodzić bezobjawowo bo to nie grypa jak ktoś jest schorowany czy ma przewlekle choroby czy słaba odporność to ma lipę znam dwie osoby już co są niestety w ciężkim stanie przez covid a jednej z tych osób dzieci w miarę ok to przeszły nie trzeba było respiratora*] (GoWork.pl, *Coronavirus does not exist*)

Example (m) above deals with the indirect experience of the narrator, which can be seen at the level of the perspective adopted (I-perspective) as well as the evaluative expressions when referring to given symptoms ("mild course", Pol. przebieg dość łagodny). Also, the fact that the author seems detailed in their descriptions and explanations contributes to the reliability of the account, even if it is not the direct one, as the author talks about their co-workers. In example (n), the focus changes as the author supports the existence of the coronavirus, offering some arguments which, in the author's opinion, should logically prove the virus is there. Also, some evaluative expressions are present ("not normal", Pol. nie normalni, "screwed", Pol. to

---

³ Original spelling.

ma lipę). What is common for these two examples is the detailed account of the cases described, even though the descriptions do not concern the very authors. Subsequently, precise reports of the symptoms and their development are offered, as if for others to judge (possibly more experienced ones, see Morrow 2006).

4.3.3. Looking for advice

As has been already mentioned, Internet forums serve the purpose of sharing information, ideas and opinions among the participants. This exchange is often a direct reaction to other users' requests. This has been demonstrated for instance in the analysis of the discourse of both English and Polish online ENT support groups and those for cochlear implant users (Zabielska and Żelazowska-Sobczyk 2019; Żelazowska-Sobczyk and Zabielska 2019). Here, in the examples below, the authors ask questions regarding COVID-19:

o) *And what do you think of walking in woods? We still have a growing number of infections, I think it is still not safe* [*A co sądzicie o tym, że można już dzisiaj poruszać się po lasach? Przecież nadal mamy rosnącą liczbę zakażonych, moim zdaniem to nadal nie jest bezpieczne*] (GoWork.pl, *How to avoid infection?*)

p) *It's Sunday my shoulders and back are hurting, I am helping myself with ibuprofen all the time.. You think it's covid?* [*Dziś niedziela bolą mnie ramiona i plecy, cały czas ratuje się ibuprofenem.. Myślicie ze to covid?*] (GoWork.pl, *People who…*)

As can be seem above, the authors ask about COVID-19 restrictions (example (o)) and openly express their view as well as request a diagnosis of their condition (example (p)).

4.4. Common metaphors

4.4.1. Reification of disease

One of the widespread but rarely realised metaphors of disease is its reification, i.e., understanding it as a THING, which, consequently, presented this way, can be possessed and possibly got rid of (as opposed to something that "develops" and lasts, see example (d) above). This can be observed in the sentences below, when one talks about patients with diseases (q) and having or itemising/enumerating (Blois 1984: 100) them (r-s).

q) *10% of patients with COVID-19* [*10% pacjentów z COVID*] (PPN2)
r) *We do not have to have any symptoms: fever, cough, rash, diarrhoea, but we can have it. One needs to care however not only for oneself but also for others, more vulnerable, for whom it is a*

threat to their lives. [*Nie musimy mieć żadnych objawów: gorączki, kaszlu, wysypki, biegunki, ale możemy go mieć. Pamiętać należy nie tylko o sobie, ale o tych słabszych dla, których stanowi zagrożenie życia*.] (GoWork.pl, *Coronavirus does not exist*)

s) *You have, had COVID and you're talking about coming back to work..laughter* [*Masz, miałaśc ovida a ty mówisz o powrocie do pracy..smiech*] (GoWork.pl, *People who…*)

The 3-gram "patients with COVID-19" (Pol. pacjenci z COVID-19) is the 9th most frequent 3-gram in the sample of scientific texts. Also, in word sketch of 'COVID-19,' in the left context, it frequently occurs with 'with' (Pol. z) (the 2nd).

Fleischman (2001: 489–490) observes that the consequences of "nominalising" the disease is perceiving it as an entity and not a process and thus not an aspect of its functioning. This seems to be the case in the sample of the discussion forum posts, where 'COVID-19' co-occurs in the left context with 'from' (Pol. na) in phrases such as 'suffer from' and 'die from', which seems closer to the understanding of disease as a process and not as a THING, a feature present also in the scientific papers analysed – examples (c-d) in section 4.2.4 above.

4.4.2. War metaphor

According to Fleischman (2001: 485), in the conceptual metaphors of biomedicine, the illness experience is presented also as a battle which victimises patients. The metaphor has become a ready-made option when communicating illness experience (Hodgkin 1985), regardless of the participants of interaction. However, its rather simplistic character has been pointed to, too, especially in the case of unsuccessful treatment, when the patient is portrayed as the one to blame. An alternative has been, for instance, the journey metaphor (Harrington 2012: 409–410; Hommerberg et al. 2020) which changes the perspective from the fight against the disease to the acceptance of its many scenarios. The WAR metaphor was also criticised in the COVID-19 pandemic (e.g., Semino 2021: 51–52) and one of the alternatives offered was the metaphors of fire and firefighters (Semino 2021: 54–56). In the current samples, instances of military metaphor were also identified:

t) *I know personally people who had COVID, 2 acquaintances lost the battle.* [*Znam osobiście osoby które przeszły Covid,2 znajomych przegrało*.] (GoWork.pl, *vaccination*)

u) *He says that that what he went through was a battle for survival. Somebody who ~~who~~ did not go through this cannot say anything.* [*Mówi, że to co przeżył to była walka o przetrwanie. Ktoś kto nie przeżył tego może nie zrozumieć*.] (GoWork *People who…*)

v) *lack of data regarding the direct SARS-CoV-2 invasion* [*brak danych o bezpośredniej inwazji wirusa SARS-CoV-2*] (PPN1)

w) *IL-12 known as well as natural killer* [*IL-12 znana również jako naturalny zabójca*] (GP1)

In these examples, one talks about going through and losing a "battle (for survival)" (u), "invasion" of the virus (v) and a "natural killer" (w). Musolff (2021) classifies the scenarios in which WAR metaphor is applied and observes that the "invasion" of the virus (v), "battle" (t-u) and "losing" it (t) follows the "pandemic management as a fight" scenario (Musolff 2021: 312). Neagu (2022: 261) in her analysis of metaphoric framings of fighting COVID-19, apart from typical instances of WAR metaphor, identifies the invisible enemy, e.g., 'killer', see example (w). Interestingly enough, no instances of the 'battle' element appeared in the analysis of the sample of scientific texts on the same topic in English (Zabielska 2022).

5. Conclusions

The aim of the current paper has been to analyse and then juxtapose two discourses about COVID-19 – professional and lay – in order to establish some starting points for further analyses of these two types of linguistic performance exemplifying particular social practices in the pandemic times. As the preliminary results demonstrate, although these discourses describe the same disease reality, their producers, aims, and audience are potentially different, thus the way they communicate certain content differs significantly. As the results demonstrate, the scientific discourse about COVID-19 communicates information in an objective and impersonal way, foregrounding the subject matter and not the parties involved, i.e., the author/medical professional and the patient. The computer-mediated discourse of forum posts concerning COVID-19 is characterised by expression of emotions and personal stance, focusing on the direct experience of participants, which serves as an alternative for scientific facts. What the discussants lived through is often communicated in narratives of various sorts and functions, in general shared to prove the existence of the coronavirus and to project their image of reliable discussants, possibly as well through offering rich accounts of the disease experience. Stories are also present in the sample of scientific texts; however, these are professional stories which present various cases in an objective fashion, offering scientific evidence and avoiding any subjectivity or emotionality, unlike in the other sample. Structurally, the scientific accounts are closer to big stories with their constituent elements describing medical cases, whereas the discussants' reports on forums have more fleeting character,

dependent on the circumstances, thus may be labelled as small stories. The differences in these two types of stories refer to different purposes for which they were created, following professional/social practices involving different producers and recipients. Apart from the presence of narratives, both samples also contain common metaphorical expressions utilising the concept of disease as a THING or WAR. Unique metaphors or lexical fields, however, were found in the sample of professional discourse, where the characteristic element of MOVEMENT was identified. Additionally, some remarks have also been offered regarding the textual references to patient and disease, however since their co-text was not analysed in depth, they should be treated only as directions for future studies.

Appendix: Analysed texts

DB1 = Rachidi, Fatima (2021) "Wirus SARS-CoV wykorzystuje receptory ACE2 i CD209L do zakażenia." *Diabetologia Praktyczna,* 7(3); 194–195.

FP1 = Wróż, Anna, Anna Breś-Targowska (2020) "Koronawirus – aktualny problem medyczny i społeczny." *Farmakologia Polska,* 76(5); 259–268.

FZM1 = Bogdański, Aleksander, Aleksandra Słaba, Matylda Kręgielska-Narożna (2020) "Otyłość jako czynnik ryzyka zwiększający szansę cięższego przebiegu COVID-19." *Forum Zaburzeń Metabolicznych,* 11(3); 105–111.

GP1 = Książkowska, Kinga, Magdalena Laszczyk, Jan Wilczyński, Dorota Nowakowska (2008) "Ciąża a zakażenie SARS-CoV." *Ginekologia Polska,* VXXIX; 47–50.

GPP1 = Stańczyk, Patrycja, Tomasz Jachymski, Piotr Sieroszewski (2020) "COVID-19 w ciąży, podczas porodu i połogu na podstawie EBM." *Ginekologia i Perinatologia Praktyczna,* 5(A); 1–10.

H1 = Błach, Justyna, Jacek Roliński (2020) "Przegląd informacji na temat COVID-19 oraz wywołującego ją SARS-CoV-2." *Hematologia,* 11(2); 82–94.

KI1 = Szyszkowska, Anna, Ewelina Żukowska, Artur Dubicki, Sławomir Dobrzycki, Bożena Sobkowicz, Agnieszka Tycinska (2020) "Ostry zespół wieńcowy a epidemia COVID-19 — przypadek 85-letniej pacjentki ze świeżym zawałem ściany dolnej." *Kardiologia Inwazyjna,* 15(2); 98–102.

N1 = Simon, Krzysztof, Marta Rorat, Justyna Janocha-Litwin, Monika Pazgan-Simon (2021) "Zakażenie SARS-CoV-2: Etiopatogeneza, obraz kliniczny, aktualne możliwości postępowania terapeutycznego–doświadczenia własne." *Biuletyn Polskiego Towarzystwa Onkologicznego Nowotwory,* 6(1); 38–42.

PP1 = Czajkowska-Malinowska, Małgorzata, et al. "Leczenie niewydolności oddychania w przebiegu COVID-19–Część I. Tlenoterapia bierna." *Pneumonologia Polska,* 1(2); 132–145.

PPN1 = Lipowska, Marta (2020) "Postępowanie z pacjentem z polineuropatią zapalną w okresie pandemii COVID-19." *Polski Przegląd Neurologiczny,* XVI(2); 84–87.

PPN2 = Śmiłowska, Katarzyna, Lech Krawczyk, Paweł Greuenpeter, Jarosław Sławek (2020) "Choroba Parkinsona w czasach COVID-19; Objawy oddechowe, sposoby optymalizacji ich leczenia." *Polski Przegląd Neurologiczny,* XVI(2); 75–79.

References

Ängsal, Magnus P. (2021) "Who Is an Expert? A Corpus-Assisted Analysis of the Expert in Swedish Covid-19 Discourse." *Tekst und Diskurs,* 15; 171–209.

Anspach, Renee R. (1988) "Notes on the Sociology of Medical Discourse: The Language of Case Presentation." *Journal of Health and Social Behaviour*, 29; 357–375.

Bamberg, Michael, Alexandra Georgakopoulou (2008) "Small Stories as a New Perspective in Narrative and Identity Analysis." *Text & Talk,* 28(3); 377–396.

Baynham, Mike, Alexandra Georgakopoulou (2006) "Big" Stories and "Small" Stories: Reflections on Methodological Issues in Narrative Research". [In:] *Seminar on Methodological   Issues in Linguistic Ethnography, The Open University, Milton Keynes, UK. 2006.* Retrieved from http://www.lancaster.ac.uk/fss/organisations/ lingethn/documents/OU_ meth_sem/Baynham_big_stories.doc. Date: 10.04.2023.

Bleakley, Alan (2017) *Thinking with Metaphors in Medicine: The State of the Art*. London: Routledge.

Blois, Marsden S. (1984) *Information and Medicine*. Berkeley: University of California Press.

Bouvier, Gwen (ed.) (2017) *Discourse and Social Media*. Oxon: Routledge.

Brookes, Gavin, Daniel Hunt (2021) "Introduction." [In:] Gavin Brookes, Daniel Hunt (eds.) *Analysing Health Communication: Discourse Approaches*. Cham: Palgrave Macmillan; 1–17.

Chojnacka-Kuraś, Marta, Marta Falkowska (2023) "Polaryzacja stanowisk wobec pandemii i jej odzwierciedlenie w dyskursywnych strategiach nominacyjnych. Studium Wyrażenia Covidianin." *Język Polski,* CIII(1); 55–70.

Coluzzi, Paolo, Patricia Riget (2002) "COVID-19 in the Malasian and Italian Linguistics Landscape." *Socjolingwistyka,* XXXVI; 99–123.

Crystal, David (2020) "Covocabulary". *Fifteen Eighty Four: Academic Perspectives from Cambridge University Press*. Retrieved from: https://www.cambridgeblog.org/2020/05/covocabulary/. Date: 10.04.2023.

Diget, Ida Stevia (2021) "Minimal English for Health: Reader Accessibility in Public Health Communication about COVID-19 in Australia (with Contrastive Reference to Denmark)." [In:] Cliff Goddard (ed.) *Minimal Languages in Action*. iBooks: Palgrave; 529–599.

Duda, Barbara, Ewa Ficek (2022) "Szczepionka, śmiercionka, trupionka. modelowanie znaczeń słowa w dyskursie antyszczepionkowym związanym z pandemią SARS-CoV-2." *Socjolingwistyka,* CII; 49–63.

Duszak, Anna (1987) *The Dynamics of Topics in English and Polish*. Warszawa: Wydawnictwa UW.

Fleischman, Suzanne (2001) "Language and Medicine." [In:] Deborah Schiffrin, Deborah Tannen, Heidi E. Hamilton (eds.) *The Handbook of Discourse Analysis*. Oxford: Blackwell Publishers; 480–483.

Gardner, Sheena, Sian Alsop (2016) *Systemic Functional Linguistics in the Digital Age*. United Kingdom: Equinox eBooks Publishing.

Geertz, Clifford (1988) *Words and Lives: The Anthropologist as Author*. Palo Alto, CA: Stanford University Press.

Giannoni, Davide S. (2009) "Disciplinary Values in English Academic Metaphors." *Linguistica e Filologia,* 28; 173–191.

Gillings, Mathew, Gerlinde Mautner, Paul Baker (2023) *Corpus-Assisted Discourse Studies*. Cambridge: Cambridge University Press.

Gordon, Cynthia (2015) "'I Would Suggest You Tell This ^^^ to Your Doctor'. Online Narrative Problem-Solving Regarding Face-to-Face Doctor-Patient Interaction about Body Weight." [In:] Franziska Gygax, Miriam A. Locher (eds.) *Narrative Matters in Medical Contexts across Disciplines*. Amsterdam: John Benjamins; 17–40.

Gotti, Maurizio (2008) *Investigating Specialised Discourse*. Bern: Peter Lang.

Halliday, Michael A. K. (1994) *An Introduction to Functional Grammar*. London: Edward Arnold.

Harrington, Kristine J. (2012) "The Use of Metaphor in Discourse about Cancer: A Review of the Literature." *Clinical Journal of Oncology Nursing,* 16(4); 408–412.

Herring, Susan C. (2001) "Computer-Mediated Discourse." [In:] Deborah Schiffrin, Deborah Tannen, Heidi E. Hamilton (eds.) *The Handbook of Discourse Analysis*. Oxford: Blackwell Publishers; 612–634.

Hodgkin, Paul (1985) "Medicine is War." *The British Medical Journal,* 241; 1820–1821.

Hoffmann, Lothar (1984) "Seven Roads to LSP." *Special Language: International Journal of LSP, Research, Didactics and Terminology,* 6(1-2); 28–38.

Hohaus, Pascal (ed.) (2022) *Science Communication in Times of Crisis*. Amsterdam: John Benjamins.

Hommerberg, Charlotte, Anna W. Gustafsson, Anna Sandgren (2020) "Battle, Journey, Imprisonment and Burden: Patterns of Metaphor Use in Blogs about Living with Advanced Cancer." *BMC Palliative Care,* 19(59). Retrieved from https://doi.org/10.1186/s12904-020-00557-6. Date: 10.04.2023.

Hunter, Kathryn Montgomery (1991) *Doctors' Stories. The Narrative Structure of Medical Knowledge*. Princeton: Princeton University Press.

Kenny, Nuala P., Brenda L. Beagan (2004) "The Patient as Text – A Challenge for Problem-Based Learning." *Medical Education* 38; 1071–1079.

Koca-Helvaci, Zeynep Cihan (2022) "'Coronavirus as a Political Weapon'. The COVID Pandemic through the Lens of the US Alt-Right Media." [In:] Pascal Hohaus (ed.) *Science Communication in Times of Crisis*. Amsterdam: John Benjamins; 169–195.

Kokkinakis, Dimitros, Maria Toporowska-Gronostaj (2006) "Lay Language versus Professional Language within Cardiovascular Subdomain – A Contrastive Study." *Proceedings of the 2006 WSEAS International Conference on Cellular & Molecular Biology, Biophysics & Bioengineering*; 1–7. Retrieved from http://www.wseas.us/e-library/conferences/2006 athensbio/papers/536-131.pdf. Date: 20.04.2023.

Labov, William, Joshua Waletzky (1967) "Narrative Analysis: Oral Versions of Personal Experience." [In:] June Helm (ed.) *Essays on the Verbal and Visual Arts*. Seattle, WA: University of Washington Press; 12–44.

Luzón, Maria J. (2022) "Coronavirus Explainers' for Public Communication of Science: Everything the Public Needs to Know." [In:] Andreas Musolff, Ruth Breeze, Kayo Kondo, Sara Vilar-Lluch (eds.) *Pandemic and Crisis Discourse: Communicating COVID-19 and Public Health Strategy*. London: Bloomsbury Academic; 97–114.

McClaughlin, Emma, Sara Vilar-Lluch, Tamsin Parnell, Dawna Knight, Elena Nichele, Svenja Adolphs, Jeremie Clos, Giovanni Schiazza (2023) "The Reception of Public Health Messages during the COVID-19 Pandemic." *Applied Corpus Linguistics,* 3(1). Retrieved

from https://www.sciencedirect.com/science/article/pii/S2666799122000211?via%3Dihub Date: 14.04.2023.

Mishler, Elliot G. (1984) *The Discourse of Medicine. The Dialectics of Medical Interviews*. Norwood, NJ: Ablex.

Molek-Kozakowska, Katarzyna, Sofiia Struchkova (2022) "Communicating Risks of an Anti-COVID Vaccine in Poland. A Comparative Study of Content, Style and Advocacy in Three Media Outlets." [In:] Pascal Hohaus (ed.) *Communication in Times of Crisis*. Amsterdam: John Benjamins; 143–168.

Morrow, Phillip (2006) "Telling about Problems and Giving Advice in an Internet Discussion Forum: Some Discourse Features." *Discourse Studies,* 8(4); 531–548.

Morse, Janice M. (2012) *Qualitative Health Research: Creating a New Discipline*. Walnut Creek, CA: Routledge.

Mu, Junfang F., Hongyue Zhao, Guang Yang (2021) "A Critical Discourse Analysis of Reports about China on the COVID-19 Pandemic in *The New York Times*." *Open Access Library Journal,* 8(e7746). Retrieved from https://doi.org/10.4236/oalib.1107746. Date: 11.12.2022.

Musolff, Andreas (2021) "War against Covid-19: Is the Pandemic Management as War Metaphor Helpful or Hurtful." [In:] Andreas Musolff, Ruth Breeze, Kayo Kondo, Sara Vilar-Lluch (eds.) *Pandemic and Crisis Discourse: Communicating COVID-19 and Public Health Strategy*. London: Bloomsbury Academic; 307–320.

Neagu, Mariana (2022) "Metaphoric Framings of Fighting Covid-19 in Romanian and English Public Speeches." [In:] Andreas Musolff, Ruth Breeze, Kayo Kondo, Vilar-Lluch (eds.), *Pandemic and Crisis Discourse: Communicating COVID-19 and Public Health Strategy*. London: Bloomsbury Academic; 255–270.

Nygren, Katarina G., Anna Olofsson (2021) "Swedish Exceptionalism, Herd Immunity and the Welfare State: A Media Analysis of Struggles over the Nature and Legitimacy of the COVID-19 Pandemic Strategy in Sweden." *Current Sociology Monograph,* 69(4); 529–546.

Ovchinnikova, Irina, Liana Ermakova, Dina Nurbakova (2020) "Sentiments in Russian Medical Professional Discourse during the Covid-19 Pandemic." [In:] Malvina Nissim, Viviana Patti, Barbara Plank, Esin Durmus (eds.) *Proceedings of the Third Workshop on Computational Modeling of People's Opinions, Personality, and Emotions in Social Media*, *Barcelona, Spain (online), 13 Dec. 2020*. Association for Computational Linguistics (ACL); 99–108.

Page, Ruth (2010) "Re-Examining Narrativity: Small Stories in Status Updates." *Text &Talk,* 30(4); 423–444.

Parvin, Gulsan, Habibur Rahman, Reazul Ahsan, Anwarul Abedin (2020) "Media Discourse about the Pandemic Novel Coronavirus (COVID-19) in East Asia: The Case of China and Japan." *Social Sciences & Humanities Open.* Retrieved from http://dx.doi.org/10.2139/ssrn.3603875. Date: 10.04.2022.

Péteri, Attila (2021) "Wissenschaftsdiskurs in der Corona-Krise in Deutschen und Ungarischen Medien. Eine Vergleichende Linguistische Analyse." *Tekst i Dyskurs – Text und Diskurs,* 15; 263–286.

Radley, Alan, Kerry Chamberlain (2001) "Health Psychology and the Study of the Case: From Method to Analytic Concern." *Social Science & Medicine*, 53(3); 321–332.

Semino, Elena (2021) "Not Soldiers but Fire-Fighters – Metaphors and Covid-19." *Health Communication,* 36(1); 50–58.

Smith, Carlota S. (2003) *Modes of Discourse. The Local Structure of Texts*. Cambridge: Cambridge University Press.

Stokes, Daniel C., Anietie Andy, Sharath C. Guntuku, Lyle H. Ungar, Raina M. Merchant (2020) "Public Priorities and Concerns Regarding COVID-19 in an Online Discussion Forum: Longitudinal Topic Modeling." *Journal of General Internal Medicine,* 35(7); 2244–2247.

Sun, Wanning (2021) "The Virus of Fear and Anxiety: China, COVID-19, and the Australian Media." *Global Media and China,* 6(1); 24–39.

TechTerms. Web Forum Definition. Retrieved from http://techterms.com/definition/web_forum. Date: 07.03.2019.

Widdowson, Henry G. (1979) *Explorations in Applied Linguistics*. Oxford: Oxford University Press.

Wikipedia (2023) COVID-19 Pandemic. Retrieved from https://en.wikipedia.org/wiki/COVID-19_pandemic. Date: 10.04.2023.

World Health Organisation (WHO) (2023) Coronavirus Disease (COVID-19). Retrieved from https://www.who.int/health-topics/coronavirus#tab=tab_1. Date: 10.04.2023.

WORLDOMETER. (2022) COVID Live – Coronavirus Statistics. Retrieved from https://www.worldometers.info/coronavirus/. Date: 10.04.2023.

Wrześniewska-Pietrzak, Marta, Małgorzata Kołodziejczak (2022) "The Virus on the Leash of Politics? The Media Image of the SARS-COV-2 Virus during the First Wave of the Pandemic in Poland (Preliminary Remarks)." *Socjolingwistyka,* XXXVI; 81–97.

Zabielska, Magdalena (2014) *Searching for the Patient's Presence in Medical Case Reports*. Frankfurt am Main: Peter Lang.

Zabielska, Magdalena (2015) "Patient-centred Case Reporting: State of the Art." [In:] Magdalena Zabielska, Emilia Wąsikiewicz-Firlej, Anna Szczepaniak-Kozak (eds.) *Discourses in Co(n)text: The Many Faces of Specialised Discourse*. New Castle upon Tyne: Cambridge Scholars Publishing; 2–32.

Zabielska, Magdalena (2021) "Pacjenci z… / u pacjentów z… / w przebiegu COVID-19…: dyskursywna analiza polskich fachowych publikacji medycznych dotyczących koronawirusa." *Poradnik Językowy,* 8(2); 23–37.

Zabielska, Magdalena (2022) "Active Virus and Passive Patients – A Discourse Analysis of Specialised Medical Publications about Covid-19 in English." *Kwartalnik Neofilologiczny,* LXIX(3); 366–382.

Zabielska, Magdalena, Magda Żelazowska-Sobczyk (2019) "Hearing Aids and Cochlear Implants – A Study of the Discourse of Patients' English ENT Online Support Forums." *Token: A Journal of English Linguistics,* 9 (special issue *Exploring healthcare communication and health literacy: Cognitive and social community action in an online world*, guest editors Marina Bondi and Franca Poppi); 143–165.

Żelazowska-Sobczyk, Magda, Magdalena Zabielska (2019) "Prostota i emocjonalność języka pacjentów w internetowej grupie wsparcia z zakresu implantów ślimakowych." *Oblicza Komunikacji,* 11; 121–138.