The dynamics of popularised discourse for diabetics: Online forums for information and emotional support

Gillian Mansfield *University of Parma*

ABSTRACT

The aim of this paper is to examine the discursive strategies of seeking and giving information as well as emotional support for diabetics in online forums. The study analyses a popular website, Diabetes.co.uk, as an instance of a virtual community of practice. The dataset includes news about diabetes and about people with diabetes. The posts are published by Diabetes.co.uk staff and users who share their experiences with the disease. A corpus of news contributions and forum discussions was compiled, and then analysed by generating a software concordance for significant words and expressions. Findings show the website is characterised by a patient-centred discourse. The discursive strategies identified fall into two categories: a popularised medical news genre providing knowledge produced by the website staff and an emotionally-charged, informal, written-to-be-spoken discourse shared by users joining the discussion forum. The discussion forum posts frame diabetics as patients seeking to achieve empowerment and self-management from their peers who transmit experiential knowledge of their chronic condition. The paper attempts to provide further insights into effective computer-mediated diabetic discourse for health professionals and language scholars alike.

Keywords: online healthcare communication, diabetes, popularised diabetic discourse, emotional support, empowerment, self-management.

1. Introduction

It is commonly agreed that the internet has transformed the way in which we communicate. Not only does it facilitate daily inter-personal communication to a massive audience, but it fosters content sharing and collaboration between friends, professionals, experts in all walks of life. The Internet has

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long been recognised as a repository of information, and according to Shaw and Johnson (2011) seeking health information is the third most popular use of Internet technology, as confirmed in recent clinical literature (among others Arduser 2011; da Silva – de Freitas Campos 2016; Powers et al. 2008). Furthermore, medical research has shown that people suffering from a health complaint not only desire to learn more about their condition, but they also seek emotional support online (at Facebook, Twitter, forums) in an attempt to cope with the disease on a daily basis (among others Farrell 2014; Hernandez 2015; Powers et al. 2008; Shaw - Johnson 2011). In this regard, Farrell (2014: 8) observes a changing dynamics in health care, where health professionals are no longer the sole providers of information, but patients join discussions themselves. As far as diabetes is concerned, she notes that among the most commonly discussed topics on Facebook groups are those raised when diabetics share personal clinical information, request diseasespecific guidance, and seek and give emotional support. Greene et al. (2011: 287) define this kind of dynamic online communication "Health 2.0" and likewise claim that it "offers patients an opportunity to build and benefit from a social network to learn about their illness and to gain support from others with similar experiences." Indeed, as evidenced in this paper, forum discussion threads contain contributions from patients who, participating on a peer-to-peer basis, not only seek information and guidance but also consolation, comfort and encouragement. This is also in line with Caplan and Turner's (2007) theory of computer-mediated emotional support and comforting communication, as Harvey and Koteyko describe (2013: 165):

Interactions with peers in self-management programmes offer people with different medical conditions the opportunity to share their concerns with similar others, in this way reducing the sense of isolation associated with many diseases. Such interactions are typically a locus of social support defined as 'transaction of empathy and concern, information or advice, or tangible aid (i.e. goods and services) between two or more individuals' and characterised by the use of verbal or nonverbal behaviours to seek or provide help (Mickelson, 1997: 157). Such support groups are particularly important for those who suffer from chronic illness as clinical research shows that interpersonal networks significantly impact on adaptation to the everyday management of the disease.

Groups such as these are usually managed by health professionals, whose responsibility is to foster a patient-centred approach by understanding the

workings and benefits of social media in online communication (Farrell 2014: 9). As Turnbull (2015: 291) notes, a patient-centred approach is one that "views the patient not just in terms of his illness or a set of symptoms, but rather as a person with emotions, feelings, needs and preferences. An essential element of this approach is empathy, which involves the ability to understand another person's experiences and feelings and view them from their perspective (Hojat et al. 2002: 1563)". Furthermore, clinical literature (Caplan – Turner 2007) has shown the advantages of online communication, claiming it guarantees a certain amount of anonymity, which is less facethreatening than a face-to-face meeting. In particular, Powers et al. (2008: 92) report the findings of the PEW Internet and American Life Project (October 2007) and the overwhelming positive reaction of e-patients to the Internet regarding the information they retrieve and their resultant feelings. In general, the information helped them make decisions regarding how to treat the illness, ask a doctor new questions or seek a second opinion, change their approach to maintain their health, cope with a chronic condition, and think about diet, exercise or stress management. As far as their feelings were concerned, the majority of diabetics felt more reassured in making appropriate health care decisions, relieved or comforted by the information they gained, and felt confident they would now be able to raise new questions about their health with their doctor. Very few were overwhelmed or confused by the mass of information available.

This paper, which is part of some ongoing research into diabetic discourse, focuses on the resultant discursive behaviour of the social actors (website administrators and forum discussants) in online social interaction. First, it will examine the discourse of the health provider-administrator in providing news, offering support and stimulating discussion between diabetics, and secondly, it will analyse certain features of the peer-to-peer discussion, both initiated by the website staff and more spontaneously by the stakeholders, the patients themselves. Indeed, the overall aim of this contribution is to highlight, from a linguistic perspective, the affordances of computer-mediated diabetic health communication. Its purpose also triggers from the initial findings of Hernandez (2015: 194) who illustrates the dual benefits that social media provide: "With social media, patients get at least 2 critical things that physicians can't normally offer: the perspective from the point of view of another patient and an almost unlimited amount of time to listen and share experiences. In turn, healthcare providers can add to their education and empathy towards patients by reading articles written in the patients' voices."

The analysis is based on the content of a popular website, Diabetes. co.uk, where news of various aspects of diabetes (e.g. research, treatment, physical exercise, recipes) is published, and where diabetics are encouraged to talk about themselves and their predicaments on a peer-to-peer basis. It examines the metadiscursive features of both informative news and discussion threads, with a view to identifying the interactional styles and rhetorical strategies of the social actors involved. The analysis highlights to what extent and in what way the metadiscourse clearly reflects the above two reasons for social interaction – seeking both information and emotional support. The grammar and lexis of the various kinds of contributions will also be analysed according to their composition in order to stimulate either a nonverbal response (reading more information) or a verbal one (participating in a discussion forum to gain information and support). The structure of the paper is the following. Section 3 presents the corpora compiled and used for the study as well as the methodology adopted. The results will be reported in Section 4 followed by a discussion of the results and concluding remarks in Section 5.

2. Some theoretical background

It is first necessary to cover some theoretical background with which to contextualise the social interaction involved and on which to build the analysis of the data collected. Central to the discussion are the affordances of social media in providing a well-frequented place for online health communication, and more specifically, in fostering collaboration in a community environment.

2.1 The social actors

The social actors are the participants (the health professionals) managing the website in general with diabetic news on the one hand, and patients with similar characteristics, namely their diabetic condition, in the forum discussion area on the other. The interaction, as such, comprises numerous communicative events, taking place within a community of practice. Wenger-Trayner and Wenger-Trayner (2015: online) define communities of practice as "groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly." This confirms the reason why patients resort to online communication – to cope better with

their condition, and the onus on the part of the health professionals is to provide quality information and appropriate encouragement and support. Wenger-Trayner and Wenger-Trayner emphasise, however, that a community of practice is not simply a club of friends or a network of connections between people, but defines its identity as a shared domain of interest (here, the health condition). Justifiably, becoming a member involves commitment, mutual engagement, a shared competence, where the emphasis is on sharing information. Communities of practice thus build relationships that enable individual members to learn from each other. A website is a virtual community of practice, a virtual space containing a repertoire of resources shared by its stakeholders and is accessible to an infinite number of Internet users. In terms of a forum discussion, these resources are experiences, stories, tools, ways of addressing recurring problems - in short, a shared practice that relies on sustained interaction. As far as the website staff are concerned, it is their responsibility to select and disseminate relevant items of interest (i.e. knowledge), stimulate critical reflection in the patient and encourage the sharing of experiences. Gannon-Leary and Fontainha (2007: 2) also emphasise the resulting improvement of knowledge through the sharing of resources:

A Virtual Community of Practice [...] is a network of individuals who share a domain of interest about which they communicate online. The practitioners share resources (for example experiences, problems and solutions, tools, methodologies). Such communication results in the improvement of the knowledge of each participant in the community and contributes to the development of the knowledge within the domain.

Herring (2004: 355) describes the concept of "community" as providing "sociability, support, and identity". With particular reference to virtual community, she identifies six sets of criteria, most of which are relevant to members of an online diabetic community:

- 1) active, self-sustaining participation; a core of regular participants
- 2) shared history, purpose, culture, norms and values
- 3) solidarity, support, reciprocity
- 4) criticism, conflict, means of conflict resolution
- 5) self-awareness of group as an entity distinct from other groups
- 6) emergence of roles, hierarchy, governance, rituals

In fact, the social actors we shall analyse are an active core of participants, self-sustaining in their participation (1); they share a history and purpose (2) due to their health condition or knowledge of the subject, which results in encouraging and exchanging expressions of solidarity, support and reciprocity (3). They are also apt to foreground conflict, such as issues with doctors or the health system in general, when relevant to the diabetic condition, (4). They are well aware they form a group distinct from other groups (non-diabetics in general) (5), and they take up specific roles and identities in the discussion: moderator – staff member providing information and stimulating support through peer discussion, or active member, well-known member, Newbie, Type 1 Expert, and so on among peers (6) (see Section 4).

2.2 The social interaction

Gunawardena et al. (2009: 5) claim that a community of practice has its own discourse and its own way of using language to determine meaning: "it is in examining discourse that we can see 'how a community is shaped by language use and how language use shapes a community' (Creese 2003: 55)". Any analysis of the discursive practice of online interaction must fall into the category of metadiscourse, as defined by Hyland (2005: 14): "The concept of metadiscourse is based on a view of writing (and speaking) as a social and communicative engagement, offering a means of understanding the ways we project ourselves into our texts to manage our communicative intentions." This is clearly relevant if we wish to understand how the pragmatic function of various communicative events is to be understood. Concerning online communication, Herring (2004: 339) states, "Online interaction overwhelmingly takes place by means of discourse. That is, participants interact by means of verbal language, usually typed on a keyboard and read as text on a computer screen."

In the Diabetes.co.uk website, other media such as video and audio files (interviews and presentations) are uploaded for further in-depth consultation regarding items of interest to the community. In a forum discussion, the emphasis is on the written which serves to enact the spoken. Fairclough (1989) adopts the term synthetic personalisation, or synthetically personalised discourse, whereby language is used in such a way that mass audiences appear to be addressed as if they were individuals, through the use of the second person pronoun "you", for example, referring to "one and all". Concerning this form of address, Hunt and Koteyko (2015: 452)

categorise the strategic use of "we", "us" and "our" for a more personalised identity of the institution.

2.3 The content – popularisation of scientific discourse

The social interaction of diabetics can be located in the context of the popularisation of scientific discourse. The literature in the field identifies a tripartite model of participants, content and communicative act around which any analysis must revolve. According to Calsamiglia (2003: 139-140), there are two crucial aspects in presenting scientific knowledge to the general public, the first is the role and position of the speakers and the second affecting the content: the conditions of its production, comprehension and interpretation. As Gotti (2014: 16) claims, "Popularization [...] addresses not an expert group within the discipline, but an audience of non-specialists." Moreover, he explains the purpose of popularisations in the form of popular scientific magazines, books and news articles published for a wide readership: "Popularizations target [...] a wide reading public and deal with specialized topics in a language close to general discourse and to the layman's everyday experience. The purpose here is chiefly informative and seeks to extend the reader's knowledge rather than develop a secondary conceptual system" (2014: 17).

Gotti further defines popularisation as a reformulation process, a kind of redrafting of the disciplinary content, where the language is remodelled to suit a new target audience. Gotti (2013) also refers to the studies of Calsamiglia and Van Dijk (2004) to introduce another concept, that of recontextualisation of scientific knowledge, originally produced without a lay audience in mind. It becomes increasingly clear then that we need to examine the content of the website in order to ascertain where to place the discourse along the scale of popularised text, if we take for granted that diabetics are necessarily familiar with some scientific terminology as part of their living with their condition.

In his definition, Myers (2003: 273) includes the above-mentioned tripartite model: "Popularization is a matter of interaction as well as information; it involves persons and identities as well as messages." Furthermore, he argues, "We need to question who the actors are, how the various discourses interact, what modes are involved, and what is communicated – and we need to consider what these questions imply for text analysis" (2003: 267). This is applicable to the language of a diabetes website. While the discourse revolves around all possible aspects relating to the diabetic condition, website staff identify themselves as the experts and supervisors of content, the

bearers of knowledge of the disease, and diabetics identify themselves more closely with their practical knowledge, or current lack of it, and practical experience in relation to their illness. This paper aims to discover how the modes of interaction of both professionals and patients affect the way in which they express themselves and to what extent they use or reformulate specific medical terminology in their discourse.

Lastly, relevant to our discussion is Hyland's (2010: 117) concept of proximity:

a writer's control of rhetorical features which display both authority as an expert and a personal position towards issues in an unfolding text. It involves responding to the context of the text, particularly readers who form part of that context, textually constructing both the writer and the reader as people with similar understandings and goals. While it embraces the notion of interpersonality, proximity is a slightly wider idea as it not only includes how writers manage themselves and their interactions with others, but also the ways ideational material, what the text is 'about', is presented for a particular audience. It is concerned with how writers represent not only themselves and their readers, but also their material, in ways which are most likely to meet their readers' expectations.

Hyland relates this to Sacks et al.'s (1974:727) notion of recipient design, that is, how our lexical choice, content and adherence to expected discursive norms in what we say or write, makes sense to our addressees. This is particularly relevant to the ways in which diabetics are given practical information and how they are encouraged to share experiences with their peers. Harvey and Koteyko (2013: 169) observe a number of discourse strategies in peer-to-peer online interaction that achieve legitimacy of a discussant's presence in a forum and at the same time solicit support: 1) indicating one's condition by describing symptoms and/or mentioning the history of the disease; 2) making direct or indirect requests for information; 3) making references to shared experiences; 4) describing personal successes and elaborating on positive improvements.

In sum, our research questions are to examine the discursive devices adopted in two specific kinds of computer-mediated communication: 1) the provision of practical information and emotional support on the part of the website management whose purpose is to trigger peer-to-peer discussion, and 2) the developing peer-to-peer discussion either launched by a member of staff or by a patient him/herself.

3. Materials and methods

3.1 Choice of website

Diabetes.co.uk was chosen as the object of study for the vast quantity of computer-mediated health communication it provides between health professionals and patients on the one hand, and diabetic peers on the other. It has also been the object of other research in the field. Firstly, Turnbull (2015: 298) evidences the duality of social interaction of the site: "a community website whose information is provided by diabetes experts, but, above all, by diabetics themselves who share their knowledge and first-hand experience". Secondly, Hunt and Koteyko (2015: 459) highlight its online sociality "based on shared experiences of diabetes and consumption of health and lifestyle information to manage health risks."

3.2 The website corpora selected and methodology

In this small-scale study, two sets of corpora from the Diabetes.co.uk forum app, also downloadable onto a smartphone, were compiled according to their overall content and pragmatic purpose. Corpus A, which was compiled over a 9-month period from July 2018 to March 2019, comprised the publication in the forum area of 488 news items of interest, either relating to diabetes in general, including latest research and technology, or to specific news of patients and their success in coping with their condition. Corpus B was compiled over an 8-month period from July 2018 to February 2019, and was limited to initial thread titles (509 in all) from the section: *Take a look at some of today's top threads*, which were published twice weekly, invariably ten at a time. These were considered representative of the thousands of weekly contributions published from a wide variety of topic threads, and thus representative of the overall content. While both small (Corpus A contains approximately 15,000 words and Corpus B 2,500 words), they nevertheless provided some interesting insights.

The software programme *AntConc* (Anthony 2018) was used to create word lists in each corpus and to carry out subsequent concordances of words and clusters that appeared to be of particular significance. In fact, the first step taken after compiling the two corpora was to create a frequency list in order to gain an idea of the recurrent words. Subsequently, concordances were carried out to investigate key words in their co-text with a view to shedding light on any emerging discursive practices.

Following a more qualitative analysis, the contributions (items of interest, news titles, forum thread titles leading to contributions) were then classified according to the pragmatic function they appeared to express. The analysis is limited to the text found in the preliminary access to a contribution, that is, at the level where the reader is invited to click for further detail, since the overall purpose is to identify the illocutionary intent of the writer and the discursive strategies adopted to stimulate both reading and active participation.

3.3 Forum description

As evident in Figure 1, the Diabetes forum website revolves around the concept of community, calling itself *The Global Diabetes Community*, reinforced by images of smiling faces to the left and right. At the top of the first strip, there is direct access to other sections focussing on various kinds of diabetes (Prediabetes, Type 1, Type 2..., treatment, complications, insurance, food and recipes, and shopping online). Across the lower strip, in capital letters, there is an invitation to join the Diabetes community, with further invitations in a series of imperatives below: (Find support, ask questions and share your experiences in the forum) and below on a separate line a further invitation, yet again in the imperative form (Join the community).



Figure 1. The Diabetes.co.uk forum website

Furthermore, scrolling down the screen, there are some statistics (Figure 2) whose purpose is clearly to encourage newcomers to join, and also a news item in brief to the right to click on for the full text. Again, the imperative form is the only verbal form present (Join, Meet, Speak):

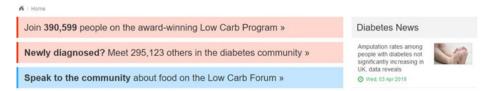


Figure 2. Statistics on the Diabetes.co.uk website

Further encouragement to participate by downloading the forum is given in the Meet the Community image (Figure 3) accompanied by a heart. The message is reinforced by a "Did you know" question containing the answer that informs the reader of its success rate in helping people to cope with the condition. The hyperlink, with its lexis, assonance and punctuation mark chosen for the imperative, "Grab the app!", reveals an informal style.

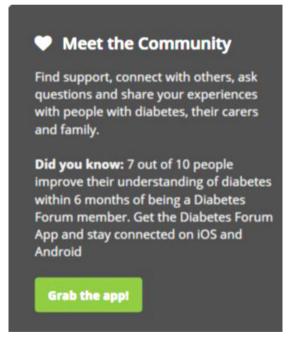


Figure 3. Discussing the option of the app in today's mobile-first world

As far as the forum discussion is concerned, Figure 4 shows the initial page, explaining what discussants can actually do. The prevalent verbal form is again the imperative, the purpose of which is to involve those interested.



Figure 4. Initial page of forum discussion with number of replies and views

Let us now examine the data in order to see how the discourse evolves in the forum and how it continually works in a stimulus-response pattern. As we shall see, the stimulus is either from the website staff to the patients or among the patients themselves in a peer-to-peer exchanges.

4. Data analysis

4.1 Discursive practices that emerge

According to Luzón (2013), in order to foster a dialogic involvement with the reader, the writer adopts several rhetorical strategies with which to engage him/her: 1) title, 2) questions, 3) humour. The two corpora under investigation include titles, the purpose of which in any text is to arouse curiosity and stimulate further reading. This paper examines principally the first two strategies. The third is probably applicable too, since there is

a sub-section, *Jokes and Humour*, but there were no humorous titles in those examined in spite of several examples of word play, possibly due to the seriousness of the topic.

4.2 The news section

The news section is the responsibility of the website staff. What is particularly interesting is that while many news items refer to themed topics on diabetes, the forum discussants are often participants in the news stories themselves. Their contributions were considered newsworthy enough to be published as stories in the own right. As we shall note, the group identity concept of "Diabetics R Us" is present throughout.

4.2.1 Words in the news

First, let us see what the word list afforded in terms of key words.

- "Diabetes", predictably, was the first content word, rating 3rd with 292 recurrences (2.02%). In clusters where it functioned in pre-modification, "diabetes forum" was the most frequent, recurring 19 times, followed by "diabetes community" (14 times), "diabetes day" (12) and "diabetes awareness" (10). "Diabetes" appeared even more frequently as the head word, when referring to a particular category of the disease, as in: "Type 1 Diabetes" (44 times), "Type 2 Diabetes" (41 times). Another interesting cluster was "with diabetes", which if expanded was most frequently preceded by "people" (20 times), indicating a human category, i.e. those affected by the disease. Also found were the more specific "children with", "drivers with", "someone with", and "a man with". One might have expected to find the word "diabetic" referring to a person as well, but it only recurred twice ("women", "a diabetic") and once referring to a dog ("diabetic service dog"). The other 3 recurrences were in the context of the illness or the title of a publication. It would seem then that the term "with diabetes" is by far the more popular when referring to people.
- "low" (158 times 1.09%) was the next most frequent content word in 11th position followed by "carb" in 12th (145 times 1%). In fact, the two appeared together in a cluster "low carb" (140 times), pointing to the significance of "low carbohydrates" for diabetic patients, as in "low carb diet" "low carb foods" and "low carb snacks". The lexical choice of "carb(s)" rather than "carbohydrate(s)" indicates the more informal register adopted.

• "You/Your/We/Our". We mentioned earlier the concept of personalisation using personal pronouns (paragraph 2.2). In fact, "you" ranked 20th with 102 recurrences (0.70%) and the personal pronoun "your" 24th with 80 occurrences (0.55%). Indeed a concordance of "you" confirmed a plural mass rather than single audience was being addressed (e.g. "What works for you? It's good to talk"), where "you" is also a much less formal choice than "one". "Your" ranked in connection with feelings and a personal condition ("your feelings", "your diabetes", "your diabetes management", "your blood sugar", "your overall health") but again the plural is implied in its use.

• "We" ranked 26th, occurring 76 times (0.53%), and "our" was 47th occurring 49 times (0.34%). As indicated earlier, "we" represents strategically less impersonally the staff at Diabetes.co.uk, as highlighted in the concordance expansion: "How can we do it better? We want to know your feelings on our Diabetes Forum." Likewise "our" gives the idea of an exclusive "we" belonging only to the subscribers to the forum.

4.2.2 The structure of the news

A typical news contribution was of human interest and basically one of two kinds: a) scientific news or b) news of /from a diabetic patient. The structure of each contribution invariably followed a simple pattern: image, headline beneath it or to the side, lead paragraph, below which came the hyperlink on a separate line in a short noun or verbal proposition. This is reminiscent of online news, in particular with its hyperactive devices. The contributions resemble the "News in Brief" section in newspapers, but with the added element of the hyperlink (or teaser) to access further detail. Below is a selection of examples according to the two categories identified in the corpus.

a) Scientific news

These items are the more objective of the two categories of news relevant in some way to diabetics and their condition:

(1)
Healthy diet, healthy heart
People with T2D were able to halve their risk of CVD risk depending
on their healthy lifestyle choices, a US study found.
Read the results

(2)

Diet advice shake-up

The University of Oxford has said in a study published in the BMJ that low calorie soups and shakes should be recommended as part of NHS treatment for obesity.

Why soups and shakes?

(3)

EASD 2018 launches T1 vaccine bid

A type 1 diabetes vaccine is being developed based on the findings of a project to prevent another autoimmune condition, celiac disease. Celiac's link to T1

(4)

Metformin could slow T2

Metformin could be as effective as gastric band surgery in slowing the progression of type 2 diabetes, new research shows.

What metformin does

b) News from patients

(5)

6 Months and reversed my T2

"6 months to the day and I've cracked it," writes Biglain. "Officially reversed my T2 and off the metformin!" Congratulations Biglain! It can be done

(6)

Police cell with no insulin

"They asked me do I need sugar?" writes dmcx3x who after being arrested was reportedly denied access to her insulin at the police station. She is considering making a complaint.

Read the full story

(7)

The Forum discusses: finding the positives

Between the tabloids and scientists warning us of health risks, it's easy to get caught up in the negatives of diabetes. But if you keep a balanced mind, diabetes can lead to some positives. The Diabetes Forum has been discussing some of the better things about diabetes. Avoid negativity, embrace positivity

(8)

All for one, one for all

When one of us succeeds, we all succeed. It's really motivating to read success stories such as MikeStrutter who has lost 3.5 stone!

"I've learned so much"

(9)

We Live and Learn

Diabetes is a condition that comes with a learning curve all of us have to climb. But through talking and sharing, that learning curve becomes a little easier. Swapping tips and tricks, sharing recipes that are kind to blood sugar levels, or simply supporting each other through the community all help to make things easier. Why not take the opportunity to share on the Forum today.

Join the conversation

(10)

Trick or treat

We've come up with a few tricks this Halloween to help you treat yourself without diabetes having the last laugh.

Top tips for Halloween

The function of a headline or title is to arouse interest and curiosity, prompting an active response in the reader. Newspaper headlines have been the topic of several studies over the years (among others, Bell 1991; Partington 1996; Morley 1998; Reah 2002; Mansfield 2006), being categorised as summary or connotative according to their content, structure and rhetorical strategy. The examples above mainly fall into the category of summary headlines since they are informative and indicate the content of the bodycopy in the lead paragraph. They all fall into the category of relevance for diabetics. Some titles are more connotative, requiring the reader to move to the bodycopy for full comprehension of the topic. Following the grammar of headlines, the examples above are either noun (1, 2, 6, 8, and 10) or verbal propositions (3, 4, 5, 7, 9). The noun phrases have an added rhetorical strategy in the form of repetition and/or alliteration (1, 8), or popular sayings (10), while (2) and (6) are classic examples of information packaging in wordy headlines. Example (10) also shows that headlines in this forum reflect timeliness and predictability with an event occurring annually. In the verbal propositions, the tense form is the present (3, 7, 9) typical of headline language reporting past events, while example (4) reports a possible advantage of some diabetic medication with a conditional form and example (5) quotes a patient reporting his achievement. Example (9) is a frequently used expression when commenting on experience we can learn from. In this case, it is only by reading the bodycopy below that the reader can gain an idea of the content.

Some headlines posed a question:

- (11) Could saliva help diagnose T1D?
- (12) In need of motivation?
- (13) How can we do it better?

Example (11) introduces a report on a new discovery, emphasised by a question that is an invitation to read further. Example (12) introduces the storytelling of a forum discussant needing support because she was not losing weight and had turned to the forum. In example (13), the website managers launch an appeal to re-impress upon participants that they are there to help and want to improve their support.

The bodycopy is the informative text exuding emotional support, whether it is simply reporting scientific news or stories of interest linked to the forum contributions, or it contains a pressing invitation to participate in the forum or a request for feedback from the subscribers on how to improve assistance. The news from the patients appeals to the emotions and includes evaluative lexis: (5) Congratulations Biglain! and (8) It's really motivating. Examples (7) and (9) are clearly written in order to solicit a positive response from the forum with the bodycopy containing a string of reassurances. Example (14), an invitation from the website staff to join in, gives an insistent message that is relevant to everyone, rather like example (8). It is introduced by a title with contracted lexis, a characteristic feature in the forum threads:

(14)

Type 1 'Stars R Us

Whether you have type 1 diabetes, type 2, gestational or any of the myriad of diabetes types, there is somewhere on the Diabetes.co.uk Forum for you. One of the most popular type 1 threads sees people sharing blood sugar levels, getting things off their chests, and simply having a chat.

Join in »

Note also the informal language in the metaphorical expression "getting things off their chests". The emphasis again is on fostering the benefits of not remaining isolated but becoming involved in the community, as in the "All for One, One for All message" (example 8).

A contribution in (15) introduces practical advice, stating the case, which is enclosed in the relevant title and hyperlink summarising the content. The title is another example of an informal metaphorical expression:

(15)

Give bad weather the cold shoulder

No one likes it when the weather gets too cold, and going into November, the mornings are becoming crisp and frost is making an appearance. The cold can wreak havoc with blood glucose levels and so managing diabetes at this time of year can require a slightly closer watch.

Cold weather management

The hot words of the hyperlink serve as a further prompt soliciting an active response to discover more. They comprise a wide variety of noun and verbal propositions that highlight a particular aspect of the news item. 94 hyperlinks were in the imperative form soliciting further action in order to gain information (1, 6, 9, 14), or they gave advice (7) as in other cases:

- (16) Keep a clear head
- (17) Don't lose sleep over diabetes

Others were encouraging statements (5, 8). Wh-question words (how, what, which) implied that by clicking on the link, more practical information could be retrieved. How, for instance, occurred 40 times (0.28%). Here are some examples:

- (18) How to get back on track
- (19) How Rachel achieved it

Other links still were self-contained comments attached to the news item, and informal:

- (20) A kick in the bum to diabetes
- (21) YES, I AM AN IDIOT
- (22) I was hooked

Noun phrases tended to summarise the content of the article:

(23) Low sugar alcohol guide

- (24) Gym, snacks + BG
- (25) Immune cells discovery

Verbal propositions were statements relating to an essential aspect of the story:

- (26) Remission is possible
- (27) CGM could increase accuracy
- (28) Patients are being heard

In sum, it is clear from the analysis how the language of information and emotional support interweave in these short texts. News is for diabetics and is about diabetics, covering every aspect of their daily lives. As mentioned at the beginning of the section, diabetes is news, but more significantly, the social actors, i.e. the diabetic subscribers to the forum are too, since they become the focus of a news story. Furthermore, "share" appeared 12 times in the corpus (in 185th position), confirming its overall significance in soliciting a response whose function is to narrate their health condition to and gain support from others.

4.3 The forum discussion

The forum discussion is essentially a place where patient expertise is requested and where the website staff encourage participants to share both their problems and their experiential knowledge.

4.3.1 Questions in the discussion

The most frequent word on the frequency list was "What", recurring 58 times (2,32%) out of the 838 word types. This is highly significant, since we usually expect function words such as articles, conjunctions and prepositions to top the list. The concordance revealed all 58 instances in initial clause position, asking a question. Therefore, it seems natural to ask what people with diabetes specifically want to know: simply information or more than that, information enveloped in peer support and advice (see Morrow 2006). The most frequent question was: "What was your fasting blood glucose (or abbreviated to BG)", occurring 19 times over the 8-month period. In fact, this thread was started several years previously:

(29) Discussion in 'Diabetes Discussions' started by NewdestinyX, Jun 30, 2011

As confirmed by frequent reference in the news section, it is obviously a constant theme diabetics return to, a daily problem for them to keep their blood sugar levels under control. Other questions seem to be related to the topic as in "What have you eaten today?" (12 times), initiated on April 20, 2015 by a staff administrator who also guides the contribution content:

(30) Share what you've eaten today with the rest of the DCUK community and maybe steal a few ideas for yourself!

Another interesting question that summarises the practicalities of living with the condition is the following title, which invites self-narration:

(31) What do you find the hardest about living with diabetes?

Other *Wh*-questions were recurrent: *Why* occurs 5 times (0.20%), generally seeking information in the form of an explanation:

- (32) Why do diabetics get tired easily
- (33) Why can I not get my HBA1C down?

It is clear that many starter threads concern not knowing what to do. How occurred 13 times (0.52%), the majority of which were again seeking practical advice:

- (34) How can I reduce my insulin resistance?
- (35) How do i know my pre and post meal numbers are on track?

Likewise, polar questions require an informative response, with more than a simple Yes/No answer:

- (36) Is it possible to have diabetes without sugar in urine?
- (37) Am I OK to eat this...

Interestingly, albeit in the minority but more present in the news section, there are 3 topical questions about issues likely to affect their health condition. The British media spread the rumour that insulin supplies might be at risk with the separation of the United Kingdom from Europe, and so it seems only natural to ask:

(38) Are we going to die post-Brexit?

While the pragmatic function of a title may blur into more than one category, 19 starter titles clearly request reassurance that what the discussant is doing or feeling is right or normal:

- (39) Think I'm doing ok???
- (40) Symptoms Worse After Lowering Sugars?

4.3.2 Key words in the discussion

The next most frequent content words in the word list are predictably those relating to the health condition:

- Type: the third most recurrent word (46 times 1.84%) refers to the kind of diabetes one has ("Type 1", "Type 2") thus justifying its prominent use.
- blood (36 times 1.44%), fasting (33 times 1.32%) and glucose (31 times 1.24%) appear in 7th, 8th and 9th positions respectively, and often in a noun phrase such as "fasting blood glucose" (22 times). Interestingly in comparison, "sugar" juxtaposed to "blood", appeared 13 times (0.52%). We may then ask, are diabetics more likely to discuss their blood glucose levels or their blood sugar levels? The more scientific term ("glucose" rather "sugar") is the more popular.
- In 13th position, was predictably "diabetes" (29 times 1.16%), very close to the above content words, which are specific to the condition. In comparison to the news section, it did not come first, probably due to the fact that in the forum discussion, specific conditions within the disease are discussed.

4.3.3 The illocutionary intent

Let us now attempt to classify the other titles according to their illocutionary force. First, numerous titles simply state a problem in one, two or three-word noun phrases, ranging from dietary topics to more strictly medical ones, something affecting the daily routine:

- (41) Medication
- (42) Eye Problems
- (43) Reversed Diabetic Retinopathy

Many titles appeared to be weighing up two nouns joined by "and":

- (44) Hypo And Hyper
- (45) Insulin and Hypos

Problems are much less frequently stated in a verbal proposition, albeit in a non-finite clause:

(46) Struggling to eat normally

Other titles seem to reflect other media language genres (e.g. newspaper titles), adding a characteristic drama effect. Appeals for help are more or less explicit, using the word "help" (17 times – 0.68%), or just stating feelings of confusion and frustration:

- (47) Really High Cholesterol 13 Please Help
- (48) Lantus... AGAIN UGH help please
- (49) Mum of newly diagnosed 12 yo seeking a friendly ear!

Many discussants expressed their discontent or a problem in the form of negative statements projecting expressions of conflict and discontent where the title precedes self-narration in the post:

- (50) Finally seen a Diabetes Nurse Specialist After 19 Months!
- (51) Employer and time off I'm really fed up
- (52) Most annoying things about Diabetes

Negativity is also expressed metaphorically:

- (53) Fell Off The T2 Wagon
- (54) Blood glucose went mental!

Some starter titles nonetheless indicate a positive self-evaluation to be shared with the group:

- (55) Early days but progress
- (56) Happy day, been accepted for libre

They also express solidarity and thanks:

- (57) Diabetics R Us
- (58) Update and thanks

These expressions reflect a community spirit, where all discussants form a distinct group – they are in it together.

4.4 Expressing the spoken in the written

It is clear that many of these titles are written in an informal style (see also Morrow 2006; Harvey and Koteyko 2013) and risk categorisation as nonstandard language since they do not follow any rules. This is not the view of the above Computer-Mediated Communication (CMC) scholars. Our findings for titles are in line with their research.

Starter titles undoubtedly reflect the spoken language in a written, typed form, where typographical errors, presumably due to predictive text if discussants are using a mobile app, are very frequent. Contractions and abbreviations are other textual features, as well as R replacing the 2nd person form of the verb "to be" (57):

- (59) New Type 1 21yo 4 Friends
- (60) GP unsure of Type 1 or Type 2...
- (61) Hypo And Hyper
- (62) Stomach issues no meds

Rather than using emoticons, discussants show their feelings through the expressive use of punctuation in repeated exclamation and question marks as well as capitalisation:

- (63) UGH!!
- (64) PR SUCCESSES GETTING THE WORD OUT THAT LCHF IS THE BEST D.
- (65) Stress and Glucose Monitor Readings!!!

As far as disjunctive language is concerned, subject pronouns and auxiliaries are often omitted, as well as the verb "to be":

- (66) Remember me?
- (67) Losing too much weight
- (68) New to the forum! 5 years as a T2
- (69) New HBa1c Result... Not good.

Lastly, the 2nd person pronoun *you* is used inclusively, confirming direct address to a mass audience, where individuals single themselves out with a response. Likewise, the inclusive "we"/"us" implies all diabetics, or at least subscribers to the forum.

5. Concluding remarks

The results of our analysis confirm the bond between cognition and emotion that emerges in popularised texts relating to health (Merhy 2016: 147) where "emotions accompany and carry information". Merhy (2016: 148) discusses the fact that

the globalization of scientific information has pushed discourse experts to look again at the concept of "style" in scientific discourse. The style in question here is one that speaks the mind through emotions, that arouses laypersons' and experts' curiosity at the same time and promotes research, reading, understanding and action, i.e. activities that require some cognitive contribution. In this regard, it is interesting to consider the interaction between emotion and cognition which purpose would be to succeed in transmitting and acquiring knowledge, including scientific information.

What is particularly significant is that the website managers exploit the forum area to make diabetics feel important. Their stories are newsworthy and are published on a par with those relating to breakthroughs in research. The use of the headline Diabetics R Us captures the sense of solidarity that regularly emerges in the overall social interaction. The style of the website staff in reporting diabetic topics is that of the newspaper genre in the headline and lead paragraph. The added hyperlinks below the bodycopy are quite varied from a linguistic point of view; they are either formal, as in a news summary headline, or more informal if they refer in some way to storytelling by a patient. The underlying reason for the publication of the story is obvious – the offering of practical knowledge and support, a message

which is continually repeated in every contribution. Furthermore, the website staff present themselves as wanting to learn from diabetics. In turn, diabetics find themselves in a position of gaining not only knowledge about their condition from the website, but also experiential knowledge from their peers in an emotional bid for support in order to cope better on a daily basis.

If we consider the discursive features of the contributions, there is a clear distinction between those of the website staff introducing news relating to diabetes in general, and those selected and copied from the forum discussions. We have noted the informal style of the latter as discussants communicate with their peers, with generally succinct titles reflecting the spoken code in comparison to the popularised text that reports items of interest to the diabetic population following the structure of newspaper headlines. However, to these texts are added solicitations to respond, seek and follow advice, ask questions from those having the same condition. The illocutionary force of the news headlines, hyperlinks and thread titles, whatever their linguistic form, implies a precise perlocutionary effect, that of improving self-management and achieving empowerment with a chronic disease.

This paper has taken its premise from recent clinical literature, which claims that diabetics seek information and emotional support in online communication. It has attempted to show how, on a discursive level, a dedicated website responds to this need. It also gives examples of how discussants take up the stimulus and enter into dynamic interaction. Hernandez (2015: 194) summarises the justification for the kind of communicative support offered:

Connecting with your peers and having an open dialogue about your experiences with this chronic condition make people start feeling understood and empowered and engage in a transformative way with their condition [...] Also, patients who become empowered by social media connections become better advocates for themselves.

Patients seek to share information with and from their peers about their experiences in order to place their own in a so-called frame of daily normality. They do this by initiating an emotionally packed dialogue in an informal style typical of everyday conversation between people sharing a health condition. Through a social dissemination of knowledge in a virtual community of practice, and given the opportunity that social media affords, diabetics clearly attempt to achieve their goal of empowerment and self-management in the everyday normality of coping with their condition.

To conclude, this contribution has attempted to analyse diabetic discourse with a view to shedding further light on the ways in which computer-mediated health communication affords a more relaxed and informative environment in which diabetic patients interact with their peers, free from any inhibition many are likely to feel in face-to-face meetings, as confirmed by the clinical literature. It also shows how peerto-peer interaction offers a positive contribution to improving the daily condition of living with a chronic disease, when it is not possible to expect a physician to be constantly available with an immediate answer. Since the discussion is mediated by the website site staff, it offers some guarantee regarding the quality and accuracy of contributions where patients relate their own practical knowledge and experience of coping. The paper has also shown how the presentation of news reporting on diabetes is characteristic of popularised scientific discourse as well as news media language in general. It is hoped that it has given a deeper insight into effective health communication for health professionals in order to fill an "institutional" gap in health provision. Furthermore, it has confirmed the relevance of strategic language choice in a virtual community that is not simply a powerful tool with which to inform, but just as importantly, to give emotional support to members who need to feel they are one of the group, as clearly advocated by the slogan "Diabetics R Us".

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Address: Gillian Mansfield, DUSIC, Dipartimento di Discipline Umanistiche, Sociali e delle Imprese Culturali, Università di Parma, Viale S. Michele 11, 43121 Parma. ORCID code: orcid.org/0000-0002-1458-855X.