

Article - Theme section

"Therefore, I would like an allergy test" Responsibly conducting a healthy body through the e-mail consultation platform

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MedieKultur 2021, 71, 187-204

Published by SMID | Society of Media researchers In Denmark | www.smid.dk The online version of this text can be found open access at www.mediekultur.dk

Abstract

In this article, we explore e-mail consultation platforms that allow digital and written asynchronous communication between patients and general practioners (GPs). Research has suggested that doctor—patient e-mail communication has the potential to transform the sphere of responsibility of health matters, leaving the patient with more responsibility than in other forms of communication. Therefore, we ask whether the e-mail consultation platform provides opportunities for patients to be active and responsible biological citizens, and if so, in what way. To explore this, we analyzed 646 e-mail consultation instances from 38 patients from 4 Danish GP practices. We found four ways the platform provides opportunities for patients to satisfy the expectation of biological citizenship: specifically, by affirming their own responsibility in healthcare; making suggestions to the GP; making requests of the GP; and questioning aspects of healthcare. In conclusion, we argue that the platform provides patients with new ways of satisfying the expectations of biological citizenship.

Keywords

e-mail consultation, biological citizenship, health platforms, general practice, doctor–patient communication, patient responsibility

Introduction

In recent years, the burgeoning of online health platforms has transformed the health sector (van Dijck et al., 2018). These online health platforms enable new ways of "doing" health, including platform-enabled experience exchange and health monitoring. At the same time, more traditional types of communication have moved to the digital realm; digital technologies have made it possible for patients to communicate with their doctors via both oral and written digital media, including e-mail consultations (also sometimes referred to as "e-consultations"). E-mail consultations are online, written consultations that allow doctors, often general practitioners (GPs), and patients to communicate asynchronously without requiring physical and/or temporal co-presence (Andreassen, 2011; Ye et al., 2010).

In the context of Danish healthcare, GPs are a first-contact access point to a fully tax-financed healthcare system that offers almost all services free of charge to citizens. Since 2009, GPs are mandated to offer e-mail consultations as an alternative to face-to-face consultations to their patients in order to "increase efficiency and quality through the digitalization of healthcare" (PLO, 2010). E-mail consultations are patient-initiated, untriaged, and provide patients with a new kind of access to their doctor (Grønning et al., 2020). In 2019, the use of e-mail consultations had risen to nearly 21 pct. of Danish patients' contact with their GP (PLO, 2020). Patients in Denmark have access to e-mail consultations through two different platforms: the GP's website, and the mobile app called Min læge [My Doctor], where they can write 24/7 and will get a response within a maximum of five workdays. These platforms are secure messaging systems that encrypt the e-mail exchanges and integrate them into patients' medical records (Grønning et al., 2020).

As the e-mail consultation is a fairly recent medium in doctor—patient communication, only limited research is available (Voruganti et al., 2018). A small body of research on e-mail consultations has mainly applied interview studies or surveys to investigate doctors' and patients' perspectives on using e-mail communication (e.g., Banks et al., 2018; Cook et al., 2016; Dash et al., 2016; Hassol et al., 2004; Hsiao et al., 2011). However, research exploring e-mail consultation *content* is even more limited. When e-mail consultation content is made the object of study, analyses have focused on analyzing the complexity of the e-mail content (Møller et al., 2021) or on categorizing e-mail content, e.g., relating to "clinical content" and "adminstrative content" (Atherton et al., 2020), and "medical updates", "requests for action" (Mirsky et al., 2016), or "non-acute issues" (Anand et al., 2005). One exception to this strand of research focusing on categorization is Klausen and Grønning (2021), who used a socio-technological framework to explore how bodies and bodily traces present themselves in e-mail consultations.

In this article, we follow the strand of research focusing on e-mail consultation content, but we take a different approach. According to van Dijck, a platform not only facilitates the performance of social acts but also shapes them (van Dijck, 2013, p. 29). Following this logic, the e-mail consultation platform not only facilitates doctor-patient

communication, but also shapes the communication. A recent review showed that e-mail communication between doctors and patients has the potential to transform the sphere of responsibility of health matters, leaving the patient with more responsibility than is the case in other forms of communication (Fage-Butler & Nisbeth Jensen, 2015). To further investigate patient responsibility in relation to e-mail consultation platforms, we apply Rose's (2007) concept of biological citizenship. According to Rose, biological citizenship is the tendency observed in modern Western societies where individuals are expected to "engage in a constant work of self-evaluation and the modulation of conduct, diet, lifestyle, and drug regime, in response to the changing requirements of the susceptible body" (Rose, 2007, p. 154). As such, individuals are expected to behave as active and responsible biological citizens (Rose, 2007). In this article, we understand responsibility as a moral responsibility to maximize one's health (Foucault, 2014; Rose, 2007). The framework of biological citizenship will enable us to explore the ways in which patients use e-mail consultations to enact their responsibilities as biological citizens and communicate their health and illness through the platform. Thus, we use the biological citizenship framework as an exploratory and descriptive framework. Consequently, we do not take a neoliberal stance in which individuals' enhanced responsibility in healthcare is ultimately viewed as empowering.

In addition, few studies of biological citizenship analyze how biological citizenship is enacted by individuals in practice (e.g., Brijnath & Antoniades, 2016; Pender, 2016). E-mail consultations provide a window into how patients relate to their health and therefore are a good platform for the analysis of performance of biological citizenship. Thus, the research question we answer is: Does the e-mail consultation platform provide opportunities for patients to be active and responsible biological citizens, and if so, in what way?

Below, we give an overview of research into health platforms followed by an outline of the theoretical underpinnings of biological citizenship and an account of research studies applying biological citizenship. We then outline our data and method before presenting our findings, discussion, and conclusion.

Platforms in healthcare

As mentioned above, online platforms have had a strong impact on the health sector and how individuals maintain their health, especially in North America and Western Europe, with various platforms used by patients, doctors, and researchers (van Dijck et al., 2018). In *The Platform Society*, van Dijck and colleagues (2018) analyze three health-related platforms, namely a *for profit*, a *not-just-for-profit*, and a *nonprofit* health platform. They specifically explore how platform mechanisms translate into value both in relation to "private gain and public benefit" as well as "corporate and collective interests" (van Dijck et al., 2018, p. 101) for those platforms. They argue that struggles relating to the governance and organization of health platforms become clear. This is particularly evident for health

platforms in which the personal patient data exchanged is of monetary interest for either the owners of the platform or the platform's partners or funders.

Whereas van Dijck and colleagues focus on the governance and organization of health platforms, we instead focus on the ways in which the platform provides opportunities for patients to be active and responsible biological citizens. Specifically, our focus is on e-mail consultation platforms in Danish general practice – platforms designed to facilitate digital and written communication between doctors and patients. Unlike previous studies of health-related platforms, our focus is not on the potential problematic consequences of health-related platforms such as monetary interests, safety, and privacy (van Dijck et al., 2018), as the e-mail consultation platform enables private communication between patient and GP to take place through closed, encrypted messaging systems. Instead, we focus on the possibilities shaped by e-mail consultations platforms in relation to the enactment of biological citizenship.

Biological citizenship and the e-mail consultation platform

Many studies exist on how individuals take up the discourse of biological citizenship. These are often based on individuals' own accounts or presentations of discursive understandings of how to act to take responsibility (e.g. Bänziger & Çetin, 2020; Hunt & Koteyko, 2015; Solbrække et al., 2017). For example, such studies are based on empirical data such as qualitative interviews and ethnographic approaches (Bänziger & Çetin, 2020; Brijnath & Antoniades, 2016; Domaradzki, 2015; Fraser, 2010; McPhail et al., 2016; Paparini & Rhodes, 2016; Rhodes et al., 2013; Solbrække et al., 2017; Thorpe, 2016; Young et al., 2019). Studies are also based on newspaper articles (Solbrække et al., 2017), writings of journalists and social commentators (Tuchman, 2019), policy documents (Jørgensen, 2015), discourse analyses of Facebook (Hunt & Koteyko, 2015), auto-ethnographic essays by students (Greenhalgh, 2016), as well as memoirs in the form of a documentary or book (Herndl, 2013). Analyses based on empirical data such as essays, books, and Facebook data, for instance, show "the conditions of possibility of the active biocitizen" (Jørgensen, 2015, p. 313), or "how contemporary discourses of biological citizenship are reproduced" (Hunt & Koteyko, 2015, p. 446). However, only a few studies have analysed how biological citizenship is enacted by individuals in practice (e.g., Brijnath & Antoniades, 2016; Pender, 2016). Only one study (Pender, 2016) analyzes written and digital communication. Pender shows how responsibility is represented in online biosocial communities and finds that the representations of responsibility "paint portraits of somatic individuality similar to the one offered by Rose" (Pender, 2016, p. 348). How individuals act out biological citizenship in practice thus seems underexplored. This aligns with findings by Brijnath and Antoniades who point out that despite the ultimate responsibility for managing and monitoring health resting with the individual, "few have examined how patients take up and apply these discourses in their own lives" (Brijnath & Antoniades, 2016, p. 7). Our focus on

patients' e-mail consultations will enable us to address this gap in the research. Unlike Pender's (2016) article on patient-patient communication, we explore how the dynamics relating to responsibility are seen in doctor-patient communication.

Methodological framework

Data collection

Data were collected between 2018 and 2019 at four Danish GP practices (one urban, two suburban, one rural). Four GPs within each practice were asked to provide us with all e-mail correspondences from ten patients each. They were asked to choose patients where the e-mail consultations, in their view, had some text and content, i.e., not only prescription renewals. All GPs were informed about confidentiality issues and signed an informed consent form. All patients were informed by their GP about the project via e-mail, and written consent was obtained. We received the e-mails as printed versions. These were then anonymized and transcribed verbatim (including typographical errors, etc.) into a Word document.

We received 646 e-mail consultation instances sent between 2015 and 2019 from 38 patients aged 21–91 years. The 38 patients communicated with 22 GPs, 5 nurses, and 5 secretaries.

Data analysis

We were inspired by thematic analysis and followed Braun and Clarke's (2006) description of the coding process, from developing a level of familiarization with the material, defining descriptive codes and themes, and then in the last phase of evaluation, relating and redefing themes. In this phase, we explicitly applied the theoretical framework of biological citizenship. We did not have predefined codes, but the coding was inspired by Rose's biological citizenship framework. The first author undertook the first coding, which was conducted in the computer-assisted qualitative data analysis program, Nvivo. Based on the initial coding, all authors subsequently in cooperation grouped these codes, thereby creating the categories and themes that focused on the modes of actions performed by the patients. These themes will be presented in the analysis. All of the presented examples of e-mail consultations have been translated from Danish into English, where we focused on staying close to the original meaning while ensuring comprehensibility.

Results

Participant information

Age in 2019	Male	Female	Total
20-30	0	4	4
31–40	1	2	3
41–50	1	5	6
51-60	4	7	11
61–70	4	2	6
71–80	2	3	5
81+	2	1	3
Total	14	24	38

Table 1: Overview of participant demographics.

Qualitative findings

In our analysis, we found that patients lived up to the expectations of biological citizenship through four different ways of positioning themselves. More specifically, in the e-mail consultations, patients positioned themselves as affirming their own responsibility in healthcare, making suggestions to the GP, making requests of the GP, and questioning aspects of healthcare. These four modes occurred frequently in the e-mail consultations, and sometimes simultaneously. All but four patients made use of at least one of the four modes. In the following, we present an analysis of the four different modes and subsequently provide an analysis of an example where several modes occur. We explain the different modes by showing examples from the patients' e-mail consultations.

Affirming their own responsibility in healthcare

In our analysis of the e-mail consultation material, we observed how patients engaged in different kinds of affirming their own role in healthcare; patients would affirm their role by displaying that they were aware of or informed about their health. Thereby, the patients positioned themselves as active participants in the maintenance of their own health.

An example of how patients affirm responsibility in healthcare is the following example where the patient, John, writes:

Hi Marie [GP], I have studied that medication Martazpin. It is harsh information, so we will talk more 3/1-18.

Best,

John [patient]

This e-mail is not an invitation for the GP to help or provide information. Rather, it is an expression of bodily expertise and control by being informed about a certain medication;

John has read about the medication Martazpin – an act which in itself shows that John takes steps to be informed about medications that will potentially affect his body. Furthermore, John has responded that he has assessed the information and deems it harsh.

John's actions can be viewed as an expression of the patient's own understanding of his role in regard to his health; namely, as someone who is, at least partially, responsible for maintaining a healthy body. Consequently, the GP is not really consulted, but rather informed, about John's investigation of the medication. This "non-consulting" consultation shows that the platform shapes what kind of communication could fall under the consultation genre. Specifically, as opposed to consulting the GP, the patient merely displays an awareness about a medication that may affect his body in a way that could potentially be considered harsh.

In other instances, patients affirm their own responsibility by displaying self-monitoring and in the form of numbers, as is observed in this example:

I have done the blood pressure measurement in the morning before breakfast

2/2 178//84/80 5/2 176/97/66
3/2 151/84/75 6/2 175/89/60
4/2 178/102/65 7/2 159/91/56
It fluctuates a lot. What do you think?

Lars [patient]

In the above example, Lars is monitoring his bodily functioning through blood pressure measurements. This act aligns with Rose's point concerning the monitoring of our health and acting accordingly to meet the requirements of the body's susceptibilities (Rose, 2007). Using the e-mail consultation platform to display that they monitor or inform themselves, patients are able to affirm their own role in maintaining a healthy body. Furthermore, the communication in the e-mail consultation above mimics that of two GP colleagues inasmuch as Lars not only sends the result of the self-monitoring, but also interprets them, by stating that they fluctuate, thus becoming, in Rose's terms, "an ally of the doctor" (Rose, 2007, p. 110).

Making suggestions to the GP

The e-mail consultation platform also provides opportunities for patients to make various *suggestions* about diagnosis, examinations, and medications. Suggestions such as "Wonder if arthritis medication or cortisone injection is worth a try??" or "I have read up on the topic and am quite certain we are dealing with athlete's foot" were seen in the material. Similar to the previous section, these suggestions show that patients take an active role in thinking about their biomedical problem instead of leaving it to the GP. Access to biomedical information and knowledge allows patients to educate themselves and suggest

a diagnosis, as in the last example. The patients in our material thus engage in diagnostic thinking, a theme also at play in the following example:

Hi Thomas [GP]. In continuation of my earlier e-mail, I would like to be checked for whether I have a vitamin B12 deficiency, and if that could be the reason for the instances where I – without warning – feel unwell. What do you think, and what should I do in that connection?

Best, Carsten [patient]

Through this e-mail consultation, the patient engages in the work of self-evaluation and modulation according to what his body requires. He not only asks the GP for help but also provides a suggestion for the diagnosis of a specific nature: vitamin B12 deficiency. This is an example of how patients are actively engaged in diagnostic thinking and formulating suggestions. Patients thus take an active role "to maximize the vital forces and potentialities of the living body" (Rose, 2007, p. 23), thereby maximizing their own health. Naturally, patients are able to make suggestions in face-to-face consultations as well. Due to the opportunities provided through e-mail consultations, however, the platform can potentially shape the ways in which patients are able to position themselves, and in this analysis, we are able to show the opportunities for patients to be active and responsible biological citizens provided specifically through e-mail consultations. Through the e-mail consultation platform, patients are able to make suggestions without interruption. Thereby, they are able to take upon themselves the role of active biological citizens, and position themselves as the GP's partner in maintaining their health.

Making requests of the GPs

Another mode observed was that patients made *requests* of their GP. These consisted both of explicit requests for information, as in "I would like you to prepare medical treatment for smoking cessation. Do I need to be checked first?" or more indirectly by asking questions, such as "how dangerous is this virus [HPV]? Did I always have it?" which implicitly call for an answer. In other instances, there was a request for action, as in the following example:

My brother has been diagnosed with muscular dystrophy – we don't know which kind yet. I would like an examination to see if I have it too.

Best, Mads [patient]

In this example, Mads, due to the brother's progressive muscular dystrophy, requests an examination for whether he (and presumably other family members) has it as well. Consequently, Mads understands himself as a genetic being that may be susceptible to an illness, and he acts upon this awareness by requesting that appropriate steps are taken.

Following Rose, the active and responsible biological citizen can use the large availability of information about health issues "to shape their demands of their medics and to evaluate or challenge their opinions" (Rose, 2007, p. 11). This particular understanding of oneself as having a certain type of biology was also seen in other examples, such as:

I have approached my psychologist, because it's got too hard. I am well underway, but could use a little chemistry to get the baseline up. What do you think about that? [...]

Best wishes, Lis [patient] mobile [redacted]

The e-mail consultation thus becomes the medium of communicating or conveying one-self as a certain type of biological being, namely the kind that could use a little chemistry to get the baseline up. In another example, the patient, Tina, writes:

Hi Thomas [GP],

After my collision on Friday, it is going better. However, I am experiencing an extreme headache and tension at the top of the neck around the rhomboid and the attachments. I get an extreme headache and I become very tired. It is aggravated when I am in front of the PC, or in the car if I don't make sure to move my head. Have I returned to work too early? Do you need to see me again? Or should it just give it some time? P.S. It is difficult to be your own therapist. Best, Tina [patient]

In this example, Tina writes about her experience of suffering in a medical-like style. By asking questions, she indirectly requests information and consultation about the appropriate way forward. By stating different possibilities (instead of only asking the GP what to do), she positions herself as someone who had carefully and responsibly thought about several options. Interestingly, the last (almost apologetic) statement that it is "difficult to be your own therapist" points explicitly to her responsibility for her own biology at the same time as she expresses ambivalence about this position.

As suggested in the analysis of the other modes, it is also possible to make requests in other kinds of consultations. However, as we argue in this article, the e-mail consultation platform shapes the way in which patients are able to position themselves as active and responsible biological citizens when making these requests. The examples above thus show how patients specifically carry out their responsibilities *through* e-mail consultations.

Questioning aspects of healthcare

The fourth mode involved questioning. Patients questioned aspects of their healthcare, including the treatment suggested by the GP, such as the specific dosage: "Would it be ok to take 150 mg every day instead of 200 one day and 100 the next?" In other cases,

patients questioned whether offers from "the system", such as screening programs, were relevant in their particular situation. Occasionally, this questioning had a corrective undertone, as is witnessed in the following:

Hi Marianne [GP].

I normally have Henrik as my doctor. I have received results on a scan which I feel are not detailed enough with regard to just taking cholesterol-lowering pills. Shouldn't it be checked more?

Best,
Mads [patient]

As is seen here, the patient questions the treatment plan of another doctor and thereby challenges his judgment. This became even more apparent in an example where a GP, Poul, had prescribed pain-relieving medication to a patient with a pain issue. In response to this prescription, the patient, Mona, writes:

Dear Poul [GP]! I know you're not the doctor who knows me best, but the cardiologists have expressly said that I can't take Ibrometin or other arthritis drugs due to Xarelto treatment. Otherwise, I would not have turned to you. I'll grit my teeth and wait until Lone comes back.

By questioning the GP's recommendation as to what medication should be used, the patient positions herself as more knowledgeable than the GP, and thereby claims the responsibility for assessing what medication she should, or should not, take, despite what the GP had recommended. A potential tension about who has more medical authority is thus observed. The dimension of enacting biological citizenship is seen when the patient argues that to maintain a healthy body, the GP's recommendation should be questioned rather than followed uncritically (Rose, 2007). This example has another interesting dimension, namely that the patient does not ask any questions, make any requests, or in other ways ask the GP for help. The essence of the e-mail consultation is merely to communicate to the GP that the provided recommendation was not good. In this example, the platform is thus used to call attention to how the healthy body cannot be ensured, and the patient is able to present herself as the medical expert on her own body. The fact that the above e-mail consultation is not in effect an invitation by the patient to the GP to help improve the patient's vitality, but merely to question the GP's recommendation and display knowledge about her body, suggests that the platform pushes the boundaries of the consultation genre; through the e-mail consultation, the consultation is not necessarily a place to get help to obtain a healthy body, but a place to inform yourself about your own competencies in doing so yourself.

Multiple modes

Often, patients made use of several modes of action in the same e-mail consultation. In the following example, the patient, Mark, is writing to the GP, Thomas:

For Thomas [GP]

For your information, the spots on my upper arm have become considerably worse – the pills you prescribed have not helped. My friend and I have been thinking and talking for a while about how I might have a food allergy. I have experienced that when I consume dairy, the spots really come out. Therefore, I would like an allergy test.

Best regards, Mark [patient]

It is observed how Mark enacts different modes of biological citizenship: Mark *questions* the medication prescribed by the GP, as through self-monitoring, he has identified that his body reacts negatively when consuming dairy. The "diagnostic" discussion with a friend has led to the *suggestion* of a diagnosis, namely a food allergy, which in the end, led him to *request* an examination, i.e., the allergy test.

Through all these modes of action, it is seen that rather than passively allowing the GP to sort out and solve the health problem, Mark is actively doing so himself. As described by Rose, "the active responsible biological citizen must engage in a constant work of self-evaluation and the modulation of conduct, diet, lifestyle, and drug regime, in response to the changing requirements of the susceptible body" (2007, p. 154). Mark is thus obliged to take appropriate steps to maximize his health. Identifying whether or not he has an allergy could thus help him make the correct adjustments to minimize the health problem in question. Specifically, by not having a GP interrupt (as could be the case in an in-person, oral consultation; Pilnick & Dingwall, 2011), Mark's suggestion of the allergy diagnosis is not instantly questioned, thus allowing for the request that follows. The e-mail consultation thus allows the patient greater agency for conducting a healthy body, as the narrative in the consultation is presented on the patient's terms and thus shapes a new style of communication between the patient and their GP (van Dijck, 2013, p. 29).

In the e-mail-consultation, the turn-taking does not change until the patient decides to end their turn; as a consequence, they are able to present their problem without interruption. In addition, the asynchronous communication form provides patients with more time to think, research, and discuss their problem, which could reduce a power imbalance.

Discussion and conclusion

Our study shows how biological citizenship can be played out by patients in written and digital communication with their GP. We identified four modes in which patients enacted biological citizenship through the e-mail consultation platform. First, patients are able to affirm their responsibility by showing that they are informed about their health. Second,

patients are able to make various suggestions to their GP; for instance, patients can suggest examinations the GP could offer them or different kinds of medication, treatment, or information the GP could provide. Third, by taking a more authoritative approach, patients are similarly able to make requests through the e-mail consultation platform; for instance, patients can request that their GP provide them with medication, treatment, or information. Fourth, and last, patients are able to question the health services provided to them; for instance, patients are able to question their GP's recommendations regarding healthcare, proposed medication, or treatment.

Thus, we address the research gap presented in the introduction by studying biological citizenship in relation to research on e-mail consultations as a digital health platform. Understanding patients' communication practices of affirming their responsibility, making suggestions to the GP, making requests of the GP, and questioning by means of the biological citizenship framework can contribute to a better understanding of the formation of digital and written doctor-patient communication. According to Rose, a patient "is to become skilled, prudent, and active, an ally of the doctor, a protoprofessional, and to take a share of the responsibility for getting themselves better" (Rose, 2007, p. 110). In our analysis, we are able to show how the patients' communication can be understood in terms of this way of constituting patients which occurred in the last half of the twentieth century (Rose, 2007, p. 110), and we see that the patients are not merely passive recipients of the GPs' care. For instance, the e-mail consultation platform provides patients with the opportunity to set the agenda in the conduct of their body. The opportunities for being active can thus be understood as empowering for patients. However, the patients' use of these opportunities can potentially influence the communicative relationship between doctor and patient. According to the Organisation of General Practitioners in Denmark, the e-mail consultation platform is to be used for simple and concrete queries (PLO, 2018). However, as is also found in other Danish studies of e-mail consultations (Assing Hvidt et al., 2020; Møller et al., 2021), we find in our material that the patients' use of the platform does not necessarily adhere to this simple use. Rather, through affirming their own responsibility in healthcare, making suggestions to the GP, making requests of the GP, and questioning aspects of healthcare, the e-mail consultation platform can become a communicative space used for complex tasks relating to the conduct of the body. We are thus able to show some of the complexities that are played out through digital and written doctor-patient communication, such as the responsibility of conducting one's body through the platform. While we do not suggest that patients are aware that their communication can be analytically considered enactments of biological citizenship, we are able to identify patterns in their communication that show that the patients do satisfy some of the expectations of active biological citizens. As such, the patients are actively involved in the conduct of their own bodies, and through the e-mail consultation, we see excerpts of how the patients maintain their bodies.

The e-mail consultation platform further shapes the way in which they are able to be active in their healthcare. This is the case as the patients are able to set the agenda, which may distinguish the digital and written doctor-patient communication from other kinds of communication, such as the oral encounter, where, "while patients take the initiative for the encounter [...] they 'lose' this initiative when the doctor's questioning takes over" (Pilnick & Dingwall, 2011, p. 1378). Naturally, the four modes of enacting biological citizenship could be played out in face-to-face consultations as well. Though this is not a comparative study aiming to compare face-to-face consultations and e-mail consultations, we still argue that the ways in which patients enact biological citizenship will be shaped by the platform. Following van Dijck and colleagues (2018), we argue that platforms shape communicative acts rather than merely facilitating them. On the e-mail consultation platform, for instance, because GPs are unable to ask questions, interrupt, or decide on the relevance of topics in the e-mail consultation until the patient has concluded their turn in the conversation, the asymmetry found in oral consultations is challenged. Though we are unable to make comparisons of e-mail consultations and face-to-face consultations in this context, previous studies in other contexts have found that doctors dominate the communication in doctor-patient consultations (e.g. Forner et al., 2020). Seeing as GPs are unable to communicatively dominate e-mail consultations, the platform challenges and shapes the ways in which GPs are able to exercise "power and authority over the patient" (Pilnick & Dingwall, 2011, p. 1375). Furthermore, as we showed in the analysis, the platform helps to shape what are considered consultations; in the analysis of the mode of affirming one's own role in healthcare, the patient John initiated a conversation with his GP merely to state that he had studied a particular medication and found that the information was harsh. Consequently, as argued elsewhere (Sturt et al., 2020), using channels of communication other than face-to-face communication for consultations can change how consultations are played out. John thereby has a new way of affirming his role in healthcare, and the platform provides him with a new opportunity to be an active and responsible biological citizen.

The patients' active role in conducting their bodies through the e-mail consultation platform can, on the one hand, potentially be considered empowering for patients. On the other hand, it may cause issues for patients and GPs alike. First, for patients, the conduct of one's body may be considered laborious, for example, "when therapeutic responsibility passes from provider to patient" (Brijnath & Antoniades, 2016, p. 7). In our material, as shown in the analysis, one patient ends an e-mail consultation by writing, "P.S. It is difficult to be your own therapist". This ambivalence in relation to being positioned in terms of responsibility for the conduct of one's own body may thus disadvantage patients. As such, following Brijnath and Antoniades' (2016) argument, challenging the hierarchical asymmetry between GPs and patients may cause unease amongst patients who may be uncomfortable with the labor those responsibilities entail. Second, the individualization of responsibilities may present problems for GPs when patients, in the words of Nettleton,

"do not make the 'right' choices" (2013, p. 53). In the process of patients taking responsibility for the conduct of their own bodies, the relationship between self-governing patients and GPs is changing, as patients are displaying, suggesting, requesting, and questioning matters that are traditionally reserved for GPs or other health experts. The individualization of responsibility thus entails that patients perform tasks previously intended for experts, something that has previously been found to be perceived by some doctors as leading to a reduction of their medical authority and power (Nimmon & Stenfors-Hayes, 2016). Thus, patients enact their healthy bodies without necessarily having an understanding "of the technical complexities of disease, disease causation, clinical procedures and so on" typically associated with expertise (Nettleton, 2013, p. 36). Affirming their own role, suggesting, requesting, and questioning without having this understanding may not only be laborious for patients, it may also be troublesome for GPs, in that they may need to find a way to appropriately respond to patient interactions that do not place patients as hierarchically below the GP in terms of authority, but rather place the patient as an active "ally of the doctor" (Rose, 2007, p. 110). This, consequently, can also create additional labor for GPs who already have limited time to write e-mails. Similarly, as patients are able to suggest diagnoses and make subsequent requests based on these suggestions, GPs also need to respond to patients' own remote diagnoses. Finding a good way to respond may require GPs to adjust their communication with patients through the e-mail consultation platform. Previous research has found that some doctors would prefer that patients limit the amount of research they conduct about their own health, as informed patients may be considered "difficult" (Herrmann-Werner et al., 2019). Consequently, adjusting communication with patients who have found information about their health elsewhere may be considered a new challenge for doctors. However, this communication adjustment may be necessary, as the platform may shape the ways in which patients expect to maintain their bodies.

Our study has limitations. Despite the large number of e-mail consultation instances, the sample size of 38 patients is small. Furthermore, the material may be biased, as we asked for a certain kind of e-mail consultations, namely containing some text and content. These aspects may limit the transferability of our findings. In addition, we do not have knowledge about the specific participants' communication style in oral encounters.

Critics of Rose have previously argued that "closer attention to empirical detail may disrupt this taken-for-granted view of the-patient-as-biocitizen" (Jørgensen, 2015, p. 313). Here, we have found enactments of biological citizenship that are in fact played out. However, while we argue that the patients do meet some of the requirements of biological citizens, the present study cannot conclude whether the ways in which patients meet these requirements are conscious. Moreover, we focus specifically on the Danish context. In Denmark, unlike in many other countries, GPs are obligated to offer e-mail consultations to their patients, and they receive reimbursement from the state for each consultations.

tion, which is why Danish patients do not pay to e-mail consult with their GP. In other countries, the use of the platform may differ.

Future studies may advantageously explore patients' actual experiences with conducting a body responsibly when communicating with their GP through the e-mail consultation platform, such as through interview methodologies. Do patients merely *do* what might be considered enactments of biological citizenship, as we show in this article that they in fact do, unconsciously, or are they conscious about enacting responsibility for their bodies through the e-mail consultation platform? Furthermore, it would be interesting to investigate GPs' reactions to the enactments. Moreover, while we analyzed all e-mail consultations in our material, not all e-mail consultations contained examples of the conduct of biological citizenship. Analyzing what is at play in the remaining e-mail consultations would also be interesting.

References

- Anand, S. G., Feldman, M. J., Geller, D. S., Bisbee, A., & Bauchner, H. (2005). A content analysis of e-mail communication between primary care providers and parents. *Pediatrics*, 115(5), 1283–1288. https://doi.org/10.1542/peds.2004-1297
- Andreassen, H. K. (2011). What does an e-mail address add? Doing health and technology at home. *Social Science & Medicine*, 72(4), 521–528. https://doi.org/10.1016/j.socscimed.2010.11.026
- Assing Hvidt, E., Søndergaard, J., Klausen, M., & Grønning, A. (2020). Not just an information-delivery tool: An ethnographic study exploring Danish GPs' perspectives on and experiences with the relational potential of email consultation. *Scandinavian Journal of Primary Health Care*, 38(4), 411–420. https://doi.org/10.1080/02813432.2020.1843939
- Atherton, H., Boylan, A.-M., Eccles, A., Fleming, J., Goyder, C. R., & Morris, R. L. (2020). Email consultations between patients and doctors in primary care: Content analysis. *Journal of Medical Internet Research*, 22(11), e18218. https://doi.org/10.2196/18218
- Banks, J., Farr, M., Salisbury, C., Bernard, E., Northstone, K., Edwards, H., & Horwood, J. (2018). Use of an electronic consultation system in primary care: A qualitative interview study. *British Journal of General Practice*, 68(666), e1-e8. https://doi.org/10.3399/bjgp17X693509
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. https://doi.org/10.1191/1478088706qp0630a
- Brijnath, B., & Antoniades, J. (2016). "I'm running my depression:" Self-management of depression in neoliberal Australia. *Social Science & Medicine*, 152, 1–8. https://doi.org/10.1016/j.socscimed.2016.01.022
- Bänziger, P.-P., & Çetin, Z. (2020). Biological citizenship and geopolitical power play: Health rights of refugees living with HIV in Turkey. *Critical Public Health*, 31(1), 43–54. https://doi.org/10.1080/09581596.2020.1838444
- Cook, N., Maganti, M., Dobriyal, A., Sheinis, M., Wei, A. C., Ringash, J., & Krzyzanowska, M. K. (2016). E-mail communication practices and preferences among patients and providers in a large comprehensive cancer center. *Journal of Oncology Practice*, 12(7), 676–684. https://doi.org/10.1200/jop.2015.008722

- Dash, J., Haller, D. M., Sommer, J., & Junod Perron, N. (2016). Use of email, cell phone and text message between patients and primary-care physicians: Cross-sectional study in a French-speaking part of Switzerland. *BMC Health Services Research*, 16(1), 549. https://doi.org/10.1186/s12913-016-1776-9
- Domaradzki, J. (2015). Patient rights, risk, and responsibilities in the genetic era a right to know, a right not to know, or a duty to know? *Annals of Agricultural and Environmental Medicine*, 22(1), 156–162. https://doi.org/10.5604/12321966.1141387
- Fage-Butler, A. M., & Nisbeth Jensen, M. (2015). The relevance of existing health communication models in the email age: An integrative literature review. *Communication & Medicine*, 12(2-3), 117–128. https://doi.org/10.1558/cam.18399
- Forner, D., Ungar, G., Chorney, J., Meier, J., & Hong, P. (2020). Turn analysis and patient-centredness in paediatric otolaryngology surgical consultations. *Clinical Otolaryngology*, 45(5), 725–731. https://doi.org/10.1111/coa.13564
- Foucault, M. (2014). The politics of health in the eighteenth century. *Foucault Studies*, 18, 113–127. https://doi.org/10.22439/fs.v0i18.4654
- Fraser, S. (2010). Hepatitis C and the limits of medicalisation and biological citizenship for people who inject drugs. *Addiction Research & Theory*, 18(5), 544–556. https://doi.org/10.3109/16066350903497551
- Greenhalgh, S. (2016). Disordered eating/eating disorder: Hidden perils of the nation's fight against fat. *Medical Anthropology Quarterly*, 30(4), 545–562. https://doi.org/10.1111/maq.12257
- Grønning, A., Assing Hvidt, E., Nisbeth Brøgger, M., & Fage-Butler, A. (2020). How do patients and general practitioners in Denmark perceive the communicative advantages and disadvantages of access via email consultations? A media-theoretical qualitative study. *BMJ Open*, *10*(10), e039442. https://doi.org/10.1136/bmjopen-2020-039442
- Hassol, A., Walker, J. M., Kidder, D., Rokita, K., Young, D., Pierdon, S., Deitz, D., Kuck, S. & Ortiz, E. (2004). Patient experiences and attitudes about access to a patient electronic health care record and linked web messaging. *Journal of the Americal Medical Informatics Association*, 11(6), 505–513. https://doi.org/10.1197/jamia.M1593
- Herndl, D. P. (2013). Virtual cancer: BRCA and posthuman narratives of deleterious mutation. *Tulsa Studies in Women's Literature*, 32/33(2/1), 25–45. https://www.jstor.org/stable/43653275
- Herrmann-Werner, A., Weber, H., Loda, T., Keifenheim, K. E., Erschens, R., Mölbert, S. C., Nikendei, C., Zipfel, S. & Masters, K. (2019). "But Dr Google said..." Training medical students how to communicate with E-patients. *Medical Teacher*, 41(12), 1434–1440. https://doi.org/10.1080/0142159X.2018.1555639
- Hsiao, A. L., Bazzy-Asaad, A., Tolomeo, C., Edmonds, D., Belton, B., & Benin, A. L. (2011). Secure web messaging in a pediatric chronic care clinic: A slow takeoff of "kids' airmail". *Pediatrics*, 127(2), e406-413. https://doi.org/10.1542/peds.2010-1086
- Hunt, D., & Koteyko, N. (2015). 'What was your blood sugar reading this morning?' Representing diabetes self-management on Facebook. *Discourse & Society*, 26(4), 445–463. https://doi.org/10.1177/0957926515576631
- Jørgensen, M. W. (2015). Patient-centred decision-making? Biocitizens between evidence-based medicine and self-determination. *Evidence & Policy*, 11(3), 311–329. http://dx.doi.org/10.1332/174426415X14381755121530
- Klausen, M., & Grønning, A. (2021). My Throat "Tickles". Conjunctions, 8(1), 1-17. doi:doi:10.7146/tjcp.v8i1.123038
- McPhail, D., Bombak, A., Ward, P., & Allison, J. (2016). Wombs at risk, wombs as risk: Fat women's experiences of reproductive care. Fat Studies, 5(2), 98–115. https://doi.org/10.1080/21604851.2016.1143754

- Mirsky, J. B., Tieu, L., Lyles, C., & Sarkar, U. (2016). A mixed-methods study of patient-provider e-mail content in a safety-net setting. *Journal of Health Communication*, 21(1), 85–91. https://doi.org/10.1080/10810730.2015.1033118
- Møller, J. E., Fage-Butler, A., & Nisbeth Brøgger, M. (2021). Complexity and simplicity in doctor–patient email consultations. *Conjunctions: Transdisciplinary Journal of Cultural Participation*, 8(1), 1–18. https://doi.org/10.7146/tjcp.v8i1.123039
- Nettleton, S. (2013). The sociology of health and illness (3rd ed.). Polity Press.
- Nimmon, L., & Stenfors-Hayes, T. (2016). The "handling" of power in the physician-patient encounter: Perceptions from experienced physicians. *BMC Medical Education*, 16, Article 114. http://dx.doi.org/10.1186/s12909-016-0634-0
- Paparini, S., & Rhodes, T. (2016). The biopolitics of engagement and the HIV cascade of care: A synthesis of the literature on patient citizenship and antiretroviral therapy. *Critical Public Health*, 26(5), 501–517. https://doi.org/10.1080/09581596.2016.1140127
- Pender, K. (2016). Somatic individuality in context: A comparative case study. *Public Understanding of Science*, 27(3), 338–351. https://doi.org/10.1177/0963662516678116
- Pilnick, A., & Dingwall, R. (2011). On the remarkable persistence of asymmetry in doctor/patient interaction: A critical review. *Social Science & Medicine*, 72(8), 1374–1382. https://doi.org/10.1016/j.socscimed.2011.02.033
- PLO. (2010). Lægernes overenskomst om almen praksis [Doctor's agreement]. Retrieved from
- PLO. (2018). Overenskomst om almen praksis [Collective agreement for General Practice]. https://www.laeger.dk/sites/default/files/overenskomst_om_almen_praksis_ok18_endelig_udgave.pdf
- PLO. (2020). Aktivitet og økonomi i almen praksis i dagtid og vagttid 2009 til 2019 [Activity and economy in General Practice 2009–2019].
 - https://www.laeger.dk/sites/default/files/aktivitet_og_oekonomi_2019.pdf
- Rhodes, T., Harris, M., & Martin, A. (2013). Negotiating access to medical treatment and the making of patient citizenship: The case of hepatitis C treatment. *Sociology of Health & Illness*, 35(7), 1023–1044. https://doi.org/10.1111/1467-9566.12018
- Rose, N. (2007). The politics of life itself: Biomedicine, power, and subjectivity in the twenty-first century. Princeton University Press.
- Solbrække, K. N., Søiland, H., Lode, K., & Gripsrud, B. H. (2017). Our genes, our selves: Hereditary breast cancer and biological citizenship in Norway. *Medicine, Health Care and Philosophy*, 20(1), 89–103. https://doi.org/10.1007/s11019-016-9737-y
- Sturt, J., Huxley, C., Ajana, B., Gainty, C., Gibbons, C., Graham, T., Khadjesari, Z., Lucivero, F., Rogers, R., Smol, A., Watkins, J. A. & Griffiths, F. (2020). How does the use of digital consulting change the meaning of being a patient and/or a health professional? Lessons from the long-term conditions young people networked communication study. *DIGITAL HEALTH*, *6*, 2055207620942359. https://doi.org/10.1177/2055207620942359
- Thorpe, H. (2016). Athletic women's experiences of amenorrhea: Biomedical technologies, somatic ethics and embodied subjectivities. *Sociology of Sport Journal*, 33(1), 1–13. https://doi.org/10.1123/ssj.2015-0030
- Tuchman, A. M. (2019). Biometrics and citizenship: Measuring diabetes in the United States in the interwar years. *History of Science*, 58(2), 166–190. https://doi.org/10.1177/0073275319869762
- van Dijck, J. (2013). *The culture of connectivity*: A *critical history of social media*. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199970773.001.0001
- van Dijck, J., Poell, T., & de Waal, M. (2018). The platform society: Public values in a connective world. Oxford University Press. https://doi.org/10.1093/oso/9780190889760.001.0001

Voruganti, T., Husain, A., Grunfeld, E., & Webster, F. (2018). Disruption or innovation? A qualitative descriptive study on the use of electronic patient-physician communication in patients with advanced cancer. Support Care Cancer, 26(8), 2785–2792. https://doi.org/10.1007/s00520-018-4103-7

Ye, J., Rust, G., Fry-Johnson, Y., & Strothers, H. (2010). E-mail in patient–provider communication: A systematic review. *Patient Education and Counseling*, 80(2), 266–273. https://doi.org/10.1016/j.pec.2009.09.038

Young, I., Davis, M., Flowers, P., & McDaid, L. M. (2019). Navigating HIV citizenship: Identities, risks and biological citizenship in the treatment as prevention era. *Health, Risk & Society, 21*(1-2), 1–16. https://doi.org/10.1080/13698575.2019.1572869

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