PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	How do patients and general practitioners in Denmark perceive the communicative advantages and disadvantages of access via email consultations? A media-theoretical qualitative study
AUTHORS	Grønning, Anette; Assing Hvidt, Elisabeth; Brøgger, Matilde; Fage-Butler, Antoinette

VERSION 1 – REVIEW

REVIEWER	Brian McKinstry University of Edinburgh UK
REVIEW RETURNED	11-May-2020

GENERAL COMMENTS	Thank you for asking me to review this interesting paper. I have a few comments outlined below. Abstract Some terminology will not be familiar to BMJ Open readers such as 'affordance' the definition I found was 'a use or purpose that a thing can have, that people notice as part of the way they see or experience it' Expression such as 'access to access' are confusing in the abstract before they are explained later in the paper and I think 'improved or enhanced access' would be as useful and a less confusing term I was unsure what was meant by 'new means of affective communication' does this mean that emotion could be conveyed in new ways…. Again this may be explained later in the paper but will be confusing for anyone reading the abstract. I found the conclusion a little bland. Of course a study will add knowledge, better to say how this study has added to current knowledge and recommendations for improvement in how e-consultations are carried out in future Introduction: This is a clear review of the literature. However,the theoretical framework paragraph is challenging for more general readers. I think it might have been helped at the start by an over arching definition of medium theory as "the name assigned to a variety of approaches used to examine how the means of expression of human communication impact the meaning(s) of human communication(s)." which I got from Wikipedia. Again, it is insufficient to drop in terms such as 'materiality' or 'action potentials' with just a reference. They need to be explained. My friend Wikipedia for example provides seven different definitions for the term 'materiality' however ' the notion that the physical properties of a cultural artifact have consequences for how the

	object is used' seems clear and apt here. The point I am making is that as someone who knows about this field I should not have to look up the dictionary four times in the first five minutes in order to understand what is being said. Method: If the large study of consultation is published it should be reference. If not it should be described briefly. It is generally useful to know where interviews were conducted and how long they lasted. The initial interview guide should be submitted as supplemental material. Was it modified in the light of findings? The data analysis section actually seems to include results… i.e. the themes obtained. I would not regard perceptions of GP and perception of patients as separate themes as such. Results. Strikes me that convenience itself was a theme, Unstated but surely a finding was one of lowering the threshold… that is patients would consult about things they might have left for a while or asked a pharmacist or family friend about. Economic theory suggest that demand is predicated by cost (and supply). The only cost for Danish patients want to see a doctor was the difficulty in getting an appointment,. Drop that cost and demand would be expected to rise generally and not just for a few favoured doctors. I was not sure in what sense the term equanimity is being used in "For patients, e-consultations were perceived as facilitating new conversations with their GP, which gave them a sense of equanimity." My understanding of equanimity is calm. Do you mean less stressful? It struck me reading this that accuracy or clarity of communication was another theme which is alluded to but not named. I thought it was interesting that patients felt able to write at times of emotional upset when if they had waited for an appointment this raw emotion would have been blunted by time. However were there any regrets at things written in haste that had been posted? Was equity not mentioned or asked about? People who are able to use e-communication seem to short circuit normal triage have a clear advantage over those who do not. Is this another example of the inverse care law? I think this is why it is important to see the topic guide as what was answered will often reflect what was asked, particularly on telephone interviews. In limitations they need to emphasise that this group of doctors and patients may not have been representative and people with much more negative or positive views on the process may not have taken part.

REVIEWER	Freda Mold University of Surrey, UK
REVIEW RETURNED	19-May-2020

GENERAL COMMENTS	Thank you for this submission on a very relevant and important topic area. The paper is very clearly written with a logical structure and great use of findings to illustrate much of the data. There were some minor issues, which, if addressed will improve this work. These are all minor but will add to the clarity of the overall work. These are: 1. There are some examples needed in places (p4, 43) to illustrate some points. For example, the inaccessibility of waiting rooms. What do you mean as 'quick questions'? Example needed. P.5;3).

	2. You have included some good context of e-consultations, but little on the Danish health care system model. Just one sentence would be useful to describe this. 3. There are some gaps in the references. I was expecting to see the following recent publication: Mold F, Hendy J, Lai YL, de Lusignan S. Electronic Consultation in Primary Care Between Providers and Patients: Systematic Review. JMIR Med Inform. 2019 Dec 3;7(4):e13042. doi: 10.2196/13042. 4. Novel choice of medium theory to framework the research, but it is not very clearly explained. Would a figure/diagram help to illustrate the framework used? 5. Little written on gaining ethical approval. A few sentences might help. 6. Very nice range of GPs/participants. Perhaps a sentence about how the 5 different Denmark regions differ in terms of urban rural or socio-economic context. 7. Very comprehensive description of the data analysis and some very good data. A pleasure to read. 8. Initially I had concerns that the medium theory would not be very useful to unpacking the data, but the opening sentences in the discussion does help to frame the findings. The italics emphasis does help. 9. Nice acknowledgement of the study limitation. Overall al very nicely detailed paper, with some interesting data.

VERSION 1 – AUTHOR RESPONSE

Reviewers' comments	**Authors' answers**
Reviewer 1	
Abstract Some terminology will not be familiar to BMJ Open readers such as 'affordance' the definition I found was 'a use or purpose that a thing can have, that people notice as part of the way they see or experience it' Expression such as 'access to access' are confusing in the abstract before they are explained later in the paper and I think 'improved or enhanced access' would be as useful and a less confusing term I was unsure what was meant by 'new means of affective communication' does this mean that emotion could be conveyed in new ways…. Again this may be explained later in the paper but will be confusing for anyone reading the abstract. I found the conclusion a little bland. Of course a study will add knowledge, better to say how this study has added to current knowledge and recommendations for improvement in how e-consultations are carried out in future	In the abstract, we have changed "Affordances" to "Themes". We have clarified "access to access" in terms of email consultations promoted access to face-to-face consultations. We have tried to be clearer about the affective communication: "Patients and GPs considered email consultations as inviting new interactions, facilitating also communication about emotional and sensitive issues." We have strengthened the conclusion by pointing to our findings and recommendations:

	"Drawing on a media perspective, this study adds knowledge of how the potentials of the medium of email consultations are perceived by GPs and patients. Email consultations do not simply extend existing forms of contact and consultation (face-to-face and telephone); they produce a new communication space with its own possibilities which results in new practices. With increasing use of email consultations, there may be challenges involved in transferring GP-patient communication to the written medium."
Introduction This is a clear review of the literature. However, the theoretical framework paragraph is challenging for more general readers. I think it might have been helped at the start by an overarching definition of medium theory as "the name assigned to a variety of approaches used to examine how the means of expression of human communication impact the meaning(s) of human communication(s)." which I got from Wikipedia. Again, it is insufficient to drop in terms such as 'materiality' or 'action potentials' with just a reference. They need to be explained. My friend Wikipedia for example provides seven different definitions for the term 'materiality' however 'the notion that the physical properties of a cultural artifact have consequences for how the object is used' seems clear and apt here. The point I am making is that as someone who knows about this field I should not have to look up the dictionary four times in the first five minutes in order to understand what is being said.	We agree and have included a short definition of 'medium theory' as well as a few explanatory lines about 'materiality' and 'action potentials', p. 4
Method If the large study of consultation is published it should be reference. If not it should be described briefly. It is generally useful to know where interviews were conducted and how long they lasted. The initial interview guide should be submitted as supplemental material. Was it modified in the light of findings? The data analysis section actually seems to include results… i.e. the themes obtained. I would not regard perceptions of GP and perception of patients as separate themes as such.	The large study has not been published. We have described the project briefly now. We write "The interviews were conducted face-to-face in a setting of the patients' own choosing such as their homes (23), a senior activity house (5) and a public library (2)." We have inserted information about how long they lasted (between 10:53 and 78:23 minutes), p. 6 The interview guides (in Danish) can be requested. In the data analysis section, we have deleted the names of the themes obtained.

Results Strikes me that convenience itself was a theme, Unstated but surely a finding was one of lowering the threshold… that is patients would consult about things they might have left for a while or asked a pharmacist or family friend about. Economic theory suggest that demand is predicated by cost (and supply). The only cost for Danish patients want to see a doctor was the difficulty in getting an appointment. Drop that cost and demand would be expected to rise generally and not just for a few favoured doctors.	We agree and that's why we also mention convenience, page 7 in the section "Lower contact threshold".
I was not sure in what sense the term equanimity is being used in "For patients, e-consultations were perceived as facilitating new conversations with their GP, which gave them a sense of equanimity." My understanding of equanimity is calm. Do you mean less stressful?	We have changed the term "equanimity" to "peace of mind".
It struck me reading this that accuracy or clarity of communication was another theme which is alluded to but not named.	Thanks for the suggested additional theme. We have added the adjective "clear" (page 9) and will think more about accuracy and clarity in a forthcoming analysis of email content.
I thought it was interesting that patients felt able to write at times of emotional upset when if they had waited for an appointment this raw emotion would have been blunted by time. However were there any regrets at things written in haste that had been posted? Was equity not mentioned or asked about? People who are able to use e-communication seem to short circuit normal triage have a clear advantage over those who do not. Is this another example of the inverse care law? I think this is why it is important to see the topic guide as what was answered will often reflect what was asked, particularly on telephone interviews.	We have no examples of regrets at things written in haste that had been posted although we have asked all patients about examples of 'bad emails'. We did not ask the patients and GPs explicitly about equity.
In limitations they need to emphasise that this group of doctors and patients may not have been representative and people with much more negative or positive views on the process may not have taken part.	We have included a remark about this in the end of our discussion: "Thus, our findings might not be generalizable to all age groups."
Reviewer 2	
The paper is very clearly written with a logical structure and great use of findings to illustrate much of the data. There were some minor issues, which, if addressed will improve this work. These are all minor but will add to the clarity of the overall work. These are: 1. There are some examples needed in places (p4, 43) to illustrate some points. For example, the inaccessibility of waiting rooms. What do you mean as 'quick questions'? Example needed. P.5;3).	Thank you very much! To clarify, we have changed 'quick questions' to 'short questions' (not further defined by the authorities) and indicated that the short questions should be answerable by the doctor without needing to see the patient.

2. You have included some good context of e-consultations, but little on the Danish health care system model. Just one sentence would be useful to describe this.	We have included the sentence: "In Denmark, general practice serves as a first-contact access point to the fully tax-financed Danish healthcare system that offers almost all services free of charge to citizens."
3. There are some gaps in the references. I was expecting to see the following recent publication: Mold F, Hendy J, Lai YL, de Lusignan S. Electronic Consultation in Primary Care Between Providers and Patients: Systematic Review. JMIR Med Inform. 2019 Dec 3;7(4):e13042. doi: 10.2196/13042.	Thank you for this reference which we have now included in the article on p. 3 and p. 13. In the review by Mold et al. (2019), they define e-consultations as: "(…) telephone, video, text messaging, email consultations, Web-based portals for prescriptions orders, appointment booking, and patient access to online health records, or any combinations of all these, recognizing that research in this area is heterogeneous." Therefore, we find their findings difficult to fully compare with our study.
4. Novel choice of medium theory to framework the research, but it is not very clearly explained. Would a figure/diagram help to illustrate the framework used?	We agree and have included a short definition of 'medium theory'. We have added further definitions of the respective theories/concepts for clarification.
5. Little written on gaining ethical approval. A few sentences might help.	We have included a few more lines now: "All participants have given written consent and have been informed that participation in the study was voluntary." In Denmark, a study like ours does not require ethical approval.
6. Very nice range of GPs/participants. Perhaps a sentence about how the 5 different Denmark regions differ in terms of urban rural or socio-economic context.	We have included a line about rural/urban difference: "thus including both urban and rural areas."
7. Very comprehensive description of the data analysis and some very good data. A pleasure to read.	Thanks!
8. Initially I had concerns that the medium theory would not be very useful to unpacking the data, but the opening sentences in the discussion does help to frame the findings. The italics emphasis does help.	Thanks!
9. Nice acknowledgement of the study limitation. Overall al very nicely detailed paper, with some interesting data.	Thanks!

VERSION 2 – REVIEW

REVIEWER	Brian McKinstry University of Edinburgh
REVIEW RETURNED	15-Aug-2020

GENERAL COMMENTS	This is greatly improved and will definitely inform international general practice about the impact of email consultations in which Denmark is definitely leading the field. Perhaps, but not essential, to say that this paper is the first analysis of these data from the larger study you mention or that other papers are in preparation, but that is and editorial decision. I may have missed it, but it is not clear to me if different sets of patients were interviewed for the different parts of the larger study or if this represents all the patients of the study or you have chosen a subset from a larger set of interviews. Please clarify. Well done! I look forward to reading the subsequent papers

REVIEWER	Freda Mold University of Surrey, UK
REVIEW RETURNED	09-Sep-2020

GENERAL COMMENTS	Thank you for re-submitting this work. This is a very timely piece of work, and does touch on some very important points, especially in relation to current primary care delivery due to the COVID-19 pandemic. The revisions have added clarity, where needed. 1. You have included an additional sentence about the context of the Danish healthcare systems. 2. There is a duplicated word – “content” on page 4. I am not sure if this is deliberate/needed. 3. Minor additions to the methods section in terms of contextualising the Danish Regions (urban/rural). There is still little detail about how the 5 different Denmark regions differ in terms of socio-economic context. I assume there was little word count for this sentence. 4. The revisions have addressed the clarity points around waiting rooms and ‘quick questions’. 5. Revisions about the theoretical frame/ affordance do add clarity. 6. Context has been added to the discussion section to recognise the heterogeneity of virtual/remote consultations in primary care. 7. Greater clarity has been provided on ethics.

VERSION 2 – AUTHOR RESPONSE

Reviewers’ comments	**Authors’ answers**
Reviewer 1	
This is greatly improved and will definitely inform international general practice about the impact of email consultations in which Denmark is definitely leading the field. Perhaps, but not essential, to say that this paper	Thank you very much! We have clarified that the data set we analyse in this article stems from two of

is the first analysis of these data from the larger study you mention or that other papers are in preparation, but that is an editorial decision. I may have missed it, but it is not clear to me if different sets of patients were interviewed for the different parts of the larger study or if this represents all the patients of the study or you have chosen a subset from a larger set of interviews. Please clarify. Well done! I look forward to reading the subsequent papers	the five subprojects and consists of semi-structured interviews with 30 patients and 23 GPs (page 5).
Reviewer 2	
Thank you for re-submitting this work. This is a very timely piece of work, and does touch on some very important points, especially in relation to current primary care delivery due to the COVID-19 pandemic. The revisions have added clarity, where needed.	Thank you very much!
1. You have included an additional sentence about the context of the Danish healthcare systems. 2. There is a duplicated word – “content” on page 4. I am not sure if this is deliberate/needed.	We have now removed the duplicated word “content”. Thank you for spotting this.
3. Minor additions to the methods section in terms of contextualising the Danish Regions (urban/rural). There is still little detail about how the 5 different Denmark regions differ in terms of socio-economic context. I assume there was little word count for this sentence.	Within the limited word count, we find it difficult to address in due detail the five regions’ distinctive socioeconomic features within the limited space. And as we don’t present any analytical points or draw any conclusions from this interesting perspective, we settle for our urban/rural comment.
4. The revisions have addressed the clarity points around waiting rooms and ‘quick questions’. 5. Revisions about the theoretical frame/ affordance do add clarity. 6. Context has been added to the discussion section to recognise the heterogeneity of virtual/remote consultations in primary care. 7. Greater clarity has been provided on ethics.	Thank you for your thorough reading and re-reading of our article.