# **BMJ Open** Patients' experiences with receiving sick leave certificates via remote consultations in Norway during the COVID-19 pandemic: a nationwide online survey

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## ABSTRACT

**Objectives** To explore patients' experiences with receiving sick leave certificates via remote consultations during the COVID-19 pandemic and investigate whether there were differences among the types of remote consultation (telephone, video or text).

**Design** A nationwide online patient survey consisting of quantitative data supplemented by qualitative opinions conducted in Norway.

## Setting Primary care.

**Participants** Patients who received a sick leave certificate via remote consultation in the period from 16 November to 15 December 2020.

**Results** Of the 5429 respondents, 3233 (59.6%) received a sick leave certificate via telephone consultation, 657 (12.1%) via video consultation and 1539 (28.3%) via textbased e-consultation. Most respondents (76.8%) were satisfied. Only 10% of the respondents thought that the doctor would have obtained more information through an office appointment. The majority of the respondents (59.6%) found that they had as much time to explain the problem as at an office appointment. Some patients also thought that it was easier to formulate the problem via a remote consultation (18.2%) and agree with the doctor on the sick leave (10.3%).

The users of text-based e-consultations were the most satisfied (79.3%, p<0.001) compared with those using telephone or video consultations. Among users of text-based e-consultations, there was a higher proportion of patients who thought that they had more time to explain the problem compared with an office appointment (p<0.001), it was easier to explain the problem (p<0.001) and agree with the doctor (p<0.001). Most respondents would use the same type of remote consultation if they were to contact the general practitioner (GP) for the same problem, with the highest proportion among the users of video consultations (62.1%, p<0.001).

**Conclusions** Patients were satisfied with communicating and receiving sick leave certificates via remote consultations. Future studies should investigate patients' and GPs' use and experiences in a postpandemic setting.

# STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ One of the first studies exploring patients' experiences with sick leave certificates issued via remote consultations.
- ⇒ Data gathered from a large number of users and analysed by type of remote consultation (ie, telephone, video and text).
- ⇒ This survey was conducted during the COVID-19 pandemic, when remote consultations were at their peak due to societal restrictions.
- $\Rightarrow$  The survey was available only to patients who received a sick leave certification, who tend to be more satisfied with a service.

# INTRODUCTION

A sick leave is defined as absence from work that is attributed to sickness.<sup>1</sup> Several systems in the Western countries require that patients present a sick leave certificate issued by a physician in order to get sickness benefits when they are unable to work due to disease or injury.<sup>2</sup> The certifying physician is often a general practitioner (GP),<sup>3</sup> who serve as gatekeeper with a dual role as physician for the patient and medical expert in writing certificates.<sup>4</sup> Issuing sick leave certifications has a large impact on society, including productivity loss, healthcare costs and efforts to get the sickness absentee back to work.<sup>5</sup> Many physicians perceive sick leave tasks as difficult<sup>6</sup> and time-demanding.<sup>7</sup> Moreover, they experience problems in assessing the patient's ability to work,<sup>28</sup> such as for patients suffering from subjective and composite health complaints,<sup>9 10</sup> and disagreements or conflicts with patients,<sup>11</sup> especially when the GP denies a patient's request.<sup>12</sup> There is also a moral hazard that individuals request sickness leave more than necessary.<sup>13</sup>

Internationally, there is variation in sick leave certification practices<sup>3 14 15</sup> and rates of

sick leave certification.<sup>16</sup> In some countries, there can be a period at the beginning of the sickness absence during which no sick leave certificate is needed, and the employee notifies the employer providing a self-certification.<sup>3</sup> In Norway, self-certification can only be used during the employer liability period (ie, the first 16 days of sick leave), and for up to 3 days at a time. In all other situations, employees must contact their GP to obtain a sick leave certificate. Sick leave certification practices also vary between physicians.<sup>9 17 18</sup> Traditionally, sick leave certificates have been issued during an office appointment.

The rapid spread of COVID-19 focused attention towards new models of care that avoid face-to-face contact between GP and patient.<sup>1920</sup> Before the pandemic, the use of text-based e-consultations to provide sick leave certificates was not recommended in Norway.<sup>21</sup> In March 2020, a temporary regulation allowed GPs to issue sick leave certifications via remote consultations. Remote consultations with the GP are defined as consultations conducted at distance, either synchronously (ie, telephone or video consultations) or asynchronously (ie, text-based e-consultations). The rationale behind this regulation was to reduce the risk of infection among both patients and GPs. This, in turn, would contribute to contain the societal burden of COVID-19-related sick leave and protect the general practice workforce. A registry analysis<sup>22</sup> showed that, from 12 March 2020 to 31 October 2020, sick leave certificates issued via remote consultations in Norway represented a 36.5% of all sick leave certificates issued during the same period (online supplemental table 1).

The practice by which the worker has to make an appointment with the GP and the GP has to be available may affect sick leave, especially when access to healthcare is poor.<sup>3</sup> With the introduction of remote consultations, the worker is not dependent anymore on an office appointment to obtain a sick leave certificate. At the beginning of the COVID-19 pandemic, remote consultations were deemed to be potentially appropriate for delivering sick leave certificates, thus avoiding an in-person visit.<sup>19</sup> However, very little is known about the actual use and experience with sick leave certificates issued via remote consultations and the consequences for patients, GPs and society. In a recent study conducted during the first pandemic lockdown, video consultations were considered by GPs suitable for extension of sick leave, where a follow-up often does not require a physical examination, thus saving time for both doctor and patient.<sup>23 24</sup> At the same time, some GPs were concerned that video consultations might cause clinical uncertainty due to loss of valuable communicative information and lower the threshold for sick leave.<sup>24</sup> No research has been conducted on how patients experience receiving a sick leave certificate via remote consultations. The contact with healthcare providers, most often GPs, plays a role in preventing sickness absence or shortening sick leave duration.<sup>25</sup> By changing means of contact between GP and patient, and allowing sick leave certificates to be issued via remote consultations, there is an increased risk

for inappropriate requests for sick leave which, in turn, might cause an even larger impact on society.

# Study aim

The current study aimed to explore patients' experiences with receiving sick leave certificates via remote consultations and investigate whether there were differences among the types of remote consultation (telephone, video or text).

# **METHODS**

# Study design

Patients' experiences with receiving sick leave certificates via remote consultation were explored through a nationwide online patient survey. A pop-up window including the invitation to the survey was shown to all citizens who logged in the Norwegian Labour and Welfare Administration (NAV) webpage to sign their sick leave. Respondents were invited with the following text: 'Did you receive this sick leave certificate via remote consultation?'. Those who received a sick leave certificate via an office appointment were routed out of the survey. The pop-up was available from 16 November to 15 December 2020, with a break of 1 week because of technical problems. The response rate was estimated to be around 5% of all sick leave certificates provided via remote consultations in the period based on data from NAV.

The survey consisted of 19 questions, 17 of which were answered on a 5-point Likert scale. Six questions focused on patients' experiences with receiving their sick leave certificate via remote consultation. The remaining questions investigated the characteristics of the respondents and the sick leave issued. Two questions on advantages and disadvantages were non-mandatory with free text answer. The survey was developed by the Norwegian Centre for E-health Research with the online data collection solution Questback Essentials.

All data collected through the survey were anonymous. Participation was based on consent wherein each receiver of sick leave could choose not to answer. The Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) checklist for cross-sectional studies**26** was used to report the results of the survey. Patients and/ or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

# Data analysis

The results were analysed using IBM SPSS Statistics (V.29). The results were summarised by number and per cent. A Pearson  $\chi^2$  test was conducted for all variables concerning the characteristics of the sick leave certificate and patients' experiences to test whether there were differences among the three types of remote consultation (telephone, video, text).

Qualitative data provided in the two questions with free text answer were used to support and supplement the quantitative data. The answers were analysed by two of

| Table 1 | Characteristics of the survey respondents | (n=5429 |
|---------|---|---------|
|---------|---|---------|

| Characteristics of survey respondents | Number | Per cent |
|---------------------------------------|--------|----------|
| Type of remote consultation           |        |          |
| Telephone consultation                | 3233   | 59.6%    |
| Video consultation                    | 657    | 12.1%    |
| Text-based e-consultation             | 1539   | 28.3%    |
| Gender                                |        |          |
| Female                                | 3774   | 69.5%    |
| Male                                  | 1615   | 29.8%    |
| Other                                 | 7      | 0.1%     |
| No answer                             | 32     | 0.6%     |
| Age                                   |        |          |
| Under 25 years                        | 230    | 4.2%     |
| 25–34 years                           | 776    | 14.3%    |
| 35–44 years                           | 1043   | 19.2%    |
| 45–54 years                           | 1552   | 28.6%    |
| 55–65 years                           | 1640   | 30.2%    |
| Over 65 years                         | 176    | 3.3%     |
| No answer                             | 11     | 0.2%     |
| Work status                           |        |          |
| Employee                              | 5107   | 94.1%    |
| Freelancer/self-employed              | 120    | 2.2%     |
| Unemployed/temporarily lay-off        | 64     | 1.2%     |
| Student                               | 38     | 0.7%     |
| Other                                 | 80     | 1.5%     |
| No answer                             | 19     | 0.3%     |
|                                       |        |          |

the authors (PZ and EK) using content analysis.<sup>27</sup> Each answer could include one or more opinions, and a code was assigned to each opinion. The coding labels assigned were then compared with find similarities and resolve differences. The results were summarised around types of advantages and disadvantages in order of frequency of opinions.

# RESULTS

## **Characteristics of survey respondents**

The survey was answered by a total of 8386 persons. Of these, 2957 (35%) received a sick leave certificate via an office appointment and were therefore routed out of the survey. Of the 5429 persons who received a sick leave certificate via remote consultation, 3233 (59.6%) received it after a telephone consultation, 657 (12.1%) after a video consultation and 1539 (28.3%) after a text-based e-consultation (table 1). Most of the respondents were women (69.5%), and the age groups with most respondents were 45–54 years (28.6%) and 55–65 years old (30.2%).

Overall, the respondents were considered to be representative of the general population of receivers of sick leave certifications via remote consultation (online supplemental table 1). There were slightly more women and a higher proportion of middle-aged adults (45–65 years) among the respondents to the survey.

# **Characteristics of sick leaves certificates**

Suspected or detected COVID-19 infection accounted for 18.7% of the sick leave certificates (table 2). Over half of the sick leave certificates (53.8%) were due to a prolongation of a previous sick leave, while 44.7% were new sick leaves. Most sick leave certificates were issued by GPs (80.8%) or by a substitute for the GP (ie, a doctor who takes over the responsibility temporarily) (12.9%). Continuity of care when issuing sick leave certificates via remote consultations was high, with only 14% of the respondents who were not acquainted with the doctor issuing the sick leave certificate. Moreover, the problem was earlier discussed with the GP or another doctor in 64.2% of the situations.

Sick leave certificates differed between types of remote consultation (table 2). There was a lower number of sick leave certificates issued for suspected or detected COVID-19 among those who performed a video consultation (p<0.001). Text-based e-consultations had a higher number of sick leave certifications issued by GPs and fewer issued by a substitute for the GP (p<0.001). Moreover, a larger proportion of patients who performed a text-based e-consultation were acquainted with (p<0.001) and had previously discussed the problem with their GP (p=0.002).

# **Patients' experiences**

Overall, 76.8% of all respondents were satisfied with receiving a sick leave certificate via remote consultation (table 3). The communication in remote consultations was comparable with that in office appointments. Only 10% of the respondents thought that the doctor would have obtained more information through an office appointment. The majority of the respondents (59.6%) found that they had as much time to explain the problem as at an office appointment. Some patients also thought that it was easier to formulate the problem via a remote consultation (18.2%) and agree with the doctor on the sick leave (10.3%). Office appointments (39.9%) and telephone consultations (33.4%) were considered their preferred consultation forms if they should contact the doctor again for the same problem in the future.

There were differences in patients' experiences depending on the consultation form. The users of textbased e-consultations were the most satisfied (79.3%, p<0.001) compared with those using telephone or video consultations. Among users of text-based e-consultations there was a higher proportion of patients who thought that they had more time to explain the problem (p<0.001) and it was easier to explain the problem compared with an office appointment (p<0.001) (table 3). It was also easier for users of text-based e-consultations to agree with the doctor on the sick leave (p<0.001). Most respondents

| Table 2 Characteristics of sick leave certificates issued via remote consultation, by consultation form (n=5429) |       |       |       |       |         |
|--|-------|-------|-------|-------|---------|
| Characteristics of sick leaves certificates  | Total | Phone | Video | Text  | P value |
| Reason for sick leave  |       |       |       |       | <0.001  |
| Suspected/detected COVID-19 infection  | 18.7% | 20.0% | 11.1% | 19.4% |         |
| Other reasons  | 81.3% | 80.0% | 88.9% | 80.6% |         |
| Type of sick leave   |       |       |       |       |         |
| New sick leave   | 44.7% | 45.7% | 43.4% | 43.1% | 0.125   |
| Prolongation of sick leave   | 53.8% | 52.6% | 55.4% | 55.8% |         |
| Don't know   | 1.5%  | 1.7%  | 1.2%  | 1.1%  |         |
| Prolongation of sick leave issued by   |       |       |       |       |         |
| Same doctor than first sick leave  | 80.9% | 80.8% | 78.3% | 82.4% | 0.095   |
| Another doctor   | 19.1% | 19.2% | 21.7% | 17.6% |         |
| Doctor who issued sick leave   |       |       |       |       | < 0.001 |
| GP   | 80.8% | 79.0% | 80.8% | 84.7% |         |
| Substitute for GP  | 12.9% | 15.3% | 13.2% | 7.7%  |         |
| Hospital doctor  | 2.5%  | 2.1%  | 2.1%  | 3.6%  |         |
| Others   | 1.4%  | 1.6%  | 0.6%  | 1.4%  |         |
| Don't know   | 1.0%  | 0.8%  | 0.6%  | 1.4%  |         |
| Doctor at out-of-hour emergency care   | 0.8%  | 0.8%  | 0.6%  | 0.9%  |         |
| Private doctor   | 0.5%  | 0.3%  | 2.0%  | 0.3%  |         |
| Patient's acquaintance with the doctor   |       |       |       |       | < 0.001 |
| Yes, met more than two times during the past year  | 44.2% | 42.8% | 43.7% | 47.2% |         |
| Yes, met 1-2 times during the past year  | 32.3% | 32.8% | 28.0% | 32.9% |         |
| Yes, but met more than 1 year ago  | 9.6%  | 9.5%  | 13.7% | 8.2%  |         |
| No   | 14.0% | 15.0% | 14.6% | 11.6% |         |
| Doctor's knowledge of the problem  |       |       |       |       | 0.002   |
| Yes, problem earlier discussed with the same doctor  | 55.6% | 53.5% | 57.8% | 59.1% |         |
| No, but problem earlier discussed with another doctor  | 8.6%  | 9.6%  | 8.4%  | 6.8%  |         |
| No, it is a new problem  | 33.5% | 34.8% | 31.5% | 31.7% |         |
| Don't know   | 2.2%  | 2.1%  | 2.3%  | 2.4%  |         |

P value from Pearson  $\chi^2$  test for differences among the three remote consultation forms (telephone, video, text). GP, general practitioner.

would use the same type of remote consultation if they were to contact the GP for the same problem, with the highest proportion among the users of video consultations (62.1%). Despite highly satisfied, only 44.9% of the users of text-based e-consultations would use them again if they were to contact the GP for the same problem and 11.1% would rather choose telephone consultations.

# **Advantages**

A total of 3921 patients (72.2%) answered the free-text question regarding the advantages of receiving sick leave certifications via remote consultation and 4589 opinions were grouped into 14 categories (table 4).

The main advantage was that remote consultations were considered easier, faster and more effective than office appointments. Many respondents pointed out that remote consultations were time-saving for both patients and GPs, and avoided a visit to the GP office. Several respondents described how remote consultations contributed to reduce the risk of infection, especially during the COVID-19 pandemic.

I've had the diagnosis for a long time. When there's no change, it's fine to talk on the phone. I don't have to sit in a full waiting room, I can rest at home until a less stressed doctor has time to call.

Issuing sick leave certifications via remote consultation was deemed suitable when the doctor is acquainted with both the patient and the problem being discussed. Respondents considered the service particularly useful in case of extensions of sick leave. Some specified that remote consultations were especially suitable for noncomplicated problems where physical attendance was not necessary.

| Table 3 Patients' experiences with sick leaves certificates issued via remote consultation, by consultation form (n=5429) |       |       |       |       |         |
|---|-------|-------|-------|-------|---------|
| Patients' experiences   | Total | Phone | Video | Text  | P value |
| Satisfaction with receiving a sick leave without office appointment   |       |       |       |       | <0.001  |
| Satisfied   | 76.8% | 75.4% | 77.9% | 79.3% |         |
| Neutral   | 13.5% | 15.2% | 12.9% | 10.1% |         |
| Dissatisfied  | 6.5%  | 6.8%  | 6.4%  | 6.1%  |         |
| Don't know/n.a.   | 3.1%  | 2.6%  | 2.7%  | 4.4%  |         |
| An office appointment would have given more information to the doctor   |       |       |       |       | 0.097   |
| Yes   | 9.8%  | 10.1% | 7.5%  | 10.1% |         |
| No  | 79.1% | 78.9% | 83.0% | 78.0% |         |
| Don't know  | 11.1% | 11.0% | 9.6%  | 11.9% |         |
| Time to explain the problem compared with office appointment  |       |       |       |       | <0.001  |
| More time   | 14.6% | 13.1% | 13.9% | 18.3% |         |
| Same  | 59.6% | 63.7% | 69.3% | 46.7% |         |
| Less time   | 13.7% | 14.2% | 9.9%  | 14.3% |         |
| Don't know  | 12.1% | 9.0%  | 7.0%  | 20.7% |         |
| Formulation of the problem to the doctor  |       |       |       |       | <0.001  |
| Easier  | 18.2% | 15.7% | 15.5% | 24.6% |         |
| Same  | 67.8% | 70.8% | 73.8% | 59.1% |         |
| More difficult  | 9.9%  | 10.2% | 9.1%  | 9.6%  |         |
| Don't know  | 4.0%  | 3.2%  | 1.5%  | 6.8%  |         |
| Agreement with the doctor on the sick leave   |       |       |       |       | <0.001  |
| Easier  | 10.3% | 9.3%  | 5.9%  | 14.2% |         |
| Same  | 80.6% | 82.4% | 86.6% | 74.4% |         |
| More difficult  | 2.7%  | 2.6%  | 2.0%  | 3.0%  |         |
| Don't know  | 6.4%  | 5.6%  | 5.5%  | 8.4%  |         |
| Preferred consultation form for same problem  |       |       |       |       | <0.001  |
| Office appointment  | 39.9% | 41.6% | 32.6% | 39.3% |         |
| Telephone consultation  | 33.4% | 50.2% | 3.5%  | 11.1% |         |
| Video consultation  | 12.0% | 5.4%  | 62.1% | 4.7%  |         |
| Text-based e-consultation   | 14.7% | 2.9%  | 1.8%  | 44.9% |         |
| Expected impact of remote consultations on self-<br>certified sick leave  |       |       |       |       | 0.151   |
| Less self-certified sick leave  | 4.0%  | 3.8%  | 4.3%  | 4.4%  |         |
| Same  | 80.3% | 80.4% | 80.4% | 79.9% |         |
| More self-certified sick leave  | 0.6%  | 0.5%  | 0.0%  | 1.0%  |         |
| Don't know  | 15.1% | 15.3% | 15.4% | 14.7% |         |
|   |       |       |       |       |         |

P-value from Pearson  $\chi^2$  test for differences among the three remote consultation forms (telephone, video, text).

It is important to have the first consultation physically. At least for me since it concerned a physical pain. Afterwards [...] it was a great help to talk to the doctor on the phone.

Conducting a remote consultation with the doctor, thus avoiding the burden of leaving home, was described as painless and stressless compared with a physical consultation. Other patients did not like meeting other people in the waiting room or show themselves outside the house while being sick.

Since I struggle with anxiety, most likely I wouldn't have been able to show up to an office appointment without great efforts or perhaps I would have just cancelled the appointment [...]. The

| Table 4 Advantages of receiving sick leave certifications via remote consultation compared with office appointments (n=4589) |             |          |  |
|--|-------------|----------|--|
| Advantages   | Opinions, n | Per cent |  |
| Easier, more efficient and faster  | 919         | 20.0%    |  |
| Time-saving  | 858         | 18.7%    |  |
| Avoided attendance at the doctor's office and/or waiting room  | 676         | 14.7%    |  |
| Less risk of infection, corona-related benefits  | 588         | 12.8%    |  |
| Avoided travel to the doctor's office  | 445         | 9.7%     |  |
| Suitable for known patient/problem, extension and non-complicated problems   | 308         | 6.7%     |  |
| Less burdensome and stressful  | 269         | 5.9%     |  |
| Easier to get an appointment/less waiting time   | 181         | 3.9%     |  |
| More practical (avoided absence at work, babysitter/substitute, parking, etc)  | 87          | 1.9%     |  |
| Better communication with the doctor   | 66          | 1.4%     |  |
| Cost-saving  | 32          | 0.7%     |  |
| Gives more time in the consultation  | 16          | 0.4%     |  |
| Environmentally friendly   | 12          | 0.3%     |  |
| Other  | 132         | 2.9%     |  |
|  |             |          |  |
|  |             |          |  |

anxiety makes me afraid of phone consultations as well, but at a tolerable level.

Some respondents thought that the communication was better via remote consultation, both over phone and video. Several specifically mentioned text-based e-consultation as a form of communication especially suitable for simpler problems, as patients can spend as much time as they need to write a message in peace and quiet.

When it comes to my health situation, it is easier to write than to talk because I easily tear up during a conversation and have difficulty explaining myself.

# **Disadvantages**

A total of 3461 patients answered the question regarding the disadvantages of receiving sick leave certifications via remote consultation. Almost a third of those who responded wrote that they did not see any disadvantage. The remaining 3155 opinions were grouped into 12 categories (table 5).

The main disadvantage was that the clinical assessment via remote consultation was limited. The patients were concerned that the GP could overlook symptoms and signs of serious illness when not performing a physical examination. Furthermore, they mentioned that remote consultations were not suitable when a blood test or other tests should be taken.

Many respondents described that they missed the personal contact with the doctor and emphasised how the quality of the interaction and the relationship with the GP could be affected. The word 'impersonal' was often used to describe remote consultations.

| Table 5 Disadvantages of receiving sick leave certifications via remote consultation (n=3155) |             |          |  |
|---|-------------|----------|--|
| Disadvantages   | Opinions, n | Per cent |  |
| Limited clinical assessment   | 1054        | 33.4%    |  |
| Missing personal contact with the GP  | 472         | 15.0%    |  |
| Poorer communication compared with a physical meeting   | 392         | 12.4%    |  |
| Difficult for new problems and some specific problems   | 299         | 9.5%     |  |
| Possibility of abuse  | 287         | 9.1%     |  |
| Difficult when the GP does not know the patient   | 133         | 4.2%     |  |
| Organisational, practical and technical problems  | 136         | 4.3%     |  |
| Can affect the relationship with the GP   | 36          | 1.1%     |  |
| Less time in the consultation   | 39          | 1.2%     |  |
| Disadvantages of text-based e-consultations   | 56          | 1.8%     |  |
| More difficult communication due to patient-related disorders                                 | 18          | 0.6%     |  |
| Other   | 233         | 7.4%     |  |
| GP, general practitioner.   |             |          |  |

I feel more distant from both the doctor and my own difficulties. It reinforces the feeling of loneliness, the absence of a person who sees me and can with his/ her presence give support through a smile, a pat on the back, energy and warmth just by being together in the same room.

Several respondents also mentioned that the communication could be poorer compared with a physical meeting (eg, loss of body language and unspoken signals), there could be more misunderstandings and both undercommunication and over-communication were more likely to occur.

A telephone/e-consultation can never replace a personal meeting! A lot of information exchanged between people is non-verbal!

Respondents reported specifically disadvantages related to the communication in text-based e-consultations. They described that there was too little space to provide a detailed description of the problem and complicated problems were not suitable to be written down. As textbased communication is asynchronous, many respondents missed the possibility to have a discussion or answer any questions from GP. The maximum waiting time to receive a reply (5 days) was perceived by some as too long.

Several days pass by when I wonder if I'm on sick leave or not.

Respondents described that it could be difficult to obtain a sick leave via remote consultation in cases of newly emerged or particularly complex problems. Other patients reflected on the possibility of abusing sick leave when it is given via remote consultation (eg, lying about symptoms which make a person unfit for work without the doctor having the opportunity to verify this).

It can be easier to deceive the doctor, both by appearing better than you are and by appearing worse.

Many respondents mentioned that it could be difficult for a doctor to assess the work disability of an unknown patient met for the first time via remote consultation. Patients believed that, when the doctor was acquainted with the patient, the communication via remote consultation was suitable and safe, and misunderstandings and misjudgements could be avoided.

If the doctor didn't know me as a patient from before and we didn't developed mutual trust, I think it would be more difficult to explain my current health problems.

Organisational, practical and technical problems were also described. Situations where the GP had agreed to call back and the patient was expected to remain available by phone for many hours were perceived as burdensome. Some respondents wrote that it was difficult to find a place where to conduct a video or telephone consultation undisturbed. Technical problems were reported especially for video consultations (eg, following a link, picture quality). Other respondents described that it was more difficult to understand each other if patient or GP had different mother tongues. Communication problems for disabled patients (eg, deaf or blind) were also mentioned as disadvantage.

# DISCUSSION

Little research had been conducted on the use of remote consultations to issue sick leave certificates. Moreover, studies had been focused on the evaluation of specific consultation forms, such as video consultation<sup>23 24</sup> and text-based e-consultation.<sup>19 21</sup> We conducted a nationwide online survey with 5429 respondents, of whom 59.6% used a telephone consultation, 12.1% a video consultation and 28.3% a text-based e-consultation.

Most sick leave certificates were issued by the GP (80.8%) or by a substitute for the GP (12.9%). This is in line with traditional sick leave certification practices adopted internationally, where the certifying physician is often a GP.<sup>3</sup> Continuity of care is one of the cornerstones of primary care.<sup>28</sup> The concept of continuity is often associated with interpersonal continuity, referring to an ongoing personal relationship between patient and care provider characterised by personal trust and responsibility.<sup>29</sup> Continuity of care varies among countries depending on the national GP schemes. While countries like Norway and Spain have a high continuity of care, other countries such as Sweden or Germany are characterised by a low continuity.<sup>30</sup> Remote consultations are easier and less risky if there is a pre-existing clinical relationship, and the patient is known to the doctor.<sup>31</sup> A recent study showed a strong and consistent association between continuity of care and GPs' perceptions of the suitability of video consultations.<sup>23</sup> Previous research also indicated that patients have a preference for being seen by a familiar GP able to understand their attitude to sickness and work.<sup>32</sup> The results from this survey show that the vast majority of the respondents (86%) were acquainted with the doctor issuing the sick leave certificate. Text-based e-consultations had a higher proportion of sick leave certifications issued by GPs compared with video and phone consultations. This confirms that textbased e-consultations, characterised by an asynchronous communication, work best in the context of an existing doctor-patient relationship and mutual trust.<sup>33</sup> On the contrary, video and telephone consultations might be also suitable to deliver sick leave certificates when the GP is not acquainted with the patient.

Most sick leave certificates in our survey (53.8%) were due to a prolongation of a previous sick leave, and the problem was often discussed earlier with the same doctor (55.6%) or another doctor (8.6%). This study was conducted during the COVID-19 pandemic, when remote consultations were often used to deliver sick leave certificates for newly emerged problems due to restrictions to visit the GP office. This explains the relatively

high proportion (44.7%) of new sick leave certificates issued via remote consultations. In a recent Norwegian study, video consultations were considered by GPs mostly suitable for extension of sick leave.<sup>23 24</sup> It is reasonable to expect that, in a normalised postpandemic situation where newly emerged problems would be normally discussed at an office appointment, remote consultations will be mostly used to issue sick leave certificates for known problems or extensions of sick leave.

GPs have raised concerns that video consultations might cause clinical uncertainty and lower the threshold for sick leave.<sup>24</sup> In contrast, the results from this survey showed that only 10% of the respondents thought that the GP would have obtained more information through an office appointment. The qualitative opinions indicated that the communication in remote consultations could be poorer due to loss of body language and unspoken signals, misunderstandings, under-communication and over-communication. Users of text-based e-consultation described that there was too little space and missed the possibility to have a discussion with the GP. However, some respondents thought that the communication was better via remote consultation, and text-based e-consultations were seen as a communication form especially suitable for simpler problems.

Previous studies found that sick leave tasks are timeconsuming for GPs,<sup>7</sup> who experience problems in assessing the patient's ability to work<sup>28</sup> as well as disagreements or conflicts.<sup>11</sup> The majority of the respondents to our survey reported having as much time (59.6%) to explain the problem in a remote consultation as at an office appointment. Moreover, nearly 20% of those who conducted a text-based e-consultation even perceived they had more time. While video and telephone consultations are synchronous and thus conducted similarly to office appointments, text-based e-consultations are asynchronous, and patients can use as much time as they need to formulate a problem. A number of patients also expressed that it was easier to formulate the problem via remote consultations (18.2%) and agree with the doctor (10.3%).

Most of the respondents (76.8%) were satisfied with receiving a sick leave certificate without meeting their GP, and only a minority (6.5%) were dissatisfied, thus confirming the findings from earlier studies.<sup>34–38</sup> The users of text-based e-consultations were the most satisfied (79.3%). The analysis of the qualitative opinions provided a more in-depth explanation of their satisfaction. Patients found that receiving sick leave certifications via remote consultations was easier, more efficient and less burdensome compared with office appointments. They avoid travelling to the GP office and contacting other patients in the waiting room, with a consequent lower risk of infection. Similar benefits were also found in previous studies.<sup>36 39</sup> The main disadvantages perceived by patients included limited clinical assessment by the GP and poorer communication compared with a physical meeting, as also found in other studies.<sup>34 39 40</sup> Some patients experienced organisational, practical and technical problems. Other studies found that technical problems are common.<sup>41</sup> For routine use and sustainable implementation, remote consultations must be reliable,<sup>42</sup> user-friendly, integrated in the GP practice and backed by technological and financial support.43 Most users would choose the same consultation form if they were to contact the GP again for the same problem, with the highest proportion among the users of video consultations. There were also several respondents would choose an office appointment. Patients during the pandemic were discouraged to attend the GP office and recommended to contact their GP via remote consultations.<sup>38</sup> The reason for this is that, while physical appointments are still considered the ideal way to contact the GP,<sup>35 36</sup> especially when discussing complex and sensitive topics and symptoms,<sup>37 44</sup> patients during the pandemic were discouraged to attend the GP office and recommended to contact their GP via remote consultations.<sup>38</sup>

## **Strengths and limitations**

This study presents unique data on patients' experiences with sick leave certificates issued via remote consultations. The respondents were representative of the general population. This survey was conducted during the COVID-19 pandemic, when absence from work was higher than usual and remote consultations were at their peak due to societal restrictions.<sup>45</sup> This allowed gathering data for all three types of remote consultations (ie, telephone, video and text) from a large number of users, as well as investigating how patients' experiences differed among the types of consultation. Future studies should investigate both patients' and GPs' use and experiences in a normalised postpandemic situation and evaluate the consequences for society. A follow-up study is already planned by the research group.

The survey was available only to patients who received a sick leave certification, who tend to be more satisfied with a service. Patients whose request for sick leave was rejected did not have the opportunity to answer. Since the free-text questions about advantages and disadvantages referred to remote consultations as a collective term, it was not possible to stratify the answers by type of remote consultation. Interviews might provide a more in-depth understanding of the different experiences among the types of consultation.

The survey was conducted in Norway, where the regular GP scheme assures a high continuity of care between patient and GP. This is reflected in the results, showing that most respondents were acquainted with the doctor issuing the sick leave certificate via remote consultation. While comparable findings might be expected in other settings characterised by a similar GP scheme, results might not be generalisable to countries characterised by a low continuity of care.

# Open access

# Conclusions

We conducted an online survey of 5429 patients in Norway who received sick leave certificates via remote consultations (telephone, video or text). Most respondents were satisfied, and only a small minority thought that the GP would have obtained more information through an office appointment. The users of text-based e-consultations were the most satisfied, perceived that they had more time to explain the problem and it was easier to explain the problem and agree with the GP. Most of the users would use the same type of remote consultation if they were to contact the GP for the same problem, with the highest proportion among the users of video consultations. Future studies should investigate patients' and GPs' use and experiences with sick leave certificates issued via remote consultations in a postpandemic setting.

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