

Use of Medical Teleconsultations During the COVID-19 Pandemic in Poland - Preliminary Results

Urszula Grata-Borkowska
Department of Family Medicine
Wroclaw Medical University
Wroclaw, Poland
e-mail: urszula.grata-borkowska@umed.wroc.pl

Mateusz Sobieski
Department of Family Medicine
Wroclaw Medical University
Wroclaw, Poland
e-mail: mateusz.sobieski@student.umed.wroc.pl

Jarosław Drobnik
Department of Public Health
Wroclaw Medical University
Wroclaw, Poland
e-mail: jaroslaw.drobnik@umed.wroc.pl

Ewa Fabich
University Teaching Hospital
Wroclaw Medical University
Wroclaw, Poland
e-mail: efabich@usk.wroc.pl

Maria Magdalena Bujnowska-Fedak
Department of Family Medicine
Wroclaw Medical University
Wroclaw, Poland
e-mail: maria.bujnowska-fedak@umed.wroc.pl

Abstract — The frequency of teleconsultation by Polish family doctors increased significantly during the COVID-19 pandemic. This study aims to assess the usefulness of teleconsultation, its advantages and disadvantages, as well as its efficiency and credibility. Preliminary results indicate a fairly high efficiency and credibility of teleconsultation.

Keywords-televisits; primary care; teleconsultations; COVID-19 pandemic; e-health; advantages and disadvantages.

I. INTRODUCTION

E-health services in the form of medical teleconsultations make contact with healthcare professionals easier and more convenient than ever before. Tele-visits, also known as teleconsultations, allow patients to see a doctor from anywhere: on a smartphone, tablet or computer. Virtual physician appointments can save doctors and patients time and avoid crowded waiting rooms, which significantly reduces the risk of infection while waiting for an appointment. This is especially important during COVID-19 pandemic, since when digital access to medical databases and various forms of e-health services has increased significantly [1]. Doctors can conduct a medical interview during tele-visits. In addition, they can refer the patient to laboratory tests and other additional tests; they can make e-prescriptions, e-referrals to specialist doctors or to a

hospital ward and issue a required sick-leave. In the period of the coronavirus pandemic, teleconsultation has quickly become one of the basic work tools for primary care physicians (PCPs) in Poland.

Preliminary research conducted among Polish patients (N=1021) regarding their opinions on teleconsultation give ambiguous results - 49% (N=500) of Poles admitted that during the pandemic had a telephone contact with a doctor, and 5% (N=51) - online contact. As many as 58% (N=592) of respondents who used a telephone contact with a doctor were satisfied with such a form of consultation.

Poles are rather not positively focused to telemedicine. Only 25% (N=255) of the respondents prefer contact telephone or online, and three-quarters of the respondents are of the opinion that teleconsultation does not replace direct contact with the doctor. 63% (N=643) of Poles claim that during pandemic patients with other ailments than COVID-19 were treated inadequately. Regardless of the age of respondents, almost half acknowledges that they do not believe in telemedicine, and consider online or telephone visits as completely ineffective [2].

In March 2021, by the ordinance of the Polish government, the rules of the widespread use of teleconsultations have been narrowed due to reported cases of misuse in this area. Nowadays teleconsultations cannot be

conducted when it concerns the child under 6 years of age, in case of suspicion of neoplastic disease, or significant exacerbation of a chronic disease.

The aim of the study was to assess the usefulness and suitability of medical teleconsultation as a valuable working tool for primary care physicians in the COVID-19 pandemic. It was important to assess benefits and risks of this form of family doctor’s work.

The following research hypotheses were made:

1. For most primary care physicians, teleconsultation is the main working tool.
2. Most family doctors will use teleconsultation in their work after the pandemic COVID-19.
3. According to family doctors, teleconsultations are an effective and reliable tool in everyday work.

II. MATERIALS AND METHODS

The research was based on the specially designed questionnaire which was distributed in the online form among all primary care doctors – members of Polish Society of Family Medicine. In this preliminary study, a questionnaire was sent to the 828 family doctors from Lower Silesia District in Poland. 219 (N=219) of them completed the questionnaire, which allowed to achieve a 26% response rate.

The anonymous survey used in the study consisted of a metric including age, gender and any additional specializations performed by the respondent, and 10 questions regarding the respondent's attitude towards teleconsultations. Among 219 respondents, 24% accounted for men (N = 52) and 76 % for women (N = 167); the respondents were in the age between 25-60 years (60%; N=131 in age range 25-49, 40%; N=88 in 41-60). All respondents were doctors; 96% (N=210) of them were family physicians.

III. RESULTS

Over 70% of respondents (N=153) prefer teleconsultation as their primary tool for working in the coronavirus pandemic. 46% (N=101) of the respondents used teleconsultation as a work tool before the COVID-19 pandemic. Almost 90% (N=197) of respondents indicated that the main advantage of teleconsultation is limiting the possibility of the spread of the COVID-19 pandemic. Only 4% (N=8) indicated the possibility of giving advice to more people at the same time.

The most frequently reported disadvantage of teleconsultation is the inability to examine the patient personally and reliably verify his condition - as many as 80% (N=175) of respondents encounter this problem. 10% (N=22) of respondents complain about unreliable information provided by patients themselves. Only 1% (N=2) believe that teleconsultation has no disadvantages.

Most Polish family doctors intend to use teleconsultation after the pandemic is over - as many as 97% (N=212) of

doctors expressed a positive attitude towards continuing work using this method, of which 54% (N=118) of respondents intend to use teleconsultation frequently, and 43% (N=94) - occasionally. One percent (N = 2) do not intend to use teleconsultation at all, and 2% (N=4) have no opinion on it.

A frequently reported problem by doctors is the inability to confirm the identity of the person being teleconsulted. Despite this, the vast majority (65%) (N=142) of physicians consider it sufficient to ask for their name and surname. On the other hand, over 20% (N=44) of respondents use a request for a PESEL number as a form of verification, which is the national identification number used in Poland that identifies just one person and cannot be changed to another one.

Significant differences emerged in terms of time spent teleconsultation - 38% (N=83) report that this form of contact they take less time than a traditional visit, 44% (N=96) - as much as 18% (N=39) - more than a personal visit to the patient.

The doctors' assessments of the effectiveness and credibility of teleconsultation are summarized in Figure 1. Teleconsultation was assessed on a scale from 1 to 10, where 1 - the lowest and 10 - the highest efficiency/credibility. On average, teleconsultation efficiency was rated as 7.22, credibility - as 6.74, which means that doctors believe that teleconsultations have good properties as a work tool. A lower value of credibility than efficiency may result from the problems reported by them in the survey - the inability to identify the patient, the inability to physically examine the patient and simulating symptoms by patients in order to receive sick leave or other treatment, adequate according to patients.

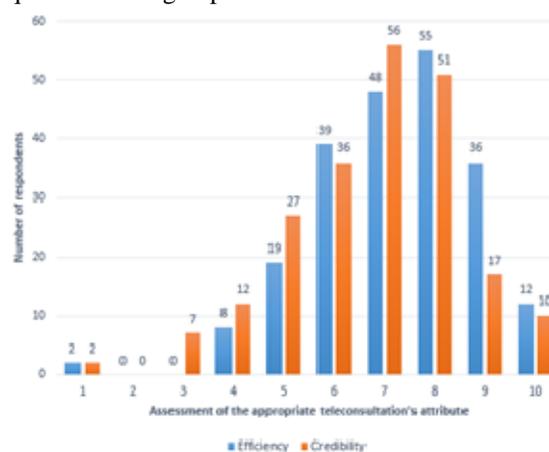


Figure 1. Personal assessments of the effectiveness and credibility of teleconsultation of Polish PCPs.

IV. DISCUSSION

Along with the development of technology, the universal affordability and availability of basic telemedicine tools are growing. The COVID-19 outbreak dramatically changed the situation of the patients and the family physicians. Despite the fact that televisits are a relatively new concept to most people, they are important working tool for epidemic reason. Telemedicine has advantages and disadvantages, however, the most important advantage during COVID-19 pandemic that it is a safe way to receive medical advice [3] [4].

Other Polish surveys also indicate benefits of televisits during the pandemic. Over 90% of the surveyed patients had got a good medical advice during teleconsultations according to a report of a patient satisfaction conducted by the Ministry of Health in cooperation with the National Health Fund and national consultant with the field of Family Medicine [5]. Telemedicine has made it possible to maintain contact between patients and the health care workers in the context of maximum complexity both in Poland and other countries [5][6].

V. CONCLUSIONS

Despite the fact that a large percentage of family doctors had the opportunity to use teleconsultation before the COVID-19 pandemic, the inability to conduct traditional visits forced their use by most doctors. According to the respondents, limiting the possibility of spreading COVID-19 infection is the main advantage of teleconsultation. Despite this, most Polish family doctors intend to continue teleconsulting even after the pandemic ends. On the other hand, the main risk is the inability to examine the patient and reliably verify his health. However in their opinion, teleconsultation is characterized by good effectiveness and

credibility. The main problem may be the discrepancy between the needs of patients and doctors - the first to use this form of consultation are often satisfied; however, most Poles still prefer stationary visits. Changing this preference will require physicians to adapt to patients' needs more closely and to try to circumvent the limitations of telemedicine.

REFERENCES

- [1] J. Vidal-Alaball et al, "Telemedicine in the face of the COVID-19 pandemic," *Atencion Primaria*, vol. 52(6), pp. 418-422, Jun-Jul 2020, doi:10.1016/j.aprim.2020.04.003
- [2] ARC Rynek i Opinia. Poles reluctant to telemedicine [*Polacy niechętni telemedycynie*]. [Online, in Polish]. Available from: <http://arc.com.pl/polacy-niechetni-telemedycynie/> 2021.04.27
- [3] U. Pinar et al, Preliminary assessment of patient and physician satisfaction with the use of teleconsultation in urology during the COVID-19 pandemic. *World J Urol*. 2020 Sep 9:1–6. doi: 10.1007/s00345-020-03432-4. Epub ahead of print. PMID: 32909174; PMCID: PMC7480659.
- [4] N.M. Hjelm. Benefits and drawbacks of telemedicine. *J Telemed Telecare*. 2005;11(2):60-70. doi: 10.1258/1357633053499886. PMID: 15829049.
- [5] Report on the satisfaction survey of patients using teleconsultation with a primary health care doctor in the period of COVID-19 pandemic. [Raport z badania satysfakcji pacjentów korzystających z teleporad u lekarza podstawowej opieki zdrowotnej w okresie epidemii COVID-19]. [Online, in Polish]. Available from: https://www.nfz.gov.pl/download/gfx/nfz/pl/defaultaktualnosci/370/7788/1/raport_-_teleporady_u_lekarza_poz.pdf 2021.06.14.
- [6] O.Solans, "Characteristics of Citizens and Their Use of Teleconsultations in Primary Care in the Catalan Public Health System Before and During the COVID-19 Pandemic: Retrospective Descriptive Cross-sectional Study" *J Med Internet Res* 2021;23(5):e28629