

## TELEPSYCHIATRY IN POLISH PATIENTS' AND DOCTORS' OPINION

Magdalena Wojtuszek<sup>1</sup>, Justyna Kachnic<sup>1</sup>, Krzysztof Krysta<sup>2</sup> & Joanna Wutke<sup>1</sup>

<sup>1</sup>Department of Psychiatry and Psychotherapy, Students' Scientific Society,  
Medical University of Silesia, Katowice, Poland

<sup>2</sup>Department of Psychiatry and Psychotherapy, Medical University of Silesia, Katowice, Poland

### SUMMARY

**Background:** Telepsychiatry is a new method of medical care, using modern communication technologies and electronic informations. It consists of web pages, containing data about diseases and their treatment in the form of multimedia libraries with video- and audiobooks.

This research concerns verification of knowledge and attitude to telepsychiatry amongst patients and psychiatrists.

**Subjects and methods:** An anonymous survey was conducted amongst 105 psychiatrists aged 26-74, including 74 women and 31 men and 102 patients aged 21-79, including 61 women and 41 men.

**Results:** Research reveals that majority of patients never met with the concept of 'telepsychiatry' and do not know what it means. However, more than 50% of respondents answered positively to every question considering the utility of telepsychiatry. Furthermore according to 18% it is possible to replace eye-to-eye conversation by videoconferencing.

Only 15% of doctors claim to have an extensive knowledge on telepsychiatry, and 10% do not know what it means. The vast majority of physicians perceive positive aspects of this method of medical care, but 63% would not want general insertion of telepsychiatry. Doctors are apprehensive of losing personal data and medical confidentiality, and of the necessity of legal changes as well.

**Conclusion:** The obtained results allow us to conclude that Polish patients and doctors, regardless of their knowledge, age, gender or disease, perceive advantages of telepsychiatry. In connection with this, implementing this method into the Polish medical market makes sense and is in accordance with both patients' and doctors' opinion. Based on our research, we confirmed that there is a necessity of wider popularization of telepsychiatry in Polish therapeutics.

**Key words:** telepsychiatry – telemedicine – videoconferencing - telehealth

\* \* \* \* \*

### INTRODUCTION

Telepsychiatry is a new method of medical care using modern communication technologies and electronic information. It consists of web pages, containing data about diseases and their treatment in the form of multimedia libraries with video- and audiobooks. This form of telehealth also includes the doctor's contact with patient via e-mail, SMS or videoconferencing. It has been used as an mTherapy intervention and the main goal is to save time, improve access to treatment for all patients, remind them of health goals, appointments and therapy homework (Klasnja 2012). Introducing such a type of contact of patients with their doctors becomes increasingly important as data from the literature show that a close cooperation between those two groups improves the functioning of the patients (Sawicka 2015). Telepsychiatry has been discussed in the literature for more than half a century, but only for about the last ten years has it reached maturation and has started to be used more commonly (Baer 1997). Modern telemedicine has a beginning in experiments, made to provide medical services evenly to everybody, such as those by Willem Einthoven's 1905 long distance transfer of electrocardiograms through the era of teleradiology and telepsychiatry of the 1950s, its maturation in the 1990s, and finally the adoption to the present technology (Rashid 2014). It

has been shown to be attainable and profitable in a wide spectrum of settings, over a complement of psychiatric treatments, in different ethnic groups and populations, and in all age ranges (Yellowlees. 2008). The trials of implementing it into Poland have been carried out and are still in process (Krzystanek 2003; Matuszczyk 2000). Unfortunately in comparison with other European countries, Poland is still far away behind them in introducing modern telepsychiatry. We would like to present the latest research, conducted amongst polish doctors and patients, about their opinions and expectations connected with this topic. This research is an expanded version of a survey conducted amongst a smaller group of patients. Preliminary results were published as a conference abstract (Gawdzik 2015) and now compared with psychiatrists opinions.

### SUBJECTS AND METHODS

The research study was prepared based on authors' anonymous questionnaires, one for patients and another for doctors, including questions on: level of knowledge about telepsychiatry, different aspects of utility of videoconferencing and the attitude to it, possibility to replace eye-to-eye conversation by it, diseases which it could help treat, doctors' fears connected with telepsychiatry and other aspects.

The questionnaire had been handed out to the patients of the Department of Psychiatry and Psychotherapy of Medical University of Silesia and psychiatrists from Poland. In the study group there were 105 doctors aged 26-74, including 74 women and 31 men and 102 patients aged 21-79, including 61 women and 41 men.

## RESULTS

### Patients' view

Research reveals that 66% of patients had never met with the concept of 'telepsychiatry' and did not know what it means. 15% heard about it but did not know what it means, 18% have general but no detailed knowledge, only 1% has a wide knowledge about it. There was no statistically significant correlation with age or gender.

Despite such insignificant knowledge, 50% of respondents answered positively in every question considering utility of telepsychiatry. More precisely for 18% it is possible to replace eye-to-eye conversation by videoconferencing, for 54% it could complement eye-to-eye conversation, but could not replace it, 13% need to know more about it to express their opinion and only for 10% did it seem totally useless. Most patients admit that contact with a physician via videoconferencing could help in the assessment of current well-being and taking drugs regularly.

For the majority (62%) videoconferencing could be helpful in exercises for improving memory and attention. However on a locked ward only one person believed so, and on an open ward only 2 people. That allows us to conclude that this solution would probably be better for patients treated in a dispensary.

### Great opportunity for 'elects'

The generality of patients (63%) claims that there are some people who would agree to talk with a psychiatrist via videoconferencing, but would never go to see him or her. Agoraphobic patients should definitely be included in that group, because very often their fear of leaving home exceeds the sense of need for psychiatric consultation. Additionally, thanks to not quite direct conversation, the patient may feel more anonymous and probably will be more open.

Numerous sources report that telepsychiatry would be effective in many other phobias, such as claustrophobia, acrophobia, aviophobia. VRET (Virtual Reality Exposure Therapy) is a special method of treatment, used to cure anxiety disorders. It is a very important component of cognitive-behavioral therapy for phobias and several other psychiatric conditions. The patients is gradually "exposed" to the situation, which he is apprehensive of (e.g. spiders, snakes, elevators), until the disappearance of symptoms. Researches guided by Botella et al. (2010) revealed the effectiveness of VRET both immediately after, and at the three-month follow-up. Efficacy have been confirmed also in the research by Castro et al.

(2014) amongst agoraphobic patients and in researches by Rothbaum et al. (2000) among aviophobic patients (people afraid of flying).

### Away from hospital or homeland

The vast majority (90%) of patients believe that this method could be helpful for patients living far from hospital. It is worth mentioning here that it does not refer only to Polish people living in Poland and having more than 100 km to the nearest hospital, but also to foreigners, who have no psychiatric care when they cannot communicate in their own language. Telepsychiatry could easily solve that problem. A survey guided by Mucid (2012) conducted amongst asylum seekers, refugees and migrants demonstrated that they feel a higher level of satisfaction and eagerness in using telepsychiatry again and recommend it to others.

### Doctors' opinion

Moving on to the doctors, only 15% of them claim to have an extensive knowledge on telepsychiatry, 76% has a general knowledge about it, 6% heard about it but does not know what it means, and 3% never heard of it. Merely 16% of doctors used telepsychiatry, 84% never tried it. As for the most preferable methods of telepsychiatry physicians chose education materials for patients including lectures and recordings about their diseases, in second place was ranked contact with a doctor in crisis situations, when immediate help is necessary, third came conferences for patients' families, but no men chose that option, fourth came control videoconferencing and the last one was first conversation with an anonymous patient.

According to the physicians telepsychiatry would be most effective in mood and neurotic disorders (wherein men did not take it into account) and less effective in mental disabilities and mental development disorders. The majority of older doctors, despite their greater willingness to introduce telepsychiatry, could not mention a disease in which telepsychiatry could be useful.

Although doctors notice positive aspects of this method, 60% of them would not want its widespread implementation in Poland, 41% of them would want this. Simultaneously 60% of physicians claims that if they had an opportunity to try telepsychiatry they would do that.

### Legal issues

There are many administrative difficulties related to telepsychiatry, such as having the right to practice, agreement on the provision of benefits, malpractice, type of technology and clinical conditions. In Poland there are no regulations about this yet. This could be the reason why the surveyed doctors answered that they are apprehensive of losing personal data and medical confidentiality, and of necessity of legal changes as well 68% of respondents, mainly women and mainly young doctors are afraid of abuse of videoconferencing, what could make caring for patients too time consuming.

Nowadays the main problem in introduction of telepsychiatry is the lack of legal solutions and refund of telemedical services. In accordance with the statement of the Minister of Health telemedicine does not need separate regulations. It is allowed to use it according to the general rules concerning the provision of health services. In pursuance of that interpretation clinical conditions are not precisely regulated, therefore it is allowed to use information technologies while providing medical services.

In those countries in which they have already implemented telepsychiatry methods they are strictly regulated, including the size of the room, safety, distance from screen etc. In USA it is included in the Health Insurance Portability and Accountability Act (HIPPA), whose authors obliged everyone to cypher confidential electronic information concerning the state of health of citizens.

Legal issues are available on the internet e.g. “Telemental Health Guide” and guidelines developed by the American Telemedicine Association “Practice Guidelines for Videoconferencing-Based Telemental Health” (available at: [www.americantelemed.org/docs/default-source/standards/practice-guidelines-for-videoconferencing-based-telemental-health.pdf?sfvrsn=6](http://www.americantelemed.org/docs/default-source/standards/practice-guidelines-for-videoconferencing-based-telemental-health.pdf?sfvrsn=6))- (Yellowlees 2010).

Psychiatrists who are planning to use telepsychiatry are obliged to inform their insurers about it. They also should develop protocols or sets of procedures referring to essential administrative and clinical elements (Shore 2013).

## DISCUSSION

Is telepsychiatry a good method? Studies carried out in countries where it has already been implemented (Andersson 2014) show great effectiveness and efficacy of telepsychiatry in specific treatments as good as exploring wider benefits e.g. cost savings associated with reduced travel, revised care coordination, and cost avoidance through early treatment.

One study (Donker 2013) shows that telemedicine methods are expanding remarkably e.g. nearly 6% of all mobile health applications are now dedicated to mental health. These applications offer help with diagnosing (Deslich 2013), self-monitoring, symptom tracking and documentation (Depp 2010), adherence to traditional therapy (Hilty 2013), and appointment and therapy homework reminders (Chan 2014). Other research show that probably up to 50% of all healthcare attendances will be organized and carried out electronically by 2020 (Weinstein 2014).

Why is telepsychiatry helpful? Using specifically designed software programs makes it possible for patients to self-diagnose, personalize treatment targets and exploit standardized therapy tools to acquire symptom control and recurrence avoidance (Aboujaoude 2015).

What is the situation in Poland? Unfortunately a very little amount of research has been carried out about this topic yet. Even though, one study (Matysiewicz 2008) shows that patients trust in virtual environments in service sectors. Other research (Duplaga 2013) suggests that probably customer trust in virtual organizations in Polish service sectors is high as a consequence of even higher customer satisfaction with traditional organizations and great customer trust in traditional institutions.

It seems, also in Poland telemedicine will reach a high level soon. According to the project of regulations (Wygoda 2015) we can expect a significant progress in telemedicine, after this segment is properly settled. CSIOZ is an institution qualified in 2000, which is responsible for the introduction and common use of Information Technology in the healthcare sector. The main goal is to improve quality of treatment, for example through obligatory introduction after August 1st, 2017 of electronic medical documentation, e-referrals (March 2017) and e-prescribing (August 2016). This prescription can be electronically transmitted to patients by the physician, and then shown in the pharmacy on the patient's smartphone or sent immediately to the pharmacist (Trojnacka-Pytel 2015).

## CONCLUSIONS

The respondents, regardless of their knowledge, age or gender, doctors as well as patients perceive telepsychiatry's advantages. In connection with this, implementing this method into the Polish medical market makes sense and is in accordance with patients opinion. However, lack of knowledge about this notion amongst the vast majority of respondents indicates the necessity of greater promotion of telepsychiatry among patients, who despite their lack the knowledge have a more positive attitude to it than physicians, and of more education of physicians, especially in order to dispel their fears. In addition not only propagation, but also legal regulations and further research are necessary.

**Acknowledgements:** None.

**Conflict of interest:** None to declare.

## References

1. Aboujaoude E, Salame W & Naim L: *Telemental health: A status update. World Psychiatry* 2015; 14:223–230.
2. Andersson G, Cuijpers P, Carlbring P, Riper H & Hedman E: *Guided Internet-based vs. face-to-face cognitive behavior therapy for psychiatric and somatic disorders: a systematic review and meta-analysis. World Psychiatry* 2014; 13:288–95.
3. Baer L, Elford DR & Cukor P: *Telepsychiatry at forty: what have we learned? Harv Rev Psychiatry* 1997; 5:7–17.

4. Bashshur RL, Shannon GW, Smith BR, Alverson DC, Antoniotti N, Barsan WG et al.: *The Empirical Foundations of Telemedicine Interventions for Chronic Disease Management. Telemedicine & e-Health* 2014; 20:769.
5. Botella C, Banos R, Villa H, Perpina A & Garcia-Palacios A: *Virtual reality in the treatment of claustrophobic fear: a controlled, multiple-baseline design. Behav Ther* 2000; 31:583–95.
6. Castro WP, Sánchez MJR, González CTP, Pérez JMB, Portero JAF & Marco RG: *Cognitive-behavioral treatment and antidepressants combined with virtual reality exposure for patients with chronic agoraphobia. Int J Clin Health Psychol* 2014; 14:9–17.
7. Chan S, Torous J, Hinton L & Yellowlees P: *Mobile tele-mental health: increasing applications and a move to hybrid models of care. Healthcare* 2014; 2:220–33.
8. Depp CA, Mausbach B, Granholm E, Cardenas V, BenZeev D, Patterson TL et al.: *Mobile interventions for severe mental illness: design and preliminary data from three approaches. J Nerv Ment Dis* 2010; 198:715–21.
9. Deslich S, Stec B, Tomblin S & Coustasse A: *Telepsychiatry in the 21st century: transforming healthcare with technology. Perspect Health Inf Manag* 2013; 10:1.
10. Donker T, Petrie K, Proudfoot J, Clarke J, Birch MR & Christensen H: *Smartphones for smarter delivery of mental health programs: a systematic review. J Med Internet Res* 2013; 15:247.
11. Duplaga M & Dzida D: *The growth of e-health services focused on mental health. Zdrowie Publiczne i Zarządzanie* 2013; 11:295.
12. Gawdzik N, Kachnic J, Wojtuszek M, Wutke J & Krysta K: *Knowledge About Telepsychiatry Among Patients in Poland. Eur Psychiatry* 2015; 30(Suppl 1):315.
13. Hilty DM, Ferrer DC, Parish MB, Johnston B, Callahan EJ & Yellowlees PM: *The effectiveness of telemental health: a 2013 review. Telemed J E Health*. 2013; 19:444–54.
14. Klasnja P & Pratt W: *Healthcare in the pocket: mapping the space of mobile-phone health interventions. J Biomed Inform* 2012; 45:184–98.
15. Krzystanek M & Krupka-Matuszczyk I: *Telepsychiatry - psychiatric advice on the Internet. Psychiatr Pol* 2003; 37:1073-1082.
16. Matysiewicz J & Smyczek S: *Customer trust in virtual environments in service sectors (a case study in Poland). International Journal of Networking and Virtual Organization* 2008; 5:300-324.
17. Matuszczyk M: *Psychiatry online--one-year experience from the practice of virtual psychiatry. Psychiatr Pol* 2000; 34:1007-1015.
18. Mucic D: *Cross-cultural telepsychiatry and its impact on quality of care. Eur Psychiatr* 2012; 27(Suppl 1):1.
19. Rothbaum B, Hodges L & Smith S: *A controlled study of virtual reality exposure therapy for fear of flying. J Consult Clin Psychol* 2000; 68:1020–1026.
20. Sawicka M & Charzynska K: *The role of a psychiatrist in treatment and recovery process of persons suffering from schizophrenia. Psychiatr Pol* 2015; 49:377-389.
21. Shore JH: *Telepsychiatry: videoconferencing in the delivery of psychiatric care. Med. Prakt. Psychiatr* 2013; 1:43-52.
22. Shore JH, Hilty DM & Yellowlees P: *Emergency Management Guidelines For Telepsychiatry. General Hospital Psychiatry* 2007; 29:199–206.
23. Trojnacka-Pytel M: *Kroki na drodze informatyzacji (2015 July 14). Retrieved from: <http://www.mp.pl/empendium/aktualnosci/show.html?id=123624>.*
24. Weinstein RS, Lopez AM, Joseph BA, Erps KA, Holcomb M, Barker GP et al.: *Telemedicine, telehealth, and mobile health applications that work: opportunities and barriers. Am J Med* 2014; 127:183–7.
25. *Wygoda na odległość (2015 July 08). Retrieved from: <http://www.mp.pl/kurier/123324>.*
26. Yellowlees P, Marks S, Hilty D & Shore JH: *Using e-health to enable culturally appropriate mental healthcare in rural areas: Telemed J E Health* 2008; 14:486–492.
27. Yellowlees P, Shore J & Roberts L: *American Telemedicine Association: Practice guidelines for videoconferencing-based telemental health. October 2009. Telemed J E Health*. 2010; 16:1074- 1089.

Correspondence:

Magdalena Wojtuszek, MD  
Department of Psychiatry and Psychotherapy, Medical University of Silesia  
ul. Ziołowa 45/47, 40-635, Katowice, Poland  
E-mail: m.wojtuszek@wp.pl