Economic Perspectives on Setting up and Running Telepsychiatry Services in India

Khushboo Dewani¹, Chethan Basavarajappa², Guru S Gowda³, Mahesh R Gowda¹, Preeti Srinivasa¹, Chandrashekar Muthyalappa¹, Channaveerachari N Kumar³, Narayana Manjunatha³, Sandeep Vohra³, Suresh Bada Math²

ABSTRACT

Background: Telemedicine Practice Guidelines, 2020 and Telepsychiatry Operational Guidelines, 2020 can be potential game changers in the practice of medicine in India. They provide legal grounds for the practice of telemedicine. The economics of setting up and running telepsychiatry services vis-à-vis in-person services in India is discussed in this paper to aid the practitioners in understanding the costs involved in each of these modalities.

Methods: Costs for various hardware, software, real estate, and human resources are collated from various sources. Telepsychiatry vs. in-person setup is compared for the costs involved.

Results: Telepsychiatry consultation will cost much lesser to that of in-person consultation.

Conclusions: Telepsychiatry is an economically viable option. There are many benefits and hurdles in telepsychiatry practice. It is a step towards providing psychiatric services at the doorstep in compliance with the Mental Healthcare Act 2017, upholding the rights of persons with mental illness. It will benefit the practitioner, the patient, and the society.

Keywords: Costs, economics, telemedicine/telecare, telepsychiatry

Board of Governors, in supersession of the Medical Council of India in partnership with the National Institution for Transforming India (NITI Aayog), released Telemedicine Practice Guidelines 2020 (TMPG) on March 25, 2020—a potential game-changer in the practice of medicine in India. The guidelines constitute Appendix 5 of the Indian Medical Council (Professional Conduct, Etiquette, and Ethics) Regulations 2002 (IMC regulations). It was the right time to embark upon the rarely charted territory in view of the current coronavirus disease (COVID) pandemic. It will enable the registered medical practitioner (RMP) to provide healthcare using telemedicine. Indian Psychiatric Society and Telemedicine Society of India, in collaboration with the National Institute of Mental Health and Neurosciences (NIMHANS), soon brought out Telepsychiatry Operational Guidelines 2020 (TPOG) on May 26, 2020.

Telemedicine practice was created by a verdict on a bail plea “Deepa Sanjeev Pawaskar and another vs. The State of Maharashtra” given by the High Court of Maharashtra (pronounced on July 25, 2018). In this case, a post-cesarean patient who presented to the hospital with vomiting was re-admitted and treated with instructions over the telephone. The lady succumbed to death later, and negligence was alleged. However, the culpable negligence charge held against the doctors was not for instructing telephonically, but for issuing the prescription without diagnosis. Indian Medical Association East Delhi branch went overboard at that time issuing a notice...
to doctors that they should not consult over phone/WhatsApp as it can be punishable under Indian Penal Code, section 304 (punishment for culpable homicide not amounting to murder). This was but a gross misinterpretation of the judgment; nevertheless, the practitioners got scared. In this COVID situation, when the general medical care has suffered due to the travel restrictions and closure of healthcare facilities, TMPG has presented a fresh opportunity to allay fears connected with telemedicine practice. TMPG, in the section “Telemedicine Applications” (Section 1.4), says that consultation can be through video, audio, text-based, or via asynchronous (email/fax), while the section “Technology of Telepsychiatry” (Section 3) of TPOG describes the hardware and software requirements for setting up and running telemedicine consultations.

One should also note that the conservative annual estimated cost to implement Mental Healthcare Act (MHCA) 2017 would be 94,073 crore rupees if used in the traditional way of the brick & mortar model. We see that India has today the world’s cheapest rate of data, and India has about 600 million Internet users. If we use telemedicine both for logistics and service delivery for implementation at center & state government levels, then the cost can be reduced drastically with substantial gain for people suffering from mental health problems.

The economics of setting up and running telepsychiatry services vis-à-vis in-person services in India is discussed in this paper to aid the practitioners in understanding the costs involved in each of these modalities. The cost calculation of setting up and running telepsychiatry and in-person services was attempted to assist the practitioners in understanding the costs involved in each of these modalities. There is a notion that telepsychiatry practice would be a burden on the practitioners and the patients economically. Hence, a detailed cost calculation is in order. This paper discusses only the costs involved in technology and real estate and does not discuss the consultation costs, which are determined by expertise, time duration, and timings of the consultation.

The cost of care for the patient, however, would include both. We discuss the setup in terms of a single practitioner, group of practitioners sharing the premises (polyclinics), and larger institutions with multiple departments.

Materials and Methods

Costs for various hardware, software, real estate, and human resources are collated from various sources. Telepsychiatry vs. in-person setup is compared for the costs involved.

Single Practitioner

The costs can be grouped under one-time investments and recurring costs for hardware and software.

1. Hardware
   a. Dedicated office mobile/landline: Will help in better organization and management of telepsychiatry services. Bharat Sanchar Nigam Limited offers a combination of 20 Mbps till 100 GB with free calling services for Rs. 499 with one month Fixed Mobile Convergence charges as a security deposit, which ranges from Rs. 120 (rural) to Rs. 160 (urban). If one wants to buy a smartphone which can be used for consultation too, it will cost above Rs. 15,000 for a 4G enabled smartphone with 6 GB random access memory (RAM). The cost of the smartphone can vary according to the features and brand, ranging from Rs. 15,000 to premium phones, which may cost around Rs. 120,000. The cost of a subscriber identification module (SIM) card is anywhere between Rs. 10 and Rs. 5,000 (depending on the tariff of the plan with which the SIM is free). It costs about Rs. 500 for 3 GB per day, which is sufficient for a mid-range user (not streaming high definition videos). A dedicated email and social media profiles are free to open and use. The same setup is applicable for in-person services too.
   b. Internet connection: As discussed earlier, it would cost about Rs. 500 for 3 GB per day Internet, whether it is fiberoptic or landline-based or mobile-based. A 1-hour video call consumes about 200–300 MB of data. A WhatsApp voice call consumes about 45–50 MB per hour. A 3 GB per day would be sufficient for video consultation for about 10 hours. Having two Internet connections from different Internet service providers will help in the case of a signal drop. Hence, it would cost about Rs. 1,000 per month for the Internet.
   c. Wi-Fi router: Having at least a 2.4 GHz bandwidth Wi-Fi router will be beneficial. The router would cost about Rs. 2,500 to Rs. 5,000. This, too, is an additional cost for telepsychiatry services.
   d. Laptop/desktop: A laptop or a desktop with a web camera with a good graphics card, at least 8 GB RAM with an inbuilt operating system, can cost Rs. 30,000 to Rs. 50,000. Web camera costs between Rs. 1,500 and Rs. 40,000 (for conference cameras). A web camera with 720p with inbuilt mic costing around Rs. 2,500 would suffice for a consultation. This is optional equipment. Many may choose to have a desktop/laptop in their clinics to aid in setting up appointments, the printing of receipts, etc. Hence, practitioners may utilize it even in in-person consultations.
   e. Headphones: An over-the-ear headphone with cuff helps in background noise reduction and can be used for extended periods, unlike in-the-ear earphones. It costs about Rs. 3,000 and Rs. 5,000 for a headphone with a built-in mic. This equipment is exclusive for telepsychiatry services.
   f. Printer/scanner: An all-in-one printer will be handy to take printouts of the notes and scan the prescriptions. It costs around Rs. 5,000 to Rs. 20,000 (for dual-sided, faster printing capabilities). This, too, is a piece of optional equipment like laptop/desktop.
   g. Writing material: A4 white paper costs about Rs. 400 to Rs. 500 for 500 sheets. A pen costs about Rs. 10 per piece. Both telepsychiatry and in-person consultation will require writing material.
h. Telepsychiatry chamber: Lightings—three warm, white light emitting diode (LED) lights (3,200K–4,000K) for three-point lighting to avoid shadows can be planned. A 20W smart LED Batten would cost about Rs. 2,500. A smart LED is beneficial as one can change the intensity and color of the light, depending on the environmental conditions.

Soundproofing: soundproofing a 10 feet × 10 feet × 12 feet room with foam costs about Rs. 200,000. The presence of furniture, floor mats, and thick curtains over the window also reduces echoing in the room. Curtains and floor mats would cost about Rs. 1,000 to Rs. 2,000 per piece. A computer table with a keyboard tray costs about Rs. 5,000 to Rs. 7,500. An office chair with good back-support costs about Rs. 5,000 to Rs. 10,000. One need not invest in soundproofing if it is not necessary.

The consultation chamber in the clinics can be converted to aid in teleconsultation. A practitioner may choose to have a consultation chamber at all and provide only telepsychiatry consultations from their home. In this case, a room with the above specifications would help in delivering better telepsychiatry consultation.

i. Electricity: About 250 kWh is utilized by desktops with a modem, speakers, etc. It costs about Rs. 6 per unit (kWh) in India, which works out to Rs. 1,500 per year or Rs. 125 per month. This cost will be added to the electricity costs of the clinic.

j. File storage: External hard disks for additional storage costs above Rs. 3,500. This is optional.

One needs to remember that most of the electronic hardware depreciates over time and needs to be replaced once in 2–5 years.

2. Software

a. Audio-video: Text messages are integrated into the tariffs of mobile phone plans. On average, 100 short message services (SMS) can be sent per day. Other text messaging services like WhatsApp are free of cost. Emails may consume less than 1 MB per mail. Voice calls are also integrated into the tariffs of mobile phone/landline plans. Voice calls over WhatsApp/Skype/Zoom/Google meet/Facebook etc. consume data but are free of cost. They have a cap on the number of participants, the time of each session, etc. Software for typing and printing the notes and prescriptions would be required. It costs about Rs. 8,000 for a one-time purchase of Microsoft Office Home & Student 2019 and Rs. 4,200 per year for Microsoft 365 Personal. A one-time purchase would be sufficient. One may also choose to use freely available software for this purpose. A practitioner may choose to have a computer with up to date software in even an in-person setup.

b. Electronic health record (EHR): EHRs should only augment the telepsychiatry consultation. These are platforms that offer facilities for video consultation, booking of appointments, and follow-up reminders for patients. Some platforms provide these facilities cost about Rs. 1,000 per month.

Additional storage and servers may cost more. A dedicated server hosting in India may cost about Rs. 10,000 per month. Cloud storage ranges from Rs. 800 to Rs. 1,500 per year for 100 GB of storage. Cloud storage hard disks of 2 TB capacity cost about Rs. 20,000.

An electronic medical management system can cost anywhere between Rs. 1,500,000 and Rs. 20,000,000 (for a bigger hospital) as a one-time investment and recurring costs for maintenance. The cost would depend on the features that can be added in the software like appointment management, prescription dispersal, availability of medical records to both clinician and patient, reminders to the patient for follow-up consultation, etc. At this stage, we do not recommend the use of costly EHRs for the usage by single practitioners.

A practitioner can use the above-mentioned tools for consultation or use old pen and paper methods to record the details of the consultation, update the same in the patient’s file, and provide the necessary details as per MHCA 2017 to the patient while sending the prescription would be cost-effective. It will also absolve the practitioner from the additional burden of data storage and possibilities of data leak connected to it.

EHRs are currently not necessary to run telepsychiatry. But many practitioners choose it as it will ease the processes of registration, tracking of follow-ups, etc. A word of caution is to be aware of the clause of “advertisement” of IMC regulations.

3. Real estate

It is difficult to provide an accurate real estate cost as the costs vary according to the geographical area and commercial value of that area. In a metropolitan city like Bengaluru, the rental prices vary from Rs. 45 to Rs. 125 per square foot per month. For a chamber of size 500 square feet, the costs would be about Rs. 22,500 to Rs. 62,500, an average of Rs. 50,000 per month.

As discussed earlier, a practitioner may choose to provide telepsychiatry consultations from their homes. In such a case, this cost will be exclusive to in-person consultations.

4. Human resources

Many practitioners hire a receptionist to manage their appointments and fee collection. On average, the salary varies from Rs. 10,000 to Rs. 20,000 per month.

With booking an appointment through text message or email, digital payments, and EHR available, the need of a receptionist comes down drastically. Due to this reason, this cost can be termed as exclusive to in-person consultations.

5. Others

a. Professional indemnity insurance (PII): We are slowly turning into a litigious society. It is better to have a PII. Many governments and private insurance companies provide PII. The costs will vary depending on the type of practice, area of practice, individual vs. hospital, etc. The cost of the premium may vary from 0.10% to 0.20% of the sum insured and Goods and Services Tax additionally. For example, for Rs. 1 crore of insurance, it will cost about Rs. 12,000 per annum. Whether the costs of the premium will increase for telemedicine practice needs to be seen.

b. The registration fee for setting up a clinic: In the state of Karnataka, ac-
According to Karnataka Private Medical Establishments Rules (amendments) 2018, the registration fee for setting up a clinic without additional facilities is Rs. 2,500. The registration is valid for 5 years.\(^1\)

This cost is exclusive for an in-person consultation setup.

**c. Biomedical waste management:** Every clinic will have to register for biomedical waste management and manage the waste according to the rules of the land. It costs about Rs. 750 per month for this.

This cost is exclusive for an in-person consultation setup.

**d. Other insurances—fire safety, theft, etc.** The cost of this item varies depending on the scale of the clinic, additional facilities, etc. On average, it costs about Rs. 6,000 to Rs. 10,000 p.a. for a small-scale clinic.

This cost is exclusive for an in-person consultation setup.

A practitioner can choose to use:

1. **Only a smartphone with Internet connectivity; consult audio/visually; write the notes and prescription on a sheet of paper; transmit it to the patient.** One-time setup costs would be about Rs. 40,000, and recurring costs would be around Rs. 1,500 to Rs. 2,000 per month.

2. **A laptop/desktop with wired Internet connectivity, printer-scanner along with the above, would cost about Rs. 15,000 to set up and about Rs. 2,000 to Rs. 5,000 per month as recurring costs.**

3. **An EHR system with the above with an additional cost of Rs. 1,000 per month and with server and storage facilities for additional costs, as discussed earlier.**

For an easier understanding of the costs involved, a table of costs is provided in **Table 1**.

By using basic equipment that is cost-effective like a non-premium smartphone ranging from Rs. 15,000 to Rs. 25,000, a headphone worth Rs. 3,000 to Rs. 5,000, mobile Internet package of 3 GB per day, and additional wired Internet connection worth Rs. 1,000 per month, a single practitioner may practice telepsychiatry from his home. This setup would cost about Rs. 30,000 as a one-time investment and about Rs. 1,500 per month as recurring costs with an additional cost of Rs. 1,000 per month if EHR is used.

Additionally, PII will be required. For a practitioner who sees about four to five patients per day or 100 patients in a month or 1,000 patients per year, the cost of telepsychiatry would be about Rs. 60 per patient to recover the costs of the setup in 1 year. When EHR is used, the prices may go up to Rs. 70 per patient.

If the practitioner already has a dual-SIM smartphone and wants to use the same phone with an extra SIM for consultation, without additional wired Internet facility, the costs would be about Rs. 500 to Rs. 1,000 per month plus PII costs, translating to Rs. 20 to Rs. 25 per patient. If EHR is used, the costs may go up to Rs. 30 to Rs. 35 per patient.

These estimates are barring the service costs of the consultation. Service costs will depend on the field of medicine, the expertise of the consultant, the time required for consultation, geographical area, etc.

A single practitioner can have two kinds of telepsychiatry models.

1. **Hybrid or Blended Model:** Herein, a patient can be seen both by coming to the clinic in person and through telepsychiatry as and when required depending on the patient's distance from the clinic and cost of travel, etc. The cost of running a telepsychiatry facility would be added to that of running a clinic.

2. **Standalone Virtual Clinic:** Herein, a patient can take consultation from any place of their choice without visiting the doctor in person. Only the cost of electronic gadgets and the broad-

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**Table 1.**

| SN | Budget head                                      | Telepsychiatric Services | Recurring cost (per month) |
|----|-------------------------------------------------|--------------------------|---------------------------|
| 1  | Smartphone                                      | Rs. 15,000               | –                         |
| 2  | Headphone                                       | Rs. 3,000                | –                         |
| 3  | File storage (optional)                         | Rs. 3,500                | –                         |
| 4  | Electricity (additional)                        | –                         | Rs. 125                   |
| 5  | Social media                                    | Free                     | Free                      |
| 6  | Video conferencing/audio/text                   | Free                     | Free                      |

**Required for both telepsychiatry and in-person consultation**

| SN | Budget head                                      | One-time cost (minimum) | Recurring cost (per month) |
|----|-------------------------------------------------|--------------------------|---------------------------|
| 1  | Writing material                                 | –                        | Rs. 500                   |
| 2  | Infrastructure (lights/table/chair/floormat/curtain, etc.) | Rs. 20,000              | –                         |
| 3  | Indemnity insurance                             | Rs. 12,000               | Rs. 12,000 (p.a.)         |
| 4  | Internet tariff (SIM/landline based) (optional) | Rs. 500                  | Rs. 500                   |
| 5  | Wi-Fi router (optional)                          | Rs. 2,500                | –                         |
| 6  | Laptop/desktop (optional)                        | Rs. 30,000               | –                         |
| 7  | Printer/scanner (optional)                       | Rs. 5,000                | –                         |
| 8  | Software for typing (optional)                   | Rs. 8,000/free           | –                         |
| 9  | EHR (optional)                                   | –                        | Rs. 1000                  |

**Required exclusively for in-person consultation**

| SN | Budget head                                      | One-time cost (minimum) | Recurring cost (per month) |
|----|-------------------------------------------------|--------------------------|---------------------------|
| 1  | Real estate                                      | –                        | Rs. 50,000                |
| 2  | Human resources                                  | –                        | Rs. 20,000                |
| 3  | Registration fee                                 | Rs. 2,500                | Rs. 2,500 (once in 5 years)|
| 4  | Biomedical waste management                       | –                        | Rs. 750                   |
| 5  | Other insurances                                 | Rs. 10,000               | Rs. 10,000 p.a.           |

EHR: Electronic Health Record; SIM: subscriber identification module.
band connection would suffice to run telepsychiatry. This is especially a boon for young budding psychiatrists who can avoid the financial burden of a loan at the beginning by utilizing telepsychiatry services and can have tie-ups with nearby hospital/nursing homes for inpatient care if and whenever required. Later on, depending on their success with a virtual clinic, they can either continue with it or convert it into a blended model.

Polyclinics
For a polyclinic facility, either each consultant can run their own telepsychiatry consultation from their chambers, the cost of which would be the same as mentioned above, or have a dedicated telepsychiatry chamber, which all the practitioners could use. The requirement of bandwidth will vary according to the number of persons using the telepsychiatry facility at the same time. A general polyclinic has 5–10 practitioners. One router would work well, even with five systems connected to it. Hence, one to two Internet connections would suffice. A central printer/scanner, if required, would be cost-effective. Although the real estate values for running a bigger space would increase, the costs would be shared by all the practitioners, and hence, the costs would be similar to a single person setup.

A polyclinic might still want to hire a receptionist to maintain the premises and records.

The costs for five practitioners running telepsychiatry from their own chambers with a shared Internet connection with the receptionist, each seeing about 1,000 patients per year, would come to Rs. 50 per patient and Rs. 20 without a receptionist.

Institutes
A larger institute would require dedicated infrastructure with multiple consultation rooms, higher bandwidth Internet, and each room equipped with desktops with a good camera, speakers, and lighting system. The electricity required for running such a facility would also be higher.

One should also remember that some of the costs of setting up the telepsychiatry practice are the same as setting up an in-person practice, for example, having a dedicated phone number, furniture, writing material, electricity, etc. Many prefer to have Internet connectivity, a desktop/laptop, and printer-scanner in their clinics. In these cases, the additional costs of setting up telepsychiatry consultation would be a rearrangement of lights, headphones, and external hard disks, if required.

Results
If we compare the costs of in-person consultation with that of telepsychiatry consultation, telepsychiatry will cost much lesser. For a single practitioner, a chamber (Rs. 50,000) and the receptionist (Rs. 20,000) will cost about Rs. 700 per patient as opposed to Rs. 60 to Rs. 70 per patient in telepsychiatry.

Discussion
Benefits
We can look at the benefits from three angles: that of a practitioner, a patient, and society. An in-person consultation is staggeringly 10 times costlier than telepsychiatry consultation. It is an economically viable option for the practitioner to run telepsychiatry as the costs incurred are much lesser and would fall within the ambit of rates fixed by the Government of Karnataka for outpatient consultation (at par with Central Government Health Scheme, which is Rs. 135). Apart from these direct cost benefits, indirect cost savings for the practitioner will arise from reduced travel time and costs, reduced exposure to air/noise pollution, reduced hassles of facility management of an in-person clinic, and so on.

For the patient, the cost of consultation may come down as some of the cost-benefit is transferred to them; a reduction in travel costs, a reduction in travel costs and travel-time, no requirement for the patient and their attendant having to apply for leave, and taking consultation at the comfort of home are some of the benefits.

Society stands to benefit by the promise of care at doorsteps, better implementation of MHCA 2017, reduced stigma (as the patient does not go to the hospital), better follow-up rates, better health translating to better functioning of the individuals and reduced carbon footprint.

The government of India is pushing for the digitization of health records by having nationwide EMR systems for the hospitals. Currently, the online registration system is functioning for government hospitals to aid in digitizing the hospitals. Psychosocial support in disaster situations is another area where telemedicine can have a significant role. It will be cost-effective if, in such situations, multiple teams from different parts of the world can simultaneously render service.

Unlike other branches in the medical sciences, in psychiatry, the primary mode of examination is mental status; hence, it stands better poised to provide services using telemedicine. Thus, it will be a boon to cover the treatment gap for mental health in our resource-restricted country. As telepsychiatry services provide greater anonymity and confidentiality, it will encourage more patients to seek treatment within the confines of their homes itself. The increased service utilization thus arising will improve the quality of life of more and more people and thus contributing to the cumulative productivity at the national level.

Hurdles
Everything is not rosy, and there are a few hurdles too. As the practitioner can consult anyone from any part of the country, and with the Consumer Protection Act 2019, when the consumer can approach the consumer forum at their place, the practitioner may have to travel to the consumer’s place if required.

Economic growth surrounding the travel of patients, their attendants, and practitioners like the cost of travel, food for them, recreation, etc., may be lost as the consultation can be done from their homes. Digital literacy in India is still low, and usage of technology by rural Indians for availing telepsychiatry is still debatable, but the patient can travel to the nearest Primary Health Centre where the RMP over there can avail telepsychiatry for the benefit of the patient.

One should remember that one requires 10–15 minutes of additional time for documentation while using telepsychiatry.

A practitioner can use free social media platforms like Facebook/WhatsApp etc.,
The consent and terms and conditions to be signed up before a consultation as a prerequisite should be in place. Apart from providing the usual information as mentioned in the TPOG, it can also include aspects like the duration of consultation, the fee to be paid, contact number for emergencies, and contingency measures if there is a loss of Internet connectivity.

Another critical issue is the validation of e-prescription by pharmacies. Many pharmacies refuse to provide medications based on the scanned copies of prescriptions and/or e-prescriptions. There are also chances of misutilization of the prescription by the patients to buy the medicines from multiple pharmacies as the e-copy cannot be marked after issuing medications by the pharmacy. A nationwide network of pharmacies and tracking systems for the prescriptions may solve the issue but is haunted by the possibility of a security breach.

Limitation of the Paper
The estimates of the costs are rough estimates as the costs vary from time to time. Many practitioners may run both telepsychiatry and in-person consultation and for the same patients.

Conclusion
Telemedicine and telepsychiatry practice could be a game-changer in the way consultation is done. Telepsychiatry is an economically viable option, at least 10 times less costly than an in-person consultation. There are many benefits and hurdles in telepsychiatry practice. It is a step towards providing psychiatric services at the doorstep in compliance with the Mental Healthcare Act 2017, upholding the rights of persons with mental illness. It will benefit the practitioner, the patient, and the society. The government can provide incentives in terms of tax benefits etc. to the practitioners and patients to use the telepsychiatry facilities.

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Approach to Informed Consent in Telepsychiatric Service: Indian Perspective

Guru S Gowda¹, Arun Enara², Furkhan Ali¹, Mahesh R Gowda³, Chethan Basavarajappa¹, Channaveerachari Naveen Kumar⁴, Suresh Bada Math¹

ABSTRACT

Consent is an essential and important medico-legal prerequisite for a patient’s treatment. This necessitates the service provider to participate in the informed consent process and discuss the risk-benefit of the proposed treatment, the best available treatment, engage in shared decision-making process, opportunity to convey their view and thereby limit chances of legal liability for all parties. The clinician should have ample knowledge and skill pertaining to the informed consent process and also have adequate understanding of medical ethics and law. This article provides an overview on informed consent pertaining to telepsychiatric services in India.

Keywords: Psychiatry, consent, telepsychiatry, India

Consent is a process that allows for free expression of an informed choice by a capable person to participate in a treatment or a study. The motive of consent is to respect a person’s autonomy and protect his/her right to choose by a rational decision-making process. Informed consent is a process of communication between a patient and a doctor. The doctor gives the patient enough information so that the patient can make an informed decision regarding the proposed procedure, test, examination, or treatment; the patient makes an informed decision after reasonably foreseeing the consequences of the choice. Informed consent is an important medical, ethical, and legal prerequisite for the treatment of a patient; failure to do so is an offense and a crime. The informed consent has a legal connotation and focuses on the choice or free will of the individual to decide on the assumption that the person has the capacity to make treatment-related decisions. Consent is primarily based on three guiding principles, autonomy, beneficence, and justice for participants.

Consenting procedure gained relevance and has played a vital role in the delivery of health care due to the rapidly changing approach of modern medical practice and the transition from a paternalistic care model to a collaborative care model. This is also partly due to the evolving approach of treating healthcare seekers as service users and not just as patients. The introduction of newer technologies, innovation, data science, and artificial intelligence (AI) into modern medical technology has also brought a change.

The concept of informed consent is universally accepted and now constitutes Article 7 of the International Covenant on Civil and Political Rights of the United Nations. This also served as the basis for the multiple international conventions such as the United Nations International Covenant on Civil and Po-