

Telepharmacy: A Detailed Review

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Abstract- Telepharmacy is a new way to provide pharmacy services using technology, such as video calls, phone calls, and messaging. It will help people to get medication advice and support without needing to visit a pharmacy. This is especially useful for people who live in remote or rural areas where pharmacies are far away. Telepharmacy offers several benefits. It makes it easier for patients to access medication services, saves time and travel costs, and helps people stick to their medication routines. It also allows pharmacists to work closely with doctors and patients to make sure medications are used safely and effectively.

Despite these benefits, there are some challenges to telepharmacy. These include dealing with regulations, making sure everyone has access to the necessary technology, and protecting patient information. Research and testing are important to understand how well telepharmacy works and to find the best ways to use it.

In summary, telepharmacy is an exciting development that can make getting pharmacy services more convenient and effective, especially in areas where traditional pharmacy access is limited.

INTRODUCTION

The progress of medical treatments depends on the proper and effective relation between the healthcare providers and patients. Within the growth of information technology and the rapid access to a large quantity of data on the internet in recent years, a new form of communication between healthcare physicians and patients has concluded through a variety of technology-based healthcare services. Telemedicine is known as the use of electronic communication to provide medical information from one location to another and to provide and support clinical care. Telepharmacy is a part of telemedicine that provides pharmaceutical services within the scope of the pharmacist's responsibilities while maintaining a temporal and spatial distance between the patients and healthcare professionals. The term "telepharmacy" refers to a type of pharmaceutical care in which pharmacists and patients are not physically present but can communicate through information and

communication technologies. Examples of telepharmaceutical services are drug selection, order review and distribution, patient counselling, monitoring, and clinical service provision. Previous research has found that telepharmacy can improve the healthcare and the quality of pharmaceutical services, decrease healthcare-pharmaceutical errors, increase patients' access and enable recognition of unknown adverse effects of drugs, increase pharmacist, nurse, and physician approval, reduce healthcare-pharmaceutical service expenses, and improve pharmacist education.

Growing evidence recommends that telepharmacy and the implementation of such technology may reduce shortages and inequalities in the provision and distribution of healthcare services for patients living in rural communities. It has been a long common practice for community pharmacists to give patient care over the phone. However, utilizing Internet teleservices like messaging apps, smartphone apps, and online shopping has just become commonplace in latest years. Pharmacy practices quickly changes to include medication counseling, drug therapy monitoring, COVID-19 elucidation and screening, and medicine home delivery for patients. These services have improved patients' lives and made it easier for patients to contact pharmacists. In Saudi Arabia, telepharmacy services are regulated by the Ministry of Health, which has issued rules on the use of telepharmacy, which include requirements for the qualifications of pharmacists giving telepharmacy services, the confidentiality of patient information, and the need for a physical pharmacy location to support the telepharmacy service. In the community system, telepharmacy can improve access to pharmacy services in remote areas. It also provide more convenient access to pharmacy services for patients who are difficult to travel to a physical pharmacy location. In Saudi Arabia, there is lack of data about the knowledge, beliefs, and readiness for telepharmacy among community pharmacists. As a result, this study is aimed to analyze community

pharmacists' knowledge, observations, and readiness for telepharmacy services in Saudi Arabia.

IMPORTANT AND BENEFITS

Because it may provide pharmacy services to underserved and distant populations, where access to healthcare resources is frequently limited, telepharmacy is significant. Principal advantages consist of:

- **Better Access to treatment:** Patients residing in remote or rural regions can obtain essential pharmaceutical treatment without having to travel thanks to telepharmacy.
- **Convenience and Efficiency:** By managing their medicines and consulting with chemists from the comfort of their homes, patients can cut down on travel time, save the patients time and can easily access the medicine.
- **Better drug Adherence:** Patients who are having trouble adhering to their prescribed drug regimens can benefit from regular virtual check-ins and follow-ups.
- **Improved Collaboration:** Telepharmacy has the ability to make it easier for patients, doctors, and chemists to communicate with one another, which results in better drug management and also care for the coordination.

TECHNICAL INSTRUMENTATION

Telepharmacy requires a strong technology foundation to be successful. Important factors are:

- **Telecommunication Platforms:** Private messaging and secure video conferencing.
- **Electronic Health Records (EHRs):** Pharmacists can have access to patient's data and make knowledgeable decisions by integrating their systems with EHRs.
- **Data security:** adhering to laws like the Health Insurance Portability and Accountability Act (HIPAA) in order to protect patient information.

DIFFICULTIES AND OBSTACLES

Although telepharmacy has several advantages, the number of limitations are:

- **Regulatory Issues:** The adoption of telepharmacy services may be loaded by differences in state and federal legislation.

- **Technology Literacy and Access:** Not all patients have knowledge in technology or have access to the tools to use it properly.
- **Privacy Concerns:** Conserving trust and adhering to regulatory requirements depend on the security of patient data in digital communications.

CURRENT TRENDS AND FUTURE DIRECTIONS

The area of telepharmacy is always changing due to developments in technology and alterations in healthcare delivery methods. The latest trends are:

- **Integration with Telehealth Services:** Bringing together telemedicine and telepharmacy to offer a more encircling method of patient care.
- **Automation and Artificial Intelligence (AI):** AI is used to have advanced decision making and help with drug administration.
- **Service Expansion:** Increasing the number of services provided by the telepharmacy, including more access to specialised care and remote patient monitoring.

CONCLUSION

To conclude, telepharmacy signifies a revolutionary development in the area of pharmaceutical care, enhancements in medication administration, accessibility, and convenience. Telepharmacy uses digital technology to fill gaps in healthcare access, especially for those living in underserved or distant areas, by increasing the accessibility of necessary pharmaceutical services. Telepharmacy offers several advantages, such as better coordination between patients, chemists, and healthcare providers, as well as streamlined drug administration and increased patient engagement. Notwithstanding the encouraging benefits, issues including data privacy, technological obstacles, and regulatory compliance need to be resolved to guarantee the fair and efficient use of telepharmacy services. Telepharmacy has the potential to become an essential part of contemporary healthcare, improving patient outcomes and a more efficient healthcare system as technology and regulatory frameworks continue to change.

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