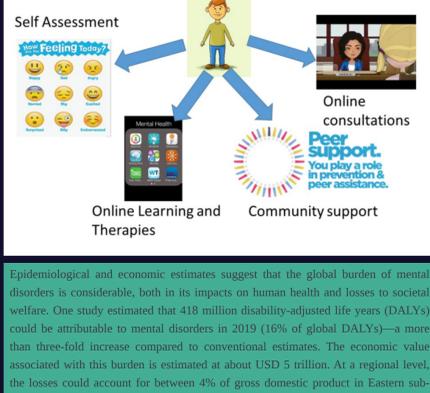


NEWSLETTER SEPTEMBER 2023

Message from CEO

Growing need to Telemedicine in Mental Health. Creating a comprehensive model.



Epidemiological and economic estimates suggest that the global burden of mental disorders is considerable, both in its impacts on human health and losses to societal welfare. One study estimated that 418 million disability-adjusted life years (DALYs) could be attributable to mental disorders in 2019 (16% of global DALYs)—a more than three-fold increase compared to conventional estimates. The economic value associated with this burden is estimated at about USD 5 trillion. At a regional level, the losses could account for between 4% of gross domestic product in Eastern sub-Saharan Africa and 8% in High-income North America.

Growth in mobile technologies, internet and access to personalized devices and content provides a great opportunity to address mental health crisis around the world. Mobile-based platforms can be used to offer a range of mental health services, such as:

- Accessing Information material and self-learning tools related to mental health. Age, gender and culturally appropriate mental health information material should be made available for the communities to help them improve their mental conditions and seek appropriate help at the right time.
- Engaging with community members for sharing mental health experiences. Such engagement is possible using a variety of chatting, audio and video platforms where the privacy of people accessing the service can be maintained.
- Assessing personal mental health condition using standardized scales and seeking help accordingly. Such scales should be made available for communities to conduct simplified self-assessment in a confidential environment. These results can also be monitored by mental health experts following users' consent. Specific recommendations made through such tools would allow people to access the required support without any delays.
- Consulting expert counselors and specialists when required. Availability of mental health professional online would bypass the barrier of stigma and resistance from the families and society. Telepsychiatry is a well-established field and continues to help thousands of people with the use of mobile technologies.

Tech4Life Enterprises has partnered with various organizations and key players in mental health for designing applications that could impact mental health for large populations. Such programs have been implemented in countries like Afghanistan and Pakistan with funding from Grand Challenges Canada.

-By Dr. Shariq Khoja, CEO – Tech4Life Enterprises

Comprehensive Mobile application designed for Assisting Frontline Health Workers in Mental Health



The Mental Health mobile application was designed by engineers and healthcare teams at Tech4Life Enterprises to help Community health workers (CHWs) and facility-based health workers in Afghanistan. This application was developed on an android platform to facilitate health workers in creating awareness and improving their knowledge about mental health issues. The application was also integrated with two other applications i.e. an e-learning platform (Moodle) and a Telehealth application (MDConsults).

This application was developed in two languages, English and Dari (local language), for better compliance and acceptability amongst the community.

KEY FEATURES OF MOBILE APPLICATION

The Mental Health Mobile Application comprises five key features:

1. **Patient Information:** Allows collection of individual patients' information for registration and HMIS of mental health related issues amongst the community.
2. **Guidelines and Protocols:** Allows interactive access to specific mhGap guidelines for each mental health issue that would aid the health care provider to have a better diagnosis by reviewing the signs and symptoms
3. **mLearning for Community:** Enables access to interactive learning material for community through health provider for improving awareness in the community. This application connects with mobile Moodle for high quality mLearning services.
4. **mLearning for Health Care Providers:** Enables capacity building among Health providers to have a first-hand knowledge about the mental health problems. This application also connects with mobile Moodle for high quality mLearning services.
5. **Telemedicine:** Mobile version of MDConsults is used to conduct teleconsultation between the patient and the physician in either live or store-and-forward mode, depending on the available connectivity

-By Dr. Shariq Khoja, CEO – Tech4Life Enterprises

Mental Health services to benefit substantially from Artificial Intelligence

TECH4LIFE
HOW MENTAL HEALTH SERVICES CAN BENEFIT FROM ARTIFICIAL INTELLIGENCE

1. **Keeping therapy standards high with quality control**
2. **Refining diagnosis and assigning the right therapist**
3. **Monitoring patient progress and altering treatment where necessary**
4. **Justifying cognitive behavioural therapy (CBT) instead of medication**

A number of research studies have suggested that Artificial intelligence (AI) can perform as well as or better than humans at key healthcare tasks, such as diagnosing and managing diseases. Today, algorithms are already outperforming radiologists at spotting malignant tumours, and guiding researchers in how to construct cohorts for costly clinical trials. By enhancing system's understanding of the intensity and interactions of biopsychosocial factors and person's capacity of dealing with them, AI would help mental health in the following ways:

1. **Keeping therapy standards high with quality control:** With an increased demand for services and workloads stretched, some mental health clinics are investigating automated ways to monitor quality control among therapists.
2. **Refining diagnosis and assigning the right therapist:** AI is helping doctors to spot mental illness earlier and to make more accurate choices in treatment plans. Researchers believe they can use insights from data for more successful therapy sessions to help match prospective clients with the right therapists and to figure out which type of therapy would work best for an individual.
3. **Monitoring patient progress and altering treatment where necessary:** Once paired with a therapist, there is a need to monitor patient progress and track improvements. AI can help identify when a treatment change needs to take place or if it's time for a different therapist.
4. **Justifying cognitive behavioural therapy (CBT) instead of medication:** The use of drugs as a treatment for mental health issues like depression has increased. AI can help validate CBT as a treatment, according to researchers. CBT aims to identify negative thought patterns and to find ways to break them, meaning therapists use statements to discuss methods of change and planning for the future.

-By Dr. Shariq Khoja, CEO – Tech4Life Enterprises

Tech4Life Regulatory Approvals Update: Upcoming ISO Surveillance Audit



Tech4Life Enterprises is committed to providing high quality products and services to its clients. To ensure our compliance with ISO certification, a surveillance audit has been scheduled at Tech4Life's Canada office to assess the compliance of the management system of Tech4Life Enterprises Canada Inc. against ISO 13485:2016 standards. The main objective of this audit is to determine that Tech4Life's system continues to meet the assessment criteria & certification scope, any applicable statutory, regulatory & contractual requirements and to ensure that the system is meeting its specified objectives.

Recently, Tech4Life also completed a CE surveillance audit successfully. The assessment team recommended the continued certification of Tech4Life's products for MDD and MDR requirements for CE certification. Finally, Tech4Life Enterprises Canada Inc. has also adopted the general HIPAA Compliance Policy to recognize the requirement to comply with the Health Insurance Portability and Accountability Act (HIPAA), as amended by the Health Information Technology for Economic and Clinical Health (HITECH) Act of 2009 and the HIPAA Omnibus Final Rule.

-By Ehsan Khan, Quality & Regulatory Officer – Tech4Life Enterprises

Expanding Healthcare Innovations in United States by joining forces with new Distributors



We are excited to introduce you to one of our trusted partners, Balkowitsch Enterprises, a leading supplier of cutting-edge healthcare technology. At Tech4Life, we believe in the power of collaboration to drive innovation and provide the best possible solutions to healthcare providers and patients worldwide. That's why we are thrilled to highlight Balkowitsch Enterprises as a player in helping us achieve our mission.

Founded in 1998, Balkowitsch Enterprises has steadily built a reputation for its extensive range of healthcare equipment and solutions. Their dedication to high quality products and affordable pricing, perfectly aligns with our core values, making them an essential part of our journey to transform healthcare.

This partnership allows Tech4Life to expand its reach across the United States, ensuring that our innovative Telemedicine Solutions are accessible to healthcare providers and patients from coast to coast. Balkowitsch Enterprises' well-established presence in the US market will allow us to connect with even more healthcare professionals and institutions.

-By Ruhab Ilyas, Marketing & Sales Officer – Tech4Life Enterprises

Telehealth: Caribbean Connected - A Resounding Success



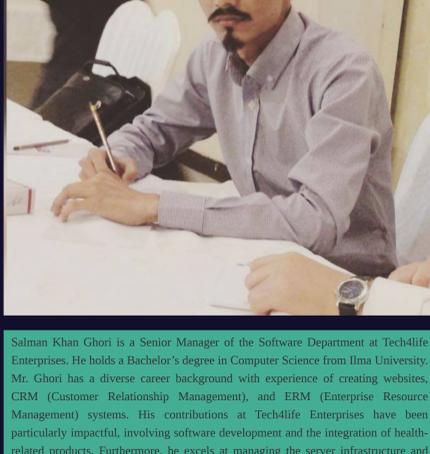
From August 18-20, the Caribbean region witnessed a groundbreaking event in the world of telemedicine and digital health—"Telehealth: Caribbean Connected," organized by the International Society of Telemedicine and eHealth (ISITeH) in partnership with Tech4Life Enterprises. Held at the Herostar Rose Hall beach resort in Montego Bay, Jamaica, this conference was nothing short of a triumph.

Gathering a diverse audience of CEOs, healthcare executives, physicians, government officials, and stakeholders, the event served as a nexus for discussions on the future of telehealth in the Caribbean. Dr. Shariq Khoja, Tech4Life's visionary CEO, took center stage to discuss telemedicine's role in emergency and disaster situations, making invaluable connections with industry leaders. The event also explored vital topics, including standards, best practices, affordable accessibility, cybersecurity challenges, and new opportunities in telehealth. It offered a global perspective, enriching the region with insights from across the world.

Tech4Life also exhibited its state-of-the-art Telemedicine kits and devices at the conference. Participants took keen interest in the innovations and smooth integration of telemedicine devices with a variety of software for successful telemedicine consultations.

-By Ruhab Ilyas, Marketing & Sales Officer – Tech4Life Enterprises

Star of Tech4Life - Salman Khan Ghori



Salman Khan Ghori is a Senior Manager of the Software Department at Tech4Life Enterprises. He holds a Bachelor's degree in Computer Science from Ilma University. Mr. Ghori has a diverse career background with experience of creating websites, CRM (Customer Relationship Management), and ERM (Enterprise Resource Management) systems. His contributions at Tech4Life Enterprises have been particularly impactful, involving software development and the integration of health-related products. Furthermore, he excels at managing the server infrastructure and ensuring its smooth operation. He also provides oversight for the development of Android and iOS applications, overseeing the entire application development process. His valuable contributions to Tech4Life's Software Solutions have earned him recognition at Tech4Life, and he is celebrated as the Star of Tech4Life.

-By Salman Khan Ghori, Software Manager – Tech4Life Enterprises



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