Leveraging Technology to Close the Mental Health Care Loop

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Setting the Scene

Mental health is a vital aspect of overall health and well-being, existing on a spectrum from wellness to disorder. This state is influenced by various factors, including the environment, physical health, economic conditions, and social determinants. We all find ourselves somewhere on this spectrum, continually navigating life's challenges that can shift our mental state at any point. It is particularly noteworthy how our mental resilience evolves through different life stages, varying from childhood to youth, adulthood, and old age. Therefore, viewing mental health interventions through a life-course approach is inevitable and necessary.

Lead, Prevention, and Engagement

Many mental health conditions in adulthood often begin or become evident during childhood. This highlights the critical opportunity to promote mental health and prevent adverse conditions early on. By promoting mental well-being, we can help prevent adverse childhood experiences and ensure early identification and intervention, mitigating potential long-term impacts on mental health. This proactive approach can significantly enhance the overall quality of life across all ages and address specific needs at different stages of life.

The recent National Health Survey found anxiety and depression as being most common in the younger population. It also reported that a significant number of people expressed suicidal ideations, but not all sought professional support. This could mean low mental health literacy or also lack of proactive programmes for early identification and management.

This system will be guided and supported by an integrated mental health policy, currently in its draft stage. Specifically, the health and well-being screening system will form a key component of the overall health and well-being strategy for schools. The policy is to screen students and provide

the necessary mental and psychosocial support. School counsellors and the School Well-being Team will play a key role in the implementation and monitoring of identified individuals.

The screening results will also guide the development of appropriate interventions designed to build resilience in students. Moreover, the system will prioritise the respect, confidentiality, and security of all personal information collected, ensuring that privacy is upheld throughout the process. This system will strive for a healthier, more resilient community by addressing mental health needs early and effectively.

Role of Technology in Reshaping the Future of Mental Health Care

Digital technology innovation is significantly transforming and supporting mental health care in various impactful ways. Online Counselling and teleconsultation platforms have made mental health services more accessible with minimal out-of-pocket expenditure. Moreover, it provides remote access to therapists through virtual means, and telephonic consultations, especially benefitting people in rural areas.

A wide range of mental health applications has impacted the promotion of mental well-being by guiding self-care like meditation practices, mindfulness exercises, mood tracking, and even tools for diagnosis of mental health conditions (mhGAP App), and some for assisting therapy services.

For instance, Virtual Reality (VR) Therapy is used for exposure therapy, particularly for phobic disorders and rehabilitation. This ensures a safe and therapeutic environment to confront and process fear or stimuli.

Similarly, Transcranial Magnetic Stimulation (TMS) has been recognised as an evolving technology-driven treatment for major depressive disorder. It is based on the principle that magnetic stimulation will balance the neurotransmitter level in the brain to overcome depression, complemented by therapy.

All such innovations have benefitted individuals in managing stress, anxiety and depression in their everyday lives. Artificial Intelligence-driven virtual platforms and chatbots, use natural language processing (NLP) to provide

real-time mental health support, consultations, and track emotional states, and suggest coping strategies based on input from human beings.

These avenues offer support beyond traditional working hours in health facilities, thus serving peoples' needs and taking mental health care closest to where they live.

Apart from the direct engagement of technology in providing care and promoting mental health, technology through advanced data analytics has helped to identify mental health trends, predict mental health crises, and track treatment progress. Predictive models have the potential to identify at-risk individuals, helping mental health professionals to intervene earlier and more effectively.

Similarly, Wearable Technology has immensely supported tracking mood and stress levels in real-time. The creation of Online Support Communities has been supportive in setting up a social network to connect individuals dealing with similar mental health challenges, offering peer support and reducing isolation. All these platforms are evolving and promise better mental health for the future.

Health and Well-being Screening - Bridging the Mental Health Divide Through Digital Innovation

One of the efforts in utilising technology to ensure accessible mental health care was the institution of the PEMA Helpline. It is catering to at-risk individuals, to address their psychosocial needs. It offers consultation, case management aspects and online counselling services.

However, to proactively prevent mental health conditions and support vulnerable and affected populations, the PEMA Secretariat developed a Health and Well-being Screening System. This initiative, leveraging technology, primarily targets students and other specific groups, with the goal of assessing their mental health status and addressing it in time and efficiently. This will ensure that individuals receive the necessary support from appropriate professionals and institutions. The system will screen for common mental health concerns, including self-harm behaviours and substance use, to facilitate timely and appropriate interventions.

In addition to initial screening, the system will include a re-assessment process for at-risk individuals, enabling access to needed services through coordinated referrals among service providers. It is important to note that this system is designed for screening and assessment purposes and is not a diagnostic tool.

Trained professionals will facilitate all aspects of the screening system, including assessment, service coordination, and follow-up, with the informed consent of individuals. High priority will be placed on ensuring the privacy and security of personal information and data.

Screening to Recovery: Tech Solutions to Close the Mental Health Care Loop

Mental health and its existence on a spectrum, ranging from being mentally well to experiencing disorders, with varying levels of distress and other conditions in between, require tailored interventions. People can move along this spectrum at different times, and their mental health can shift due to factors such as age, environmental influences, and individual vulnerability.

To prevent negative outcomes, it is crucial to implement appropriate interventions early on. Most mental health issues present themselves through identifiable signs or symptoms, and early intervention can prevent these from progressing into more serious adverse conditions.

One key approach to addressing mental health challenges is early identification. Early detection allows for timely intervention, reducing the likelihood of developing to disorders. Studies have shown that more than 60% of mental health issues in adulthood begin during childhood or adolescence, making these phases critical for intervention, prevention and response. Recognising this, the health and well-being screening system places a strong emphasis on monitoring students and other vulnerable groups. The system is designed to assess the mental health status of individuals, helping them navigate challenges while also promoting overall well-being.

Beyond screening, the system incorporates a range of interventions aimed at promoting mental health and preventing issues before they escalate. The mental health promotion efforts are designed to reduce the incidence and burden of mental health problems, while the screening process ensures that interventions are tailored to individual needs.

The screening itself involves standardised, self-administered questionnaires, and the results are then reviewed and assessed by mental health professionals. This review is particularly important for individuals flagged as being at higher risk for common mental health issues or substance abuse.

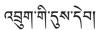
For those identified as being at risk, the system facilitates referrals to clinical mental health professionals for further assessment, treatment and support. A comprehensive care framework is provided, which includes initial screening, treatment, rehabilitation and re-integration, when required. The system aims to create a cohesive mental health care ecosystem, ensuring that all aspects of mental health needs are addressed - from prevention and promotion to treatment and aftercare - thus closing the loop on mental health care.

Closing the Treatment Gap with Technology – Leaving No One Behind

The treatment gap for mental health services in the region remains significantly high, with an alarming 70% gap for some severe mental health conditions. This gap is attributed to several factors, including inadequate service availability, stigma, discrimination, and the absence of effective early identification programmes. Addressing these barriers through early detection programmes and awareness campaigns is crucial in helping individuals to navigate and overcome mental health challenges.

These programmes are designed not only to identify mental health issues early but also to ensure that those who are screened are linked to the necessary treatments and psychosocial services. The system has options for outreach programmes, ranging from small-scale outreach efforts to larger community-based screening events in vulnerable and underserved communities. This approach ensures that at-risk populations are prioritised and that no one is left behind in receiving the care they need.

The increase in reported mental health cases could indicate growing awareness about mental health and the importance of seeking help.



However, it may also point to the persistence of environmental and social risk factors that negatively impact mental health, leading to a higher burden of mental illness.

Through this system, we aim to dig deeper into the underlying causes and risk factors to make more informed, data-driven decisions. Ultimately, this system holds great potential for significantly reducing the treatment gap and ensuring that mental health services reach every individual in need, providing a more inclusive and supportive mental health care environment.

Conclusion

The Health and Well-being Screening System represents a significant initiative in bridging the mental health divide through digital innovation. By harnessing technology to provide early screening and linked services, the system plays a crucial role in identifying mental health issues before they escalate, ensuring that individuals in vulnerable communities are supported from the very beginning of their mental health journey.

From screening to recovery, the integration of tech solutions is pivotal in closing the mental health care loop, offering a streamlined process that connects patients to the appropriate care and psychosocial services they need, in a timely manner and efficiently.

The system's potential to close the mental health treatment gap is immense. Through digital outreach, the system makes it possible to reach populations that are traditionally underserved due to barriers like stigma, geographical limitations, or lack of resources. This innovative approach ensures that no one is left behind in accessing essential mental health services.

By embedding technology into the core of screening and care management, the system can play a transformative role in reducing the treatment gap and embracing a more equitable, inclusive mental healthcare landscape for the country.

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