



**MEDCONNECT : MEDICAL FACTS AND HEALTHCARE.**

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**ABSTRACT :**

Today in this busy world people are very careless about their health. They do not remember to take their medication on time and also not do exercises regularly. It affects their physical health. As we all see in day-to-day life at many places people suffers from different kind of diseases but more ignores the symptoms or do laziness to go in hospitals also along with this in rural area it had been seen that people are so careless with their life. This system will help to solve all the above issues. It tackles three important aspects of health management: remembering medications and staying active by regularly doing exercise and checking the symptoms. It provides personalized reminders for medications, ensuring you never miss a dose. You can also track your exercise routines within the app, creating a central hub for your well-being. This all-in-one approach aims to simplify your health journey by combining reminders and fitness tracking in a convenient and user-friendly way.

**Keywords:** MEDCONNECT, Medicine Reminder, Healthcare and facts, Doctor consultation

**INTRODUCTION:**

Introducing the Medicine Reminder app: your dependable companion in managing medications effortlessly. Designed for busy individuals, this app sends personalized reminders directly to your device, ensuring you never miss a dose. It simplifies medication adherence with features like tracking and refill alerts, empowering you to stay on top of your health goals seamlessly. With its intuitive interface and proactive notifications, the Medicine Reminder app makes managing your health a breeze, fitting into your daily routine with ease. Imagine a personal health assistant that keeps track of your medication schedule and motivates you to stay active. That's exactly what our app aims to do. Our user-friendly app provides a convenient platform for managing your medication, setting reminders, and tracking your exercise progress. Whether you're dealing with chronic conditions or simply want to improve your overall health, our app is designed to support your wellness.

**LITERATURE :**

**Todd Rupparr, PhD, RN, Overcoming Barriers to Medication Adherence for Chronic Diseases. Us Department of health and human services. February 2017.** As stated by the WHO Poor adherence can lead to serious health risk. For instance, a recent study found out that the risk of hospitalized patients, having diabetes congestive heart failure, mellitus, hypertension, or hypercholesterolemia who actually were non adherent to prescribed remedy was more in comparison with the general population. Non-adherence rate can vary widely, even in the rigid controlled and monitored environment of a clinical test. To mention, patients with long term conditions are questionable to follow prescription than those with acute state[9]. **Shaantam Chawla Mechatronics Research Laboratory Academy for Technology and Computer Science Hackensack, NJ 07601 USA, "The Autonomous Pill Dispenser: Mechanizing the Delivery of Tablet Medication", 7th Annual Ubiquitous Computing, Electronics & Mobile**



**Communication Conference(UEMCON) IEEE 2016.** The healthcare will create medications schedule using android app and loads medication in device. At prescribed time, patient receives text message notification to take the pills. Android app sends signals to device via Bluetooth. Patient needs to flip the unit so that one pill gets trapped in tip of the cone and using vibrator it gets dispensed. So it requires following particular steps for dispensing of medicines which is not easy task for aged people and disabled people [2]. **Owen N, Healy GN, Matthews CE, Dunstan DW. Too much sitting: the population-health science of sedentary behavior. Exerc Sport Sci Rev. 2010;38:105–13.** Physical inactivity is the fourth leading cause of death worldwide. Despite this, PA levels of adults across developed nations remain low and the promotion of regular participation in PA is a key public health priority. Population level PA surveillance relies upon having tools to accurately measure activity across all population sub-groups. In addition to surveillance, it is essential that valid, reliable and sensitive measures of PA are available to practitioners, researchers and clinicians in order to examine the effectiveness of interventions and public health initiatives. The accurate measurement of PA in adults has relevance not only for refining our understanding of PA-related disorders, but also for defining the dose-response relationship between the volume, duration, intensity and pattern of PA and the associated health benefits.

#### **OBJECTIVES:**

1. To develop a module that will send timely reminder to the user.
2. To develop a module for online and offline consultation.
3. To build a module for appointment scheduling.
4. To develop a prescription renewal module.
5. To build a personalized exercise plan module.
6. To build a symptom checking module.

#### **PROBLEM STATEMENT**

Many people struggle to remember to take their medications on time, and staying motivated to exercise can be tough too. This can lead to health problems. An ideal app would solve both issues by reminding users to take their meds and offering exercise routines that fit their needs. But existing apps often focus on just one or the other, or can be confusing to use. We need a simple, all-in-one app that helps people take control of their health by easily managing medications and creating a fun, personalized exercise plan.

#### **METHODOLOGY :**

##### **Identify Target Audience:**

- Demographics: Age, gender, location, etc.
- Health Conditions: Chronic diseases, medication requirements.
- Technology Familiarity: Comfort level with smartphones, apps, etc.

##### **Choose Appropriate Channels:**

- Mobile Apps: Offer personalized reminders, tracking features, and educational content.
- Wearable Devices: Integrate health data for more comprehensive monitoring.
- SMS or Email Reminders: Simple and effective for basic reminders.
- Voice Assistants: Hands-free reminders and interactions.
- Physical Planners: For those who prefer tangible reminders.

**Develop a Personalized Plan:**

- Medication Reminders: Set specific times for each medication. Include visual cues like pill images. Provide information on side effects and interactions.
- Exercise Reminders: Suggest suitable exercises based on fitness level and health conditions. Track progress and set achievable goals. Offer motivational messages and tips.
- Doctor Consultations: Schedule reminders for regular check-ups. Provide information on preventive care and screenings. Facilitate communication with healthcare providers.

**Leverage Behavioural Psychology:**

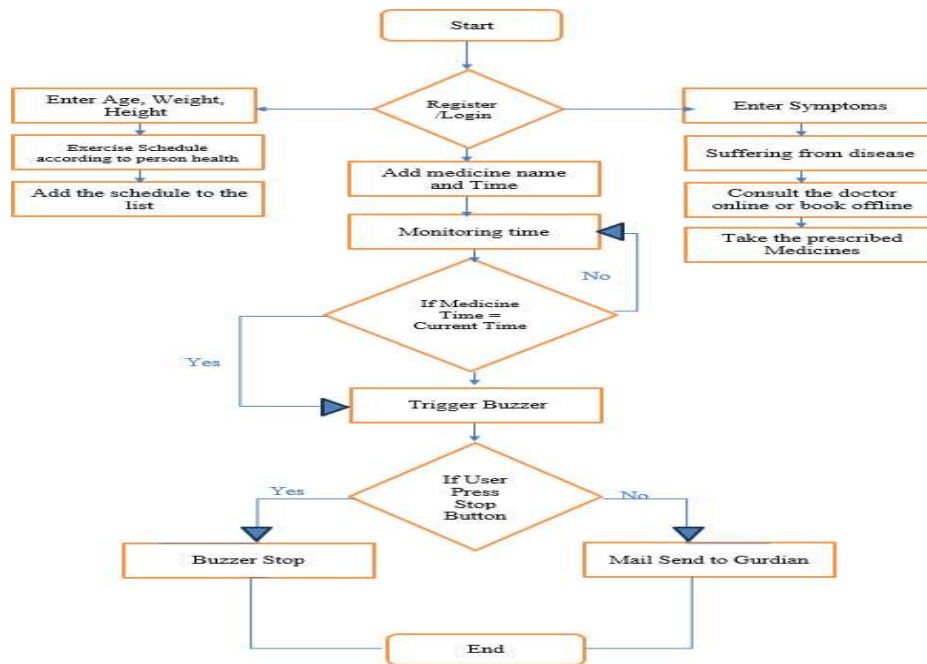
- Goal Setting: Help users set realistic and achievable targets.
- Positive Reinforcement: Reward adherence with positive messages or progress tracking.
- Habit Formation: Use techniques like habit stacking and priming to build healthy habits.
- Gamification: Incorporate elements of fun and competition to increase engagement.

**Ensure User-Friendliness:**

- Intuitive Interface: Make the app or platform easy to navigate.
- Customization: Allow users to personalize reminders and settings.
- Accessibility: Consider the needs of users with disabilities.

**Continuous Improvement:**

- Collect Feedback: Gather user insights to identify areas for improvement.
- Data Analysis: Analyse usage data to optimize features and content.
- Updates and Enhancements: Regularly update the platform with new features and



improvements.

**Fig.5.1 Flow diagram of Medconnect**

**CONCLUSION:**

The medicine reminder feature allows you to set reminders for when to take your medication, and you can also track your progress over time to see how well you are adhering to your medication regimen. The exercise tracker feature allows you to set goals for the number of steps you take each day, the number of minutes you exercise each week, and the number of calories you burn. You can also track your progress over time to see how well you are meeting your fitness goals. The doctor consultant feature allows you to search for doctors based on your location, specialty, and experience.

**REFERENCES:**

- [1] M. Alhaj, Abdullah Nizar, Shahd Al-Hatem, and Athraa Leekha, "A case study of medication reminder system," Oct. 17, 2019. [https://www.researchgate.net/publication/336605786\\_A\\_case\\_study\\_of\\_medication\\_reminder\\_system](https://www.researchgate.net/publication/336605786_A_case_study_of_medication_reminder_system) (accessed Oct. 17, 2024). Kamienski, C.; Soininen, J.-P.; Taumberger, M.; Dantas, R.; Toscano, A.; Salmon Cinotti, T.; Filev Maia, R.; Torre Neto, A. Smart Water Management Platform: IoT-Based Precision Irrigation for Agriculture. *Sensors* 2019, 19, 276.
- [2] Shaantam Chawla Mechatronics Research Laboratory Academy for Technology and Computer Science Hackensack, NJ 07601 USA, "The Autonomous Pill Dispenser: Mechanizing the Delivery of Tablet Medication", 7th Annual Ubiquitous Computing, Electronics & Mobile Communication Conference (UEMCON) IEEE 2016.
- [3] K. Santo, C. K. Chow, A. Thiagalingam, K. Rogers, J. Chalmers, and J. Redfern, "MEDication reminder APPs to improve medication adherence in Coronary Heart Disease (MedApp-CHD) Study: a randomised controlled trial protocol," *BMJ Open*, vol. 7, no. 10, p. e017540, Oct. 2017, doi: <https://doi.org/10.1136/bmjopen-2017-017540> Lavanya, G.; Rani, C.; GaneshKumar, P. An automated low cost IoT based Fertilizer Intimation System for smart agriculture. *Sustain. Comput. Inform. Syst.* 2020, 28, 100300.
- [4] M. S. S. Tang, K. Moore, A. McGavigan, R. A. Clark, and A. N. Ganesan, "Effectiveness of Wearable Trackers on Physical Activity in Healthy Adults: Systematic Review and Meta-Analysis of Randomized Controlled Trials," *JMIR mHealth and uHealth*, vol. 8, no. 7, p. e15576, Jul. 2020, doi: <https://doi.org/10.2196/15576>.
- [5] N. Agarwal and B. Biswas, "Doctor Consultation through Mobile Applications in India: An Overview, Challenges and the Way Forward," *Healthcare Informatics Research*, vol. 26, no. 2, pp. 153–158, Apr. 2020, doi: <https://doi.org/10.4258/hir.2020.26.2.153>.
- [6] M. Catita, A. Águas, and P. Morgado, "Normality in medicine: a critical review," *Philosophy, Ethics, and Humanities in Medicine*, vol. 15, no. 1, Apr. 2020, doi: <https://doi.org/10.1186/s13010-020-00087-2>.
- [7] B. P. T, P. G. K, and Mounika S, "Skin Disease Prediction Using Machine Learning Techniques," pp. 1–6, Dec. 2023, doi: <https://doi.org/10.1109/icmnwc60182.2023.10436003>.
- [8] R. Shukla and R. Sawant, "Multiple Disease Prediction System Using Machine Learning," vol. 5, pp. 1–6, Aug. 2023, doi: <https://doi.org/10.1109/elexcom58812.2023.10370285>.
- [9] Todd Ruppap, PhD, RN, Overcoming Barriers to Medication Adherence for Chronic Diseases. Us Department of health and human services. February 2017.
- [10] Owen N, Healy GN, Matthews CE, Dunstan DW. Too much sitting: the population-health science of sedentary behavior. *Exerc Sport Sci Rev.* 2010;38:105–13.
- [11] Kohl HW, Craig CL, Lambert EV, Inoue S, Alkandari JR, Leetongin G, Kahlmeier S. Group LPASW: The pandemic of physical inactivity: global action for public health. *Lancet.*



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2012;380:294–305.

- [12] Haskell WL, Lee I-M, Pate RR, Powell KE, Blair SN, Franklin BA, Macera CA, Heath GW, Thompson PD, Bauman A. Physical activity and public health: updated recommendation for adults from the American College of Sports Medicine and the American Heart Association. *Circulation*. 2007;116:1081–93.