

International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

Volume 3, Issue 1, March 2023

Review on the Drug Dealing Robot

Ms. Naykodi Sneha¹, Ms. Mule Nivedita², Ms. Pawar Trupti³, Ms. Atole Shubhangi⁴, Mr. Tambe Sagar⁵

Assistance Professor, Samarth Institute of Pharmacy, Belhe, Pune, Maharashtra, India¹ Students, Samarth Institute of Pharmacy, Belhe, Pune, Maharashtra, India^{1,2,3,4}

Abstract: This project expresses an idea about distribution medicines by using intelligent system which is included an information system, auto-guided vehicles (AGVs), a robot dispensing has been widely reported that a large number of patients die from cases of errors in the issuing of medication prescriptions. The increasing number of prescriptions needed to be filled daily reduces the amount of time that. The staff can use to focus on each individual prescription, which may increase the human error ratio. The Need for robotic-assisted pharmacies is arising from here to distribute drugs to eradicate or substantially Reduce human error. The pharmacy robot is one of the most significant technologies that play a prominent Role in the advancement of hospital pharmacy systems. The purpose of this review paper is to cover the Pharmacy robot concept and the published literature reporting on pharmacy robot technology as one of the Most important applications of artificial intelligence in pharmacology.

Category: Health care technology

Keywords: Pharmacy robot, dispensing medication, hospital Pharmacy, medicine distribution.

REFERENCES

- A.J. Winfield / R.M.E. Richards, (1998) "Pharmaceutical Practice "Second edition, Churchill Livingstone London
- [2]. Don A. Ballington, / Mary M. Laughlin (2003)" Pharmacology for Technicians"Second Edition EMC Paradigm
- [3]. William E. Hassan, JR. (1986) "Hospital Pharmacy" Fifth EditionLea and Febiger, Philadelphia
- [4]. Bloor, K., N. Freemantle. (1996). Lessons From International Experience. In Controlling Pharmaceutical Expenditure II: Influencing Doctors, British Medical Journal, 312 (7045): 1525-1527
- [5]. Brekke, K., Konigbauer, I., Straume, O. (2007). Reference pricing of pharmaceuticals. Journal of Health Economics, 26(3): 613-64
- [6]. Airakrien, M.(2005). The importance of medication error And the role of the pharmacist: committee of experts on Safe medication practice. Presentaton at the WHO EuroPharm Forum. Riga, Latvia
- [7]. Anderson D.J., W.C. (2001) A systems approach to the Reduction of medication error on the hospital ward. Journal of Advance Nursing, 35(1)
- [8]. Aronson, J(2009). Medication error: what they are, how Happen, and how to avoid them. Quarterly Journal of Medicine, 102
- [9]. Benjamin, D (2003 July). Reducing medication errors and Increasing patient safety: case studies in clinical Pharmacology. Journal of clinical pharmacology. 43(7), USA: SAGE Publication
- [10]. Beso A., F. B. (2005). The frequency and potential cause Of dispensing errors in a hospital pharmacy. Phamarcy World & Science
- [11]. Barker. K, N, (1995). Ensuring safety in the use of Automated medication dispensing system. American Journal of health-system pharmacy: AJHP: official journal Of the American Society of Health-System Pharmacists, 53, 2445-2447.
- [12]. Borel, J.M. & Rascati, K.L. (1995). Effect of an Automated, nursing unit-bassed drug-dispensing device on Medication errors. American Journal of Health-system Pharmacy: AJHP: official journal of the American Society of Health-System Pharmacists, 52, 1875-1879

[13]. Chung K., Choi, Y, B., Moon, S (2003). Toward efficient Medication error reduction: error-reducingCopyright to IJARSCTDOI: 10.48175/568www.ijarsct.co.in548

IJARSCT Impact Factor: 7.301

International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

IJARSCT

Volume 3, Issue 1, March 2023

information Management system. Journal medical system, 27,553-560

- [14]. Cork, A (1998). Storage system recommendations. HD: The Journal for Healthcare Design & Development, 29,42
- [15]. Darby, A, L. (1996). Considering a hybrid system for Automated drug distribution. American Journal of Health-System pharmacy: AJHP: official journal of the American Society of Health-system Pharmacists, 53,1128
- [16]. Goundrey-Smith S: Pharmacy automation. Information Technology in Pharmacy. Springer, London; 2013.95-119. 10.1007/978-1-4471-2780-2_4
- [17]. Svirsko AC, Norman BA, Hostetler S: Standardizing pharmaceutical delivery to reduce pharmacy costs while Simultaneously reducing missing doses. IISE Trans Healthc Syst Eng. 2020, 10:33.
- [18]. Alam S, Osama M, Iqbal F, Sawar I: Reducing pharmacy patient waiting time. Int J Health Care Qual Assur.2018, 31:834-44. 10.1108/IJHCQA-08-2017-0144
- [19]. Flynn EA, Barker KN: Effect of an automated dispensing system on errors in two pharmacies . J Am Pharm Assoc (2003). 2006, 46:613-5. 10.1331/1544-3191.46.5.613.flynn
- [20]. Angelo LB, Christensen DB, Ferreri SP: Impact of community pharmacy automation on workflow, workload, And patient interaction. J Am Pharm Assoc. 2005, 45:138-44. 10.1331/1544345053623537
- [21]. The five rights: a destination without a map | institute for safe medication practices . (2007). Accessed: June18, 2022: https://www.ismp.org/resources/five-rights-destination-without-map.
- [22]. Lin AC, Huang YC, Punches G, Chen Y: Effect of a robotic prescription-filling system on pharmacy staff Activities and prescription-filling time. Am J Health Syst Pharm. 2007, 64:1832-9. 10.2146/ajhp060561
- [23]. Watch robots transform a CA hospital . (2015). Accessed: June 18, 2022: https://www.npr.org/sections/money/2015/05/27/407737439watch-robots-transform-a-california-hospital.
- [24]. Yaniv AW, Knoer SJ: Implementation of an i.v.-compounding robot in a hospital-based cancer center Pharmacy. Am J Health Syst Pharm. 2013, 70:2030-7. 10.2146/ajhp120649
- [25]. Sabharwal A, Selman B: S. Russell, P. Norvig, artificial intelligence: a modern approach, third edition . Elsevier. 2011, 175:935-7. 10.1016/j.artint.2011.01.005
- [26]. Kenakin TP: A Pharmacology Primer: Techniques for More Effective and Strategic Drug Discovery, Fifth Edition. Elsevier, Amsterdam, Netherlands; 2019. 10.1016/C2017-0-00662-6
- [27]. Haidegger T: Autonomy for surgical robots: concepts and paradigms. IEEE Transactions on Medical Robotics And Bionics. 2019, 1:65-76.10.1109/TMRB.2019.2913282
- [28]. Pharmacy automation using autonomous robot. (2019). Accessed: June 18, 2022:https://patents.justia.com/patent/11200979.
- [29]. Oswald S, Caldwell R: Dispensing error rate after implementation of an automated pharmacy carousel System. Am J Health Syst Pharm. 2007, 64:1427-31. 10.2146/ajhp060313
- [30]. Singhai M, Singhai AK, Verma K: Applied mathematics for pharmaceutical problems using robotics as Assistive tools for learning: a comprehensive review. Jurnal Teori dan Aplikasi Matematika. 2021, 5:374-91.