

The emergence of 3d printing in pharmaceuticals

Riya Ann Philip

ISF College of Pharmacy, India



Abstract

3D printing is a manufacturing method in which objects are made by fusing or depositing materials in layers by stacking to produce a 3D object. Due to its constantly enhancing standard, the use of this technology on patients has increased immensely. It is also used to produce artificial tissues that can be used for testing drugs for the whole pharmaceutical industry. The first 3D printed tablet, Spritam (Levetiracetam) was granted approval by the U.S. Food and Drug Administration agency (FDA) in 2015. Spritam is an anti-epileptic drug. This process of 3D printing is also called additive manufacturing (AM), rapid prototyping (RP), or solid free-form technology (SFF). The printers are similar to inkjet printers but the end products are different. The current applications of this technology in the field of medicine are prevalent in Medical Research, Education and Training and most importantly in Individual Patient Care. There are also several controversies and barriers regarding its safety and security, copyright concerns, patent, regulatory concerns etc. A study by Market Research Future (MRFR) reports that the Global 3D Printing Medical Devices Market is likely to witness exponential growth over the forecast period 2018 to 2023. The market is likely to expand at an approximate CAGR of 18% over the forecast period. In this review, we would like to throw light on the aforementioned technology and its effective application in medical field.

Pharmaceutical Investigation volume 49, pages575–585(2019)Cite this article 4635 Accesses 7 Citations Metrics

2.“ Application of 3D Printing Technology in the Development of Novel Drug Delivery Systems; Maulvi FA, Shah MJ, Solanki BS, Patel AS, Soni TG, et al. (2017) Application of 3D Printing Technology in the Development of Novel Drug Delivery Systems. Int J Drug Dev & Res 9:44-49.

3. Contemporary practice in forensic odontology; J Oral Maxillofac Pathol. 2014 May;18(2):244-50. doi: 10.4103/0973-029X.140767.

[19th International Conference on Pharmaceutics & Novel Drug Delivery Systems](#); Webinar; June 18-19, 2020

Abstract Citation:

Riya Ann Philip, The emergence of 3d printing in pharmaceuticals, Pharmaceutica Meet 2020, 19th International Conference on Pharmaceutics & Novel Drug Delivery Systems; Webinar, June 18-19, 2020 (<https://novel-drugdelivery-systems.pharmaceuticalconferences.com/middleeast/2020>)



Biography:

Riya Ann Philip pursuing PhD in ISF College of Pharmacy, India.

Speaker Publications:

1. “Pharmaceutical applications of 3D printing technology: current understanding and future perspectives; Journal of