Nanotechnology in Medicine- Small Wonders, **Big Impact**

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Abstract

The general information about nanotechnology, the classification of the attainments based on the used size, and the possible application of nanotechnologies in medicine are considered in the following article. Due to this it stresses the need of the scientific community, governments, various sections of civil society, and the public at large to be involved in shaping the use of this science. Due to, their ability to enter human cells with ease of the nanoscale, nanotechnology and medicine are important fields of study especially for cell target therapy, drugs delivery systems and diagnostic of diseases. Furthermore, drugs are shielded from degradation by the nanoparticles since they have shield like configurations. This study review aims to introduce the next generation of medical scientists to a collection of common characteristics of nanomedicine and present known approaches towards medical investigation. Nanotechnology in regard to delicate treatments has been covered with studies that include the newest information from trustworthy databases. This review article considers the possible medical applications of Nanobiotechnology in diagnosis, drug delivery therapy of certain diseases, gene therapy, cancer therapy and inherited disorders. It focuses on the observation that more work is required to achieve many of the benefits from nanotechnology in health care. Special consideration is toward nanoparticles and nano-pharmaceuticals, as mentioned in this chapter, nanotechnology application in clinical research. Their use in managed drug delivery systems, contact lenses and prosthetics, wound dressing, nerve regeneration, gene and drug delivery, diagnostics and chemotherapy, medical imaging, dental surgery, tissue engineering, immunology and in vision enhancement, and molecular repair are considered. This paper presents a focus on internet of bio nano things (IoBNT) and explores the various layers of taxonomical hierarchy involving nanoparticles, biosensors, nanotechnology and nanozymes in connection with actual medical application. This explores the possibilities of enhancing its ability to interface with the human body as well as the barriers to effective application of IoBNT.

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