

International Conference and Exhibition on

Pharmaceutical Development and Technology

April 24-26, 2017 Dubai, UAE

Pellets as a drug delivery system: New formulation aspects

Mohamed Abbas Ibrahim
King Saud University, KSA

The interest in pellets as dosage forms has been increasing continuously. Several therapeutic advantages could be achieved using pellets as drug delivery system, over the single-unit regimen, such as less irritation of the gastro-intestinal tract and a lowered risk of side effects due to dose dumping. It has been shown that the rheological properties of wet masses can be successfully monitored by a mixer torque rheometer. It was shown that the rheological properties of wet mass could affect the release patterns from pellet formulations. Different authors utilized pellets and granules controlled drug delivery systems techniques, which do not involve using organic solvents or coating, due to stringent global requirements of product safety. By developing matrix sustained release system one predominantly save time and money by omitting the coating operation. Monitoring the coating process by determining the amount of drug or color deposited is tedious, and often, encountering large variability. In addition, several attempts have been made to modify drug release from multi-particulate oral dosage forms by incorporating various hydrophobic materials into a basic formulation for pellets. Such systems retard the penetration of aqueous fluids into the formulation and hence slow the rate of drug release. On the other hand, hydrophilic excipients can be incorporated to the pellets' wet mass so as to enhance the drug dissolution, giving advantages in addition to lowering the drug GI irritation and presenting homogenous drug absorption.

mhamoudah@ksu.edu.sa
Abbma71@gmail.com

A review of technological advances in pharmacology in the UK, the development of an online learning adjunct

Abdel Rahim Salhab¹, Mohammad Salhab¹ and Maryam El Hakam²

¹University of Bradford, UK

²University of Huddersfield, UK

Introduction: The core pharmacology topic has traditionally been taught using a lecture based teaching methods. However research has shown that errors in prescribing that compromise patient safety still exist and this may be attributed to poor teaching methods. In the United Kingdom (UK), clinical students were taught basic pharmacology and clinical pharmacology as they studied their undergraduate medical degree. This changed with the general medical council (GMC) overhaul of undergraduate medical education in 1993 with publishing of tomorrow's doctor vision. Therefore it is important to introduce a module pharmaco-technology to teach students and also help future pharmacologists make use of these technological advances in their professional lives.

Method: Databases selected for the structured review were British Nursing Index (BNI), Cumulative Index to Nursing and Allied Health Literature (CINAHL), EMBASE and Medline. Only articles investigating the pharmacology and technology in the UK were selected. Articles were then ranked in order and data were analysed.

Results: The results using the national library of health yielded BNI (n=10), CINAHL (n=104), EMBASE (n=101), and Medline (n=45).

Conclusion: Despite the technological advances in the field of pharmacology, undergraduate students and some professionals seem still oblivious to these facts. We suggest an introduction of pharmaco-technology into the curriculum.

abudisalhab@gmail.com