

# g delivery development: manipulation of steroids and related compounds for contraception

Mati, J. K

## **Abstract:**

Advances in science and technology and consequent development of potent drugs and vaccines resulted in dramatic reduction of mortality especially in childhood. With persistent high birth rates, sharp increase in population growth rates prompted the need for effective contraception. Steroids have played a leading role in this, especially in the form of the oral pill and the injectable, Depo-provera. Safety concerns have since necessitated manipulation of steroid dose in the combined pill, making today's low dose pill much safer. The discovery of highly potent progestins permitted use of lower dosage without compromising effectiveness. Other innovations have included varying the routes of administration for added convenience. Steroidal contraception is today available through the vaginal route, through injection or as implants. This way steroids have provided long-term contraception, itself an important innovation. Application of steroids for male contraception has been slower because steroids exert negative feed-back effect to the hypothalamic-pituitary axis, thus interfering with the Leydig function as well. To sustain libido, progestins have to be complemented by testosterone. Among the methods likely to be in use in the near future are a number of prototype vaccines under evaluation. The most advanced of these involve antibodies against human chorionic gonadotropin.