# **Research Article**

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# Over the counter (OTC) sell of sex enhancer drugs: an emerging public health issue in India

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### **ABSTRACT**

**Background:** As a result of lack of skilled service providers/doctors, there is increasing trend of over the counter (OTC) sell of medicine in India. Among these OTC drugs, sell of sex enhancer medicine is an emerging problem as these medicines are being advertised on large scale using mass media like Television, newspapers and Radio without any approval from drug controlling authority 'Central Drugs and Standards Control Organization'. Purpose of current study was to study the trend of over the counter sell of sex enhancer drugs in India & to study health seeking behavior of patients with self-diagnosed ED in terms of self-medication.

**Methods:** This cross-sectional study include interview schedule of 74 patients coming on 10 medical stores selected randomly in Jodhpur city in September 2013.

**Results:** So 10% were found to buying sex enhancer drugs. Thirty eight percent among those buying sex enhancer medicines were Unmarried and 62% were married.92% buying sex enhancer medicine were Hindu and 8% were Muslim patients. Only 9.46% patients had consulted allopathic doctors and 12.16% consulted to Ayurveda Vaidya, 4.05% consulted local Quack and 8.11% consulted to friends but 66.22% patients had not consulted anybody for Medication; but they are buying by self for self-diagnosed ED

**Conclusions:** This study therefor confirms that there is significant association between self-diagnosed ED and OTC sell of sex enhancer medicine in India. TV & newspapers, poster/banners are significantly important in providing information of sex enhancer medicines to self-diagnosed patients of ED.

Keywords: Over the counter (OTC), Sex enhancer medicines, Self-medication, Erectile dysfunction

# **INTRODUCTION**

According to report by National commission on Macro economics and health, 2005 India as doctor population ratio of 59.7 physicians per 1, 00000 population worse than most developed countries which has 200 and more per every 100000 population. As a result of lack of skilled service providers /Doctors, there is increasing trend of over the counter (OTC) sell of medicine in India. Although the Rx-to-OTC switch can be beneficial as significant cost savings for consumers but, the misuse of

medications can cause side effects, hospitalizations, and even death; so a balance must be struck between the increasing demand for these switched medications and their safety risks. Among these OTC drugs, sell of sex enhancer medicine is an emerging problem as these medicines are being advertised on large scale using mass media like Television, newspapers and Radio without any approval from drug controlling authority 'Central Drugs and Standards Control Organization'. However, few medicines/sex enhancer drugs should be prescribed by authorized medical personnel only. Products promising to

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enhance sexual performance have been promoted for over a century, dating back to the patent medicines of the 1800s; these products were characterized by wildly exaggerated claims and sold to the public by unscrupulous manufacturers, without evidence of safety or effectiveness in treatment for erectile dysfunction (ED).<sup>2</sup> Erectile dysfunction is characterized by the regular or repeated inability to obtain or maintain an erection.<sup>3</sup> Sexual dysfunction notably in psychological impotence, there is a strong response to placebo treatment.<sup>4</sup> The diagnosis and clinical evaluation of ED should be helpful in the determination of personalized treatment options by identifying the underlying causes via the investigation of risk factors and by determining the severity of erectile dysfunction. A thorough history-taking is essential for all patients suffering from erectile dysfunction. In addition, a physical examination and laboratory tests should also be conducted.<sup>5</sup> Many sexual enhancement products are marketed as dietary supplements with words like "natural," "herbal' but these dietary supplements are not always verified for their potency by drug regulatory agencies .They are not subjected to quality controls and often are not studied as comprehensively as approved products. The ingredients in sexual enhancement products can be harmful. Sometimes, supplement manufacturers do not list all the ingredients on the label neglecting basic drug regulation criteria.<sup>6</sup> Cultural practices in India prohibit every male or female from discussing their sexual health problems as it is considered as taboo. Most of the time, patients had to rely on information and advise by their close friends or they prefer to seek treatment from unknown pharmacy where they will not get noticed by their known relatives or friends. Review of the literatures relating to OTC medicine abuse has revealed that there is a recognized problem internationally involving a range of medicine and potential harms. Methodological concerns have emerged in relation to the use of proxy, self-report and non-OTC specific data and the relative lack of qualitative research involving individual experiences of OTC medicine abuse. These represent urgent areas where research is needed; to explore the extent of the problem and to provide insights into those affected, coupled with providing clarification of the type of problem being investigated. Such research is needed to inform policy, regulation and the preparedness of a range of health care professionals to avoid harm to those who purchase OTC medicines that may be liable to abuse. No previous published study has assessed the impact of OTC sell of sex enhancer drugs in India &health seeking behaviour knowledge and practices of patients with ED in India. Therefore, we conducted this study to evaluate the knowledge, health seeking behaviour and over-thecounter sell of sex enhancer in an urban city of India.

#### Aim

To study the trend of over the counter sell of sex enhancer drugs in India & to study health seeking

behaviour of patients with self-diagnosed ED in terms of self-medication.

## **Objectives**

To assess the impact of erectile dysfunction disorder and its effect as over the counter sell of sex enhancer drugs.

#### **METHODS**

This cross-sectional study include interview schedule of patient coming on 10 medical stores selected randomly in jodhpur city on a random date in September 2013, and only patients buying sex enhancer medicine were interviewed. This study was approved by institutional ethics committee. Written informed consent was taken from all participants in our study. Total 727 male ages from 15 to 90 years interviewed, Inclusion criteria: 1) Buying sex enhancer medicines 2) Age 18-90 year. 74 were interviewed out of 727 males fulfilling inclusion and exclusion criteria. Interview was conducted by trained person in pre-tested questionnaire. Interviewers were trained for data collection and their interviewing techniques were standardized before the data collection. Data were entered in a statistical Package for Social Sciences trial version 17 and analyzed using descriptive statistics.

#### RESULTS

Total 727 males of any age surveyed out of them 74 were interviewed based on inclusion and exclusion criteria and questionnaire was filled by them. So 10% were found to buying sex enhancer drugs. Thirty eight percent among those buying sex enhancer medicine were Unmarried and 62% were married (Figure 1). 92% buying sex enhancer medicine were Hindu and 8% were Muslim patients (Figure 2). Only 9.46% patients had consulted allopathic doctors and 12.16% consulted to Ayurveda Vaidya, 4.05% consulted local Quack and 8.11% consulted to friends but 66.22 % patients had not consulted anybody for Medication; but they are buying by self for self-diagnosed ED (Figure 3).

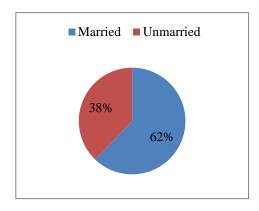


Figure 1: Marital status.

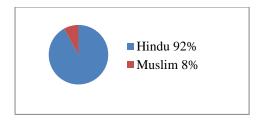


Figure 2: Religion.

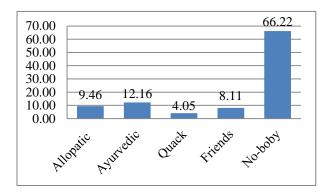


Figure 3: % to whom patients consulted.

Among these patients 10% taken these sex enhancer medicines 1to 5 times in last year. And 12% taken in 5-10 times, 19% taken 10 to 15 times and 43% taken the medicines 15to 20 times, 16% taken these medicines more than 20 times in last one year (Figure 4).

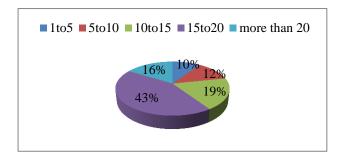


Figure 4: % how many times taken medicine.

Regarding source of information in these patients, they received information of these sex enhancer medicine as 5.41% from TV, 21.62% Newspaper, 20.27% Poster and Banners & 51.35% from Over the Counter of Medical store/Pharmacy (Figure 5).

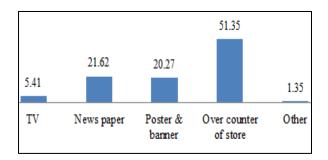


Figure 5: % source of information for medicine.

Among study group 77.02% patients were not aware of side effects of medicines they are taking, only 22.97% have information of side effects. As awareness and knowledge of Sexually Transmitted Diseases (STD) considered only 9.46% were aware of STD but 90.54% were not having knowledge of STD.

### **DISCUSSION**

The primary factors which influence purchase of any OTC drugs identified are the past experience with the drugs, corporate image of the pharmaceutical company, and brand identity of the drug, insignificant side effect, and prior assumption about the drug to be used for the ailment. Undoubtedly this is not a healthy practice to adopt. This type of tendency can bring hazardous outcome even in short run and long run for the individual consumer. Govt. has drawn a demarcation line between the prescribed and un-prescribed drugs but the line has almost got blurred. Awareness is required to reduce the tenacity of transacting such type of products.8 Inappropriate self-medication results in irrational use of drugs, wastage of resources, increased resistance of pathogens, entails serious health hazards such as adverse reactions and prolonged suffering.<sup>9</sup> Also it was seen in this study that a large number of people were not aware of the potential damaging nature of the different medications self-administered by them. Similar results were shown in the study done by Cindy et al. It was quoted in that study: "There is an alarming deficiency in the patients' knowledge of the possible side-effects of self-medication; they should therefore be warned about the danger." There has not yet been any systematic research conducted to assess the prevalence of selfmedication in the community. Thus self-medication in modern pharmaceuticals seems to be a field in which information is scarce. 11,12 So more and better education of both the public and health professionals is required to avoid complications arising from this practice. 13-15

#### **CONCLUSIONS**

This study therefor confirms that there is significant association between self-diagnosed ED and OTC sell of sex enhancer medicine in India. TV & newspapers, poster/banners are significantly important in providing information of sex enhancer medicines to self-diagnosed patients of ED.

#### Recommendations

Proper understanding of health seeking behaviour could reduce delay to diagnosis, improve treatment compliance and improve health promotion strategies in a variety of contexts. Encouraging people to opt first for the physician, Health care seeking behaviours and local knowledge need to be taken seriously in programmes and interventions to promote health in a variety of contexts, the need to improve integration of patients need and public health services. As ED is an emerging public

health issue government should establish more sex clinic so proper medical treatment can be provided to patients. Government should make and implement the strong policies related to advertisement and over the counter sell of sex enhancer medicine/products. Since OTC drugs can be bought without prescription in anytime, anywhere and by anybody, so the packaging information (regulatory and clinical) of OTC drugs should be specific, reliable, clearly printed in both English and in local language and should important highlighted. information be Pharmaceutical companies as well as Drug Regulatory Authority, Drug Administration, Ministry of Health and Family Welfare should be careful and take necessary steps regarding the packaging of OTC drugs for the safety of patients and improve the healthcare system. <sup>12</sup>Studies which categorize the types of barriers or determinants which lie between patients and services in terms of geographical, social, economic, cultural and organizational factors should be carried out to bridge the gap between patient and health system.

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Ethical approval: The study was approved by the

institutional ethics committee

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