

MANAGING THE MEDICINES IN SOCIETY- A SURVEY

Singh Gyanendra^{1*}, Khan Shoaib¹, Anand Jyotsna², Jha Dayanand³, Puri Poonam⁴

¹Smt. Vidyawati College of Pharmacy, Gora Machiya, Jhansi, UP, India

²Department of Pharmaceutical Chemistry, Rajiv Academy for Pharmacy, Mathura, UP, India

³ICFAI Flexible Education Network, Elite Sipiri Road, Jhansi, UP, India

⁴Institute of Management Studies, Bundelkhand University, Jhansi, UP, India

*Gyanendra singh, HOD, Department of Pharmaceutics, Smt. Vidhyawati College of Pharmacy, Jhansi (UP) E.Mail: gyanendraleo@gmail.com

Article Received on: 30/12/10 Revised on: 16/01/11 Approved for publication: 20/01/11

ABSTRACT

There is increasing concern at the amount and cost of prescribed medicines that are unused and then have to be disposed off. Our studies have used health promotion and Dispose Unwanted Medicines Properly campaigns targeted at the patient to describe and quantify the annual cost of waste. The reasons patients return unused drugs to pharmacies have also been explored. The Study focuses on patient explanations for not needing medication categorized as, over-collection in the past, self-management strategies, changes in medical condition, other changes in patient circumstances or the repeat medicines policy at the surgery.

The aim of the original study was to make a measurable change in prescribed medicines with a reduction in medicines wastage, whilst at the same time achieving improved standards of pharmaceutical care. Information on patient needs and behavior came from consultation in the pharmacy monitoring forms and interview. The study was based on two medical practices areas in Jhansi and Orai, comparing an outer city and an inner city population. The participants were general practitioners and pharmacists. The outcome was that 67% of the prescription sale was found over the 33% OTC product of the medications that would be expected to be regularly supplied were collected. The study suggests that closer professional management at the point of dispensing and an understanding of patient experiences can help reduce the amount of unwanted medication collected by patients.

KEYWORDS: Medicine Management, Survey, Shelf Life, OTC (Over Through Counter)

INTRODUCTION

Medicines are an important aspects of human life, it become necessary to handle this blessing of human creation because in country like us there were n numbers of patients are died because of inability to purchase the Medicines and another part of the coin we are the country were medicines were not properly consumed and become waste for the society⁸.

There is increasing concern at the amount and cost of prescribed medicines that are unused or wasted and then have to be disposed off previous studies have used health promotion and Dispose Unwanted Medicines Properly campaigns targeted at the patient to describe and quantify the annual cost of waste. The reasons patients return unused drugs to pharmacies have also been explored. The paper focuses on patient explanations for not needing medication; categorized as: over-collection in the past, self-management strategies, changes in medical condition, other changes in patient circumstances, or the repeat medicines policy at the surgery^{6,3}.

The aim of the original study was to make a measurable change in prescribed medicines with a reduction in medicines wastage, whilst at the same time achieving improved standards of pharmaceutical care. Information on patient needs and behavior came from consultation in the pharmacy monitoring forms and interview. The study was based on two medical practices in the Jhansi and Orai, comparing an outer city and an inner city population. The participants were general practitioners, pharmacists and Patients. The

study suggests that closer professional management at the point of dispensing and an understanding of patient experiences can help reduce the amount of unwanted medication collected by patients^{5,7}.

Objective

To identify the sources and reason of medicinal waste.

Evaluation and prevention process of medicinal waste.

The purpose of this study is to discover answer to questions through the application of self administered questionnaires. The aim of research is also to find out the truth which is hidden and which has not been discovered.

To discover the reasons behind these problems.

Provide suitable answer of this question.

MATERIAL AND METHODS

Sample Designing

A sample design is the definition plan for obtaining a sample from a given population, we refer to the technique or the procedure, we would adapt in selecting practitioner and pharmacist for the sample. Sample design is determine before data are collected. There are many sample designs from which researcher can choose. I selected the stratified purpose sampling design.

Sample Unit- Medical practioner and pharmacist from district Jhansi and Orai (UP)

Sample Size- 100

Research Methodology

Research methodology is a way to systematically solve the research problem, when we talk to research methodology we not only consider the research methods but also consider the logic behind the methods we use in the context of our research study. So, this research result is capable of being evaluated either by researcher himself or other. Research shows scientific and inductive thinking and it promotes the development of logical habits of thinking and organization⁴.

Research Design

A plan, structure and strategy of investigation conceived so as to obtain answers to research questionnaires. A research design is the arrangements of conditions analysis of data in a manner that aims to combine relevance of the research purpose with economy in procedure. In fact, the research design is the conceptual frame work within which the research is conducted, it constitute the blueprint for the collection, measurement of data. I have adopted "descriptive research design". Are those studies which are concerned with describing the characteristics of particular individual or a group The studies concerned with specific predictions, groups or situation are or examples of descriptive research studies, this design involves the followings content.

- 1) Type and sources of data
- 2) Tool of data collection
- 3) Contact method

Type and Sources of Data

Primary data-was collected from the medical practioner and pharmacist through self administered questionnaire, This study involves the collection of primary data because it is less touched by the researchers no proper data available from the past .The primary data is advantageous for many reasons as it can be re-tabulated and re-analyzed^{2,3}.

Tools of Data Collection

Structured and closed ended schedule.

Contact Method

Contact to the targeted population one by one.

RESULT

The present studies comprised the questionnaires which having the 10 (Ten) Questions. Our respondent was belongs to urban and rural area of Jhansi and Orai district of UP. With reference to question number 1 in questionnaires around 54% respondents admitted that patients are using tablets (solid dosage forms) and 12% use tubes or semisolids dosages forms Figure 1. When the 2nd question being asked to the

respondents it was observed that the 36% consumer use the medicament whose shelf life is within five years Figure 2. When asking about the packaging appeal of product around 78% respondents admitted that they use flexible packaging for their product while rest 22% of the respondents are using conventional mode of packaging Figure 3. The response of the respondents with regard to question number 4 mostly preferred Generic 72% over Ethical 28% Figure 4. In terms of prescriptive medicines and over the counter (OTC) the respondents prefer prescriptive medicine 67% over (OTC) sale 33 % Figure 5. When question 6th regarding the side effect while purchasing the medicine, respondent shows a totally mixed reactions, 39% said Yes, 58% said no, and rest of them doesn't know about the side effects Figure 6. With reference to question number 7th the response is found that medicinal waste is increased by increasing the drug purchasing in bulk. 63% consumer admitted, medicine waste is increased when purchase in bulk Figure 7. Out of those who agree are around 79% respondent stands in favor to need improvement in technology and rest of them not aware about the technology and they adopt the old techniques Figure 8. Response came against the referred question is 63% medical practitioners relies that medical practitioner is responsible for this problem and 27% for human attitude. Figure 9 Regarding question number 10 that 34% doctors are responsible, 12% patients and 44% are less aware against the medicine. Figure 10

DISCUSSION

According to pharmacists and medical practitioner prescription record of solid dosage form i.e. tablets are mostly preferred because of the ease of patient uses. Economically and therapeutically point of view of drugs, medicaments and drug products of maximum duration of self life is preferred over the Short shelf Life products because shorter self life deteriorate in less time. Flexibility of packaging is more popular form of dosage within Medical community, flexible packing is preferred a unit dosage form in which patient is convenient. Though Ethical drugs is an important aspect from therapeutic point of view but from economical point of view consideration for generic medicines is high. Generic medicine consume in general practice such as NSAIDs, Analgesic, etc but in the case of life saving drug medical practitioner not taking any risk for the patient health, mostly they recommended ethical drugs of reliable manufacturer. We found that prescription sale is more high compare to over the counter Medicine, primitive factor for increase the prescription sale because pharmaceutical marketing is based on principle of indirect sale. We found the mixed reaction, most of them are well aware about the Medicaments and its side effects, mostly these questions is depend upon the customer's awareness and the knowledge of the individuals.

We found that increasing amount of wastage when the customers purchasing the drug in bulk. Technology is the most important factor in the field of pharmaceuticals, most of the respondent feels that technology is necessary for storing, administration, of the products. Response is seen, practitioner suggested that minimal waste responsibility play by the pharmacist and the pharmacist give the responsibility to medical practitioner. Awareness is the most important factor due to which we reduce the medicinal waste, those waste which other than hospital.

Some limitations are seen in this study which is given below:

Since a lot of survey are being conducted now a days, so it was very difficult for us to convince the people about the importance of the survey, as many of them did not took it very seriously. While working on project several Dealers were visited, In spite of the best efforts certain information could not be received and certain loopholes remind in study because of following limitation-

1. Study was limited in Jhansi and Orai. (U.P).
2. Secondary data was not used.
3. Limited time was a major constraint.
4. Sample size of 100 respondents could not reflect the generalize ability of the study.
5. There was biasness in answering of the certain questions on the part of the customer.
6. The respondents may be biased gives false data so as to influence the researcher.
7. Cost considerations from practical point of view have a major impact in conducting a research.

Recommendation & Suggestions

It is recommended that presently more attention should be laid on wide variety of features.

It is suggested that, the product should be used which have maximum self life period.

It is suggested that biodegradable packaging should be use.

Pharmacist and medical practioner also play an important role to prevent the medicinal waste by providing the information regarding the product.

Recycle process should be necessary as much as possible combustion of hospital waste in an adequate way.

Doctors have to prescribe carefully.

Patients take medicines regularly, if medicine is in spare, return to medical store.

Variety of Drug candidate is big problem, It creates confusion.

Proper managing is to be done for unconsumed medicines.

There is a need to educate general public for the proper use of medicines.

ACKNOWLEDGEMENT

I am highly acknowledged of the students of Smt. Vidyawati College of Pharmacy, Jhansi (UP) to contributing for their work and collection of data and providing me a support for this work.

REFERENCES

1. Philip Kotler, Kayley, Marketing management, Analysis Planning and Control 11th ed. Prentice Hall of London; 1984.
2. Kothari CR, Research methodology, Methods and Techniques, 2nd ed. Wishawa Prakashan, Jaipur; 1990.
3. French MTP, Martin RB.B, The Costs of Drugs Abuse Consequences: A Summary of Reasearch Findings. J. of Substance Abuse Treatment 1996; 13:453-466.
4. Caulkins J, Reijter P. Setting Goals for Drug Policy: Harm Reduction or Use Reduction?, Addiction 1997; 9:1143-1150.
5. Single E, Robson L, Xie X, Rehm J. The Economic Costs of Alcohol, Tobacco, and Illicit Drugs in Canada 1992, Addiction 1998; 93:991-1006
6. Kleinman, Mark AR, Economic Cost' Measurements, Damage Minimization and Drug Abuse Control Policy, Addiction 1999; 94(5):638-641.
7. Zarkin GA, Cates SC, Bala MV. Estimating the Willingness To Pay For Drug Abuse Treatment: A Pilot Study. J. of Substance Abuse Treatment 2000; 18(2):149-59.
8. Hakkarainen P, Tigerstedt C, Tammi T. Dual-Track Drug Policy: Normalization of the Drug Problem in Finland. Drugs Education Prevention and Policy 2007; 14: 543-558.

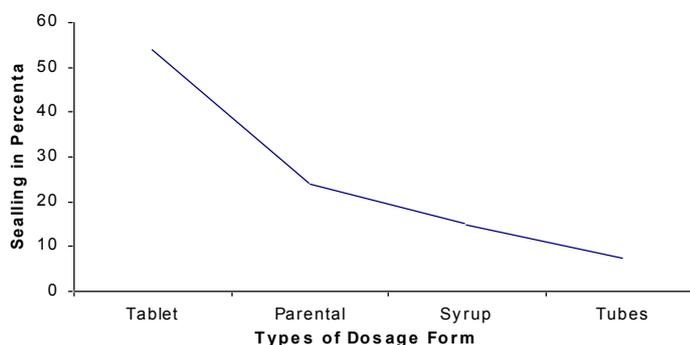


Figure 1: Graphical Representation of Preferred Dosage Form

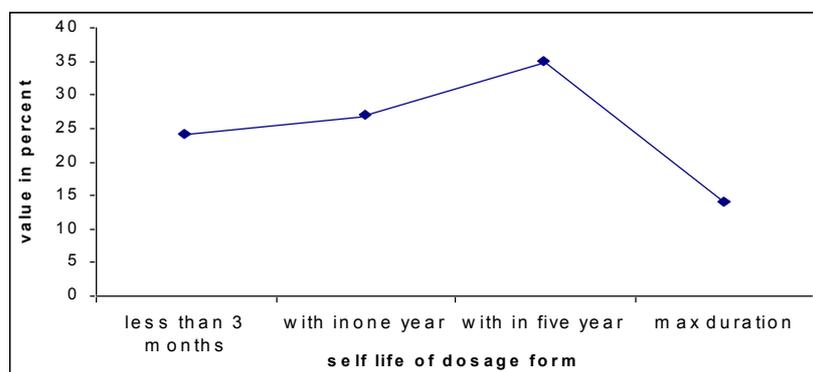


Figure 2: Graphical Representation of Drug Which Preferred According To Shelf Life

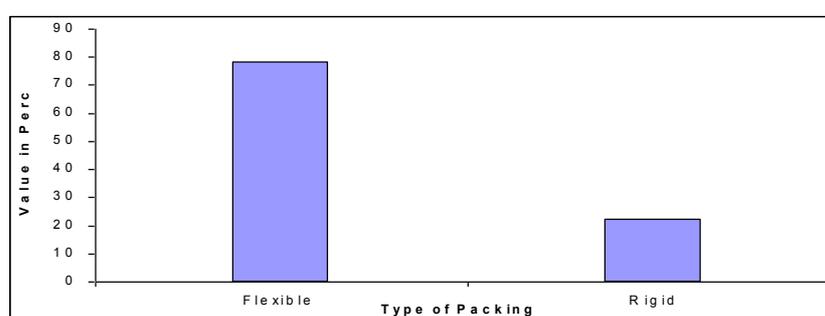


Figure 3: Preferred Dosage Form According To Packing

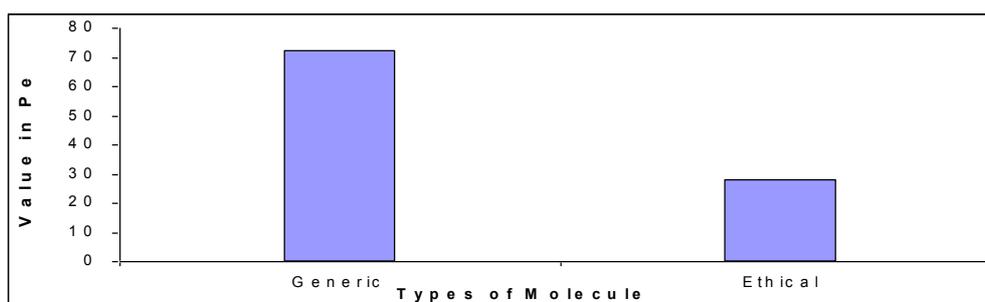


Figure 4: Graphical Representation of Generic and Ethical Dosage Form

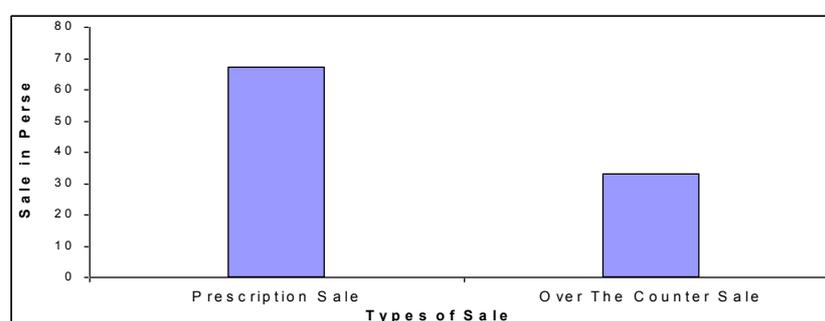


Figure 5: Graphical Representation of Prescription Medicine and OTC Drug

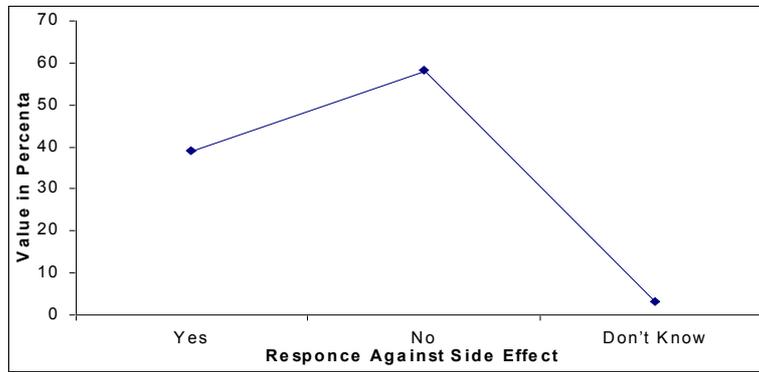


Figure 6: Graphical Representation of Awareness of Medicinal Waste

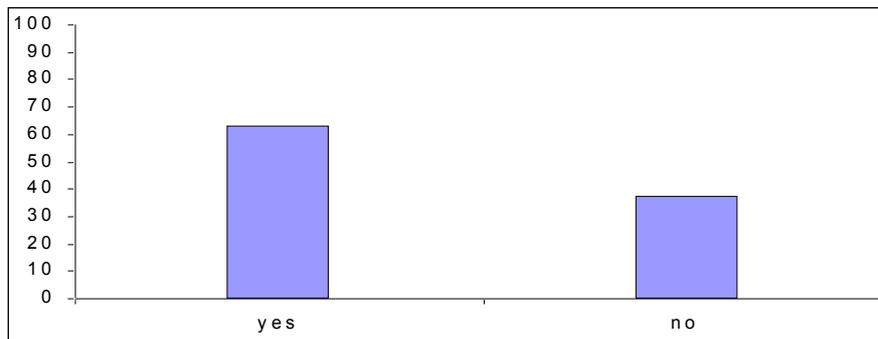


Figure 7: Graphical Representation of Medicine Using In Bulk

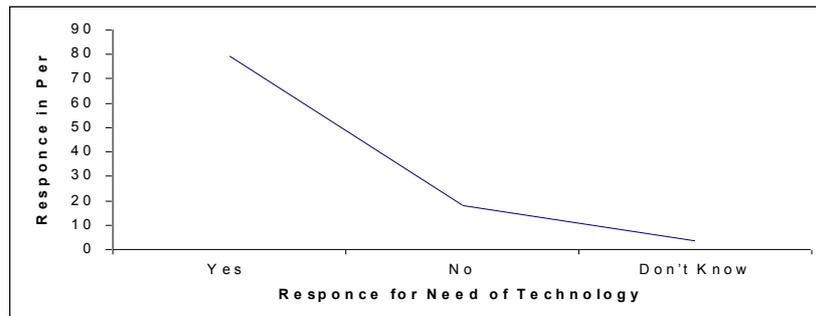


Figure 8: Graphical Representation of Response for Need of Technology

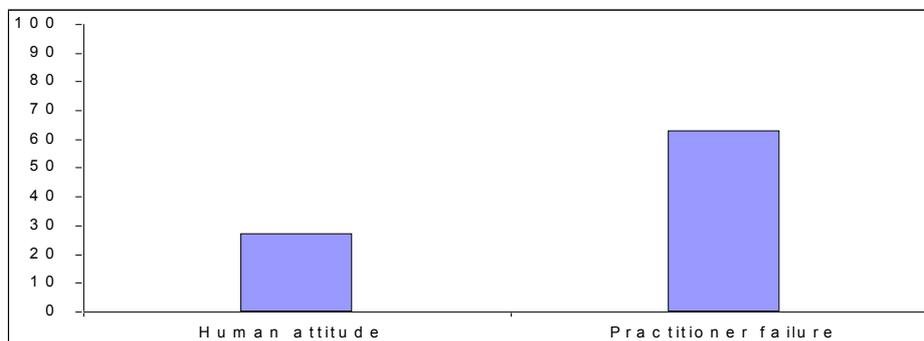


Figure 9: Graphical Presentation of Responsible Cause of Problem.

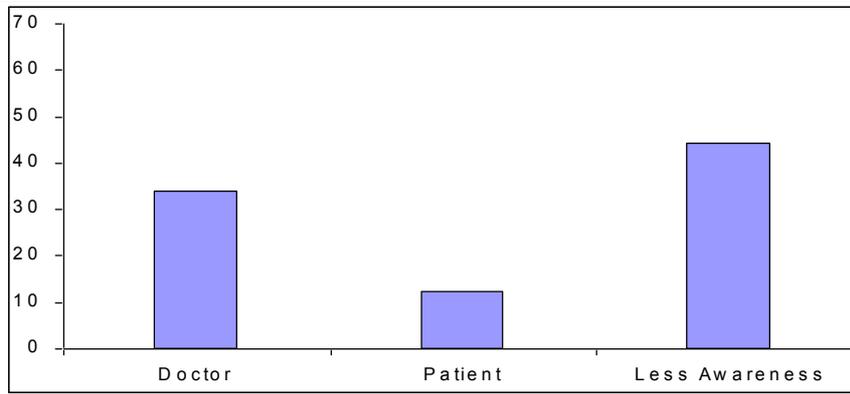


Figure: 10 Graphical Presentation of Responsible Person of Problem.

Source of support: Nil, Conflict of interest: None Declared