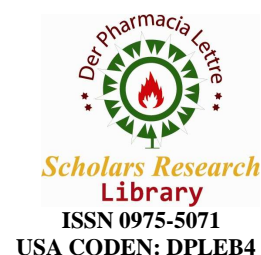




Scholars Research Library

Der Pharmacia Lettre, 2011, 3(3):306-310
(<http://scholarsresearchlibrary.com/archive.html>)



Assessment of pregnancy prescriptions in an ante-natal clinic

R. Sivasakthi*, C. Senthilkumar, S S. Rajendran, J. Anudeepa, R. Ramya and Venkat Narayanan.

RVS College of Pharmaceutical Sciences, Sulur, Coimbatore, Tamilnadu, India

ABSTRACT

A Prospective cross-sectional study was carried out in order to assess the prescription pattern in pregnancy women's. The study subjects were 200 pregnancy women from ante natal clinic at Coimbatore. Prescription pattern and qualification of antenatal care providers are assessed by using Instate Excel sheet. The main outcome measures were Calcium, Iron, and Folic acid are the main drug of choice. During pregnancy, either alone or in combination with other drugs. Self medication was more in higher socio economic and knowledge on contraceptive methods are less in rural population. Mean age of the group under the study was 28 years (range 25 to 30 years). The majority of Pregnancy women in Urban were house wife 56% (n=112) and no one is from Army, air force, Smoking and alcohol. Folic acid is mostly Prescribed in the Pregnancy prescriptions 21%(n=42) and Calcium and Iron were Prescribed in 21.5%(n=42) and 20%(n=40). The study resulted that Prescriber must encouraged to adhere to the standard guidelines like FDA- safety drugs for better ante- natal Care..

INTRODUCTION

Drugs play an Important role in protecting and restoring Health. Prescription writing is a Science and art conveying message from Prescriber to the Patient. Studies shows that teratogens to cause fetal death syndrome and FDA-safety drugs in Pregnancy gives Improvement in Clinical Practice.

The rational use of the drugs during Pregnancy requires a careful assessment as in addition to mother, the Health and life of her unborn child. Information on the use of drugs during Pregnancy is not available in most of the ante-natal Clinics. Careful consideration of Prescribing of drugs during Pregnancy and Patient Counseling may reduce medication errors and Patient safety.

In market most of the drugs are not labeled for use during Pregnancy. So, Physician should take care for Pregnant women to help them to desire whether the potential benefits to mother outweigh the risk to the fetus.

Nicotine and its metabolite Nicotinine are harmful to the fetus effects including intra uterine growth degradation. So, Physicians should educate Pregnant women about the harmful effects of smoking.

The Previous studies shows that the alcohol always has teratogenic potential that effects the development of central nervous system of the fetus and new born with potentially severe consequences. The Consequences of alcohol dependency in pregnancy is a fetal alcohol Syndrome (FAS). The Primary purpose of this study was found out the Pregnancy Prescription Pattern, HERBAL and Self medication, Qualification of Antenatal care provider and the Knowledge of Pregnancy women's on Contraceptives.

MATERIALS AND METHODS

Study Design:- A Prospective cross-sectional study.

Study site:- Surya Multispecialty Hospital, Coimbatore.

Study period:- The Study was conducted for a period of 6 months.

Outcome measures:- Improvement in Prescription pattern on Pregnancy women's and qualifications of ante-natal care providers,

Inclusion/Exclusion criteria:- Pregnancy women's in any age groups ranging from 20 to 35 years. And Pregnancy women are having hypertension. With other Co-morbidities. Whereas Pregnancy women's who were below 18 years of age and above 45 years of age.

Methods:-

The data collection form was given to the study population as per the study criteria . The Pregnancy women's were explained about the purpose of the study and were requested to give the required information and counseling was given to the patients.

Statistical Methods:-

The Collected data were analyzed and results were expressed as mean (+-) Standard deviation."P"- value of >0.05 was considered statically significant.

RESULTS AND DISCUSSION

A total of 200 patients who were on Pregnancy were enrolled in the study. The mean age of the group under study was 27 years.(SD=1.17; range = 21 to 25 years). 98% (n=196) were rural and 2% (n=4) were rural population. Age distribution of patient who participated in the study was given in Table-1.

Table-1 age Distribution of Pregnancy Women

Age distribution in years.	No. of Patients.	Percentage(%)
18 - 20	30	15%
21 - 25	160	80%
26 - 30	10	5%
31 - 40	Nil	Nil

Almost 51%(n=101) of the study population under the category of high school where as 1%(n=2) of the patients were illiterate. Majority of patients were non-vegetarians 68% (n=136) and no one were Alcoholic and Smoking.

Dislipidemia was the highest disease observed as family history with value of 31%(n=61). Moreover 2%(n=4) of anemia. Folic acid, Calcium, Iron, multivitamins were the four drug classes prescribed either alone or in Combination in about 22%(n=43) of the Prescriptions followed by Folic acid and Iron with the frequencies of 21%(n=42) and 20%(n=40) respectively. The details of current treatment of drugs shown in table-2.

Table-2 Current treatment of drugs

Drug class	Total No of Drugs used	% Use of drugs.
MVT	40	20
Calcium	43	21.5
Folic acid	42	21
Iron(Heamatinic)	40	20
NSAIDS	20	10
Antiemetic	06	03
Antihypertensive	04	02
Diabetics	03	1.5

Table -3 gives the details of fixed dose Combinations. About 51%(n=102) prescriptions were Prescribed with MVT, Folic acid and NSAIDS. The other major combination prescribed was Calcium, MVT in 41% (n=82).

Table-3 currently prescribed fixed dose combinations

Drug Class	No. of Prescriptions.	Percentage (%)
Vitamins + Folic acid (40 + 42)	82	41
Iron + Folic acid (42 + 40)	83	41.5
Calcium + Vitamins (43 + 40)	82	41
Vitamins + Folic acid + NSAIDS(40+42+20)	102	51

One way analysis of variance was performed to compare the prescribed drugs by using Turkey-Kramer multiple comparison Test. Significant difference ($P>0.05$) was observed in the comparison Test and the results were as shown in table -10.

A Prescription based survey is considered to be one of the most effective methods to assess drug utilization of medication. It is also important to consider the recommendations of FDA drugs on Pregnancy that helps to improve Prescribing Patterns of the Prescriber and ultimately the Clinical Standards. A continuous supervision is required through such kind of

systematic audit that provides feedback from the Physicians and helps to promote rational use of drugs and ante-natal care.

Table-4 Turkey-Kramer Multiple Comparison Test

Drug Combinations	Mean value	P-value
NSAIDS Vs MVT	-4.0	>0.05
NSAIDS Vs Calcium	-4.6	>0.05
MVT Vs Calcium	2.8	>0.05
MVT Vs Antiemetic	7.2	>0.05
Calcium Vs Folic acid	6.8	>0.05
Calcium Vs Antiemetic	7.8	>0.05
Folic acid Vs Antibiotics	7.4	>0.05
Folic acid Vs Antiemetic	7.8	>0.05

Note:- If the value of 'q' is greater than 4.669, then the P-value is less than 0.05

The Present study observed that Pregnancy was more in urban than rural population. According to the study finding 21 to 25 years age group women were more in pregnancy and our study result also indicates the same. The mean age of Pregnancy women were observed to be 26 years. The Pregnancy care drugs prescribed to the study patients were categorized. The three main class of drugs Prescribed alone or in combination with other class of drugs were Calcium, Folic acid, Iron, which constituted 22%, 20% respectively. The mostly Prescribed fixed dose combination was MVT, Folic acid and NSAIDS. The use of fixed dose combination may produce more compliance and simplify the treatment.

The current knowledge of Pregnancy women was assessed. 86% were had a knowledge of Contraceptives in Urban population. Even though the Patient was educated they were taking self medication and herbal drugs. It was interesting to note that the number of Pregnancy women self-medication, Herbal medication were higher when compared to lower Socio-economic groups. It may be due to lack of Patient counseling.

CONCLUSION

Ante-natal care is a key entry point for pregnant women to receive a broad range of health-promotion and Preventive health services including Nutritional support. It is also an time to counsel women about the benefits of child spacing. Rural and uneducated women are least likely to receive antenatal care.

Targeted assessment based on the women's individual situation to ensure normal progress of the Pregnancy and to facilitate the early detection of and special care for Complications, Chronic conditions and other potential problems.

The study conclude that despite of few positive adherences of FDA-safety drugs for Pregnancy the fetal growth was not attained in the Pregnancy women's. Prescribers must encouraged to adhering to the Standard guidelines like FDA-safety drugs for Pregnancy for better ante-natal care. Educational programmes on Prescribing to Pregnancy will give benefits for both care provides and Pregnancy women's.

REFERENCES

- [1]. SA.Panditrao, MA.Ramkrishna, *The journal of obstetrics and Gynecology of India*; **2006**; 56(3);216-218.
- [2]. Baired PA, Anderson Tw, Lowry RB, *American Journal of Human Genetics*, **1989**, 42910; 677.
- [3]. Friedman JM, Little BB, *Journal of Obstetrics and Gynecology*, **1990**, 75(1); 594.
- [4]. Little BB, *Journal of Obstetrics and Gynecology*, **1999**, 93(1); 858-868.
- [4]. Wen SW, Walker M, *Journal of Obstetrics and Gynecology*, **2004**, 26(1); 819-822.
- [5]. Ronald A, Black MD, *Journal of American Family Physician*, **2003**, 15;67(12), 2517-2524.
- [6]. Kumari R, Idris MZ, Khanna A, *Indian Journal of Pharmacology*, **2008**,40(6); 243-247.
- [7]. Tiwari H, Kumar A, Kulkarni SK, *Singapore Medical Journal*, **2004**, 45(3); 117-120.
- [8]. Simones LA, Ortiz M, Calcino G, *Medical Journal of Australia*, **2008**, 188(4); 224-227.
- [9]. Sharma R, Kapoor B, Verma U, *Journal of medical Science*, **2006**, 60(7); 277-287.
- [10]. Blenkinsopp A, Phelen M, Dahkil N, *International Journal of Pharmacy Practice*, **2000**, 8(1); 165-175.
- [11]. Ram SS, Rajeswari R, *Indian Journal of Hospital Pharmacist*, **2009**, 46(3); 78-82.
- [12]. Sreedhar D, Janodia MD, Udupa N, *Indian Journal of Hospital Pharmacist*, **2009**, 46(3); 83-85.