

# “DRUG USE DURING ANTENATAL PERIOD AT A TERTIARY CARE HOSPITAL”

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# Introduction



- Drug use in pregnancy: Balance of benefits to mother & risks to fetus.
- 8% of pregnant women need drug treatment for chronic diseases and pregnancy induced complications .
- Difficult to determine all effects on fetus before marketing new drugs: ethical reasons.
- Medication safety information in pregnancy: obtained through animal studies, case reports and epidemiological studies.
- Pattern of drug use in antenatal period: Is there a room for improvement in the light of current knowledge?

# Aim

- To study the pattern of drug use during antenatal period at a tertiary care teaching hospital.

# Objectives

- To assess current treatment practices in pregnancy.
- To categorize drugs used in antenatal period according to pharmacological class and teratogenic potential (U.S.FDA classification).
- To evaluate awareness of drug intake, in pregnant women at a tertiary care hospital.

# Material & Methods



Observational cross-sectional study.

Study population: 60 Pregnant women from ANC clinic & Obstetrics- Gynecology ward at a tertiary care teaching hospital (Pilot work).

Study duration: Sept – Oct 2010.

Data collection: Interviewing study subjects with their prescriptions and medical case-files.



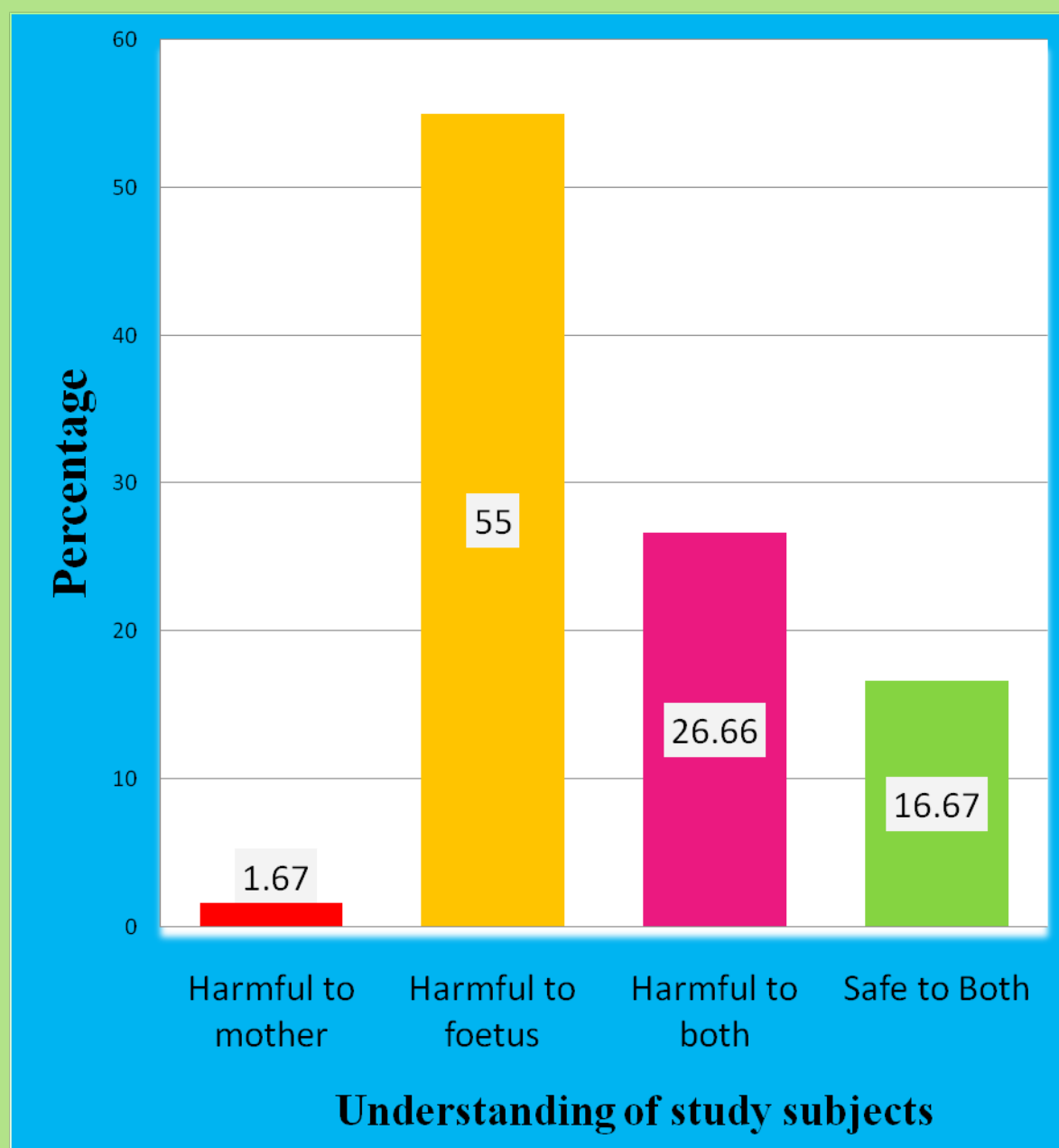
➤ Drugs categorized according to pharmacological class and teratogenic potential using U.S.FDA classification.

➤ Results expressed in percentage.

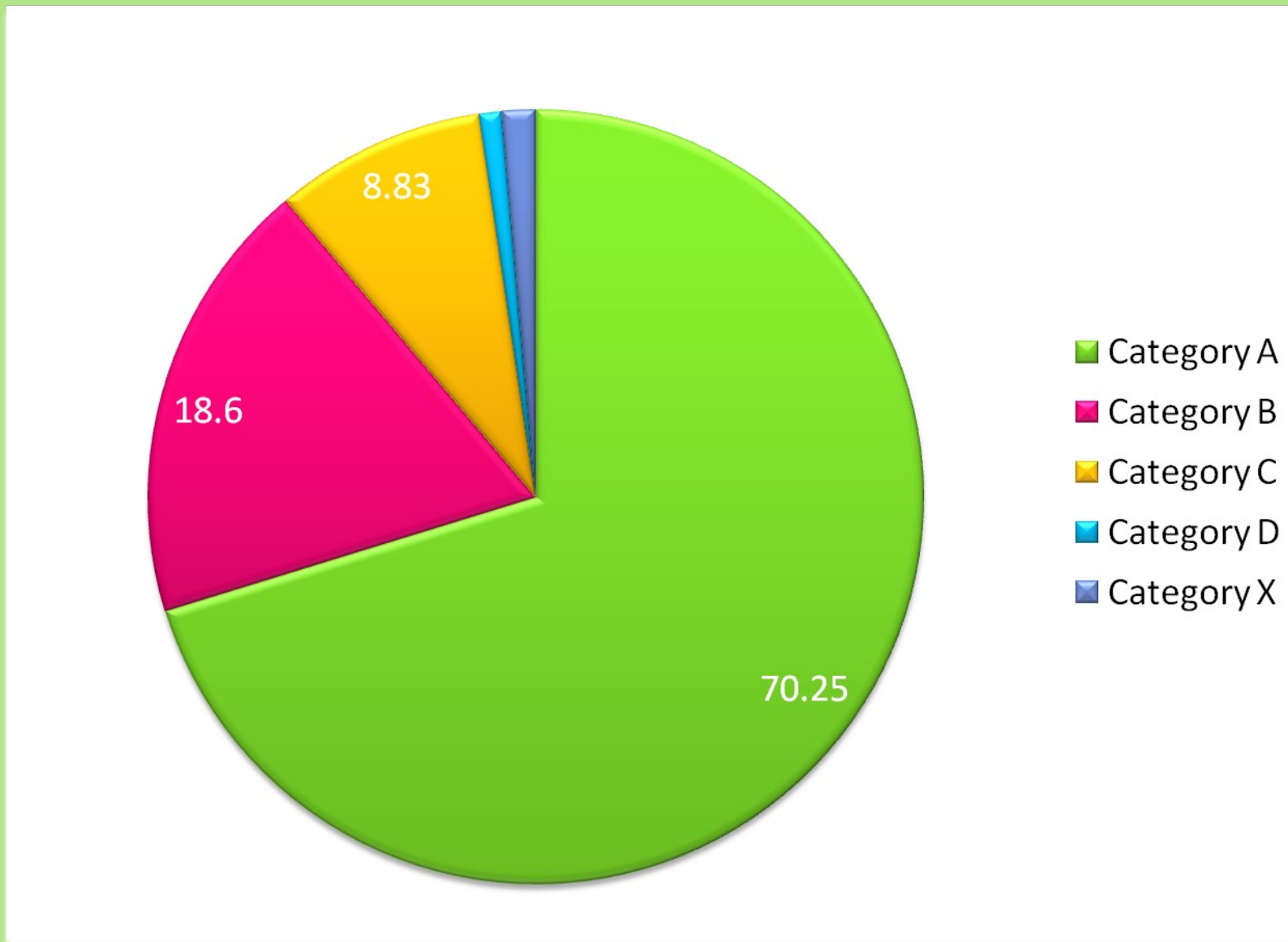
# Results

Sr. No	Drugs	No.(%)
1	Multivitamins	21(9.76)
2	Iron and Folic acid	56(26.04)
3	Calcium	56(26.04)
4	Antipyretic	6(2.77)
5	Analgesics	2(0.93)
6	Antimicrobials	16(7.44)
7	Antifungal	5(2.32)
8	Antihypertensive	9(4.18)
9	Antiulcer	17(7.90)
10	Antiemetic	3(1.39)
11	H1 Antihistaminic	3(1.39)
12	Antiepileptic	2(0.93)
13	Antiasthmatic	1(0.46)
14	Insulin	3(1.39)
15	Uterine relaxant	2(0.93)
16	Digoxin	1(0.46)
17	Corticosteroids	1(0.46)
18	Progesterone	3(1.39)
19	Others	8(3.72)
<b>Total No. of Drugs</b>		<b>215</b>

## Understanding about use of medicines in pregnancy



# U.S.FDA Categorization of drugs used in the study



**Category A & B**

**Most frequently used drugs in the study (No risk or risk to fetus is unlikely)**

Category C

Nifedipine, Digoxin, Mg.sulphate, Deriphylline, Clotrimazole, Furosemide, Oseltamivir, Dextromethorphan, Isoxsuprine

Category D

Phenobarbitone, Carbamazepine, Phenytoin

Category X

Progesterone

# Discussion



- Drug use practices in the study set-up are Appropriate.
- Average drugs per prescription: 2.9.
- Most frequently prescribed drugs: Iron, folic acid, multivitamin & calcium supplements.
- Majority of the drugs used for common ailments in pregnancy (Nausea, URTI, UTI, Diarrhea, PIH, etc.): fall in category A&B.
- Drugs used to treat other pregnancy related problems : Nifedipine (Pre-eclampsia), Mg.sulphate (eclampsia), Isoxsuprine (preterm labour), Clotrimazole (vaginitis).
- Drugs used for chronic diseases (Epilepsy, Bronchial asthma, CCF) : fall in category C&D.

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- Category X (progesterone): for threatened abortion and preterm labor.
- Awareness about specific drugs prescribed: Lacking.
- Strength of the study: Data collected from prescriptions and medical case-files rather than just recall from patient.

## Conclusion

- Study reveals careful prescribing behavior.
- Need to educate and counsel ANC patients.





# References

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