



Prescription practices among antenatal care providers

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OBJECTIVE(S) : To know the variations in drug prescriptions given to pregnant women by varied types of medical practitioners.

METHOD(S) : Prescriptions possessed by women admitted for labor were collected in 160 consecutive unbooked labor admissions. These prescriptions were analyzed to study the prevailing practices of prescribing medications to pregnant women.

RESULTS : One hundred and sixty women generated 300 prescriptions. There were practitioners of four different acquainted systems and three incomprehensible systems of medicine who prescribed drugs to pregnant women. Persons with 16 different qualifications were engaged in providing care to pregnant women. Number of drugs prescribed per prescription ranged from one to ten. Repetition of the same drug in the same prescription but by different trade name was seen in 41 prescriptions. In 65 prescriptions one or many drugs were written in illegible handwriting. Teleprescription and quackery were other observations.

CONCLUSION(S) : There is anarchy in prescription practices. Continuation of medical education programs on prescribing in pregnancy would benefit both the care providers and the pregnant women.

Key words : pregnancy, antenatal care providers, prescriptions, drugs

Introduction

India has physicians practicing a variety of systems of medicine. Pregnant women enjoy freedom to get pregnancy care from the doctors of their choice. This has resulted in absence of uniform pattern of prescribing medications to pregnant women. We attempted to study the extent of variations in prescription practices concerning pregnant women.

Methods

Three hundred prescriptions possessed by 160 consecutive unbooked women admitted for labor were collected and studied. They were given to them during their antenatal care

period. The names, addresses and phone numbers of the prescribing doctors were blinded to the authors. These prescriptions were analyzed to study the prevailing practices of prescribing medications to pregnant women. The trade names of the drugs prescribed were used to know exactly to which category the drugs belong by referring to Indian Drug Review¹ and Monthly Index of Medical Specialities². These prescriptions were analyzed to know the qualifications of those providing antenatal care. The analysis was made for trimesters of pregnancy, number of drugs prescribed in a single prescription, repetition of the same drug with different trade names in a single prescription, and illegible prescriptions. The dosage of the prescribed drugs was also studied. Teleprescriptions were also analyzed.

Results

Out of 300 prescriptions 64 were for first trimester, 118 for second trimester and 102 for third trimester. In 16 prescriptions we were unable to find the exact trimester. There were four different acquainted systems of medicine involved in prescribing during pregnancy viz., Allopathy,

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Ayurved, Homeopathy and Unani. Also there were three incomprehensible systems of medicine prescribing drugs to pregnant women. The different qualifications of practitioners who were engaged in providing care to pregnant women and number of prescriptions by each qualification are shown in Table 1. Table 2 shows the number of drugs prescribed per prescription. It ranges from one to ten. Repetition of the same drug in the same prescription but by different trade name was seen in 41 prescriptions. Iron and multivitamin prescriptions were common in these prescriptions. Details of such prescriptions are shown in Table 3. In 65 prescriptions one or more drugs were written in illegible handwriting. There were two prescriptions in which not a single drug could be read properly. It was observed that although 11 women were low risk gravidas 83 of their prescriptions carried 4 to 6 drugs (Table 4). In only 56% of first trimester prescriptions folic acid was prescribed. In 24% of first trimester prescriptions iron was prescribed which was against the standard practice of not prescribing iron in the first trimester³. Iron and calcium were prescribed in 70% and 50% of the second trimester prescription respectively. Multivitamins were the third most preferred drug in second trimester prescriptions after iron and calcium, and it appeared in 30% prescriptions. Only 54% of third trimester prescriptions had iron and calcium prescribed.

Table 1. Qualifications of those giving antenatal care.

Qualification		Number
M.D. (Obgy)	(Allopathic)	89
D.G.O	(Allopathic)	108
MBBS	(Allopathic)	17
BAMS	(Ayurvedic)	26
CGO	(Ayurvedic)	03
DHMS	(Homeopathy)	04
BHMS	(Homeopathy)	05
DMS	(Unknown)	02
BUMS	(Unani)	02
BSAM	(Unknown)	03
GCAM	(Ayurvedic)	02
MFAM	(Ayurvedi)	05
DMLT	(Laboratory technician)	01
MSFAIS	(Unknown)	01
MD (Medicine)	(Allopathic)	06
MS (Surgery)	(Allopathic)	06
No qualification		18

Table 2. Number of drugs prescribed per prescription.

Number of drugs in a prescription	First trimester (n=64)	Second trimester (n=118)	Third trimester (n=102)	Trimester not identified (n=16)
1-3	33	58	56	06
4-6	28	57	40	05
7-9	03	02	06	105
>9	-	01	-	-

Table 3. Repetition of the same drug in the same prescription (n=41).

Category of drug	Number of prescriptions with repetition of the same drug with different trade name
Iron	09
Calcium	07
Multivitamin	11
Antiemetic	04
Antacid	03
Nonsteroidal antiinflammatory	03
Progesterone	03
Folic acid	01

Table 4. Number of drugs prescribed and the risk status of the gravidas.

	Number of drugs per prescripion			
	0-3	4-6	7-9	>9
Prescriptions of 112 high risk gravidas	20	36	05	-
Prescriptions 112 low risk gravidas	113	83	08	01
Risk status not identified (n=22)	24	07	03	-

Out of 300 prescription, 47 (15.7) did not have the signature of the prescribing doctor nor the date. On 18 (6%) prescriptions there was no name or qualification of the prescribing doctor. Interestingly, six prescriptions were telephonic prescriptions which were written down by the women or their relatives with the doctor dictating them on phone. The drugs prescribed telephonically were tocolytics in three prescriptions, sedatives and antiemetics in two each and antihypertensives and antacids in one each.

When we compared the drug dosage prescribed with the recommended standard dosage, it was found that calcium was not prescribed according to standard recommendation in 24 prescriptions. Only 500 mg/day of calcium was

prescribed as against standard recommendation of 1 to 1.2 g/day. Antimalarial was not prescribed in standard dosage in three prescriptions.

Discussion

Doctors having qualifications in four acquainted and three incomprehensible systems of medicine prescribed drugs to pregnant women. It seems that almost anybody with slightest training in pregnancy and related problems provides antenatal care. Out of the 16 different qualifications of these antenatal care providers nine pertained to systems which are not of modern medicine. It is difficult to imagine the protocol of antenatal care these practitioners must be following. Number of drugs prescribed per prescription ranged from one to ten which is against the general consensus that during pregnancy the medication must be minimum. Repetition of the same drug in the same prescription by different trade name was seen in 41 (13.7%) prescriptions.

The purpose of these practices is not clear. Possibly women of rural background admire lengthier prescriptions or relate the quality of a doctor to the length of his prescription. However this resulted into higher spending and, therefore, inability to continue antenatal care for reasons of affordability. This might have also resulted into nonavailability of money for important investigations. In 65 (21.7%) prescriptions one or more drugs were written in illegible handwriting. Doctors handwriting has always been a matter of criticism, and ability of pharmacists to read it a matter for great

admiration. This sometimes must result in consumption of unintended drugs. It is a standard teaching that iron requirement is not increased during first trimester. of pregnancy. Further its administration may bring about exacerbation of morning sickness. In spite of this 24% of first trimester prescriptions included iron. Calcium was often prescribed in less than advocated dosage. Telephonic prescriptions and quackery are other important observations. Telephonic prescriptions should be discouraged. Serious conditions that need urgent medication need hospital admission and not telephonic prescriptions. However, simple medications like antacids and laxatives which have no serious side effects and deal with ordinary complaints can be judiciously prescribed telephonically to allay anxiety and spare avoidable visits for consultation.

Conclusion

There is anarchy in prescription practices. Educational programs on prescribing in pregnancy would benefit both care providers and pregnant women.

Reference

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