AN EPIDEMIOLOGICAL STUDY OF ANAEMIA OF PREGNANCY
IN A RURAL POPULATION OF PRIMARY HEALTH CENTRE
KOCHHABHANWAR
DISTRICT JHANSI, UTTAR PRADESH

(SUMMARY)

THESIS
SUBMITTED FOR THE DEGREE OF
DOCTOR OF MEDICINE
(SOCIAL AND PREVENTIVE MEDICINE)

BUNDELKHAND UNIVERSITY
JHANSI, UTTAR PRADESH.

1982

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SUMMARY

Anaemia is one of the important preventable health problems affecting the women of child bearing ages. It is notorious for its deleterious effects during pregnancy, on mother as well as on foetus. It is often associated with high maternal and foetal mortality, besides morbidity.

Anaemia is a pathological condition in which the haemoglobin level is reduced, below the normal limits for age and sex of the individual. The term 'anaemia of pregnancy' is somewhat different from that of anaemia in pregnancy; the former takes into consideration only those types of anaemia which are directly caused or precipitated by pregnancy while the latter includes all the types irrespective of its aetiology.

In view of graveness and high magnitude of the problem in rural pregnant women, a longitudinal study on anaemia was undertaken under domiciliary conditions in a rural community of district Jhansi (Uttar Pradesh) with the following objectives.

1. To find out the extent of problem of anaemia of pregnancy in the area considered.
2. To investigate the association of various socio-economic and demographic factors, lactation and dietary habits with the prevalence of anaemia, if any.

3. To suggest some measures, based on the conclusions of the study, for the control of anaemia of pregnancy in the area.

A total of 246 pregnant women belonging to different trimesters of pregnancy were studied for the purpose. An equal number of non-pregnant women, belonging to same socio-economic status, parity and age-group, acted as control.

All the women of the two groups - study and control were subjected to a detailed examination consisting of general interrogation, history taking, general and systemic examination, haematological investigations and diet survey. In women initially belonging to first and second trimesters of pregnancy, a follow-up survey was also conducted, at an average interval of 3 months, to study the haematological changes and incidence rate of anaemia. A pregnant woman was considered to be anaemic when her haemoglobin level below 11 gm. percent; a cut-off point of 12 gm. percent was, however, considered for non-pregnant women (W.H.O., 1968). The findings of the study may be summarised as under:
1. The overall prevalence rates of anaemia were 68 percent and 25 percent in pregnant and non-pregnant women respectively. This indicated that in about 43 percent women, anaemia was directly caused or precipitated by pregnancy.

2. Follow-up investigation of women belonging to early pregnancy, revealed an overall net incidence rate of 44 percent, indicating the extent of a fresh development of this condition in pregnant women during a period of about 3 months.

3. The prevalence as well as incidence rates of anaemia showed an increasing trend with advancing pregnancy; the highest prevalence rate being in women belonging to third trimester. It indicates that for comparison of prevalence of anaemia in 2 groups of pregnant women, the groups need to be homogeneous in respect of gestational age. Of course, the criteria adopted for the diagnosis of anaemia must be uniform.

4. Microcytic hypochromic anaemia was commonest amongst various morphological types prevalent in the area in the two groups. It indicates that the majority of women were suffering from anaemia due to iron deficiency. A small percentage of pregnant women who were anaemic showed macrocytic changes too indicating that folic acid and Vit. B12 deficiencies also play some role in the causation of anaemia of pregnancy.
5. Amongst the socio-economic factors, literacy and social status of the women were found to be significantly associated with anaemia in the two groups. Literacy status of husbands had a significant role in the determination of anaemia in a population.

6. Prevalence of anaemia in both the groups increased with the increasing age of the woman. It was higher in women who had relatively early ages at consummation and were multigravidae. Prevalence of anaemia among pregnant women was also significantly affected by age at marriage, age at first child birth and space between last child birth and present pregnancy.

7. Prolonged breast feeding to the last child was found to have significant effect on the prevalence of anaemia neither in study nor in control groups.

8. Dietary factors showed a significant role in the determination of prevalence rates of anaemia in the two groups. Such a rate showed a consistent increase with increasing intake of iron, folic acid and Vit. B_12_.

On the basis of the findings portrayed above, some recommendations may be made for effective control of anaemia in population commensurating in nature with the present one.
1. The vulnerable group of pregnant women viz. elderly, multigravidae and those with short spaces between last child birth and present pregnancy should be given priority in anaemia control programmes; an attempt should be made to cover all such women specially during later half of their pregnancy.

2. Role of nutritious diet, prepared from locally available cheap food articles should be emphasized to all the women of child bearing ages.

3. Mass education should be provided to stop early marriages in the community; ages at marriage and at consummation should be enhanced, as far as possible, to avoid early pregnancies.

4. Family welfare programmes should lay down emphasis on the role of planned families in reducing the prevalence of anaemia.

Most of the socio-economic and demographic factors studied by us influence the prevalence of anaemia in non-pregnant women also. Thus, it is expected that by adopting the recommendations, mentioned above, the haemoglobin level of all the women of child bearing ages would improve thus making them less susceptible for anaemia during successive pregnancies.