بِسْمِ اللّهِ الرَّحْمَنِ الرَّحِيمِ

قال الله تعالى

لَقَدْ أَرْسَلْنَا رُسُلَنَا بِالْبَيِّنَاتِ وَأَنْزَلْنَا مَعَهُمُ الْكِتَابَ وَالْمِيزَانَ لِيَقُومَ النَّاسُ بِالْقِسْطِ وَأَنْزَلْنَا الْحَدِيدَ فِيهِ بَأْسٌ شَدِيدٌ وَمَنَافِعُ لِلنَّاسِ وَلِيَعْلَمَ اللَّهُ مَنْ يَنْصُرُهُ وَرُسُلَهُ بِالْغَيْبِ إِنَّ اللَّهَ قَوِيٌّ عَزِيزٌ

صدق الله العظيم
سورة الحديد الآية ٢٥

Dedication:

To my family

Acknowledgement

Praise is to Allah the Mighty GOD, who gave me the heath, strength, and patience to carry out this work . I would like to thank my Supervisor Dr. Abdelrahman Mohammed Ahmed Tambal, associate professor- Faculty of medicine, ALribat ALwatany University, for this invaluable help in accomplishing this work.

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Abstract

This study was done during the period from November 2002 to April 2004 in Mukalla hospital – Hadramout-Yemen .

The aim of this study was to determine the prevalence of iron deficiency anaemia in a population of pregnant women .

A total of 215 pregnant women and 40 healthy non-pregnant women as a control, ages ranging from 16 years to 44 years (mean age 26.3 year), were studied. Blood samples were taken randomly from each pregnant women presenting mother-child-health center (M.C.H) during different gestational age for follow up. Pregnant women under iron treatment or supplementation were excluded from this study. Haematological parameters were determined by coulter counter. For Pregnant with haemoglobin below normal (< 11 g/dl) and control group with haemoglobin < 12 g/dl, biochemical iron profile parameters were done to detect iron deficiency anaemia.

Results showed that 82% of studied pregnant women were anaemic with mild to moderate degree of severity. Of these anaemic pregnant women, 77% had iron deficency anaemia, which was more common and severe during third trimester(89%). This high prevalence may be due to inadequate iron intake befor and during pregnancy.

37.5% of the control group were anaemic, of these 73% had iron deficiency anaemia.

As a conclusion, anaemia in general and iron deficiency anaemia in particular showed a high prevalence rate among pregnant women living in Mukalla-Yemen.. Therefore, this study suggests that M.C.H services at the primary health care are not adequate and should be improved to be capable of dealing with anaemic pregnant women.

الخلاصة

أجريت هذة الدراسة خلال الفترة من نوفمبر ٢٠٠٢ وحتى أبريل ٢٠٠٤ في مستشفى المكلا للأمومة والطفولة – حضرموت – اليمن .

كان الهدف من الدراسة هو تحديد مدى إنتشار فقر الدم بسبب عوز عنصر الحديد بين النساء الحوامل .

وقد شملت هذه الدراسة ٢١٥ إمرأة حامل تتراوح اعمارهن بين ١٦ الي ٤٤ سنة (معدل اعمارهن ٢٦.٣ سنة).كما شملت الدراسة ٤٠ من النساء الأصحاء الغير حوامل وهن المجموعة المتحكمة.

تم أخذ عينات عشوائية من الدم من كل إمراة حامل بغض النظر عن فترة الحمل التي تمر بها، كما تم إستبعاد الحوامل اللآتي يتعالجن أو يتعاطين عنصر الحديد . عولجت عينات الدم لقياس هيمقلوبين الدم ومؤشرات كرات الدم الحمراء بإستخدام جهاز كولتر الألكتروني . الحالات التي تعاني من فقر الدم وكان تركيز هيمقلوبين الدم أقل من(١١g/dl) وفي المجموعةالمتحكمةأقل من (١٢g/dl) خضعت عيناتهن للفحوصات الكيميائة لقياس مستوي الحديد في الدم.

أظهرت النتائج أن ٨٢ % من الحالات التي شملتها الدراسة كانت تعاني من فقر الدم معظمها بين الحالات البسيطة والمتوسطة .ومن بين تلك الحالات التي تعاني من فقر الدم كانت ٧٧% منهن يعانين من فقر الدم بسبب عوز في عنصر الحديد.وقد تبين من خلال النتائج إن معظم الحالات وأشدها تأثرا هي فترة الحمل الأخيرة والتي تمثل ٨٩% .

37.5 % من المجموعة المتحكمة كانوا يعانين من فقر الدم منهن ٧٣% يعانين من فقر الدم بسبب عوز في عنصر الحديد.

إن هذ ا الإنتشارالمرتفع في فقر الدم بين النساء الحوامل ربما يكون بسبب سوء التغذية وقلة تناول عنصر الحديد قبل وأثناء قترة الحمل .

تشير هذة الدراسة إلى أن فقر الدم بشكل عام وفقر الدم بسبب عوز في عنصر الحديد بشكل خاص هو الأكثر إنتشارا بين النساء الحوامل اللآتي يعشن قي مدينة المكلا – اليمن.

لذالك إقترحت الدراسة أن خدمات الأمومة والطفولة من خلال الرعاية الصحية الأولية غير كافية ويجب تحسين هذه الخدمات لتكون قادرة علي التعامل مع النساء الحوامل اللاتي يعانين من فقر الدم.

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Abbreviations

MEIA= Micopartical enzyme immunoassay.

MCH= mother-child health care.

Hb= haemoglobin.

Hct= Haematocrite.

RBC= Red blood cell.

MCV= Mean corpuscular volume.

MCH= Mean corpuscular haemoglobin.

MCHC= Mean corpuscular haemoglobin concentration.

Plt= Platletes.

EDTA= ethylendimintetra acetic acid.

RDW= Red cell distribution width.

fl= Femtoliter.

Pg= picogram.

ng= nano gram.

TIBC= Total iron binding capacity.

TS = Transfirrin saturation.

FEP= Free erythrocyte protoporphyrin.