

Anaemia in Pregnancy: A persistent challenge in Pakistan. Are we knocking the right door?

The worsening situation:

The power of circulating haem is far more than estimated regarding maternal and foetal health. Working in a public sector hospital and catering mostly low socio-economic population, anaemia is the commonest condition we witness in pregnancy and even in non-pregnant women. The degree of anaemia has worsened over two decades with more severe deficiency being seen now. Girls with haemoglobin around 9g/dL is almost taken as the new compromised norm by family and junior doctors, not at all appreciating the grave consequences it has on mother and developing foetus.

Despite numerous awareness and preventive campaigns nationwide, anaemia in pregnancy is still a major public health concern in Pakistan, with significant short term and long term implications for maternal and foetal health. Defined by the World Health Organization (WHO) as hemoglobin(Hb) levels below 11g/dL in pregnant women, anaemia is associated with increased risks of maternal mortality, repeated infections, ante-partum and post-partum bleeding, pre-term birth, low birth weight and learning disability in newborn.¹ In a struggling nation like Pakistan, women health is one of the least important things for the care takers unless she is gravely ill and unable to do the daily chores.

How common is anaemia in pregnancy?

As I mentioned above, the burden of anaemia among pregnant women in Pakistan remains alarmingly high and is still under reported. Various studies estimate the prevalence to be between 40% and 70%.^{2,3} The Pakistan Demographic and Health Survey (PDHS) 2017-18 reported that approximately 52% of pregnant women in Pakistan are anaemic.⁴ I seriously doubt that this data takes into account the home managed pregnant ladies in small villages and un-booked pregnant ladies with no visits to

healthcare in big cities or going to near by small clinics with no record maintenance. So, this is only the tip of an iceberg and the unofficial incidence of anaemia in pregnancy is far far more in Pakistani population.

Why are we so interested in a good blood count in pregnant women especially?

The consequences of anaemia in pregnancy is underestimated by our healthcare professionals and this is the reason to emphasize it in an editorial of surgical journal, to enlighten its importance in fields other than obstetrics. It is indeed a public health matter involving not only a mother, but a developing foetus who is the future adult and future generation of our country. Another reason for writing about anaemia in pregnancy here is the lowering of bars for haemoglobin levels in women especially pregnant women by our physicians, surgeons, family doctors and by some obstetrician too. A haemoglobin concentration of 10gms/dl is comfortably ignored or taken as normal by us, although WHO criteria is 11gms/dl or more anytime from conception till puerperium.¹

Causes, contributing factors and complications

The high prevalence of anaemia in pregnancy in Pakistan is complex and interconnected with nutritional deficiencies, infectious diseases, and socio-economic disparities. Small towns, villages and urban lower-income groups are particularly vulnerable due to unhealthy dietary intake, lack of proper healthcare access, and cultural practices that compromises women's nutrition during pregnancy.⁵

Nutritional deficiencies are detrimental especially in the course of carrying a baby in the womb even from day one of conception as a healthy blood count and good oxygen carrying capacity is essential for foetal growth and

neuro-developmental health. For mothers to be, anaemia rises the risk of maternal mortality and morbidity due to complications like ante-partum and post-partum hemorrhage, and cardiac failure, not to forget the compromise in quality of life and mental health with tiredness and fatigue in woman. Regular deworming of pregnant women, specifically in high-burden areas, can minimize the impact of parasitic infections on anaemia prevalence in pregnant women in Pakistan.

Management of anaemia in pregnancy depends on type of anaemia, severity of anaemia and duration of gestation. Identifying the type of anaemia is important as treatment modalities are different for microcytic and macrocytic anaemia. Serum ferritin is advised for all microcytic pictures. Advanced pregnancy demands a more aggressive and active treatment option as compared to early gestation. Symptomatic severe anaemia requires blood transfusion irrespective of gestation. Haemoglobinopathies, specifically thalassemia should be ruled out.⁶

Out of box solution to this long standing challenge!

Talking about the challenges to improve haemoglobin in pregnant women as a pressing problem in Pakistan, it is imperative to think out of box to find a solution as even after long years of uncountable awareness programs, we are still stepping the initial stones and major reforms needed. Preventing anaemia in pregnancy requires a sophisticated but aggressive approach, integrating public awareness, nutritional interventions, healthcare improvement programmes and public health initiatives. "A complete blood picture in first trimester and then at 24-28 weeks is mandatory for screening and preventive anaemia in pregnancy" should be the slogan for doctors. While care taker awareness line could be more in lay man words.

The way forward

The way forward is to find something new and innovative in awareness campaigns for fighting anaemia in pregnancy in Pakistan. To make a change in women health, we have to involve more and more men in her life. Awareness sessions regarding general health and especially anaemia in pregnancy and importance of providing adequate nutrition and maintaining a high haemoglobin level should be imparted to boys at an early age. Men in Colleges, Universities, Offices and mosques should be taken as target areas to explain the worth and power of good haemoglobin levels throughout pregnancy and in pre-pregnancy time.

Religious scholars can be included in awareness programs, explaining them the need to disseminate the knowledge. The rural men have faith in scholars as healers and this opportunity can be taken to knock the right door. Online help numbers for anaemia in pregnancy should be available on billboards. Till now doctors are working more on patient information or counselling of mothers and mother in laws. Nationwide social media campaigns can be initiated for fathers, fathers to be, father in laws, brothers and husband.

To conclude, Is that we are knocking the wrong doors or may be not hitting the right nail at the right time?

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