

UNIVERSITI TEKNOLOGI MARA

**KNOWLEDGE, ATTITUDE AND DIETARY COMPLIANCE
TOWARDS IRON TABLETS CONSUMPTION AMONG
PREGNANT WOMEN IN SELANGOR**

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JULY 2024

ACKNOWLEDGEMENT

I begin by expressing my deepest gratitude to Allah S.W.T. for His guidance and strength, which have been crucial in helping me complete this final year project. His blessings and support have been a constant motivation throughout this journey. I am incredibly thankful to my supervisor, Dr. Syahrul Bariah Abdul Hamid, for her excellent guidance, steady support, and patience. Her dedication to teaching and answering my questions has greatly enriched this thesis.

To my parents, I owe a huge thank you. They have supported me emotionally, financially, and with unwavering encouragement, despite our different fields of study. I also want to thank my FYP partner and group members for their teamwork, contributions, and friendship during this project. Special thanks go to my friends, especially Aishah, Ezzati, and others, for their constant support, motivation, and belief in me during tough times. Your unwavering support and companionship have made this journey more joyful and supportive, both in good times and difficult ones.

Lastly, I acknowledge myself for pushing through the challenges and celebrating the successes of this thesis journey. Looking back, I'm proud of how far I've come and the lessons learned along the way. I want to thank me, I want to thank me for believing in me, I want to thank me for doing all these hard work, I want to thank me for having no days off, I want to thank me for never quitting, I want to thank me for always being a giver and try give more than I receive, I want to thank me for trying to do more right than wrong, I want to thank me for just being me all the times. I acknowledge myself for pushing through the challenges and celebrating the successes of this thesis journey. Looking back, I'm proud of how far I've come and the lessons learned along the way. Great job Balqis!

ABSTRACT

Iron deficiency anemia (IDA) during pregnancy is a widespread global health concern with the potential for severe adverse effects on both maternal and fetal health. It is well-documented that iron is an essential nutrient during pregnancy, as it plays a crucial role in preventing anemia, supporting fetal growth and development, and reducing the risk of preterm births and low birth weights. In the context of Malaysia, prioritizing the health of pregnant women and their babies is important. Therefore, it is important to understand the knowledge, attitude and compliance of pregnant mothers towards taking iron tablets. Therefore, the aim of this study is to comprehensively evaluate the knowledge, attitude, and dietary compliance towards iron tablet supplementation among pregnant women in Malaysia, with a particular focus on understanding how sociodemographic factors may influence dietary compliance. This cross-sectional study focused on pregnant women aged between 18-49 in different stages of pregnancy and various socio-demographic backgrounds. Data is collected through self-administered questionnaires with sections including sociodemographic, knowledge about iron deficiency, their attitudes towards iron tablet usage, and their dietary compliance with iron tablets supplementation (MyMAAT). A total of 200 pregnant women were recruited in this study. About 50.5% of pregnant women have high knowledge and a high attitude, and others 49.5% of them have low knowledge and low attitude towards iron tablet supplementation. In addition, about 27.5% of pregnant women have good compliance towards iron tablets and another 72.5% are categorized as poor and moderate compliance. Ethnicity and the presence of IDA were significantly associated with knowledge levels, while no socio-demographic factors were significantly associated with attitudes or compliance towards iron supplementation. In addition, attitude was the only factor significantly associated with compliance towards iron tablets. Pregnant women with high attitudes were 2.523 times more likely to be compliant with iron tablet supplementation. Identifying pregnant women who have good knowledge, attitude and compliance towards iron tablets is crucial to prevent iron deficiency anemia. Understanding the knowledge, attitudes, and dietary compliance towards iron tablet supplementation among pregnant women can help in developing targeted interventions to improve iron status and overall maternal health during pregnancy.

Keywords: Anemia, Iron deficiency, Pregnant women, Knowledge, Attitude, Dietary compliance, Maternal and fetal health

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CHAPTER 1: INTRODUCTION

1.1 Research background

As per data from the World Health Organization (WHO), anemia is anticipated to impact approximately 500 million women aged 15 to 49 and 269 million children aged 6 to 59 months on a global scale. In the year 2019, anemia affected about 30% (539 million) of non-pregnant women and 37% (32 million) of pregnant women within the age group of 15 to 49 years. The primary cause of anemia is iron deficiency, largely caused from inadequate dietary iron intake to meet the body's needs and infections that result in intestinal blood loss or disrupt iron absorption and metabolism (World Health Organization [WHO], 2001). In Malaysia, iron deficiency prevails at a rate of 35%, mostly of the mild form and more widespread in the Indian and Malay communities (Haniff et al., 2007). Pregnancy-related anemia is a frequently occurring condition, with potential repercussions for both maternal and fetal health. These consequences include heightened risks of preterm birth, low birth weight, and neonatal iron deficiency (Rosmawati et al., 2012). The cornerstone of managing anemia during pregnancy is iron supplementation, often in the form of iron tablets, as pregnancy increases the demand for iron. However, despite the clear benefits of iron supplementation, challenges and barriers persist, hindering pregnant women's compliance. These challenges include concerns about side effects, lack of awareness about the importance of compliance towards iron tablets, cultural beliefs, and logistical difficulties in accessing supplements. Understanding the levels of knowledge, attitudes, and dietary compliance related to iron tablets among pregnant women is crucial for developing effective interventions to combat anemia during pregnancy.

Numerous studies have explored the knowledge and awareness levels of pregnant women regarding iron supplementation, shedding light on the extent to which they understand the benefits of such supplementation and the risks associated with anemia. Similarly, research has delved into the attitudes and perceptions of pregnant women towards iron tablet use, uncovering misconceptions and concerns that may influence compliance. However, an