CHAPTER 5 CONCLUSION

1. Conclusion

1.   In a survey of 200 respondents, most were adults (57.5%), married (99.5%), primary school graduates (58%), and housewives (78.0%) or farmers (17.5%). They largely lived in rural areas (98%) and displayed poor healthcare-seeking behaviour (95.5%). Despite the majority using bed net insecticides (89%), their overall knowledge about malaria was poor (95.5%), and their prevention of malaria was inadequate (95.5%). There were two areas where a significant percentage of women (23.5% and 43.0%) lacked correct information about malaria prevention.

2.   The positive rate of Malaria infection among the pregnant women in Abau District is 7% which translates to 14 out of 200 surveyed individuals testing positive, or 70 cases per 1000 individuals.

3.   The incidence of malaria infection in pregnant women is not significantly influenced by factors such as age, marital status, residence, education level, knowledge of malaria, and occupation.

4.   There is an influence between malaria prevention and the incidence of malaria in pregnant women in Papua New Guinea (p-value 0.014 POR= 4.426), meaning that pregnant women with poor malaria prevention are 4 times more likely to suffer from malaria than pregnant women with good malaria prevention.

5.   There is an influence between healthcare-seeking behaviour and the incidence of malaria in pregnant women in Papua New Guinea (p-value 0.033 POR= 4.330), meaning that pregnant women with poor healthcare-seeking behaviour are 4 times more likely to suffer from malaria than pregnant women with good healthcare-seeking behaviour.

6.   The variable that has most significant correlation is prevention of malaria (p-value 0.014 POR= 4.426), meaning that pregnant women with poor malaria prevention are 4 times more likely to suffer from malaria than pregnant women with good malaria prevention.

2. Implications and Suggestions

Implications:

1. Demographics and Socio-economic Factors: The majority of respondents were adults, married, primary school graduates, housewives or farmers, and resided in rural areas. These factors could be influencing their knowledge and attitudes towards malaria prevention and healthcare-seeking behaviour.

2. Knowledge and Attitudes: Despite the majority of respondents using bed net insecticides, the overall knowledge about malaria was poor, and healthcare-seeking behaviour was predominantly bad. This suggests a need for improved health education and awareness programs.

3. Malaria Incidence: The incidence of malaria among pregnant women was found to be relatively low. However, poor malaria prevention and healthcare-seeking behaviour were significantly correlated with the incidence of malaria. This indicates that these behaviours are key areas to target for reducing malaria incidence further.

Suggestions:

As a healthcare provider to pregnant women, I would suggest the following;

1. Health Education Programs: Implement health education programs that specifically target pregnant women. These programs could provide information about the risks of malaria, the importance of prevention measures, and the need for professional healthcare.

2. Community Engagement: Engage with local communities and leaders to raise awareness about malaria. This could involve community meetings, workshops, or public health campaigns.

3. Healthcare Provider Training: Train healthcare providers to effectively communicate the risks of malaria to pregnant women. This could include training on how to explain the importance of prevention measures and the dangers of self-treatment.

4. Use of Visual Aids: Use visual aids, such as posters or pamphlets, to convey information about malaria. These can be particularly effective in areas where literacy rates may be low.

5. Incorporate Local Beliefs and Practices: Understand and incorporate local beliefs and practices into education programs. This can help ensure that the information is culturally appropriate and resonates with the target audience.

6. Regular Check-ups: Encourage regular check-ups for pregnant women. This provides an opportunity for healthcare providers to educate women about malaria and monitor their health.

7. Distribution of Insecticide-Treated Nets (ITNs): Distribute ITNs and educate pregnant women on their proper and consistent use.

8. Preventive Treatment: Ensure pregnant women receive preventive treatment at prenatal visits after the first trimester.

These strategies are to be tailored to the specific needs and circumstances of the community. It's also important to monitor and evaluate these interventions to assess their effectiveness and make necessary adjustments.

Limitations and Suggestions for Future Research:

1. Sample Size: The sample size may not be representative of all pregnant women in Papua New Guinea, which could limit the generalizability of the findings. Future studies could aim to include a larger and more diverse sample that is representative of the broader population of pregnant women in Papua New Guinea.

2. Socioeconomic Data: The lack of comprehensive socioeconomic data could limit the understanding of how these factors influence healthcare-seeking behaviour and prevention of malaria. Future research could collect more detailed socioeconomic data, including employment status, level of education, and access to healthcare services.

3. Income Data: Without a detailed distribution of the average household in the income levels, it's difficult to understand the economic diversity of the sample

and its impact on the results. Future studies could aim to collect more detailed income data to better understand the economic status of the respondents.

4. Environmental Characteristics: The lack of data on potential environmental risk factors for malaria could limit the understanding of how these factors influence the incidence of malaria. Future research could include data on climate, altitude, or proximity to bodies of water, which are known to influence the prevalence of malaria.

5. Self-Reported Data: The reliance on self-reported measures could introduce bias into the data, as respondents may not accurately recall or may overestimate or underestimate their behaviours or experiences. Future studies could aim to use objective measures where possible, or validate self-reported data with other sources of information.

6. Lack of Comparative Data: The inability to compare the findings with the minimum and maximum income levels in Papua New Guinea limits the understanding of the impact of socio-economic status on malaria incidence. Future research could aim to include comparative data on income levels in Papua New Guinea, or use other indicators of socio-economic status that can be compared with available data.

7. Diagnostic Limitations: The study relied solely on Rapid Diagnostic Tests (RDTs), which may not be as accurate or comprehensive as other diagnostic methods like microscopy. RDTs, while quick and easy to use, may not detect all cases of malaria, particularly those caused by species other than Plasmodium falciparum. Future research could aim to use more comprehensive diagnostic methods, such as microscopy, to ensure all cases of malaria are detected.

8. Species Specificity: The study focused only on Plasmodium falciparum, the deadliest species of malaria parasite. However, there are other species of malaria parasites, such as Plasmodium vivax, that also pose significant health risks. By focusing only on Plasmodium falciparum, the study may have missed cases of malaria caused by other species. Future research could aim to