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UNDERSTANDING THE DIFFERENCE (BETWEEN): MALARIA AND COVID-19



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ABSTRACT

BACKGROUND: Malaria still remains one of the contributors to mortality in South Africa. Since 2020, the advent of the severe acute respiratory syndrome coronavirus (SARS-CoV-2), also known as the COVID-19 disease, obscured the lines of differential symptomatic diagnosis between malaria and COVID-19. This study aimed to determine the difference(s) between malaria and COVID-19 by describing the knowledge, attitudes and practises (KAP) of healthcare professionals (HCPs) and the general public (GPub) towards these two potentially life-threatening diseases.

METHODS: Following WITS human ethics approval (M220530) and provincial Department of Health permission (GP202206_065), the 62-item questionnaire was administered to the HCPs and the 50-item questionnaire was administered to the GPub (outpatients) at two major academic hospitals and two regional hospitals, in Johannesburg, South Africa. The inhouse-developed questionnaire was self-administered by respondents that were randomly approached and voluntarily answered the questionnaire. The data were captured onto the REDCap database and was analysed using linear and Tobit regression.

RESULTS: The 84 HCPs and 304 GPub displayed inadequate KAP regarding malaria and COVID-19. Only 28.6% of HCPs understood malaria transmission via the bite of an infected female mosquito, while 53% of the GPub understood the transmission is through the bite of a mosquito. With regards to vaccines, 59.5% of HCPs were willing to receive the malaria vaccine, but only 15.5% of HCPs have not been vaccinated against SARS-CoV-2, in comparison to 86.5% of the GPub willing to take the malaria vaccine and 91.45% vaccinated against SARS-CoV-2. HCPs with less than 1 year of experience and older age had lower knowledge scores. A total of 11.9% of HCPs wrongly believed malaria prophylaxis is only needed when symptoms are present. The majority did not know the recommended dosage and contraindications for drugs in specific populations. The GPub lacked an understanding of malaria prophylaxis and treatment. The educational qualification and medical training significantly influenced the knowledge levels of the GPub.

CONCLUSION and CONTRIBUTION: Overall, the study found that HCPs had a better understanding of both diseases compared to the GPub. Factors such as educational qualification, medical training, and age played a role in determining knowledge levels. The GPub from certain sites and age groups showed lower levels of knowledge regarding malaria and COVID-19. This suggests the need for targeted education and awareness campaigns to improve understanding among both groups. The study emphasises the importance of tailored interventions and educational strategies to enhance awareness and practices related to malaria and COVID-19, particularly among outpatients in specific demographics. Ultimately, these findings can guide efforts to improve public health practices and combat these diseases more effectively.

KEYWORDS: Malaria, COVID-19, SARS-Cov-2, KAP, Healthcare Professionals, Outpatients, Awareness