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Short Communication

Interactions between Drugs in Malaria Patients

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DESCRIPTION

Malaria is one of the infectious illnesses that cause burden at the healthcare system. According to WHO, malaria accounts for 216 million instances in ninety one nations in the year 2016. This turned into a development of 5 million instances over 2015 [1]. Moreover, in 2016, about 85% of vivax malaria instances have been recognized in 5 nations consisting of Pakistan. Worldwide, malaria stays one of the reasons of death because of infectious illnesses [2].

Malaria treatment is required to manage the disease's severity, symptoms, and comorbid conditions. Hospitalized malaria patients are often treated with anti-malarial drugs, anti-pyretics, and analgesics. Apart from these medications, a range of additional medications are administered to treat comorbid disorders and symptoms. The administration of many drugs at the same time increased the risk of drug-drug interactions (DDIs), which can change a drug's pharmacokinetic and pharmacodynamic characteristics [3,4]. Hospitalization reduced or eliminated therapeutic effectiveness, duration of stay, toxicity, and side effects are all possible consequences of DDIs. DDIs are responsible for approximately 20%–30% adverse effects with 1%–2% of these being life-threatening and 70% demanding clinical intervention. As a result, special attention to DDIs and their early management is critical for the rational use of drugs in malaria patients.

The issue of potential DDIs (pDDIs) in hospitalised patients has been addressed in general, as well as in specific diseases such as liver cirrhosis, hypertension, Diabetes Mellitus (DM), bone marrow transplant, cancer, stroke , pneumonia, urinary tract infections, and hepatitis C. DDIs, particularly among inpatients with malaria, remain ignored despite being the most common reasons of hospitalisation. Moreover, in developing countries, research is rarely reported, and irrational drug use is a common problem. As a result, performing research evaluating pDDIs and their therapeutic value among hospitalised malaria patients requires special care [5]. After that, such research will increase patient safety and aid healthcare professionals in managing pDDIs and reducing their poor clinical outcomes.

More than 90% of malaria deaths occur in Africa, and virtually majority of the victims are children under the age of five. Malaria is quite uncommon in the United States. Infected persons who travel to the United States can transfer the disease to others if a mosquito bites them and then infects someone else. Malaria may affect everyone, but persons who reside in Africa are at a higher risk of illness. Malaria increases the risk of death in young children, the elderly and pregnant women. People who are poor and do not have access to healthcare are more prone to get medical problems.

By evaluating the levels of interactions, healthcare professionals may manage negative effects associated to interactions. pDDIs of major and moderate types were common in research, but pDDIs of fair and good types were more common in terms of documentation levels. This is important since findings suggest that malaria patients may be exposed to the negative effects of pDDIs. As a result, identifying the type of interaction by a healthcare professional is important for managing pDDIs, minimising the chances associated with them, and developing prophylactic measures for prevention. Patients with malaria are hospitalised primarily for the treatment of associated signs/symptoms/complications or various comorbid conditions, much as they are in hospitals. The pDDIs discovered in this study are mostly linked to the usage of drugs to treat such problems [6]. As a result, the results of this study may not be applicable to ambulatory individuals, because drug usage, drug interactions, and illness patterns may differ.

PDDIs are often seen in malaria patients. Knowledge of the most frequent pDDIs among healthcare professionals may aid in preventing pDDIs and its adverse consequences. Patients with polypharmacy, prolonged hospital stays, and diabetes mellitus should have important clinical parameters including laboratory results and signs/symptoms evaluated. Significant approaches to reduce the harmful effects associated with DDIs include careful monitoring for adverse outcomes and prescription medications with a low risk of pDDIs.

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REFERENCES

1. Gautret P, Gaudart J, Leder K. Travel-associated illness in older adults (>60 y). J Travel Med. 2012; 19:169–177.
2. Mace KE, Arguin PM, Lucchi NW, Tan KR. Malaria surveillance—United States, 2016. MMWR Surveill Summ. 2019; 68(5):1–35.
3. Dondorp AM, Lee SJ, Faiz MA. The relationship between age and the manifestations of and mortality associated with severe Malaria. Clin Infect Dis. 2008; 47:151–157.
4. Mühlberger N, Jelinek T, Behrens RH. Age as a risk factor for severe manifestations and fatal outcome of falciparum malaria in European patients: observations from TropNetEurop and SIMPID surveillance data. Clin Infect Dis. 2003; 36:990–995.
5. Gjorup IE, Ronn A. Malaria in elderly nonimmune travelers. J Travel Med 2006; 9:91–93.
6. Shenoy P, Harugeri A. Elderly patients' participation in clinical trials. Perspect Clin Res 2015; 6:184–189.