

residentes da comunidade de baixa renda São João do Cazumbá em Feira de Santana - Bahia. Em suma, apresentou-se o projeto para a comunidade e foram recolhidas as assinaturas dos Termos de Assentimento do Menor e do Consentimento Livre e Esclarecido das famílias interessadas. Ainda foi realizado um questionário de dados de cada família, abrangendo: condições de moradia e saúde, ambiência residencial e contexto familiar. Após, foi armazenado em cooler as amostras de fezes entregues pelos pais e responsáveis. Por fim, utilizou-se recursos de um laboratório para análise dos parasitológicos de fezes e, com os resultados foi feito um levantamento das parasitoses mais prevalentes nessa comunidade infantil, para elaboração de panfletos educativos.

**Resultados:** Posterior a análise laboratorial, foi detectado, por ordem de mais prevalentes: *Ascaris lumbricoides*, *Giardia lamblia*, *Trichuris trichiura*, *Entamoeba histolytica*, *Ancilostomídeos*, *Taenia sp.* e *Enterobius vermicularis*. Com isso, estudantes de medicina elaboraram panfletos para promover uma conscientização dos habitantes dessa comunidade em relação a tais parasitoses. **CONCLUSÃO** Com a execução do projeto e após as análises laboratoriais, os panfletos elaborados foram de importância ímpar para a educação dessa parcela da população feirense, inclusive, porque foi realizado com olhar atencioso para os menores em idade escolar, possuindo grande interferência sobre o crescimento e estado nutricional desses.

**Palavras-chave:** Enteropatias Parasitárias, Pré-Escolar, Promoção da Saúde.

**Conflitos de interesse:** Não houve conflito de interesse.

**Ética e financiamentos:** Declarações de interesse: Nenhum.

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#### POLYMORPHISMS IN THE CYP-450 GENE AND MALARIA: A GENOTYPIC AND PHENOTYPIC RELATIONSHIP WITH THERAPEUTIC FAILURE

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**Introduction:** Therapeutic failure in patients with malaria can occur due to various factors and polymorphisms in enzymes of the Cytochrome P450 (CYP450) family, responsible for around 90% of the metabolization of chloroquine and primaquine, can generate individuals who are low, intermediate or fast metabolizers of antimalarial drugs.

**Objective:** We evaluated the relationship between these polymorphisms and the biometalization of antimalarial drugs

worldwide through a systematic review using the PRISMA statement.

**Methodology:** The research question was structured in the PICO format (Population = people infected with *Plasmodium vivax*; Intervention = people without *vivax* malaria; Comparison = polymorphisms in the CPY450 gene; Outcome = biometabolization of antimalarial drugs is influenced by polymorphisms in the CYP450 gene). The investigation in the databases (Medline through Pubmed, Google scholar, Science direct and Scopus) was carried out by grouping descriptors (DECs/Mesh) with Boolean operators (AND/OR). Duplicate articles were excluded, as well as those with *in vitro* research, which did not meet the objective of the study and which, when applying the Joanna Briggs Institute questionnaire, had ≤ 50% "yes" answers.

**Results:** Of the 187,935 articles retrieved, only 12 were selected for this review, adding up to 2050 individuals. The majority (75%) of the articles reported an interaction between polymorphisms in the CYP2A6, CYP2D6, CYP2B6, CYP3A4 and CYP3A5 genes in individuals infected with *Plasmodium falciparum* and interference in drug metabolization. As for *Plasmodium vivax* (25%), the SNP in the CYP2D6 gene was the most frequently reported cause of therapeutic failure. As for the phenotype regarding biometabolization, 65% were normal, 25% low, 5% fast and 5% null metabolizers. **Conclusions:** It is important to develop measures aimed at profiling genetic biomarkers and their respective phenotypes in populations from endemic areas, in order to prevent relapses from *P. vivax* and treatment failure for both plasmodia; important for establishing malaria prevention and control measures.

**Keywords:** Molecular Epidemiology, Pharmacogenetics, *Plasmodium*, Public Health.

**Conflicts of interest:** There was no conflicts of interest.

**Ethics and financing:** Declarations of interest: None.

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#### WORLDWIDE GENETIC POLYMORPHISM OF CIRCUMSPOROZOITE PROTEIN IN PLASMODIUM VIVAX SEQUENCES: A SYSTEMATIC REVIEW

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The Circumsporozoite Protein of *Plasmodium vivax* (PvCSP) is an immunodominant antigen expressed on the surface of the sporozoite. PvCSP consists of a central repetitive region (CRR), capable of stimulating both T and B lymphocytes. The CRR is flanked by two non-repetitive regions, N-terminal (RI) and