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Adherence to folic acid among methotrexate-treated patients with rheumatologic diseases: a cross-sectional study

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ABSTRACT

Background. Methotrexate (MTX), a fundamental drug used in treating various rheumatologic diseases such as rheumatoid arthritis (RA), is often associated with side effects due to its interference with folate metabolism. Folic acid (FA) is routinely prescribed to counteract these adverse effects. However, adherence to FA among MTX users remains an important but underexplored issue.

Objectives. This study aimed to assess adherence to folic acid among patients using methotrexate for rheumatologic diseases and to identify factors contributing to non-adherence.

Materials and methods. A cross-sectional study was conducted between August and December 2024 at outpatient clinics in Al-Basrah and Al-Sayyab Teaching Hospitals, including private rheumatology clinics. Data were collected from 73 patients receiving medical care, using structured interviews and medical records. Adherence was evaluated using the medication adherence rating scale (MARS) and the medication adherence reasons scale (MAR-Scale). Demographic, clinical, and treatment-related characteristics were analyzed. Statistical analysis was performed using SPSS version 27.

Results. Among the 73 patients (91.8% female; mean age: 48.25 ± 14.79 years), 79.5% were non-adherent to folic acid. The only factor significantly associated with non-adherence was the duration of folic acid use ($p < 0.05$). According to the MAR-Scale, the primary reasons for non-adherence were the burden of multiple medications (31.5%), concerns about long-term effects (27.4%), and fear of side effects (21.9%).

Conclusions. This study highlights a high rate of folic acid non-adherence among methotrexate-treated patients. The duration of supplementation was the only significant correlate. These findings emphasize the need for targeted adherence interventions and enhanced patient counseling in rheumatology clinics.

Keywords: folic acid, adherence, methotrexate, rheumatologic diseases, medication adherence rating scale (MARS), medication adherence reasons scale (MAR-Scale)

Abbreviations (in alphabetical order):

BMI	– body mass index
DAS28	– disease activity score 28
DMARDs	– disease-modifying anti-rheumatic drugs
EULAR	– European Alliance of Associations for Rheumatology
FDA	– Food and Drug Administration
ID	– Iraqi dinar
MAR-scale	– medication adherence reasons scale
MARS	– medication adherence rating scale
MTX	– methotrexate
RA	– rheumatoid arthritis
SPSS	– Statistical Package for the Social Sciences

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