ADHERENCE, TOXICITY, AND QUALITY OF LIFE IN PATIENTS RECEIVING ORAL ANTINEOPLASTIC THERAPY: A CROSS-SECTIONAL PILOT STUDY FROM ROMANIA

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OBJECTIVES

Oral antineoplastic therapy provides significant benefits by improving survival and reducing the burden of medical care. However, the shift toward oral administration introduces additional challenges in ensuring and monitoring therapeutic adherence [1], especially when it comes to monitoring quality of life and toxicity. Regarding this study, we focus to investigate how medication adherence, adverse-event (AE) burden and sociodemographic/clinical factors jointly influence health-related quality of life (QoL) in patients receiving oral antineoplastic therapy.

METHODS

In this cross-sectional pilot study, we enrolled 58 adults (mean age 61 ± 10 y; 63.8 % women) treated with 11 oral drug classes. To preserve statistical power the agents were collapsed into three mechanistic groups: (I) targeted kinase-pathway inhibitors (n = 38),

(II) endocrine/hormonal therapies (n = 11),

(III) classic antimetabolites (n = 9).

Adherence was measured with the 10-item Medication Adherence Rating Scale (MARS, range 10–50) [2], QoL with the 15D instrument (0–1), which explores 15 dimensions, including mobility, vision, hearing, breathing, sleeping, eating, speech, excretion, usual activities, mental function, discomfort and symptoms, depression, distress, vitality, and sexual activity [3],

and toxicity with a weighted CTCAE grade ≥ 2 AE score [4]. Group differences were explored with Kruskal–Wallis tests; associations were assessed with Spearman correlation and a multivariable linear regression adjusting for age, gender, cancer type and drug group.

RESULTS

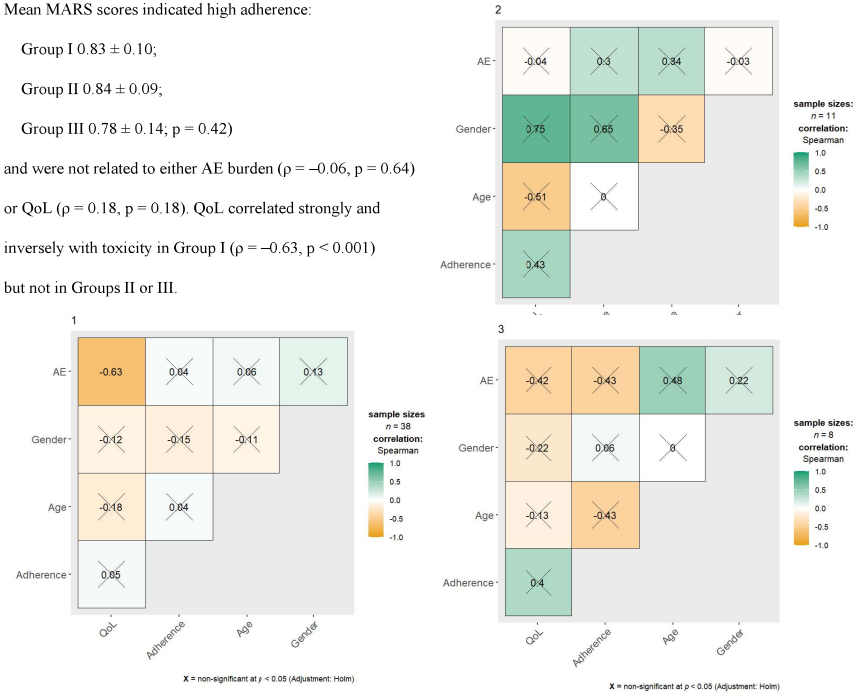
Mean MARS scores indicated high adherence:

Group I 0.83 ± 0.10;

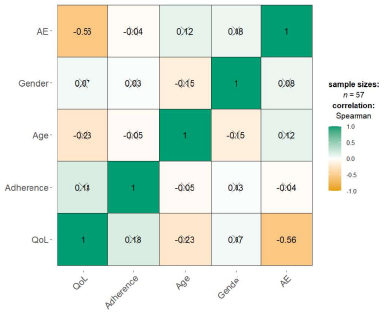
Group II 0.84 ± 0.09;

Group III 0.78 ± 0.14; p = 0.42)

and were not related to either AE burden (ρ = –0.06, p = 0.64) or QoL (ρ = 0.18, p = 0.18). QoL correlated strongly and inversely with toxicity in Group I (ρ = –0.63, p < 0.001) but not in Groups II or III.



In the full model (adjusted R^2 = 0.31, F = 4.92, p = 0.002) Only AE burden independently predicted QoL: each additional grade ≥ 2 toxicity reduced the 15D score by 0.016 units (β = –0.40, p = 0.001). Adherence showed a positive but non-significant effect (β = 0.15, p = 0.20); age, genderand cancer type were not significant covariates.



CONCLUSIONS

In this mixed cancer cohort, moderate-to-severe toxicities—not non-adherence—were the principal determinant of diminished QoL, underscoring the clinical value of proactive AE prevention and management for patients on oral antineoplastics. Although adherence was generally high, its independent contribution to QoL was small and under-powered to reach significance, warranting confirmation in larger longitudinal studies.

References

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