ADHERENCE TO DRUG THERAPY FOR CHRONIC DISEASES IN UNDOCUMENTED MIGRANTS. RESULTS FROM A RETROSPECTIVE OBSERVATIONAL STUDY

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Introduction

The health of migrants is a topic of great interest and concern for many Western countries. To guarantee the right and equality of care and adequate policy planning, it is necessary to have available and updated data on the health status and behaviours of this heterogeneous population. It has already been observed that undocumented migrants are frequently burdened by several chronic conditions [1]. To date, however, there are no studies that have described how much these patients affected by the main chronic pathologies adhere to the prescribed drug treatment.

Aims

To describe the adherence to drug therapy in undocumented migrants affected by three different chronic conditions: cardiovascular diseases, diabetes and mental health disordes.

Methods

Among the migrants assisted from 2011 to 2020 by Opera San Francesco (OSF), those who were newly treated for cardiovascular diseases (ATC class: C), diabetes (ATC class: A10) or psychiatric disorders (ATC classes: N05–N07) were selected and followed for 1 year after the first prescription. Medication adherence was assessed in the three identified cohorts calculating the "proportion of days covered" (PDC) [2] criterion, that is the ratio between the number of days in which the drug was available and the days of follow-up. The PDC value was expressed as mean and it also has been categorized as low (PDC < 25%), intermediate (PDC 25–75%), and high (PDC > 75%) adherence. Multivariate log-binomial regression models were used to assess the association between a high adherence and baseline characteristics.

Results

1,189 subjects who started cardiovascular therapy, 376 with diabetic treatment and 631 with mental health-disease drugs were identified. The mean PDC during the first year of treatment was equal to 39%, 38%, 27% for cardiovascular, diabetes and mental health treatment, respectively. In figure 1A it can be seen that at 6 months and 1 year from the beginning of the therapy, large differences in the classes of adherence can be noted. For diabetes and cardiovascular disease, the percentage of high adherents after 6 months from the beginning of the therapy is close to 40%, after 1 year it drops to less than 10%. Patients with mental health disorders have an even lower adherence to pharmacological treatments (Figure 1B), with at 6 months, only 1 patient out of 4 hours with high adherence. In migrants who begin cardiovascular therapy, less adherence is observed among subjects from Latin America, Asia or Africa than in Europeans. Subjects also affected by mental pathologies are less adherent (RR=0.30, 95% CI 0.11-0.82).

Conclusions

Among undocumented migrants who started drug therapy for a chronic condition, only a very small percentage manages to maintain high adherence in the first year of treatment, especially for mental illnesses. It therefore becomes necessary to consider actions and programs that allow for the control and promotion of greater adherence for these fragile populations.

Figure 1_ PDC adherence by therapies. Percentage of PDC adherence class at 6 and 12 months (A). Monthly trend of the percentage of subjects with high adherence calculated from the beginning of follow-up (B).
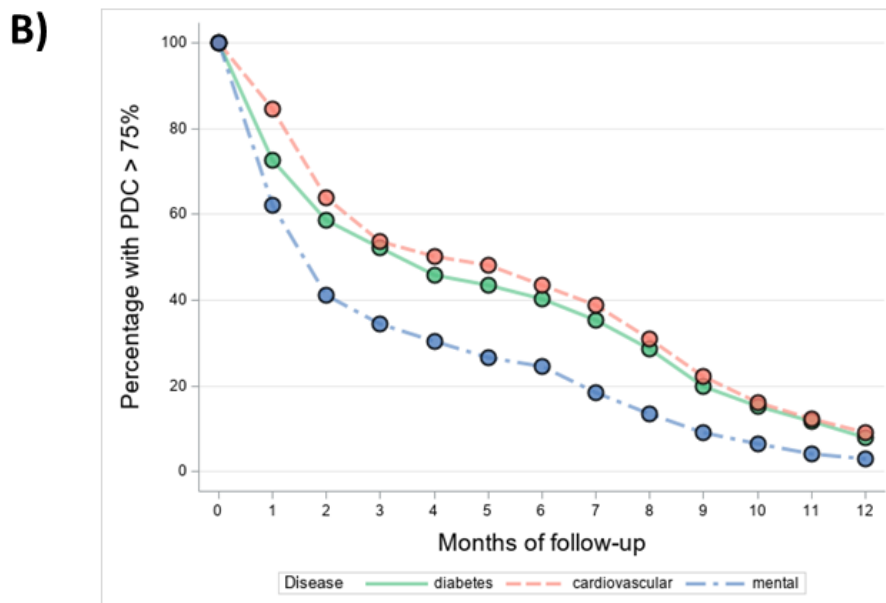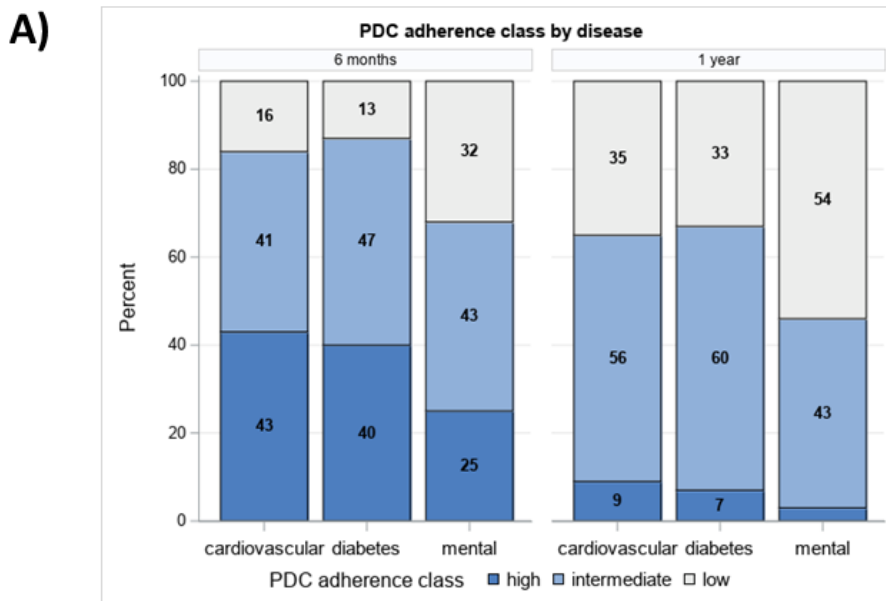
References

[1] Fiorini G, Franchi M, Pellegrini G, et al. Characterizing non-communicable disease trends in undocumented migrants over a period of 10 years in Italy. Sci Rep. 2023;13(1):7424. Published 2023 May 8.

[2] Andrade SE, Kahler KH, Frech F, Chan KA. Methods for evaluation of medication adherence and persistence using automated databases. Pharmacoepidemiol Drug Saf. 2006;15(8):565-577. doi:10.1002/pds.1230