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Measurement of therapeutic adherence in orphan diseases: A Scoping review



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INTRODUCTION

Orphan diseases (OD) are chronic and degenerative pathologies with a low global prevalence that affect the quality of life. Due to their late and difficult diagnosis there is a need to initiate timely and continuous treatment according to the prescription. The compliance and adherence to the treatment is critical to achieve health outcomes.

OBJECTIVE

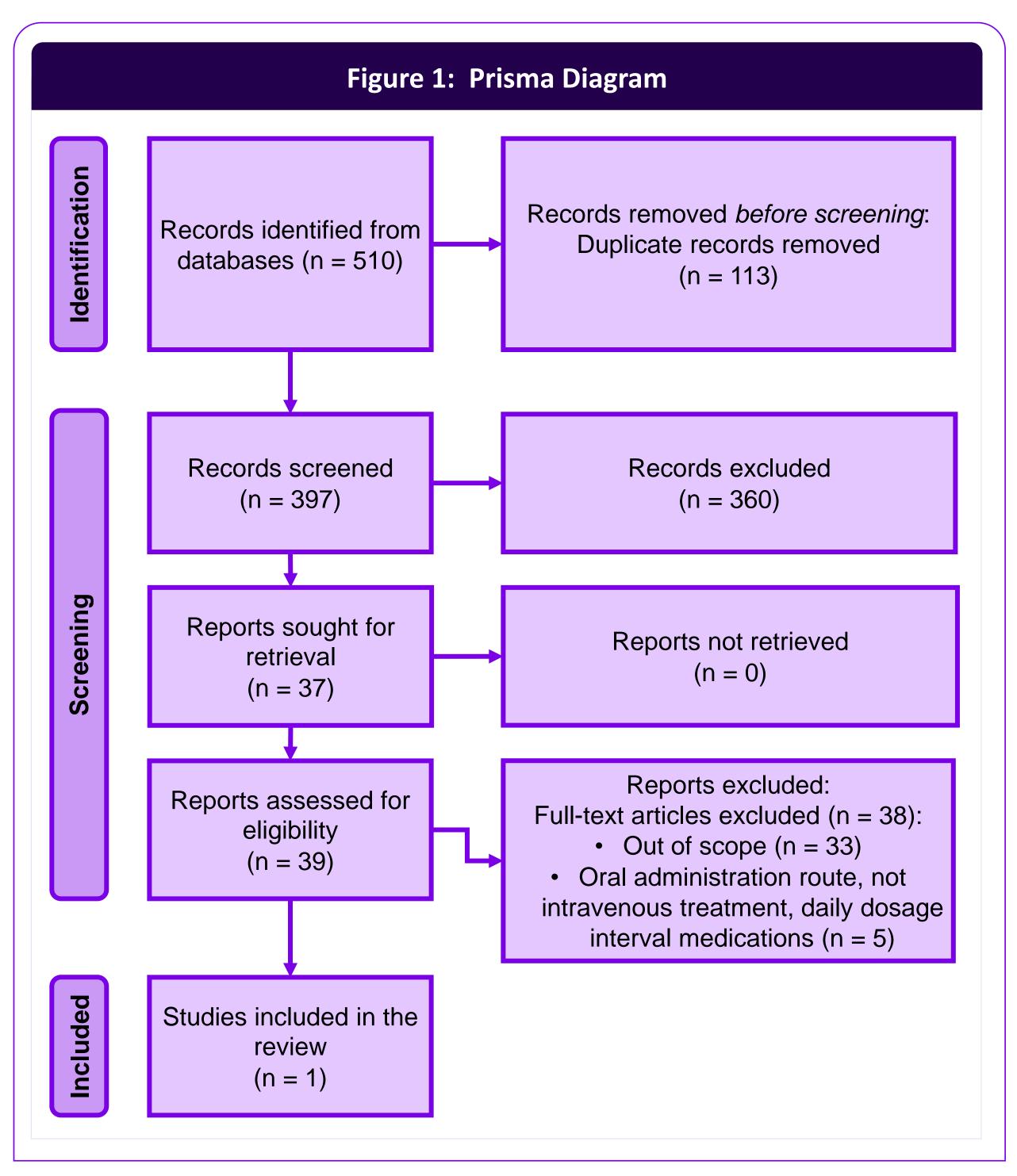
To evaluate the state of art related to adherence scales in OD for intravenous treatment (IVT) administered at home or at specialized centers.



POSTER HIGHLIGHT: Having adequate instruments to measure objectively the adherence in orphan diseases, can improve the treatment effectiveness, identify access barriers, impact patient quality of life, and reduce both disease complications and associated healthcare costs.

METHODS

- A scoping literature review of published research articles of adherence scales in OD was carried out in MEDLINE, Cochrane, LILACS, PubMed, Ovid, Embase, SciELO and Redalyc.
- The search strategy included the keywords: adherence, compliance to treatment, rare diseases, home infusion therapy, surveys, and questionnaires.



RESULTS

- 510 articles were found, only 1 accomplished the inclusion criteria (Figure 1). The VERITAS PRO¹ scale for hemophilia meets the characteristics to evaluate OD adherence. However, the publication did not describe the questionnaire components.
- Additional instruments with potential to be adapted and used for IVT in OD were identified according to the disease used to test them and the inclusion of therapeutic adherence in their components. These used indirect measurement methods and/or a patient-reported outcomes approach.
- The MMAS-8², BMQ³, ARMS⁴, and MAS⁵ instruments, amongst others, were described in different studies for high-prevalence of chronic diseases, outpatient treatment, daily dosage interval medications and/or an oral administration route.

CONCLUSIONS

- There are several methods available to measure adherence. However, not all methods can be applied as the standard measurement for each disease and treatment scheme. In this literature review, an optimal method for OD was not found.
- There are opportunities to develop alternatives that evaluate objectively the IVT adherence in OD. Such instrument could allow for improved treatment effectiveness and to identify access barriers.
- It would also have a positive impact on the patient's quality of life, reduced disease complications and healthcare costs.

REFERENCES

- 1. Duncan N, Kronenberger W, Roberson C, Shapiro A. VERITAS-Pro: a new measure of adherence to prophylactic regimens in haemophilia. 2010 Mar;16(2):247-55. doi: 10.1111/j.1365-2516.2009.02129.x. Epub 2009 Nov 18.
- 2. Martinez P, et al. Validation and psychometric properties of the 8-item Morisky Medication Adherence Scale (MMAS-8) in type 2 diabetes patients in Spain. Aten Primaria. 2021 Feb;53(2):101942. doi: 10.1016/j.aprim.2020.09.007. Epub 2021 Jan 25.

 3. Jimenez K, et al. Evaluating the Validity and Reliability of the Beliefs About Medicines Questionnaire in Low-Income, Spanish-Speaking Patients With Diabetes in the United States. Diabetes Educ. 2017 Feb;43(1):114-124. doi: 10.1177/0145721716675740.
- Epub 2016 Nov 10.
- 4. Kripalani Sunil, et al. Development and evaluation of the Adherence to Refills and Medications Scale (ARMS) among low-literacy patients with chronic disease. Value Health. 2009 Jan-Feb;12(1):118-23. doi: 10.1111/j.1524-4733.2008.00400.x.
- 5. Unni, E, Sternbach N, Goren A. Using the Medication Adherence Reasons Scale (MAR-Scale) to identify the reasons for non-adherence across multiple disease conditions. Patient Prefer Adherence. 2019 Jun 28;13:993-1004. doi: 10.2147/PPA.S205359. eCollection 2019.