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Assessing Medication Adherence in Patients with Chronic Autoimmune Diseases - Doctors' Perspective

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Abstract: A questionnaire - based survey was conducted among clinicians who deal with management of Autoimmune rheumatic conditions to determine the factors influencing drug adherence among patients with chronic autoimmune diseases. Using a prestructured web - based questionnaire, information about disease and treatment was evaluated - frequency of drug non - adherence, economic, socio - demographic factors, health system related and therapy related factors which have an influence on drug adherence. The most often reported reasons for drug non - adherence were high cost of therapy, fear of adverse effects and low level of patient education. From available results, it can be inferred that reducing cost burden of disease and/or reducing pill burden is of utmost importance, apart from improving patient education.

Keywords: Drug adherence, Autoimmune diseases, patient education, survey, cost of therapy

1. Introduction

Autoimmune disease are chronic inflammatory conditions requiring long term sometimes lifelong therapy. Adherence to medical therapy is a major determinant of successful treatment outcomes in these chronic diseases. However, non - adherence is common in these patients due to various reasons. This undermines the effectiveness of control of disease activity and increases burden on health care systems. The full benefit of disease modifying drug therapy can be obtained only if drugs are adhered to properly. Barriers to medication adherence are complex and varied. The problem gets augmented with coexisting morbidities, polypharmacy, and several socio - demographic factors. (1) Treating physicians encounter several such occurrences in daily clinical practice and this further makes treatment of autoimmune disease challenging and complex. The aim of this study is to gather information and understand regarding the factors determining non - adherence to drug therapy.

2. Materials and Methods

This was a questionnaire - based study to gather information regarding factors responsible for drug non - adherence in patients of chronic rheumatic diseases from the perspective of treating physicians. A web - based questionnaire with single or multiple choices to answer was circulated among Rheumatologist and Physician groups practicing in urban areas and based in India - predominantly South India. Questions were pertaining to the frequency of drug non adherence, effect of non - adherence on underlying clinical condition by each in their day - to - day clinical practice, several social, economic, health sector related factors for drug non - adherence, inspired from the WHO Five dimensions of adherence (2)

3. Results

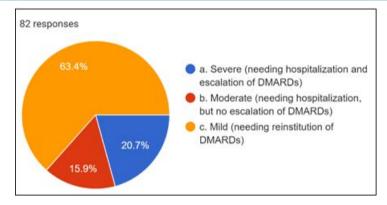
Using the WHO framework where adherence is described as a result of interactions of five dimensions: socioeconomic, therapy related, patient, clinical condition related and healthcare system related (3). Themes explored in the questions were occurrence of flare of underlying disease and its severity, intentional and non - intentional causes of drug non - adherence, possible ways to reduce non - adherence.

83 responses were recorded from clinicians in the departments of Rheumatology and General Medicine. All the responders (n=83, 100%) practised in urban areas. All had reported to have seen patients having rheumatic diseases with drug non - adherence. All the responders (n=83, 100%) had also encountered patients who had presented with disease flare due to non - adherence to drugs.

Most commonly noted disease flare was of mild intensity – requiring reinstitution or optimisation of disease modifying drug therapy (n=52, 63.4%)

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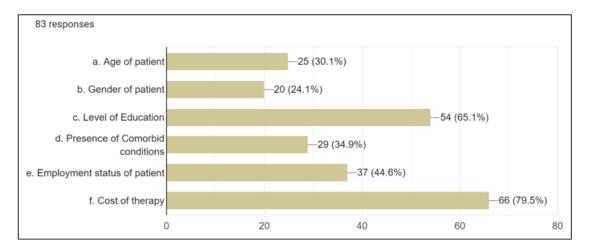
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80% of participating clinicians noted only few patients having severe disease flares due to drug non - adherence requiring hospitalisation. Similarly, around 70% doctors, reported to have come across few cases of drug non - adherence on a regular basis.

Rheumatoid arthritis was the disease most observed to have disease flare due to non - compliance to drugs, followed by spondyloarthritis group of diseases. When asked about the most common intentional cause of drug non - adherence observed in their practice, half the doctors reported 'fear of side effects' to be noted as the primary cause, and about 38% reported 'high therapy cost' as the primary non - intentional cause of drug non - adherence.

Poor / low level of education was perceived to be a strong socio - demographic factor for drug non - adherence alongside high therapy cost.



Polypharmacy was the most perceived therapy related factor to cause drug non - adherence, followed by side effects of therapy. Reducing the number of drugs was the primary suggestion for improving drug adherence.

4. Discussion

This study provides insights into the factors for non adherence to treatment of autoimmune rheumatic diseases from the perspective of treating clinicians. Many patients reported more than one reason for non - adherence, which is in line with the multifactorial World Health Organization conceptual framework of adherence. Cost of therapy and fear of adverse effects were commonly reported themes to impact adherence to therapy.

Non availability of drugs for free in centralised health institutes was another commonly perceived obstacle for drug adherence by 41% doctors.

A study on drug adherence in a tertiary centre in Hyderabad, South India was done in 2019, which reported cost burden of therapy to be the most common factor leading to drug non adherence among patients of Rheumatoid arthritis. (4) Cutting down the number of pills and improving patient education so as to remove fear of adverse effects and stressing the importance of compliance to medication were the foremost suggestions for improving patients' drug adherence.

Based on the factors noted, there is an utmost need for effective intervention strategies to be formulated so as to improve patients' adherence to treatment both at institutional level and individual clinician's level.

A high proportion of patients also switch to alternative therapy in hopes of achieving cure from disease. Patient education regarding treatment options, dismissing incorrect information from unreliable sources are of prime importance.

5. Conclusion

Patients should be encouraged to regular follow - up; their fears and doubts should be addressed. They should be reassured that their health will be closely monitored, and their safety is of utmost importance.

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References

- Lee WP, Lee SSS, Xin X, Thumboo J. Towards a better understanding of reasons for non - adherence to treatment among patients with rheumatoid arthritis: A focus group study. Proceedings of Singapore Healthcare.2017 Jun 1; 26 (2): 109–13.
- [2] The five dimensions of adherence as suggested by the World Health. . . | Download Scientific Diagram [Internet]. [cited 2022 Dec 4]. Available from: https: //www.researchgate. net/figure/The five dimensions of adherence as suggested by the World Health Organisation_fig1_28229081
- [3] Joplin S, van der Zwan R, Joshua F, Wong PKK. Medication adherence in patients with rheumatoid arthritis: the effect of patient education, health literacy, and musculoskeletal ultrasound. Biomed Res Int [Internet].2015 [cited 2022 Dec 4]; 2015. Available from: https: //pubmed. ncbi. nlm. nih. gov/26060812/
- [4] Devi N JM, Naaz M. MEASURING COMPLIANCE, ADHERENCE TO DRUGS IN RHEUMATOID ARTHRITIS PATIENTS AND ASESSING THEIR DISEASE ACTIVITY STATUS. [cited 2022 Dec 4]; Available from: http: //dx. doi. org/10.24327/ijrsr.2019.1010.4059