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Impact of Clinical Pharmacist Interventions on Patients' Quality of Life and Medication Adherence Among Rheumatoid Arthritis Patients

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Background

- Rheumatoid arthritis is associated with high disease activity and multiple comorbidities that may negatively impact the patient's quality of life (QOL).
- Furthermore, the presence of complex drug regimens and polypharmacy raises the risk of medication non-adherence.
- Hence, we aimed to assess the impact of clinical pharmacist interventions on patients' QOL and medication adherence among rheumatoid arthritis patients.

Objectives

- To assess the patients' quality of life among rheumatoid arthritis patients.
- To assess the medication adherence among rheumatoid arthritis patients.

Methods

Study Design: A prospective cohort study

Study Site: Department of Rheumatology & Immunology, JSS Hospital, Mysuru, India.

Study Period: July 2019–April 2021

Study Subjects: Patients diagnosed with rheumatoid arthritis

Study inclusion criteria: Patients of any gender and aged ≥ 16 years and diagnosed with rheumatoid arthritis.

Methodology

- Patients were randomised either into intervention group (IG) or usual care group (UCG).
- Patients in IG received physician care along with pharmacist interventions, whereas, UCG patients received only physician care.
- At the baseline visit, 3 months and 6 months, the WHOQOL-BREF scale and medication adherence rating scale (MARS) were used to assess patients' QOL and medication adherence respectively.
- Mean & SD was calculated for continuous data and SPSS v25 was used for statistical analysis.

Results

- Of 320 RA patients enrolled, 298 completed the final follow-up in this study. Majority of patients were females than male.
- There was statistically significant improvement was observed in the WHOQOL-BRIEF score and MARS at the baseline versus 6 months follow-up between both groups.

Patients' quality of life (WHOQoL-BREF, mean±SD score)

Disease condition	UCG at Baseline n= 160 (%)	UCG at 6 months n= 149 (%)	P Value	MDCT at Baseline n= 160 (%)	MDCT at 6 months n= 149 (%)	P Value
Domain 1	25.51±8.8	32.24 ± 9.30	<0.0001	24.2±10.2	64.28 ± 17.52	<0.0001
Domain 2	26.40±9.9	30.62 ± 11.82	<0.0001	25.25±9.9	67.47 ± 13.17	<0.0001
Domain 3	27.65±11.4	29.89 ± 11.57	0.003	27.85 ± 12.03	67.83 ± 24.24	<0.0001
Domian 4	26.48 ±11.4	34.72 ± 10.88	<0.0001	25.98±11.7	69.93 ± 21.74	<0.0001
Overall	26.51 ± 10.42	31.86 ± 10.89	<0.0001	25.82 ± 10.96	67.37 ± 19.16	<0.0001

*Paired T-test at 95% CI and p < 0.05 considered as statistically significant

Average mean score compression of medication adherence between baseline visit versus 6 months follow-up within groups

Disease condition	UCG at Baseline n= 160 (%)	UCG at 6 months n= 149 (%)	P Value	MDCT at Baseline n= 160 (%)	MDCT at 6 months n= 149 (%)	P Value
Rheumatoid arthritis	5.99 ± 2.53	5.08 ± 1.92	0.54	4.43 ± 2.31	7.91 ± 1.03	<0.0001

*Paired T-test at 95% CI and p < 0.05 considered as statistically significant

Conclusion

- Patient quality of life and adherence towards medication is too low among rheumatoid arthritis patients.
- This study reveals that clinical pharmacists' interventions can improve patients' quality of life and medication adherence in rheumatoid arthritis patients.

Reference

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