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FRI0635 MEDICATION ADHERENCE IN PATIENTS WITH RHEUMATIC DISEASES: A QUALITATIVE STUDY IN A BIOLOGICS CLINIC

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Background: High rates of non-adherence to prescribed medications in rheumatic diseases have been reported, with adherence as low as 30% in some studies [1, 2]. Physicians commonly overestimate adherence [3]. Consequences of non-adherence include poorer patient outcomes and increased healthcare costs [1, 2]. Improving adherence may be as effective as developments in biomedical management in terms of positive health outcomes [4]. Understanding factors contributing to non-adherence may inform strategies for improvement.
Objectives: This study aims to explore factors affecting medication adherence in patients attending a dedicated biologics clinic.
Methods: Patients were selected by purposive sampling. Semi-structured interviews were performed and continued until data saturation was achieved in order to examine reasons why patients failed to take their prescribed medication. Interviews were transcribed and coded using NVIVO. The principles of grounded theory were used to analyse the data. The emergent themes were informed by health behaviour theories and factors which have previously correlated with adherence in similar cohorts.

Results: Major themes which emerged include the concept that the presence of active symptoms significantly influenced adherence. It was noted that patients tended not to prioritise medication taking until they had recurrence of symptoms. Patients sometimes failed to display an understanding of the concept of disease activity, or concern for the risk of long term joint damage or other consequences of uncontrolled inflammation. They also expressed concern regarding potential long-term side effects of biologic medications; even if they had not experienced any side effects to date. Methotrexate was perceived as a toxic and “heavy” medication. Biologics were described by patients as “life-changing” and superior to conventional DMARDs. Patients identified their relationship with their rheumatologist as being pivotal in their experience of their condition and medication management. Diet, exercise and stress were perceived to play a critical role in disease causation, flares and treatment.
Several minor themes were identified. Developing habitual patterned behaviour was a challenge for some participants. Affordability was an issue despite biologics being heavily subsidised. Depression, social situation and needle phobia were potential barriers to adherence. Preference for alternative therapy, distrust of “synthetic medications” and an awareness of the high cost of biologics affected decision making for some patients.
Conclusions: This study examined the medication adherence of a group of patients with rheumatic diseases who are very closely managed in a dedicated biologics clinic. Even in this group of patients, factors which contribute to medication non-adherence were readily identified. Several of these themes suggest that enhancing patient education may improve adherence in this group.

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FRI0636 THE VALUE OF PERSISTENCE IN TREATMENT WITH SUBCUTANEOUS TNF-ALPHA INHIBITORS FOR ANKYLOSING SPONDYLITIS

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Background: Subcutaneous Tumor Necrosis Factor-alpha inhibitors (SC-TNFi) with higher persistence are often perceived as being more costly compared with SC-TNFis with lower persistence based merely on the resulting higher drug acquisition cost. Thus, failing to consider possible health care cost offsets, productivity gains and increased quality of life.
Objectives: The objective of this study was to assess the value of higher treatment persistence by evaluating cost-effectiveness of SC-TNFis for Ankylosing Spondylitis (AS), with higher persistence compared with lower persistence from a payer and societal perspective.
Methods: A Markov cohort model, following the framework of the NICE commissioned York model in AS¹, was developed. In the model, patients achieving BASDAI50 response at 12 weeks transition to treatment maintenance and non-responders to conventional care. In each cycle, patients are at risk of death. Patients discontinuing treatment after the treatment response period rebounds in BASDAI and BASFI by what was gained at response. Inputs were sourced from the York model where available and costs were updated to 2016/17 prices. The societal perspective included indirect costs from productivity losses (i.e. absenteeism, presenteeism, and early retirement)². Two treatment strategies are investigated; SC-TNFis with constant annual withdrawal rates of 10% and 20%. Apart from discontinuation rates, treatment inputs are the same for the two strategies.
Results: Better persistence increases the treatment cost, but this is partly offset by savings in disease related costs and from a societal perspective it is cost-saving (figure 1). In addition, the improvement in the health of persistent patients is noticeable as a gain in quality adjusted life years (QALYs). The ICERs of the 10 % and 20% withdrawal rate treatment strategies versus conventional care (CC) are £18,323 and £20,063, respectively (table 1). Given a WTP of £20,000 the strategy with better persistence compared to the strategy with worse persistence is clearly cost-effective (ICER= £16,112) and dominates when a societal perspective is taken.

Table 1 Cost-effectiveness analysis of SC-TNFis

	Total costs, £	Total QALYs	Incremental costs, £	Incremental QALYs	Incremental cost per QALY, £
Payer perspective					
SC-TNFis vs. CC					
CC	128,016	9.71	-	-	-
10% withdrawal rate	146,146	10.70	18,130	0.99	18,323
20% withdrawal rate	139,379	10.28	11,363	0.57	20,063
Between SC-TNFis	-	-	6,767	0.42	16,112
Societal perspective					
SC-TNFis vs. CC					
CC	326,454	9.71	-	-	-
10% withdrawal rate	322,537	10.70	-3,917	0.99	Dominates
20% withdrawal rate	325,270	10.28	-1,184	0.57	Dominates
Between SC-TNFis	-	-	-2,733	0.42	10% dominates