

## Putting the spotlight on a backbencher: psychosocial aspects of rheumatologic diseases

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More than one hundred and fifty rheumatologic diseases and/or syndromes have been described, each with a variety of clinical manifestations. As they often cause musculoskeletal symptoms, including articular pain, rheumatologic diseases are recognized as one of the leading causes of disability globally<sup>1</sup>. While healthcare providers focus on providing solutions to the physical and biological aspects of these diseases, the psychosocial aspects may remain unrecognized, yet their impact on treatment outcome is significant.

The relationship between disease processes and psycho-social wellbeing is complex. Chronic diseases affect the general functioning and wellbeing of an individual. At the same time, social, psychological and physiological factors have a strong influence on both the disease process and the general functioning and wellbeing of an individual. This relationship is a potentially vicious, bilateral cycle, where poor functioning in one dimension upsets functioning in other dimensions.

Biomedical and biopsychosocial models attempt to explain the role of the biologic disease process and individual characteristics in manifestation of disease processes<sup>2</sup>. The hypothalamic-pituitary axis and sympathetic nervous system are susceptible to the effects of cytokines and stress hormones (cortisol and catecholamines), which are all possible causes or end-products of inflammation. In addition, persons with chronic diseases have a tendency towards low self-esteem and neuroticism. When these factors combine, they may change an individual's perception of disease and affect how they cope.

Negative psychosocial factors such as mood disorders (depression and anxiety), learned helplessness, external stressors, sleep disturbance and fatigue are common in patients with rheumatologic diseases, and negatively impact treatment outcomes. In one series of cross-sectional multi-country population studies, mood disorders were up to twice as likely to be

present in patients with arthritis, than with those without<sup>3</sup>. Approximately 25% of patients with osteoarthritis and ankylosing spondylitis have been reported to have depression and anxiety. The prevalence is even higher in patients with rheumatoid arthritis and fibromyalgia where numbers as high as 42% and 71% respectively have been reported<sup>2-8</sup>. Additional psychosocial factors with negative impact include a personal history of psychiatric disorders and history of abuse.

It is worth our time as health care providers to actively identify and address negative psychosocial factors in our patients. These factors have consequences on the course and outcome of rheumatic diseases. Patients with depression and anxiety may have higher levels of pain, higher painful joint counts, reduced functional ability and mortality. They may spend more time in bed, and pay more visits to the physician, which both have economic and health system consequences<sup>2-8</sup>.

Interventions to address negative psychosocial factors include patient education and cognitive behavioural therapy. Patient education provides the patient with credible rationale that alters negative perceptions and gives the patient confidence that coping skills can be learned. Cognitive Behavioural Therapy (CBT) is a goal-oriented systematic intervention that employs a variety of techniques which help patients to develop sustainable strategies to cope with pain and manage negative factors. Mindfulness Based Stress Reduction (MBSR) therapy is a related technique that may also be applied. The ultimate goal of these interventions is to increase positive psychosocial factors in the patient, including self-efficacy, optimism, acceptance, and coping skills. Addressing negative psychosocial factors reduces displays of pain behaviour, improves psychological functioning and has a positive impact on disease activity scores by changing joint counts and patient self-assessment scores. Results of these interventions vary. While some

studies report at least short term gains, others such as patient education and lay-led self-management programs fail to show long term benefits. There are also few studies addressing the aspect of patient adherence to medication<sup>8-11</sup>.

Psychosocial evaluation and interventions should be integrated into our ambulatory clinics. In our African setting, simple, inexpensive strategies should be considered. The 2-question screen<sup>12</sup> can be applied at triage or during patient registration; it takes almost no time but provides useful information. Rheumatologic units may choose to adopt one of the many available validated psychosocial screening tools, including the PHQ-9 (Patient Health Questionnaire) or the HADS questionnaire (Hospital Anxiety and Depression Score) among others. Decision makers in units may choose to design structured ways to periodically assess the psychosocial dimensions of their patients, for example, detailed questionnaires may be applied to all new patients and periodically thereafter (6-monthly perhaps) according to the resources available. Time-saving strategies such as patient self-administration of questionnaires in waiting rooms can be considered. Patient educational materials should be on display and accessible in units, and where possible, health talks should be provided in waiting rooms. Cognitive behavioural therapy requires investment in both human resources and capacity. Large units with access to multi-disciplinary teams may find it easier to link patients to mental health units with these services. We suggest that arthritis self-management programs and patient peer support groups would greatly benefit the often resource limited African setting in addressing psychosocial problems.

Negative psychosocial factors in our patients may pass unnoticed and fail to be addressed. There is evidence that these factors influence treatment outcomes. The cost impact of screening our patients for these factors is low, yet identifying and addressing them may go a long way in cutting treatment costs and reducing morbidity and mortality. Rheumatologic units in the African setting should identify the low-hanging fruits and implement cost-effective strategies to address the psychological and social factors in our patients, and generate supportive scientific evidence relevant to our setting.

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