



Role of Community Pharmacist Care of Arthritis Patients

Debjit Bhowmik^{*1}, Chiranjib¹, Biswajit¹, Jetandra Yadav¹, Pankaj¹, K. K. Tripathi¹,
K. P. Sampath Kumar²

¹Rajiv Gandhi College of Pharmacy, Nautanwa, Maharajganj, Uttar Pradesh
²Department of Pharmaceutical Sciences, Coimbatore Medical College, Coimbatore

Abstract

Pharmacist is now becoming more patient oriented than product oriented and have brought many changes in life of patients. There is considerable evidence that patients counseling enhances patient compliance and improve the quality of life outcomes in Arthrities patients. Arthritis is a disease that causes pain and loss of movements of the joints. Arthritis is a disease that causes pain and loss of movement of the joints. People of all ages, including children and young adults, can develop arthritis. Currently, there is no permanent Arthritis treatment or Arthritis remedy. Arthritis can only be managed by proper diet, exercise, food supplementation, drugs and surgery. Arthritis sufferers include men and women, children and adults. Approximately 350 million people worldwide have arthritis. Over 40 million people in the United States are affected by arthritis, including over a quarter million children! More than half of those with arthritis are under 65 years of age. there are 150 varieties of arthritis affecting almost 150 million people in India. About 10 million suffer from the debilitating rheumatoid arthritis. one of the world's leading research and advisory firms focusing on pharmaceutical and healthcare issues, finds that the rheumatoid arthritis drug market in India will more than double by 2013, growing from \$296 million in 2008 to \$672 million in 2013. This growth will be fueled by a growing drug-treated population, improved patient access to healthcare insurance, greater patient spending power and the increased use of biological agents in rheumatoid arthritis treatment.

Key words: Arthritis, pain, medication

Introduction

Rheumatoid arthritis is a major health issue which is common in woman. It is an inflammatory autoimmune disorder. It affects approximately 1-2% of the population. Usually women are more prone to this chronic disease. RA is a systemic disease, autoimmune disarray in which the defense system of the body attacks the joints through the thin layer of cells called the synovium that line and lubricates the joints. Arthritis pain and inflammation of joints has many forms.

Rheumatoid arthritis can be one of the most disabling types of arthritis. Its course varies, from a few symptoms to severe and painful deformities. Three times as many women as men are affected, usually at a fairly young age (between 25 and 50). The disease may come on slowly or appear suddenly. Rheumatoid arthritis typically affects the small finger joints, wrists, knees and toes. All joints of the body, however, are potential targets. Along with swelling and pain of joints, some of the early symptoms of the disease may include fatigue, loss of appetite, weight loss and fever. Stiffness in the joints and surrounding muscles that lasts for several hours after getting up in the morning is a regular symptom. Sometimes the disease involves other organs, causing damage to the heart, lungs, eyes, skin and nerves. Many individuals with rheumatoid arthritis feel their arthritis is influenced by the weather, stress, temperature and exercise. A few have periods of remission when the disease seems to have gone away. Unfortunately, in most cases, the symptoms eventually return. The cause of rheumatoid arthritis is unknown. Some scientists feel that it may result from an infection, but there is no evidence that it is contagious. For whatever reason, the joint lining becomes very inflamed and thickened, slowly destroying cartilage and bone.

The goal of treatment is to halt the inflammation and prevent the destruction of joints. Medical supervision is a must, because this form of arthritis can be crippling, other organs may be affected and all treatments may, on occasion, cause side effects. Doctors now have many ways of treating rheumatoid arthritis. Large doses of aspirin or aspirin-like drugs can be effective in reducing pain and inflammation. If the arthritis is aggressive, drugs called DMARDs or SAARDs (disease-modifying antirheumatic drugs, or slow-acting antirheumatic drugs) such as the anti-malarial may be used. Certain immunosuppressant's biologic response modifiers, corticosteroids, or gold therapy may be used. All these drugs require close supervision, since they may have hazardous side effects. Rest, heat and physical therapy are important adjuncts to drug therapy. A healthy diet and exercise also helps patients retain mobility and strength, maintain or lose weight, sleep better, and even help maintain a positive attitude. Although there is no scientific evidence that eating or not eating certain foods reduces or aggravates symptoms of rheumatoid arthritis, some recent studies indicate that omega-3 fatty acids (found in certain fish and plant seed oils) may reduce the inflammation of rheumatoid arthritis. Joint deformity or pain is sometimes so severe that surgery is the best alternative. A patient can have added years of mobility due to the hip, elbow, shoulder and knee replacements that can be performed today. Surgeries include joint replacement (replacing the joint with an artificial joint), tendon reconstruction (reconstructing damaged tendons) and synovectomy (removal of the inflamed tissue).

The use of a splint or brace can also help straighten some joints. Although surgery cannot cure all deformities, advances in the field have given rheumatoid patients, who previously would have been wheelchair-bound, the ability to continue in relatively normal lives. One form of chronic arthritis (less widely known) is one that attacks children, *juvenile rheumatoid arthritis*. It may start with symptoms as general as fever and rash, and it may take a long time for a definite diagnosis to be reached. Some children complain of swelling and stiffness in a few scattered joints. When the disease threatens the function of the joints, skilled professional treatment is called for to prevent permanent deformity. The disease in its juvenile form often stops progressing within 10 years, but the damage may be permanent and cause further deterioration of the joints. The major concern for the child, parent and doctor is to provide treatment that will

spare the child a deformity that might persist long after the disease itself has disappeared. Osteoarthritis is a disease that causes the breakdown of joint tissue, leading to joint pain and stiffness. It can affect any joint, but commonly occurs in the hips, knees, feet and spine. It also may affect some finger joints, the joint at the base of the thumb and the joint at the base of the big toe. It rarely affects the wrists, elbows, shoulders, ankles or jaw, except as a result of injury or unusual stress. Osteoarthritis is one of the oldest and most common diseases in humans. It probably affects almost every person over age 60 to some degree, but only some have it badly enough to notice any symptoms. Osteoarthritis is also known by many other names, such as degenerative joint disease, arthrosis, osteoarthrosis, or hypertrophic arthritis. Although there is no cure for osteoarthritis, proper treatment can help relieve the symptoms and prevent or correct serious joint problems. A cornerstone of therapy of any form of arthritis is physical therapy and occupational therapy to maintain joint mobility and range of motion.

Many drugs are now used to treat the inflammation and pain associated with arthritis. Aspirin and other nonsteroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen (Motrin, and others), naproxen (Naprosyn, and others) and diclofenac (Voltaren), have immediate analgesic and anti-inflammatory effects and are relatively safe. Second-line drugs used for treatment of rheumatoid arthritis include hydroxychloroquine, gold, penicillamine, azathioprine, sulfasalazine and methotrexate. These agents (which have no immediate analgesic effect) can control symptoms and may possibly delay progression of the disease, but many of them can also cause severe adverse effects and diminish in effectiveness over time. NSAIDs are usually taken concurrently with the slower acting second-line drugs, which may take months to produce a therapeutic response. Aspirin in high doses is as effective as any other NSAID and much less expensive, but some patients cannot tolerate the gastrointestinal toxicity. Aspirin interferes with platelet function and can rarely cause serious bleeding; this effect can persist for four to seven days after the drug has been discontinued. Tinnitus (ringing in the ears) and rarely, hepatitis (liver inflammation) or renal (kidney) damage can also occur with high-dosage aspirin therapy. Enteric-coated aspirin is safer but may not be fully absorbed. Nonacetylated salicylates, such as sodium salicylate, salsalate (Disalced, and others), and choline magnesium salicylate (Trilisate, and others), do not interfere with platelet function and may be safer than acetylated salicylates for aspirin-sensitive patients, but some clinicians have questioned their effectiveness. Serious about tackling the country's most widely prevalent ailment, the Arthritis Foundation of India has launched a new multilingual call centre in Bangalore to help provide information about osteoarthritis and its management. Alcohol can also cause osteo-arthritis, a senior orthopedics consultant said. About 2-3 per cent of all osteo-arthritis cases in India are alcohol induced. Consumption of alcohol would lead to stoppage of blood circulation to the ball of the hip. This, in turn, would lead to irregular surface.

Role of community pharmacist care of arthritis patients

The Pharmaceutical Care is an important health care intervention which is mandatory for quality use of medicine. The community pharmacist is the globally accepted professional to cater the pharmaceutical care to the patients at the time of dispensing the medicine it self. This will correct the wrong practices in medicine usage and make the patient a partner in his improvement of health. Pharmacists are uniquely positioned and most easily accessible healthcare professionals in the Community. Even in developing countries like India, most of the people communicate and take treatment advice on minor ailments from pharmacist only! Among all Healthcare

Professionals, Pharmacist is the one who have wide compass and can communicate with people most effectively. Pharmacists are often the first point of contact for patients experiencing Meningitis. As the most accessible health care professional, pharmacists have an important role to play in current situation. Community pharmacist is only healthcare professional who will interact with several individuals each day and this is major platform to communicate with common individuals. Physiotherapy and physical therapy are initiated to help improve and sustain range of motion, to increase muscle strength, and to reduce pain. Occupational therapy is initiated to help patients to use joints and tendons efficiently without stressing these structures, to help decrease tension on the joints with specially designed splints, and to cope with daily life through adaptations to the patients' environment and the use of different aids. Orthopedic measures include reconstructive and replacement-type surgical measures

Conclusion

As community Pharmacist becomes a consultant for patients who are put on therapy. He counsels the patients about the disease process and simultaneously role of drugs. From learning about the importance of exercising regularly to fully understanding your arthritis medications, the information contained in this section is meant to provide you with insights, information and tips that can be used by you to help make living with arthritis a little bit more manageable. For people with arthritis, learning to make it part of your life can be difficult. But learning as much as you can about your particular type of arthritis and actively working with your arthritis treatment team are two very effective ways of regaining control over your life. There is plenty of information, some specific to arthritis and some not, that can be very helpful to someone facing the challenges associated with having a chronic or lifelong disease. In the future, medications may be available that protect the cartilage from the deteriorating consequences of osteoarthritis. Surgical innovation has led to a technique for the repair of isolated splits of cartilage (fissures) of the knee. In this procedure, a patient's own cartilage is actually grown in the laboratory, then inserted into the fissure area and sealed over with a "patch" of the patient's own bone covering the tissue. While this is not a procedure for the cartilage damage of osteoarthritis, it does open the door for future cartilage research. These and other developing areas hold promise for new approaches to an old problem. Investigators at the National Institutes of Health are currently looking into whether or not taking glucosamine or chondroitin could actually improve or protect the quality of the cartilage in joints affected by osteoarthritis. Research scientists have found that doxycycline, a tetracycline drug, has been shown to slow the progression of cartilage degeneration in the knees of patients with osteoarthritis. More studies are needed to determine the significance of this early but interesting work.

Reference

- [1] American Geriatrics Society Panel on Exercise and Osteoarthritis (2001). *Journal of the American Geriatrics Society*, 49(6): 808–823.
- [2] Cochrane Musculoskeletal Group (2004). *Cochrane Database of Systematic Reviews* (2). Oxford: Update Software.
- [3] Clyman B (2001). *Current Rheumatology Reports*, 6(3): 520–523.
- [4] Sharma L (2003). *Arthritis and Rheumatism*, 49(2): 255–260.
- [5] Deyle GD (2000). *Annals of Internal Medicine*, 132(3): 173–181.
- [6] Messier SP, et al. (2000). *Journal of the American Geriatrics Society*, 48(2): 131–138.

- [7] Friedrich MJ (1999). *JAMA*, 282(11): 1023–1025.
- [8] McCarthy CJ, et al. (2004). *Rheumatology*, 43(7): 880–886.
- [9] Hinman RS, et al. (2003). *BMJ*, 327(7407): 135.
- [10] Scott DL, Shipley M, Dawson A, Edwards S, Symmons DPM, Woolf AD. *Rheumatology* 1998; 37: 546-554.
- [11] www.arc.org.uk, accessed 4 April 2007.
- [12] Messier SP, et al. (2000). *Journal of the American Geriatrics Society*, 48(2): 131–138.
- [13] Friedrich MJ (1999). *JAMA*, 282(11): 1023–1025.
- [14] McCarthy CJ, et al. (2004). *Rheumatology*, 43(7): 880–886.