Impact of Nurses Counseling On Quitting Tobacco Use in Inflammatory Rheumatological Diseases (IRDs)

Baghel S Sadhana, Thakran D Ravita and Messi Christy

Department of Rheumatology, Indian Spinal Injuries Centre, Vasant Kunj, New Delhi 110070, India.

ABSTRACT

Objectives: To assess, the prevalence of tobacco use among patients with IRDs and the effect of counselling on quitting tobacco use.

Methods: A survey was conducted on the status of the tobacco use of patients attending the Rheumatology clinic. Tobacco use was categorized as active [smoking or oral tobacco use] or passive (when the patient was exposed to tobacco smoke). All the patients were interviewed to find out their current tobacco use status. They were counselled about the methods of quitting tobacco with the help of visual poster, written quit advice, material to raise awareness, regular and intense counselling by specialist nurses.

Results: Total of 126 patients (59.7%) were tobacco users. Counselling intervention to give up tobacco use yielded the following results: Quitting success rate 33.7% in active and 7.7% passive in tobacco users.

Conclusion: Creating awareness with the help of material use, regular and intense counselling by specialist nurses increased patients’ knowledge about the ill effects of tobacco use in IRDs. Quitting tobacco use reduced comorbidities burden prevents premature death of patients and increases efficacy of disease modifying anti rheumatic drugs (DMARDs).

Keywords
Counseling, Rheumatology nurses, Quitting tobacco use, Inflammatory rheumatological diseases.

Introduction
Tobacco has the deleterious effect on autoimmune inflammatory rheumatic diseases (AIRDs). They are chronic illnesses where joint pains, stiffness and increasing disabilities are common. It has long been known that there is a strong connection between inflammatory diseases and tobacco use. Tobacco use is one of the major environmental factors suggested to play a crucial role in the development of several diseases and significantly increases the risk of comorbidities such as cardiovascular diseases, lung cancer, respiratory diseases and osteoporosis is highly associated with tobacco consumption. The more recently, it has been reported that smoking is involved in the pathogenesis of certain autoimmune inflammatory diseases such as Rheumatoid arthritis (RA), Spondyloarthritis (SPA), systemic lupus erythematos (SLE), systemic sclerosis, and many other inflammatory diseases. The leading causes of death in IRDs are cardiovascular diseases (31%), respiratory diseases (29%) and osteoporosis (10-50%). Patients with IRDs increases the risk of many comorbidities and morbidities of cumulative diseases burden as well as excess mortality with the risk of premature death which is 50% higher in IRDs than the general population. The use of tobacco further aggravates the existing severity of IRDs and worsens the joint...
In India, tobacco is used in various forms like cigarettes, bidis, hookah, pan masala, gutka, etc. Therefore, awareness about the deleterious effects of tobacco and counseling to quit the same should be an imperative part of the patient's education. In our clinic, we identified such patients and tried to counsel them to quit tobacco use.

**Significance & Innovation**

- Tobacco use decreases efficacy of disease-modifying anti-rheumatic drugs (DMARDs), biologics, and aggravates the disease activity and its complications.
- Counseling related to quitting tobacco use carried out by dedicated specialist rheumatology nurses increases the quitting rate.

**Methods**

211 IRDs patients attending the rheumatology clinic, willing to participate in the survey were enrolled in this study. Tobacco use was categorized as active (smoking or oral tobacco use) or passive (when the patient was exposed to tobacco smoke). All the information collected in pre-design form, which included demographic information and current status of tobacco use. They were also counseled and told about the methods of quitting tobacco and its importance.

**Results**

211 patients were enrolled in this study attending the Rheumatology Clinic. The diagnosis among them was as follows: Rheumatoid arthritis 162 patients and Spondyloarthropathy 49 patients. Tobacco use was categorized as active (smoking or oral tobacco use) or passive (when the patient was exposed to tobacco smoke). All the information collected in pre-design form, which included demographic information and current status of tobacco use. They were also counseled and told about the methods of quitting tobacco and its importance.

Out of them 85 (40.28%) were tobacco-naive and 126 patients (59.71%) were either active or passive tobacco users. Among them active tobacco users were 74 (58.73%), and passive users were 52 (41.26%). Active tobacco users were further classified into mild (44 patients, 59.45%), moderate (20 patients, 27.02%), and severe (10 patients, 13.51%) users. Other characteristics were as follows: Female: Male ratio 1:0.4 (F: M), Rheumatoid arthritis 162 patients and Spondyloarthropathy 49 patients. Residential details were: urban 161 (76.3%) and rural 50 (23.69%). Educational status: 19 (9%) illiterate, 80 (37.91%) basic education, 66 (31.2%) graduate and 46 (21.8%) postgraduate. Co-morbidities status: 69 (32.7%) having multiple comorbidities, and 142 (67.3%) have no comorbidities.

The total of 126 patients (59.7%) was tobacco users. Counseling intervention to give up smoking yielded the following results: 29 patients (23.01%) gave up tobacco use, 48 (38.09%) did not give up, and in 49 pts. (38.9%) the information could not be obtained.

Out of 74 active tobacco users; 25 (33.78%) had quit it use, 40 (54.05%) did not give up; in 9 (12.16%) patients the information could not be obtained.

Out of 52 passive smokers; 4 (7.7%) had given it up, 8 (15.38%) did not give it up, and 40 (76.92%) the information could not be obtained.

74.88% patients were unaware of the ill effects of tobacco use in IRDs whereas, remaining 25.12% were aware of it.

**Discussion**

A study of tobacco use cessation aimed at the patient with inflammatory diseases was successful and it is a continuing process. The use of visual poster, written quitting advice of tobacco use, material to raise awareness, regular and intense counseling by specialist nurses all these methods are more effective to quit tobacco use. It is very important to create awareness to the patient about ill effect of tobacco use in inflammatory diseases. There is the teachable moment for the patient to know the relation between tobacco use and inflammatory disease. Large numbers of the patient with the inflammatory disease were unaware about the ill effects of tobacco use. There is a need to increase creating awareness and compelling reason for promoting quitting tobacco use in IRDs as it increases the disease's activity, lesser the treatment response, increases the risk of cardiorespiratory and other diseases in rheumatological patients. So it is very important to repeatedly quit tobacco use advice given to all patients in each visit by specialist rheumatology nurses are highly cost-effective [1-4].

**Conclusion**

Tobacco use is not insignificant although it is much less among females. Unfortunately, if passive smoking is included then; females also are exposed to tobacco in a large proportion of patients. Thus, after a single sitting of counseling, the quitting tobacco use rate in our active tobacco users patients was 33.78% and in passive 7.7%. Our results show that counseling related to quitting tobacco use, carried out by dedicated specialist rheumatology nurses, appears to improve the quit rate. We feel that the specialist rheumatology nurses may have spare time for in-depth counseling of patient with regards to quit tobacco use. This is the area where the role of us the specialist rheumatology nurses becomes important. Our results show that dedicated counseling by specialist nurse makes a difference. Therefore, the rheumatology clinics should utilize the service of specialist rheumatology nurses for this purpose on a regular basis. This will not only improve the services in the rheumatology clinic but also the compliance rate of tobacco quitting.

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References


