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

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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 erythematosus (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
damage. In addition tobacco user’s patients become less responsive to treatment. Besides several adverse effects of tobacco use the efficacy of disease modifying anti rheumatic drugs (DMARDs) and biologics is also decreased in those using tobacco.

In India, tobacco is used in various form like a cigarette, bidi, hookah, pan masala, gutka etc. Therefore, awareness about the deleterious effect of tobacco and counselling to quit the same should be an imperative part of the patient education. In our clinic, we identified such patients and tried to counsel them to quit tobacco use.

Significance & Innovation
- Tobacco use decrease efficacy of disease modifying anti rheumatic drugs (DMARDS), biologics and aggravates the disease activity and its complication.
- 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 Spondyloarthopathy 49 patients. Tobacco use was categorised 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.

The total of 126 patients (59.7%) was tobacco users. Counselling 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 quitted 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, in 40 (76.92%) the information could not be obtained.

Discussion
A study of a tobacco use cessations 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 counselling, the quitting tobacco use rate in our active tobacco users patients was 33.78% and in passive 7.7%. Our results show that counselling 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 counselling 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 counselling 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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