

## ABSTRACT

Although malocclusion is a human morphological variation, it still places a significant burden on health care provision. Malocclusion has impact on individual physically, functionally, socially and emotionally. Perceptions of malocclusion by the public are mainly subjective and vary with the social and cultural conditions. Patient who seek treatment are concerned with improving their appearance and social acceptance than improving their oral function or health. Clinical diagnosis of malocclusion, express only the professional judgment and it neglect patients' functional and social needs. There is a growing consensus to integrate OHRQoL measures in daily practice to complement this deficiency.

As any other high technology and expensive specialized services, orthodontic services are scarce and provided on referral basis. Public demand is one of factors that drives the referrals and which depend on need and expectations of population. Out of patients who have been referred, all are not registered for treatment, due to inappropriateness of the referral. Inappropriate referrals are greater burden to the healthcare system in Sri Lanka, with limited resources and greater disease burden.

The objective of this study is to determine factors associated with referrals to Orthodontic Clinic, Dental Institute, Colombo.

A cross sectional study was carried out with patients who have been referred to Orthodontic Clinic, Dental Institute, Colombo. Three hundred and eighty one new patients and their parents/ guardians coming for orthodontic consultation were interviewed regarding impact of malocclusion, perception of malocclusion (satisfaction with arrangement of teeth and perceived treatment need). Treatment need of the patient was assessed by consultant orthodontist.

Eighty five percent of the patients was referred by the Dental Surgeon and found higher prevalence of impact of malocclusion (92.5%). Higher percentage of the study participants and their parents/ guardians express dissatisfaction of arrangement of teeth and need for orthodontic treatment. Out of referred patients 65.4% of patients had definite orthodontic treatment need while 12.3% did not. About one fifth of the patients were referred too early for the treatment. From those who were diagnosed as having

definite orthodontic treatment only 68.8% was registered for treatment. Impact of malocclusion was associated with patients satisfaction of arrangement of teeth, patients perceived treatment need and normative treatment need but not with registration for treatment. Patients' and parents' perceived treatment need was not associated with normative treatment need and registration for treatment.

Although the referred patient for orthodontic care had higher prevalence of impacts of malocclusion, higher dissatisfaction with arrangement of teeth, high perceived treatment need, only 65.4% had normative need. From the total sample 44.9% was registered for treatment.

Number of referred patients can be reduced by half if the patients are appropriately referred. In order to improve the efficiency of the referrals, measures to be taken to enhance the knowledge of the Dental surgeon and school Dental Therapist. Referral guidelines and referral format will make the referrer's threshold more uniform. Integration of OHRQoL measures with normative need assessment will provide physical, psychosocial and social dimension of oral health.

**Key words:** impact of malocclusion, referrals to orthodontic care