INTRODUCTION

Record keeping is such an essential aid that its importance cannot be ignored when it comes to orthodontics. Even diagnosis is dependent on accurate and reliable orthodontic records. The vital information required to diagnose a malocclusion and develop an orthodontic treatment plan consists of models, photographs, panoramic and lateral cephalometric radiographs and a clinical examination.¹

Ubiquitous orthodontic model has been part of orthodontics as long as we have been looking at orthodontic questions,² plaster study casts have a long and proven history in orthodontics. They have been the "gold standard" in orthodontics, with advantages ranging from being a routine dental technique, ease of production, inexpensiveness and ease in measurement to plaster casts being able to be mounted on an articulator for study in three-dimensions.³

A panoramic radiograph shows positioning of the teeth and their periodontal and endodontic status. Cephalometric analysis and methods of superimposition are useful in monitoring the changes that are due to growth or to a combination of growth and treatment.⁴

The eye can grasp an idea many times faster than the ear and in general retain it far longer. Pictures are the best means of visual education and patient records should be supplemented by good photography. In addition, much information that is normally lost during the course of treatment can be recorded from the mouth by photography and these pictures become valuable records.⁵ Orthodontic photography records the exter-

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nal manifestations of health, disease or deformity as related to the teeth, gums or adjacent tissues and the development of facial characteristics. 

**METHODOLOGY**

Questionnaires were distributed to the dentists practicing orthodontics at their clinics or dental institutes in the twin cities (Islamabad and Rawalpindi) and the questionnaires were collected by hand. The results were subjected to a descriptive statistical analysis with the help of SPSS 17 (Table 1).

**RESULTS**

The response showed that forty eight dentists were practicing orthodontics out of which 90% were documenting initial records, while 42% were recording progress and 60% were completing the post treatment records (Figures 1 and 2).

It was interesting to know that majority of the practicing consultants were predicting growth by cervical vertebral maturation method and hand & wrist radiographs (Figure 3).
DISCUSSION

When we consider the term “records,” the first thing that comes to mind is the initial gathering of information of how the patient presents, so the dentist can formulate an opinion (diagnosis). Although the initial records are a vital part of the patient profile, there are other issues regarding to records that all clinicians and staff must consider for diagnostic and medico-legal reasons. Initial diagnostic records should include a minimum of a patient history (medical, dental), clinical findings, TMJ examination, intra and extra oral photographs, panorex, cephalometric analysis and study models. The present study shows that initial records were well kept by 90% of the dentists and growth prediction was done by CVM method or hand & wrist radiograph. Persistence of hand & wrist radiograph may be due to poor quality of lateral cephalograms.

Progress records include all events including treatment rendered, financial activity, correspondence, and appointment history, including missed or cancelled appointments. If a patient fails to return for treatment, a registered letter must be delivered and a copy filed in the patient record.
Frequently, when treating orthodontic patients, the treatment requires re-evaluation and the orthodontist may require updated diagnostic records. The need for updated records (radiographs, models, photos) should be explained prior to the initiation of treatment. A new fee attached to “another x-ray” may lure the parent or patient to refuse the recommendation and this in turn will affect re-evaluation of the treatment and record keeping.

When the treatment is coming to an end, pre-debond records must be considered to be satisfied with the treatment results. This may include models (check the occlusion and tooth position), photos, panorex (check the roots) and TMJ examination. It is a clinician’s nightmare to complete a case and find out after the treatment is finished that the case could have been fine tuned. This study shows a low frequency (42%) of progress record keeping. This trend may owe to the fact that progress records may increase treatment cost, extra effort and untrained staff.

Final records are also an important part of the patient profile. The day the treatment is finished (or discontinued), models, photos, panorex, and lateral cephalogram should be taken prior to the patient leaving the department and retainers inserted. It is imperative to have a record of how the treatment was completed. This study shows that final record keeping is being practiced very well as far as casts and radiographs are concerned. However, final radiographic records have seemed not to have been very well maintained by the sample used in this study. A strong reason for this could be non compliance from patients at the end of treatment and a further increase in treatment cost. This may lure parents or patients to refuse recommendations, thus effecting record keeping.

If a patient is relocating or being referred to another clinician, the patient’s records may need to be transferred. Patient information is confidential and should never leave the department without written permission. If the patient has not started treatment and the initial diagnostic records are to be transferred, a copy may be kept and the originals sent. However, if the patient is in treatment, it is advisable to send duplicate records (excluding the orthodontists notes) with a summary of the treatment rendered.

**CONCLUSION**

Orthodontic record keeping is an important part of any orthodontic practice. Documenting too much (everything) may not be always possible. It must be remembered that if it isn’t documented, it didn’t happen. Progress and final records are as important as the initial records. Records must be kept, maintained and archived “forever” if possible.

**REFERENCES**