

# Dentists underdiagnose when faced with time pressure, research shows

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Dentists can miss important details on x-rays when put under time pressure, according to new research led by the University of Plymouth.

The study, published in the *Journal of Dentistry*, showed that primary care dentists missed 67% of [bone loss](#) and 40% of tooth decay on a sample of dental x-rays, when given limited time to assess them. However, the 40 study participants diagnosed correctly, on average, all the pathologies related to bone loss and [tooth decay](#) correctly, when not faced with time pressure.

Dental x-rays are taken routinely by dentists to detect dental decay and loss of bone support around teeth (which is a sign of severe gum disease).

The [study participants](#), all from dental practices in and around the south west of England, rated their stress levels as much higher in the time pressured situation than in without time pressure.

The research was led by Anastasios Plessas, Academic Clinical Fellow in Peninsula Dental School, in collaboration with the School of Psychology at the University of Plymouth.

He said: "I conducted this research as there are no other studies out there evaluating the performance of dentists under time pressure, and it's a really important issue.

"This work showed a significant deterioration of dentists' diagnostic performance when examining [x-rays](#) under time pressure. Diagnostic errors may put [patient safety](#) at risk. Underdiagnosis may lead patients to be needing more complex treatment in the future or even extraction of teeth unnecessarily. This study shows that we shouldn't be cutting appointment times in order to fit more people in, but looking at other ways to meet the patient needs."

The full study is entitled Impact of [time pressure](#) on dentists' diagnostic performance and is now available to view in the *Journal of Dentistry*.

**More information:** Anastasios Plessas et al, Impact of time pressure on dentists' diagnostic performance, *Journal of Dentistry* (2019). [DOI: 10.1016/j.jdent.2019.01.011](#)

Provided by University of Plymouth

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