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**Title:** the light intensity and contributed factors in private dental offices in Gorgan between 2011-12

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**Abstract:**

Objective: Light intensity reduction of curing units is a common problem in dental settings that has a significant effect on resin composite. Due to paucity of information about the prevalence of inadequate light intensity of curing units, this study was performed to assess the light intensity and contributed factors in private dental offices in Gorgan between 2011-12.

Material and method:

150 private dental offices that had light curing unit (QTH and LED) was studied and some information including age of unit, history of control and revision and presence of radiometer in clinic was collected. The light intensity was measured using three calibrated radiometer and the fiber optic contamination as well other contributed factors was assessed.

Result:

Range of light intensity was 110-730 mw/cm², that was adequate in 111 units (74%). The light intensity had a good negative correlation with the age of unit ($P=0.0001$). The presence of radiometer in clinic and positive history of control and revision of unit significantly increased the intensity of light in curing units; while it was reduced with high contamination of fiber optic tip ($P=0.0001$).

Conclusion:

Significant percent of light curing units of private dental offices in Gorgan had inadequate light intensity (specialy QTH units).

Recommendation:

Educational programs for regular control and measuring of light intensity is suggested.

**Light curing unit, light intensity, private dental office.**

**Presentation:** Poster