Background. Based on the report of “Survei Kesehatan Rumah Tangga (SKRT)” 2013, the prevalence of dental caries and gingivitis in the community was 90.05% and about 85% are elementary school children with caries. Dental caries is an infectious disease which damages the structures of teeth. Streptococcus mutans is a bacteria that causes dental caries and periodontal disease. Streptococcus mutans can only be found after the eruption of teeth or dentures. The earlier age of the child who has the colonization of Streptococcus mutans, the higher the risk of caries in children. Streptococcus mutans can also be passed from mother to her child, it’s probably caused by oral contact, and therefore caries is considered as a disease that can be transmitted. 

Purpose. To determine the correlation of streptococcus mutans level in mother-child pair.

Method. This research was observational analytic. Streptococcus mutans obtained from plaque which taken from 28 pairs of mother-child pair. Plaque were planted into Tripticase Yeast Cysteine and the bacteria levels counted.

Result. The Kolmogorov-Smirnov Test result is abnormal distribution with $p = 0.014$, so the test continued with the non-parametric Spearman's and the results obtained two variables which have a significant correlation.

Conclusion. Obtained a significant correlation of mother’s Streptococcus mutans level and her child in kindergarten Gubeng Surabaya.

Keywords: Streptococcus mutans, plaque, bacteria level, caries.