Objective: This study aimed to determine the association of self-awareness of periodontal disease and the outcome of periodontal examination in a group of Swedish adults. Methods: The participants were 1676 adults (838 males and 838 females), aged 34-44 years, consisting of 615 smokers, 620 non-smokers, and 441 ex-smokers. Through a questionnaire, the participants were asked if they suspected to have the signs of periodontal disease. 1637 subjects completed the questionnaire and they were then divided into "yes" group (Y-group, n=201) or "no" group (N-group, n=1436). The full-mouth clinical examination included determination of plaque (PLI), calculus (CI), gingival inflammation (GI), number of teeth with pocket=>5mm and number of remaining teeth. ANOVA was the statistical method used. Results: The number of teeth with pockets=> 5 mm was significantly higher in males (mean 1.00, s.e. 0.11) than that in the females (mean 0.73, s.e. 0.09) (p<0.05). The number of teeth with pocket=> 5mm was significantly higher in the Y-group (mean 2.60, s.e. 0.38), as compared to that in the N-group (mean 0.60, s.e. 0.06) (p<0.001). The females in the Y-group (n=102) had significantly higher number of teeth with pocket=> 5mm (mean 2.30, s.e. 0.05) than those females in the N-group (n=718, mean 0.50, s.e. 0.07) (p<0.001). The males in the Y-group (n=99) showed higher number of teeth with pocket=> 5mm (mean 2.90, s.e. 0.59) than those males in the N-group (n=718, mean 0.71, s.e. 0.09)(p<0.001). Significant difference was also found in the presence of PLI, CI and GI, and in number of remaining teeth between the Y-group and N-group. Conclusion: The present study suggests that self-awareness of periodontal disease seems to be related to periodontal disease severity and clinical assessment outcome. Supported by The Karolinska Institutet