

THE IMPACT OF IMPLEMENTATION OF THE QUALITY MANAGEMENT SYSTEM ON EFFICIENCY AND EFFECTIVENESS OF SELECTED DENTAL CLINICS

The aim of the study is to create, implement and evaluate the impact of the proprietary quality management system on the efficiency and effectiveness of dental clinics.

Research hypothesis: The implementation of own original quality management system in dental clinics contributes to the improvement of the efficiency and effectiveness of the managed practice.

Research methodology

The first stage of the study is to create a quality management system based on:

1. An analysis of the existing Polish and international experience in the field of quality management in dental clinics
2. Assessment of the correctness of the proposed statements and quality management procedures and their adaptation to the needs of dental clinics in Poland by competent judges.

The own original quality management system will be a holistic tool that will allow to improve all elements of the office's work, starting from the reception work, arranging a patient through the patient's visit to the office and collecting a medical interview. The system will cover the issues of making orders, the work of the auxiliary staff, the failure rate in the office and reporting all kinds of faults and failures.

The next stage of the study will be the selection of number of dental clinics in the Łódź Voivodeship and obtaining consent to participate in the study. The clinics qualified for the study will be divided into two groups: 1. clinics in which the proprietary quality management system will be implemented (research group), 2. clinics in which there is no quality management system (control group).

The efficiency of the implemented quality management system will be measured one year after the introduction of the above-mentioned system by comparing selected quality measures before and after the introduction of the proprietary system. Carrying out the analysis in the control group will allow for the elimination of differences in the monitored quality measures caused by changes taking place on the dental services market in the analyzed period. To collect empirical material, own original questionnaires dedicated to managers / owners of dental clinics, employees and patients will be used.

Selected measures of economic, social and purposefulness will also be examined. The analyzed economic measures will include: the rate of inputs, productivity, cost-effectiveness of effects, cost-effectiveness and profitability. Analytical quality measures will be assessed, such as: non-conformities, faults and downtime at work, losses due to internal and external faults, suitable for repair and irreparable, as well as defective and delayed deliveries. In the social part of the activities, the level of employee adaptation to changes and the level of purposefulness will be analyzed, also measures allowing to determine the degree of achievement of the goal resulting from the strategy. The collected empirical material will be statistically analyzed using the Statistica program.

At the research design stage, the expected conclusions will allow us to answer the following questions: **is the quality management system in dental clinics perceived as necessary and whether it significantly improves the efficiency and effectiveness of dental offices.**

Schedule of works carried out:

1. the work included a literature review, development of research methodology, preparation of a preliminary draft quality management program, creation of research tools for office staff and facility owners
2. invitation to cooperation of owners and managers of offices, implementation of research tools in institutions for the staff of offices and owners, supervision and environmental data collection in selected dental clinics, work on the publication of other research
3. collecting and analyzing data, preparing and processing data and conclusions, and preparing publications, implementation of the prepared procedures
4. verification of conclusions and results as well as the final data processing and preparation of the doctoral dissertation in its final form

Results of an initial entry survey conducted in dental practices among patients, employees, and facility owners and managers

Study group

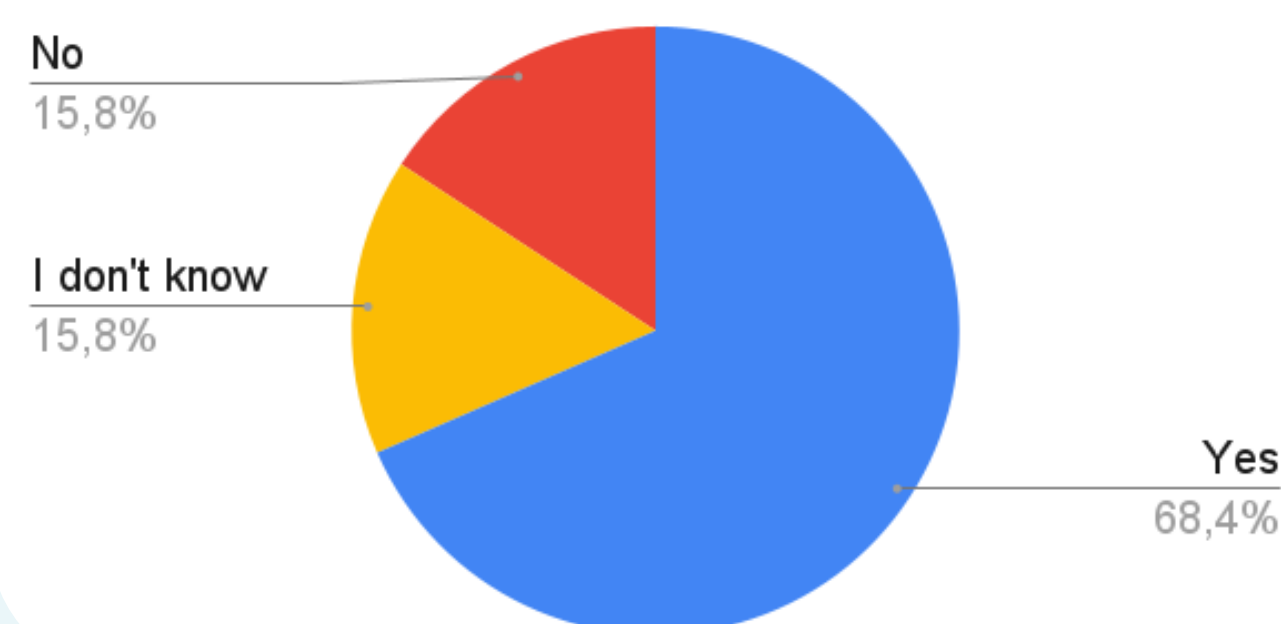
Patients: 823

Employees of dental clinics: 117

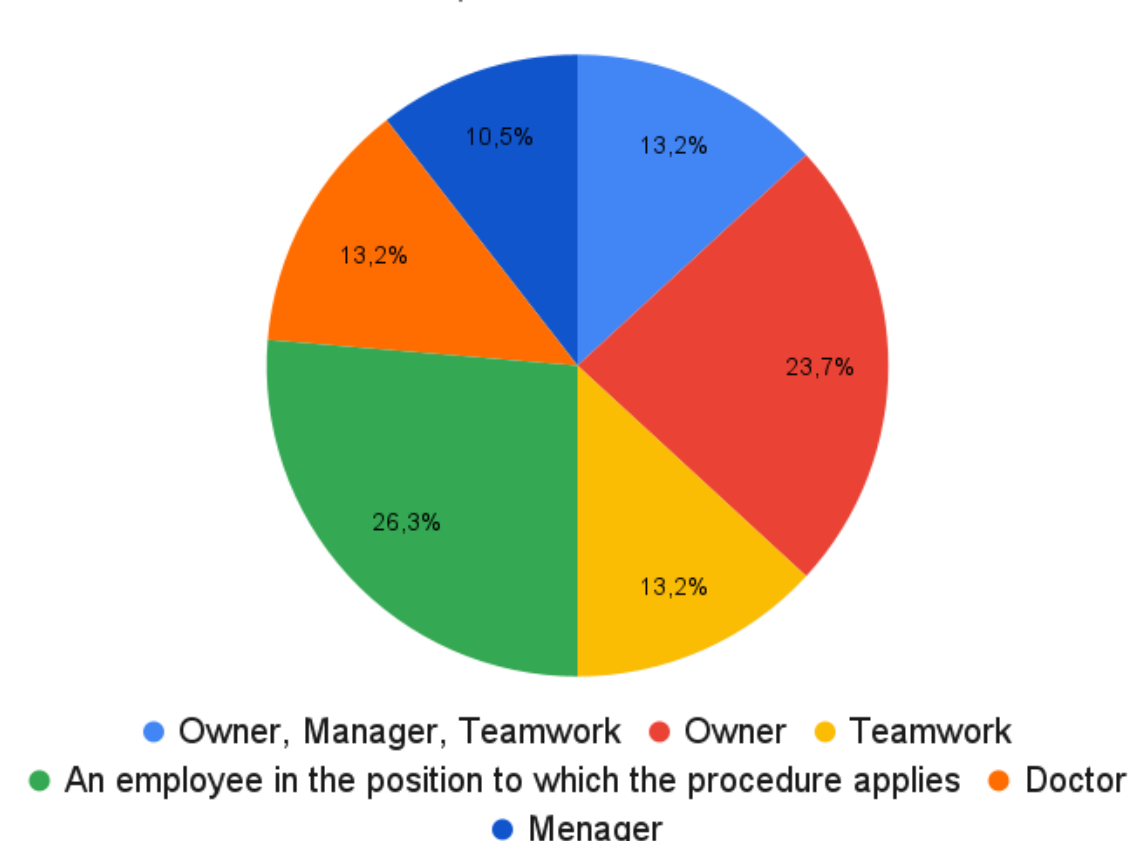
Owners/managers: 14

Owners/managers responses

Would you see the benefits of using the procedure and quality improvement in your practice?

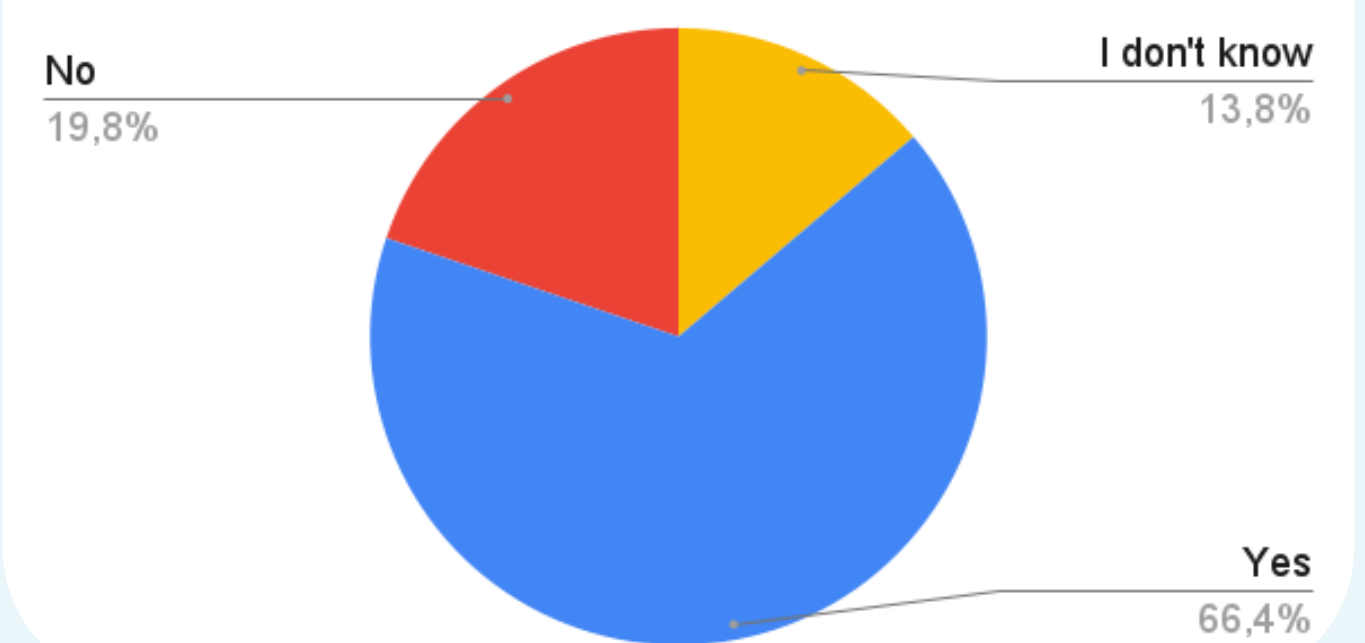


Who in your clinic is/should be responsible for creating procedures?

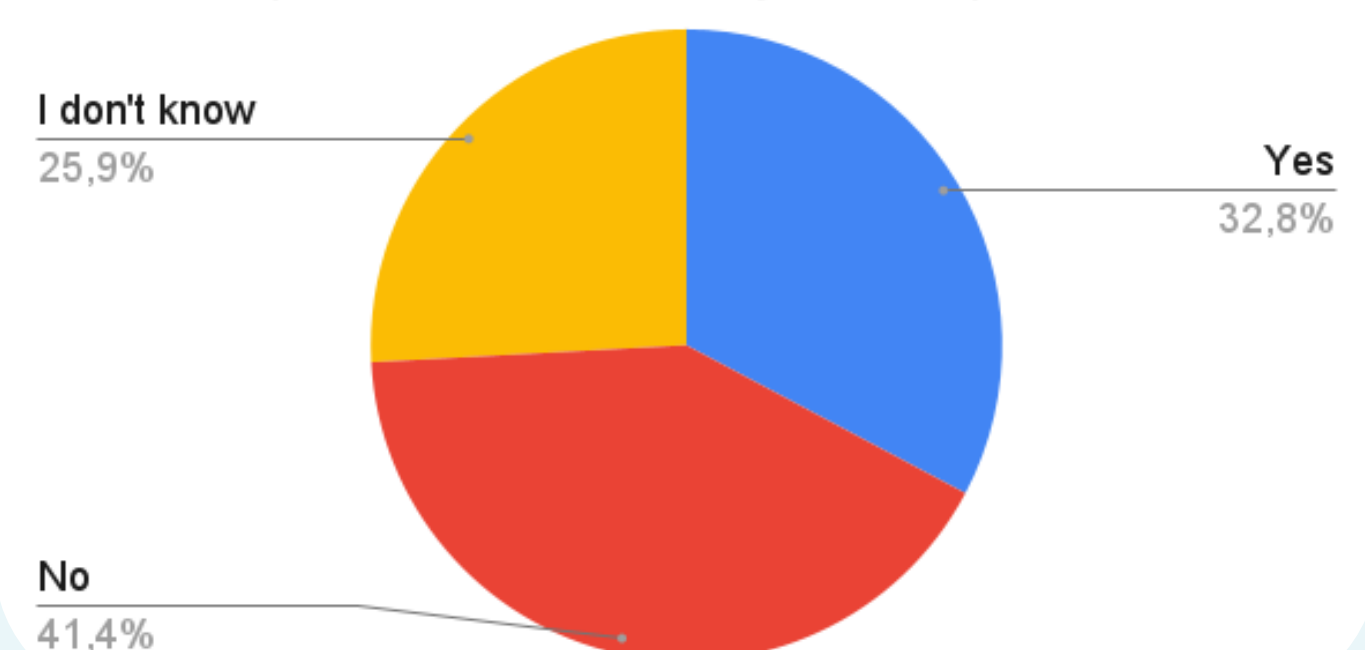


Employee responses

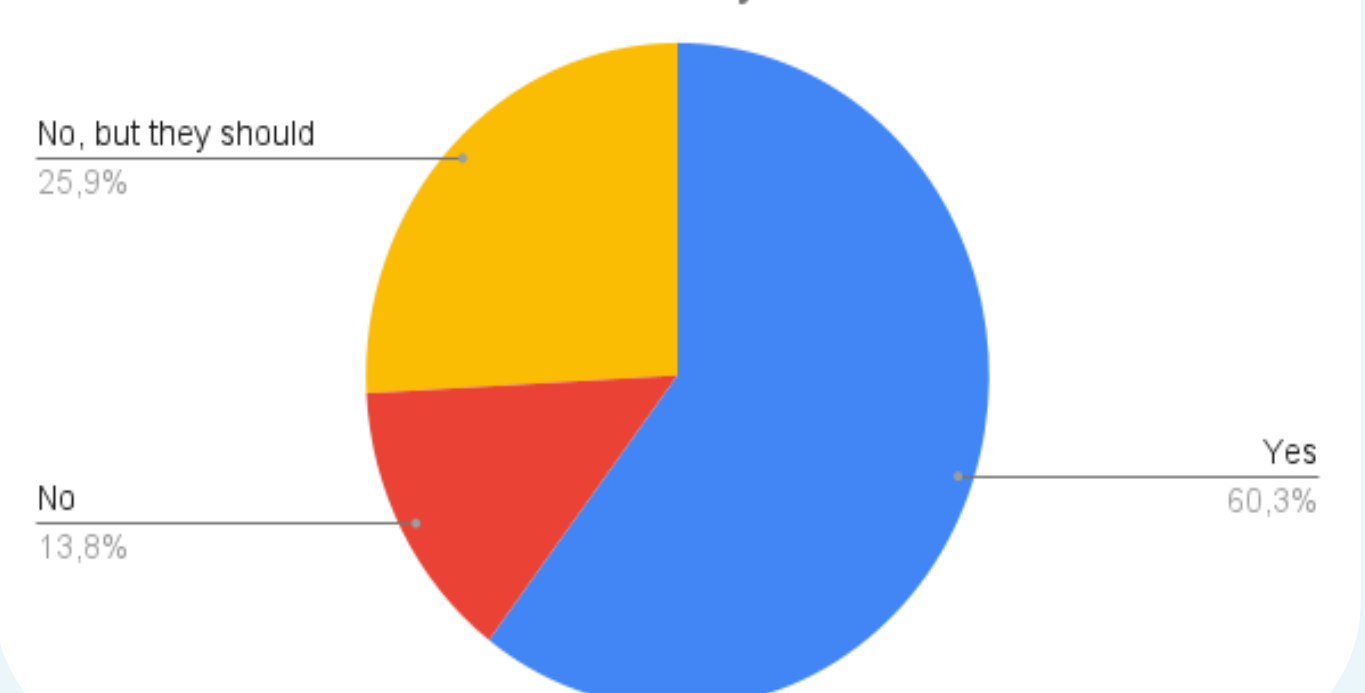
Do you think that procedures of conduct and quality improvement procedures would be useful at your workplace?



Are there procedures of conduct and quality improvement procedures available at your work place?



Are there regular meetings with employees planned and held in the clinic where you work?



Conclusions

The presented results clearly indicate the need to create and implement uniform procedures in dental clinics. Among the questions for employees and owners was a list of the most necessary procedures that they would use in the practices. On its basis, a list of procedures was created. Patients were surveyed about their satisfaction and safety in the facilities.

Publications

1. Agata Zuzanna Kunert, Dominika Cichońska-Rzeźnicka, Jan Krakowiak— Quality Management in Dental Offices in the Lodz Voivodeship in the Opinion of the Facilities' Employees and Owners— Journal of Health Study and Medicine, 2022, No. 2
2. Natalia Skorzycka, Agata Kunert, Dominika Cichońska-Rzeźnicka, Jan Krakowiak—Analysis of the intervention of emergency medical teams in Lodz in 2020, Journal of Health Study and Medicine 2023