

Industrial Safety, Work and Well-being of Dental Professionals in Colombia

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SUMMARY

Know the different concepts about industrial safety, allowing you to analyze the import of this discipline in the development of work activity in dentists in Colombia, understanding the various regulations that regulate a health and safety management system, how it emerged, how it is composed, what is your objective, etc. and in turn describe the different approaches to which safety in dental work points, taking into account factors such as the environment, working conditions, etc.

Keywords: Safety, Dentist, Health, Prevention, Colombia

INTRODUCTION

Work is an activity that has accompanied man throughout his history, as are the risks derived from this activity that threaten the life and health of man. Consequently, there has also been a need to protect oneself, which gives rise to awareness and importance of occupational health and safety at work. It is worth clarifying that occupational health includes three branches: occupational medicine, industrial hygiene and industrial safety, which according to the International Labor Organization (ILO) is defined as: "The set of multidisciplinary activities aimed at the promotion, education, prevention, control, recovery and rehabilitation of workers, to protect them from the risks of their occupation and place them in a work environment in accordance with their physiological and psychological conditions" these provisions affect all unions, including dentistry [1]. In this same order, industrial safety is a topic with various conceptualizations, including dental ones, different authors and researchers have interpreted and understood it according to their experience and knowledge [2].

According to the Venezuelan standard COVENIN 2260-88 (2004) "industrial safety is the set of principles, laws, criteria and

standards formulated whose objective is to control the risk of accidents and damage, both to people and to equipment and materials. that intervene in the development of all productive activity" [3]. This technicality is concise and simple, since it describes that the protection of workers is an obligation of organizations and that the laws protect and ensure this, such as those of the health sector along with the work of dentistry [4].

On the other hand, according to Cortes (2002) "work safety: is the set of procedures and technical resources applied to effective prevention and protection against accidents"[3].

Likewise, the Brazilian specialist in Business Administration and Human Resources, Idalberto Chiavenato (2000), also states that "safety at work: is the set of technical, educational and psychological measures used to prevent accidents and eliminate unsafe conditions of the environment and to instruct or convince people about the need to implement preventive practices." (p. 487) [4]. These concepts have similarities, applying a set of techniques in order to minimize or eliminate said risks derived from productive activities, but Chiavenato adds a conception, psychological measures, considering the mental and emotional state of the worker as an important factor in their safety. same and collective; The above is not foreign to the dentist who daily faces dangers such as biological, ergonomic and chemical, which in different order of priority appear in his daily actions [5].

According to the above, industrial safety is a concept that is linked to the prevention, minimization and elimination of risks that affect the health of the employee. In this sense, when ensuring the quality of life and well-being of the operators, it is appropriate to include hygiene at work [6].

Therefore, to contextualize this relationship, "safety and hygiene at work are the procedures, techniques and elements that are applied in workplaces for the recognition, evaluation and control of harmful agents that intervene in the processes and activities, in order to establish measures and actions to prevent accidents and diseases, in order to preserve the life, health and physical integrity of workers, as well as avoid any possible deterioration to the workplace. This means that the main concern of healthcare companies should be to promote the health of their dentists in order to achieve the greatest possible efficiency, with the least exposure to risk in dental care rooms [7].

In this framework, the World Health Organization (WHO)

defines health as "a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity" [6]. Definition that forms part of the principles of the Constitution of the world health organization, adopted by the International Sanitary Conference, held in New York from June 19 to July 22, 1946, signed on July 22, 1946 by the representatives of 61 States and which came into force on April 7, 1948. This same regulation declares that "The enjoyment of the maximum degree of health that can be achieved is one of the fundamental rights of every human being, without distinction of race, religion, political ideology or economic or social condition" [8], also integrating the management of biological risk due to stomatological infections.

That is to say, since health is an inviolable human right, companies must ensure that it does not deteriorate during the development of work activities, which is promoted through occupational health and safety systems, where it is avoided. the health condition of being in contact with substances such as mercury, widely used in dental processes in the past [9].

To achieve this care for the well-being of workers in the dental area, it is necessary to establish the relationship between work and health, that is, identify the dangers to which they are exposed, the risk factors that threaten health and the conditions that can cause these. risks, which is why a job must not only give the opportunity to financially support a person and meet their needs, but also provide them with a health system to turn to in the event of any unforeseen event . Said responsibility for legal issues falls on the employer, but it is worth clarifying that the main concern for the worker's health belongs to the employer [10].

Based on this, the Occupational Health and Safety System of a health company that provides dental services must be focused on ensuring that the dental worker is kept in optimal health conditions, during and after their work duties [11]. This is because "in recent decades, the increasing complexity and rapid evolution of the world of work have made a systemic approach necessary to manage and maintain a safe and healthy work environment"(ILO) [12]. This systematic planning has been key in improving the efficiency of many companies in various fields, its flexibility to adapt has been the precedent of this success, each organization structures an OSH management system according to the needs and risks posed by the activities they develop. Although a number of guidelines have been developed on the OSH management system, it was not until 2001 that the ILO published the "Guidelines on occupational safety and health management systems (ILO-OSH). 2001";

international standard with a tripartite approach, defined as “a practical instrument that helps competent organizations and institutions to continuously improve the effectiveness of occupational safety and health (OSH). These guidelines have been established in accordance with internationally agreed principles and defined by the three constituents of the ILO. The practical recommendations in these guidelines have been established for use by those responsible for OSH management” [13].

To achieve the objective of an SST management system (Control risks and maintain healthy work environments), it is necessary to have the participation of all organelles of the organization, from the managers, providing the means, spaces and disposition for improvement. continuous work safety, down to the operators, worrying about their own safety and that of their co-worker, creating a system of constant feedback and progress [14].

Among the biomechanical risk factors that affect dentists we can find those related to postures, such as: maintained, when a biomechanically correct posture is adopted for 2 hours or more or biomechanically incorrect when maintained for 20 minutes or more [15].

In accordance with this, according to Sánchez, M (2016) “the Occupational Health and Safety Management System (SG SST) has been evolving and reforming through regulations and decrees that regulate the mandatory nature of its compliance, which Beginning with occupational health programs, they consisted of the planning and execution of medicine, safety and industrial hygiene activities with the objective of maintaining and improving the health of workers, but with little commitment from the directors and senior managers of the organization. without the necessary follow-up so that it could be developed and without great opportunities for improvement” [16].

Taking into account the practical activity of the dentist, it is decided to emphasize static overload, which is determined by postures and is related to maintained muscle contractions, another cause is dynamic overload, which is determined by muscular effort, displacements. , load handling and repetitive movements [17].

Returning to the above, from a normative point, the first law related to the protection of workers was born in Spain in 1778 by Charles III who gave the edict of protection against accidents [18], an example that the English followed, “in 1802

the English Parliament gives factory work regulations that limit working hours and set minimum levels for hygiene, health and education of workers” [19]; And so on, laws or standards were developed that regulated and ensured the protection of workers.

Currently, each country has different laws, decrees or resolutions regarding this issue, in Colombia there are regulations:

- Resolution 1401 – Year 2007: Regulates the investigation of work accidents.
- Resolution 2346 – Year 2007: Regulates the performance of occupational medical evaluations, to examine the worker and monitor exposure to risk factors. It includes physical examinations, laboratory tests, and a questioning of your health history.
- Resolution 1409 – Year 2012: Safety regulations for protection against falls of workers who carry out activities at height.
- Resolution 0312 – Year 2019: This is a definition of the minimum standards that must be followed in the Occupational Health and Safety Management System (SG-SST). Webmaster (2022) [19,20].

And, finally, decree 1072 of 2015, which groups all these regulations, having as its objective: “to compile the current regulations of the Labor sector, issued by the National Government through the regulatory powers conferred by numeral 11 of article 189 of the Political Constitution to the President of the Republic for the complete execution of the laws.” [21], this decree is made up of the definition of security mechanisms, implementing an annual training program, everything about the SG-SST program and carrying out annual audits and review of the SG-SST, thus guaranteeing the well-being of each employee [22].

In this same order, there is a legislative framework for safety and health at work in Colombia that began with law 50 of 1904, national labor law, a project that did not prosper, which, as stated by Lizarazo, G (2011) “is known as the Uribe law on occupational accidents and occupational diseases and which becomes the first law related to the issue of occupational health in the country” [23]. From this many more laws related to the protection of employees against the dangers and risks to which they were exposed were displaced.

RESULTS AND CONCLUSIONS

Taking into account everything described above, industrial safety applied to dental work is a discipline focused on locating, analyzing, evaluating, controlling and preventing all those dangers that become risks when interacting with them in the dentist's performance [24].

When carrying out a specific activity, but taking into account variables such as the work environment, the possible limitations of the worker (physical or psychological), etc. all in order to provide them with a workplace that is as healthy as possible or with adequate control of the risks to which they are exposed in the place where they work.

The implementation of this system has advantages in the organization such as:

- Control of occupational injuries or illnesses.
- Lower insurance and compensation costs.
- Damage control to company assets.
- Control of time losses.
- Lower staff turnover due to absences or medical leaves
- Normal continuity of the production process.

Develop activities so that the human group of dentists who present some type of musculoskeletal trauma can resolve their condition that generates absenteeism from work, poor health and early retirement [25].

While not putting these measures into practice can lead to an increase in workplace accidents, greater suffering for the workers' families, given that the probability of suffering a fatal accident is higher, which in turn implies losses, money, aimed at compensation, reduction of production and discrediting before the market. The biological risk factor in oral health professionals requires attention; it can occur either through contact with contaminated material, with body fluids or secretions, which increases the risk of contracting infectious diseases, so it is essential to continually inform staff about exposure and prevention mechanisms, based on the use of strategies that mitigate the risk of contracting an occupational disease and/or work accident during work performance [26].

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