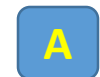


Author: **Conf. Dr. Bondor Cosmina-Ioana**

Medical writing:
articles, bachelor's thesis, oral presentation



ALWAYS



SEEK



KNOWLEDGE

Objectives

- Regulations: when? how? where? who?
- Structure: what do we write in each section?
- Mistakes to avoid
- Stylish recommendations

Authors

- Who can / should be considered author?
- Any person who has made a significant contribution to the article
 - is responsible for the results of the research
- significant contribution:
 - have participated
 - in writing/conception of the protocol of the research
 - in writing the manuscript
 - in interpreting the results
 - have approved the final version

- First author
 - performed the essential work
 - coordinates the research
 - drafted the manuscript
- Coauthor
 - listed in the order of contribution

- Last author
 - the initiator of the research
 - person who obtain the research funds
 - the principal investigator
 - the supervisor of the research
- Corresponding author
 - submit the article
 - responsible for ensuring that all the authors' contact details are correct
 - who takes primary responsibility for communication with the journal and to the other authors

Content

- contain at least the titles of all chapters
- the page number on which each chapter begins
- Word - option to automatically create a table of contents
 - [Quick guide](#) from Microsoft

Content - example

Cuprins

PARTEA GENERALĂ.....	6
Capitolul 1 - Îndepărtarea mecanică a plăcii bacteriene.....	7
1.1. Periajul dentar.....	7
1.1.1. Tehnica Fones.....	8
1.1.2. Tehnica orizontală.....	9
1.1.3. Tehnica Bass modificată.....	9
1.1.4. Tehnica Stillman modificată.....	10
1.2. Periutele dentare.....	10
1.2.1. Periutele manuale.....	11
1.2.2. Periutele electrice.....	12
Capitolul 2 - Îndepărtarea chimică a plăcii bacteriene.....	14
2.1. Pastele de dinți.....	14
2.2. Apa de gură.....	15
Capitolul 3 - Mijloace auxiliare de igienă orală.....	18
3.1. Ața dentară.....	18
3.2. Superfloss-ul.....	19
3.3. Periutele interdentare.....	20
3.4. Scobitorile medicinale.....	20
3.5. Stimulatorul gingival.....	21
3.6. Dușul bucal.....	21
3.7. Dispozitive de curățare a limbii.....	22
Capitolul 4 - Mijloace profesionale de igienă orală.....	23
4.1. Periajul profesional.....	23
4.2. Detartrajul manual.....	24
4.3. Detartrajul sonic și ultrasonic.....	25
4.4. Tehnica Air Flow.....	26
Capitolul 5 - Surse de informare a copiilor asupra sănătății orale și influența acestora.....	28

CONTENTS

	<i>Page</i>
INTRODUCTION.....	3
DENTAL CARIES AS RELATED TO FOOD AND MICROORGANISMS.....	3
The proteolytic versus acid theory of enamel destruction.....	7
The carbohydrate-bacteria plaque.....	9
The plaque.....	10
The saliva.....	11
The state of the tooth at eruption.....	13
The reaction of the erupted tooth.....	15
Summary.....	21
LOW CARIES FREQUENCY IN PRIMITIVE PEOPLE AND IN PEOPLE LIVING TOTALLY OR PARTLY ON NON-INDUSTRIALIZED FOODS.....	23
LOW CARIES FREQUENCY IN SPECIAL GROUPS OF CHILDREN.....	25
CARIES FREQUENCY IN INSTITUTIONAL CHILDREN VERSUS IN "FAMILY" CHILDREN.....	28
LOW CARIES FREQUENCY IN OUTPATIENT PROPHYLACTIC HEALTH WORK.....	30
DENTAL CARIES DURING PREGNANCY.....	31
LOW CARIES FREQUENCY IN MALNOURISHED CHILDREN.....	32
DENTAL CARIES IN CHILDREN DURING AND AFTER THE SECOND WORLD WAR.....	33
COMMENTS ON DIETARY STUDIES IN RELATION TO DENTAL CARIES.....	41
FLUORIDE IN DENTAL CARIES PROPHYLAXIS.....	42
OTHER SUBSTANCES ACTING ON THE CARIES BACTERIA OR ENZYMES NECESSARY FOR ACID PRODUCTION.....	48
THE EXAMINATION FOR DENTAL CARIES.....	50
SUMMARY AND CONCLUSIONS.....	52

General part of the bachelor's thesis

- Current state of knowledge in the field of the subject of the license thesis
 - select the existing information on the subject of interest in the literature
 - presenting
 - correctly
 - completely
 - synthetically
 - organized
 - original
- about the hypothesis of the research
 - what is currently known about the subject of interest
 - what has not been fully elucidated

General part of the bachelor's thesis

use

- present tense
- past tense

the information included should be supported by

- current references (last 5 years)

General part of the bachelor's thesis

Parts:

- importance of the chosen topic
- state of research in the field
 - NOT all existing studies in the literature related to the respective topic should be described, some being without scientific value
- unresolved issues
- contradictions regarding the chosen topic
- synthesization of the data presented

General part of the bachelor's thesis

The common mistakes

- statements without references to the specialized literature
- statements unrelated to the title of the bachelor's thesis
- Chaotic presentation
- All references older than 5 years

Tables/Figures

- with number and title
- the source of the data is specified below the table/figure,
 - the name of the first author et al. (if there are several authors), the year of publication
 - e.g. Kirkwood et al., 2001
- Each table/figure must be referenced in the text

Histopathological aspects – descriptive histology

Representative sections from rats' periodontium, obtained by histopathological analysis demonstrates that the presence of a silk ligature around the lower incisor, in a submarginal position, induced a characteristic microscopic aspect for periodontitis. Intense inflammatory cell infiltration, the presence of osteoclasts and an obvious bone resorption activity were detected (Fig. 2).

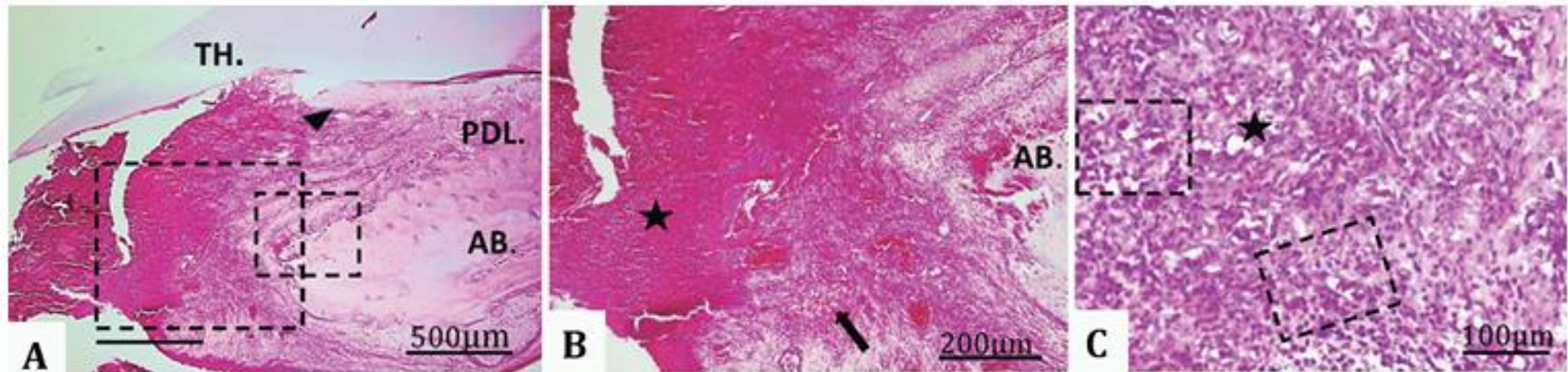
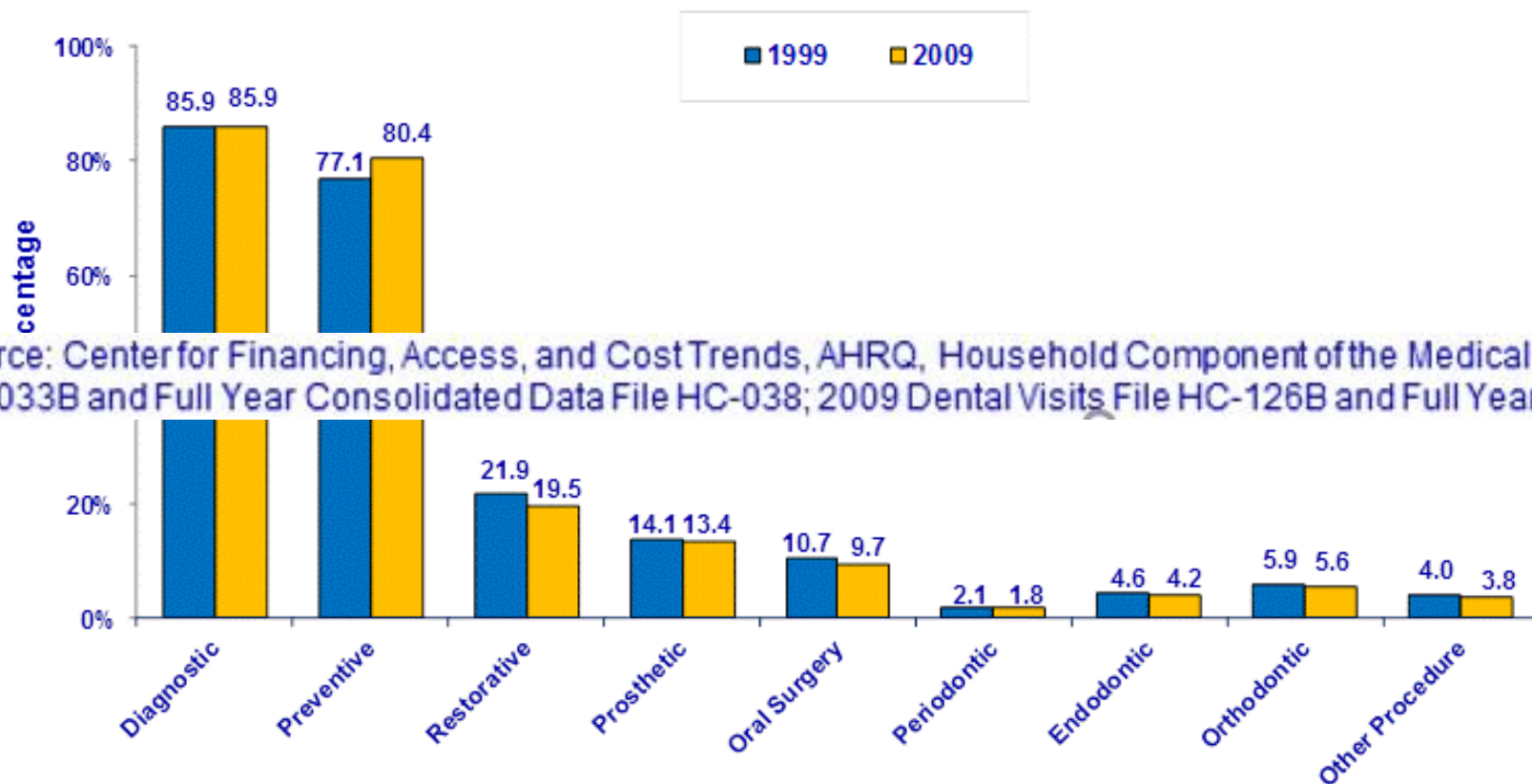


Fig. 2. Histopathological aspects of the periodontal region of rats after periodontal disease induction. **A.** The section of the periodontal space of rat incisor- tooth (TH), periodontal ligament(PDL) and alveolar bone (AB). **B.** This image captures a histopathological detail of the area marked by the large square from figure A, which reveals the presence of a rich mixture of cellular debris and neutrophils (noted by a star). The arrow marks the presence of granulation tissue with an inflammatory character, in different stages of maturity, with numerous leukocytes. **C.** The subjacent region is dominated by the inflammatory granulation tissue; blood vessels with different calibers (star), leukocyte infiltration and a fibrous connective tissue with lax aspect can also be observed. **D.** Detailed aspect of the area delimited by the small rectangle from panel A; a severe alveolar osteolysis was detected characterized

Figure 3. Percentage of persons with at least one procedure,⁺ U.S. civilian noninstitutionalized population, 1999 and 2009



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey: 1999 Dental Visits HC-033B and Full Year Consolidated Data File HC-038; 2009 Dental Visits File HC-126B and Full Year Population Characteristics File HC-123

+ For persons with a visit.

Other includes other procedures not otherwise reported.

Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey: 1999 Dental Visits HC-033B and Full Year Consolidated Data File HC-038; 2009 Dental Visits File HC-126B and Full Year Population Characteristics File HC-123

Example

– General part for:

The effectiveness of myofunctional therapy on facial expression recovery post-orthognathic surgery

I. Facial expression post-orthognathic surgery

- importance
- impact on the patient quality of life

II. Therapies for facial expression post-orthognathic surgery

- enumeration
- description
- comparisons

III. Myofunctional therapy

- description
- usage

IV. Myofunctional therapy treatment for facial expression recovery post-orthognathic surgery

- historical
- evidence
- effects

Problem 2

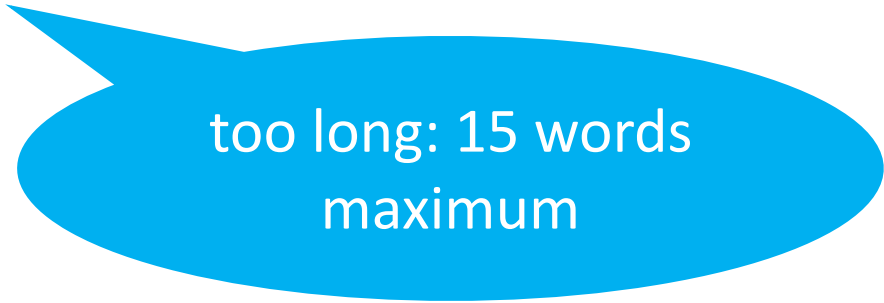
What's wrong with this title?

Prevention of hospital-acquired infections by bathing with chlorhexidine gluconate-impregnated towels in intensive care units: a systematic review and meta-analysis of randomized crossover trials

Problem 2

What's wrong with this title?

Prevention of hospital-acquired infections by bathing with chlorhexidine gluconate-impregnated towels in intensive care units: a systematic review and meta-analysis of randomized crossover trials



too long: 15 words
maximum

Problem 3

This paragraph is part of the general part. What's wrong?

The prevalence of osteoarthritis increases with age, and the prevalence is likely to increase in the future due to the increase in the elderly population.

Problem 3

This paragraph is part of the general part. What's wrong?

The prevalence of osteoarthritis increases with age, and the prevalence is likely to increase in the future due to the increase in the elderly population.



Is a statement. Need
reference

Articles

Special part of bachelor's thesis

Articles / Special part of the bachelor' thesis

The language used

scientific

clear

exact

concise

the tense of the verbs

past tense

with minor exceptions

The thesis is not a literary creation, it is a scientific creation

Language! we do not use literary language

figures of speech are not allowed:

- hyperbole,

- onomatopoeia,

- personifications

- etc.

vocabulary should not be very extensive (8th grade level)

- we lose clarity

repetitions are allowed and encourage

- make the text easier to read

Problem 4

- Aquatic exercises are great for people with osteoarthritis. Hot baths are like a panacea from the gods: they reduce pain, reduce stiffness in the musculoskeletal system, and cause muscle relaxation.

Problem 4

- Aquatic exercises are extraordinary for people with osteoarthritis. Hot baths are like a panacea from the gods: they reduce pain, reduce stiffness in the musculoskeletal system, and cause muscle relaxation.
- Words from medical vocabulary – if use they should be explained or avoided by replacing with their definitions
 - osteoarthritis
 - osteoarthritis
 - musculoskeletal
- stylistic figures
 - extraordinary,
 - panacea from the gods

Introduction

- Informative purpose
- presents the topic
- from the general aspect to the particular aspects of the subject
- gives the reader (anyone) the knowledge necessary to read the thesis
- presents the interest of the work
- why should we read it?
- presents the motivation of the work
- why was the study necessary?

Introduction

Important:

- ends with the purpose and objectives of the research
- Required
 - the last paragraph of the introduction
 - contains the purpose and objectives of the study

Introduction

- Use the present tense
 - for stating accepted facts in scientific literature
- Use the past tense
 - for citing an author
 - for stating purpose and objectives

Introduction

Mistakes to avoid

- no history of the subject
- very extensive bibliography
- we are not writing a book
- not to exaggerate with the didactic – explanatory style
- we are not writing a book
- formulate statements and there is no reference to them

Introduction

Mistakes to avoid

- contain information that is not on the research topic
- contain the results of the study
- overlap with the discussions

1 Introduction

Interactions between teeth and the tongue can break down food prior to its entry into the digestive system. Incomplete chewing of food as a result of problems in the mouth can increase the burden on the stomach and intestines, harming health [1, 2]. Dental diseases can adversely affect the normal functions of the mouth cavity and thus physical and mental health. Among these diseases, periodontal disease is the most common type that significantly affects mouth cavity function. Periodontal disease is also related to other diseases such as cardiovascular disease and diabetes. Relevant studies have shown that pathogens of periodontal diseases damage the vascular walls, resulting in cardiovascular inflammation and blockages, as well as severe heart disease [3]. In addition, patients with both diabetes and periodontal diseases have a higher risk of destructive periodontitis [4, 5]. A study by Drisko [6] implicated dental plaque as a cause of gingivitis, which can lead to periodontal disease if it is not completely removed. According to Slots and Genco [7], the main bacteria in periodontal diseases are facultative anaerobes; the mucosal damage and tissue necrosis caused by these bacteria can easily induce infections in surrounding tissues [8]. Patients with periodontal diseases must, therefore, constantly control the number of facultative anaerobes to maintain periodontal health. To those who are under attack by facultative anaerobes, it is crucial to eliminate the dental bacteria effectively. The research of Merriam *et al.* [8] indicated that facultative anaerobes hide deep inside dental pockets, which are the trickiest places to clean; ordinary toothbrushes are inefficient in wiping out these bacteria. Therefore, in this paper, we proposed a cavity-cleaning device that uses oxygen microbubbles and

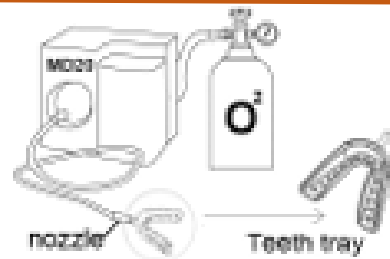


Fig. 1 Modified oxygen microbubble generator and the soft tooth-tray (made from medical silicone)

substitutes for a toothbrush to remove facultative anaerobes. It was modified from the commercially available Braun MD20 oral irrigator, and its inlet valve was connected with the outlet of an oxygen cylinder. The machine pumped oxygen into water and emitted oxygen microbubbles to a soft tooth tray that fits the shape of human teeth (Fig. 1). The device was used to eject water with oxygen microbubbles and cleanse dentures that had been soaked in facultative anaerobe solution. The residual anaerobes on the surfaces of the synthetic teeth were collected to calculate the total number of anaerobe-free tooth surfaces and examine the effectiveness and feasibility of using this device to clean the dentures. We surmised that the effectiveness of anaerobe removal would be affected by flow volume and discharge velocity, as well as the size and oxygen content of the microbubbles, all of which might be influenced by the speed of the rotor and the number and size of holes in the nozzle. Therefore, this paper manipulated three design variables and conducted a cleaning experiment on dentures to determine the optimal combination of variables for anaerobe removal.

2 Methods

To understand the optimal cleaning outcome of the oxygen microbubble generator, this study manipulated device design variables and tested different combinations of them. An experiment was carried out emitting water in different ways to clean the dentures in a soft tooth tray and remove the facultative anaerobes, aiming to investigate whether the oxygen microbubbles produced by this generator were effective in removing facultative anaerobes and determine which combination of design variables cleaned most efficiently. The effects of three design variables (water speed

Efficacy of using oxygen microbubble device for facultative anaerobe removal

Pei-Ju Lin , Ming-Chuen
Chuang, Szu-Chung
Chang

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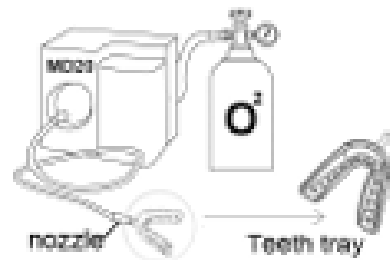


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Efficacy of using oxygen microbubble device for facultative anaerobe removal

Pei-Ju Lin , Ming-Chuen Chuang, Szu-Chung Chang

Many researchers have made use of microbubbles to transfer oxygen. For instance, in their experiment, Bisazza *et al.* [17] inserted oxygen microbubbles with an average size of 2.5 μm into chitosan and showed by an analysis under a fluorescence microscope that this core-shell structure is effective in transferring oxygen to anoxic tissues. Using microbubbles as a medium, Ikeura *et al.* [18] incorporated ozone to get rid of vegetables and fruits of pesticides and pests owing to the disinfecting property of ozone. Continuous production of ozone microbubbles had a significant effect in dissolving pesticide residue. In aquaculture, air bubbles are commonly used as a medium to send carbon dioxide to water plants undergoing photosynthesis, hence supplying oxygen to fish. As shown by these examples, microbubbles are a carrier that is small and that has a vast range of cleaning uses. The research described above demonstrated the application of microbubbles to cleaning. This paper focused on their application to improve oral hygiene, as it used microbubbles to transport oxygen and eliminate facultative anaerobes in dentures.

2 Methods

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Study aim

Efficacy of using oxygen microbubble device for facultative anaerobe removal

Pei-Ju Lin , Ming-Chuen Chuang, Szu-Chung Chang

What is wrong? (Problem 5)

Despite the growing popularity of IF in lay media, limited research has been done in patients with T2DM ¹⁸. Previous reports in individuals with T2DM have suggested that IF interventions can induce similar weight loss and reduction in glycated hemoglobin (HbA1c) as standard dietary recommendations ¹⁹⁻²³. However, the small sample sizes preclude definitive conclusions based on these individual studies, indicating the need for a robust and systematic evaluation of the effect of IF in T2DM. Thus, the purpose of this systematic review and meta-analysis is to evaluate the metabolic impact of IF interventions in patients with T2DM.



Ultimul paragraf din
introducere

MATERIAL AND METHODS

This systematic review and meta-analysis is reported in accordance with the Preferred

Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) Statement and was registered

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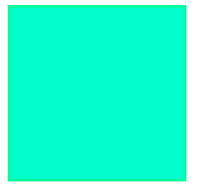


The verb is at present tense

MATERIAL AND METHODS

This systematic review and meta-analysis is reported in accordance with the Preferred

Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) Statement and was registered



What is wrong? (Problem 6)

- in the **Introduction** chapter:
- "The aim of the study was to evaluate the efficacy of candesartan cilexetil compared to placebo in patients with hypertension. Hypertension is an important aspect as it can lead to stroke. In the literature, mean values of systolic blood pressure of 145 mmHg and 135 mmHg were found for subjects treated with candesartan cilexetil."

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In introduction, but
before the aim,
need reference

In discussion
chapter, need
reference

Thank you!