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### ORIGINAL RESEARCH

# The Profile of the Patients Who Consulted to the Conventional and Complementary Medical Centre in Duzce University

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#### **Abstract**

**Objective:** This paper investigates the consulting reasons of the patients, the applied cures to them and also the demographic features (age, gender) of the patients who consulted to the Centre of Conventional and Complementary Medicine, Duzce.

**Material-Method:** In this paper the patients who consulted to the related centre between the dates 15.05.2019-15.05.2020 were analysed in a retrospective way. The ages, genders, date of consultation, complaints and results of the applied practice were obtained and discussed.

**Results:** During our researches, when looked over the range of gender, it is stated that 39,8 % of 860 patients were male and 60,1 % were female. If we consider the range of age, it is seen that the most crowded group ranges between 30-49 ages with a percentage of 45%. This group is respectively followed by the ones between 50-65 with a percentage of 39 % and the ones over 65 as 10 %, 18-29 ages (4%), 0-17 ages (2 %). If we consider the range of the patients according to the applied cures, we see that the most common practice is ozone therapy as 42%. It is respectively followed by cupping therapy as 19%, mesotherapy as 15%, acupuncture as 11%, hirudothearpy as 10%, hypnotherapy as 2% and lastly the apitherapy as 0,4%.

**Conclusion:** Consequently, it is obvious that the use of conventional and complementary medicine is more common among females than males and it is preferred more when the age gets older. Also, it is preferred

**Keywords:** Conventional and Complementary Medicine, Acupuncture, Hirudo Therapy, Cupping Therapy, Ozone Therapy

### **INTRODUCTION**

The definition of conventional and complementary medicine by The World Health Organisation (WHO): It is a whole of the data, skills and practices –accountable or not-, which are based on the theories, beliefs and experiences peculiar to different cultures<sup>1</sup>. It aims defence against the physical and mental illnesses, diagnosing these in addition to healing or remediation to maintain wellness. Familiarity to and use of conventional complementary therapies has recently increased both in our country and around the world. The supreme issue about this topic is the fact that this kind of therapies are administered as depending uncontrolled; on that complications may occur<sup>2</sup>. To prevent this kind of situations, conventional and complementary medicine was legitimised on the official journal on 27.10.2014 by the regulation named the same and numbered as 29158<sup>3</sup>. In our country, only the medical doctors and the dentists have been legally licensed and allowed to administer in 15 different fields. These are acupuncture, apitherapy, phytotherapy, hypnosis, hirudotherapy, chiropractic, homeopathy, cupping therapy, debridement maggot therapy, mesotherapy, prolotherapy, osteopathy, ozone therapy, reflexology and musicotherapy<sup>4</sup>.

In the relevant regulation, these therapies are defined as:

• Acupuncture means the application by means of

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stimulating the particular points stated on the human body using the stimulation procedures likewise the needle, laser beams, electrostimulation, cupping, ear seeds, magnetic massage balls, thermic stimulation, acupress and audio or magnetic resonance.

- Apitherapy is the use of bees and bee products to cure some illnesses as a complement and promoter.
- Phytotherapy is a way of treatment using the conventional herbal medical materials and herbal remedies.
- Hypnosis is the process designed to obtain or reveal a change on someone's conscience, awareness, body, emotions, feelings, thoughts, mind or manners.
- Hirudotherapy is the use of sterilised leeches.
- Homeopathy is an integrative practice that aims to heal the patient using homeopathic drugs that are specifically chosen for that person.
- Chiropractic is a promoter field concerning the prevention of bio-mechanic disorders and their effects on the nervous system by the musculoskeletal system.
- Cupping therapy has two types: dry cupping therapy is the treatment method that aims a local vacuuming in order to boost the bloodstream. On the other hand, wet cupping(hijama) is a method that involves puncturing the skin to remove the blood after vacuuming on the specific parts of the body.
- Maggot debridement therapy is the use of Lucilia Sericata sterile maggots with the aim of bio debridement on the chronic lesions.
- Mesotherapy is the local and intradermal injection of herbal and pharmacological drugs that aims to cure the organ pathologies originating from mesoderm by minimal doses, specific needles and techniques.
- Prolotherapy is the intraligamentary injection of proliferative and irritant solutions.
- Osteopathy is a non-invasive conventional and complementary medical treatment that helps strengthening the musculoskeletal system involving the diarthrosis, muscles, connective

- tissues and spine. It focuses on the total body weight and the effectiveness of musculoskeletal system on illnesses.
- Ozone therapy is the local or systematic use of ozone-oxygen mixture.
- Reflexology depends on the basis of the presence of the collimator reflex areas on hand, sole and ears related to whole body parts, organs and glands. Without the use of any tools, materials, cream or lotion, these reflex areas are only exerted pressure. Reflexology doesn't involve diagnosing and healing specific illnesses or mobilisation and manipulation of diarthrosis.
- Musicotherapy is the clinical and evidence-based use of music and its implementations by a professional licensed in musicotherapy in order to meet one's physical, psychological, social and mental needs<sup>4</sup>.

Cupping therapy a conventional is complementary medicine type whose background dates back to old times. Cupping therapy, which was thought to have a history of 5000 years, was extensively used in Muslim socieities and Ottoman Empire. It boosts subcutan blood build up by local vacuuming on body. The type cupping which is conducted only by local vacuuming without puncturing is called as dry cupping. After vacuuming, revealing the accumulative blood hygienically is called as wet cupping (hijama). Nowadays, cupping therapy has been used to cure many illnesses as a complementary medical practice. Some of these are musculoskeletal system diseases, hematologic diseases such as iron overload, migraine type headache, rheumatic disorders and gastrointestinal system disorders<sup>5</sup>.

Apitherapy is type of conventional and complementary medicine in which bees and bee products are used aiming the wellness and treatment. When we gaze at its history, the oldest chronical is a Sumerian tabloid belonging to 5000 years ago<sup>6</sup>. The mostly used bee products are honey, pollen, bee gum, royal jelly and bee venom. Thanks to the researches, it is obtained that these products have anti-inflammatory, antimicrobial, anticancer, antioxidant and immunomodulator effects<sup>7</sup>. Those kind of products like royal jelly,

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pollen, honey and bee gum are used to strengthen the immune system as a complement. When it comes to bee venom, it is used for the purpose that decreasing the pain experienced in musculoskeletal system diseases and as a supporter against myasthenia. Apitherapy is never administered on the patients who suffer from bee sting allergy.

Ozone therapy is the practice of mixing certain amount of blood taken from the body with ozone gas and then transferring it back to the patient intravenously. This practice is called as major autohemotherepy. Taking less amount of blood (2-10 cc) from the body and intramuscular transfer of it back to the patient after mixing ozone gas is called as minor autohemotherapy. The history of ozone therapy goes back to 1840s and the German Chemist Christian Friedrich Schönbein is accepted as the father of ozone therapy. The situations in which it is primarily used are arterial circulation disorders, dentistry practices, rheumatic arthritis, decubitus ulcer, diabetic ulcer, muscle and diarthrosis disorders and much more<sup>8</sup>.

Mesotherapy is the injection conducted with specific needles of 4.6 or 13 mm into the tissues which are based on mesoderm. For this procedure the materials varies in compliance with the aim of treatment. Dr. Michel Piston practiced Mesotherapy for the first time in history in France in 19529. It is used in two different fields as cosmetics and medicine. In cosmetics, it is used for such treatments that losing weight, alopecia, cheloid and acne. In medicine, it may be preferred to strengthen the immune system or to treat migraine type headache, sports injuries on soft tissues, arthritis, trigeminal neuralgia, arteritis, vasculour diseases and much more<sup>4</sup>.

Acupuncture is a conventional and complementary curing type that dates back to 5000 years ago. In China, proofs on acupuncture practice by using stone needles were obtained. The internal diseases book written in Chinese and in 200 B.C. is the oldest source on acupuncture. The Turkish doctor İbn-i Sina referred acupuncture in his works in 1100s<sup>10</sup>. Acupuncture is stimulating certain areas of the body, which are called as acupuncture points, by the way of dry needling. It is used as a

complementary treatment method against such diseases that musculoskeletal disorders, arthralgia, migraine and other headache types that are nonorganic, accordance to regime in exogen obesity, anxiety, nausea and vomiting based on the chemotherapy and actinotherapy, sleep disturbances based on nonorganic reasons, dysmenorrhea, infertility, polycystic ovaries and much more<sup>4</sup>.

Hirudotherapy is the use of medical hirudos to cure. In this way, the hirudos are fed with the blood of host; meanwhile, their function of secreting many substances that have anticoagulant, inflammatory, anaesthetic features is utilised. It has been used since from very old times. In Egypt, demonstrations of the use of medical hirudos were found on a tomb which was thought to date back to 1500s. In Kanun Fit-Tip, the work of the important medical scientist İbn-I Sina, it is mentioned how and against which diseases the hirudos were use.<sup>11</sup> The indications in which hirudotherapy is used are degenerative arthropathies like osteoarthritis, venous dysfunction post flep surgery, also, it is used to decrease the pain in varicose venous diseases and such diseases that lateral epicondylitis.

- Definition of hypnotherapy in words of American Psychology Union- Hypnosis Department: Hypnosis is the consciousness in focus and minimised environmental awareness and it is characterised by a rise on the capacity of replying the suggestions<sup>12</sup>. Within the Regulation of Conventional and Complementary Medical Techniques, medical practice fields of hypnosis are stated as: Conquering pre-op fear before the operations,
- •coping with the anxiety and intra-op pains,
- during whole diagnostic and interventional operations, quelling and supporting the accordance to treatment in emergency,
- in the process of infertility treatment,
- during pregnancy and the moment of birth,
- during treatment of gynaecological diseases, obesity, eating disorders, smoking cessation, alcoholism, stress disorder, nonorganic sleep disturbances, depression, functional intestinal



disorders, acute and chronic pains, allergic rhinitis and allergic asthma;

- strengthening the immune system,
- reducing the pain and anxiety in treatment of ambustion,
- narcotising,
- coping with the pain, vomiting, anxiety and side effects of the drugs seen on the ones who suffer from cancer

Apart from these, hypnosis practices in dentistry are stated as<sup>4</sup>:

- Phobias on dentistry operations
- •Removing pain and during anaesthetic procedure
- In treatment of bruxism, temporomandibular joint disorders, trigeminal neuralgia, oral disorders
- •Increasing compatibility to treatment or denture prosthesis

Maggot debridement is the use of Lucilia Sericata maggots in medicine. It is preferred to cure purulent or scabbed lesions. The enzyme released by the maggot helps to remove and disinfect the infarct on the lesion<sup>13</sup>. Also, it helps stimulating the creation of scar tissue<sup>13</sup>.

In this paper, we aim to analyse the number of the patients consulted to the conventional complementary medical centre in Duzce University, the complaints and demographic features of the consultants, which conventional and complementary medical practices are carried out against which situation.

### MATERIALS AND METHODS

In this study the patients who consulted to the Conventional and Complementary Medical Centre of Duzce University between the dates 15.005.20019 and 15.05.2020 were analysed retrospectively. Within this period the total number of the consultants is 860. On the other hand the ages, genders, application dates, complaints of the patients and the results of the administrations were collected.

With the help of the collected data demographic feature range of the patients, the ratio of the consultant number by months, by complaints and finally by the applied treatments were analysed.

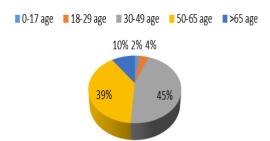
Our medical centre is licenced to practice acupuncture, cupping therapy, ozone therapy, hirudotherapy, hypnosis, mesotherapy, apitherapy, maggot debridement, phytotherapy and music therapy.

Microsoft Excel XP and SPSS were used to analyse the data. The values were given in numbers and percentage.

#### **RESULTS**

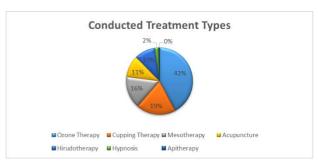
When we consider the range between the genders of 860 consultants in the mentioned period, we see that 39.8% (n=343) of the total number is male, 60.1% (n=517) is female. When the range of age is considered, the most crowded group is between 30-49, that covers 45 % of the total number. It is respectively followed by the ages 50-65 (39%), >65 (10%), 18-29 (4%), 0-17 (0.2%) (Figure 1). The average of age for the target population of the study is  $49.7(\pm 12.7)$ . The age average of the male ones is  $49(\pm 14.8)$ , only the female consultants' age average is  $50.2(\pm 11.4)$ .

### **Groups of Age**



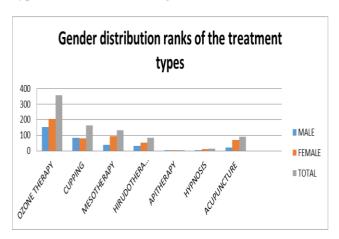
**Figure 1**. Age Division of the Patients Consulted to Conventional and Complementary Medical Centre of Duzce University

When we consider where the patients come from, the common answer is Duzce with a percentage of 97.6% (n=840). The rest of the total number (2%) is from other cities. When we consider the range of the patients according to the treatments they got, the most common practice is ozone therapy as 42%. It is followed by cupping therapy (19%), Platelet Rich Plasma (15%), acupuncture(11%), hirudotherapy (10%), hypnosis (2%), apitherapy (1-0.4%) (Figure 2).



**Figure 2.** The range of the treatment types administered on the patients

When we consider the distribution of the patients according to their genders in terms of the treatment types, it is seen below (Figure 3).



**Figure 3.** The graphic monitoring the gender distribution ranks of the treatment types

When the treatment types were analysed in accordance with the complaints, we see that 49.2% of the patients who demanded general well-being got ozone therapy, 43.8% of them got cupping therapy. 74.2% of the patients who complained knee pain got Platelet Rich Practice, 23.4% of them got hirudotherapy.

According to the treatment indications data;

- •For ozone therapy, general well-being demand takes place on the top as 37% of the total number. Diabetic foot takes second place as 16%. Pain complaint comes then as 8%.
- •For cupping therapy, general well-being demand comprises 73.7% when the pain complaints comprise 13.4%.
- •For hirudotherapy, the most common consulting reason is knee pain as 36.4%. Leg pain based on

the peripheral venous statis follows it as 20%.

- •For acupuncture, the most common reasons to consult are obesity (64.4%) and being overweight. Alcohol withdrawal syndrome follows them as 13.3%.
- •For Platelet Rich Plasma, 74.2% of all the indications to consult is knee pain as the most common one.

### **DISCUSSION**

Use of the conventional and complementary treatments has recently increased in our country; yet, the number of academic studies in this field is not satisfying. For this reason, we expect more studies will be carried out on the topic.

In this study, ozone therapy is the most common conventional and complementary treatment type among all. Oral and her colleagues conducted a study to detect the notion, manners and actions of the ones who consulted to the primary care clinic in relation to conventional and complementary treatment types. They reached that the most common method is thermal spring; on the other hand herbal products and remedies follow it<sup>14</sup>. Again, in the study written by Kav and colleagues to analyse the frequency of occurrence of the complementary and alternative medicine, the most common method is found as herbal remedies and products<sup>15</sup>. These data conflicts the data that we obtained in our study. The reasons of this conflict are the different complaints and demands that the patients have. In the lastly mentioned study, all of the patients suffer from cancer; however, in our research, the number of the cancer sufferers is limited. In our study, whereas the least common methods are hypnosis and apitherapy, Oral and her colleagues stated ozone therapy and hypnosis as the least common<sup>14</sup>. Hypnosis is the method that has been practiced rarely according to both results.

We can easily detect that the quantity of female patients is more than male ones. Similarly, oral and her colleagues reached the same conclusion in their study<sup>14</sup>. Considering the ages of the consultants in our medical centre, the most frequent ages change between 30-49; the secondary group ranges between 50-65. Again, Oral and her colleagues reached the information that the ones over 30 prefer

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the conventional and complementary treatments more<sup>14</sup>. Seeing the same results in both studies may make us think that the given medical methods are preferred mostly by the ones who are older than 30. In our study, the rate of the ones who consulted for the general well-being without any complaints is less than the rate of the ones who have a complaint. Similarly, in Oral and her colleagues' study, the practice of conventional treatments based upon a complaint is on the top rank<sup>14</sup>. This data obviously reveals that the patients prefer conventional and complementary treatments mostly because they suffer from a disturbance. However, some of the

consultants prefer these kind of treatments even though they have no complaint.

#### Restriction of the Research

This paper frames only the consultants who consulted to The Conventional and Complementary Medical Centre of Duzce University.

In conclusion, this study claims that conventional and complementary treatments are more popular among females and older groups; they may be preferred just for the general well-being apart from a complaint also.

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