

## THE WOMAN IN PREGNANCY: BODY CARE BY KNOWING OF ALTERNATIVE MEDICINE

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### ABSTRACT

**Introduction:** In 1907 Louisa Burns took into account the pregnant woman as a target of choice for Osteopathic Manipulative Treatment (OMT) and over the years various studies have shown the efficacy of OMT and identified fields of application for the problems that may be encountered by pregnant women. Firstly Osteopathy in Italy is not recognized today, despite it being recognized as a profession, it is not considered a medical practice and thus cannot be taught in university faculties of medicine and surgery and the professional figure of an osteopath cannot take part of the hospital staff. This study aims to examine the state of knowledge of the osteopathic profession in the population of pregnant women in relation to the level of study.

**Materials and methods:** The study was performed at the 2nd Family Counseling - Modica Alta USL No. 7 - Ragusa , the counseling Family (ex CT3 ) - Via G. D'Annunzio 60 - Catania and the hospital of Lentini - District hospital SR2 . 288 pregnant women aged between 15 and 42 participated in the research. The gestational average period is 7 months. To Pregnant women was asked to fill out a self-reported, for evaluate their knowledge of the osteopathy

**Results:** The results obtained show that there is a knowledge default of osteopathy as alternative medicine and the benefits that you could have from a manual processing.

**Conclusion:** Complementary and Alternative therapies in Medicine should be considered as treatment options for to ensure a physiological development of the body of woman nine months of pregnancy is continually changing. For this aim, we suggest to encourage projects in osteopathy during pregnancies in family counseling using childbirth courses to inform medical, obstetrician and nurse staff and women. We hope for a successful collaboration among the professional figures that with their passion are dedicated to the prevention and care of the pregnant woman.

**Keywords:** woman in pregnancy, body, alternative medicine.

DOI: 10.19193/0393-6384\_2016\_4\_115

Received January 30, 2016; Accepted June 02, 2016

### Introduction

In 1907 Louisa Burns took into account the pregnant woman as a target of choice for Osteopathic Manipulative Treatment (OMT). Over the years various studies have shown the efficacy of OMT and identified fields of application for the problems that may be encountered by pregnant women<sup>(1,2)</sup>, ranging from lumbosacral pain<sup>(3-8)</sup>, nau-

sea and vomiting, increased systemic blood pressure<sup>(9)</sup>, the duration of labor reduced<sup>10</sup>, from prevention of injuries of the pelvic viscera<sup>18</sup> to lessen the perineum<sup>(19)</sup> and pelvic chronic pain<sup>(20,21)</sup>, the positive results achieved by the OMT on the lower urinary tract symptoms<sup>(22,23)</sup>, improving the quality of life during this period<sup>1</sup> to treat postpartum<sup>(24-29)</sup> and newborn problems<sup>(30,31)</sup>.

It's important to not forget a key advantage of Osteopathy, that is the total absence of use of narcotics on a pregnant woman.

Even though there is a wide selection of international articles on the effectiveness of OMT during pregnancy, there is a lack in the treatment of these subjects in the Osteopathic Italian clinics. This phenomenon can be explained both by the relatively young age of Osteopathy in Italy (the national Register of Osteopaths of Italy, Registro degli Osteopati d'Italia, R.O.I. was founded in 1989) and also the lack of an official status of this profession, which was obtained by Law n. 4 of 14 January of 2013 (published on Gazzetta Ufficiale della Repubblica Italiana, Serie Generale n.22, 26-01-2013). Another fact that affects the "unawareness" of the entire population is given by the fact that the formation of Osteopaths is provided exclusively by private schools<sup>(32-40)</sup>. Firstly Osteopathy in Italy is not fully recognized today, despite it being recognized as a profession, it is not considered a medical practice and thus cannot be taught in University's Medical Schools and the professional figure of the Osteopath is not part of the medical staff in the hospital<sup>(41-51)</sup>.

The present study aims to examine the state of knowledge of the osteopathic profession in general and of specific osteopathic techniques intervention in pregnancy, in particular, within a large sample of pregnant women.

## Materials and methods

### Subjects

A total of 288 pregnant women aged between 15 and 42 participated in the research. The gestational average period was 28 weeks ( $\pm 3.3$  SD).

This research work is an observational study, aimed to evaluate and to verify the level of knowledge of practice osteopathic in pregnant women.

The pregnant woman had to fill out a self-reported questionnaire for evaluating her knowledge of the osteopathy. The questionnaire had only one answer to be selected (figure 1).

The pregnant women were fully informed of the purpose of the study and signed an informed consent prepared according to the ethical standards laid down in the Declaration of Helsinki (revision 2013).

The study was performed at the 2<sup>nd</sup> Family Counseling - Modica Alta USL No. 7 - Ragusa, the counseling Family (ex CT3) - Via G. D'Annunzio

60 - Catania and the hospital of Lentini - District hospital SR2. The childbirth courses, with the participation of pregnant women, was performed 2014 to April 2015.

The questionnaire form is titled 'CSGOI' at the top. It contains the following sections and questions:

- Age (years):**
  - 15-18
  - 19-27
  - 28-40
  - Over 40
- Marital Status:**
  - Divorced
  - Unmarried couple
  - Single
  - Married
- Educational Qualification:**
  - Degree
  - Bachelor's degree
  - Professional Course
  - High School Diploma
  - Middle School Diploma
- In what stage of a pregnancy can you consult an osteopath?**
  - After 7th month
  - No earlier than the third month
  - At any time
  - I don't know
- Have you ever addressed an Osteopath?**
  - Yes
  - No
- Were you satisfied with the treatment?**
  - Yes
  - No
- Do you know what Osteopathy is?**
  - A specialty in medicine that deals with osteoporosis
  - An unconventional manual medicine
  - A bone disease
  - I don't know
- Why does one need Osteopathy?**
  - Treat bone diseases
  - Reduce pain
  - Find and solve problems at the basis
  - I don't know
- In pregnancy what is the aim of osteopathy?**
  - Reduce osteoporosis in pregnancy
  - Maintain the balance in the body
  - Increase postural changes
  - I don't know

**Figure 1:** Questionnaire submitted to the subjects for evaluating her knowledge of the osteopathy.

### Statistical analysis

Data was collected and averaged, and then compared by using one-way repeated measures analysis of variance (ANOVA; Friedman test), followed by post-hoc Dunn's Multiple Comparison Test. The relationship between variables was analyzed with linear regression. Significance was set at  $p < 0.05$  and all data are reported as mean  $\pm$  standard deviation (SD). All analyses were performed by means of using GraphPad Prism version 6.03 for Windows (GraphPad Software, San Diego, CA, USA).

### Results

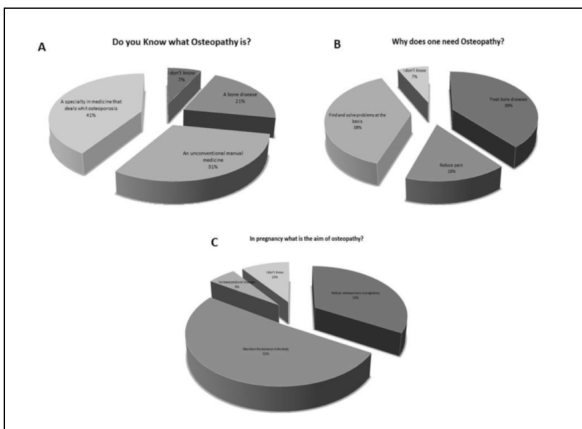
Table 1 shows some characteristics of the 288 subjects; as can be seen, 25 subjects had an age from 15 to 18 years (9%), 90 subjects aged from 19 to 27 years (31%), 165 subjects aged from 28 to 40 years (57%) and the remaining 8 subjects aged over 40 years (3%).

Table 1 shows also that 22 subjects was divorced (7%), 144 subjects were partner in an unmarried couple (49%), 65 subjects were single (23%) and only 61 subjects was married (21%).

VARIABLES	NUMBERS SUBJECTS	PERCENTAGE (%)
<b>AGE (YEARS)</b>		
15-18	25	9
19-27	90	31
28-40	165	57
Over 40	8	3
<b>MARITAL STATUS</b>		
Divorced	22	7
Unmarried couple	140	49
Single	65	23
Married	61	21
<b>EDUCATIONAL QUALIFICATION</b>		
Degree	49	17
Bachelor's degree	45	16
Professional Course	26	9
High School Diploma	116	40
Middle School Diploma	52	18

**Table 1:** Characteristics of participants relative to: age (years), marital status, educational qualification.

Moreover, Table 1 illustrates that the subjects had an education degree distributed as follows: 49 subjects had a Doctoral degree (17%), 45 subjects had a Bachelor's degree (16%), 26 subjects acquired a title after a professional Course (9%), 116 subjects had a high school diploma (40%) and, finally, 52 subjects had a middle school diploma (18%).



**Figure 2:** Answers about to the questions: Do you know what Osteopathy is? Why does one need Osteopathy? In pregnancy what is the aim of osteopathy?

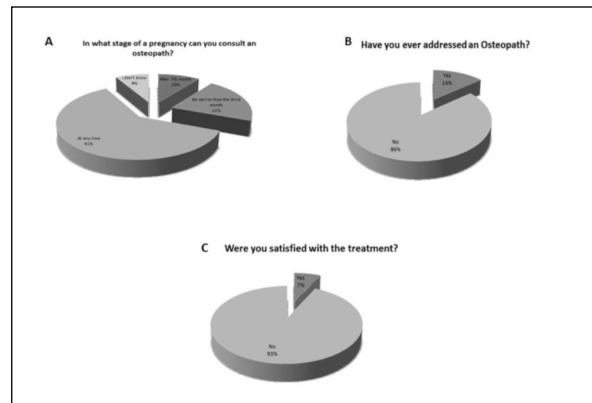
Figures 2 and 3 summarizes the results: it is possible to observe that there was a basic knowledge of Osteopathy as alternative medicine and about the benefits that it is possible to have from a manual processing.

In fact, 40% of pregnant women think that Osteopathy is a medical approach that deals with osteoporosis while 22% think that Osteopathy is a bone disease and 7% did not answer (Figures 2a),

then 69% of the sample has no adequate knowledge.

Moreover, 62% of pregnant women believed that manual therapy is right for treatment of bone diseases or thought it was useful for pain reduction (2b).

In fact, 54% think that Osteopathy reduces osteoporosis in pregnancy or say it is useful to ameliorate postural changes induced by pregnancy (figure 2c).



**Figure 3:** Answers about to the questions: In what stage of a pregnancy can you consult an osteopath? Have you ever addressed an Osteopath? Were you satisfied with the treatment?

Oddly, the majority of pregnant women does not know what is the role of Osteopathy but they think that after three months of gestation an osteopath may be consulted (Figures 3a). The most of pregnant women never consulted an Osteopath (Figures 3b, 3c) and no one ever recommended an osteopath.

**Discussion**

The age of Osteopathy in Italy is of only 26 years and this is surely the main reason of unawareness, or a confused knowledge, of the profession of Osteopath in both medical and community areas. However, in the last few years, these aspects have changed in a positive way<sup>(52-57)</sup>.

The great effort made by the creation of ROI in the institutional and educational fields has brought this job to be known as a professional occupational figure.

For the majority of pregnant women, it is clear that it is a profession not well known, often osteopathy is thought to deal with bone disease or with a medical branch devoted to the therapy of osteoporosis, and the competence of the osteopath are not known even though there is a wide collec-

tion of international literature which shows how it is used in different illnesses<sup>(58-62)</sup>.

This could be explained because in Italy the education in Osteopathy is given in private structures and not in Universities, and in this way it remains outside the educational, formational and communicational systems.

Complementary and alternative medicine (CAM) therapies may be considered as an option for to ensure a physiological development of the body of women during the nine months of pregnancy<sup>(63)</sup>.

As example, it is known that the pregnancy-related back pain is often associated with sleep disturbance and it may affect the activities of daily living and, therefore, the quality of life<sup>(64-67)</sup>.

Licciardone et al observed that the OMT decreases of back pain and related symptoms during the third trimester of pregnancy<sup>(68)</sup>.

For this reason, it seems to be important to encourage initiatives intended to pregnant women who provide for the intervention of osteopaths, for a successful collaboration among the professional figures dedicated to the care of the pregnant women.

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