



Prevalence of SoothagaNoigal[Menstrual Disorder] among the Non Stick Pan users in two wards, Palayamkottai in Tirunelveli [dt]

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Abstract

Menstrual disorder is the medical condition most of women contain that can be the cause of a significant amount of stress to both the patients and their parents. Due to the immaturity of the hypothalamic-pituitary-ovarian (HPO) axis, menstrual cycle in this age are very broad. Non stick cookware products were manufactured with the use of perfluorooctanoic acid - PFOA is not metabolized in the body; it is not lipophilic. PFOA is not directly genotoxic; animal data indicate that it can cause several types of tumors and neonatal death and may have toxic effects on the immune, liver, and endocrine systems. In this manner this research work conducted in two wards at palayamkottai area in 2018. Objectives are to evaluate the prevalence of Soothaganoigal (Menstrual disorder) in Palayamkottai, Tirunelveli (dt), to determine the interrelation between the SoothagaNoigal and NonStick Pan users, to find out the frequency of non stick pan users in menstrual disorder. study period: 04 ½ months (may 2018 to mid of September, 2018) proposed methods are study population-this research work conducted in palayamkottaitaluk area which has 91,174 populations itself in 2018 (wikipedia) study design: cross sectional descriptive study; collect the primary data from direct interview among non stick pan users in palayamkottai with the permission of proper channel of hierarchy through our college principal. Operational definitions are in this research defined as key features of samples are known menstrual disorder persons and non stick pan users defined as using of non stick pan users minimum one times a day. Sample size: 129 According to the result, female-129 (N=129), finally concluded with paired t-test significant of non stick pan users dependent on the irregular menstruation, dysmenorrhea, PCOD, white discharge and thyroid disorder. (p value <0.05)

Key words: *Soothaganoigal*(menstrual disorder), Non Stick Pan Users

INTRODUCTION

The normal length of a woman's menstrual cycle is 28 days, but this varies between individuals. Irregular menstruation is when the length of the cycle is more than 35 days, or if the duration varies. A period, or menstruation, is the part of the menstrual cycle in which the endometrium, which is the lining of the uterus, is shed. This appears as bleeding from the womb that is released through the vagina. Periods usually start during puberty, between the ages of 10 and 16 years, and they continue until menopause, when a woman is 45- to 55-years old. Irregular periods, also called oligo-menorrhea, can occur if there is a change in contraception method, a hormone imbalance, hormonal changes around the time of the menopause, and endurance exercises.

Polycystic ovary syndrome (PCOS) is a common endocrine system disorder among women of reproductive age. Most women with PCOS have many small cysts on their ovaries. Hence, it is called polycystic ovarian syndrome. The cysts are not harmful but lead to hormone imbalances. One hormone change triggers another, which changes another forming a vicious cycle.

The incidence of PCOS appears to be rising in India day by day. It is seen in as many as 5% to 10% of women in their reproductive age. Prevalence of PCOS in Indian adolescents is 9.13%. PCOS and related problems are making an alarm especially in south Indian women population. The incidence is increasing may be due to unhealthy lifestyle.

In present trend compare with ancient period PCOS is increasing situation because of the diet pattern and life style of the women. In ancient women used as traditional diet pattern and natural friendly life style such routine works as exercise and natural unpolluted fresh environment. It is help to maintain healthy reproductive organs. In this way this is going to prove the traditional systematic lifestyle is most important to ensure the health of body.

In this manner, Diet pattern depends on food preparation mainly, therefore food preparing utensils play main role on diet pattern.

Most people are familiar with it as a non-stick coating surface for pans and other cookware. It is also used in many other products, such as fabric protectors.

Perfluorooctanoic acid (PFOA), also known as C8, is another man-made chemical. It is used in the process of making Teflon and similar chemicals (known as fluorotelomers), although it is burned off during the process and is not present in significant amounts in the final products.

Nowadays people are using so many utensils commonly; Non Stick Pan among other vessels.

PTFE (Polytetrafluoroethylene) is used as an inner coating material in non-stick cookware. At normal cooking temperatures, PTFE-coated cookware release various gases and chemical that present mild to severe toxicity. Moreover, the emerging, persistent, and well-known toxic environmental pollutant PFOA is also used in the synthesis of PTFE. There are

some reports where PFOA was detected in the gas phase released from the cooking utensils under normal cooking temperatures.

When heated nonstick cook ware releases PerFluoroOctanoic Acid (PFOA) which is carcinogen causes thyroid disorders, infertility, developmental and reproductive problems.

OBJECTIVES

Primary:

To evaluate the prevalence of *SoothagaNoigal* (Menstrual Disorder) among the Non stick Pan users on June,2018 in two Wards, Palayamkottai, Tirunelveli (Dt)

Secondary:

- To determine the interrelation between the *SoothagaNoigal*& Nonstick Pan Users
- To find out the frequency of *SoothagaNoigal* in Nonstick pan Users

MATERIALS AND METHODS

Study Population

This research work conducted in two Wards in *PalayamkottaiTaluk area* which has 91,174 populations itself in 2018 (Wikipedia)

Study Design

Cross sectional descriptive study; Collect the primary data from direct interview among *SoothagaNoigal* (Menstrual disorder) persons in Palayamkottai with the permission of proper channel of hierarchy through our college principal.

Operational definitions

In this research defined as key features of samples are known affected by *SoothagaNoigal* persons. Nonstick pan users defined as using of Non stick pan for minimum 02 years in their daily cooking life style

SAMPLING PROCEDURES

Sample Size:

Use population survey or descriptive study using random (not cluster) sampling in epi.info. Confidence limits-5%, Population size - 91174, Expected frequency-09.3%, Sample size-129

RESULTS

Age Group

- 11 to 20 -1
- 21 to 30 -2
- 31 to 40 -3
- 41 to 50 -4
- 51 to 60 -5

Data Collection

Information collected

The information will be collected from known affected by *SoothagaNoigal* persons in PalayamkottaiTaluk, Tirunelveli District.

Data collection procedure

Main Investigator collects all data from public by questionnaire fill in field survey method.

Data Analysis

In research data analysis; including recording of key exposure/outcome variables, indicators to be calculated for the descriptive analysis [Eg. measure the *SoothagaNoigal* (Menstrual disorder) persons in Nonstick pan use (prevalence, incidence), measures of central tendency (mean, median)].

Quality Assurance

Following procedures are conducted in-time with good planning by chief investigator whole research work himself with time frame schedule.

- Protocol development
- Field procedures
- Data collection
- Data analysis

Bias and Limitations

Will be taken to minimize the impact of the bias / limitation on the quality of the study through primary data confirm by informed reality scores are *Good, Fair, Unreliability*.

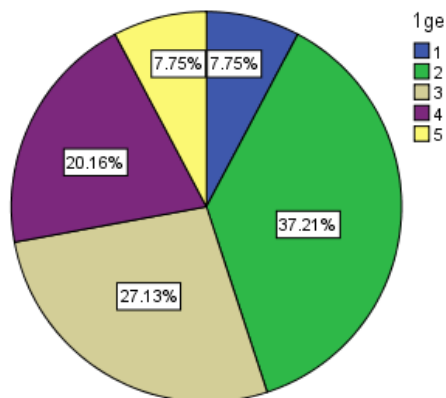
Practical Considerations

Logistics for data collection

Chief investigator arrangements for the data collection time schedule as 3pm-6pm weekdays & particular time of week end.

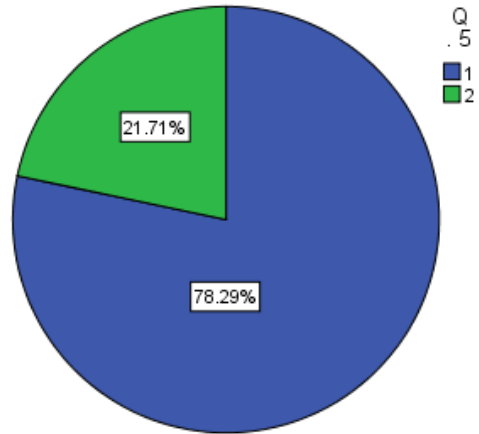
Ethical Issues:

The study is to be carried out in primary data from individual, therefore don't need to IEC approval. Selected samples informant concern should be get from all participants of this research.



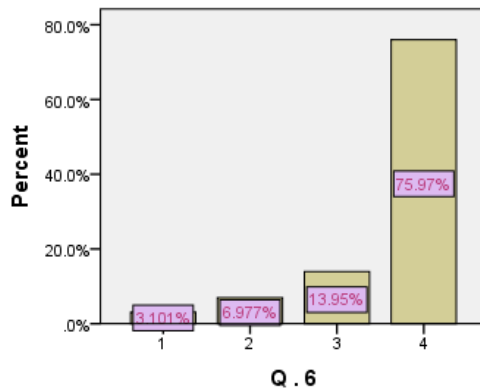
Non stick pan users /day

- 1 - One Time
- 2 - Two Time



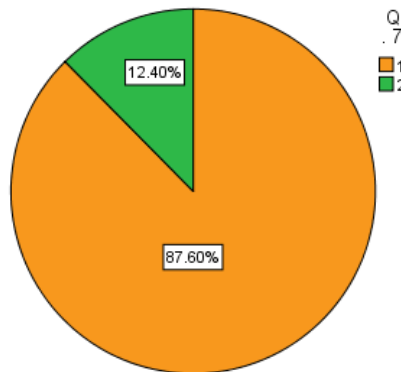
Number of day using NSP

- 1- 6 Months
- 2- 1 Year
- 3- 2Years
- 4- Above 2 Years



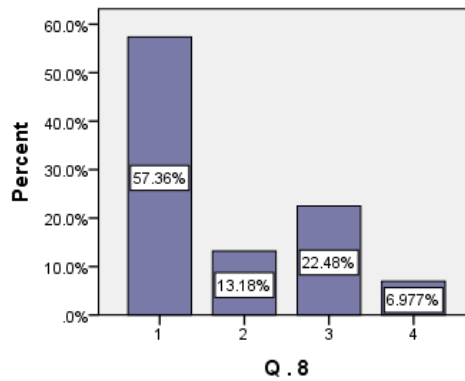
Type of preparing food

- 1- Vegetarian
- 2- Non vegetarian



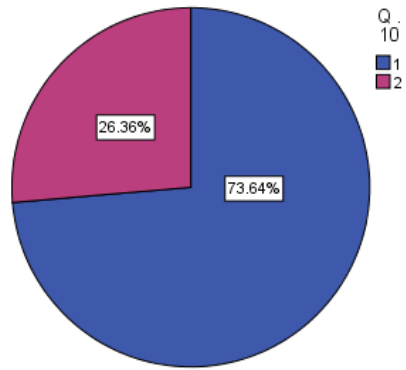
Purpose of using NSP

- 1- To make dosai
- 2- To oil fry
- 3- Dry fry
- 4- Cooking rice



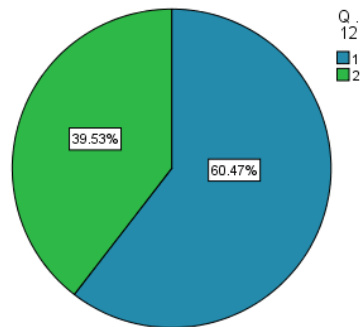
Marital status

- 1- Married
- 2- Unmarried



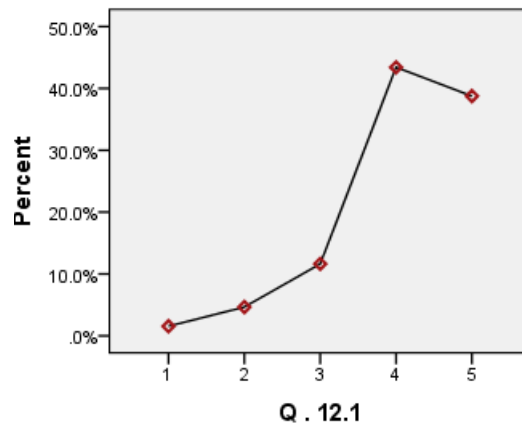
Irregular periods

- 1- Yes
- 2- No



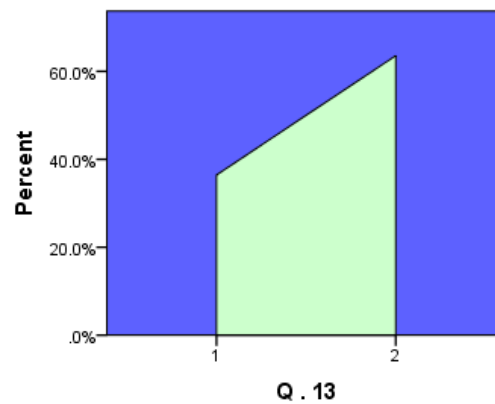
Duration of irregular periods

- 1- 3 Months
- 2- 4 Months
- 3- 6 Months
- 4- Above 6 Months
- 5- Nil



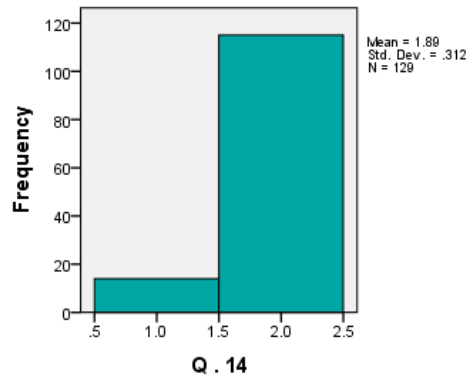
Dysmenorrhoea

- 1- Yes
- 2- No



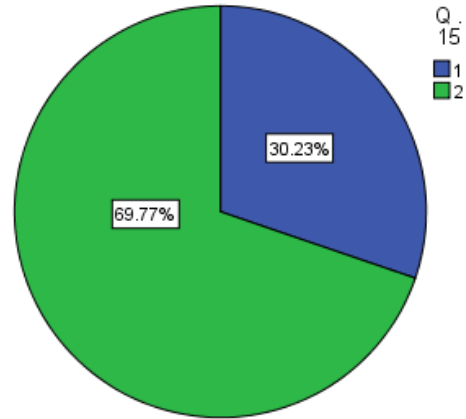
Menorrhagia

- 1- Yes
- 2- No



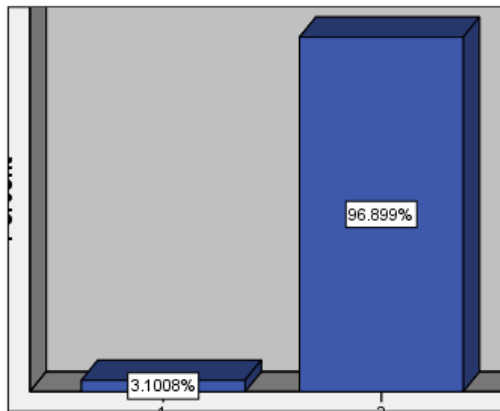
PCOD

- 1- Yes
- 2- No



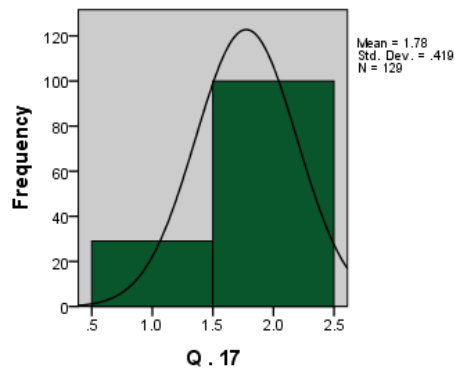
White discharge

- 1- Yes
- 2- No



Thyroid disorder

- 1- Yes
- 2- No



DISCUSSION AND CONCLUSION

In this research, female samples were 129, in age group obtained maximum age samples 21 to 30 were 48 and minimum age samples 51 to 60 were 10. In non stick pan usage per day maximum was one time and minimum was 3 times in duration of non stick pan usage maximum was above 2 years and minimum was 6 months. In type of preparing food maximum was vegetarian and minimum was Non vegetarian. In purposing for using non stick pan maximum was to make Dosa and minimum was to cooking rice. In marital status maximum was married. In menstrual disorder 78 samples were affected and 51 samples were not affected. duration of irregular periods highest sample was affected above 6 months and lowest sample was affected for 3 months. In dysmenorrhea 46 were affected and 83 were not affected. In 14 samples were contained menorrhagia and 115 were not contained. In PCOD problem 39 were affected and 90 were not affected. 4 samples only had white discharge and 125 samples were not had. In thyroid disorder 29 samples were had and 100 samples were not had. finally concluded with statistical analysis by using of SPSS (version 22) reporting as; paired t-test significant of non stick pan users dependent on the persons' affected by irregular menstruation, dysmenorrhea, menorrhagia, PCOD, White discharge, thyroid disorder. (p value <0.05)

REFERENCES

1. Dutta D.C, Text book of Gynecology, 7th edition, 2008, p.no 443.
2. Environ Health Perspective. 2010 Aug; 118(8): 1100–1108. Published online 2010 Apr 27. doi: 10.1289/ehp.0901827
3. Environmental Science and pollution research – October 2017, volume 24, Issue 30, PP23436-23440 (Springer-Verlag GmbH Germany 2017)
4. <https://www.cancer.org/cancer/cancer-causes/teflon-and-perfluorooctanoic-acid-pfoa.html>
5. Leon Speroff, Marc A. Fritz, Clinical Gynecologic Endocrinology and Infertility, 2005, p.no 369
6. Nidhi R, Padmalatha V, Nagarathna R, Amritanshu R, Prevalence of polycystic ovarian syndrome in Indian adolescents, 2011, p.no 223-227.
7. Rao Kamini, The infertility manual, Jaypee brothers, New Delhi, 2004, p.no 91.
8. Robert W Shaw, David Luesley, Ash monga, Text book of gynaecology, 4th edition, p.no 256.
9. Sultan, C, Pediatric and Adolescent Gynecology, Evidence-Based Clinical Practice, 2000.
10. Yvette Brazier, “What you need to know about irregular periods” Reviewed by University of Illinois-Chicago, School of Medicine, 2017