

## A correlation study between knowledge and lifestyle practices on cancer cervix among the clients with leucorrhoea at Government headquarters hospital, Cuddalore

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**Abstract:** *The community's degree of awareness of the warning signs and symptoms of cervical cancer, risk factors, the advantages of early detection and treatment, the accessibility of health services and options for prevention, such as HPV vaccination is crucial. The aim of the study was descriptive study to correlate between the knowledge and lifestyle practices on cancer cervix among clients with leucorrhoea. A non-experimental correlation study with level II (explorative and explanative) research design of 100 clients with leucorrhoea by non-probability convenience sampling technique. The knowledge and lifestyle practices questionnaire among clients with leucorrhoea were assessed. The overall knowledge, personal hygienic practices and lifestyle practices on cervical cancer was 69.89%, 37.78% and 45.28% with mean of  $121.61 \pm 7.91$ ,  $6.80 \pm 2.17$  and  $9.51 \pm 2.18$  respectively. The correlation between knowledge on cancer cervix and general health practices shown the value  $r = 0.42$ ; the correlation between knowledge on cancer cervix and personal hygiene practice shown the  $r = 0.38$ ; the correlation between general health practices and personal hygiene practices shown that  $r = 0.32$  with  $p$  value 0.001. A strategy should be developed to inform women and the public about cervical cancer, including information on risk factors, symptoms of the disease, and the availability of screening, in partnership with organizations that are concerned.*

**Keywords:** *Knowledge, lifestyle practices, cancer cervix, leucorrhoea, Cuddalore.*

### 1. INTRODUCTION:

Leucorrhoea is a white, yellowish, or greenish discharge that a female experiences from her vagina. This discharge may be benign or it may be an infection. <sup>(1)</sup> Early stages of cervical cancer may be completely symptomless. In its later phases, it may manifest as persistent pelvic pain, unexplained weight loss, atypical vaginal bleeding, such as after menstruation, in between periods, or after menopause, heavier and longer-lasting menstrual periods, pain during menstruation, vaginal discharge, and odour. <sup>(2)</sup>

The Human Papillomavirus is the primary cause of cervical cancer (HPV) Human papillomavirus infections are to blame for almost all incidences of cervical cancer. 12 HPV types (HPV 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, and 59) have demonstrated adequate evidence to be causally related with the development of cervical cancer out of the over 120 forms of HPV that have been found. Despite being a common screening test, Pap smear has a 70–80% overall sensitivity for detecting high grade squamous intrapithelial lesions (HSIL). A premalignant condition linked to the human papilloma virus (HPV) known as vaginal intraepithelial neoplasia (VaIn) is characterized by dysplastic alteration in the vaginal epithelium without stromal invasion. Just 0.4% of female lower vaginal tract intraepithelial lesions are caused by it. <sup>(3)</sup>

The community's knowledge, attitude, and level of practice about cervical cancer symptoms, risk factors, advantages of early detection and treatment, accessibility to health services and strategies for prevention (HPV vaccination). Socio-demographic variables, as well as the availability and accessibility of health care, have an impact on women's awareness of and attitudes towards the disease. A complex interaction of numerous elements at the individual, family, and community levels results in screening behaviour. <sup>(4)</sup>

Women under the age of 50 are most commonly affected by cervical cancer. The Indian women are now at higher risk of getting the disease due to a number of sociocultural hurdles to basic screening and treatment services. In underdeveloped nations of the world, 86% of cervical cancer diagnoses and 88% of cervical cancer deaths occur. In India, the most common cancer among women between the ages of 15 and 44 is cervical cancer. Around one-fifth of all cervical cancer cases worldwide are in India. Each year, more than 100,000 new cases are found in India, where it accounts for 20% of all female fatalities. <sup>(5)</sup>

Cervical cancer is the second most common in Tamil Nadu, with prevalence changing by district. The prevalence of cervical cancer is 15.1% in Chennai. The north eastern districts of Tamil Nadu, including Thiruvallur (28.6/100,000), Villupuram (31.1/100,000), Pondicherry (39.2/100,000), and Cuddalore (29.9/100,000), have a high prevalence. <sup>(6)</sup> This findings indicated that the load would get worse over a few years. So, adopting a healthy lifestyle and staying away from those bad lifestyle choices are essential to lowering the occurrence of cervical cancer in the future. Examining the cervical cancer risk factors is crucial to comprehend healthy and harmful lifestyle choices.

Though many studies are conducted in the area of the cancer cervix, the researcher could not find any valid study to the knowledge and life style practices on cancer cervix. Hence, the researcher felt the need to identify the correlation between knowledge and life style practices on cancer cervix among the clients with leucorrhoea.

## 2. MATERIALS & METHODS:

**Design:** A non-experimental correlation study with level II (explorative and explanative) research design was adapted for the present study.

**Sample Size:** A sample of 100 clients with leucorrhoea.

**Sampling Technique:** Non probability convenience sampling technique was used to select the sample.

**Data collection Procedure:** The formal setting permission was obtained from the Joint Director of Government Headquarters Hospital, Cuddalore. Institute Ethical committee clearance has obtained. A written informed consent was obtained with each subject by providing the patient information sheet and confidentiality was maintained. The investigator collected the demographic variables first followed with this the knowledge on cervical cancer data were collected by the interview schedule. It includes basic information regarding the cervical cancer, risk factors, symptoms, investigations, treatment, prevention and availability of health services. The lifestyle practices questionnaire was collected with the collective information of Personal hygiene (18 items) and General Health practices (21 items). The data were analyzed based on the objectives of the study using Descriptive statistics as frequency, percentage distribution, mean, and standard deviation and Inferential statistics as Karl Pearson correlation r test and chi square test.

## 3. RESULTS:

Frequency and percentage distribution of demographic variables of the clients with leucorrhoea, majority 46% were aged 31- 45years, 67% were Hindu, 48% had primary school education, 77% earned <Rs.5000 monthly income, 64% belongs nuclear family, 52% had irregular menstrual cycle, 61% had two children, 77% have not any family history of cancer and 56% of information passed through the health care professional.

The level of knowledge on cervical cancer of clients with Leucorrhoea, 48% had adequate knowledge, 42% had moderate adequate knowledge and 10% had inadequate knowledge. The level of personal hygiene practices (lifestyle practices) of clients with leucorrhoea, 78% had poor level of practices, 22% had moderate level of practices and none had good level of personal hygiene practices. The level of General Health practices (lifestyle practices) of clients with leucorrhoea, 66% had poor practices, 34% had moderate practices and none of the clients are having good level of general health practices.

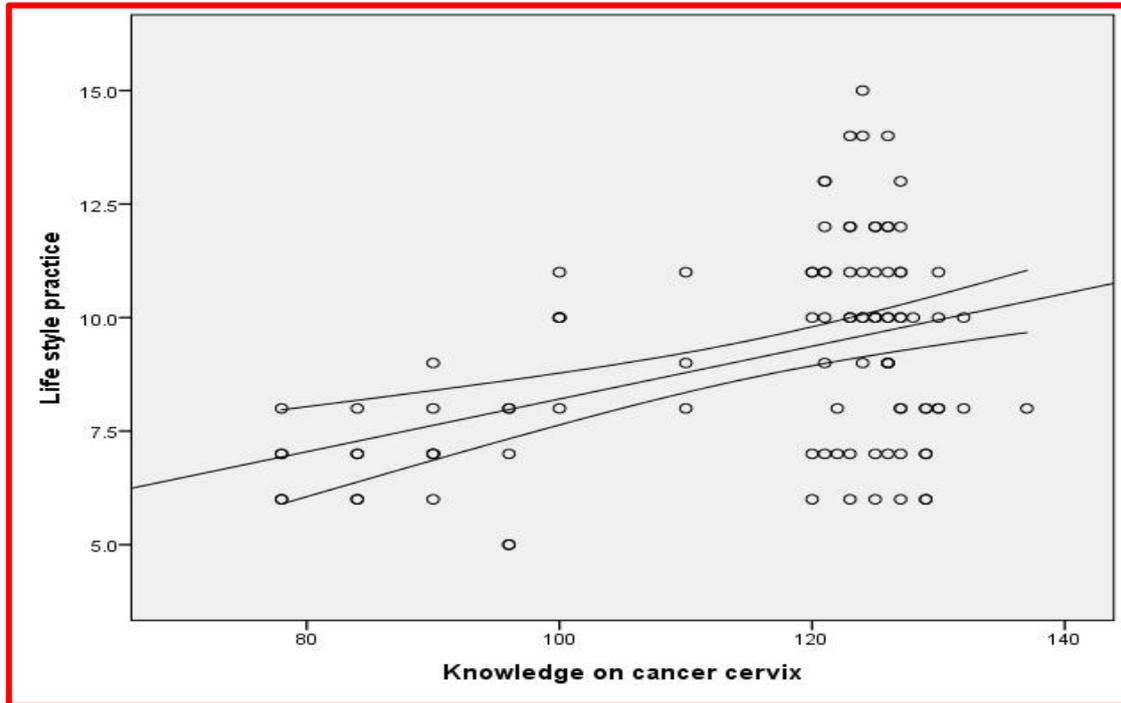
The overall knowledge on cervical cancer was 69.89% with mean value of  $121.61 \pm 7.91$ , the overall personal hygienic practices was 37.78% with mean value of  $6.80 \pm 2.17$  and the overall lifestyle practices was 45.28% with mean value of  $9.51 \pm 2.18$ . (Table 1)

**Table 1: Mean, SD, and Mean Percentage regarding knowledge and lifestyle practices on cervical cancer among clients with leucorrhoea.**

Overall aspects	Maximum	Mean	SD	Percentage mean score
Knowledge on cancer cervix	174	121.61	7.91	69.89%
Lifestyle practices				
a. Personnel Hygiene	18	6.80	2.17	37.78%
b. General Health Practices	21	9.51	2.18	45.28%

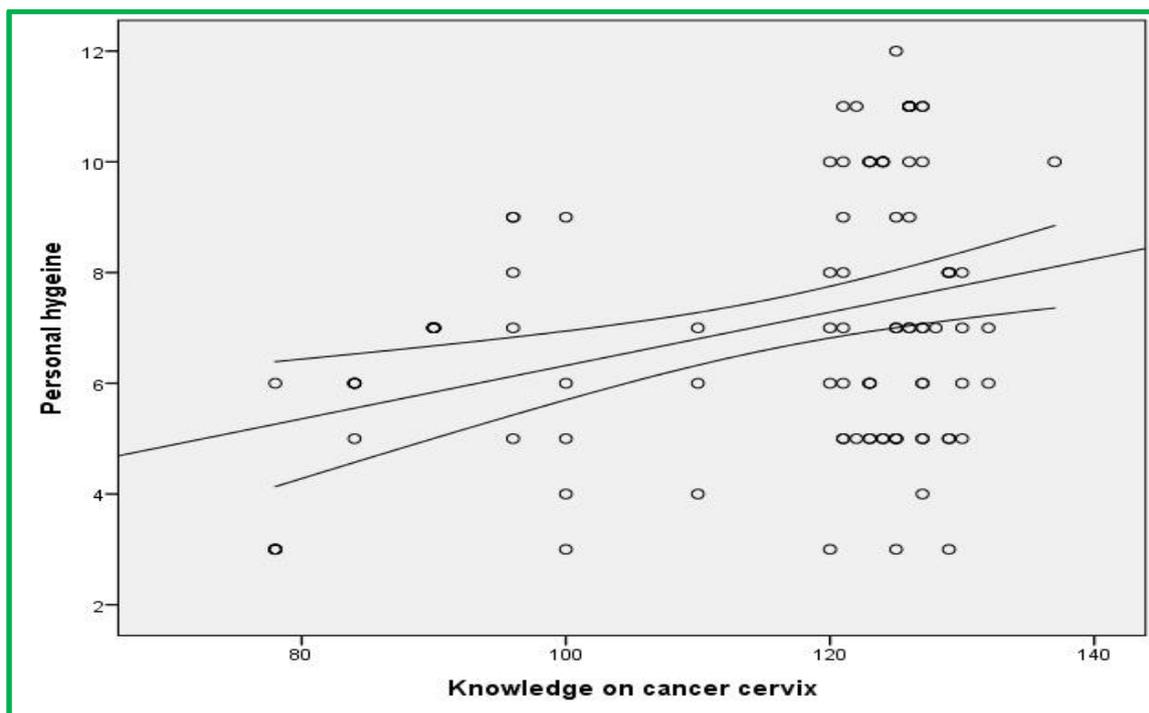
The correlation between knowledge on cancer cervix and General Health practices shown the value  $r = 0.42$  with significant positive moderate correlation of  $p$  value was 0.001. (Figure 1)

Figure 1: Scatter plot with regression estimate shows the positive moderate correlation between the knowledge on cancer cervix and lifestyle practices (General health Practices)



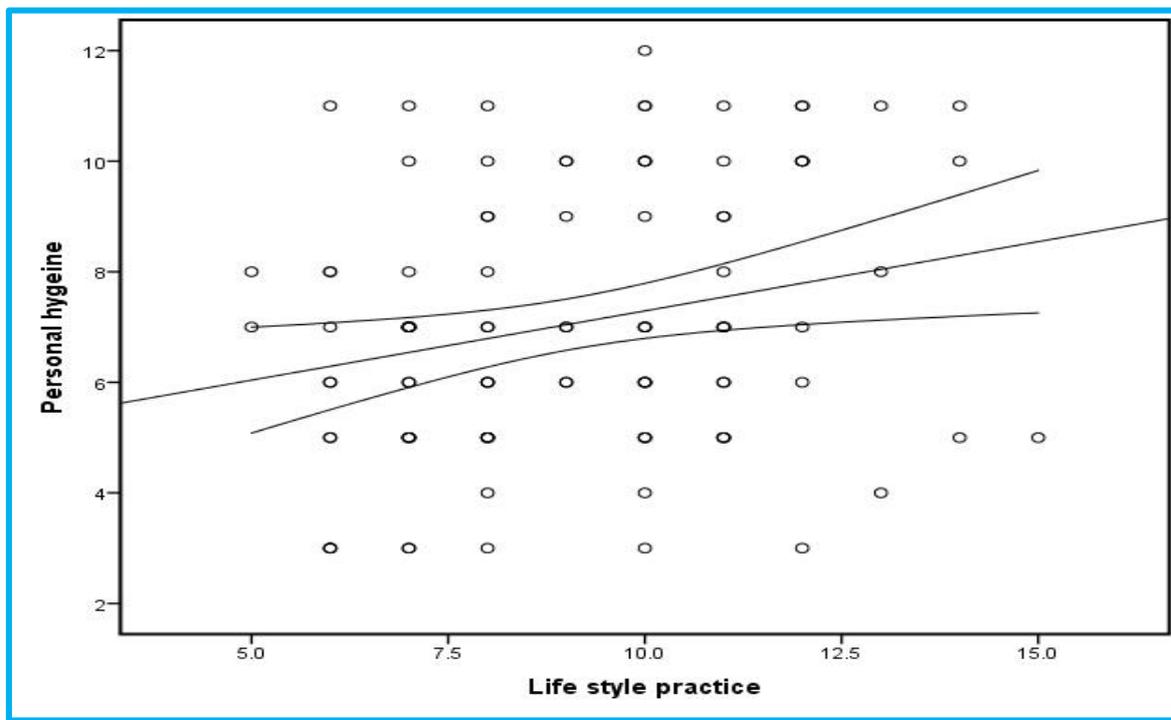
The correlation between knowledge on cancer cervix and personal hygiene practice shown the  $r = 0.38$  with significant positive fair correlation of  $p$  value was 0.001. (Figure 2)

Figure 2: Scatter plot with regression estimate shows the positive fair correlation between the knowledge on cancer cervix and personal hygiene.



The correlation between General Health practices and personal hygiene practices shown that  $r = 0.32$  with significant positive fair correlation of  $p$  value was 0.001. (Figure 3)

**Figure 3: Scatter plot with regression estimate shows the positive fair correlation between the personal hygiene and life style practices (General Health Practices)**



There was a statistically association found between the level of knowledge with selected demographic variables of **age in year** ( $\chi^2=15.06$ ,  $P=0.05$ ,  $DF=6(S)$ ), **Educational status** ( $\chi^2=14.27$ ,  $P=0.05$ ,  $DF=6(S)$ ) and **occupation** ( $\chi^2=12.84$ ,  $P=0.05$ ,  $DF=6(S)$ ). There was a statistically association found between the personal hygiene with selected demographic variables of **monthly income** ( $\chi^2=5.11$ ,  $P=0.05$ ,  $DF=2(S)$ ), **type of family** ( $\chi^2=6.21$ ,  $P=0.05$ ,  $DF=2(S)$ ) and **menstrual cycle** ( $\chi^2=4.60$ ,  $P=0.05$ ,  $DF=2(S)$ ). There was a statistically association found between General Health Practices and demographic variables of **educational status** ( $\chi^2=9.85$ ,  $P=0.05$ ,  $DF=6(S)$ ), **monthly income** ( $\chi^2=4.40$ ,  $P=0.05$ ,  $DF=2(S)$ ) and **Type of family** ( $\chi^2=7.79$ ,  $P=0.05$ ,  $DF=2(S)$ ).

#### 4. DISCUSSION:

A non-experimental correlation study with level II (explorative and explanative) research design was used to select the sample; Total 100 clients with leucorrhoea were selected by non-probability convenience sampling technique. The aim of the study was to correlate the knowledge and lifestyle practices on cancer cervix among clients with leucorrhoea.

##### **The first objective was to assess the knowledge on cancer cervix among the clients with leucorrhoea**

Majority 48% had adequate, 42% had moderate adequate and 10% had inadequate knowledge on cervical cancer.

The supported study was conducted by Renuka P Sonawane et al. (2020) <sup>(7)</sup> shows Majority of women 68% had good, 24% had excellent and 8% had average knowledge of cervical cancer.

##### **The second objective was to identify the lifestyle practices among the clients with leucorrhoea.**

Most 78% had poor, 22% had moderate and none had good level of personal hygiene practices. Most 66% had poor, 34% had moderate and none had good level of general health practices.

The supported study was conducted by M Rahman, et al. (2017) <sup>(8)</sup> shows the cytological patterns included Normal in 1.7%, Inflammatory in 88.3%, Low grade intraepithelial squamous cells in 4.8%, High grade intraepithelial squamous cells in 2.6%, and Atypical squamous cells of undetermined significance in 2.6%. Trichomonas was the pathogen most frequently found (70.62%), followed by Candida albicans (40.66%).

**The third objective was to correlate the knowledge and lifestyle practices on cancer cervix among the clients with leucorrhoea.**

The knowledge on cervical cancer was 69.89% with mean of  $121.61 \pm 7.91$ , the personal hygienic practices was 37.78% with mean of  $6.80 \pm 2.17$  and The lifestyle practices was 45.28% with Mean of  $9.51 \pm 2.18$ . The correlation between knowledge on cancer cervix and General Health practices shown the value  $r = 0.42$  and  $P = 0.001$ . The correlation between knowledge on cancer cervix and personal hygiene practice shown the  $r = 0.38$  and  $p$  value was 0.001. The correlation between General Health practices versus personal hygiene practices shown that  $r = 0.32$   $P = 0.001$ . The client has got knowledge on cervical cancer but they have poor personal hygiene practices and lifestyle practices.

The supported study was conducted by Gloria Phebani et al. (2019) <sup>(9)</sup> shows 1.8% were aware that cervical cancer and the Human Papilloma Virus are related, and 37.5% had ever undergone a cervical cancer screening. 94.6% had heard of cervical cancer. 96.4% could recognise symptoms before they manifested. There is a substantial correlation ( $r=0.306$ ,  $p=0.022$ ) between education level and understanding of cervical cancer risk factors. Age and understanding of self-defense measures against cervical cancer are significantly correlated ( $r=-0.402$ ,  $p=0.002$ ). There is a strong correlation ( $r=0.295$ ,  $p=0.027$ ) between knowledge of risk factors and knowledge of preventative measures for cervical cancer.

**The fourth objective was to find the association between the knowledge with selected demographic variables on Cancer cervix among clients with leucorrhoea.**

There was a statistically association found between the levels of knowledge with selected demographic variables of age in year ( $\chi^2=15.06$ ), Educational status ( $\chi^2=14.27$ ) and occupation ( $\chi^2=12.84$ ) at  $p$  value of 0.05.

The supported study was conducted by Weng et al. (2020) <sup>(10)</sup> shows At a  $p$  value of 0.05, education level, family income, and knowledge of prior disease history were significant influencing factors on screening uptake.

**The fifth objective was to associate the lifestyle practices with selected demographic variables among the clients with leucorrhoea.**

There was a statistically association found between the personal hygiene with selected demographic variables of monthly income ( $\chi^2=5.11$ ), type of family ( $\chi^2=6.21$ ) and menstrual cycle ( $\chi^2=4.60$ ) at  $p$  value of 0.05. There was a statistically association found between General Health Practices and demographic variables of educational status ( $\chi^2=9.85$ ), monthly income ( $\chi^2=4.40$ ) and Type of family ( $\chi^2=7.79$ ) at  $p$  value of 0.05.

The supported study was conducted by Adeyemi A. Okunowo et al., (2018) <sup>(11)</sup> shows Knowing someone with cervical cancer and having had prior counselling from doctors or nurses both significantly boosted knowledge of the disease and Pap smear uptake at a  $p$  value of 0.05.

## 5. CONCLUSION:

The study concluded that every woman has to be adequately informed about and comprehend early cervical alterations. Poor life style practices are caused by a lack of understanding about cervical cancer, poor personal cleanliness habits, and a lack of assessment of general health. A strategy should be developed to inform women and the public about cervical cancer, including information on risk factors, symptoms of the disease, and the availability of screening, in partnership with organizations that are concerned. Because population-based cervical smear screening programs have demonstrated the value of screening in lowering the death rate, they should be established.

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