

**DISSERTATION ON**  
**A COMPARATIVE STUDY TO ASSESS THE**  
**EFFECTIVENESS OF KADUKKAI AND LUKE WARM**  
**WATER WASH ON ABNORMAL VAGINAL DISCHARGE**  
**AMONG REPRODUCTIVE AGE WOMEN RESIDING AT**  
**SAMAYANALLUR, MADURAI.**

**MSC (NURSING) DEGREE EXAMINATION**  
**BRANCH – IV COMMUNITY HEALTH NURSING**  
**COLLEGE OF NURSING**  
**MADURAI MEDICAL COLLEGE, MADURAI**



*A dissertation submitted to*  
**THE TAMILNADU DR. M.G.R. MEDICAL UNIVERSITY,**  
**CHENNAI – 600 032.**

*In partial fulfilment of the requirements for the degree of*  
**MASTER OF SCIENCE IN NURSING**

**APRIL-2012**

## **CERTIFICATE**

This is to certify that this dissertation titled, **A COMPARATIVE STUDY TO ASSESS THE EFFECTIVENESS OF KADUKKAI AND LUKE WARM WATER WASH ON ABNORMAL VAGINAL DISCHARGE AMONG REPRODUCTIVE AGE WOMEN RESIDING AT SAMAYANALLUR, MADURAI.** is a bonafide work done by **Mrs.V.Gomathi Priya**, College of Nursing, Madurai Medical College, Madurai-20 submitted to The Tamilnadu Dr. M.G.R. Medical University, Chennai in partial fulfilment of the university rules and regulations towards the award of the degree of Master of Science in Nursing, Branch-IV, Community Health Nursing under our guidance and supervision during academic period from 2010-2012.

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**A COMPARATIVE STUDY TO ASSESS THE EFFECTIVENESS OF  
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VAGINAL DISCHARGE AMONG REPRODUCTIVE AGE WOMEN  
RESIDING AT SAMAYANALLUR, MADURAI.**

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- *St.M.Euphrasia*

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## **ABSTRACT**

This study is indented to “A comparative study to assess the effectiveness of kadukkai and Luke warm water wash on abnormal vaginal discharge among reproductive age women residing at Samayanallur, Madurai.”

## **INTRODUCTION**

Women are the nucleus of the society. 19 % of total population constitutes, 15-45 years of women in the child bearing age group. The focus now is to provide holistic health care that values women’s participation and cooperation, health care experience, in which the women is the true owner and caretaker of her body. Indian System of Medicine can play a vital role in achieving in objectives of Reproductive Child Health Programme implemented by the Ministry of Health and Family Welfare. Therapies’s suggested by Indian System of Medicine are safe tolerable and with no or minimum side effects women continue to suffer from common reproductive tract infections.

## **OBJECTIVES OF THE STUDY**

1. To assess the abnormal vaginal discharge among reproductive age women.
2. To evaluate the effectiveness of kadukkai water on abnormal vaginal discharge among reproductive age women.
3. To evaluate the effectiveness of lukewarm water on abnormal vaginal discharge
4. To assess the effectiveness of kadukkai and lukewarm water wash of pre and post test of on abnormal vaginal discharge among reproductive age women.
5. To compare the effectiveness of kadukkai water and Luke warm water wash on abnormal vaginal discharge among reproductive age women.
6. To associate the abnormal vaginal discharge among reproductive age women in the experimental group with selected demographic variables.

## **METHODOLOGY**

Research Design is selected for true experimental study design. The Investigator selected approach for this study is quantitative research approach was taken as it is appropriate to accomplish this ability of this study. The conceptual framework of the study was based on modified Wiedenbach's Clinical Nursing theory. This study was made use of the true experimental study design. Systematic random sampling technique was used to select this samples. This study was conducted at Samayanallur, Madurai for both experimental groups, in different street. The tool used for data collection was structure questionnaire. The study was conducted with 30 samples as experimental group for "Kadukkai Water Wash" and 30 samples as lukewarm Water Wash group for a period of four weeks. A pilot study was conducted to find out the feasibility of the study.

## **FINDINGS**

The significant findings was assessed by using split half and test retest method. Correlation coefficient value of reliability is 0.81. The study results are shown that pre and post test assessment level of burning sensation, Vaginal itching, Low back pain is improved which is significant  $\chi^2=46.6$   $P=0.001^{***}$   $DF=3$  significant, hydrogen ion concentration is  $\chi^2=52.5$   $P=0.001^{***}$   $DF=2$  which is significant. Kadukkai water  $t=27.51$ , Significant, Luke warm water  $t=8.84$  post test effectiveness  $t=7.76$ . Significant Mean score effectiveness of kadukkai water is 57.9%, and Luke warm water wash is 31.4% wash. The effectiveness of kadukkai water is 26.5%. is better than the lukewarm water wash.

## **CONCLUSION**

By these interventions, we can provide the relevant information on the subject and clearing up the misconceptions the rural and urban community can understand locally available kadukkai water wash on abnormal vaginal discharge among reproductive age women is the best possible treatment option.



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# CHAPTER - I

## INTRODUCTION

***“To really change things, we need to get down  
To the community level. We can’t do this job in office,  
we have to get out there and touch people to let  
Them, know that they’re important.”***

***Susan R. Cooper.***

Women are the nucleus of the society. 19% of total population constitutes, 15-45 years of women are child bearing age group. The focus now is to provide holistic health care that values women’s participation and cooperation, health care experience, in which the women is the true owner and caretaker of her body. Women’s health has changed from treatment of problem to maintenance of wellness, which promote self-care through education and support. To empower each woman to educate to control over her body and its health by treating her as an informed and independent learner, to respect informed decision about how she will be treated and to encourage the sharing of information from woman to woman. Reproductive health is an important component of general health for women. Reproductive health starts with conception and reproduction.

World wide 600,000 women between the age of 15 and 45 die every year due to complications arising from pregnancy, and child birth. This means almost every minute of every year, there is maternal death. 99% which occur in developing countries majority 80% deaths are preventable. Likewise ¾th women affected with reproductive tract vaginal Infections, and pelvic inflammatory disease. . Mothers constitute a large group, but they are also a “vulnerable” or special-risk-group. The risk is connected with childbearing in the case of women. vaginal discharge is a cloudy secretion from the reproductive tract of the females from both the cervix and the vagina. .vaginal discharge is more like secretion of sweat that varies from various individuals.

In a healthy woman *Lactobacillus* is the only organism found in the upper 2/3<sup>rd</sup> of vagina, but the neighborhood of vulva both saprophytic and parasitic organisms can be demonstrated. Hydrogen ion concentration value of 4-4.5 is normal. It is normal, acidic in nature, which occurs slightly during ovulation and just before the onset of menstruation. It is worse during infection, Hydrogen ion concentration value alters, and woman's resistance is reduced. After values altered, pathogens are introduced. Common infections are Vaginitis, Candidiasis, Bacterial vaginosis, *Trichomonas vaginalis* and others. Other factors also influence infections sexual intercourse, wearing tight panties and heat retaining clothing. Urethritis may also associate with this infection. These infections can cause burning sensation, vaginal itching, fishy odour smell, low back pain. After the causative organism has identified appropriate treatment is needed. This may include oral medication, local medication and vaginal wash. Therapeutic vaginal wash can be reduced unpleasant, abnormal odour, and for reducing excessive discharge. Woman living in remote place with inadequate transport facilities and lack of health services to treat and manage in home care will be effective with help of locally available resources.

Indian System of Medicine can play a vital role in achieving in objectives of Reproductive Child Health Programme implemented by the Ministry of Health and Family Welfare. Therapies suggested by Indian System of Medicine are safe tolerable and with no or minimum side effects women continue to suffer from common reproductive tract infections. Women living in remote place with inadequate transport facilities and lack of health care services to treat and manage in home care will be effective with help of locally available resources which are highly attempt of antibiotic. The locally available resources are Thulasi, Neem, Kadukkai. Hence the health services are for the people who living in remote areas. Use of vaginal wash with kadukkai powder that really can perfectly suit us. Kadukkai is having anti fungal activity against cutaneous Pathogens found that seeds extract of kadukkai showed inhibitory of fats higher than these measured 28 South Indian medicinal plants.

Anti bacterial activity of mylobalan Terminalia chebula role against Helico bacteria pylori. Prophylactic treatment of cytomegalo virus infection with traditional herbs antivirus Living a normal life such as getting enough exercise, having healthy diet and getting enough sleep is a necessity for almost all individuals. These are also considered as the best treatment for severe white discharge. This only means that the natural treatments that we can practice are not that hard for us.

Nurses play a key role in practicing educating women concerning vaginal health and the prevention of vaginal discharge. Identifying high-risk behaviour and providing nonjudgmental, sensitive counseling and education should be part of every physical check-up. Prevention of disease is the key role of the nurse. Behavioural changes all age groups healthy behavior such as, Personal hygiene, menstrual hygiene and safe sex practices is essential. Many programmes are available under which the nurses can make use of in the community to teach leucorrhoea prevention.

#### **NEED FOR STUDY:**

Global observations show that in developed regions maternal mortality ratio averages at 30 per 100,000 live births, in developing regions the figure is 480 for the same number of live births. Maternal mortality rates are high in many developing countries. According to World Health Organization estimates, about 510,000 maternal deaths about 0.9 percent of total deaths occurred globally during the year 2002. Maternal mortality rate in India is 407 per 100,000 live births during the year 2000. In Karnataka estimated maternal mortality rate during the year 1997 is 195 per 100,000 live births. Untreated Reproductive tract infections account for about 15% of maternal mortality worldwide further much of the sickness and deaths among mothers is largely preventable by improving the health of mothers; women contribute to the health of the population.



Despite the admirable effects of industrialization in India, it is unbelievable that maternal mortality rates still remain very high 4 out of every 1000 women Reproductive child health 2009. In the state of Tamil Nadu I Current Maternal mortality rates - 111 in Tamilnadu. Maternal mortality rates 4 per 1,00,000 live births. Madurai District total women population has reached to 15,12,730 out of 2578201 populations. In Government Rajaji hospital, daily 15-20 Leucorrhoea clients are attending Gynaec outpatient department, they are taking treatment for the same.

**Kostick KM et.al (2010) conducted “A study of identifying women at greater risk on Vaginal discharge.vaginal discharge is one of the leading symptoms for which women in India seek care. Data are drawn from two prevention intervention studies, the results are shown ‘pani in Hindi, meaning "white water". These results provided the basis for identifying women at greater risk for psychosocial distress and providing supports at the locations at which they seek treatment.**

**Sharma et.al (2009) conducted A study to assess medicinal plants were investigated to evaluate antibacterial activity of aqueous, ethanol and acetone extracts against 66 multidrug resistant isolates of major vaginal tract pathogens” by disc diffusion method. Ethanol extracts of Terminalia chebula and Tripala exhibited antibacterial activity against Klebsiella pneumoniae. The results support the folkloric use of these plants in the treatment of vaginal tract infections by the tribals of Mahakoshal region of central India.**

Mothers form a ‘vulnerable’ or ‘special risk group’. The risk is connected with child bearing and nurturing. Gender inequalities begin at birth and sometimes even before birth. Therefore it is rightly said that, “Women’s vulnerability has social roots and not just biological ones.”

**Jasmine et-al 2007** at Christian Medical college .Vellore, conducted community based cross sectional study of reproductive tract infection among married women 16-22 years of age Results are shown, Trichomoniasis 13% Vaginal candidiasis.10%,Bacterial vaginosis 18%.

The programme aims at improving the outreach of services primarily for the vulnerable group of population who have been, till now, effectively left out of planning process, e.g., special programme will be taken up for urban slums, tribal population and adolescents. Currently married women age 15-45 years with symptoms of leucorrhoea more. Today, the nurse being an important member of the Health Care team, she has to play a vital role in the community because she has greater access to nursing care as per the needs of women. A nurse can diagnose, treat and educate women regarding vaginal discharge and the women and her family members will value the nurse and treated at an earlier stage leads to avoid serious problems such as infertility, cervical cancer, spontaneous abortion, ectopic pregnancy and later on, death. As prevention is better than cure, the investigator feels that, grateful outcome is underwent in her course of her study period.

During my field visit at Samayanallur Primary health centre Siddha clinic routinely 10 to 20 clients are attending outpatient department for abnormal vaginal discharge. In Samayanallur primary health centre total female 4550, reproductive age group-1480. So, I have selected this topic for my dissertation.

## **STATEMENT OF PROBLEM**

“A comparative study to assess the effectiveness of kadukkai and Luke warm water wash on abnormal vaginal discharge among reproductive age women residing at Samayanallur, Madurai.”

## **OBJECTIVES OF THE STUDY**

1. To assess the abnormal vaginal discharge among reproductive age women.
2. To evaluate the effectiveness of kadukkai water on abnormal vaginal discharge among reproductive age women.
3. To evaluate the effectiveness of Luke warm water on abnormal Vaginal discharge among reproductive age women..
4. To assess the effectiveness of Kadukkai and lukewarm water wash pre and post test of on abnormal vaginal discharge among reproductive age women.
5. To compare the effectiveness of kadukkai water and Luke warm water on abnormal vaginal discharge among reproductive age women.
6. To associate the abnormal vaginal discharge among reproductive age women in the experimental group with selected demographic variables.

## **HYPHOTHESES**

- i. There will be a significant difference in the effectiveness of Kadukkai water on abnormal vaginal discharge among reproductive age women.
- ii. There will be a significant difference in the effectiveness of Luke warm water on abnormal vaginal discharge among reproductive age women.
- iii. There will be a significant association in the effectiveness on abnormal vaginal discharge among reproductive age women in the experimental group with their selected demographic variable.

## **OPERATIONAL DEFINITION**

### **Effectiveness:**

It refers to the outcome of vaginal discharge.

**Kadukkai**

It refers to traditional Indian medicine; It is an age old Indian herb. Haritaki, Chebulic myrobalan & Terminalia chebula are other names. It is found to be anti inflammatory, analgesic, healing capacity, antibacterial and anti fungal, anti leucorrhoeal properties. Kadukkai is in so many forms like seed, mathirai, Legium, and so on, but the researcher has taken as powder form for this study.

**Luke warm water:**

It refers to warm water which is boiled and cooled, and tolerable.

**Abnormal vaginal discharge:**

It refers to excessive white discharge from the vagina. Increased or decreased hydrogen ion concentration value range of 4-4.5.

**Reproductive age group:**

It refers to the women those who are all having age between 15-45 years.

**ASSUMPTION:**

1. Women of reproductive age group may have abnormal vaginal discharge.
2. Abnormal vaginal discharge can be managed by locally available resources of kadukkai powder.

**DELIMITATION**

The study was delimited to

1. The study period is four weeks.
2. The study setting only at Samayanallur.

## **CHAPTER – II**

### **REVIEW OF LITERATURE**

**A Literature Review** is written summary of the state of existing knowledge on research problem. This chapter presents a review of related literature relevant to the study of on abnormal vaginal discharge among reproductive age women. It entitles a systematic identification, selection, location, screening and critical analysis, summary & written description of existing information relevant to the problem under study. **Polit and Hungler, 2003**. An extensive review of literature relevant to the research topic was done to gain insight and to collect maximum information for laying the foundation of the study. The purpose of review of literature is to obtain operation comprehensive knowledge in depth information about the study to assess the effectiveness of Kadukkai and Luke warm Water wash on abnormal vaginal discharge among reproductive age women.

**This chapter has divided in two parts:**

**Part – A    Review of related literature**

**Part - B    Conceptual framework**

#### **Part – A**

#### **REVIEW OF RELATED LITERATURE**

This section related to Literature is divided into three parts which explore the literature and the previous studies of abnormal vaginal discharge among reproductive age group women and Literature related to kadukkai. This Section is divided in to the following headings.

1. Studies related to abnormal vaginal discharge prevalence rates among reproductive age,
2. Studies related to signs and symptoms of abnormal vaginal discharge among reproductive age woman.
3. Studies related to Kadukkai.

## **1. LITERATURE RELATED TO ABNORMAL VAGINAL DISCHARGE PREVALENCE RATES AMONG REPRODUCTIVE AGE.**

**Kostick KM et.al (2010)** conducted “A study of identifying women at greater risk on Vaginal discharge”. Vaginal discharge safed pani in Hindi, meaning "white water" is one of the leading symptoms for which women in India seek care. Data are drawn from two intervention studies on prevention. These results have shown 60% rural women identifying at greater risk for psychosocial distress and providing supports at the locations at which they seek treatment.

**Samuelson J, KM et.al (2009)** conducted “A study to assess the prevalence of rural married women on sexually transmitted infections and two non-sexually transmitted infections.” The studies shows that sample of 2,000 rural, married women were interviewed, to assess six sexually transmitted infections and two non-sexually transmitted infections. The overall prevalence of any infections was 10.9%. 95% Candida infections,. Chlamydia trachomatis was detected in 6.4% of women, Candida albicans in 8.8%, Trichomonas vaginalis in 0.7% and bacterial vaginosis in 15.4%. Health promotion messages regarding safe sexual and healthcare seeking behavior is important.

**Yongjun et.al (2009)** conducted “A study to assess rural married women examined and clinical specimens collected for six Sexually transmitted disease and two non-sexually transmitted Reproductive tract vaginal infections.” 2000 rural, married women were interviewed, examined and

clinical specimens collected. The results show that the overall prevalence of any Sexually transmitted disease was 10.9%. Reproductive tract vaginal infections was 30.8%. Chlamydia trachomatis was detected in 6.4% of women, Neisseria gonorrhoeae in 1.7%, Treponema pallidum in 0.5%, human papilloma virus in 0.6%, herpes simplex virus type-2 in 2.0%, Candida albicans in 8.8%, Trichomoniasis vaginal is in 0.7% and bacterial vaginosis in 15.4%. The prevalence of Chlamydia trachoma is alone and the combined prevalence rates of Neisseria gonorrhoea and Chlamydia trachomatis were high enough (7.9%) to consider interventions for the control of cervical infections. Health promotion messages regarding safe sexual and health care seeking behavior are important.

**APMIS. et.al (2007)** conducted study to assess, “Bacterial Vaginosis is a sexually transmitted infection, postoperative infections and pelvic inflammatory disease.” The results show Bacterial Vaginosis is not a sexually transmitted infection, it is exogenous infection. The reviewed studies do not lend unequivocal support to an endogenous or exogenous transmission of the bacteria present in Bacterial Vaginosis. For women undergoing gynecological surgery such as therapeutic abortion, the relative risk of postoperative infection is clearly elevated approx. 2.3-2.8 A weaker association exists between Bacterial Vaginosis and pelvic inflammatory disease. Thus, studies on the vaginal inflammatory response to microbial colonization should be given priority.

**Williams’s et.al (2007)** conducted “A study to assess morbidity status of Vaginal Discharge”. They stated that vaginal infections are common infectious diseases that can be associated with substantial morbidity and significant expenditures antimicrobial resistance, recurrent vaginal infections in women, diagnosis, treatment of uncomplicated and complicated vaginal infections, prophylaxis, catheter associated bacteriuria, & the chronic pelvic pain syndrome. Vaginal infections management of most complicated

infections depends on clinical experience and resources at individual institutions rather than on evidence based guidelines.

**Thakor et.al, (2007)** conducted a study to “A study to assess the prevalence status on reproductive infections in tribal women”. Vaginal swabs are collected and examined for the presence of *Trichomonas vaginalis* and yeast cells. The results are shown 20% women symptomatic & asymptomatic *Trichomonas vaginalis* 1.9%, candidiasis 13%, bacterial vaginosis 3.1 %. Appropriate treatment was given those are having infections.

**Nicolle et.al (2007)** conducted “A study to assess prevalence of vaginal infections”. They stated that Antimicrobial therapy is seldom indicated for asymptomatic infection, but antimicrobial therapy is usually indicated for amelioration of symptoms. Management of acute uncomplicated vaginal infections is generally straight forward, with a predictable distribution of uropathogens isolated. Factors to be considered in the selection of appropriate antimicrobial therapy include pharmacokinetics, spectrum of activity of the antimicrobial agent, resistance prevalence for the community.

**Morison et.al (2007) conducted** “A cross-sectional community survey to estimate the prevalence of reproductive morbidity on the basis of women”. They concluded 1348 women aged 15-54years, a gynecological examination and laboratory analysis of specimens.. A total of 1157 women consented to gynecological examination and 58% had signs of genital cutting. Women who had undergone surgery had a significantly higher prevalence of bacterial vaginosis adjusted odds ratio =1.66.



## **2. LITERATURE RELATED TO ABNORMAL VAGINAL DISCHARGE AMONG REPRODUCTIVE AGE. WOMEN'S SIGNS AND SYMPTOMS.**

**Kostick et.al., (2010)** conducted study, To assess Vaginal discharge is one of the leading symptoms for which women in India seek care. “The results are shown two prevention intervention studies 2002-2006 and 2007-2012 conducted in economically marginal communities in Mumbai”. These results provide the basis for identifying women at greater risk for psychosocial distress and providing supports at the locations at which they seek treatment.

**Kjetland et.al (2008) conducted** “A cross-sectional study to assess morbidity of stress of vaginal discharge in endemic rural Zimbabwe”.. The results s are shown that Women with genital sandy patches had significantly more genital itch  $P = 0.009$  and perceived their discharge as abnormal  $P = 0.003$ . Eighty percent of he women who had genital itch, yellow discharge, chronic nature of the disease in adults, we suggest to pay special attention to the prevention of morbidity.

**Apmislarsson et.al (2007)** conducted “A Study to assess the bacterial Vaginosis”. Results are shown some data indicate that Bacterial vaginosis is not a sexually transmitted infection in the traditional sense; Bacterial vaginosis is an exogenous infection. This review focuses on whether or not Bacterial vaginosis should be regarded as a sexually transmitted infection its role in post operative infections and pelvic inflammatory disease. The reviewed studies do not lend unequivocal support to an endogenous or exogenous transmission of the bacteria present in Bacterial vaginosis. A weaker association exists between Bacterial vaginosis and pelvic inflammatory disease.

**Vigram Patel et.al, (2007)** conducted “A study to assess risk factors of the complaints of vaginal discharge among rural women.” The results are shown 83% agreed to participation 14.5% complained having vaginal discharge and 6.23% somatoform disorders and the use of intra device 1.86% were independently associated with the complaints. 0.54% are low literacy and age above 40 years were associated with a reduced risk. They concluded that psychosocial factors have the strongest association with the complaints of vaginal discharge syndrome management algorithm need refinement so that women with complaints that are non-infectious in aetiology are offered psychosocial.

**Ermani et.al (2007).**conducted “A study to Integrate, prevent and care of sexually transmitted infections with family planning service , India”. The result of many patients are seeking help from alternative systems of medicines, Since a long time, medicinal plants have been used for the treatment of many infectious diseases without any scientific evidence. In the present review, plants reported to possess activity or used in traditional systems of medicine for prevention and treatment of vaginal infections including herbal formulations for vaginal application, and topical microbicides from herbal origin, have been discussed.

**Bhatti et.al (2007)** conducted “A Study to explore the contextual factors influencing health-seeking behavior of women in Karachi regarding reproductive tract infections”. They stated that 18 women with reproductive tract infections from different clinics and community settings were identified a woman to have lower reproductive tract infection if she complained of malodorous vaginal discharge with or without perineal itching; and to have pelvic inflammatory disease or upper reproductive tract infection if she had any two of the following complaints: malodorous vaginal discharge, menstrual irregularities, lower abdominal pain. The different treatments prescribed to women ranged from oral and intravaginal medications to various home remedies including refraining from specific foods..

### **3. LITERATURE RELATED TO KADUKKAI AND LUKE WARM WATER WASH**

**Amudhavalluvam et.al (2011)** conducted “A study to document the indigenous knowledge and health seeking behavior in south and north Arcot District”. The result suggested that use of variety of plants like kadukkai products are leaves, branches, fruits etc., in different combination to cure various diseases. They concluded that, the kadukkai is effective for menstrual problem and vaginal discharge problem.

**Dr. R. Jayakumararaj et.al (2011)** conducted “A study to assess wound healing medicinal plants for “Malaiyali Tribes”. They concluded medicinal plants used in the treatment of wound “Kadukkai” is used for enhance the process of wound healing. The most frequently used preparations were kadukkai decoctions and powder plant material were invariably used for same properties as on alternative sources.

**Rege et.al (2010)** conducted “A study to assess the anti-inflammatory activity of some Ayurvedic remedies the study shows that Terminalia chebula is used extensively in the preparation of infectious diseases such as chronic ulcer, white discharge.

**Mohd Noor et.al (2010)** conducted on “A study to assess vaginal discharge is in general practice women’s, perceptions belief and behavior. The results shown that 65% women with, without complaints of vaginal discharge, and 20% women with complaints, (14%) women without complaints of vaginal discharge 27%. The result showed 27 herb which kadukkai combinations are used for vaginal discharge.

**Sharma et.al (2009)** conducted study on. “To assess the treatment of vaginal tract infections by the folkloric plants.” They investigated to evaluate antibacterial activity of extracts against 66 multidrug resistant isolates of major vaginal tract pathogens by disc diffusion method. Ethanol extract of *Zingiber officinale* and *Punica granatum* showed strong antibacterial activity against *Escherichia coli*. Ethanol extracts of *Terminalia chebula* and *Ocimum sanctum* exhibited antibacterial activity against *Klebsiella pneumoniae*. Ethanol extract of *Cinnamomum cassia* showed maximum antibacterial activity against *Pseudomonas aeruginosa* while ethanol extract of *Azadirachta indica* and *Ocimum sanctum* exhibited antibacterial activity against *Enterococcus faecalis*.

**Karunyal et.al (2008)** conducted study on “Traditional medicinal plant wealth of pachalur and peiyar hamelets of Dindugal District.” They stated that 65% of the Indian populations depends on the traditional medical systems for their primary health care. Most of the tribal people of the study area use medicinal plants for various ailments and for primary health care. The study reveals that the tribal people still depend on the large number medical plants for the daily medicinal requirements. They identified *Terminalia chebula* Kadukkai is the treatment for abnormal vaginal discharge.

**Dehne et al (2007)** conducted study “Integration of prevention and care of vaginal infections with family planning services” Many patients of are seeking help from alternative systems of medicines such as Unani, Chinese, Ayurvedic, naturopathy, and homeopathy. Since a long time, medicinal plants have been used for the treatment of many infectious diseases without any scientific evidence. At present there is more emphasis on determining the scientific evidence and rationalization of the use of these preparations. In the present review, plants reported to possess activity or used in traditional systems of medicine for prevention and treatment of vaginal infections including herbal formulations for vaginal application, and topical microbicides from herbal origin.

**Jasmin Helen et.al (2007)** conducted “A study to assess prevalence of reproductive tract infections among young married women. The results are shown among 240 women 45% had reproductive tract infections according to lab findings 85 women reported burning pain 31 women urinary tract infection. 11 of them 13% had bacterial growth indicative of infection. Bacterial Vaginosis 18% Vaginal candidiasis 10% trichomoniasis 13%.

**Judith et.al (2007)** conducted “A study to assess bio-medical behavioral and social factors influence reproductive tract infection. The study concluded early diagnosis and accurate therapy needed for women’s good health fertility, productivity and effectiveness of Family Planning programmes. Public Health Planners can address these treatable symptoms through research and services in socially acceptable settings.

**La Ruche et.al (2007)** conducted study “To assess the widespread practice of douching pregnant women.” The results are shown that the harmful effects of antiseptics need to be substantiated, among 552 women included, douching before consultation was reported by 97% and was common practice for 98%. Intravaginal urealyticum infection was associated with douching and with the use of intravaginal agents. Diagnosis of genital infections was independent of douching with water or soap, but chlamydial infection was associated with douching with antiseptics, used by 14% of the women  $p = 0.036$ . Human Immuno Virus infection was two times more frequent in women using antiseptics  $p = 0.17$ .

## **PART - II:**

### **CONCEPTUAL FRAME WORK:**

A conceptual frame work or model is defined a set of concepts and the preposition that integrate them into a meaningful configuration conceptual frame situations and events of particular interest to a discipline in this instance of nursing. **Hye & Berndu, 1987.**

The present study aims to deliver health care, the investigator's guidelines to proceed in attaining the objectives of the study on abnormal vaginal discharge among reproductive age women.

The conceptual frame work for this study is based on Wiedenbach's clinical nursing model. Health promotion is directed at increasing a client level of well being. **Pender.1996.**

**Wiedenbach's 1987 model** focuses on the following three areas consist of 3 steps.

- a) Identifying the client needs for help
- b) Ministering the need for help
- c) Validating that the need for help was met.

It is a schematic representation of the steps, activities, and outcome of the study.. In this model the patient is an individual under treatment are who experience needs. Need for help is defined as "measures or actions are required and derived which potentially restore are external ability to cope with situational demands."

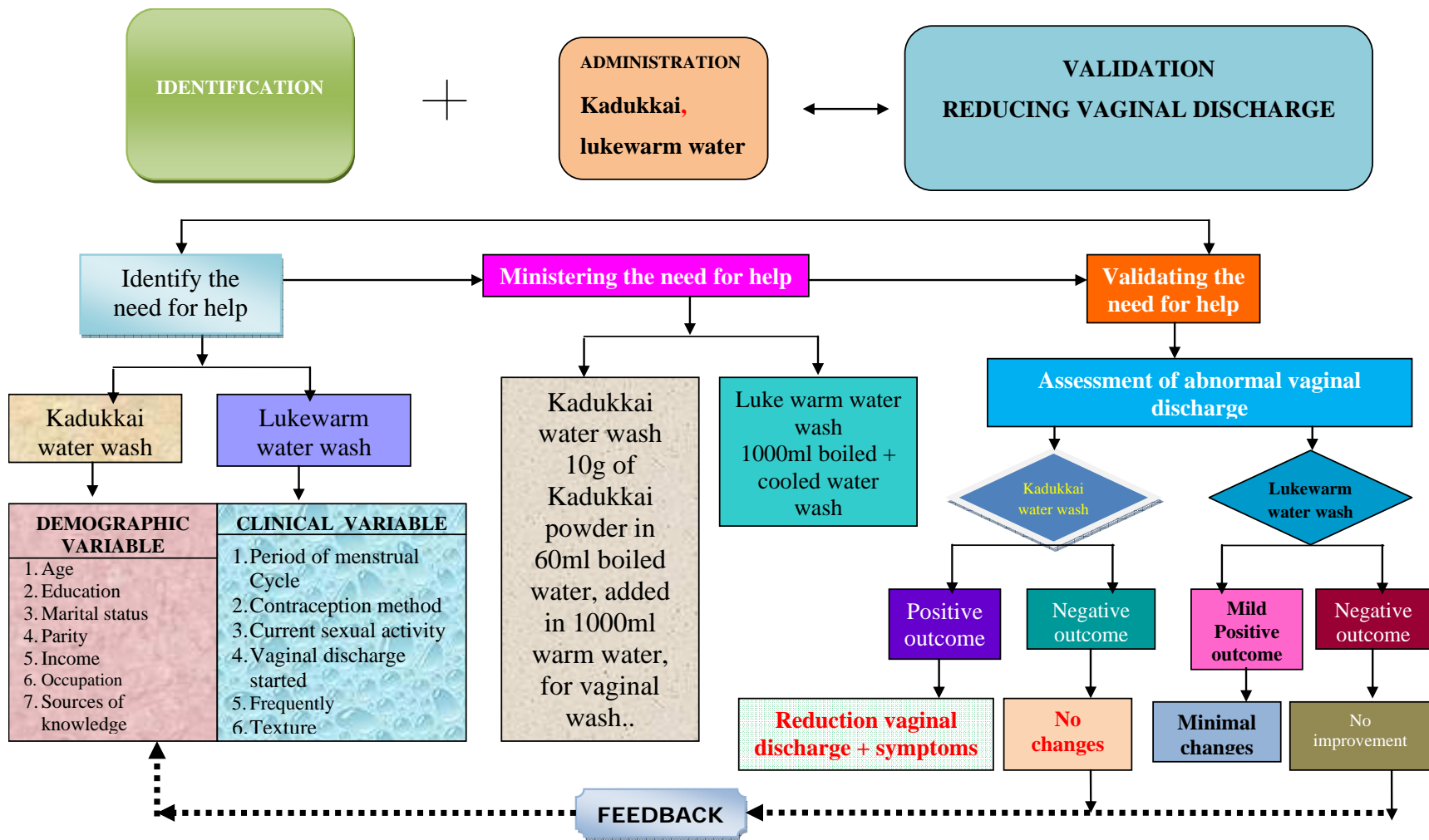
The art of clinical nursing theory contains several parts of awareness services, perception, assumption, realization, insight, design and decision. As the investigator aimed that assessing the effectiveness of kadukkai as a home management measure of abnormal vaginal discharge to improve the reproductive health status.

The Wiedenbach's helping art of clinical nursing model was found suitable. The identification of client need for help done by structure questionnaire, on abnormal vaginal discharge, severity of infection for both experimental group.

Ministering the need for help done by the kadukkai powder 10mg is mixed with 60ml boiled water and it is mixed with 1000ml of warm water and other group has given tolerable warm water 1 litre for perineal wash, as placebo.

Validation of this study shows that there is a considerable control in abnormal vaginal discharge among the experimental group. This shows that the help of kadukkai powder control the abnormal vaginal discharge and this can be managed by home itself. This lead to optimum health of reproductive among women. This results in the formulation of healthy society.

A Positive outcome represents, an optimum reproductive health of reproductive age group women in selected community area and maintain the positive reproductive health, positive feedback continues, in case of negative outcome which represents a poor reproductive health. The community health nurse understand activity such as health education, health care, mass education, complimentary and supplementary in public health centre and reproductive component, population based care, mobilizing community resources, women empowerment, that would finally result in positive outcome.



**MODIFIED WIEDEN BACK'S CONCEPTUAL FRAMEWORK CLINICAL NURSING THEORY**



## **CHAPTER-III**

### **METHODOLOGY**

The methodology of research indicates the general patterns of organizing the procedure of authorizing valid and reliable data for the problem under investigations KOTHARI, 1996. The third chapter includes methodology definition description of research approach, research design, setting of the study sample, population sample, sample size sampling technique, criteria for sampling technique which includes inclusion criteria and exclusion criteria, variables are include independent variable dependent variable attributed variable development of the instrument and description of the tool part-1, part-II, part – III scoring procedure, testing of the tool which includes validity reliability content validity and ethical committee approval pilot study, data collection procedure, plan for data analysis and statistical method. “A comparative study to assess the effectiveness of kadukkai and Luke warm water wash on abnormal vaginal discharge among reproductive age women residing at Samayanallur, Madurai.”

### **RESEARCH APPROACH**

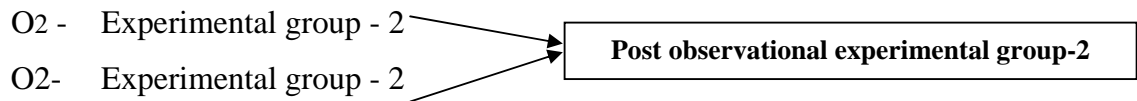
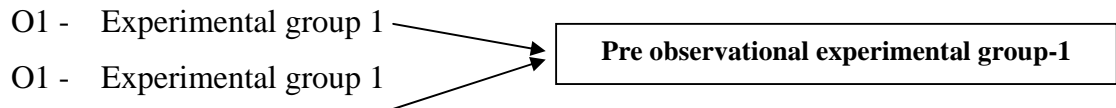
The Investigator selected approach used for this study is quantitative research approach was taken as it is appropriate to accomplish this ability of this study.

### **RESEARCH DESIGN**

Research Design is selected for **true experimental study design.**

R O1 - X1 O<sub>2</sub> Group-1

R O1 - X2 O<sub>2</sub> Group-2



X1 - Kadukkai water.

X2 – Luke water

## **SETTING OF THE STUDY**

The study conducted in rural Samayanallur area, which comes under north zone of Madurai Corporation and is very near to Samayanallur Primary Health Centre. It has got 4 wards. There are 20 streets. Among the 20 streets 4 streets are adopted by the department of community health nursing to provide preventive and curative care to the populations. Among these 4 streets, 2 streets have been selected to conduct present study. Pudhu Street and Chekkadi Street have a reproductive age women.

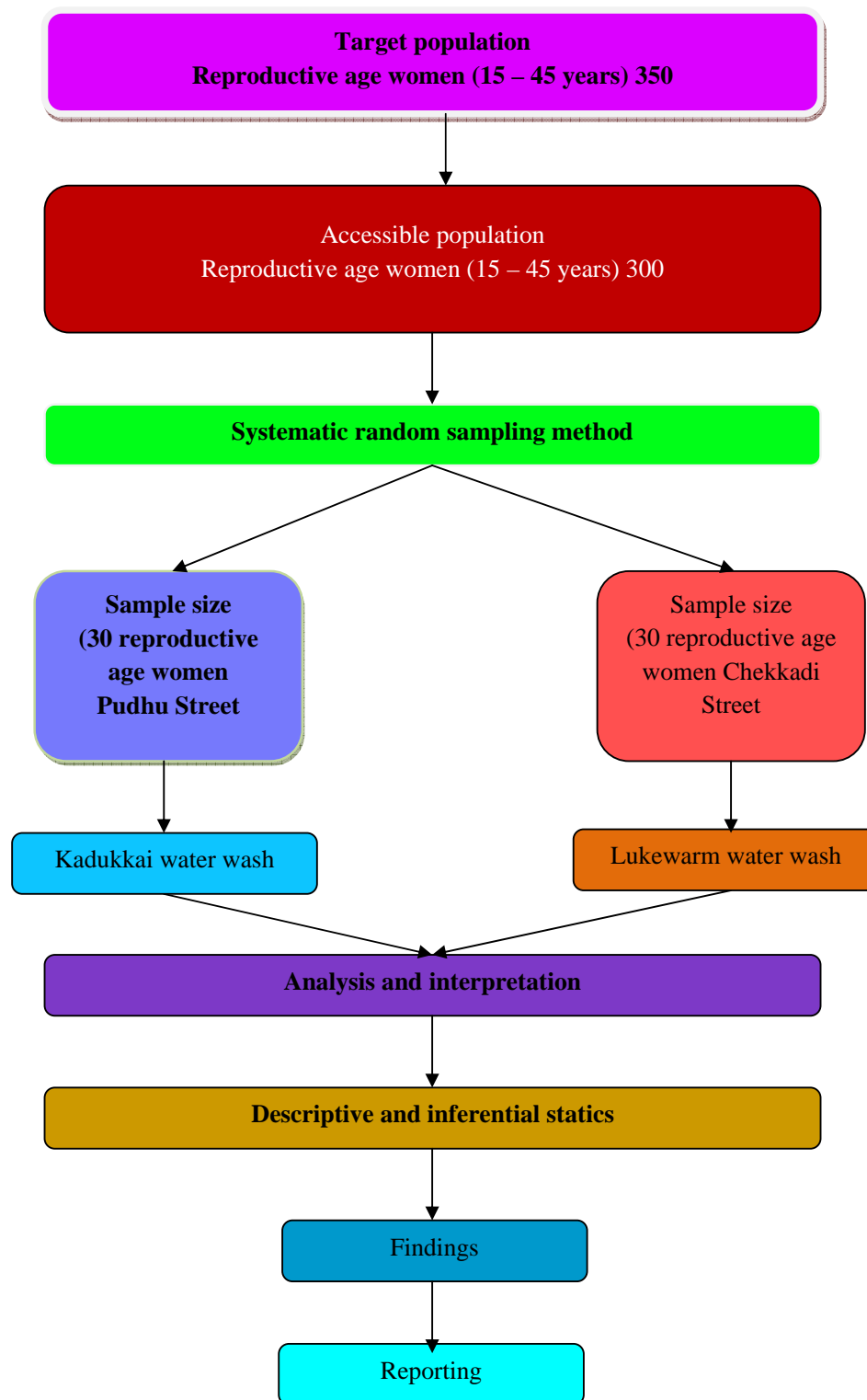
## **POPULATION**

The target population of this present study comprised of 350 reproductive age women. The accessible population for the present study is reproductive age women 300 between the age of 15-45 years who have abnormal vaginal discharge residing at Samayanallur. The total population of Samayanallur village 11, 34,025 in Madurai.

## **SAMPLE**

The sample for the present study comprised of abnormal vaginal discharge among reproductive age women, residing at Samayanallur and who is having abnormal vaginal discharge and who have met inclusion criteria.

**FIGURE-II SCHEMATIC REPRESENTATION OF RESEARCH DESIGN**



## **SAMPLE SIZE**

Sample size of the present study is 60 reproductive age women 30 women from Pudhu Street, Samayanallur village 30 women from Chekkadi Street, Samayanallur Village, Madurai.

## **SAMPLING TECHNIQUE:**

The sample consisted of total number of 60 subjects, reproductive age women 30 subjects from Pudu Street, Samayanallur Village and same 30 from Chekkadi Street, Samayanallur Village. Who satisfy the inclusion criteria. Pudu Street, Samayanallur Village consists of 4 sub-streets, and Chekkadi Street also consists of 3 sub-streets and one cross street. Systematic random Sampling was taken. The Investigator conducted survey in Samayanallur 300 reproductive age women were identified. The sample interval was calculated by using the formula. In Pudu Street, 160 reproductive age women were identified in Samayanallur Village. In Chekkadi Street 140 reproductive age women were identified in Samayanallur Village.

$$K=N/n$$

Where N= total Number of sample available

Where n=total number of total sample size

$$K= 160/30=5.3$$

So every 5<sup>th</sup> reproductive age women was selected as the sample.

The same size of each street was given below.

1. Pudu street -1 sub-street – 8 subjects
2. Pudu street -2n sub-street – 7 subjects
3. Pudu street -3rd sub-street – 6 subjects
4. Pudu street -4th sub-street – 9 subjects

In Chekkadi Street, 140 reproductive age women was identified in Samayanallur Village

$$K=N/n$$

Where N= total Number of sample available

Where n=total number of total sample size

$$K= 140/30=4.6$$

So every 4<sup>th</sup> reproductive age women was selected as the sample.

The same size of each street was given below.

1. Chekkadi street -1 sub-street – 7 subjects
2. Chekkadi street -2n sub-street – 8 subjects
3. Chekkadi street -3rd sub-street –7 subjects
4. Chekkadi street -Cross-street – 8subjects

## **CRITERIA FOR SAMPLE SELECTION**

### **INCLUSION CRITERIA:**

- Reproductive age group 15-45 years, women who is having abnormal vaginal discharge for more than 1 week, who are residing at Samayanallur Village
- Women who is willing to participate
- Women who can speak and understand Tamil Language.

### **EXCLUSION CRITERIA**

- Women with menstruation during the period of data collection.
- Pregnant women
- Post menopausal women
- Lactating mother
- Women on treatment for abnormal vaginal discharge during data collection
- Woman who has attended the pilot study is not included.

## **VARIABLES**

Variables are characters which has more than one value. The present study consist of three categories has discussed.

### **Independent variable:**

- Kadukkai water, Luke warm water.

### **Dependent variables:**

Abnormal vaginal discharge among reproductive age women associated with burning sensation in vagina, vaginal itching, fishy odour smell, low back pain, alteration in hydrogen ion concentration value by fast indicator stick.

### **Attributed variables:**

Age, Educational status, Marital Status, Parity, Occupation, Income, Sources of Knowledge, Menstrual Cycle, Contraception method, Current sexual activity, vaginal discharge comments, Consistency, Texture, Nature, Factors aggravate, washing status.

## **DEVELOPMENT OF THE TOOL**

A structure interview schedule was developed based on the objectives of the study, through review of literature on related studies, journals and book, opinion from experts. All these helped in the ultimate development of the tool.

## **DESCRIPTION OF THE INSTRUMENT**

The instrument used in the study consists of three parts which are as follows:-

- Part-1 Demographic Variables:- Age, Educational status, Marital Status, Parity, Occupation, Income, Sources of Knowledge with multiple choice questionnaire.

- Part –II Clinical variables: Menstrual cycle, Contraception method, Current sexual activity, vaginal discharge comments, Consistency, Texture, Nature, Factors aggravate, washing status.
- Part –III It consist of multiple choice questions which was prepared for assessment of vaginal discharge burning sensation, vaginal itching, fishy odour smell, low back pain, Hydrogen ion concentration Value

## SCORE INTERPRETATION

The Score helps to assess the effectiveness of “Kadukkai” water and Luke warm Water wash on abnormal vaginal discharge among reproductive age women. The subjects of the sample based on the distribution of items and the researcher gave the score which helps to assess the severity of the sample.

## SCORE INTERPRETATION

**TABLE -I**

| S.NO | QUESTION  | NO | MILD | MODERATE | SEVERE |
|------|---|----|------|----------|--------|
|      |   | 1  | 2    | 3        | 4      |
| 1.   | Do you feel burning sensation during vaginal discharge?         | 1  | 2    | 3        | 4      |
| 2.   | Do you have vaginal itching?                                    | 1  | 2    | 3        | 4      |
| 3.   | Do you have fishy odour smell in vaginal discharge?             | 1  | 2    | 3        | 4      |
| 4.   | Do you have low back pain vaginal discharge?                    | 1  | 2    | 3        | 4      |
| 5.   | Assess Hydrogen ion concentration value by fast indicator stick | 1  | 2    | 3        | 4      |

## **SCORING OF EACH STATEMENT**

| <b>RESPONSE</b> | <b>SCORE</b> |
|-----------------|--------------|
| A               | 1            |
| B               | 2            |
| C               | 3            |
| D               | 4            |

## **SCORING**

|          |   |          |
|----------|---|----------|
| 0 – 5    | - | Normal   |
| 5.1 – 10 | - | Mild     |
| 10.1-15  | - | Moderate |
| 15.1-20  | - | Severe   |

## **CONTENT VALIDITY**

In order to measure the content validity, the tool was given to two experts from the Community Health Nursing Department. Experts were requested to judge the items for their clarity, relevance, Comprehensiveness and appropriate of the content. Appropriate modifications were made in each part as per the suggestions given by the experts. When the items with 100% agreements were included in the interview schedule which is assessing the effectiveness of “Kadukkai” water and Luke warm water wash on abnormal vaginal discharge among reproductive age women.

## **RELIABILITY**

Reliability is the degree of consistency that the instrument of the procedure demonstrates whatever is measuring it does so consistently. After the pilot study reliability of the tool was assessed by using split of method. Calculated co-relation, co-efficient “r” value is 0.82. This co-relation, co-efficient is very high and it is excellent tool for “Assessing effectiveness of Kadukkai Water wash and Luke Warm water wash on abnormal vaginal discharge among reproductive age women. The tool was feasible and practicable.



## **ETHICAL COMMITTEE APPROVAL**

The researcher got the approval from the ethical committee on 09.05.2011 by viewing the presentation; the committee has given approval to the researcher to continue the main study with approval of Siddha medical officer.

## **PILOT STUDY**

Pilot study was conducted on 11-07-2011 at Paravai Village. 10 reproductive women were selected based on inclusion criteria. That subject was not taken for main study. The structured interview and the intervention with 'Kadukkai' and Luke warm water wash were administered. The investigator found that the instrument was feasible to use and no further modifications were needed before actual implementation of the study. In my pilot study kadukkai water wash subjects 75.3%, for lukewarm water 49%.Subjects were reduced abnormal vaginal discharge associated symptoms.

## **DATA COLLECTION PROCEDURE:-**

The data collection and the intervention was done for a period of 4 weeks from 01.09.2011 to 30.09.2011. The data was collected on all the days in morning and evening including Sundays. The investigator got permission from the Deputy Director of Health Services from Visvanathapuram, Madurai, and Primary Health Centre Block Medical Officer from Samayanallur. Subsequently the investigator visited 5 to 6 women per day and the subjects were selected based on the inclusion criteria. Data collection was done according to the convenience and flexible timings of the subjects. The investigator demonstrated preparation of kadukkai water. 10g of kadukkai

powder was added in 60 ml boiled water and was mixed with 1000 ml of warm water. For other group tolerable warm water for washing was taken. The researcher explained the anatomical picture of reproductive tract of Vagina and showed the technique of deep vaginal washing, and the researcher had given washing at morning and evening for 10 days. The investigator had spent approximately totally 40 to 45 minutes for morning and evening with one subject to complete the intervention. Following these procedure the subjects are assessed for effectiveness after 10 days of intervention for both group and confirmed with ph.value fast indicator stick. The women were very co-operative during the whole procedure.

### **PLAN FOR DATA ANALYSIS**

Data analysis enables the researcher to reduce, summarize, organize, evaluate, interpret and communicate numerical information to obtain answer to research questions. Analysis and interpretations was done based on objective of the study. The data were analyzed using descriptive statistics like frequency percentage, inferential statistics like chi-square test and Pearson co-relation, co-efficient, student independent test, student dependent test. The significance findings were expressed in the form of table.

## **CHAPTER – IV**

### **DATA ANALYSIS AND INTERPRETATION**

Analysis is a process of organizing synthesizing data in such a way that a research questions can be answered and hypothesis tested. *Polit and Hungler 1999*. This Chapter deals with analysis and interpretation of data collected and thereby to compare the effectiveness ‘Kadukkai’ and Luke Warm Water Wash on abnormal vaginal discharge among reproductive age Women, residing at Samayanallur Village and to determine the relationship with selected demographic variables. Analysis is the appraisal of the data and interpretation of the data consist of relationship between findings of the study to the research problem and theoretical frame work for the study. An important of the process of interpretation is to link the findings of the study to the main stream of scientific knowledge in the field. The Data collected from 60 reproductive age women, 30 subjects from Samayanallur Village, Pudu Street, and 30 subjects from Chekkadi Street.

#### **PRESENTATION OF THE DATA**

The study findings of the samples are presented in the following sections.

Section – I Description of the demographic variables and clinical variables on abnormal vaginal discharge among reproductive age women.

Section - II Assess the abnormal vaginal discharge among reproductive age women.

Section - III Evaluates the effectiveness of kadukkai water on abnormal vaginal discharge among reproductive age women.

Section – IV Evaluate the effectiveness of lukewarm water on abnormal vaginal discharge among reproductive age women.

Section – V Assess the effectiveness of kadukkai and Lukewarm water wash of pre and post test on abnormal vaginal discharge among reproductive age women.

Section –VI Compare the effectiveness of kadukkai water and Luke warm water on abnormal vaginal discharge among reproductive age women.

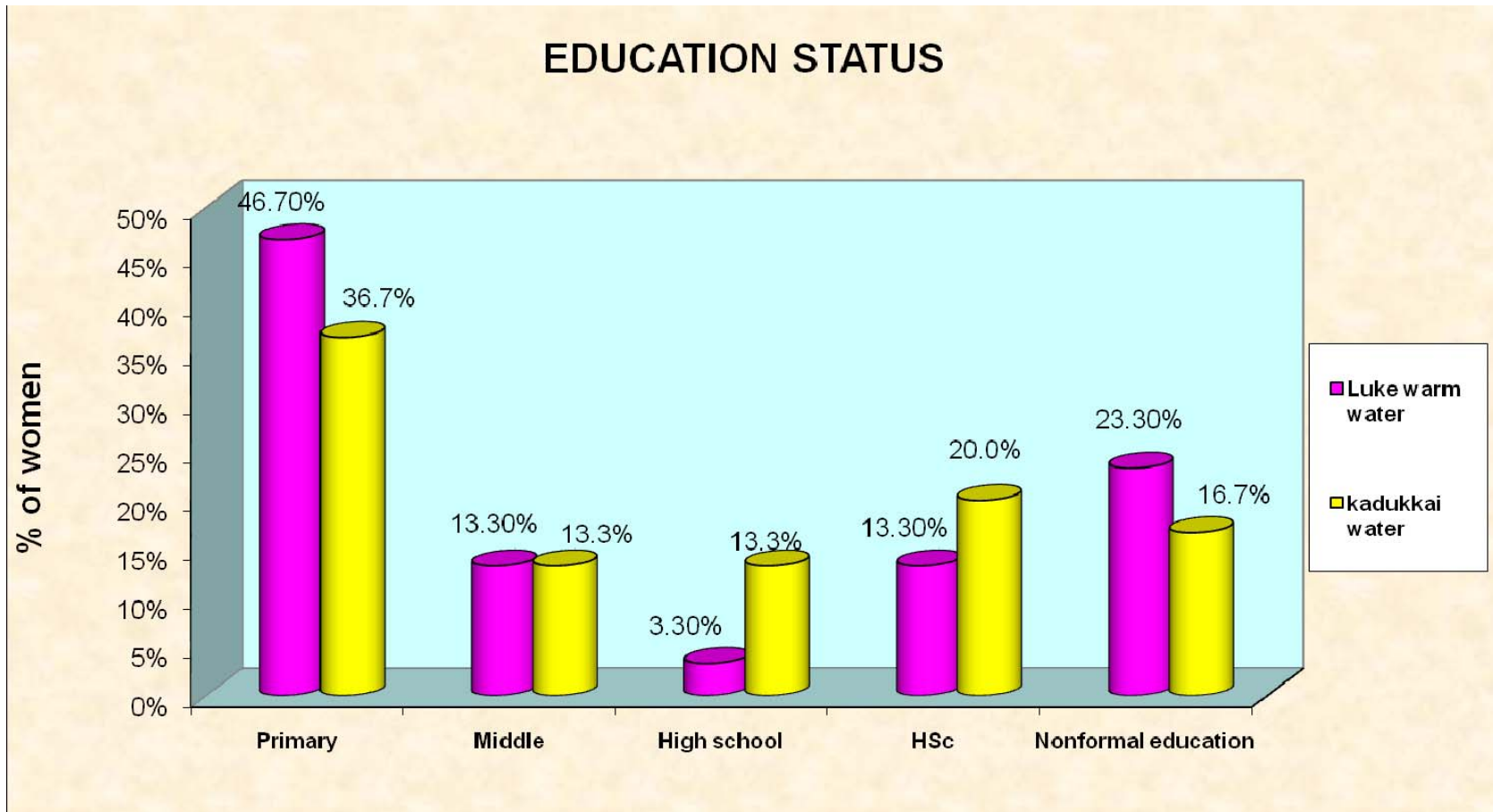
Section –VII Associate the abnormal vaginal discharge among reproductive age women in the experimental group with selected demographic variables

**SECTION-I: TABLE-2**  
**DESCRIPTION OF THE DEMOGRAPHIC VARIABLES ON**  
**ABNORMAL VAGINAL DISCHARGE AMONG**  
**REPRODUCTIVE AGE WOMEN.**

| DEMOGRAPHIC VARIABLES |                        | GROUP                     |       |                            |       |
|-----------------------|------------------------|---------------------------|-------|----------------------------|-------|
|                       |                        | KADUKKAI WATER WASH GROUP |       | LUKE WARM WATER WASH GROUP |       |
|                       |                        | N                         | %     | N                          | %     |
| Age group             | 15 -25 yrs             | 11                        | 36.7% | 11                         | 36.7% |
|                       | 25 -35 yrs             | 8                         | 26.7% | 9                          | 30.0% |
|                       | 35 -45 yrs             | 11                        | 36.7% | 10                         | 33.3% |
| Parity                | One                    | 3                         | 10.0% | 4                          | 13.3% |
|                       | Two                    | 14                        | 46.7% | 18                         | 60.0% |
|                       | >Two                   | 10                        | 33.3% | 4                          | 13.3% |
|                       | None                   | 3                         | 10.0% | 4                          | 13.3% |
| Occupation            | Home maker             | 20                        | 66.7% | 18                         | 60.0% |
|                       | Professional           | 3                         | 10.0% | 6                          | 20.0% |
|                       | Self help group member | 7                         | 23.3% | 6                          | 20.0% |
| Monthly income        | Rs. 1001 -3000         | 5                         | 16.7% | 6                          | 20.0% |
|                       | Rs. 3001 -6000         | 19                        | 63.3% | 20                         | 66.7% |
|                       | >Rs. 6000              | 6                         | 20.0% | 4                          | 13.3% |
| Source of knowledge   | Parents                | 8                         | 26.7% | 11                         | 36.7% |
|                       | Friends                | 9                         | 30.0% | 6                          | 20.0% |
|                       | Health care provider   | 10                        | 33.3% | 10                         | 33.3% |
|                       | Media                  | 3                         | 10.0% | 3                          | 10.0% |

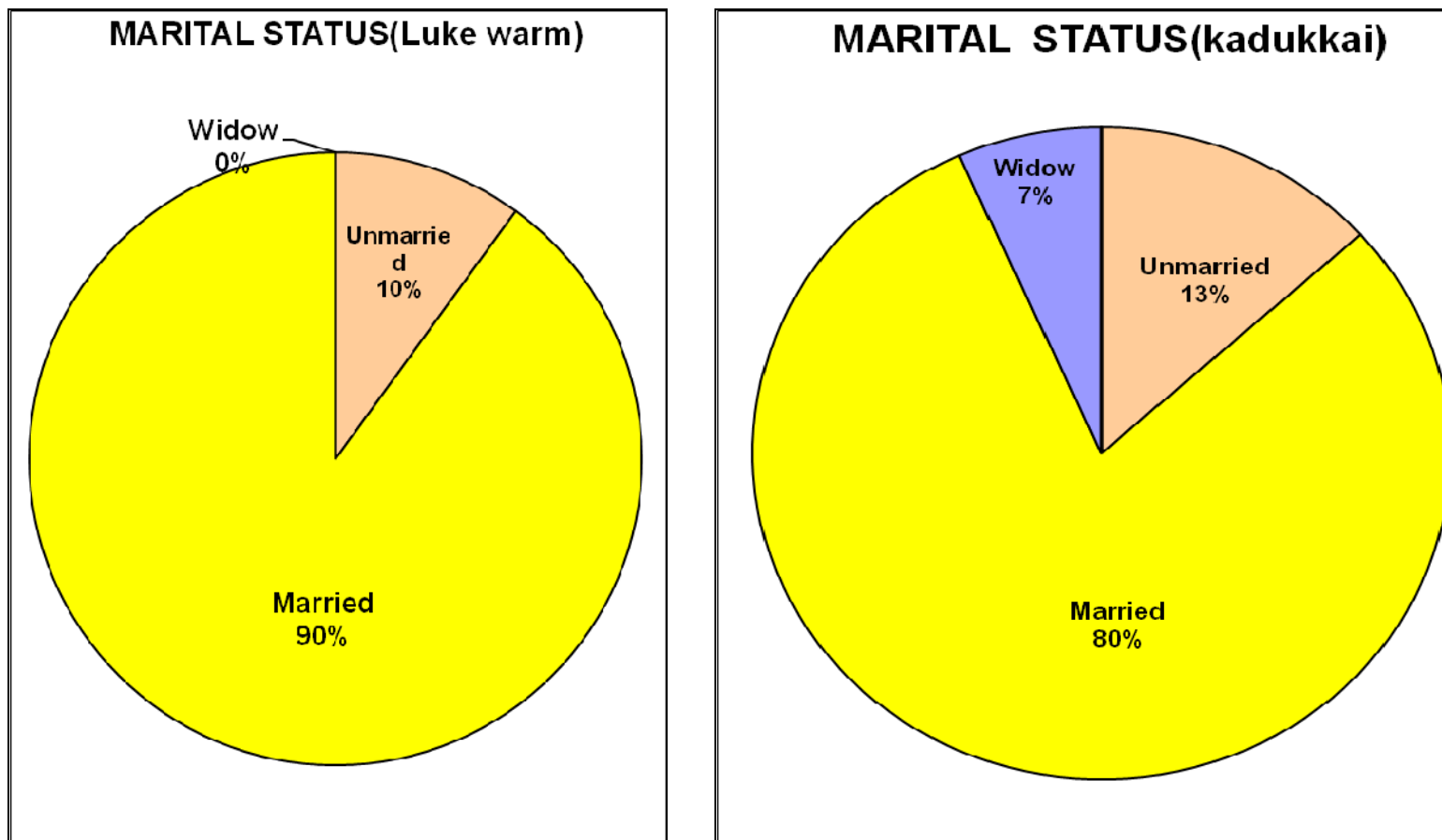
The above table revealed that higher percentage of reproductive age women both kadukkai water wash group and lukewarm water was group 36.7%, 36.7% belongs to age 15-25 years.

**FIGURE-III**



The above figure revealed that maximum percentage of reproductive age Educational status for both kadukkai water wash group and lukewarm water was group 46.7% and 36.7% belongs to primary education.

**FIGURE-IV**



The above figure revealed that Marital status both kadukkai water wash group and lukewarm water was group maximum percentage 90.0% and 80.0% belongs to Married women.

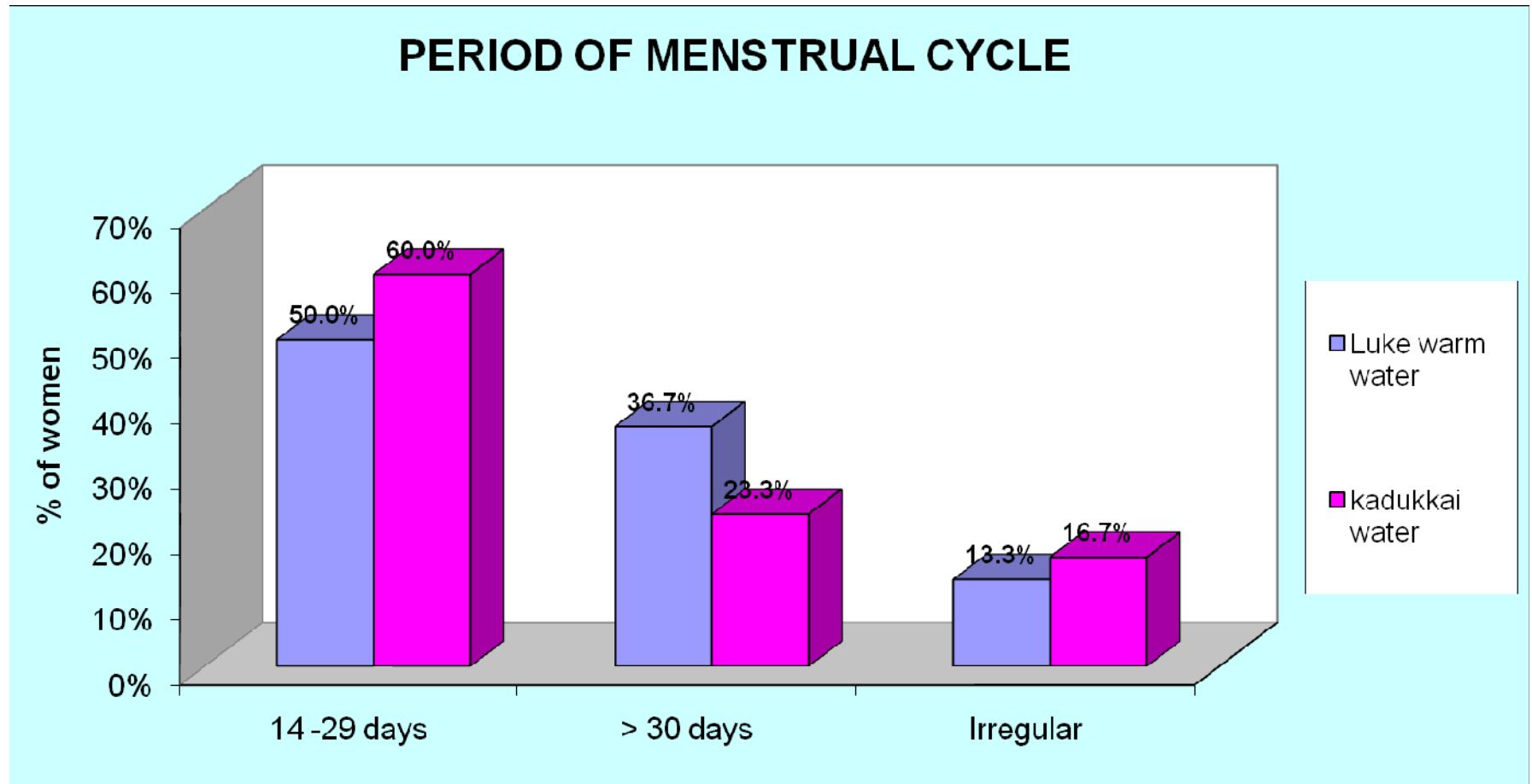
**TABLE - 3**  
**DESCRIPTION OF THE CLINICAL PROFILE**

| CLINICAL PROFILE                                       |                      | Group                     |        |                           |        |
|--|----------------------|---------------------------|--------|---------------------------|--------|
|  |                      | kadukkai water wash group |        | Luke warm water was group |        |
|  |                      | N                         | %      | N                         | %      |
| Contraception method adopted                           | Temporary method     | 9                         | 30.0%  | 11                        | 36.7%  |
|  | Permanent method     | 15                        | 50.0%  | 11                        | 36.7%  |
|  | Not using any method | 6                         | 20.0%  | 8                         | 26.7%  |
| Current sexual activity                                | Weekly               | 14                        | 46.7%  | 18                        | 60.0%  |
|  | Occasional           | 11                        | 36.7%  | 6                         | 20.0%  |
|  | No sexual activity   | 5                         | 16.7%  | 6                         | 20.0%  |
| Vaginal discharge commenced since                      | >7 days              | 30                        | 100.0% | 30                        | 100.0% |
| Frequency of vaginal discharge present?                | Every day present    | 4                         | 13.3%  | 3                         | 10.0%  |
|  | On& off              | 26                        | 86.7%  | 27                        | 90.0%  |
| Nature of vaginal discharge                            | Wet & Stains         | 9                         | 30.0%  | 15                        | 50.0%  |
|  | Stains               | 15                        | 50.0%  | 11                        | 36.7%  |
|  | Wets                 | 6                         | 20.0%  | 4                         | 13.3%  |
| Factors aggravate vaginal discharge                    | Ovulation            | 7                         | 23.3%  | 8                         | 26.7%  |
|  | Sexual activity      | 10                        | 33.3%  | 16                        | 53.3%  |
|  | Menstrual period     | 13                        | 43.3%  | 6                         | 20.0%  |
| During vaginal discharge what did you do for that?     | Nothing doing        | 14                        | 46.7%  | 18                        | 60.0%  |
|  | Cold water           | 16                        | 53.3%  | 12                        | 40.0%  |
| During abnormal vaginal discharge, what you will wear? | Not using anything   | 23                        | 76.7%  | 24                        | 80.0%  |
|  | Cloth                | 3                         | 10.0%  | 2                         | 6.7%   |
|  | Panti                | 4                         | 13.3%  | 4                         | 13.3%  |

The above table revealed that maximum percentage of both kadukkai water wash group and lukewarm water wash group Contraception method, maximum percentage for both experimental group 50.0% and 36.7% belongs to permanent method. Current sexual activity maximum percentage for both kadukkai water wash group and lukewarm water was group 46.7% and 60.0% belongs to weakly. Kadukkai water wash group and lukewarm water was group maximum percentage 76,7% ,80.0%. Not wearing anything during discharge.

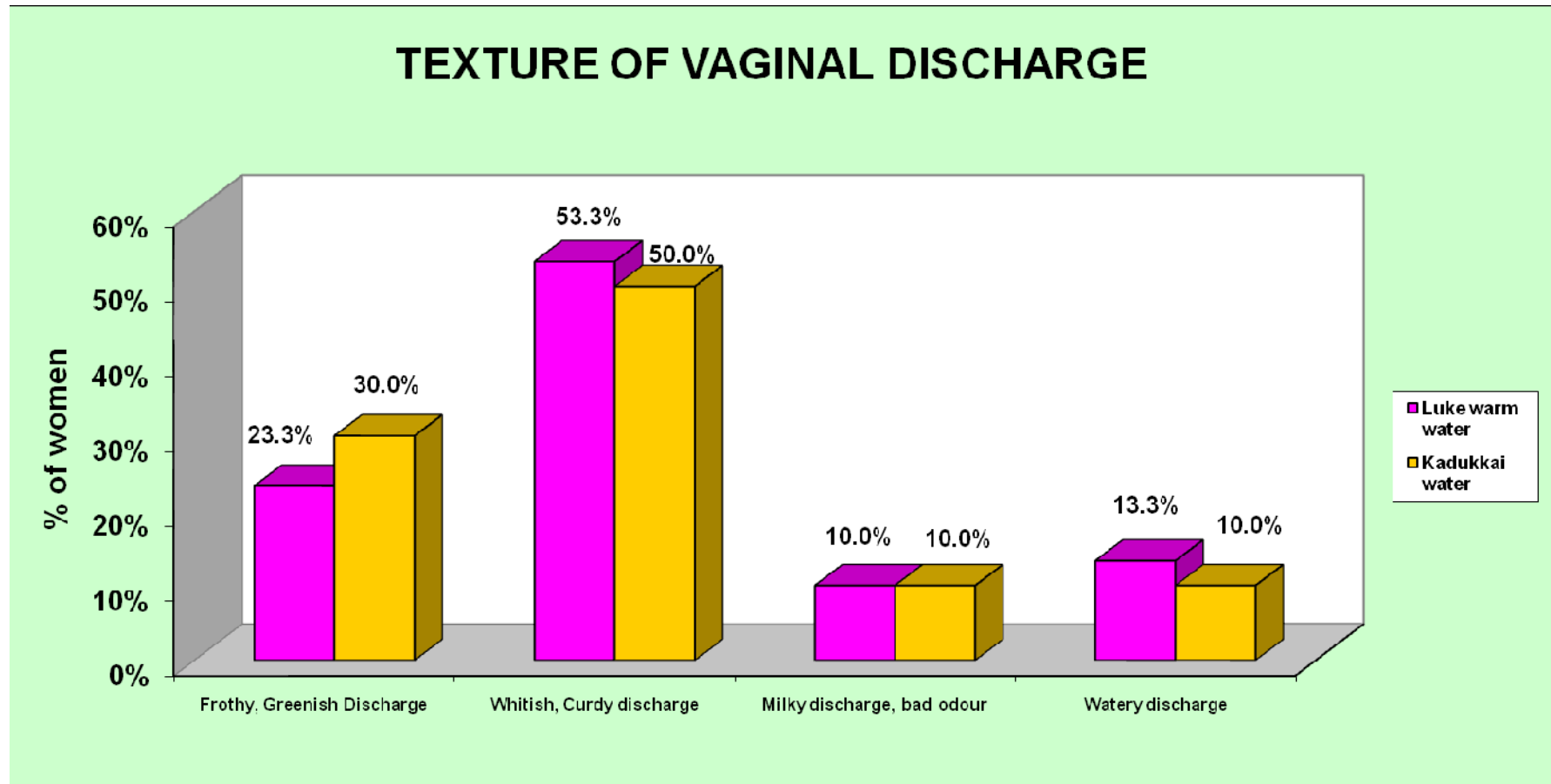


FIGURE-V



The above figure revealed that maximum percentage of both kadukkai water wash group and lukewarm water was group period of menstrual cycle above 14-29 days 50.0% and 60.0%

FIGURE - VI



The above figure revealed that maximum percentage of both kadukkai water wash group and lukewarm water was group Texture of abnormal vaginal discharge 53.3% and 50.0% belongs to whitish curdy discharge.

**SECTION-II**

**TABLE: 4**

**PRETEST ASSESSMENT OF VAGINAL DISCHARGE AMONG REPRODUCTIVE AGE WOMEN**

| Assess the abnormal vaginal discharge among reproductive age women.  |  | GROUP               |       |                      |       |
|--|--|---------------------|-------|----------------------|-------|
|  |  | KADUKKAI WATER WASH |       | LUKE WARM WATER WASH |       |
|  |  | N                   | %     | N                    | %     |
| Do you feel burning sensation (irritation) during vaginal discharge? | No burning sensation                     | 4                   | 13.3% | 4                    | 13.3% |
|  | Mild burning sensation                   | 1                   | 3.3%  | 2                    | 6.7%  |
|  | Moderate burning sensation               | 22                  | 73.3% | 18                   | 60.0% |
|  | Severe burning sensation                 | 3                   | 10.0% | 6                    | 20.0% |
| Do you have vaginal itching?   | No itching                               | 2                   | 6.7%  | 3                    | 10.0% |
|  | Mild itching                             | 2                   | 6.7%  | 1                    | 3.3%  |
|  | Moderate itching                         | 23                  | 76.7% | 22                   | 73.3% |
|  | Severe itching                           | 3                   | 10.0% | 4                    | 13.3% |
| Do you have fishy odour smell in vaginal discharge?                  | No smell                                 | 25                  | 86.7% | 26                   | 83.3% |
|  | Mild smell                               | 3                   | 6.7%  | 2                    | 10.0% |
|  | Moderate smell                           | 2                   | 6.7%  | 2                    | 6.7%  |
| Do you have low back pain vaginal discharge?                         | Mild pain                                | 4                   | 13.3% | 3                    | 10.0% |
|  | Moderate pain                            | 20                  | 66.7% | 23                   | 76.7% |
|  | Severe pain                              | 6                   | 20.0% | 4                    | 13.3% |
| Assess hydrogen ion concentration value by fast indicator stick      | Hydrogen ion concentration value 4.5-5.5 | 10                  | 33.3% | 12                   | 40.0% |
|  | value 5.5-6.5                            | 20                  | 66.7% | 18                   | 60.0% |

The above table revealed that moderate burning sensation for both kadukkai water wash group and lukewarm water was group 73.3% and 60.0% vaginal itching moderately 76.7% and 73.3%, fishy odour (no smell 86.7% and 83.3%, low back pain moderately 66.7% and 76.7%, hydrogen ion concentration value by fast indicator stick 66.7% and 60.0%.

**SECTION-III**                      **TABLE: 5**  
**EVALUATE THE EFFECTIVENESS OF KADUKKAI WATER WASH PRE AND POSTTEST ASSESSMENT OF VAGINAL DISCHARGE AMONG REPRODUCTIVE AGE WOMEN**

| ASSESSMENT OF VAGINAL DISCHARGE                                      |   | Kadukkai water wash |       |          |       | Chi square test                                 |
|--|---|---------------------|-------|----------|-------|---|
|  |   | Pretest             |       | Posttest |       |   |
|  |   | N                   | %     | N        | %     |   |
| Do you feel burning sensation (irritation) during vaginal discharge? | No burning sensation                              | 4                   | 13.3% | 26       | 86.7% | $\chi^2=40.8$<br>P=0.001***<br>DF=3 significant |
|  | Mild burning sensation                            | 1                   | 3.3%  | 4        | 13.3% |   |
|  | Moderate burning sensation                        | 22                  | 73.3% | 0        | 0.0%  |   |
|  | Severe burning sensation                          | 3                   | 10.0% | 0        | 0.0%  |   |
| Do you have vaginal itching?   | No itching  | 2                   | 6.7%  | 27       | 90.0% | $\chi^2=46.2$<br>P=0.001***<br>DF=3 significant |
|  | Mild itching                                      | 2                   | 6.7%  | 3        | 10.0% |   |
|  | Moderate itching                                  | 23                  | 76.7% | 0        | 0.0%  |   |
|  | Severe itching                                    | 3                   | 10.0% | 0        | 0.0%  |   |
| Do you have fishy odor smell in vaginal discharge?                   | No smell  | 25                  | 83.3% | 26       | 86.7% | $\chi^2=2.16$ P=0.30<br>DF=2 not significant    |
|  | Mild smell  | 3                   | 10.0% | 4        | 13.3% |   |
|  | Moderate smell                                    | 2                   | 6.7%  | 0        | 0.0%  |   |
|  | Severe smell                                      | 0                   | 0.0%  | 0        | 0.0%  |   |
| Do you have low back pain vaginal discharge?                         | No pain   | 0                   | 0.0%  | 25       | 83.3% | $\chi^2=46.6$<br>P=0.001***<br>DF=3 significant |
|  | Mild pain   | 3                   | 10.0% | 3        | 10.0% |   |
|  | Moderate pain                                     | 23                  | 76.7% | 2        | 6.7%  |   |
|  | Severe pain                                       | 4                   | 13.3% | 0        | 0.0%  |   |
| Assess hydrogen ion concentration value by fast indicator stick      | Hydrogen ion concentration value. Normal (4- 4.5) | 0                   | 0.0%  | 25       | 83.3% | $\chi^2=52.5$ P=0.001***<br>DF=2 significant    |
|  | value Below 4                                     | 0                   | 0.0%  | 0        | 0.0%  |   |
|  | value 4.5-5.5                                     | 10                  | 33.3% | 5        | 16.7% |   |
|  | value 5.5-6.5                                     | 20                  | 66.7% | 0        | 0.0%  |   |

The above table shows that pre and post test assessment level of burning sensation improved which is significant, Vaginal itching is improved which is significant Low back pain is improved which is also significant  $\chi^2=46.6$  P=0.001\*\*\*DF=3 significant, hydrogen ion concentration. Value is becoming normal which is also significant  $\chi^2=52.5$ P=0.001\*\*\*DF=2.

## SECTION-IV

TABLE: 6

**EVALUATE THE EFFECTIVENESS OF LUKE WARM WATER  
WASH PRE AND POSTTEST ASSESSMENT OF VAGINAL  
DISCHARGE AMONG REPRODUCTIVE AGE WOMEN**

| ASSESSMENT OF<br>VAGINAL DISCHARGE   |  | Luke warm water wash |       |          |       | Chi square test   |
|--|--|----------------------|-------|----------|-------|---|
|  |  | PRETEST              |       | POSTTEST |       |   |
|  |  | N                    | %     | N        | %     |   |
| Do you feel<br>burning<br>sensation<br>(irritation)<br>during<br>vaginal<br>discharge? | No burning<br>sensation                                    | 4                    | 13.3% | 13       | 43.3% | <b><math>\chi^2=19.1</math><br/>P=0.001***<br/>DF=3 significant</b> |
|  | Mild burning<br>sensation                                  | 2                    | 6.7%  | 9        | 30.0% |   |
|  | Moderate<br>burning<br>sensation                           | 18                   | 60.0% | 8        | 26.7% |   |
|  | Severe burning<br>sensation                                | 6                    | 20.0% | 0        | 0.0%  |   |
| Do you have<br>vaginal<br>itching?   | No itching   | 3                    | 10.0% | 11       | 36.7% | <b><math>\chi^2=23.4</math><br/>P=0.001***<br/>DF=3 significant</b> |
|  | Mild itching   | 1                    | 3.3%  | 11       | 36.7% |   |
|  | Moderate<br>itching  | 22                   | 73.3% | 8        | 26.7% |   |
|  | Severe itching   | 4                    | 13.3% | 0        | 0.0%  |   |
| Do you have<br>fishy odour<br>smell in<br>vaginal<br>discharge?                        | No smell   | 25                   | 83.3% | 27       | 90.0% | <b><math>\chi^2=1.07</math> P=0.58<br/>DF=2 not<br/>significant</b> |
|  | Mild smell   | 3                    | 10.0% | 1        | 3.3%  |   |
|  | Moderate smell   | 2                    | 6.7%  | 2        | 6.7%  |   |
|  | Severe smell   | 0                    | 0.0%  | 0        | 0.0%  |   |
| Do you have<br>low back<br>pain vaginal<br>discharge?                                  | No pain  | 0                    | 0.0%  | 16       | 53.3% | <b><math>\chi^2=45.9</math><br/>P=0.001***<br/>DF=3 significant</b> |
|  | Mild pain  | 3                    | 10.0% | 8        | 26.7% |   |
|  | Moderate pain  | 23                   | 76.7% | 6        | 20.0% |   |
|  | Severe pain  | 4                    | 13.3% | 0        | 0.0%  |   |
| Assess<br>hydrogen ion<br>concentration<br>value by<br>fast indicator<br>stick         | Hydrogen ion<br>concentration<br>value. Normal<br>(4- 4.5) | 0                    | 0.0%  | 8        | 26.7% | <b><math>\chi^2=33.1</math>P=0.001***<br/>DF=2 significant</b>      |
|  | value Below 4  | 0                    | 0.0%  | 0        | 0.0%  |   |
|  | Ph value 4.5-5.5   | 12                   | 40.0% | 9        | 30.0% |   |

The above Table shows that pre and post test assessment level of burning sensation improved which is significant. Vaginal itching is improved which is significant. Low back pain is improved which is also significant hydrogen ion concentration Value is becoming normal which is also significant Statistical sing chi square test. .In each aspects Luke warm water wash women improved.

**SECTION-V      Table: 7**  
**EFFECTIVENESS OF PRE AND POSTTEST FOR BOTH**  
**EXPERIMENTAL GROUPS**

| Effectiveness          | Luke warm water wash   |      | kadukkai water  |      | Student's Independent t-test  |
|------------------------|--|------|---|------|---|
|                        | Mean   | SD   | Mean  | SD   |   |
| Pretest                | 13.80  | 1.83 | 13.77   | 1.55 | t=0.08 P=0.93 DF=58<br>not significant  |
| Posttest               | 9.47   | 2.16 | 5.80  | 1.42 | <b>t=7.76 P=0.001***</b><br><b>DF=58</b><br><b>significant</b>                      |
| Student Dependent test | <b>t=8.84</b><br><b>P=0.001***</b><br><b>DF=29</b><br><b>significant</b> |      | <b>t=27.51</b><br><b>P=0.001***</b><br><b>DF=29</b><br><b>significant</b> |      | Post test significance in t test. Both group significance in student dependent test |

The above table revealed that pre and post test effectiveness of both kadukkai water, Luke warm water group. Kadukkai water t=27.51, Significant, Luke warm water t=8.84 post test effectiveness t=7.76.

## SECTION-VI

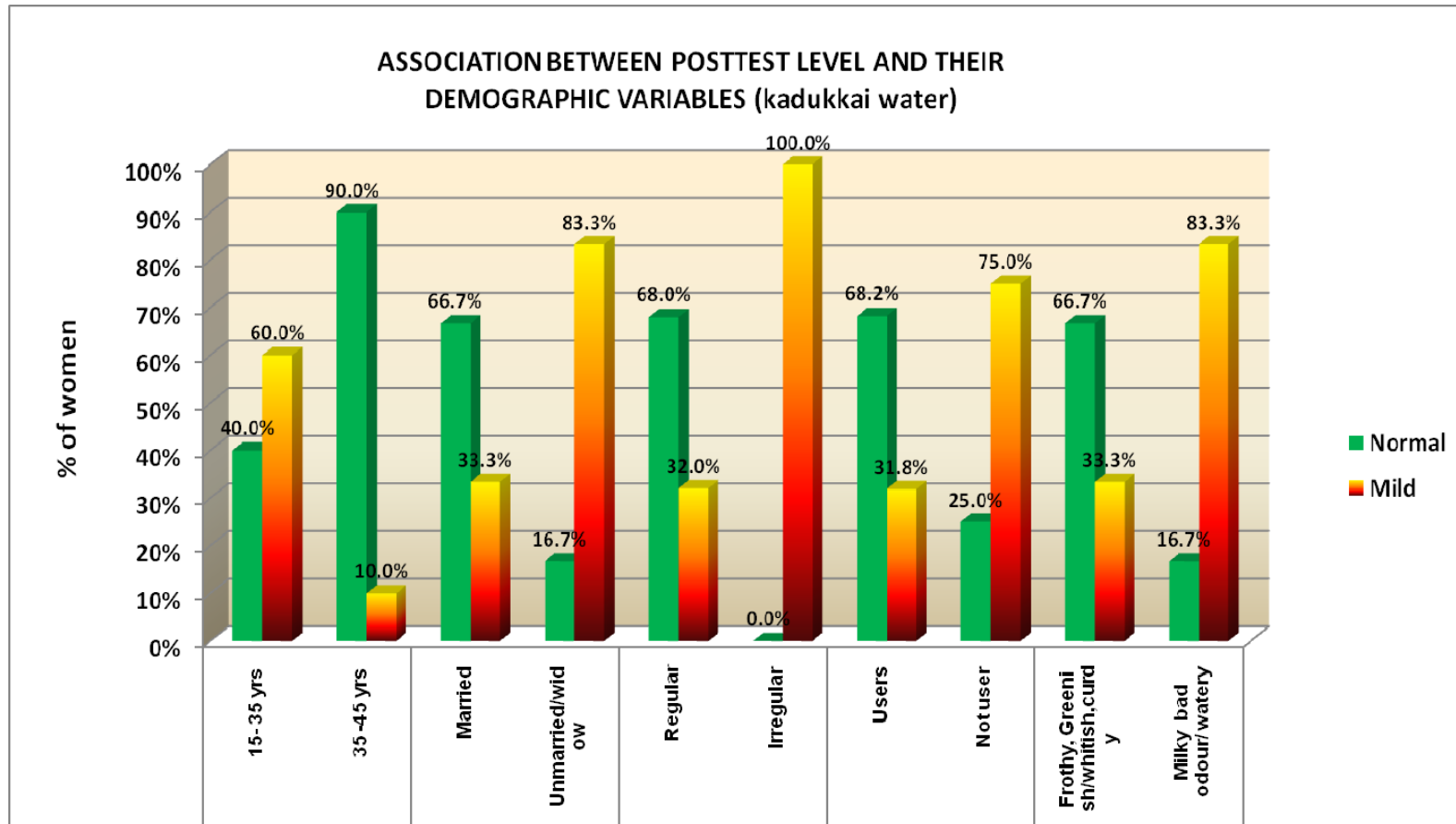
**TABLE: 8**

### COMPARISON OF EFFECTIVENESS

| <b>GROUP</b>    | <b>TEST</b> | <b>Max score</b> | <b>Mean score</b> | <b>Mean Difference score</b> | <b>Percentage of reduction from base line data</b> |
|-----------------|-------------|------------------|-------------------|------------------------------|--|
| Luke warm water | Pre-test    | 30               | 13.80             | 4.33                         | 31.4%  |
|                 | Post-test   | 30               | 9.47              |                              |  |
| kadukkai water  | Pre-test    | 30               | 13.77             | 7.97                         | 57.9%  |
|                 | Post-test   | 30               | 5.80              |                              |  |

The above table reveals that on an average, in Luke warm water wash women, they are reduced 31.4% of score whereas in kadukkai water wash women are reduced 57.9% score. Difference is 26.5%. Kadukkai water wash is better than Luke warm water wash significant.

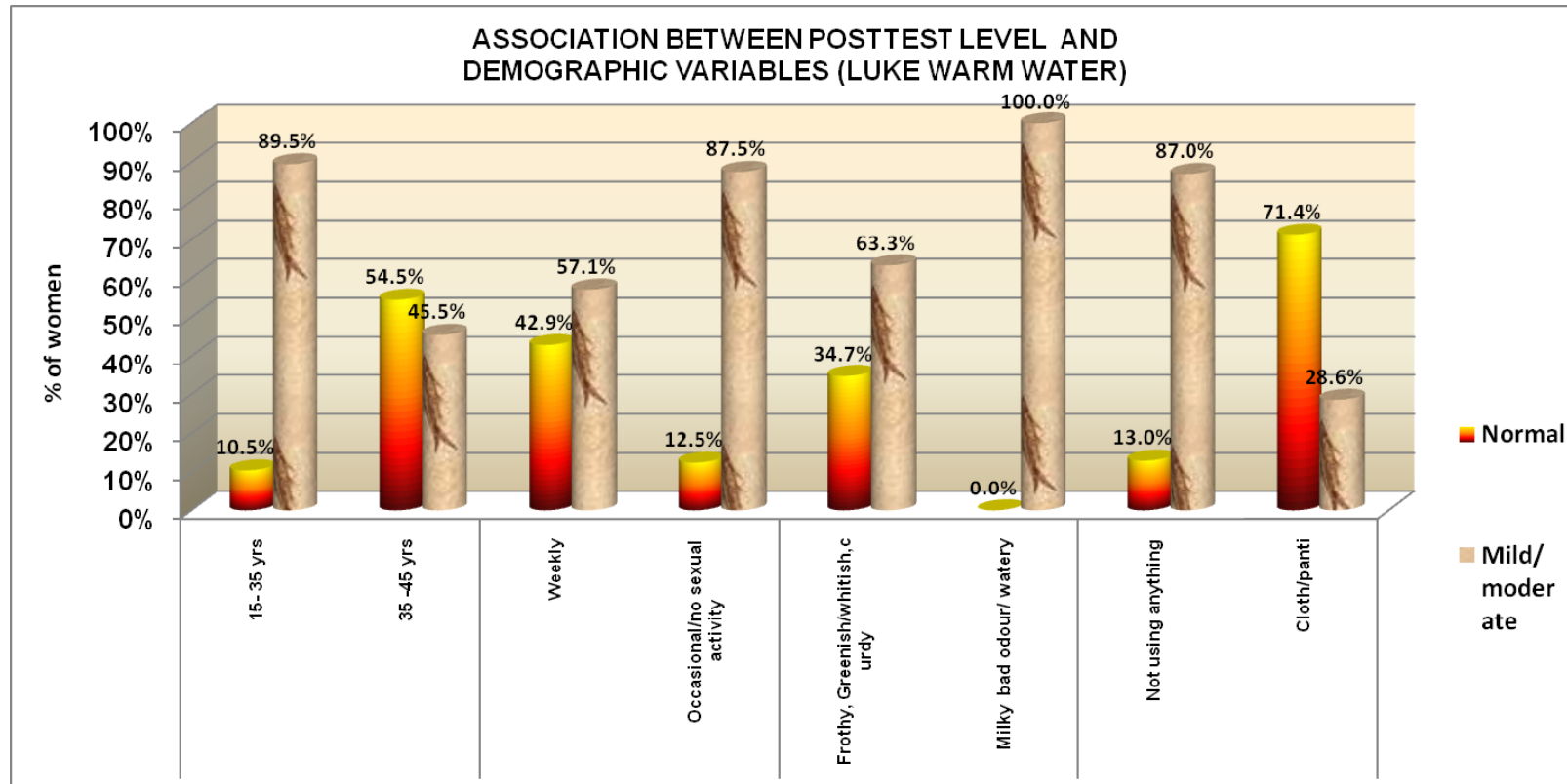
SECTION-VII FIGURE : VII



The above figure revealed that the association between demographic variables and their level of abnormal vaginal discharge among women of reproductive age group 35 -45 years women, married women, regular period women, contraceptive not users and Frothy, Greenish/whitish, curdy women more benefited than others.



**FIG: VIII**



The above figure revealed that the association between demographic variables and their level of abnormal vaginal discharge among women of reproductive age group 35 -45 years women, Significant weekly sexual, Significant Texture of abnormal vaginal discharge Frothy, Greenish/whitish, curdy, Significant During abnormal vaginal discharge not using anything Cloth/panties significant.

## **CHAPTER - V**

### **DISCUSSION**

It is the process of section, the researcher draws conclusions about the meaning and implications of the findings **Densief. Polit** the situation of women of the child being age constitute a large group, but they are vulnerable, special, risk group global observation vaginal discharge also top diseases categories for which adults in developing countries seek health care. Treatment of these infection and preventions of this sequel are complicated by the fact of that 30-50% women with infections are symptomatic. Considering the magnitude of problem. There is an urgent need for research in the field of women's reproductive health. It has to provide freedom for women from reproductive ill health.

This study is to compare to effectiveness of 'kadukkai' and Luke warm water wash on abnormal vaginal discharge among reproductive age women. The sample consists of total 60 'kadukkai' water wash 30 and lukewarm water wash 30 subjects, through structure interview schedule assessment of vaginal discharge assessed based on demographic and clinical variable, intervention given and assessed. "A comparative study to assess the effectiveness of Kadukkai and Luke warm Water wash on abnormal vaginal discharge among reproductive age women."

#### **Demographic variables & clinical variables on abnormal vaginal discharge among reproductive age woman**

The present study shows that the reproductive age woman who were selected for the present study were 15-45 years of age group.36% of reproductive age women belongs to 15-25 years for both kadukkai water wash, Luke warm water wash 26.7%,30% were 25-35 years.36.7%,33.3 were 35-45 years. 36.7% and 36.7% belongs to 15-25 years. Occupational status, 66.7% and 60.0% belongs to home maker. Monthly income 63.3% and 66.7% belongs

to Rs.3001 to Rs.6000. Source of knowledge 33.3% belongs to health care provider. The present study revealed that Clinical variables both kadukkai water wash, Luke warm water wash maximum percentage of contraception method, 50%, 36.7% belongs to permanent method. Current sexual activity maximum percentage 46.7%, 60% belongs to weakly. vaginal discharge commenced above 7 days maximum for both group. 100%, 100%, Rural women identifying at greater risk above 7 days vaginal discharge at which they seek treatment. The present study is supported by Kostick et.al (2010). These results are shown 60% rural women identifying at greater risk for psychosocial distress and providing supports at the locations at which they seek treatment. Frequency of vaginal discharge, 86.7%, 90%, maximum on & off present. Nature of vaginal discharge, maximum percentage for kadukkai experimental group (50.0%) belongs to stains, for lukewarm water wash 50% belongs to wet & stains. Factors aggravate vaginal discharge for kadukkai water wash experimental group maximum percentage 43.3% belongs to menstrual period for lukewarm water wash 53.3% belongs to sexual activity. The present study results are shown, for both kadukkai water wash, and lukewarm water wash group trichomoniasis 23.3%, 30.0%, vaginal candidiasis. 53.3%, 50%, bacterial vaginosis 10% 10%, watery discharge 13.3%, 10%. This study is supported by Jasmine et.al (2007) Results are shown, trichomoniasis 13% vaginal candidiasis. 10%, bacterial vaginosis 18%.

### **THE FIRST OBJECTIVE OF THE STUDY WAS TO ASSESS THE ABNORMAL VAGINAL DISCHARGE**

The present study results are shown, for both kadukkai water wash, and lukewarm water wash group trichomoniasis 23.3%, 30.0%, vaginal candidiasis. 53.3%, 50%, bacterial vaginosis 10% 10%, watery discharge 13.3%, 10%. The present study is supported by Samuelson et.al (2009) conducted a study married women on sexually transmitted infections and two non-sexually transmitted infection. The studies show that the overall prevalence of any infections was 10.9%. Chlamydia trachomatis was detected in 6.4% of women,

Candida albicans in 8.8%, trichomonas vaginal is in 0.7% and bacterial vaginosis in 15.4%. Health promotion messages regarding safe sexual and healthcare seeking behavior are important. The present study results are shown, for kadukkai water wash, and lukewarm water wash group frothy greenish discharge, 23.3%30%, whitish curdish discharge 53.3%50%, milky discharge, bad odour10%, 10%. Watery discharge 13.3%, 10%. Moderate burning sensation 73.3%, 60.0%. Moderate itching 76.7% ,73.3% no smell 86.%,83.30%, Moderate low back pain66,7%,76.7%, Moderate pH value by fast indicator stick 66.7%,60.0%. The present study is supported by Kjetland et.al (2008) the results s are shown that women with genital sandy patches had significantly more genital itch  $p = 0.009$  and perceived their discharge as abnormal  $p = 0.003$  .Eighty percent of the women who had genital itch, yellow discharge, chronic nature of the disease in adults, we suggest to pay special attention to the prevention of morbidity. The present study is supported by Morison et.al (2007) community study concluded, Women who had undergone surgery had a significantly higher prevalence of bacterial vaginosis ratio =1.66. The present study is supported by Jasmine et-al 2007 Christian medical college Vellore, conducted community based –cross sectional study, the results are shown, Trichomoniasis 13% vaginal candidisis. 10%, bacterial vaginosis 18%. The above findings of different studies were consistent with the present study findings.

**THE SECOND OBJECTIVE OF THE STUDY WAS TO TO EVALUATE THE EFFECTIVENESS OF KADUKKAI WATER WASH ON ABNORMAL VAGINAL DISCHARGE AMONG REPRODUCTIVE AGE EFFETIVENESS OF KADUKKAI**

The present study results are shown that there is effectiveness shows after kadukkai water wash majority 86.7% of women felt no burning sensation, and 13.3% had mild sensation only present. Vaginal itching 90% reduced, 10% mild vaginal itching only present. Fishy odour 86.7% reduced, mild fishy

odour only present. Low back pain (86.7% belongs to low back pain, mild low back pain only present. ph value majority 83.3% reduced belongs to normal by fast indicator stick. Their assuring that they will continue kadukkai for someday also, because in each aspect kadukkai water wash woman is improved. The present study is supported by Amudhavalluvam et.al (2011) conducted study to document the indigenous knowledge and health seeking behavior ,the result suggested that use of variety of plants like kadukkai products like leaves, branches, fruits etc., in different combination to cure various diseases. They concluded that, the kadukkai is effective for menstrual problem and vaginal discharge problem. The present study is supported by Dr. R. Jayakumararaj et.al (2011) conducted a study to assess wound healing medicinal plants for “malaiyali tribes”. They concluded medicinal plants used in the treatment of wound “kadukkai” is used for enhance the process of wound healing. The most frequently used preparations were kadukkai decoctions and powder plant material were invariably used for same properties as on alternative sources. The present study is supported by Rege et.al (2010) conducted a study to assess the anti-inflammatory activity of some ayurvedic remedies the study shows that terminalia chebula is used extensively in the preparation of infectious diseases such as chronic ulcer, white discharge. The present study is supported by karunyal et.al (2008) conducted study. They stated that 65% of the indian populations depends on the traditional medical systems for their primary health care. They concluded that terminalia chebula, kadukkai is the treatment for abnormal vaginal discharge.

**THE THIRD OBJECTIVE OF THE STUDY WAS TO EVALUATE THE EFFECTIVENESS OF LUKE WARM WATER ON ABNORMAL VAGINAL DISCHARGE AMONG REPRODUCTIVE AGE WOMEN.**

The present study shows that the effectiveness after leuk warm water wash burning sensation 30.0% belongs to mild sensation, moderate becomes to mild sensation. Their having poor practice only.vaginal itching 36.7% belongs to mild vaginal itching, moderate vaginal itching 26.7 only present .Fishy odour 33.7% belongs to, mild odour, 6.7% belongs to moderate fishy odour present. Low back pain 20.0% belongs to moderate low back pain,mild low back pain 26.7% only present.Their practice is in poor status. Hydrogen ion concentration value reduced 26.7% by fast indicator stick. majority 43.3% belongs to severe. 30.0% belongs to moderate., They are practicing poor. Results are shown, for both kadukkai water wash,and leuk warm water wash group Trichomoniasis 23.3%,30.0%,vaginal candidiasis.53.3%,50%, bacterial vaginosis 10%10%,watery discharge 13.3%,10%. The present study is supported by La ruche et.al (2007) conducted study practice of douching pregnant women. The results are shown that the harmful effects of antiseptics, douching before consultation was reported by 97% and was common practice for 98%. Intra vaginal infection was associated with douching and with the use of intra vaginal agents. Diagnosis of genital infections was independent of douching with water or soap, but chlamydial infection was associated with douching with antiseptics, used by 14% of the women  $p = 0.036$ .

**THE FOURTH OBJECTIVE OF THE STUDY WAS TO ASSESS THE EFFECTIVENESS KADUKKAI AND LUKE WARM WATER WASH OF PRE AND POST TEST OF ON ABNORMAL VAGINAL DISCHARGE AMONG REPRODUCTIVE AGE WOMEN.**

The present study pre and post test effectiveness, before the administration of kadukkai water wash, 86.7% moderate itching, 13.3% severe itching level. After the administration of kadukkai water wash none of them having moderate itching, & severe 56.7% of them having normal and 43.3% of them having mild level, before the administration of lukewarm water wash, 73.3% moderate itching, 13.3% severe itching level. After the administration lukewarm water wash, moderate itching 26.7% and 36.7% of them having mild level. So kadukkai water wash is better than Luke warm water wash. The present study shows that pre, post test effectiveness for kadukkai and lukewarm water wash student's independence t value=8.84,  $p=0.001^{***}$ ,  $df=29$  significant, pre post test effective for lukewarm water t value=27.51,  $p=0.001^{***}$ ,  $df=29$  significant by the same test. The present study is supported by Mohd noor et.al (2010) conducted a vaginal discharge is in general practice women's, perceptions belief and behavior. The results shown that 65% women with, without complaints of vaginal discharge, and 20% women with complaints, 14% women without complaints of vaginal discharge 27% the result showed kadukkai combinations are effective for vaginal discharge, This study is supported by Sharma a, et.al. (2009) conducted study the treatment of vaginal tract infections by the folkloric plants. They concluded antibacterial activity of extracts Terminalia chebula, kadukkai while ethanol extract of azadirachta indica and Ocimum sanctum exhibited antibacterial activity against vaginal tract infections.

**THE FIFTH OBJECTIVE OF THE STUDY WAS TO COMPARE THE EFFECTIVENESS OF KADUKKAI WATER AND LUKE WARM WATER ON ABNORMAL VAGINAL DISCHARGE AMONG REPRODUCTIVE AGE WOMEN.**

The present study shows that comparison of effectiveness are pre and post test effectiveness maximum mean score percentage for kadukkai water wash women are reduced 57.9% score. Only 31.4% for lukewarm water. Difference is 26.5%. kadukkai water wash is better than Luke warm water wash. This study is supported by Dr. R. Jayakumararaj et.al (2011) conducted a study to assess wound healing medicinal plants for “Malaiyali Tribes”. They concluded medicinal plants used in the treatment of wound “Kadukkai” is used for enhance the process of wound healing, white discharge. The most frequently used Kadukkai” preparations were decoctions and powder plant material was invariably used for same properties as on alternative sources. The present study shows that before the administration of kadukkai water wash, 86.7% moderate itching,13.3% severe itching level. After the administration of kadukkai water wash none of them having moderate itching,& severe 56.7% of them having normal and 43.3% of them having mild level., before the administration of lukewarm water wash,73.3% moderate itching,13.3% severe itching level. After the administration lukewarm water wash 73.3% moderate itching,13.3% severe itching level. So kadukkai water wash is better than Luke warm water wash. The present study is supported by La ruche et.al (2007) conducted study practice of douching pregnant women. The results are shown that the harmful effects of antiseptics, douching. Intra vaginal infection was associated with douching and with the use of intra vaginal agents. Diagnosis of genital infections was independent of douching with water or soap, but Chlamydia infection was associated with douching with antiseptics, used by 14% of the women  $p = 0.036$ . The present study is supported by Kohinoor et.al (2010) conducted a vaginal discharge is in general practice women’s, 65% women with, without complaints of vaginal discharge, and 20% women with complaints, 14% women without complaints of vaginal discharge 27% the result showed kadukkai combinations are effective for vaginal discharge.



**THE SIXTH OBJECTIVE OF THE STUDY WAS TO ASSOCIATE THE ABNORMAL VAGINAL DISCHARGE AMONG REPRODUCTIVE AGE WOMEN IN THE EXPERIMENTAL GROUP WITH SELECTED DEMOGRAPHIC VARIABLES**

- The present study shows that demographic variables are age 25-35 years are 36.7% for kadukkai water wash, age 15-25 years are 36.7% for luke warm water wash. Marital status married women are higher percentage 90%, 80%. For kadukkai water wash demographic variables are age, marital status, clinical variables are period of menstrual cycle, contraception method, texture of vaginal discharge, are significantly associated with this intervention.

This study is supported by Jasmine et al (2007) at Christian medical college, Vellore, conducted community based –cross sectional study of reproductive tract infection among married women 16-22 years of age. Educational status higher percentage for both group 46.7%, 36.7% in primary education. This study is supported by Vigram patel et.al (2007) .He shows the result. 0.54% are low literacy and age above 40 years were associated with a reduced risk. The present study shows that demographic variables are parity, occupation, monthly income, source of knowledge. Clinical variables are period of menstrual cycle, contraception method, current sexual activity, frequency texture, nature of vaginal discharge, factors aggravate, during discharge wearing status The present study is supported by Kostick et.al (2010). These results are shown 60% rural women identifying at greater risk for psychosocial distress and providing supports at the locations at which they seek treatment.

## **CHAPTER VI**

### **SUMMARY, CONCLUSION, IMPLICATIONS AND RECOMMENDATIONS**

This chapter deals with the summary of the study implications, for nursing practice, education, nursing research, administration and recommendations for future research. "A study to assess the effectiveness of Kadukkai and Luke warm Water wash on abnormal vaginal discharge among reproductive age women."

#### **SUMMARY**

*Practicing people is empowering them. It is only through  
their minds that you Can change the attitude of people."*

*-Rugiatu turay*

The study was conducted to ascertain the effectiveness of kadukkai water wash and Luke warm water wash on abnormal vaginal discharge among reproductive age Women. Women are the nucleus of the society. 19 % of total population constitutes, 15-45 years of women are child bearing age group. ¾ the women affected with reproductive tract vaginal Infections, and pelvic inflammatory disease. . Mothers constitute a large group, but they are also a "vulnerable" or special-risk-group. Vaginal discharge is a cloudy secretion from the reproductive tract of the females from both the cervix and the vagina. Hydrogen ion concentration value of 4-4.5 is normal. It is normal, acidic in nature, which occur slightly during ovulation and just before the onset of menstruation. It is worse during infection, Hydrogen ion concentration value alters, woman resistance is reduced...Therapeutic vaginal wash can be reduced unpleasant, abnormal odour, and for reducing excessive discharge. Woman living in remote place with inadequate transport facilities and lack of health services to treat and manage in home care will be effect with help of locally

available resources. Indian System of Medicine can play a vital role in achieving in objectives of Reproductive Child Health Programme implemented by the ministry of health and family welfare. Therapy's suggested by Indian System of Medicine are safe tolerable and with no or minimum side effects women continue to suffer from common vaginal infections.

The conceptual frame work for this study is based on Wiedenbach's clinical nursing model. Health promotion is directed at increasing a client level of well being. **Pender.1996.Wiedenbach's 1987 model** focuses on the following three areas consist of 3 steps. The conceptual framework of the study was based on modified Wiedenbach's theory Clinical Nursing theory The present study aims to deliver health care, the investigator's guidelines to proceed in attaining the objectives of the study on abnormal vaginal discharge among reproductive age women a, Identifying the client needs for help b. Ministering the need for help. Validating that the need for help was met.

**Methodology** is selected for true experimental study design. The study made use of the true experimental study design. The Investigator selected approach used for this study is quantitative research approach was taken as it is appropriate to accomplish this ability of this study. Systematic random sampling technique was used to select the samples. The study conducted at Samayanallur, Madurai for both experimental group. The study was conducted with 30 samples as experimental group for "Kadukkai Water Wash" and 30 samples as Lukewarm Water Wash group for a period of four weeks. The tool used for data collection were modified structure questionnaire. The tool was also tested for the content validity and reliability prior for the study. A pilot study was conducted to find out the feasibility of conducting the study was analysis. Using descriptive and inferential statistics.

**The data collection procedure** was done for a period of 4 weeks from 01.09.2011 to 30.09-11. The data was collected on all the days including Sundays. The investigator got permission from the Deputy Director of Health Services from Visvanathapuram, Madurai, Primary Health Centre Block Medical Officer from Samayanallur. Subsequently the investigator visited 5 to 6 women per day and the subjects were selected based on the inclusion criteria. The investigator went to their residents on morning and evening of every day including Sunday holidays. According to the convenient and flexible timings of the subjects ensured before starting data collection. The investigator had spend approximately 40 to 45 minutes with one subject to complete the intervention. The women were very co-operative during the whole procedure.

The data were analyzed using descriptive statistics like frequency percentage, inferential statistics like chi-square test and Pearson co-relation, co-efficient, student dependent test, student independent test. The significance findings were expressed in the form of table.

## **MAJOR FINDINGS OF THE STUDY**

- ❖ Majority of reproductive age women both experimental group and 36.7%, 36.7% belongs to 15-25 years. Majority of reproductive age women Educational status both experimental groups belongs to 46.7% and 36.7% belongs to primary education.
- ❖ Majority of reproductive age women both experimental group Marital status 90.0% and 80.0% belongs to Married women
- ❖ Majority of reproductive age women both experimental group Occupation statuses 66.7% and 60.0% belongs to home maker.
- ❖ Majority of reproductive age women both experimental group Monthly incomes 63.3% and 66.7% belongs to 3001 to 6000.
- ❖ Majority of reproductive age women both experimental group Source of knowledge 33.3 and 33.3% belongs to health care provider.

- ❖ Majority of reproductive age women both experimental group period of menstrual cycle above 14-21 days 50.0% and 60.0%
- ❖ Majority of reproductive age women both experimental group Contraception method 50.0% and 36.7% belongs to permanent method
- ❖ Majority of reproductive age women both experimental group. Current sexual activity 46.7% and 60.0% belongs to belongs to weakly
- ❖ Majority of reproductive age women both experimental group. Vaginal discharge commenced above 7 days 100% and 100%
- ❖ Majority of reproductive age women both experimental group. Frequency of vaginal discharge, 86.7% and 90.0% belongs to on & off present.
- ❖ Majority of reproductive age women both experimental group Texture of abnormal vaginal discharge 53.3% and 50.0% belongs to whitish curdy discharge.
- ❖ Majority of reproductive age women Nature of vaginal discharge for kadukkai experimental group 50.0% belongs to stains, For Luke warm water wash 50.0% belongs to wet & stains
- ❖ Majority of reproductive age Factors aggravate vaginal discharge for kadukkai water wash experimental group 43.3% belongs to menstrual period for lukewarm water wash 53.3% belongs to sexual activity
- ❖ Majority of reproductive age women during vaginal discharge 53.3% based on nothing doing for kadukkai water wash, cold water wash 60.0% lukewarm water wash
- ❖ Majority of reproductive age women both experimental group 76.7% and 80.0 nothing doing belongs to not using anything.
- ❖ Majority of reproductive age women during vaginal discharge moderate burning sensation for both experimental group 60.0% and 73.3%, vaginal itching moderately 73.3% and 76.7%, fishy odour no smell 83.3% and 86.7%, low back pain moderately 76.7% and 66.7%, hydrogen ion concentration value by fast indicator stick 60.0% and 66.7%

- ❖ Majority of reproductive age women during pre and post test assessment level of burning sensation improved which is significant, Vaginal itching is improved which is significant .Low back pain is improved which is also significant , hydrogen ion concentration . Value is becoming normal which is also significant. .Statistical significance was calculated using chi square test.
- ❖ Majority of reproductive age women during pre and post test assessment level of burning sensation improved which is significant. Vaginal itching is improved which is significant. Low back pain is improved which is also significant. Hydrogen ion concentration value is becoming normal which is also significant. Statistical significance was calculated using chi square test. In each aspects Luke warm water wash women improved.
- ❖ Majority of reproductive age women during pre and post test effectiveness of both experimental group. Post test value effectiveness of both experiment group score was analyzed using student's independent t-test. In pretest there is no significant difference both experiment, but in posttest it is observed significant difference in both experimental group.
- ❖ Effectiveness of pretest and posttest score was analyzed using student's dependent t-test. In other group there is no significant difference between pre and posttest,. but in experiment group there is a statistically significant difference between experiment and other 1 group.pre and post test assessment level of burning sensation improved which is significant. Vaginal itching is improved which is significant Low back pain is improved which is also significant Hydrogen ion concentration value is becoming normal which is also significant..
- ❖ This study reveals that on an average, in Luke warm water wash women, they are reduced 31.4% of score whereas in kadukkai water wash women are reduced 57.9% score. Difference is 26.5%. Kadukkai water wash is better than Luke warm water wash.

- ❖ Majority of reproductive age women during 35 -45 years women, married women, regular period women, contraceptive not users and Frothy, Greenish/whitish, curdy women more benefited than others.
- ❖ Significant findings was assessed by using split half and Test retest method anxiety reliability correlation coefficient value is 0.81 and observation checklist reliability correlation coefficient value is 0.8 study results shows that, The mean score effectiveness of kadukkai water 57.9%,and Luke warm water wash 31.4% wash. The effectiveness of kadukkai water 26.5%.is better than the Luke warm water wash

## **IMPLICATIONS IN NURSING**

### **NURSING SERVICE:**

- ❖ The community health nurse has to educate the reproductive women about the various reproductive child health care services at Govt hospital, primary health centre.
- ❖ The community health nurse should know the life styles practices of the people in her working area to adopt the healthy life style practices to prevent gynecological, reproductive morbidities.

### **NURSING EDUCATION:**

- ❖ General information about the reproductive health problem to be included in nursing curriculum. Conduct periodic in service education to the health personnel working in the field.
- ❖ Organize workshops and hands on training for health personnel working in the community.
- ❖ Periodicals can be published on the newer paradigm of reproductive health services

## **NURSING ADMINISTRATION:**

- ❖ Nurse administrators are challenged to provide quality care by effective organization and management.
- ❖ Nurse administrator should take part in the health policy making, developing procedures and standing orders related to patient care.
- ❖ The Nurses already working in maternity hospitals should be given in-service education to help them update their knowledge and cope with demanding situations with the help of video assisted programmes.
- ❖ More administrators should concentrate on proper selection, placement and utilization of nursing personnel in suitable area so that the reproductive women can be benefited by them.
- ❖ Government should provide adequate funds that should be mobilized and hand outs to the women for reinforcing their knowledge and it is also necessary to implement the various health services. to reduce their anxiety and increase their co-operation nursing administration shall organize continue nursing education and encourage nurses to use, need to supervise and monitor the practice in Primary Health Centres.
- ❖ Nurses who are interested in their desire to give support should collaborate with hospital administrative staff to develop the said systems to meet the needs of all concerned

## **NURSING RESEARCH**

- ❖ The essence of research is to build up a body of knowledge in nursing as an evolving profession. Interventions that also have the same effect can be studied in order to give sound research based knowledge about nursing support.
- ❖ The effectiveness of programme can be tested in various health care settings.
- ❖ These can be helpful in enhancing the midwifery knowledge. Similar studies can be conducted with large sample.



## **RECOMMENDATIONS**

- ❖ The Indian Govt spends around 1, 2% of its annual budget on health. As other programme. They have to allot budget for reproductive health.
- ❖ Similar studies can be done in different settings.
- ❖ Suitable posters, advertising boards and pictures can be displayed in prominent placers regarding reproductive health services
- ❖ Coverage by mass media to highlight the various adolescent reproductive health services in the forms of songs, drama, short stories, advertisements and social drama can be presented t the general public.
- ❖ In service education an short term training regarding adolescent reproductive health services can be arranged for the health awareness.
- ❖ Adequate supply of audio visual aids and to be provided to the health workers for the health education on adolescent reproductive health services

## **SUGGESTIONS FOR FUTURE STUDY**

- ❖ The study can be conducted between two districts or to states as a comparative one.
- ❖ Study can be done between socio economic groups or major communities as a comparative one.
- ❖ Study can be done in various aspects of reproductive issues including human immune deficiency virus and reproductive tract infection.
- ❖ Replication of the study may be done with larger samples in different settings to validate and generalize the findings.

## **CONCLUSION**

Women living in remote place with inadequate transport facilities and lack of health care services to treat and manage in home care will be effect with help of locally available resources which are highly attempt of antibiotic. the locally available resources are thulasi, neem, kadukkai. Hence the health services are for the people who living in remote areas. Use of vaginal wash with kadukkai

powder that really can perfectly suit us. This only means that the natural treatments that we can practice are not that hard for us. By these interventions of kadukkai water wash on abnormal vaginal discharge among reproductive age women and provide them with relevant information on the subject clearing up the misconceptions and offer them to possible treatment option.

Nurses play a key role in educating women concerning vaginal health and the prevention of vaginal discharge. Identifying high-risk behaviour and providing nonjudgmental, sensitive counseling and education should be part of every physical check-up. Prevention of disease is the key role of the nurse. Teaching all age groups healthy behavior such as, personal hygiene, menstrual hygiene safe sex practices is essential. Many programmes are available under which the nurses can make use of in the community to teach leucorrhoea prevention. Mothers form a 'vulnerable' or 'special risk group'. the risk is connected with child bearing and nurturing. Gender inequalities begin at birth and sometimes even before birth. Therefore it is rightly said that, "women's vulnerability has social roots and not just biological ones. Currently married women age 15-45 years with symptoms of leucorrhoea more. Today, the nurse being an important member of the health care team, she has to play a vital role in the community because she has greater access to nursing care as per the needs of women. a nurse can diagnose, treat and educate women regarding vaginal discharge and the women and her family members will value the nurse and treated at an earlier stage leads to avoid serious problems such as infertility, cervical cancer, spontaneous abortion, ectopic pregnancy and later on, death. as prevention is better than cure, the investigator feels , grateful outcome is underwent in her course of her study period.

## **LIMITATION**

- ❖ Rural women are hesitating to answer for certain question regarding the purities vulva and white discharge.
- ❖ The women were seeking for privacy which is inadequate in rural areas.
- ❖ Since the study was in community set up, it is not possible to get the answers from the women continuously due to domestic work.

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## APPENDIX - I

### INTERVIEW SCHEDULE

#### Part – I Demographic variable

Sample No: \_\_\_\_\_

#### Section - A

Demographic variable

1. AGE GROUP

A.15-25

B.25-35

C. 35-45

2. EDUCATIONAL STATUS

A. Primary education

B. Middle school

C. High school education

D. Higher secondary education

E. Collegiate

F. Non formal education

3. MARITAL STATUS

A. Unmarried

B.Married

C. Divorce

D.Widow

4. PARITY

A. no child

B. one

C.Two

D. above 2

E. None

5. Occupation

A. Home maker

B. Professional

C. State Government Job

D. Central Government job

E. Self help group member

6. Income

A. upto Rs.1000

B.Rs.1001-Rs.3000

C.Rs.3001-Rs.6000

D.Rs.6001&Above

7. Source of knowledge regarding vaginal discharge

A. Parents

B. Friends

C. Health care provider

D.Media

**SECTION - B**  
**CLINICAL VARIABLES**

1. Period of menstrual cycle   
A. 1-14 days B. 14 - 29days C. Above 30days D. Irregular
2. Contraception method adopted   
A. Temporary method (Niroth, IUCD, Mala Tab, Others)  
B. Permanent method  
C. Not using any methods
3. Current sexual activity   
A. Daily B. Weekly  
C. Occasional D. No sexual activity
4. Vaginal discharge commenced since   
A. 1-3days B. 4 - 7days C. 7 days & above
5. Frequency of vaginal discharge present?   
A. every day present B. On & off C. Occasional
6. Texture of abnormal vaginal discharge   
A. Frothy, Greenish Discharge. B. Whitish, Curdy discharge  
C. Milky discharge, bad odour D. Watery discharge
7. Nature of vaginal discharge   
A. Wet & Stains B. Stains C. Wet
8. Factors aggravate vaginal discharge   
A. Ovulation. B. Sexual activity C. Menstrual period
9. During vaginal discharge what did you do for that?   
A. nothing doing B. Cold water C. Warm water
10. During abnormal vaginal discharge, what you will wear?   
A. Not using anything B. Cloth C. panties

## SECTION - C

### ASSESSMENT OF VAGINAL DISCHARGE

1. Do you feel burning sensation (irritation) during vaginal discharge? 
  - A. No burning sensation
  - B. Mild burning sensation
  - C. Moderate burning sensation
  - D. Severe burning sensation
  
2. Do you have vaginal itching? 
  - A. No itching
  - B. Mild itching
  - C. Moderate itching
  - D. Severe itching
  
3. Do you have fishy odour smell in vaginal discharge? 
  - A. No smell
  - B. Mild smell
  - C. Moderate smell
  - D. Severe smell
  
4. Do you have low back pain vaginal discharge? 
  - A. No pain
  - B. Mild pain
  - C. Moderate pain
  - D. Severe pain
  
5. Assess pH value by fast indicator stick 
  - A. Phvalue . Normal (4- 4.5)
  - B..Ph value Below 4
  - C.Ph value 4.5-5.5.
  - D.Ph value 5.5-6.5

**CONFIRMATION BY PH VALUE FAST COLOUR INDICATOR  
STICK**

|                        |               |                   |   |                   |   |              |   |
|------------------------|---------------|-------------------|---|-------------------|---|--------------|---|
| <b>MILD<br/>YELLOW</b> | <b>YELLOW</b> | <b>GREEN MILD</b> |   | <b>DARK GREEN</b> |   | <b>WHITE</b> |   |
| 3.5                    | 4.0           | 4.5               | 5 | 5.5               | 6 | 6.5          | 7 |

**PH value**

**INFERENCE**

4-4.5

NORMAL

Below 4

ACID FAST BACILLUS

More than 4.5

BACTERIALVAGINOSIS

Between 4.5-5.5

MONILIASIS

Raised above -4.5

TRICHOMONIASIS

5.5-6.5

NON SPECIFIC VAGINITIS

## APPENDIX - II

பிரிவு -அ  
தன்னிலைவிபரக்குறிப்பு  
வினாத்தாள் -1  
மாதிரிஎண்

### 1. வயது

அ. 15– 25

ஆ. 25 – 35

இ. 35 - 45

### 2. கல்வித்தகுதி

அ. ஆரம்பக்கல்வி

ஆ. நடுநிலைக்கல்வி

இ. உயர்நிலைக்கல்வி

ஈ. மேல்நிலைக்கல்வி

உ. பட்டப்படிப்பு

ஊ. படிக்காதவர்

### 3. திருமணவிபரம்

அ. திருமணம் ஆகாதவர்

ஆ. திருமணம் ஆனவர்

இ. கணவனால் கைவிடப்பட்டவர்

ஈ. விதவை

### 4. பிள்ளைப்பேறு

அ. குழந்தையில்லை

ஆ. ஒருகுழந்தைமட்டும்

இ. இரண்டுகுழந்தைகள்

ஈ. இரண்டுக்குமேல் குழந்தைகள்

உ. ஒன்றும் இல்லை

### 5. பணிவிபரம்

அ. வீட்டிலேயே இருப்பவர்

- ஆ. தொழிற்சார்ந்தவேலை
- இ. மத்தியஅரசுவேலை
- ஈ. மாநிலஅரசுவேலை
- உ. கைத்தொழில்

6. குடும்பவருமானம்



- அ. ரூ.1000 வரை
- ஆ. ரூ 1001 முதல் ரூ.3000வரை
- இ. ரூ. 3001 முதல் ரூ. 6000 வரை
- ஈ. ரூ.6000க்கும் மேல்

7. இயற்கைக்குமாறானகசிவுபற்றியஅறிவுகிடைத்தவிதம்,



- அ. பெற்றோர்
- ஆ. நண்பர்கள்
- இ. உடல் நலம் பேணுபவர்
- ஈ. தொலைக்காட்சி
- உ. செய்தித்தாள்



**பிரிவு - ஆ**  
**நோய் சம்மந்தப்பட்டநிலையின் அறிக்கை**

**1. மாதவிலக்கின் காலம்**

- அ. 1 முதல் 14 நாட்கள் வரை
- ஆ. 14 முதல் 29 நாட்கள் வரை
- இ. 30 நாட்களுக்குமேல்
- ஈ. ஒழுங்கற்று இருத்தல்

**2. குடும்பகட்டுப்பாடுமுறை**

- அ. தற்காலிகம் என்றால் (ஆணுறை,ஐயூசிடி (கருப்பையில் செலுத்தப்படும் காப்பர் குழாய்),மாலாமாத்திரைகள்,மற்றவை
- ஆ. நிரந்தரகட்டுப்பாடு
- இ. எந்தமுறையும் பயன்படுத்தவில்லை

**3.கணவருடன் சேர்க்கை (புணர்ச்சி)**

- அ. தினந்தோறும்
- ஆ. வாரந்தோறும்
- இ. எப்போதாவது
- ஈ. இல்லை

**4. இயற்கைமாறானகசிவுதொடங்கியகாலம்**

- அ. 1 - 3 நாட்கள்
- ஆ. 4 - 7 நாட்கள்
- இ. 7 நாட்களுக்குமேல்

**5. இயற்கைக்குமாறானகசிவுஅடிக்கடிவருமா?**

- அ. ஒவ்வொருநாளும்
- ஆ. விட்டுவிட்டுவருதல்
- இ. எப்போதாவதுவருதல்

**6. இயற்கைக்குமாறானகசிவின் தன்மை**

- அ. நுரையுடன் கூடியபச்சைநிறகசிவு

- அ. வெள்ளைநிறதயிர் போன்றகசிவு
- இ. பால் நிறமீன் வீச்சக் கசிவு
- ஈ. தண்ணீர் போன்றகசிவு

7. உள்ளடைகளில் இயற்கைமாறானகசிவுஎதனைஏற்படுத்துகிறது?

- அ. ஈரப்பசையுடன் கூடியகரை
- ஆ. கரைபடிதல்
- இ. ஈரம் படிதல்

8.இயற்கைக்கு மாறானகசிவுஎந்தசமயம் அதிகமாகிறது?

- அ. கருமுட்டைஉருவாகும் நேரத்தில்
- ஆ. உடலுறவின் போது
- இ. மாதவிடாய் நேரத்தில்

9. இயற்கைக்குமாறானகசிவின் போதுஎன்னசெய்கிறீர்கள்?

- அ. ஒன்றும் செய்வதில்லை
- ஆ. சாதரணநீரில் கழுவுதல்
- இ. வெந்நீரில் கழுவுதல்

10.கசிவிற்போது நீங்கள் எதனைபயன்படுத்துகிறீர்கள்?

- அ. ஒன்றும் அணிவதில்லை
- ஆ. சாதரணதுணி
- இ. உள்ளடை

பிரிவு - இ

சோதனைமுடிந்தபிறகுதேர்வு

,aw;iff;Fkhwhdfrptw;Fnte;ePhpy; fye;jfLf;fha; Jhs; kw;Wk;  
nte;ePuhy; fOtpagpwFVw;gl;ltpisT

1. கழுவியபின் பிறப்புஉறுப்பில் வலி இருக்கிறதா?

அ. வலி இல்லை

ஆ. அசௌகரியம்

இ. அதிகவலி

ஈ. பெரும் வலி

2. கழுவியபின் இடுப்புவலிவருகிறதா?

அ. வலி இல்லை

ஆ. அசௌகரியம்

இ. அதிகவலி

ஈ. பெரும் வலி

3. கழுவியபின் எரிச்சல் இருக்கிறதா?

அ. எரிச்சல் இல்லை

ஆ. லேசானஎரிச்சல்

இ. மிதமானஎரிச்சல்

ஈ. அதிகஎரிச்சல்

4. கழுவியபின் அரிப்பு இருக்கிறதா?

அ. அரிப்பு இல்லை

ஆ. லேசானஅரிப்பு

இ. மிதமானஅரிப்பு

ஈ. அதிகஅரிப்பு

5. Phன் மதிப்புதூரிதமுறையில் அளவு



அ. Phன் மதிப்புசாதாரணம் (4 - 4.5)

ஆ. Phன் மதிப்புஅசாதாரணம் (4க்கும்குறைவாக)

இ) Phன் மதிப்பு 4.6 – 5.5

ஈ) Phன் மதிப்பு 5.6 – 6.5

pHமதிப்புஅறியதூரிதமுறையில் உறுதிசெய்யக்கூடியநிறம் மாறும் அளவிடுதல்

| வெளிர்ந்தநிலை | மஞ்சள் | மேலோட்டமானஆப்பிள்நிறபச்சை | அடர்ந்தஆப்பிள் நிறபச்சை | மேலோட்டமானகிளிப்ப |
|---------------|--------|---------------------------|-------------------------|-------------------|
| 3.5           | 4.0    | 4.5                       | 5                       | 5.5               |

pHமதிப்பு

முடிவு

4 – 4.5

சாதாரணம்

4.5 – 5

பாக்டீரியாவால் பிறப்புறுப்புபாதிக்கப்படுதல்

4க்கும் குறைவாக

கான்டிடியாசிஸ்

5க்கும் மேல்

டிரெக்கோமோனியாசிஸ்

### APPENDIX - III

Ref.no.23339/E4/3/09 dt 09.05.11. Govt. Rajaji Hospital, Madurai – 20.

#### INSTITUTIONAL REVIEW BOARD / INDEPENDENT ETHICS COMMITTEE

GovtRajaji hospital and Madurai Medical Collage, Madurai 625020.

#### Proceedings and recommendations of the IRB / IEC meeting held on 31.03.20 11

The Institutional Review Board/ Independent Ethics Committee of the Govt. Rajaji Hospital and Madurai Medical College, Madurai 625020 met on the 31.03.2011 at 12 noon, when the following members were present. -----

|  |  |                  |
|--|--|------------------|
| 1. Dr.S.M.Sivakumar, M.S (Gen. Surgery) M.S,       | Govt. Rajaji Hospital, Madurai.  | Convener         |
| 2. Dr.N.Vijayasankaran, M.Ch (Uro.)                | Sr. Consultant Urologist<br>Madurai Kidney Centre,<br>Sivagangai Road, Madurai | Chairman         |
| 3. Dr.T.Meena, MD or Dean I/c (MMC)                | Professor of Physiology,<br>Madurai Medical College                            | Member           |
| 4. Dr.MosesK.Daniel MD (Gen.Medicine)              | Professor of Medicine<br>Madurai Medical College                               | Member           |
| 5. Dr.M.Gobinath, MS (Gen. Surgery)                | Professor of Surgery<br>Madurai Medical College                                | Member           |
| 6. Dr.B.K.C.MohanPrasad, M.ch,<br>(Surg. Oncology) | Professor of Surg.Oncology<br>Madurai Medical College                          | Member<br>-Secy. |
| 7. Shri.M.Sridher, B.Sc.B.L.                       | Advocate,<br>623-B.II.Floor, East II Cross,<br>K.K.Nagar, Madurai.20.          | Member           |
| 8. Shri.O.B.D.Bharat, B.sc.,                       | Businessman<br>Plot No.588,<br>K.K.Nagar.Madurai.20.                           | Member           |
| 9. Shri.S.Sivakumar, M. A (Social)<br>M.Phil       | Sociologist, Plot No.51 F.F,<br>K.K Nagar, Madurai.                            | Member           |

The Committee considers the 45 dissertations / research / study Proposal submitted by PG students / Non Medical students from outside the institution as per agenda. After discussion, the following dissertations I records / study proposals are approved.

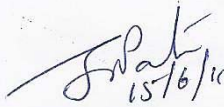
|                    |   |   |
|--------------------|---|---|
| Mrs.V.GOMATHIPRIYA | Second Batch<br>M.Sc<br>Nursing M.M.C<br>Madurai. | A comparative study to assess the effectiveness of kadukkai and Luke warm water wash on abnormal vaginal discharge among reproductive age women residing at Samayanallur, Madurai |
|--------------------|---|---|

**Medical Superintendent**

## APPENDIX - IV

### CONTENT VALIDITY CERTIFICATE


This is to certify that the tool developed for data collection by **V.GOMATHI PRIYA II Year M.SC.,(N)** on thesis entitled **“A comparative study to assess the effectiveness of kadukkai and Luke warm water wash on abnormal vaginal discharge among reproductive age women residing at samayanallur, Madurai.”**.



SIGNATURE OF THE EXPERT  
NAME: DR JOY PATRICIA M.D.  
DESIGNATION: (Community Medicine)  
DATE: HEAD OF THE DEPARTMENT  
INSTITUTE OF COMMUNITY MEDICINE  
MADURAI MEDICAL COLLEGE  
MADURAI.

## CONTENT VALIDITY CERTIFICATE

This is to certify that the tool developed for data collection by **V.GOMATHI PRIYA II Year M.SC.,(N)** on thesis entitled “**A comparative study to assess the effectiveness of kadukkai and Luke warm water wash on abnormal vaginal discharge among reproductive age women residing at samayanallur, Madurai.**”.



மகப்பேறு மனைகளின்  
கண்காணிப்பாளர்  
முனிச்சாலை மகப்பேறுமனை  
மதுரை மாநகராட்சி

## CONTENT VALIDITY CERTIFICATE


This is to certify that the tool developed for data collection by **V.GOMATHI PRIYA II Year M.SC.,(N)** on thesis entitled “**A comparative study to assess the effectiveness of kadukkai and Luke warm water wash on abnormal vaginal discharge among reproductive age women residing at samayanallur, Madurai.**”.

Recommended  
Dr. J. J. J.  
6.9.11  
வட்டார மருத்துவ அலுவலர்  
அரசு ஆரம்ப சுகாதார நிலையம்  
சமயநல்லூர், மதுரை.



## CONTENT VALIDITY CERTIFICATE

This is to certify that the tool developed for data collection by **V.GOMATHI PRIYA II Year M.SC.,(N)** on thesis entitled “**A comparative study to assess the effectiveness of kadukkai and Luke warm water wash on abnormal vaginal discharge among reproductive age women residing at samayanallur, Madurai.**”.

  
SIGNATURE : **T.V. MALLIGA, M.Sc., (N)**  
NAME: **PRINCIPAL**  
DESIGNATION **COLLEGE OF NURSING**  
**GOVT CHENGALPATTU MEDICAL COLLEGE**  
DATE: **CHENGALPATTU**

## CONTENT VALIDITY CERTIFICATE

This is to certify that the tool developed for data collection by **V.GOMATHI PRIYA II Year M.SC.,(N)** on thesis entitled “**A comparative study to assess the effectiveness of kadukkai and Luke warm water wash on abnormal vaginal discharge among reproductive age women residing at samayanallur, Madurai.**”

Signature:

  
27/4/2011.

Name & Seal:

MR. J. John Sam Arun Prabu

J. D. John Sam Arun Prabu,  
M.Sc.,(N)|M.Sc.,(Psy),PGDHM  
HOD, Community Health Nursing  
CSI Jeyaraj Annapackiam  
College of Nursing  
Pasumalai, Madurai-625 004

Date: 27.4.2011.

## CONTENT VALIDITY CERTIFICATE

This is to certify that the tool developed for data collection by **V.GOMATHI PRIYA II Year M.SC.,(N)** on thesis entitled “**A comparative study to assess the effectiveness of kadukkai and Luke warm water wash on abnormal vaginal discharge among reproductive age women residing at samayanallur, Madurai.**”.

*Kannamal*  
SIGNATURE OF THE EXPERT  
NAME: Mrs. Kannamal. C.  
DESIGNATION:  
DATE: Head of the Department  
Community Health Nursing

SARA NURSING COLLEGE  
Dharapuram-638 673.  
Tirupur-Dist.  
MANAKADAVU

APPENDIX - V

PERMISSION LETTER

From:

V.GomathiPriya  
I year .Sc (N) student  
College of Nursing  
Madurai Medical College  
Madurai.

Permission  
D. Ravi  
BLOCK MEDICAL OFFICER  
GOVT. PRIMARY HEALTH CENTRE  
SAMAYANALLUR  
MADURAI (DT)

To

The Deputy Director of Health Services & family welfare officer,  
Visvanathapuram,  
Madurai.

Through

**The principal**  
College of Nursing,  
Madurai Medical College,  
Madurai.

Respected sir,

Sub: Requesting permission to conduct dissertation in rural primary health centre area.

Forwarded  
D. Ravi  
1/4/11

This is for your kind information that for the fulfillment of my curriculum. I have to do dissertation on the topic **“A comparative study to assess the effectiveness of kadukkai and Luke warm water wash on abnormal vaginal discharge among reproductive age women residing at samayanallur, Madurai.”**. So, I kindly request you to permit me to do the dissertation in rural primary health centre, Samayanallur at Madurai.

Thanking you

Yours faithfully

Madurai  
23.02.2011  
S. Jothi  
23/2/11  
மதுரை மருத்துவ கல்லூரி  
மருத்துவ அலுவலர் அலுவலகம்  
மதுரை - 625 402.

Deputy Director  
of Health Services  
Madurai-11

D. Ravi  
1/4/11  
MEDICAL OFFICER  
SIDDHA WING  
GOVT. RAJAJI HOSPITAL  
MADURAI - 625 020

V. GomathiPriya

xg;Gjy; fbjk;

ngah;:

Njpp:

taJ:

Muha;r;rpNrh;ifvz;:

இந்த ஆராய்ச்சியின் தலைப்பு "பதினைந்து வயதிலிருந்து நாற்பத்தைந்து வயதிற்குட்பட்டபெண்களுக்கு வெள்ளைபடுதலின் போது கடுக்காய் தண்ணீரில் பிறப்புறுப்பை கழுவுதல், வெந்நீரில் கழுவுதல் இவற்றில் வெள்ளை படுதலுக்கு சிறந்ததுபற்றிய ஆராய்ச்சி",e;jMuha;r;rpapd; tptuq;fSk; mjd; Nehf;fq;fSk; KOikahfvdf;Fnjspthftpsf;fg;gl;IJ. vdf;Ftpsf;fg;gl;ltptuq;fisehd; Ghpe;Jnfhz;Lehd; vdJrk;kjj;ijnjhptpf;fpNwd;. gpwhpd; eph;g;ge;jkpd;wpvd; nrhe;jtpUg;gj;jpd; Nghpy; jhd; gq;FngWfpNwd; kw;Wk; ehd; ,e;jMuha;rpapypUe;Jve;NeuKk; gpd;thq;fyhk; vd;gijAk; mjdhy; ve;jghjpg;Gk; Vw;glhJvd;gijAk; ehd; Ghpe;Jnfhz;Nld;. ehd; vd;DilaRaepidTld; kw;Wk; KO Rje;jpuj;Jld; ,e;jkUj;JtMuha;r;rpapy; vd;idNrh;j;Jf; nfhs;srk;kjpf;fpNwd;.

ifnahg;gk;



