# CHAPTER-II

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## **REVIEW OF LITERATURE**

Various types of literatures have been studied to gain some knowledge about the different types of gynaecological morbidity among the women of reproductive. This is carried out in two steps. In the first step, literature related to the gynaecological diseases is reviewed. In the second step, studies of different writers and scholars in the field of reproductive health and gynaecological morbidity is reviewed. Some of the common gynaecological diseases are amenorrhoea, cervicitis, dysmenorrhoea, genital prolapse, infertility, leukorrhoea, menorrhagia, pelvic inflammatory disease (PID), reproductive tract infections (RTI), sexually transmitted diseases (STD), vaginitis etc.

## History of Gynaecology

'Gynecology' spelled 'Gynaecology', is defined by the Oxford English Dictionary as "That Department of Medical Science which treats of the functions and diseases peculiar to women" [Brieger,1997]. This word was first used in the middle of the 19<sup>th</sup> century. In 1867, gynaecology represented the physiology and pathology of the non pregnant state. Although most histories of gynaecology trace its roots back to antiquity, the field of medicine we call by that name today really has had a fairly origin.

Soranus, the Roman physician and writer who practiced in the reign of the Emperors Trajan (98A.D.-117A.D.) and Hadriam (117A.D.-138A.D.) is perhaps best known for his text entitled 'Gynaecology'. It was william's classic book about the gravid uterus with its detailed engravings that shed new light on the structure of the female pelvis.

The growth of interest in women's disease began long before the 19<sup>th</sup> century. In the Renaissance, for instance, the publication of a large, encyclopedic work entitled "gynaecia" by Casper Wolf (1532-1601), and later similar collections, represented what had been written since antiquity. The mere existence of such texts,

however does not mean that much attention was given to the treatment of women, except as it related to childbirth.

Ephraim Mc Dowell (1771-1830) made surgical history with his successful removal of a large ovarian tumour in 1809. James Marion Sims (1813-1883) developed a successful technique to repair vesicovaginal fistulas. The repair of vesicovaginal fistulas and the removal of ovaries for a wide operative gynaecology as it is known today. Women learned and taught surgery, including gynaecologic procedure, The Women's Medical College of Pennsylvania from its founding in 1850.

Any discussion of the treatment of women's diseases since the latter half of the 19<sup>th</sup> century must take into account a variety of interpretations of women's role in society and both professional and lay views of women's health. In the Victorian climate of concern about women and their diseases, as well as their moral sensibilities, vaginal examinations were not routine. When they were performed great efforts were made to preserve the patient's privacy and dignity. A battle over the morality of the use of speculum also ensued. The speculum, opponents of its use believed, could lead to sexual stimulation and sexual excesses. The term 'speculum rape' was used in the debates over the Contagious Disease Acts in England in the 1860s. In 1872, Robert Battey (1828-1895) of Georgia, did bilateral oophorectomy.

Moved to the new Johns Hopkins Hospital, where. Howard A. Kelly (1858-1943) began to teach gynecology. Kelly initiated a residency programme in gynaecology with a strong link to the pathology department. Kelly contributed a lot to the field of gynaecology. In 1898, Kelly published On both sides of the Atlantic , the view of Victorian women was influenced by the writings of eminent physicians. In Boston, a Harvard Medical School Professor, Edward H. Clarke (1820-1877) wrote a book in 1873 entitled 'Sex in Education' or 'A Fair Chance for the Girls.' This book was widely reviewed and discussed. Similarly Henry Moudsley (1835-1918) in England, an influential psychiatrist and medical teacher, also wrote about the supposed harm of higher education on the physiologic development of post pubescent girls. In Britain, the pioneer women physician Elizabeth garrelt Anderson (18361917) claimed that it was boredom that caused that caused the medical complaints of middle class women, not higher education. By the turn of the 20<sup>th</sup> century, the leadership of gynaecology had clearly "Operative Gynecology." In 1943, George N. Papanicolaou (1883-1962) and Herbert Traut (1894-1963) published "Diagnosis of Uterine Cancer by the Vaginal Smear" Papanicolaou had worked on this technique since the 1920s. Cancer in situ was recognized early in the century by Cullen and in 1912 by J. Schottlander and F. Kermauner. Invasive cancer was more clearly described in 1944 by G.A. Galvin and Te Linde in relation with cancer in situ. In the late 1940s, with the introduction of fiber optics, diagnostic possibilities were further increased.

In recent years, many operative and diagnostic procedures formerly requiring a major pelvic operation have been successfully performed through the laparoscope. The immediate post – World War II years were a period of truly astounding medical developments and saw the explosive growth of medical research funding and new hospital construction. After 1945, penicillin became available for civilian use, and this was soon followed by other antibiotics.

Likewise in India also gynaecology got importance in the first part of the 19<sup>th</sup> century also. Since 1962 family planning got importance in India. Thus gradually maternal health started getting attention. In 1987 a world wide "safe motherhood" campaign was launched by World Bank. In 1992 child survival and safe motherhood programme was taken up. In 1997 Reproductive and Child Health Programme was started. The safe motherhood programme is currently in the process of upgrading maternity care services in India. In comparison, scant attention has been paid to the reproductive health of non pregnant women. In India and other third world countries, women usually do not consult physicians or gynaecologists due to inhibition or to a lack of perception of causes of disease. There are various gynaecological diseases. Some of them are mentioned below in brief.

## Types of gynaecological diseases

(1) Amenorrhoea- Amenorrhoea is defined as absence of menstruation. There are two types of amenorrhoea:-

(a) Primary amenorrhoea - Primary amenorrhoea is defined when menstruation fails to begin by the age of 14, or in presence of well developed secondary sex characters, menses do not start by the age of 16.

(b) Secondary amenorrhoea - In secondary amenorrhoea menstrual periods stop after establishment of puberty.

(2) **Candidiasis** - This infection is due to gram positive fungus candida albicans. Vaginal candidiasis is characterised by thick, cheesy, white vaginal discharge and itching.

(3) **Cryptomenorrhoea** - It is the occurrence of menstrual symptoms without external bleeding which may be either congenital or acquired.

(4) **Cystocele-** A **cystocele** is a medical condition that occurs when the tough fibrous wall between a woman's bladder and her vagina (the pubocervical fascia) is torn by childbirth, allowing the bladder to herniate into the vagina. Urethroceles often occur with cystoceles.

(5) **Dyspareunia** - The term dyspareunia is loosely used for both difficult and painful coitus or sexual intercourse. The causes may be physical, psychological or both.

(6) **Dysmenorrhoea** - Dysmenorrhoea, or painful menstruation, is one of the most frequent of gynaecological complaints. Severe dysmenorrhoea is most prevalent in young single women leading sedentary lives, and its frequency has some economic importance, for the patients are often incapacitated from work for one or more days during each period.

(7) **Dysuria** - Dysuria is the pain or burning during urination.

(8) Endometriosis - Endometriosis is the occurrence of ectopic endometrial tissues outside the cavity of the uterus.

(9) **Fistula** - It is an abnormal communication between two structures which are normally unconnected. It may be vasicovaginal, vesico-uterine, urethro vaginal etc.

(10) **Fibroid** - Fibroid is the most common benign tumours of the female genital tract, usually occurring in the uterus. The most common presenting feature is menorrhagia or heavy menstrual bleeding.

(11) Genital prolapse - It is the weakness of the pelvic supporting structures causing a descent of the pelvic organs into the vagina. E.g. uterine and vaginal prolapse.

(12) **Infertility** - Infertility is the inability to conceive after one year of unprotected sexual intercourse.

(13) Low backache - The term includes many types of pain on the lower part of the back viz. pain at the sacrum, coccyx, on the lumbar spine, soreness on the back and sciatica.

(14) Leucorrhoea - This is a symptom of pouring out white discharge per vagina.Vaginal infection is the commonest cause of leucorrhoea.

(15) Menorrhagia - In menorrhagia, the menstrual cycle is unaltered but the duration and quantity of the menstrual loss are increased.

(16) **Metrorrhagia** - It may be defined as irregular, acyclical bleeding from the genital tract. The bleeding may be intermittent or continuous.

(17) **Polymenorrhoea** - In polymenorrhoea or epimenorrhoea, the menstrual cycle is reduced from the normal. Women with polymenorrhoea therefore menstruate more frequently than normal women, and the frequent menstruation is usually associated with excessive bleeding, which is prolonged.

(18) **Pelvic inflamatory disease (PID)** - It implies inflammation of the upper genital tract involving the fallopian tubes as well as the ovaries. It is caused by a combination of micro organisms.

(19) **Reproductive Tract Infections (RTI)** - Reproductive tract infection includes three types of infections :-

(i) Sexually transmitted diseases (STDs), such as chlamydial infection, gonorrhoea, trichomoniasis, syphilis, genital herpes chancroid and genital warts.

(ii) Endogenous infections, which are caused by the overgrowth of organisms that can be present in the genital tract of a healthy woman, such as bacterial vaginosis and vulvovaginal candidiasis; and

(iii) latrogenic infections that are associated with medical procedures. All these infections are preventable or are treatable causes of infertility, cervical cancer and ectopic pregnancy.

(20) Vaginitis - It is the inflammation of the vagina. Three of the most common organisms causing vaginitis in women of reproductive age group are Trichomonas vaginalis, Candida albica, and Gardinerella vaginalis.

(21) Vaginosis - A vaginitis of undertermined cause is called vaginosis.

(22) Chronic cervicitis - Chronic inflammation of the cervix is very common and is seen in about 80% of women with any gynaecological diseases or complaints. Chronic cervicitis is brought about by infection during abortion or child birth.

The present study will be confined within the following gynaecological diseases only:-

(i) Amenorrhoea,

- (ii) Dysmenorrhoea,
- (iii) Menorrhagia,
- (iv) Leukorrhoea,
- (v) Genital Prolapse,
- (vi) Chronic cervicitis
- (vii) Pelvic Inflammatory Disease (PID), &
- (viii) Vaginitis.

### **Review of Previous Studies**

#### Studies Abroad

Mette H. Moen (1987), gave an overview of the problem of women suffering from endometriosis in the study titled 'Endometriosis in women at interval sterilization'. The prevalence of endometriosis was investigated in 108 Norwegian women admitted for interval tubal sterilization. The mean age of the patients was 37 years. Endometriosis was detected in 19 (18%) of the women. About one-half of these had no symptoms from the disease. A positive correlation was found between a retroversion of the uterus and endo-metriosis. The women with endometriosis showed a longer period of uninterrupted menstrual cycles prior to the time of sterilization, when compared with the controls (89 unaffected women). Sisters and mothers of patients with endometriosis displayed a higher frequency of benign gynecological disorders than the corresponding relatives of the control group. The prevalence of endometriosis appeared to be independent of the following clinical parameters: onset of menarche, age at first pregnancy, number of pregnancies, previous use of hormonal contraceptives or IUD, and actual age at the time of sterilization. (9

Nabi Younis et al. (1993) in the study titled 'A Community Study of Gynaecological and Related Morbidities in Rural Egypt' tried to assess the prevalence of gynaecological and related morbidity conditions in a rural Egyptian community. A medical examination was conducted on a sample of 509 ever-married, non pregnant women. For gynaecological morbidities, genital prolapse was ranked high followed by reproductive tract infections and abnormal cervical changes. For related morbidities anemia was at the top, followed by obesity, hypertension and urinary tract infection. Regression analysis of risk factors demonstrated the contributions of social conditions and medical factors to these diseases. Reproductive tract infections were shown to occur more frequently with utero-vaginal prolapse, IUD use, presence of husband (regular sexual activity), and unhygienic behaviour. Genital prolapse increased with age and number of deliveries. Age, recent pregnancy, education, socioeconomic class, and workload showed significant associations with related morbidity conditions. This evidence challenges national health programmes to go beyond safe motherhood, child survival, and family planning in its services to women, and to consider the social context of health as well.

L. Brabin PhD, et al. (1995), in the study 'Reproductive tract infections and abortion among adolescent girls in rural Nigeria' tried to highlight the need for health care for adolescents. The study was conducted in southeast Nigeria. 868 females attended for interview and examination. 458 aged 20 and above and 410 aged 12-19 years, the latter representing 93.4% of the adolescent population. 43.6% of those less than 17 years and 80.1% aged 17-19 years were sexually active and at least 24.1% had undergone an induced abortion. Only 5.3% had ever used a modern contraceptive. Vaginal discharge was reported by 82.4%, though few sought treatment. 94.1% of sexually active adolescents and 97.6% of sexually active women 20 years old or over were gynaecologically examined and screened for reproductive tract infections. Of those aged less than 17, 19.8% had symptomatic candida and 11.1% trichomonas infections. Among those aged 17-19 years, chlamydia was detected in 10.5%, and symptomatic candidosis in 25.6%; this was the group most likely to have any infection (43.8%). 42.1% of sexually active adolescents had experienced either an abortion or a sexually transmitted disease. Syphilis was the only infection for which the incidence clearly increased with age. Health-care services for adolescents in this community are needed and should include sex education, contraceptive provision (especially barrier methods), and access to treatment for reproductive tract infections. Investments in health for this age group will have an effect on subsequent reproductive health.

Thongkjai et al. (1996) conducted a study on 'Prevalence of non HIV gynaecological diseases and sexually transmitted diseases in rural Thai women' to investigate the prevalence, type and distribution of non HIV, gynaecological diseases and sexually transmitted diseases among rural Thai women. To work in villages, a mobile gynaecological clinic was set up, so that physical examination could be done. Demographic variables were collected by questionnaire. Samples including endocervical and vaginal swabs, urine and blood were collected and tested by microscopic examination, bacterial cultivation, RPR, TPHA, LED test for urine, white blood cell count and PCR for chlamydia trachomatis HSV and HPV. A number of 586 normal women, age range 15-54, were recruited in the study. It was hypothesized that HIV would be spreading into communities of northeast Thiland via labours and low educated workers. The HIV would then be transmitted to their spouse and lovers. Even though the prevalence of sexually transmitted diseases was still low, a large portion of women complained of unpleasant disorders. This implies that sexually transmitted diseases (and also HIV) found among rural women can be resulted from infected husbands.

Klouman, Elise., et al. (1997), mentioned about a study titled 'HIV and Reproductive Tract Infections in Rural Kilimanjaro, Tanzania: Women at Increased Risk'. The aim of this study was to determine the prevalence of HIV infection, other sexually transmitted diseases (STDs), and biological risk factors associated with HIV infection in a rural population in Tanzania. A population-based study of a village population was carried out from July 1991 through January 1992. A total of 3,239 people (83.7%) participated in an HIV serosurvey. The total HIV prevalence was 0.7 and 1.9% among males and females, respectively, and 4.3% in women and 1.6% in men in participants aged 15 to 44. The same age group was interviewed and offered screening for STDs. *Trichomonas vaginalis* vaginitis (24.7%) was the most common reproductive tract infection (RTI); 10.3% of women were infertile and 10.6% suffered from pelvic inflammatory disease (PID). Comparing women and men, we found that 2.2 versus 20.4% had been treated for genital discharge; 2.6 versus 1.2% suffered from active syphilis; 6.9 versus 9.6% had chlamydial infection; and 46.9 versus 14.6% had an ongoing RTI/STD. A significant association was found between HIV infection and STD cases (in women) and between HIV infection and a history of STDs (in men). The heavy burden of untreated RTIs in females calls for a more gender-specific approach to HIV and STD prevention.

A community-based survey conducted in 1997 and 1998 by investigators at Mahidol University in Thailand and the University of Arizona, USA, revealed that gynecological symptoms self-reported by women of reproductive age in the rural Kohn Kaen province of northeast Thailand were high: 70 percent of surveyed women had reported such symptoms over the previous two years, and 58 percent to 71 percent of these complaints were recurrent. Furthermore, qualitative research methods used by the investigators showed that these symptoms were of substantial concern to the women, greatly affecting their health-seeking behavior, use of medication, sexual relations, and peace of mind. The survey revealed women's reports of gynecological complaints, Pap smear clinic attendance, self-medication, and use of health services for gynecological problems. This initial research was followed by two months of qualitative research using a combination of participant observation, structured and semi-structured interviews, and focus group discussions. Another month of qualitative research in the same six villages produced detailed case histories of 50 women selfreporting chronic or recurrent gynecological problems. Married women who had reported recurrent symptoms on the initial survey were selected for in-depth interviews.

A.Sadeghi-Hassanabadi et al (1998) studied the prevalence of reproductive morbidity among women of the Qashqa'I tribe, Islamic republic of Iran. Gynaecological problems related to childbearing was studied in 1010 married women of the semi nomadic Qashqa'I tribe. The most common problems were cystocele (56.0%), uterine prolapse (53.6%) and restocele (40.4%). The prevalence of other problems such as cervical erosion and inflammation, urinary incontinence and dyspareunia was found to be between 24% and 40%. Early age at marriage and childbearing, high parity and poor access to medical facilities are considered to be the most important factors leading to these high prevalence rates, although the lifestyles of the women in this community could also be a major contributing factor.

To describe the menstrual experience of women referred for menstrual problems and to assess associations with reasons for referral given by their general practitioners Pamela Warner et al. undertook a cross-sectional study from 1996 to 1999. Questionnaire survey was done on women (aged 25 years to 49 years) newly referred for menstrual complaints to gynaecological clinics at Edinburgh and Glasgow Royal Infirmaries and Glasgow Western Infirmary. Although there may be no underlying serious disease or risk to physical health, periods can cause major distress and disability. Many women are deterred from consulting by reticence about discussing menstrual problems, anxiety about investigations, or a lack of belief that medical help will be forthcoming. In an opinion poll of 1069 women, 60% espoused the view that not enough attention is paid to problems with periods. Patients may hold definitions of health and healthcare needs that differ from those of clinicians, perhaps more so with periods, an intensely private event beset with societal constraints. Health needs that remain unvoiced within the consultation have been related to poor outcomes. They found that pain around periods is commonly reported as problematic yet relatively "invisible" in the referral and diagnostic pathways, and also that the more deprived women were less likely to be diagnosed with fibroids, more likely to be diagnosed with dysfunctional uterine bleeding, and more likely to fail to return to the clinic.

Dr.Gijs Walraven MD et al. (2001), mentioned the prevalence of reproductive organ disease in a sample of rural Gambian women in the study titled 'The burden of reproductive-organ disease in rural women in Gambia, West Africa'. A questionnaire on reproductive health was administered by fieldworkers to women aged 15–54 years living in a rural area under demographic surveillance. A female gynaecologist questioned and examined the women (including speculum and bimanual pelvic examinations). Vaginal swabs and cervical smears were taken for test. Reproductive-organ symptoms were more likely to be reported to the gynaecologist than to the fieldworker. Menstrual problems, abnormal vaginal discharge, and vaginal itching were the most commonly reported symptoms. A minority of women said they had sought health care for their symptoms. The frequencies of reproductive-organ morbidity were high: menstrual dysfunction 34·1%, infertility 9·8%, reproductive-tract infections 47·3%, pelvic tenderness 9·8%, cervical dysplasia 6·7%, masses 15·9% and childbirth-related damage to pelvic structures 46·1%. 948 (70·3%) women

had at least one reproductive-organ disorder. For these rural women, whose lives depend heavily on their reproductive function, reproductive-organ disease is a large burden. In inadequately resourced rural areas, with poor education, heavy agricultural and domestic labour, and limited access to quality health care, many women are not able to attain and maintain reproductive health and wellbeing.

Thi Hoa Binh et al.,(2002) in the study titled 'Perception of morbidity related to reproductive tract infection among women in two rural communities of Ninh Binh Province, Viet Nam' explored women's perceptions of reproductive tract infection and their associated symptoms and health seeking behaviours. Focus group discussions, in-depth interviews, free listings and pile sortings were conducted with approximately 230 women. Although infections are perceived to be common and to cause much discomfort, there is title consistency in the reporting of symptoms, causes and consequences of infection. Perceived causes are predominantly associated with dampness and exposure to dirty water, although there is also a perceived association with medical procedures such as IUD insertion and abortion. The findings highlight the need for further training of providers to understand better the perceptions of women; the expansion of information activities, particularly to include accurate information on reproductive physiology, Ithe causes of infection and possibility of sexual transmission and strengthening the quality of IUD and abortion services.

Alamgir et al. (2004) in their study 'Reproductive Tract Infection-A Giant Agony for Bangladeshi Women' revealed the real condition of women's health, most prevalent disease pattern and correlated the socio-economic and educational status of people to prevalent diseases. Women of reproductive age group (15 to 45 year) were included in the studies. These were all cross sectional studies with clinical interview and semi closed questionnaire pattern. Results were statistically analysed. Results revealed 60% RTI patients in rural areas 56% of women population were diagnosed as having RTI among whom 23% had sexually transmitted diseases. Poor literacy rate, lack of hygienic conditions and proper health education were supposed to be the prime factors for RTI among women.

To estimate the pattern of gynaecological morbidity among the women seeking services at the Pakistan Institute of Medical Sciences, Islamabad a study was conducted which has been cited in the Journal of Pakistan Medical Association (2004), under the title 'Burden of gynaecological diseases in a tertiary hospital: Two years audit of out patient department at Pakistan Institute of Medical Sciences, Islamabad. All women seeking advice for gynaecological problems in the out patient department of Obstetrics and Gynaecology, Pakistan Institute of Medical Sciences Islamabad were included in the study. The total reproductive morbidity presenting at the OPD was 29196 of these 18289 (62.7%) presented with gynaecological morbidity. Menstrual irregularity was the commonest gynaecological problem encountered followed by reproductive tract infections, sub fertility, urogynaecological malignancies and others (including sexual dysfunction congenital malformations and genital tract injuries). This study highlights the need for addressing and prioritizing resources towards these women health issues which affect women's ability to fulfill a wide range of diverse roles.

Sabalic et al. (2005) worked on 'Reliability of gynaecological examination in differential diagnosis of appendicitis in women of reproductive age' to examine the differential diagnostical reliability of gynaecological examination in women of reproductive age who have shown clinical symptoms of acute abdomen in the lower right quadrant, with a dilemma whether this was due to acute appendicitis or acute gynaecological disease during the 15 year period. During this 15 year period there were 530 women of reproductive age underwent surgery for suspected acute appendicitis at Community Hospital in Pozega. Case history intraoperative findings, pathological findings as well as consultative gynaecological findings were analysed retrospectively. The results of this suggest a significant unreliability of bimanual gynaecological examination in differential diagnosis of acute abdomen in women of reproductive age clinical work should, at any rate, include other diagnostical methods (US,CT, Laparoscopy, MRI) aiming at more precise diagnosis, which would then lead to the application of a more adequate therapy.

Durr-e Nayab (2005) in his research 'Reproductive Tract Infections among Women in Pakistan: An urban case study' showed an assessment of the magnitude, nature of infections and evaluation of the efficiency and effectiveness of clinical diagnosis of Reproductive Tract Infections as an alternative of laboratory diagnosis. The study was conducted in the city of Rawalpindi, Pakistan. A representative sample of 500 households was taken. The major objectives of this study were -(i)To assess the magnitude and nature of infections as diagnosed through medical examination, including both laboratory and clinical diagnoses. (ii)To evaluate the efficiency and effectiveness of clinical diagnosis of RTIs as an alternative for the more expensive and resource demanding laboratory diagnosis, (iii)To probe the variation in magnitude and nature of RTIs across women with different socio-economic and demographic characteristics. Findings of this study showed that doctors, whom women were consulting, not always gave medically sound advice .

To highlight the various gynaecological problems presenting as acute surgical abdomen and their management Dr. Sardar Ali et al. (2007), mentioned about the study titled 'Gynaecological Emargencies'. The study was a prospective one and was conducted at the District Headquarters Hospital Kasur, Pakistan. The study was continued for two years from January 2001 to December 2002. A total of 44 patients presenting with acute surgical abdomen but having some gynaecological problems were included. The surgical procedure was tailored according to the circumstances. Further management, conservative or post operative care was done in surgical ward. Pelvic Inflammatory Disease (PID) which is the inflammation of upper genital tract with its complications like pelvic cellulites and pelvic peritonitis was the most common emergency. The age group between 16 to 30 years was the commonest having gynaecological problems. There was a clear predilection of married than unmarried females facing these problems. Because of lack of experience and limited diagnostic facilities erroneous diagnosis was made to some extent in almost all the cases.55.55% of patients suffering from PID were treated successfully by conservative means. Surgical procedure was performed in all the patients suffering from ruptured ectopic pregnancy, perforated uterus and torsion of ovarian cyst and pedunculated subserosal fibroid. Wound infection and delayed wound healing were among the most common postoperative complications. Mortality occurred in ectopic pregnancy (16.66%) and PID (5.55%). The different gynaecological problems are commonly encountered in general surgical practice. The surgeons often fall in this unwary trap because of (1) close resemblance of clinical features (2) less exposure to gynaecological problems (3) non availability of more sophisticated diagnostic tools in emergency. The overall sufferings of patients can be reduced to some extent by overcoming these shortcomings.

Geeta Gurung et al (2007) conducted a study titled 'Pelvic organ prolapse in rural Nepalese women of reproductive age groups: What makes it so common?' to find out the prevalence, aetiopathogenesis and the magnitude of problems of pelvic organ prolapse (POP) among married women of reproductive age in the rural Nepalese community. A cross- sectional descriptive study was conducted in eight selected districts of Nepal. Among 2849 women who agreed to take part on the study when interviewed 2070 (72.6%) came for assessment. POP was diagnosed in 207/2070 giving the incidence as 10% being commoner in the planes (8:1) than mountains. In this large reproductive morbidity study including women in the rural community of varied ethnic groups from diverse ecology, basic community survey linked to clinical assessment in the health facility found the incidence of POP to be much higher in planes than hills giving unusually lower prevalence rate for POP as 10% than other clinic based studies.

M. Mizanur Rahman et al (2007), in the study 'Adolescent Self Reported Reproductive Morbidity and Health Care Seeking Behaviour' highlighted the scarcity of studies in the reproductive morbidities of unmarried adolescents. This was a crosssectional study conducted in both rural and urban areas of Bangladesh. The female adolescents aged 10-19 years irrespective of their marital status constituted the study population. A multistage cluster sampling technique was adopted to select the sample. Both quantitative and qualitative data on reproductive morbidity were collected. A total of 2883 adolescents were selected. The analysis revealed that a large proportion of the adolescents (64.5%) reported has been suffering from gynaecological morbidity. The most frequent form of morbidity was menstrual disorders followed by lower abdominal pain, burning sensation during urination, genital itching, vaginal discharge etc. The incidence of these health problems varied by socio-economic and demographic characteristics of the adolescents. Recommendations to address these problems include encouragement of female education, introduction of family life education in school curricula, creating community awareness for seeking health care and empowerment of women in household decision making process.

Z. Jabiry-Zieniewicz, et al. (2009), investigated the menstrual patterns and sex hormone profiles among female liver transplant recipients of reproductive age in the study titled 'Menstrual Function in Female Liver Transplant Recipients of Reproductive Age'. The study was conducted in the Medical University of Warsaw, Poland. The study group consisted of 24 women of reproductive age with end-stage liver failure who underwent successful OLT (Orthotopic Liver Transplantation). Menstrual patterns and sex hormone profiles were analyzed before as well as 3 and 12 months after OLT (Orthotopic Liver Transplantation). Twenty-seven healthy women of reproductive age served as controls. Biochemical parameters of liver function were assessed before and after OLT (Orthotopic Liver Transplantation). Amenorrhea was the most commonly observed abnormality of menstrual cycle in women with endstage liver failure (71% of patients). The recurrence of regular menstrual cycles was observed in 35% of patients 3 months after OLT (Orthotopic Liver Transplantation). The percentage increased to 70% at 1 year after grafting and was clearly associated with stabilization of liver function. Amenorrhea, the most common menstrual disturbance in women with end-stage liver failure, may be reversed by OLT (Orthotopic Liver Transplantation). One year after OLT (Orthotopic Liver Transplantation), menstrual bleedings were noted in 74% of patients of reproductive age. The recurrence of reproductive function indicated the need for effective and safe family planning methods in that group of patients.

#### **Studies in India**

Bang & Bang (1986) in their study 'A community study of gynaecological disease in Indian villages' elucidated the various gynaecological diseases, existing taboos and inhibitions regarding sexual health very clearly. The study was conducted at the two villages of Gadchiroli, Maharashtra. The research was empirical, exploratory and community based. All women, regardless of whether they had symptoms or not were examined in order to estimate true prevalence of gynaecological morbidity. It was found that 92% of the women had gynaecological disorders. Each women had an average of 3.6 diseases, but only 7% of the women had ever sought medical care. The study also invites attention to the fact that the existing taboo and inhibitions regarding sexual health prevent women from securing an easy access to medical care.

Shatrunga et al. (1987) in the study 'Backpain, the feminine affliction' found out the correlation of the causes of back pain with working pattern and calcium deficiency. The study was empirical, descriptive, retrospective, helth centre based. The study was carried out in two parts : (a) retrospective and (b)study of currently admitted women in the orthopaedic ward of the Osmania Genernal Hospatital,Hyderabad.297 women of 18 years and above were taken as sample. The study recognises backpain as an important health complaint in women's life. This complaint which other wise remains delegitimised for doctors inflicts on women's bodies in a variety of ways throughout their lives. The causes of back pain and its correlation with working pattern and calcium deficiency have been explained.

Parikh et al. (1989) enquired on 'Gynaecological morbity among women in a Bombay slum' and described the gynaecological morbity in the urban slum and women's perception of their gynaecological health. The main aim was to study the levels, patterns and correlates of gynaecological morbidity in the urban slum, focusing on women's perceptions and assessment of their gynaecological health.1,500 married women of the slum were taken as sample. The study was empirical, descriptive and community based. Older and higher parity women are more likely to report low back or lower abdominal pain and menstrual problems. Gynaecological conditions were rarely taken seriously untill they became grave. The findings show high prevalence of gynaecological morbidity. The report presents a forceful plea for greater attention to, and investment in reproductive health care needs of poor Indian women.

To delineate treatment seeking behavior of women having vaginal discharge, College of Nursing, Post Graduate Institute, Chandigarh, conducted a cross-sectional, community survey in the year 1992 at Dadu Majra Colony, Chandigarh, North India. The study sample consisted of 1,682 women, married, aged 15-44 years and not pregnant or puerperal. Prevalence of vaginal discharge was found to be 21.6%. Consultation rate was 45%, and the remaining did not seek treatment due to shyness (27.5%), 26% were not interested, 14% due to high costs, 10% took it as normal and 6.5% felt that it was incurable other reasons (32.16%) for not seeking help were no time no escort, no one to look after children, husband not interested or did not know where to go 75% of those who sought treatment did so after one year of onset.

Bhatia and Cleland (1993) made a study on 'Self reported symptoms of gynaecological morbidity and their treatment in South India' and highlighted about the quality of care, hygienic condition, etc. The study was empirical, descriptive and community based. The main study had several components, of which the present study was a part. Sample size was 3,600 and women less than 35 years were not taken. Approximately one third of the women included in this study reported current symptoms of at least one reason for reproductive morbidity 99% of abortions were reported to be spontaneous. The causes of which may be out come of prior infection or a cause of subsequent infection. Among others, menstrual problems symptoms of lower reproductive tract infections, anaemia and symptoms of acute PID were reported. Prolapse, urinary tract infections, infertility (secondary), haemorrhoids were less frequently reported. The results strongly suggest that the quality of care and, in particular, hygienic conditions, may be poorer in government hospitals, than in private hospitals and clinics.

Bhatia, J.C., et al. (1993), in their study 'Levels and Determinants of Gynaecological Morbidity in a District of South India' tried to determine the levels and determinants of gynecological morbidity and other related conditions among currently married women below 35 years of age. The study was conducted in the year 1993, in one sub district of Karnataka. It was a cross-section at and community based survey. 385 women having children between 6-12 months, married and younger than 35 years formed the study sample. The women were interviewed at monthly intervals for one year and then invited to undergo a medical examination.152 out of 385 women reported 226 gynecological complaints. The average number of complaints was 1.5 and the diseases are excessive weakness, vaginal discharge with lead odour, itching or irritation, lower abdominal pain or vaginal discharge with fever, menstrual bleeding disorders or painful menstruation / spotting. Approximately one tenth of the women suffered from STDs like trichomonabvaginals, gonorrhoca, clamydia trachomatis and syphilis. More than one half of the women were found to have endogenous infections such as bacterial vaginosis, mucopurulent cervicitis, candid allbicans and cervical cell changes. Clinical examinations revealed the prevalence of vaginitis, cervicitis, cervical ectopy, pelvic inflammatory disease (PID), genital prolapse, fistula and dyspareunia. Servere anaemia was found in 17% of women while 67% of women were mildly anacmic. Severe chronic energy deficiency (CED) was found in 12% of women, moderate (16%) and mild (29%) severe CED was observed to be significantly related to with clinically diagnosed PTD were three times more likely than those who are not so diagnosed to report menstrual problems.

In the study 'Gynaecological diseases in women of reproductive age groupunmet needs in MCH care' mentioned in the Indian Journal of Community Medicine the prevalence of gynaecological diseases among women of reproductive age group (15-45 years) was assessed and the awareness and perception of the women of reproductive age group regarding their gynaecological problems were studied.The study was conducted in Kalyanpuri, an urban resettlement colony of Delhi. There were 362 participants and cross sectional study design was used. A very high prevalence of gynaecological, diseases such as cervicitis, PID, vaginitis, trichomoniasis,, menstrual disorders, dysmenorrhoea, hypomenorrhoea, menorrhagia etc. were found among these women.

Ooman, Nandini conducted a study on "Poverty and pathology: Rajasthani Women's Perceptions of Gynaecological Morbidity and Their Implications for Research and Intervention" in the period May 1993 - April 1994 to find out the determinants of morbidity as perceived by women in relation to this socio-economic context. It was a qualitative ethnographic and clinical, cross-sectional, community based survey. The qualitative survey included 250 women. The study was carried out in three phases ; ethnographic, survey and clinical in the Bikaner District of Rajasthan. 47.9% of the women reported menstrual problems. The causes as described ranged from weakness, worry, abortions, problems in delivery, eating hot foods, drinking too much tea, wearing a copper-T and men sleeping with other women. 20% of the women reported prolapse although they could not distinguish between vaginal and uterine prolapse. Weakness in the house (economic hardship) is considered as the significant underlying cause of all women's illnesses. In case of illness the most frequently informed person was the husband. This was seen across all ages. The majority of the women did not seek any treatment for discharge, menstrual problems or prolapse.

Indian Council for Medical Research, Mumbai conducted a prospective, hospital based study in Mumbai to find out prevalence rate of eight sexually transmitted diseases in women attending a family planning clinic. Sample size was 356. 32.6% of women, were detected with at least one STD 15/356 women had one STD, 12 women had 2 types and women had 2 types of STD. Bacterial Vaginosis (7.3%) was the most frequent complaint followed by viral STD s (HSV,HPV)(3.3%), and 0.8% had gonococcai chlamydia was found in 5.4% of women.

To find out the microbial profile of pelvic inflammatory disease (PID) a prospective, hospital-based study was conducted in Amritsar, Punjab from 29 March 1993 to 27 March 1994 by Government Medical College, Amritsar. Arora, Usha and U. Mohan (1997) mentioned about this study in the Indian Journal of Medical Sciences. The sample consisted of 100 women who had a tubectomy. 30% showed bacterial growth and high vaginal smears showed growth in 50% of the cases. Isolates from 20 of upper and lower genital tract revealed similar infections. Isolation of similar bacteria suggests the ascent of microorganisms from the lower to the upper genital tract. Ciprafloxin emerged as the most sensitive drug as 94.20% isolates were sensitive to it.

Gujarat Institute of Development Research, Ahmedabad, conducted a crosssectional, community based study during the time period of 1995-96 to estimate the level of gynecological morbidity among different socio-economic group and to assess the extent of medical care sought by women in the Kheda district (rural) of Gujarat. The title of the study was "Gynaecological Morbidity in Rural Gujarat : Some Preliminary Findings." The sample included 800 women aged16 to 60 years. 75% of the women reported some disorder or problem with their reproductive functions. 51.6% reported backache before or during menses of whom 4.9% sought treatment, 22% described menstrual periods as painful, 35.7% reported excessive vaginal discharge and 14% each complained of itching sensation in the vaginal area and painful sexual intercourse. Incontinence and genital prolapse were reported by 8% and 3% respectively. Only about a third of the women discussed their problems with their family members. The majority of these discussed the problem with their husbands. Among those who reported illnesses, 88-98% had not sought any treatment. Reasons given included high cost of treatment since govt. health facilities did not provide any treatment for these reproductive health problems. 97% of those who reported painful sexual intercourse did not seek any medical treatment. A higher proportion of better educated women tended to talk about their problems (mainly to their husbands) as compared to those with no education.

In the year 1996 a study was conducted in the Kaniyambadi block, Vellore, Tamil Nadu, to determine the nature and extent of gynecological morbidity including reproductive tract infections in young married women by Christian Medical College, Vallore. It was a community survey with clinical and laboratory investigation and the title was "Prevalence of Reproductive Tract Infections among Adolescents in a Rural Community in Tamil Nadu. 451 married women in the age group of 16-22 years formed the study sample. Majority reported one or more gynaecological problems. Other problems were reproductive tract infections, menorrhagia, infertility, uninary tract infections and genital prolapse. Among the reproductive tract infections, bacterial vaginosis was the most prevalent followed by trichomoniasis, invasive type of candidiasis and Hepatisis B. Prevalence of reproductive tract infections in symptomatic women was 58% and 38% in asymptomatic women. Only 35% of the women had sought treatment and majority approached unqualified / traditional practitioners.

Pal, Amitava, U.K. Ghosh et al. (1994), in 'Clinical Bacteriological Study of 'Gardnerella Vaginalis' mentioned the prevalence of Gardnerella vaginalis in patients attending a gynaecology outpatient clinic. This was a prospective, hospital-based study and conducted by Motilal Nehru Medical College, Allahbad. The sample consisted of 250 non-pregnant women in the age group of 15-40 years residing at Allahbad, Uttar Pradesh. A detailed clinical history was taken in reference to vaginal discharge, pruritus vulvae and dyspareunia. General examination was followed by local genital examination. The prevalence rate for G. vaginalis was the most followed by Trichomonas vaginalis and candida. Of those testing positive for G. vaginalis, had vginal discharge, pruritus valvae, dyspareunia and dysuria as associated symptoms. Majority of the G. vaginalis cases presented with the sign of vaginal discharge ( thin, white, mild to moderate in amount without any offensive odour), rest are presented with vaginitis (mild), chronic cervicitis and erosion.

To assess microbial flora in women with complaints of vaginitis and to compare it with that of healthy women a prospective, hospital-based study was conducted by Lokmanya Tilak Medical College Hospital, Mumbai. Pandit, D. V., et al. (1994) mentioned about this study in the Journal of Obstetrics and Gynaecology in India. The sample consisted of 300 patients with vaginal discharge, and the control group was 100 women with no genital complaints. They were matched for age and and socio-economic status. History was taken and requisite tests done. Trachomonas vaginalis, Mycoplasma hominis, Ureaplasma urealyticum, Gardenerella vaginalis and candida are higher in the study group as compared to controls.

To find out the magnitude of asymptomatic gonorrhoea in women a prospective, hospital based study was conducted in Amritsar, Punjab by Medical College, Amritsar, from January 1993 to January 1994. Kaur. Harinder, Jagdish Saini, and Jasmeen Singh (1995) mentioned about the study in the Journal of Obstetrics and Gynaecology of India. The sample consisted of 500 women aged 17 years to 46 years attending the gynaecological, skin and STD clinic and suspected of having gonorrhoea. Detailed history was taken, urethral and endocervical swabs were taken for gram staining and culture. 4/500 (0.8%) showed positive gonococci culture. Two of the positive cases denied any extramarital contact, one gave a history of multiple partners and one gave a history of husband taking treatment for venereal disease two months prior to the study.

Parvez, S. et al. (1995) in the study 'Vaginal Discharge in a Slum' highlighted about various factors related to the problem of vaginal discharge and the continuation of the treatment. This was a longitudinal, community-based study conducted in an urban slum of Chandigarh, North India by Post Graduate Institute of Medical Education and Research, Chandigarh. The sample size was 364 and the period of study was from Jan-Feb 1992-Nov 1993. Only self reported cases were taken and clinical examinations were done. 169 out of 241 were relieved of their symptoms by the second year, but 72 still had vaginal discharge and were referred to the Post Graduate Institute located about 5 kms away, for check-up and treatment. Thirty-eight women were unwilling to come to the Institute for treatment. Reasons given were lack of time, difficulty to go, unsuitable dates, fear of multiple follow-up visits, nobody to look after children, expensive treatment and difficulty in locating outpatient departments in the Institute. Of the 34 women who were willing to come for treatment, only 11 complied. Reasons for noncompliance were child not well, husband busy/refused, other ailments and some had no specific reason. The diagnosis for all of the 11 women who came for check-up was chronic gynaecological

morbidity, and included: cervical erosion (3), chronic cervicitis (4), non-specific vaginitis (2) and cervical polyp (2).

To prove efficacy of oral Vitamin B1 administration for the treatment of dysmenorrhoea, Gokhale, Leela B., conducted a study from July 1993 to June 1994 in Pune, Maharashtra. The study used a randomized, double blind, placebo controlled design. The sample consisted of 556 girls aged 12 to 21 years from nine schools and five hostels in Pune, having moderate to severe spasmodic dysmenorrhoea. A total of 715 girls were interviewed. The age, weight and menstrual history of all the girls were recorded. Girls with mild dysmenorrhoea are excluded. The result of the study showed that after 150 days 87% were completely cured, 8% relieved (pain almost nil to reduced) and in 5% there was no change. In contrast to the usual treatment regimen which consists of oral contraceptives and non-steroidal anti-inflammatory prostaglandin synthetase inhibitors, which are palliative and suppressive in nature, vitamin B1 is curative, without any side-effects, simple to administer and inexpensive.

Maheswari, V., et al. (1996), described the incidence of etio-pathological factors in abnormal uterine bleeding cases. This was a prospective, hospital-based study and was conducted by Medical College Aligarh. Endometrial specimens in 104 cases of abnormal uterine bleeding were studied. Menorrhagia was the most common bleeding pattern, followed by metrorrhagia, polymenorrhoea and polymenorrhagia, post-menopausal bleeding and continuous bleeding. The majority belonged to the 31-40 years age group. Histopathological examination showed proliferative endometrium in most cases followed by secretory endometrium, hyperplastic endometrium, irregular shedding, malignant lesion and tuberculosis. Adenomyosis uteri and leiomyoma were seen in 46.7% and 40% of the 30 hysterectomy specimens.

A prospective, hospital based study was carried out by S.S.G. medical college and Hospital, Baroda, to evaluate the prevalence of reproductive tract infections among users and non users of contraceptive methods. The sample consisted of 671 women attending the gynaecology out patient clinic. Overall, pelvic inflammation was seen in 126, cervical infection in 90 and vaginal infection in 353 women. Thirty percent of non users had a reproductive tract infection as compared to 97.3% of users of contraceptive methods of women who were non users and had an infection (36), 19% had PID, while about 40% each had a vaginal or a cervical infection of tubectomy acceptors with an inflection (468 / 473), the vast majority (67.7%) had vaginal infection and 23.5% had PID. Among IUCD users with an infection (39146); on the other hand, cervical infections were more common (48.7%), followed by vaginal infections (35.9%).

Patel and Khan (1996) surveyed 1790 women in a community in rural Uttar Pradesh to find out the levels of self-reported gynecological morbidities. Of those women reporting menstrual problems 33% had excessive bleeding, 20% had continuous bleeding for 10 days or more and 27% had occasional bleeding. It is also found that 31% of the women reported urinary tract problem.

Aggarwal, K., A.T. Kannan, A. Puri, et al. (1997), in the study 'Dysmenorrhoea in Adolescent Girls in a Rural Area of Delhi: A Community-based Survey' tried to grade dysmenorrhoea based on the ability of the patient to work. This was a cross-sectional, community survey. A house to house survey was done and adolescent girls aged 11 years to 18 years were interviewed using a pre-tested proforma. A total of 300 girls were identified, of whom 97 had attained menarche. Questions were asked on duration of menstruation, severity of pain and need for medical attention, ability to work and absenteeism from school or work due to menstrual problems. Gradation of dysmenorrhoea was done in four stages. Grade 0 (no pain), where, working ability is not affected and analgesics are not required. In Gradel (menstruation with mild pain), working ability is moderately affected and analgesics are rarely required. Grade2 is such a stage where working ability is moderately affected and analgesics are required and in Grade3, working ability is clearly inhibited and analgesics have poor effect. Mean age at menarche was 12.8 years in girls with dysmenorrhoea and 13.3 in those without dysmenorrhoea. Prevalence of dysmenorrhoea was 70.8%. However, severe dysmenorrhoea was present in only 17.5%. The mean days of menstrual flow was significantly correlated with dysmenorrhoea.

Joseph et al. (1997) have shown in their study on 'General and reproductive health of adolescent girls in rural South India' showed that the perception of the adolescent girls about topics, such as, menstruation, contraception, nutrition, and AIDS were extremely low. The study was conducted in Arcot district of Tamil Nadu. The type of the research was empirical, descriptive and community based. In the focus group discussions, adolescents spoke of having headaches, body pains, and fatigue. There was reluctance to discuss sexual health problems, but many reported concerns about menstrual irregularities. Total 190 girls were interviewed. Over 20% suffered from joint pains, weight loss, poor appetite and recurrent respiratory problems. About 30% were anaemic and levels of knowledge about topics, such as, menstruation, contraception, nutrition, and AIDS were extremely low.

Shabnam, Gupta B. K., Kumar Raj et al. (1997), mentioned about a prospective, hospital-based study in Ludhiana, Punjab by Dayanand Medical College and Hospital, Ludhiana in the Journal of Obstetrics and Gynaecology of India. The sample consisted of 500 women attending a gynaecological outpatient clinic, who were suffering from different types of clinical presentations associated with vaginal discharge suggestive of non-specific vaginitis. Fifty healthy women matched for age were used as controls. Patients were divided into four groups. Group1 was having IUCD and suffering from non-specific vaginal discharge (240), group2 was having pregnant women with vaginal discharge (100), group3 was having discharge and pruritis vulvae (104) and group4 was having discharge associated with low backache/discomfort in the lower abdomen (56). Of the four groups of patients , group1,(IUCD patients) had the largest proportion testing positive (26%), followed by pregnant women (10.4%) and women with vaginal pruritis (7.2%). Only 2.8% of women with lower back pain or lower abdominal discomfort tested positive.

Char Arundati and Shilpa Vaidya conducted a study on "Gynaecological Morbidity among Women Seeking Sterilisation services in Rural Maharashtra" at Palghar, Thane, Maharashtra during the period March 1997 to June 1998 to ascertain the extent of gynaecological morbidity among currently married women before and after undergoing sterilization. The study was prospective, health- interview survey and clinical investigation and the sample included 511 women. 37% of the women reported the occurrence of at least one problem during the three months prior to sterilisation of these 17% reported painful periods, 13% menorrhagic, 12% irregular periods and 5.3 of flow with clots. Around 7% reported abnormal discharge and 5.3% reported lower backache 29% of the women had at least one morbidity. More than one fourth (26%) were found to suffer from vaginal prolapse. First degree uterine prolapse was found in 9.4%, abnormal discharge in 19.6% and vulva vagina abnormal

in 10.5%. Pelvic inflamematory discase was seen in 5.3%, vaginal infection in 8.6% and cervical infection in 4.1%. laboratory tests revealed that 7% of the women suffered from syphilis and 6.6% from bacterial vaginosis.

Suresh and Sarada (1997-98) mentioned about a study tilled "Interventions to Reduce Maternal Anaemia among the urban poor in Tamil Nadu : Baseline survey in Two Towns in Tamil Nadu, Tirpur and Dindigul" in "Epidemiological Report of UNICEF Sponsored Operations Research Project, Clinical Epidemiology Unit, Madras Medical College and Research Institute, Chennai 3. It was proposed to compare the performance of the existing government delivery system with two alternate intervention approaches. Each intervention was studied in both the towns. A baseline evaluation was done at the beginning of the study. Based on an assumption of 20% prevalence of anaemia in women aged 15-45 years, 862 women needed to be sampled in four areas, two of which are study areas and two were control areas. The following 12 factors were included for calculation of socio-economic status (SES) scores to study association with risk of anaemia : SC/ST, uneducated, children under 5 Years, no food for two meals / day, no income or one income family, alcoholism, presence of a disabled person in the family, presence of child labour in the household, no toilet, no drinking water, dilapidated house and female headed family.

To enhance the reproductive health status of couples in developing countries, the knowledge, attitudes, and behavior of both women and men must be investigated, especially where women depend on men for the decision to seek care. Kaushalendra K., Singh et al. (1998), in the study "Husbands' Reproductive Health Knowledge, Attitudes and Behaviour in Uttar Pradesh, India" tried to find out men's views on women's health. This study analyzes data from a survey of 6,727 husbands from five districts in the northern state of Uttar Pradesh, India. Data are presented on men's knowledge of women's health and on their own sexual behavior outside the context of marriage, on their perceptions of sexual morbidity and their attempts at treatment for specific conditions, and on their opinions concerning the social role of wives. Findings indicate that men know little about maternal morbidity or sexual morbidity conditions. Few husbands reported that they had had sexual experience outside of marriage and the majority of these few said they had had such a relationship with more than one partner. Of men who said they had had reproductive morbidity symptoms, many said they had not sought treatment. Men's views concerning the role of wives indicate a low level of women's autonomy in this region of India. Results indicate a pressing need for reproductive health education that targets both women and men in Uttar Pradesh.

Deptt. Of Preventive and Social Medicine, Maulana Azad Medical College, New Delhi, studied the prevalence of reproductive tract infections among the slum women of New Delhi through a cross-sectional, community based study named "Reproductive Morbidity in an Indian Urban Slum : Need for Health Action". Perceived morbidity 885 of the women reported at least one morbidity. The most frequent was backache, followed by vaginal discharge and low abdominal pain. Over all 72% women were found to have one or more infections. Detected morbidities were bacterial vaginosis, chlamydia, candidiasis, trichomoniasis, syphilis, hepatitis B, hepatitis C and human papilloma virus.

To gain insights into health seeking behavior among poor urban woman Ramasubban, Radhika and Banwar, Rishyasringa carried out a study on "Treatment Seeking by Women in Mumbai Slums" in Mumbai Maharashtra. It was a community based qualitative investigation and sample included 60 ever-married women. One – third of the women reported problems in relation to the menstrual cycle. The most common complaint was of irregular periods both in duration and interval. The main cause of the problem as perceived by the women was due to excess consumption of pickles, jiggery, fruits such as papaya, and chilies. Only about 40% of those with this problem sought medical care. 50% of the women reported white discharge of whom 40% felt it was serious enough to be seen as a problem, while among the remaining treatment was rarely sought. One third of the women also reported other problems such as boils and painful intercourse and 15% of them had sought treatment but were not satisfied with the treatment because the cure was not permanent. A third of the women reported burning during micturation and urinary stress incontinence

Barua ,Alka (2000) mentioned about the study 'Reproductive Health needs of Married Adolescent girls in Rural Maharashtra' conducted in paner block, Ahmed Nagar, Maharaslatra. The study was conducted by institute for Health Management. It was a community based, cross-sectional survey, sample selection was purposive, and information was collected through in-depth interviews. A variety of Subjects were interviewed including the married adolescent girls, husbands, mothers-in-law, medical officers and auxiliary nurse midwives (ANMS). Twenty private doctors were also interviewed. In addition to the qualitative survey, a quantitative survey was carried out on a sample of 302 married adolescent girls. Sixty seven percent of the girls had experienced at least one pregnancy and the average age of conception was 16.5 yrs of these over pregnant girls, 14% reported at least one pregnancy ending in abortion, 5% in stillbirths and 4% in infant deaths. Almost 29% of the girls were pregnant at the time of the survey, which was well above the 10 percent prevalence of pregnancy among women of all childbearing years (15-45) 23% of the girls reported complications during the delivery such as excessive bleeding, vaginal discharge and fever.

An Ethnographic study was conducted in Vadodara district, Gujarat by Operations Research Group, Centre for Social Reserarch on "Gynaecologica Problems : Perceptions and Treatment Seeking Behaviours of Rural Gujarati Women" to study women's perceptions and understanding of reproductive health problems. The sample included 69 women from eight villages. A total of 122 episodes of reproductive health problems were reported. Among these episodes, 55 were related to white discharge, 36 to urino-genital problems, 21 to menstrual problems, 7 to infertility and 3 to prolapsed uterus. Heat was perceived to be the main underlying cause of the reproductive health problems. 54/69 women had sought some form of treatment including home remedies.

"Gynecological Morbidity among Urban Thane Slum Women" is a study conducted by Jaswal, Surinder in Thane, Mumbai, Maharashtra to study the experience of low income urban women's experiences of gynaecological morbidity and common mental disorders. It was a cross-sectional; community survey and the sample consisted of 660. Inclusion criteria used for selection : residing in the community, ever married in the reproductive age group (16-45 years), married for at least two years, not currently pregnant, not menopausal, not postnatal amenorrhea and no history of sever mental illness were eligible for the study. Majority of the women reported reproductive tract infection, followed by menstrual problems, urinary infections, utero-vaginal prolapse and infertility. Breakdown by age showed that those in the 26-35 age group reported the highest percentage of morbidities. Women described symptoms and morbidities as women's illness and this was irrespective of ethnic groups or religious beliefs. For example, white discharge was perceived as a result of frequent intercourse and lower abdominal pain as a consequence of heavy work.

Reddy, Rani and others (2000) surveyed 274 adolescent school going girls in Tirupati town of Andhra Pradesh to study awareness and perception about menarche, and menstrual problems. 200 of the 232 post menarcheal girls reported 232 problems experienced before menstruation. Dysmenorrhoea (backache) was felt by 50% of the adolescents prior to as well as during menstruation. Bad odour of menstrual blood was the prominent problem reported by 57% of the adolescent girls. Profuse menstrual bleeding was complained by 31% of the adolescent girls. Calf muscle pain was the number one complaint felt prior to as well as during menstruation by more than a quarter of the adolescent girls. Tiredness was the number two problem experienced prior to the menstruation by 20.5% of the adolescent girls and this complaint had declined to 6% during menstruation. Irritability was third in rank reported by 20.5% adolescent girls before and 21.3% girls during menstruation.

Srivastava et al. (2004) in their 'A Comparative Study of Perception about Reproductive Tract Infections among Married Women in Rural,Urban and Urban Slum Areas',showed the variation in the perception of married women regarding the gynaecological diseases. The study was conducted in the village of Sainya block, Agra, Urban slum areas of Lohamandi, Agra and Urban area of Lohamandi Agra. Sample size was 345 i.e. 115 women of reproductive age taken from each rural, urban and urban slum area. Perception about reproductive tract infection was responded correctly by 28.69% rural, 74.78% urban and 45.22% urban slum women. Perception about vaginal discharge was correct 78.26% in urban women while 26.09% in rural and 30.43% in urban slum women, perception about side effect of vaginal discharge was correct 100% rural and urban while 97.37% in urban slum women. Occurrence of vaginal discharge was found with an average of 24% in all three areas.

Satyajeet Nanda and Madhumita Tripathy (2005), mentioned about the study 'Reproductive Morbidity, Treatment Seeking Behaviour and Fertility: A Study of Scheduled Caste and Tribe Women. The currently married women of the age group 13 to 49 years of Angul district of Orissa were the respondents. The sample size was

600, 300 from the scheduled caste and 300 from the scheduled tribe. This study attempts to find out the prevalence of reproductive morbidity, treatment seeking behaviour and their plausible causal relationship with human fertility. The bivariate and multivariate analyses showed that certain health problems impose negative effect on fertility, although few did not show common association possibly due to reverse causation. Menstrual irregularity consistently emerged out to be a significant attribute of lower fertility and some others such as smallpox, sickling, malaria and gynecological problems showed negative effect on fertility. treatment, which may be nonspecific in nature.

Bhattacharya and Gupta (2006) in their work on 'Reproductive Tract Infections Among Female Adolescents' studied the gynaecological morbidity of the females accompanying the beneficiaries coming for vaccination. A study was conducted in the immunization clinic run by the Department of Community Medicine of Calcutta National Medical College, Kolkata among the female adolescents aged 10 to 19 years who accompanied the beneficiaries of the clinic for vaccination in the year 2006. The period of study was one month. Total 106 respondents were taken. It was observed that 35% of the girls had given the history of excessive vaginal discharge without low backache, 29% have history of lower abdominal pain /low backache with vaginal discharge. So considering both the groups together 64% of the girls were suffering from RTIs. Among them 12% had history of burning sensation during micturation and 50% had dysmenorrhoea.

Sehgal et al. (2006) studied on 'An Epidemiological Study of Gynaecological Morbidity in a Rural Community of Haryana,India' and explored the gynaecological morbidity of the rural community and their health seeking behaviour. The study was conducted in two villages of Haryana State (North India) among the rural women to determine the prevalence of gynaecological morbidity. The study was cross sectional and 225 women of reproductive age group were taken as sample. Menstrual irregularities and genital tract infections were two major causes of gynaecological morbidity. Majority of the participant believed that their family planning method were the root cause of their ill health. Consultation is sought infrequently for gynaecological problems; when it is sought, health personnel often have little knowledge of gynaecological disease. The majority of the patients seek no treatment or undertake only partial.

Pandit et al. (2005),in the study 'Morbidity Pattern of Women Attending Screening Programme in an Urban Slum in Mumbai' drew a picture of the morbidity pattern of the woman attending the screening programme in the year 2005. Crosssectional study design was used. Headache was the commonest complaint given by woman followed by dysmenorrhoea, low backache, cough, lower abdominal pain, and fever. 13.8% women had vaginal discharge and 1patient had ulcer in the genital region. Women also reported multiple symptom. 77.7% women were found to be anaemic, 5.2% women showed severe anaemia, 25.86% showed moderate anaemia and 46% showed mild anaemia mean haemoglobin value was 11.03.32.18% women had body mass index above 25, 57% of women were underweight.

To know the gynaecological problems of adolescents Goswami Sebanti et al. (2005), conducted a study titled 'A profile of adolescent girls with gynaecological problems'. A total of 124 adolescent girls attending the gynecological outpatient department of Medical College and Hospital, Kolkata, were included in the study. After history taking and examinations, investigations like hemogram, coagulograms, hormonal assays, and sonographywere done wherever applicable. Menstrual disorders were found to be the commonest gynecological problem. They varied from amenorrhea to menorrhagia. Dysfunctional uterine bleeding was the commonest etiology of menstrual dysfunction (32/46) in the group under study. Menstrual abnormalities are the most common problems of adolescents. Setting up of adolescent clinics is desirable.

From the above studies various aspects regarding the gynaecological diseases and the reproductive problems of the women have come up. There are studies both abroad as well as in India. From the studies abroad majority are from Asian continent and rest are from African and European continent. The studies revealed various kinds of gynaecological diseases and their co-relations with other factors such as socioeconomic status, educational status, awareness level, perception regarding the disease, health-seeking behaviour etc. Some of the studies highlighted that taboo and inhibitions regarding sexual health prevent women from securing an easy access to medical care and gynaecological conditions were rarely taken seriously until they became grave. Some studies revealed that unhygienic condition, economic hardship etc. are some contributory factors regarding the disease situation and late recognition of the disease is a common thing. There are incidences where majority of the patients approached traditional practitioner. The above mentioned studies showed that the social pathology of gynaecological diseases is of great importance and there is a vast necessity to conduct such studies.

Scant attention has been paid to the reproductive health of non-pregnant woman in general and in India and in other third world countries in particular. Due to inhibitions or lack of perception of causes of disease, women usually do not contact or consult gynaecologist. Lack attention is given to the gynaecological diseases as compared to other diseases. Cost of treatment and social taboos also make the situation worse. In the literature, there is also paucity of research studies. We have seen various studies conducted abroad as well as in India. Some studies focus their attention on the gynaeclogical morbidity pattern; some studies take into account the correlation of socio-economic factors with the occurrence of the gynaecological diseases. A few studies try to reveal the perception of the women about various gynaecological diseases and some others were comparative studies. But till now no study has been made on the proposed area of research. Gynaecological morbidity in the current health programmes has also remained largely unaddressed. Hence, the main aim of the present study is to explore the trend and social pathology of the major gynaecological diseases of the reproductive age group in the Barak Valley and find out ways how the sufferings can be minimized.