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## Vulvodynia - A Clandestine Challenge of Postmenopausal Life: What is New?

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### Key Facts

- Vulvodynia has been shown to both develop and persist in peri and postmenopausal women.
- Incidences reported as high as 15.6% in women over age 65.
- This decreases overall well-being and causes low quality of life.
- Multiple factors involved in pathogenesis.
- Clinicians primarily treat symptoms over the pathology.

### Introduction

Many postmenopausal women experience persistent vulval pain that affects their quality of life. Vulval pain can be due to a specific cause or maybe unexplained/idiopathic in origin. The latter is known as Vulvodynia (Fig-1). According to the International Society for the Study of Vulvovaginal Disease, Vulvodynia (ISSVD) is considered vulval discomfort in the absence of relevant visible findings or identifiable neurological condition.

This pain can be described as burning (most commonly), itching, stinging, rawness, or

irritation that may be localized to one area or generalized to the entire vulva. It could be triggered by direct touch (inserting a tampon or sexual intercourse), indirectly by walking, or even without provocation.

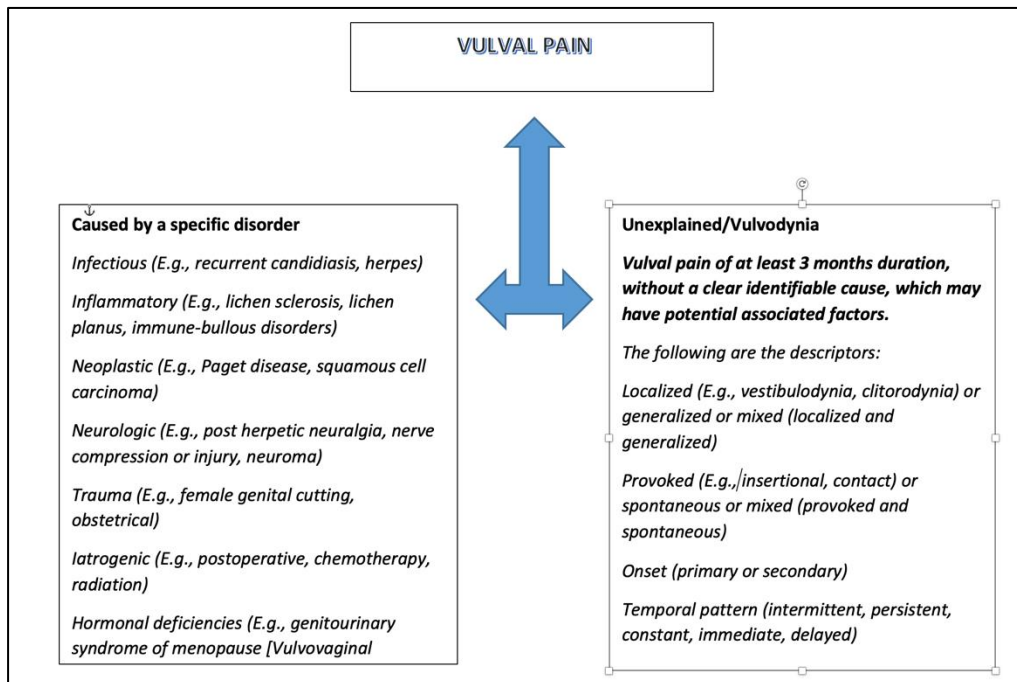
Vulvodynia has been shown to both develop and persist in peri- and postmenopausal women, with incidences reported as high as 15.6% in women over age 65<sup>1</sup>. The negative psychological and sexual impact of Vulvodynia and the number of patients who do not seek treatment, this number is probably underreported. Unfortunately, Sri Lankan data on the prevalence of Vulvodynia is not available.

Women with Vulvodynia report decreased overall well-being and low quality of life. Women are often told that no physical cause can be found for their pain, implying that their pain results from psychological problems or does not exist at all<sup>4,5</sup>. The lifetime prevalence of depression among women with vulvodynia has been estimated to be 45% and, for two-thirds of patients, their first depressive episode appears to have preceded the pain<sup>8</sup>.

Newer classification has eliminated former terms used to describe vulval pain such as vulvar dysesthesia and vestibulitis. According to new terminology introduced in 2015, Vulvodynia is the term used and further details of conditions in accordance to pre-set descriptors.



**Figure 1: 2015 Consensus Terminology and Classification of Persistent Vulvar Pain and Vulvodynia**



**Table-1: Comparison between GVD & LVD**

FACTOR	GVD	LVD
Prevalence	6-7%	12%
Age group	Post-menopausal	Pre-menopausal
Onset	Unprovoked, Spontaneous	Provoked
Affects	Entire vulva	Specific Area of the Vulva
Appearance of vulva	Normal	Erythematous
Cotton swab test	Negative	Positive
Local Lidocaine Gel	Not alleviate pain	Alleviate pain

Generalized Vulvodynia (GVD) is defined as pain affecting the entire vulvar region and occurs in 6–7% of women in the general population. Pain that is restricted to a portion of the vulva is referred to as localized Vulvodynia (LVD); for example, the pain may be restricted to areas such as the vestibule, clitoris (termed clitorodynia)

or a portion of the vulva (termed hemi vulvodynia). The most common subtype of Vulvodynia is localized provoked vulvodynia, which has an estimated lifetime prevalence of 12% among premenopausal women<sup>6</sup> (Table-1).

**Pathophysiology**



There are multiple proposed etiological factors for the pathogenesis of Vulvodynia. Some of these include abnormality which comes from early foetal development, genetic factors, immune factors, endocrine factors, infections, inflammation, dietary oxalates, and neuropathic conditions. However, no single factor is solely responsible and a multitude of these may together play a significant role in pathogenesis.

Most clinicians believe that the presence of vulvar pain is attributable to an underlying inflammatory process or a dysregulation of the peripheral nervous system and the CNS; this model is termed the 'neuropathic pain hypotheses. However, not all studies detected evidence of inflammatory mediators and the cause of hyper-innervation is unknown<sup>3</sup>. Alternatively, others believe that the presence of pain in the vulva is the result of a pre-existing psychosexual dysfunction and, thus, is psychosomatic in nature<sup>7</sup>.

### **Clinical presentation**

Post-menopausal Women with GVD most often experience an unpleasant abnormal sensation over the entire vulvar area. The pain is most often described as burning, but it may have an irritating, sharp, stinging, and/or occasionally pruritic (itchy) quality. It may have arisen suddenly with or without provocation and may last for several days following coitus or a gynaecological examination.

### **Diagnosis**

Vulvodynia is a diagnosis of exclusion, which requires ruling out other potential sources of pain, and the pain must be at least 3 months in duration<sup>2</sup>.

#### (a) Clinical History

Systematic history of patient-reported symptoms is a crucial step in the assessment<sup>9</sup>.

**The onset of symptoms-** to distinguish whether this condition is primary or secondary in origin.

**Duration-**At least 3 months of symptoms duration is a must when considering vulvodynia.

**The character of pain** as burning, stinging, irritating and raw sensations may aid in diagnosis. Self-reported dyspareunia and stinging pain were strongly associated with vulvodynia<sup>10</sup>.

**Site of pain-**identification of generalized or focal pain points is important to differentiate between GVD versus LVD. (Localized disease is seen in young patients with features like pain provoked by touch and Pain most frequently felt in the 4-8 o'clock position in the vulva, proximal to the hymenal ring.

**Aggravating factors-** not only in finding a treatable cause but also in helping the patient in her everyday life and avoiding possible provocative factors.

**Co-existing symptoms-**pruritus and a tendency toward fissures in the vulva were not associated with vulvodynia. It is important to inquire about symptoms of painful bladder syndrome (pain settles with urination, worsen by acidic foods and last > 6 months) and IBS (irritable bowel syndrome). These





two conditions are known to be associated with vulvodynia<sup>10</sup>.

**Psychosocial and sexual impact**-need to be inquired and addressed if any impact is identified.

(b) Physical Examination

Understanding of normal anatomy of the vulva is important. Any identifiable skin lesion, fissuring, discharges, or erythematous changes should be accurately identified as these may reflect other causes for vulval pain (Fig-1).

**Cotton Swab Test**-helps to identify areas of pain thereby differentiating generalized pain from localized pain. The cotton swab test has been established as a reliable tool for diagnosing LVD<sup>11</sup>.

The test starts from the innermost thigh and a wet swab is used. The cotton swab gradually moves towards the labia majora, inter labial sulcus labia minora and the vestibular area. The vestibular area is checked at 2, 4, 6, 8, and 10 o'clock positions. When pain occurs, it is quantified as mild, moderate, or severe. A diagram of pain distribution will help to monitor response to treatment.

**Musculoskeletal assessment**-helps to assess factors like pelvic muscle over-activity that contribute to vulvodynia.

Ex.1. Palpation of obturator internus muscle on stretch

2. Palpation of pubo-vaginalis and urethra-vaginal sphincter.

(c) Investigations

**Infection screening**-Saline wet mounts, Vaginal P<sup>H</sup> studies, Gram stains and cultures, PCR testing as appropriate to the scenario.

**Vulvoscopy+/-Biopsy**-similar to Colposcopic evaluation, the vulva is examined with a colposcope, and acetic acid is avoided to minimize pain and caustic effect. For any suspicious area, a biopsy is necessary.

**EMG bio-feedback**-can be used to identify pelvic muscular origin pain.

**Treatment**

The effects of vulvodynia are often complex, an individualized treatment approach is needed. When selecting appropriate treatment option/s, the decision should be based on the results of controlled studies. Over the years, treatment decisions have been largely based on expert opinion and not on evidence from randomized, clinical trials. The literature on treatment for GVD is minimal and does not consist of strong randomized trials. But there are RCT-derived data for the treatment of LVD. Fortunately, many treatment options exist and are sharable between GVD and LVD. This knowledge can be adapted to GVD management in postmenopausal women. Options are often used in combinations than alone for better outcomes.

Treatment options can be divided into

- a. General vulval care
- b. Medical
- c. Surgical



- d. Behavioural /Cognitive-  
Behavioural
- e. Alternative methods

General vulval care (Table-2)

The primary aim is to reduce irritation. Few known options exist and none of these are RCT based.

**Table 2: General Vulval Care**

<b>Pure cotton undergarment</b>
<b>Avoid irritant shampoos, perfumes, and douching</b>
<b>Use only mild bathing soaps and no direct application to the vulva</b>
<b>Clean vulva only with water</b>
<b>Do not use hair dryers to dry the vulval area</b>
<b>Switch to cotton sanitary pads if needed</b>
<b>Non-irritant lubricant gels for sex when needed</b>
<b>Rinse and pat the vulva after urination/intercourse</b>
<b>Preservative-free topical emollients application to the vulva after bathing</b>
<b>Cool gel packs application to the vulva</b>

Medical Options

1. Topical agents or injections

When considering topical agents’ particular attention must be paid to treatment preparation as certain substances that function as “vehicles” per se cause irritation. This is more with creams than ointments.

**Lignocaine ointment-** topical 5% lignocaine nocturnal application has a very limited effect on GVD than LVD in studies. This is basically related to intercourse-provoked vestibulodynia<sup>12</sup>. However, RCT conducted later showed this is not superior to placebo in GVD<sup>13</sup>.

**Gabapentin ointment-**2-6% topical gabapentin showed promising results for both GVD and LVD by 50% reduction in pain with nocturnal

application and in LVD, there was improvement in sexual function<sup>14</sup>.

**Botox A local injection-** botulinum toxin A blocks the cholinergic innervation of the target tissue. Recently, it has been proven effective not only at a neuromuscular junction but also within parasympathetic or sympathetic neural synapses. There are small-scale studies where Botox A is used in low doses (20-40IU) in women with vulvodynia and they showed promising results<sup>15</sup>. But larger RCTs are essential for its routine use.

Local steroid injection per se ineffective treatment modality. However when combined with bupivacaine relieved pain in some LVD patients.



## 2. Oral agents

Tricyclic antidepressants and anti-convulsants are effective options for GVD and LVD. Often used in clinical practice. But care must be taken to avoid polypharmacy due to unacceptable side effects such as dry mouth, sedation, gait imbalances, cognitive issues and dizziness. Over time patients will start tolerating these and stepwise dosing is important. Good patient counselling is important, and patients must be informed that clinical efficacy will take about 3 weeks.

**Amitriptyline** (TCA) is the frequent first-line agent usually started at 12.5-25mg low dose and can go up to 150mg daily dose depending on response to symptoms and side effects tolerance. Near 60% improvement in pain is well evident in RCTs.

**Gabapentin** is an effective alternative agent. Usually given as a 300mg daily dose (3-divided doses). This can titrate up to 3600mg total daily dose depending on the response to symptoms and side effects tolerance. In RCTs, the efficacy of gabapentin was high as 80% in GVD<sup>17</sup>.

These medications should not be stopped abruptly and gradually tapered off when they are no more effective.

### Surgical Options

Surgeries for GVD are less well-developed and unlike in localized disease refractory to medical management, it is not recommended for GVD.

### Behavioural / CBT

Psychosexual counselling, supportive groups and cognitive behavioural therapy, all have played a role in coping with chronic pain and its impact on lifestyle. Significant reduction in pain severity and improvement of function is best seen with CBT<sup>18</sup>.

### Alternative Methods

**Transcutaneous nerve stimulation-** when using vaginal TENS there was a significant improvement in pain, and sexual functions in LVD patients. But its use for GVD is not well evident.

**Vaginal laser treatment-** a known rejuvenation therapy format. However, it has been used in LVD with promising results as a 60% reduction in pain. But data for GVD is not found in the literature.

**Non-invasive cerebral cortical stimulation** was found to have an effective treatment modality for GVD with the improvement of mood and pain. But further research is required for its clinical use<sup>21</sup>.

**Electromyography biofeedback** offers an immediate impression of how pelvic wall tone behaves and small-scale studies showed promising results. However, this non-invasive, cost-effective technique should be further studied<sup>22</sup>.

**Multimodal physical therapy** (combination of pelvic exercises, TENS and etc.) was extensively studied with regard to LPV with good results in pain profile. But, for GVD further data is necessary<sup>22</sup>.



**Acupuncture** has been tried for GVD for decades and there are studies showing its effectiveness with regard to the GVD pain profile. Acupuncture is applied to acupoints on the abdomen, supra public region, and the extremities, but not directly to the vulva<sup>23,24</sup>.

### Novel Interventions

**Medical cannabis**<sup>25</sup>-becoming popular and one online survey has been done (2020) to assess the efficacy of medical cannabis on vulvodynia. Despite of assessment of the route of administration, this has the potential benefit to overcome vulval pain and dyspareunia.

**Intra-vaginal diazepam** – is used in vulvodynia and hypertonic pelvic muscles and studies were done with regard to hypertonic pelvic muscles. But no reduction in pain profile was noted<sup>22</sup>.

**Estradiol/progesterone cream**<sup>22</sup> (or conjugated equine oestrogen) - effective for LPV. But its use in GVD has not been proven by studies.

**Enoxaparin** does play a role in LPV reduction. But the evidence is lacking for its use in GVD<sup>22</sup>.

### Conclusion

Despite its high prevalence and negative ramifications, vulvodynia is still far from understood. Much remains unknown regarding the factors involved in the aetiology and maintenance of this condition. Due to this reason current treatments for vulvodynia only focus on symptoms. There is a greater need for studies on prevalence, clinical presentations and current management strategies in Sri Lankan population. Also due to unresolved gaps in knowledge and treatment, large-scale multicentre RCTs are essential.

**Table 3: Summary of Treatment Options According to Invasiveness**

<b>First line</b>	<b>CBT</b>
	<b>Topical ointments</b>
<b>Second line</b>	<b>Oral Agents</b>
	<b>Botox A</b>
<b>Third line</b>	<b>Acupuncture</b>

**Conflicts of Interests** - None

### References

1. Reed BD, Harlow SD, Sen A, et al. Prevalence and demographic characteristics of vulvodynia in a population-based sample. *Am J Obstet Gynecol.* 2012; 206:170, e1–9.
2. Sadownik LA. Etiology, diagnosis, and clinical management of vulvodynia. *Int J Womens Health.* 2014; 6:437-449. doi:10.2147/IJWH.S37660.



3. Lynch PJ: Vulvodynia as a somatoform disorder. *J. Reprod. Med.* 53, 390–396 (2008)
4. Arnold LD, Bachmann GA, Rosen R, Kelly S, Rhoads GG: Vulvodynia: characteristics and associations with comorbidities and quality of life. *Obstet. Gynecol.* 107, 617–624 (2006).
5. Pukall CF, Payne KA, Kao A, Khalifé S, Binik YM: Dyspareunia. In: *Handbook of Sexual Dysfunction*. Balon R, Seagraves RT (Eds). Taylor & Francis, NY, USA 249–272 (2005).
6. Harlow BL, Wise LA, Stewart EG: Prevalence and predictors of chronic lower genital tract discomfort. *Am. J. Obstet. Gynecol.* 185, 545–550 (2001).
7. Mascherpa F, Bogliatto F, Lynch PJ, Micheletti L, Benedetto C: Vulvodynia as a possible somatization disorder. More than just an opinion. *J. Reprod. Med.* 52, 107–110 (2007).
8. Masheb RM, Wang E, Lozano C, Kerns RD: Prevalence and correlates of depression in treatment-seeking women with vulvodynia. *J. Obstet. Gynaecol.* 25, 786–791 (2005)
9. Kaufman RH, Faro S, Brown D: *Benign Diseases of the Vulva* (5th edition). Mosby, Philadelphia, PA, USA (2005)
10. Pukall CF, Binik YM: Vulvodynia. In: *Functional Pain Syndromes: Presentation and Pathophysiology*. Mayer EA, Bushnell MC (Eds). IASP Press, Washington, DC, USA, 71–84 (2009).
11. Bergeron S, Binik YM, Khalifé S, Pagidas K, Glazer HI: Vulvar vestibulitis syndrome: reliability of diagnosis and evaluation of current diagnostic criteria. *Obstet. Gynecol.* 98, 45–51 (2001).
12. Zolnoun DA, Hartmann KE, Steege JF: Overnight 5% lidocaine ointment for treatment of vulvar vestibulitis. *Obstet. Gynecol.* 102, 84–87 (2003)
13. Foster DC, Kotok MB, Huang LS, Watts A, Oakes D, Howard FM: Oral desipramine and topical lidocaine for vulvodynia: a randomized controlled trial. *Obstet Gynecol.* 2010; 116:583-93
14. Boardman LA, Cooper AS, Blais LR, Raker CA: Topical gabapentin in the treatment of localized and generalized vulvodynia. *Obstet. Gynecol.* 112, 579–585 (2008)
15. Yoon H, Chung WS, Shim BS. Botulinum toxin A for the management of vulvodynia. *Int J Impot Res.* 2007 Jan-Feb;19(1):84-7. doi: 10.1038/sj.ijir.3901487. Epub 2006 May 18. PMID: 16728964.
16. Reed BD, Caron AM, Gorenflo DW, Haefner HK: Treatment of vulvodynia with tricyclic antidepressants: efficacy and associated factors. *J. Low. Genit. Tract. Dis.* 10, 245–251 (2006)
17. Harris G, Horowitz B, Borgida A: Evaluation of gabapentin in the treatment of generalized vulvodynia, unprovoked. *J. Reprod. Med.* 52, 103–106 (2007)
18. Masheb RM, Kerns RD, Lozano C, Minkin MJ, Richman S: A randomized clinical trial for women with vulvodynia: cognitive-behavioural therapy vs. supportive psychotherapy. *Pain* 141, 31–40 (2009).
19. Murina F, Bianco V, Radici G, Felice R, Di Martino M, Nicolini U: Transcutaneous electrical nerve



- stimulation to treat vestibulodynia: a randomised controlled trial. *BJOG* 115, 1165–1170 (2008).
20. Leclair CM, Goetsch MF, Lee KK, Jensen JT: KTP-nd:YAG laser therapy for the treatment of vestibulodynia: a follow-up study. *J. Reprod. Med.* 52, 53–58 (2007).
  21. Cecilio SB, Zaghi S, Cecilio LB, Correa CF, Fregni F: Exploring a novel therapeutic approach with noninvasive cortical stimulation for vulvodynia. *Am. J. Obstet. Gynecol.* 199, E6–E7 (2008).
  21. Schlaeger JM, Glayzer JE, Villegas-Downs M, Li H, Glayzer EJ, He Y, Takayama M, Yajima H, Takakura N, Kobak WH, McFarlin BL. Evaluation and Treatment of Vulvodynia: State of the Science. *J Midwifery Womens Health.* 2023 Jan;68(1):9-34. doi: 10.1111/jmwh.13456. Epub 2022 Dec 19. PMID: 36533637; PMCID: PMC10107324.
  22. Schlaeger JM, Xu N, Mejta CL, Park CG, Wilkie DJ. Acupuncture for the treatment of vulvodynia: a randomized wait-list controlled pilot study. *J Sex Med.* 2015;12(4):1019-1027
  23. Schlaeger JM, Takakura N, Yajima H, et al. Double-blind acupuncture needles: a multi-needle, multi-session randomized feasibility study. *Pilot Feasibility Study.* 2018;4(1):72
  24. Barach E, Slavin MN, Earleywine M. Cannabis and vulvodynia symptoms: a preliminary report. *Cannabis.* 2020;3(2):139-147



## Fertility-sparing Surgery in Malignant Epithelial Ovarian Tumor: A Case Report

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### Abstract

**Background:** Epithelial ovarian cancer is the most common and lethal ovarian cancer. Fertility preservation is an important issue now a days because of the constant shifting of childbearing age towards higher ages. The increasing incidence of epithelial ovarian cancer in women with active

childbearing potential constitutes a therapeutic dilemma. Fertility sparing techniques are being increasingly incorporated in the therapeutic strategies in early stage of disease. Established organ-preserving techniques in early-stage epithelial ovarian cancer includes preservation of the contralateral ovary and uterus.

**Aim:** Report the case of a patient with a malignant epithelial ovarian tumor, who had conservative surgery and chemotherapy with a good fertility outcome.

**Case presentation:** A 31-year-old nulliparous woman with a right sided malignant ovarian mucinous cystadenocarcinoma was treated by right adnexectomy and omentectomy followed by chemotherapy. A 3years follow-up showed no signs of relapse, and she completed a full-term natural pregnancy which was delivered by caesarian section.

**Conclusions:** Fertility sparing surgery in early-stage malignant epithelial ovarian tumor has good prognosis. However, due to the rarity of the disease in early stages, the fertility outcome for this group of patients is not established.

**Keywords:** Fertility, Surgery, Mucinous cystadenocarcinoma.

### Introduction

Epithelial ovarian cancer is the most common and lethal ovarian cancer<sup>1</sup>. Fertility preservation is an important issue now a days because of the constant shifting of childbearing age towards higher ages. The increasing incidence of epithelial ovarian cancer in women with active childbearing potential constitutes a therapeutic dilemma<sup>2</sup>. The abrupt loss of childbearing potential due to the malignant disease is an area of concern both for the patient as well as treating physician. So, alternative treatment options are being sought to preserve a last hope of fertility within the antitumor treatment<sup>3</sup>.



Maximal tumor reduction by radical surgery is currently the established cornerstone in the management of advanced epithelial ovarian cancer<sup>4</sup>. Fertility sparing techniques are being increasingly incorporated in the therapeutic strategies in early stage of disease<sup>5</sup>. Established organ-preserving techniques in early-stage epithelial ovarian cancer includes preservation of the contralateral ovary and uterus or even in highly specialized cases peritonectomy of the pelvis and uterine serosa to avoid the need of hysterectomy are being recruited<sup>5,6</sup>. The subsequent “fertility protecting” chemotherapy is being applied under the concomitant ovarian protection.

### **Case presentation:**

A 31-year-old regularly menstruating woman, who was married for three month, with no past personal, familial, or medical history, admitted in the hospital with acute abdominal pain and deterioration of her general status. After a physical examination, she was found to be afebrile with a whole abdominal tenderness but no signs of peritonitis with an ill-defined lump in hypogastrium. On vaginal examination uterus was found to be bulky and a mobile tender mass in the pouch of Douglas which was separated from the uterus. The remaining part of the physical examination was normal. A pelvic ultrasound showed a large 10×9 cm right ovarian thick-walled complex mass with solid and cystic component within it. The mild vascularity was with a RI +0.43.

In view of her acute abdominal pain, she was scheduled for an emergency laparotomy with a provision of frozen section biopsy. A 10 cm right ovarian mass with intact capsule, without any associated ascites or peritoneal implants; the rest of her abdominal cavity appeared normal. A right sided adnexectomy was conducted. The frozen section showed a malignant ovarian tumor. The surgery was completed

by omentectomy, biopsy from contralateral ovary and multiple site of peritoneum. A peritoneal washing was taken after surgery. A final histologic examination showed mucinous cystadenocarcinoma with intact capsule. But other specimen were free from malignancy.

She was then referred to oncologist. The chemotherapy consisting of bleomycin, etoposide, and cisplatin (BEP), with a complete clinical and radiological response after four courses of BEP. Finally, she underwent six well-tolerated injections of BEP.

Two years post-treatment, follow-ups were conducted including physical examinations, radiographic assessment, and tumor markers. All these parameter were negative during all follow-ups and there have been no signs of relapse to this date. She also reported a full-term natural pregnancy, which was delivered by caesarian section, 3years after the completion of the treatment. During her second caesarian section after 3years of first pregnancy, the contra-lateral ovary was removed. Both the pregnancies were spontaneous, no fertility treatment was needed.

### **Discussion**

#### **Oncologic safety**

As 70% of epithelial ovarian cancer presented at stage III or IV disease<sup>7</sup>, few cases have been reported in the literature in early-stage disease. As such, the safety of FSS for this disease is accepted but not yet fully clinically supported. Data from the first largest report series by Zanetta et al. in 1997 concerning oncologic outcome after fertility sparing surgery in epithelial ovarian cancer showed it as a safe treatment option for early-stage patients with acceptable oncologic safety profile<sup>8</sup>. On 2010, Satoh et al. attempted to systematically determine selection criteria for fertility-sparing surgery in stage I





epithelial ovarian cancer. On the basis of clinical outcomes of more than 200 stage I patients who underwent fertility-sparing surgery. A relapse rate 8.5% was reported, among the relapsed cases 27% recurrence was exclusively in the remaining ovary without any distant or peritoneal metastases<sup>9</sup>. When collectively evaluating most published results so far, mean relapse rates are estimated to be around 10%, even in patient's cohorts which included also Ic stage disease<sup>8,9,10</sup>.

### Reproductive Outcome

In young cancer survivors' future fertility prospect represents a therapeutic dilemma for both treating physicians and affected patients. Both the operative and systemic treatments consistently compromise the ovarian reserve and often resulting in infertility and premature menopause<sup>11,12</sup>. Evidence suggests that the rate of women with successful conception approximately 30% of all patients after FSS. On the contrary the women with an intention to conceive and actively tried to conceive, then rates of successful conception are substantially higher from 66% to 100%, which indicating that no relevant reproductive impairment usually exists only for FSS. Assisted reproductive techniques for a successful conception and pregnancy is needed in a small group<sup>8,9,10</sup>.

Regarding the incidence of spontaneous abortions, the rates range between 11% to 33%, but no conclusions can be extracted about the cause of the abortions and their pathophysiology in the existing data. The rates of congenital malformations or abnormal fetal outcomes have been reported in the current literature is not higher<sup>9</sup>.

The interest of completion of surgery after childbearing age (or after 40 years in patients who have not been pregnant) is still under discussion. Nevertheless, to reduce the risk of recurrence, removal of the

remaining ovary should be considered in women who no longer intend to conceive.

### Conclusions

Fertility sparing surgery in early-stage malignant epithelial ovarian tumor has good prognosis. It is usually associated with a good fertility outcome in early stages. However, due to the rarity of the disease in early stages, the fertility outcome for this group of patients is not clear. This lack of data surrounding early stages points to the need for a meta-analysis of all published cases.

### References

1. Koonings PP, Campbell K, Mishell Jr DR, Grimes DA. Relative frequency of primary ovarian neoplasms: a 10-year review. *Obstet Gynecol.* 1989;74:921–6.
2. C. Fotopoulou, K. Savvatis, G. Schumacher, W. Lichtenegger, and J. Sehouli, "Surgical outcome and survival analysis of young patients with primary epithelial ovarian cancer," *Anticancer Research.* 2009;29(7):2809–15.
3. C. Schlaerth, D. S. Chi, E. A. Poynor, R. R. Barakat, and C. L. Brown, "Long-term survival after fertility-sparing surgery for epithelial ovarian cancer," *International Journal of Gynecological Cancer,* 2009, 19 (7)1199–04.
4. R. E. Bristow, B. E. Palis, D. S. Chi, and W. A. Cliby, "The National Cancer database report on advanced-stage epithelial ovarian cancer: impact of hospital surgical case volume on overall survival and surgical treatment paradigm," *Gynecologic Oncology,* 2010,118 (3):262–267



5. C. Fotopoulou, G. Schumacher, J. C. Schefold, C. Denkert, W. Lichtenegger, and J. Sehouli, "Systematic evaluation of the intraoperative tumor pattern in patients with borderline tumor of the ovary," *International Journal of Gynecological Cancer*, 2009, 19(9)1550–55.
6. N. Rasool and P. G. Rose, "Fertility-preserving surgical procedures for patients with gynecologic malignancies," *Clinical Obstetrics and Gynecology*.2010. 53 (4): 804–14,
7. Pautier P, Lhommé C. Traitement des tumeurs germinales de l’ovaire. In: Guastalla J, Ray-Coquard I, editors. *Les Cancers Ovariens*. Paris: Springer; 2006. p. 485–97.
8. G. Zanetta, S. Chiari, S. Rota et al., "Conservative surgery for stage I ovarian carcinoma in women of childbearing age," *British Journal of Obstetrics and Gynaecology*, 1997, 104 (9)1030–35.
9. T. Satoh, M. Hatae, Y. Watanabe et al., "Outcomes of fertility sparing surgery for stage I epithelial ovarian cancer: a proposal for patient selection," *Journal of Clinical Oncology*, 2010, 28 (10):1727–32.
10. Y. S. Kwon, H. S. Hahn, T. J. Kim et al., "Fertility preservation in patients with early epithelial ovarian cancer," *Journal of Gynecologic Oncology*, 2009,20 (1): 44–47.
11. E.- I.Braicu,J.Sehouli,R.Richter,K.Pietzner,C.Denkert,and C. Fotopoulou, "Role of histological type on surgical outcome and survival following radical primary tumour debulking of epithelial ovarian, fallopian tube and peritoneal cancers," *British Journal of Cancer*,2011. 105 (12):1818–24.
12. A.Bamias,T.Psaltopoulou,M.Sotiropoulouetal.,"Mucinous but not clear cell histology is associated with inferior survival in patients with advanced stage ovarian carcinoma treated with platinum-paclitaxel chemotherapy," *Cancer*, vol. 116, no. 6, pp. 1462–1468, 2010.



## Contraceptive Preferences and Practices Among Perimenopausal Females in Mahaoya MOH Area.

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**Suggestions** - A series of educational programs are essential to uplift the knowledge among these women. A re-audit done later can assess the improvement in practices.

**Keywords:** Contraceptives, Perimenopause, DMPA, LRT

### Abstract

**Introduction** - Perimenopause marks the transition phase from normal ovulation to anovulation and, ultimately to permanent loss of follicle maturation and ovulation causing menopausal changes in females. Fertility and probability of conception decline by half as early as the mid-forties; however, women during perimenopause still need effective contraception. Many studies and multiple reports worldwide have shown perimenopausal contraception to be an important but rather neglected issue.

**Methodology** - An audit was conducted among the medical clinic attendees at the rural base hospital of Mahaoya. Knowledge of contraception, usage patterns, basic sociodemographic details and medical conditions were evaluated.

**Results** - The study cohort had a mean age of 46.9 years with poor education levels and low-income backgrounds. Approximately half of the women (45.9%) have had an unexpected pregnancy. Even though a considerable proportion of women were sexually active (82.4%), the usage of contraception was only seen among (54.1%) of the participants. Permanent sterilization with LRT (30%) was the most common method employed, followed by DMPA (25%), IUCD (22%), Jadella (13%), COCP (5%) and condom (5%) usage.

The knowledge of contraception (knowledge, attitudes, side effects, emergency contraception etc.) was adequate only among a minority (28.4%) and only 14.8% had adequate knowledge on when to stop contraceptive usage. The main source of knowledge had been through well-women clinics.

**Discussion & Conclusions** - Comprehension of the importance, appropriate time of stoppage and usage of contraception is quite low in this cohort of women selected from a rural population of Sri Lanka. Some women have given up on usage based on side effects, but the majority have a clear deficiency of knowledge, thus resulting in a higher incidence of unexpected pregnancies.

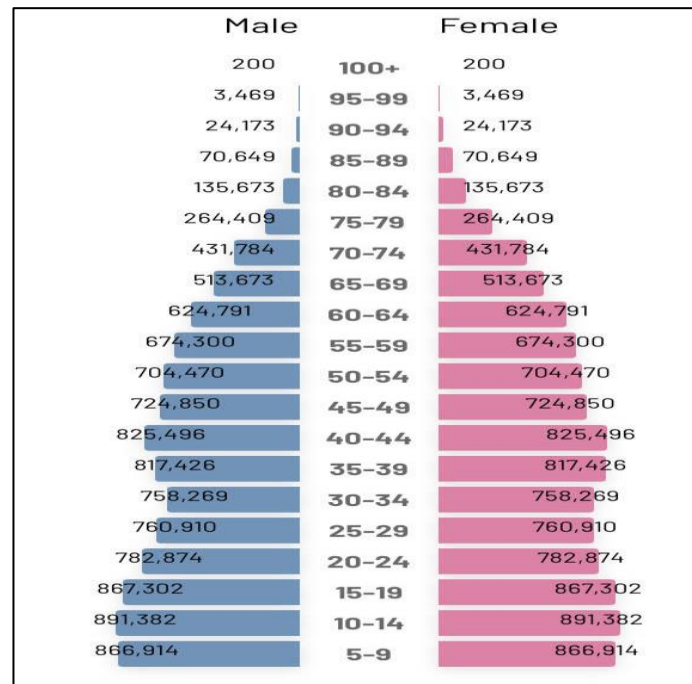
### Introduction and background

Natural menopause is characterized by complete cessation of menstruation secondary to depletion of ovarian follicles. The median age for menopause is about 51 years in the Western population<sup>1</sup> and Asians do have similar ages at menopause<sup>2</sup>. According to the latest population data (2021) presented by the Department of Consensus and Statistics, the total Sri Lankan population is 22,156,000 with females occupying 51.5% (11,429,000) fraction. The population growth rate is 1.08%. Approximately, 2,254,816 females (19.7%) belong to the perimenopausal age group. (40-55 years).

The introduction of family planning to Sri Lanka in 1953 and the establishment of the National Family Planning Programme in the country have made massive improvements to a wide array of family planning services. In the mid-1970s one out of three married women aged 15–49 was using a contraceptive method. By the mid-1980s, the use of contraception increased to almost two out of three women. During the period 1993–2000, the overall prevalence increased from 66% to 70%. The Contraceptive Prevalence Rate (CPR) did not change much between 2000 and 2006/7<sup>3,4</sup>.



**Figure 1; Population distribution of Sri Lanka in 2021 according to different age groups.**  
Source [http://www.statistics.gov.lk/DashBoard/srilanka\\_glance](http://www.statistics.gov.lk/DashBoard/srilanka_glance)



**Table 1: Knowledge of contraception methods, Demographic and Health Survey, 2016**

Percentage of ever-married women and currently married women age 15-49 who know any contraceptive method, by specific method, Sri Lanka 2016		
Method	Ever-married women	Currently married women
Any method	99.6	99.7
Any modern method	99.6	99.7
Female sterilization	95.9	96.0
Male sterilization	66.9	67.2
Pill	97.1	97.3
IUD	95.2	95.5
Injectable	97.2	97.3
Implants	89.0	89.5
Male condom	90.9	91.4
Female condom	19.2	19.4
Emergency contraception	53.1	53.7
Lactational amenorrhea (LAM)	41.6	42.1
Any traditional method	85.6	86.3
Rhythm	78.9	79.7
Withdrawal	69.7	70.5
Other	5.1	5.2
Mean number of methods known by respondents 15-49	9.0	9.0
Number of respondents	18,302	17,257

Sri Lanka Family Planning Association's Demographic and Health Survey report (SLDHS 2016) highlighted that the contraception prevalence rate (CPR) in Sri

Lanka is ~ 65% with the unmet need for contraception rate ~7.5%. But there is a 0.2% increment of unmet need when compared with 2006/7 SLDHS<sup>3,4</sup>.



**Table 2: Knowledge of contraceptive methods by background characteristics, Demographic and Health Survey, 2016**

Background characteristic	Heard of any method	Heard of any modern method <sup>1</sup>	Number of currently married women
<b>Age</b>			
15-19	96.4	96.4	225
20-24	99.3	99.3	1,373
25-29	99.7	99.7	2,559
30-34	99.7	99.7	3,481
35-39	99.9	99.9	3,735
40-44	99.7	99.6	3,033
45-49	99.7	99.7	2,851
<b>Residence</b>			
Urban	99.7	99.7	2,682
Rural	99.8	99.8	13,908
Estate	96.8	96.8	669
<b>District</b>			
Colombo	99.7	99.7	1,625
Gampaha	99.8	99.8	1,755
Kalutara	99.9	99.9	1,040
Kandy	99.6	99.5	1,174
Matale	100.0	100.0	456
Nuwara Eliya	97.1	97.1	552
Galle	99.8	99.8	896
Matara	99.4	99.4	685
Hambantota	100.0	100.0	532
Jaffna	99.5	99.5	409
Mannar	99.3	99.3	76
Vavuniya	99.3	99.3	125
Mullaitivu	99.5	99.5	67
Kilinochchi	99.7	99.7	81
Batticaloa	99.6	99.6	491
Ampara	99.9	99.9	692
Trincomalee	99.7	99.7	331
Kurunegala	99.8	99.8	1,501
Puttalam	100.0	100.0	635
Anuradhapura	99.4	99.4	919
Polonnaruwa	99.8	99.8	381
Badulla	99.6	99.6	697
Moneragala	100.0	100.0	452
Ratnapura	100.0	100.0	1,025
Kegalle	100.0	100.0	658
<b>Education</b>			
No education	96.4	96.4	235
Passed Grade 1-5	99.3	99.3	1,099
Passed Grade 6-10	99.7	99.7	7,629
Passed G.C.E.(O/L) or equivalent	99.8	99.8	3,842
Passed G.C.E.(A/L) or equivalent	99.9	99.9	3,611
Degree and above	99.9	99.9	841
<b>Wealth quintile</b>			
Lowest	99.0	99.0	3,065
Second	99.8	99.8	3,459
Middle	99.8	99.8	3,621
Fourth	99.9	99.9	3,658
Highest	99.8	99.8	3,454
<b>Total 15-49</b>	<b>99.7</b>	<b>99.7</b>	<b>17,257</b>



**Table 3: Need and demand for family planning among currently married women, Demographic and Health Survey, 2016**

Background characteristic	Unmet need for family planning			Met need for family planning (currently using)			Total demand for family planning <sup>1</sup>			Percentage of demand satisfied <sup>2</sup>	Percentage of demand satisfied by modern methods <sup>3</sup>	Number of women
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total			
<b>Age</b>												
15-19	19.3	2.1	21.4	42.0	1.6	43.5	61.3	3.7	65.0	67.0	57.7	225
20-24	9.6	1.5	11.2	44.2	11.8	56.0	53.9	13.3	67.2	83.4	71.1	1,373
25-29	6.7	3.3	9.9	37.5	21.1	58.6	44.2	24.3	68.5	85.5	74.9	2,559
30-34	3.4	5.3	8.7	22.7	40.9	63.6	26.1	46.2	72.4	87.9	74.6	3,481
35-39	1.4	5.6	7.1	9.7	61.4	71.1	11.1	67.0	78.2	91.0	77.0	3,735
40-44	0.5	4.9	5.4	2.2	69.8	72.0	2.7	74.7	77.4	93.0	74.2	3,033
45-49	0.2	3.7	3.9	1.1	59.5	60.6	1.2	63.3	64.5	94.0	71.8	2,851
<b>Residence</b>												
Urban	4.9	6.1	10.9	15.8	41.0	56.8	20.7	47.1	67.8	83.9	67.1	2,682
Rural	2.7	4.1	6.8	17.4	48.9	66.4	20.2	53.0	73.2	90.7	75.3	13,906
Estate	4.4	4.9	9.3	9.4	49.5	58.9	13.8	54.4	68.2	86.4	80.3	669
<b>District</b>												
Colombo	4.2	5.5	9.7	16.7	43.8	60.5	20.9	49.3	70.2	86.2	67.4	1,625
Gampaha	2.1	5.5	7.6	15.9	51.4	67.3	18.0	56.9	74.9	89.9	69.4	1,755
Kalutara	2.4	3.5	5.8	21.1	52.8	73.8	23.4	56.2	79.7	92.7	69.5	1,040
Kandy	2.7	5.0	7.6	15.0	46.8	61.8	17.7	51.8	69.4	89.0	75.3	1,174
Matale	1.5	3.5	4.9	19.3	52.0	71.4	20.8	55.5	76.3	93.6	81.0	456
Nuwara Eliya	3.1	5.0	8.1	12.1	54.5	66.6	15.2	59.5	74.7	89.2	83.9	552
Galle	2.4	3.6	6.0	19.5	51.1	70.6	21.9	54.7	76.6	92.2	70.3	896
Matara	3.4	5.0	8.4	16.6	48.4	65.0	20.1	53.4	73.4	88.5	72.1	685
Hambantota	4.1	3.6	7.8	17.5	47.0	64.5	21.6	50.6	72.2	89.3	74.8	532
Jaffna	4.1	4.3	8.4	9.8	36.8	46.6	13.9	41.1	55.0	84.7	77.8	409
Mannar	3.2	2.8	6.1	5.7	12.6	18.4	9.0	15.5	24.4	75.2	75.2	76
Vavuniya	6.2	9.3	15.5	10.2	22.8	33.0	16.4	32.1	48.5	68.0	63.4	125
Mullaitivu	1.7	4.6	6.3	18.0	49.2	67.2	19.7	53.8	73.5	91.5	86.9	67
Kilinochchi	4.3	5.1	9.3	13.1	45.3	58.4	17.4	50.4	67.8	86.2	83.1	81
Batticaloa	9.9	12.9	22.8	8.2	23.3	31.5	18.1	36.2	54.3	58.0	52.5	491
Ampara	6.8	3.4	10.2	15.0	30.8	45.7	21.8	34.1	55.9	81.8	72.7	692
Trincomalee	8.4	6.0	14.4	16.9	31.6	48.6	25.4	37.7	63.0	77.1	72.1	331
Kurunegala	2.3	3.6	5.9	17.8	51.7	69.5	20.1	55.3	75.4	92.2	74.0	1,501
Puttalam	2.2	2.3	4.5	18.1	51.2	69.3	20.3	53.5	73.8	93.9	75.4	635
Anuradhapura	2.3	1.9	4.2	18.8	48.4	67.2	21.1	50.4	71.4	94.1	87.5	919
Polonnaruwa	2.4	3.6	6.0	17.3	55.0	72.3	19.7	58.6	78.3	92.3	85.6	381
Badulla	2.2	4.1	6.3	18.7	52.6	71.3	20.9	56.8	77.6	91.9	83.4	697
Moneragala	2.5	2.8	5.3	20.8	51.8	72.7	23.4	54.6	77.9	93.2	81.7	452
Ratnapura	1.5	2.4	3.9	20.7	53.6	74.4	22.2	56.0	78.2	95.0	71.3	1,025
Kegalle	2.0	5.9	8.0	13.6	53.3	66.9	15.6	59.2	74.8	89.4	79.2	658
<b>Education</b>												
No education	0.7	1.6	2.3	1.9	68.8	70.7	2.6	70.4	73.0	96.9	91.3	235
Passed Grade 1-5	1.6	5.2	6.8	5.2	58.7	63.8	6.7	63.9	70.6	90.4	80.2	1,099
Passed Grade 6-10	2.6	4.2	6.8	15.9	52.0	67.9	18.5	56.2	74.7	90.9	77.7	7,629
Passed G.C.E.(O/L) or equivalent	3.6	4.7	8.2	16.8	45.1	62.0	20.4	49.8	70.2	88.3	73.9	3,842
Passed G.C.E.(A/L) or equivalent	4.0	4.9	8.9	22.1	39.3	61.4	26.1	44.1	70.2	87.4	66.5	3,611
Degree and above	4.7	2.5	7.3	22.5	37.4	59.9	27.2	39.9	67.1	89.2	62.2	841
<b>Wealth quintile</b>												
Lowest	3.1	5.0	8.0	15.4	49.1	64.5	18.4	54.1	72.5	89.0	81.4	3,065
Second	2.8	3.5	6.2	17.4	49.2	66.6	20.2	52.7	72.8	91.4	77.3	3,459
Middle	3.1	4.2	7.3	17.6	47.6	65.1	20.6	51.8	72.4	90.0	75.9	3,621
Fourth	3.5	4.1	7.7	17.7	46.1	63.8	21.2	50.2	71.4	89.3	71.9	3,658
Highest	3.2	5.4	8.5	16.1	46.9	63.0	19.2	52.3	71.5	88.1	65.4	3,454
<b>Total</b>	<b>3.1</b>	<b>4.4</b>	<b>7.5</b>	<b>16.9</b>	<b>47.7</b>	<b>64.6</b>	<b>20.0</b>	<b>52.1</b>	<b>72.1</b>	<b>89.6</b>	<b>74.2</b>	<b>17,257</b>

Sri Lanka Family Planning Association's Demographic and Health Survey report (SLDHS 2016) assessed Knowledge of

contraceptive methods among ever married and currently married women (n=18302). According to the report (Table-1), almost



all ever married, and currently married women knew at least one method and on average nine methods were known by the respondents. Among the currently married women of reproductive age, only 4% of women did not know of female sterilization as a family planning method and 33% were not familiar with male sterilization. The most widely known modern methods are injectables and pills. Only half of currently married women have heard of emergency contraceptive pills. Knowledge of female condoms is the least known method of contraception by women among the 12 methods inquired.

These data (Table-2) indicate that knowledge of both any or modern methods of family planning is as nearly as high as 100% in all districts, with no variations between education levels and wealth quintiles. Furthermore, a total of 5884 currently married women were included in the age cohort of 40-49 representing all districts. Their contraceptive knowledge was outstanding according to data. The figures for the unmet need for contraception were comparatively low for age cohort 40-44 & 45-49, the tendency to use any contraception method progressively declined with age.

About 692 participants were included for SLDHS (2016) representing the Ampara district and this cohort included to the rural

population. However, when analysing data from each district, it is obvious that Ampara district has 3rd highest rate of unmet need for contraception (10.2% in 2016).

This cohort of women has reduced natural fecundity, yet potential for unplanned and unwanted pregnancies which are associated with social/financial dilemmas, spontaneous or induced miscarriages, and chromosomal abnormalities of offspring, increased fetomaternal morbidity and mortality<sup>5</sup>.

### Justification

Mahaoya division is a rural area situated in the Ampara district (Eastern Province). It has a 667 km<sup>2</sup> area. Based on 2012 national consensus data, the total population in Mahaoya is about 20,828 with an annual population growth of 1.3%. The female population is about 10,287(49.3%).

However, data from MOH Mahaoya indicates the actual total population in 2022 is about 25,254 and according to that population growth rate is about 1.9% in the last decade. (Fig. 2) PGR (Population Growth Rate) =  $\frac{P(t) - P(t_0)}{P(t_0)} \times (t - t_0)$ . In 2022, the total female population was 12958 (51.3%) and during the last decade, 2671 female births were noted in the region. (Fig. 3).

**Figure 2: Population of Mahaoya, Source-MOH Mahaoya database**

MOH - Mahaoya			
	2021 ↕	2022 ↕	2023 ↕
Actual population	24 653	25 254	25 565
Population Estimated (by MOH)	23 882	24 633	24 255
MCHJ01.06 Total number of eligible families registered ::	4 991	5 286	5 096



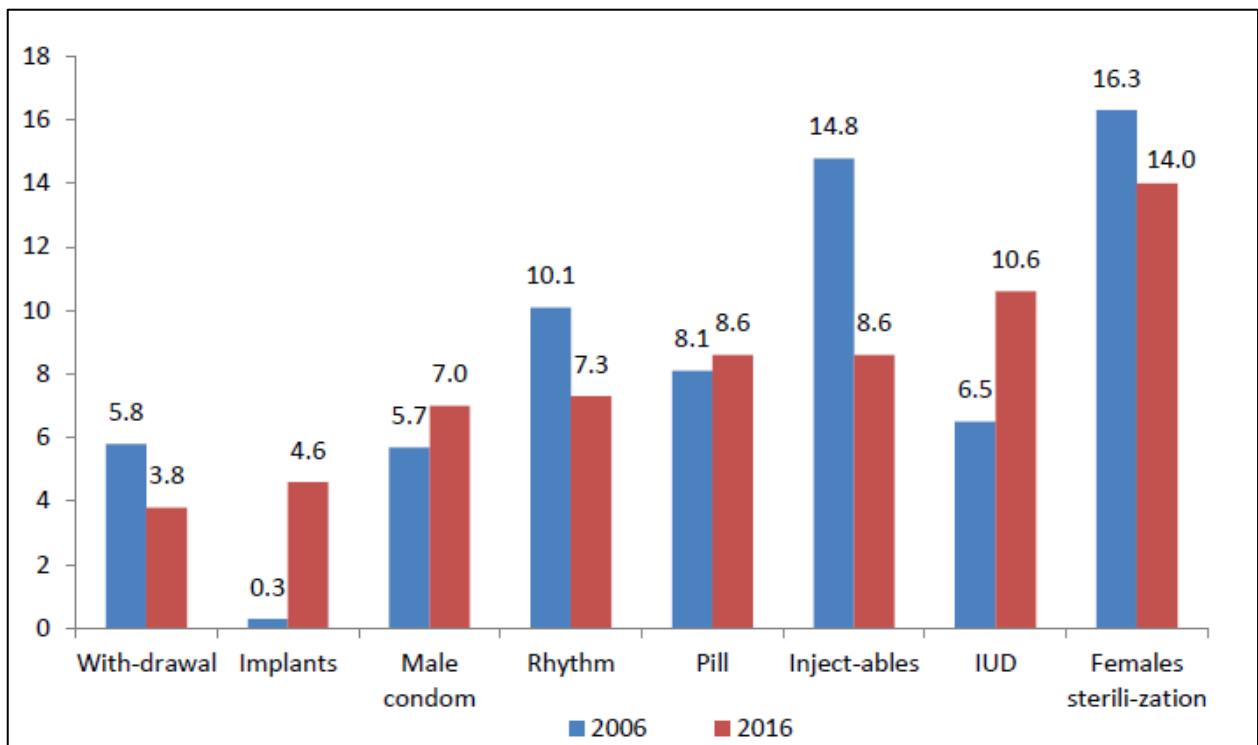
**Figure 3: Age-related population distribution in 2022, Source-District Secretariat Office, Mahaoya**

Age category	0-5y	6-14y	15-19y	20-30y	31-65y	66-69y	>70y	Total
Male	1037	1788	1200	2135	5425	617	469	12669
Female	1047	1834	1196	2087	5543	703	546	12958

When comparing trends of contraceptive use between SLGHS 2006 & 2016 (Fig-4), It was obvious that women are moving for

proper contraceptive methods over natural methods.

**Figure 4: Trends in current use by contraceptive methods, Demographic and Health Survey, 2016**



However contraceptive practice and preferences in Mahaoya have deviated from

national data significantly as data from MOH-Mahaoya indicated.





**Table 3&4: Contraceptive Use in Mahaoya, Source-MOH Mahaoya**

MOH - Mahaoya			
	2021	2022	2023
MCH 13.01 Percentage of eligible couples using OCP::	6.4	6.1	2.6
MCH 13.02 Percentage of eligible couples using DMPA (Injectables) ::	36.7	37.6	16.3
MCH 13.03 Percentage of eligible couples using IUCD ::	9	8.1	3.3
MCH 13.04 Percentage of eligible couples using Implants ::	10.7	9.9	4.1
MCH 13.05 Percentage of eligible couples using Condoms ::	2.6	2.4	0.99
MCH 13.06 Percentage of eligible couples using female sterilization ::	10.7	9.9	4
MCH 13.07 Percentage of eligible couples using male sterilization ::	0	0	0
MCH 13.08 Percentage of eligible couples using modern family planning me...	76.2	74.1	31.4
MCH 13.09 Percentage of eligible couples using traditional family planning ...	3.2	2.9	1.2
MCH 13.10 Percentage of eligible couples using any family planning method ::	79.4	76.9	32.6
MCH 13.11 Percentage of eligible couples with unmet need of family plannin...	2.3	2.1	0.94
MCH 13.12 Percentage of eligible couples with subfertility ::	1.8	1.5	0.7
MCH 13.14 Percentage of couples with family planning method failure ::	0.15	0.15	0.12
MCH 13.15 Total number of current users of all family planning methods ::	3 964.3	4 066.9	1 661.5

**FP use and Fertility status of Eligible Families: 2022**  
Data source: MOH-Mahaoya MCH National Review 2022

	Indicator	2020		2021		2022	
		No.	*(% )	No.	*(% )	No.	*(% )
11.1	OCP users	333	6.5	321	6.4	324	6.2
11.2	DMPA users	1782	34.7	1831	36.7	1987	37.8
11.3	IUD users	477	9.4	452	9	428	8.1
11.4	Implant users	554	10.9	535	10.7	524	10
11.5	Condom users	125	2.4	130	2.6	126	2.4
11.6	Female Sterilization users	538	10.6	534	10.7	526	10
11.7	Male Sterilization users	0	0	0	0	0	0
11.8	Current users of modern methods (a+b+c+.....+g)	3759	74.4	3803	76.2	3915	74.4
11.9	Traditional method users	179	3.5	161	3.2	110	2.9
11.10	Current users of all methods (h+ i)	3938	77.9	3964	79.4	4025	77.3
11.11	Unmet need for FP	122	2.4	117	2.3	110	2.1
11.12	Sub fertile couples	98	1.9	92	1.8	86	1.5
m	Pregnant mothers	249	4.8	221	4.4	194	3.6
n	Postpartum mothers	46	.9	46	.9	39	.7
<b>Total</b>							
<b>No (11.10+11.11+11.12+m+n)</b>		4453/5100	87.3	4440/4991	88.9	4454/5259	84.6
<b>%(11.10+11.11+11.12+m+n) /Total eligible families *100</b>							
<b>Gap (families out of EF)</b>		647/5100	12	551/4991	11	805/5259	15
<b>Reasons for the gap (numbers and %)</b>							

Even though there is less sufficient data with age distribution mentioned, in 2022 total number of eligible couples registered was 5286. Out of them, 76.9% followed family planning and 37.6% preferred injectable Progesterone (DMPA) which is substantially higher than national data.

According to this regional data as well as personal observation in clinical practice in the last 6 months duration, it was found that the use of OCP, Barrier methods, Progesterone subdermal implants and Intrauterine devises becoming progressively less popular in Mahaoya.



Contrary to evidence-based practice, the rising trend of DMPA use was marked among fertile age groups despite of available modern LARC methods. And it was observed that many females use DMPA for > 2 years without analysing risk versus benefits for its long-term use and the overall cost was never a concern. This unusual tendency to DMPA use was one reason to reflect on the contraceptive preference and practice of women in Mahaoya.

DMPA contains 150 mg medroxyprogesterone acetate and is administered intramuscularly (IM) every 12 or 13 weeks<sup>7</sup>. DMPA use is associated with a small BMD loss, usually recovered after discontinuation. Several observational studies have examined the effects of DMPA use (past or present) on BMD in women over 40<sup>8,9</sup>. Women using DMPA experience initial bone loss due to the hypoestrogenic effects of DMPA, but this initial bone loss is not repeated or worsened by menopause. Women over 40 with additional risk factors for osteoporosis (e.g. smoking, inactivity, family history, vitamin D deficiency, etc.) are advised to consider alternative methods. The evidence regarding DMPA, and increased breast cancer risk is conflicting. There is possibly a weak association between current use and breast cancer, but any increased risk is likely to be small and reduced with time after stopping<sup>7</sup>.

A 2016 systematic review found that there may be a slightly increased risk of VTE for women using DMPA<sup>10</sup>; however, the evidence is limited, and the potential risk may only affect women with other risk factors for VTE (e.g. smoking, family history).

Even though it is believed that age alone is not a contraindication to any contraceptive methods, The Faculty of Sexual & Reproductive Health recommendation for, DMPA is UKMEC Category 2. But many

perimenopausal women continue DMPA despite of risks.

The health needs of women are significantly compromised in the perimenopausal age group, and the potential risk of conception is often neglected. This is exaggerated by factors like shyness to discuss sexual well-being and contraceptives. Therefore, women over 40s are less likely to have contraceptive-seeking behaviour than younger ones. This widens the contraceptive gap.

Currently, there are no sufficient studies on contraceptive preference and practice in perimenopausal women in Sri Lanka.

### Methodology

This audit was conducted at Mahaoya Base Hospital during the period of 01-05-23 to 31-05 2023. Participants were selected through a systematic sampling method from the medical clinic. Women who are above 40 years and have not yet achieved menopause were selected. Information with regards to contraception usage, knowledge of contraception, sexual practices, socio-demographic details, and medical history were obtained from the patients at the end of the clinic visit.

### Analysis

Data analysis (descriptive statistics) was performed using SPSS version 25.

### Results

The age of females ranged from 40 – 55 years, with a mean age of 46.9 years. All females were married, except for one (1.4%) and five women (6.8%) were nulliparous with a majority having two children (n=28, 41.8%). The age of the last child had a wide range from 01 - 36 years with a mean age of 15.4 years. The majority of the perimenopausal women were unemployed (n=54, 73%), with the



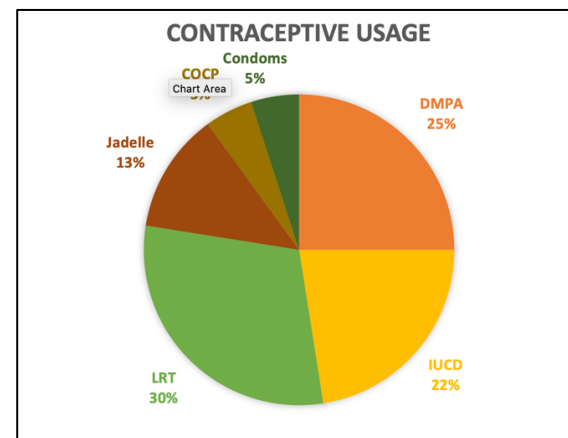
majority (n=40, 54.1%) not proceeding beyond ordinary level education, which was also seen among the partners (n=44, 59.5%). Monthly income was less than 50,000 rupees among the vast majority (n=59, 79.7%).

BMI of these women ranged from 19 - 36 kgm<sup>-2</sup> with a mean BMI of 25.45 kgm<sup>-2</sup> and only 27 women (40.1%) having a BMI range within normal values. On inquiring about comorbid conditions, a wide majority were on treatment for diabetes mellitus (n=20, 27%), followed by ischemic heart disease (n=10, 13.5%), dyslipidaemia (n=8, 10.8%) & hypertension (n=7, 9.5%). Given the data were collected from females attending a medical clinic, an over-representation of medical issues is likely.

Out of the cohort of perimenopausal women, a considerable majority were sexually active (n=61, 82.4%). Despite that, contraceptives were only used by 40 (54.1%) of the women (Chart 1). A considerable number had undergone ligation & resection of tubes (30%, n=12) followed by DMPA (25%) and IUCD (22%) usage. Other methods included Jadella, COCP and condom usage. Despite the current low usage of contraception, 90.5% (n=67) of women had used some method of contraception at some point during their life, out of which DMPA was the commonest (31.1%).

Of the women currently using contraceptives, the main reason (n=40, 100%) for usage was to avoid unwanted pregnancy as their families were already completed. On inquiring about reasons for not adopting a contraceptive method for those women who are sexually active (n=21), 16 (76.2%) women had no idea of the need for contraceptive usage at this age, two (9.5%) were reluctant to use a contraceptive method due to side effects experienced and the remaining three women (14.3%) had fertility wishes. The decision to use or not to use contraception

was following a collaborative discussion with the partner among a majority of women (n=52, 70/1%).



Nine women (12.2%) had encountered some sort of complication with regard to contraceptive usage, including weight gain with DMPA, excessive vaginal bleeding & abdominal pain with IUCD and troublesome spotting with implants.

Basic knowledge of contraception was assessed based on the ability to name common contraceptive methods, the side effects of each, proper usage, and the comprehension of when to stop the usage of contraception. Surprisingly only 21 (28.4%) had adequate knowledge of contraception as determined by the short interview. Out of the cohort, only 11 (14.8%) women had adequate knowledge of when to stop using contraception. Awareness of emergency contraception was only seen among 08 (7.8%) of women. Most have acquired knowledge on contraception from well-women clinics, followed by peers and doctors. Approximately half of the women have experienced an unexpected pregnancy, one or more (n=34, 45.9%).

## Discussion & Conclusions

Comprehension of the importance, appropriate time of stopping and usage of contraction is quite low in this cohort of women selected from a rural population of



Sri Lanka. Some women have given up on usage based on side effects, but the majority have a clear deficiency of knowledge, thus resulting in a higher incidence of unexpected pregnancies.

### Suggestions

To address this issue, we suggest comprehensive educational programmes, and information leaflets to the women in the catchment area through the well-women clinic, public health midwives and through the hospital. Also, there's a need to increase the accessibility to free or low-cost contraceptive methods.

A re-audit is suggested after the above interventions have taken place.

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### References

1. Gold EB, Bromberger J, Crawford S et al: Factors associated with age at natural menopause in a multi-ethnic sample of midlife women. *American Journal of Epidemiology* 2001; 153,865–874.
2. Gold BE et al: The timing of the age at which natural menopause occurs. *Obstet Gynecol Clin North Am.* 201; 38(3)425-440
3. National Family planning programme review (2016), Sri Lanka
4. Demographic and Health Survey (2016), Sri Lanka
5. Stovall D, Toma S, Hammond M, Talbert L: The effect of age on female fecundity. *Obstet. Gynecol.* 1991; 77: 33–36.
6. Speroff L: The effect of ageing on fertility. *Curr. Opin. Obstet. Gynecol.* 1994; 6:115–120.
7. Faculty of Sexual & Reproductive Healthcare (FSRH). Progestogen-only Injectable Contraception. 2014. <http://www.fsrh.org/standards-and-guidance/documents/cec-ceu-guidance-injectables-dec-2014/>.
8. Cundy T, Cornish J, Roberts H, et al. Menopausal bone loss in long-term users of depot medroxyprogesterone acetate contraception. *American Journal of Obstetrics and Gynaecology* 2002; 186:978–983.
9. Viola AS, Castro S, Bahamondes MV, et al. A cross-sectional study of the forearm bone mineral density in long-term current users of the injectable contraceptive depot medroxyprogesterone acetate. *Contraception* 2011; 84:e31–e37
10. Tepper NK, Whiteman MK, Marchbanks PA, et al. Progestin-only contraception and thromboembolism: a systematic review. *Contraception* 2016; 94:678–700



**MENOSOC 2023 – Annual Academic Sessions of Menopause Society of Sri Lanka -  
Free Paper Abstracts**

**Comfort in Menopause Management Among Trainees**

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**Objectives**

To evaluate the confidence in prescribing hormone replacement therapy (HRT) and identify gaps in diagnosis and management of menopause in postgraduate trainees.

**Method**

A cross-sectional survey was sent to 1st and 2nd year trainees in Obstetrics and Gynaecology. It included questions regarding availability and importance of training in menopause management, interest of trainees in identifying menopausal symptoms, confidence in prescribing HRT.

**Results**

Of the 67 surveys sent, 28 trainees responded (41.7%), and believed it was important to be trained to manage menopause (100%). However, majority (71%) denied having had study days related to menopause. Importantly, gaps in knowledge were identified. 57% indicated

they were hesitant to offer HRT to a symptomatic, newly menopausal woman without contraindications. 90.4% claimed to have very rarely prescribed HRT to patients at the clinic. However, following surgical menopause, 65% claimed to have inquired about menopausal symptoms. Majority (90%) agreed that symptomatic women suffer in silence due to cultural barriers and all respondents (100%) believed that HRT improves their quality of life. Nevertheless, 24% were uncomfortable about inquiring about genito-urinary and sexual symptoms related to menopause. Only 52% reported feeling adequately prepared to manage menopausal symptoms.

**Conclusion**

Trainees do recognize the importance of management of menopause, but knowledge gaps exist. Considering the shift of Sri Lankan demographics towards an ageing population, with females having a higher life-expectancy, health education to provide comprehensive menopause management should be a priority.

**Follow-up of Women Taking HRT at a Specialist Gynaecology Clinic: A  
Clinical Audit**

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<sup>1</sup>*National Hospital Kandy*

**Objectives**

Hormone replacement therapy (HRT) is the single most important management strategy in treating post-menopausal symptoms and complications, with wide ranging benefits as well as risks. To ensure the best benefit and minimum risk to the patient, high

quality HRT clinics should be maintained. Auditing the compliance with explicit standards in conducting a safe and effective specialist HRT clinic.

**Methods**

This audit looked at all women taking HRT attending gynecology clinics at National Hospital Kandy from December 2022 to May 2023. Audit standards were set



according to NICE and NHS trust HRT guidance. Audit standards were a 100% compliance required in the following; initial HRT prescription by a consultant or senior registrar, a follow-up plan detailing 3-months and annual visits, complete documentation, designation, history, risk assessment including breast examination, systemic examination including blood pressure, BMI, investigations and management.

### Results

There were 41 women on HRT ranging from 46-68 years of age. Estrogen only HRT was the commonest. Initial prescription was by either a consultant or a

senior registrar in 65.8%. 90% had a 3-month review and 82.9% had an annual follow-up plan. 58.5% had a risk assessment including breast examination. Documentation with date, designation, examination findings (ex: - blood pressure), investigations, management plans and scheduling the next appointment had achieved target compliance level of 100%. Recording BMI was at 21.9%.

### Conclusions and recommendations

The audit yielded mixed compliance levels emphasizing the need for a refresher course in HRT use and clinical documentation. These have been conducted and a post-analysis will be performed.

## NCD Burden and Associated Risk Factors in Postmenopausal Women in Selected Public Health Midwife Areas in Sri Lanka: An Interim Analysis

Weerasooriya SD<sup>1</sup>, Ekanayake CD<sup>2</sup>, Attapattu P<sup>3</sup>, Dissanayake M<sup>4</sup>, Ferdinandez MGSCR<sup>5</sup>, Akmeemana SP<sup>6</sup>, Goonaratne MDP<sup>1</sup>, Perera H<sup>1</sup>, Akmeemana LDD<sup>6</sup>, Jayalath JAVS<sup>1</sup>

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### Objectives

To describe the non-communicable disease (NCD) burden and associated risk factors in postmenopausal women.

### Methods

A descriptive cross-sectional study among postmenopausal women in selected midwifery areas was conducted in Kalutara district by trained midwives using an interviewer-administered questionnaire. Information including Height, weight, body mass index (BMI), abdominal

circumference (AC), lipid profile and fasting blood glucose were obtained.

### Results

Of 105 participants, the mean ( $\pm$  SD) age and age at menopause were 58.72 ( $\pm$  7.16) and 48.66 ( $\pm$  4.25) years respectively. Sixty percent (n= 63) had comorbidities. In comparison with women  $\leq$  50 years and  $>$  50 years, percentages previously known with diabetes, hypertension and dyslipidemia were 32.9% (n= 24): 31.2% (n=10), 52.1% (n= 38): 53.1% (n= 17) and 75.3% (n= 55): 84.4% (n= 27) respectively. Previously unknown NCDs i.e. Diabetes [4.16% (n=1): 10% (n=1)] hypertension, [36.84% (n=14): 11.76% (n=2)] and dyslipidemia [58.18% (n=32): 51.85% (n=14)] were diagnosed for the first time by the present biochemical screening. Mean BMI and AC were 25.58 ( $\pm$  4.81) kg/m<sup>2</sup> and 90.68 ( $\pm$  11.50) cm respectively. Diabetes and hypertension showed no association with BMI and AC (p>0.05). Dyslipidemia



was significantly associated with BMI ( $p < 0.05$ ).

### Conclusion

The majority had one or more NCD with a high prevalence of diabetes, hypertension,

and dyslipidemia. Only Dyslipidemia but not diabetes and hypertension showed a significant association with BMI. A high prevalence of previously undiagnosed NCDs, suggests the need for improved population screening and healthcare access.

## Osteoporosis and Associated Risk Factors in Postmenopausal Women in Selected Public Health Midwife Areas in Sri Lanka: An Interim Analysis

Weerasooriya SD<sup>1</sup>, Ekanayake CD<sup>2</sup>, Attapattu P<sup>3</sup>, Dissanayake M<sup>4</sup>, Ferdinandez MGSCR<sup>5</sup>, Akmeemana SP<sup>6</sup>, Goonaratne MDP<sup>1</sup>, Perera H<sup>1</sup>, Akmeemana LDD<sup>6</sup>, Jayalath JAVS<sup>1</sup>

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### Objectives

To describe the osteoporosis disease burden and associated risk factors in postmenopausal women.

### Methods

A descriptive cross-sectional study among postmenopausal women in the selected midwifery areas was conducted in Kalutara district using an interviewer-administered questionnaire by trained midwives. Body mass index (BMI) and abdominal circumference (AC) were obtained. Fracture risk was calculated using the Fracture Risk Assessment Tool (FRAX) score. The age-dependent major osteoporotic fracture risk (MOFR) and hip fracture risk (HFR) intervention thresholds in Sri Lanka (7.4 and 1.8 respectively for the mean age of 60 years), were used for calculation.

### Results

Of 105 participants, the mean ( $\pm$  SD) age and age at menopause were 58.72 ( $\pm$  7.16) and 48.66 ( $\pm$  4.25) years respectively. Percentage previously diagnosed with osteoporosis was 5.7% ( $n = 6$ ). The mean ( $\pm$ SD) values of major osteoporotic risk and hip fracture risk were 5.18 ( $\pm$  5.11) and 1.50 ( $\pm$  3.08) respectively. Eligibility for further intervention was 24.8% ( $n = 26$ ). Percentages with previous fractures and parental fractures were 17.1% and 18.1% respectively. Mean BMI and AC were 25.58 ( $\pm$  4.81)  $\text{kg/m}^2$  and 90.68 ( $\pm$  11.50) cm respectively. MOFR ( $p < 0.05$ ,  $r = -0.326$ ) and HFR ( $p < 0.05$ ,  $r = -0.331$ ) were significantly associated with BMI. HFR was significantly associated with AC ( $p < 0.05$ ,  $r = -.231$ ).

### Conclusions

About 25% of postmenopausal women met the intervention thresholds for osteoporosis intervention based on age-dependent risk percentages. Lower BMI and higher AC were associated with increased fracture risks emphasizing the need for targeted interventions and preventive measures to reduce osteoporotic fracture risk.



## Translation and Validation of the Tamil version of Menopause Rating Scale

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### Aims and Objectives

The objective was to translate and validate the Tamil translation of Menopause Rating Scale (MRS).

### Methods

MRS-Tamil questionnaire was developed following forward and backward translations, experts' review, focus group discussions and pre-testing. It was administered to 130 postmenopausal Tamil women at community level in Nanattan, Mannar. MRS-Tamil was re-administered to a subsample (n = 94), four weeks after the first administration.

### Results

The median (IQR) age of the sample was 61 (58–67) years. Content validity was assessed by the level of missing data which was 1.5% for each item in the questionnaire. The total score, psychological, somatic and urogenital

subscale scores were significantly different between symptomatic (n=84) and asymptomatic (n=43) women emphasizing good discriminant validity ( $p < 0.001$ ). Factor analysis with Principal Component Analysis extracted three factors explaining 55.58% cumulative variance. The item-subscale correlation analysis items showed stronger correlations within their own subscale (Pearson  $r$  range between 0.40–0.77) than with other subscales indicating strong convergent validity. Internal consistency as assessed using Cronbach's coefficient alpha score was 0.78 (range 0.73 to 0.78). Test–retest reliability was assessed by intraclass correlation coefficient 0.75 [95% CI 0.68-0.81, ( $p < 0.001$ )] and weighted kappa scores (0.53-0.70). A total score  $\geq 5$  (sensitivity 81.0%, specificity 83.7%) was found to be the optimal threshold for referral.

### Conclusion

The results of the Tamil translation of MRS are satisfactory and would potentially be valuable to objectively assess menopausal symptoms in Tamil speaking women. The threshold for referral was found to be a total score  $\geq 5$ .

## Experiencing Menopausal Symptoms Among Women Who Underwent Hysterectomy for Benign Gynaecological Condition at Colombo South Teaching Hospital, Kalubowila

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<sup>1</sup>Colombo South Teaching Hospital,  
Kalubowila.

### Objectives

To assess the Experience of menopausal symptoms among women who underwent hysterectomy for benign gynaecological

condition at Colombo south teaching hospital, Kalubowila.

### Methods

Randomly selected 55 patients who underwent hysterectomy in view of benign gynaecological condition were included. Menopausal symptoms and severity were





assessed using modified Menopause Rating Scale (MRS) scale. Post hysterectomy menopausal symptoms at six weeks and three months were compared in this study.

### Results

The mean age of the study participants was 47.4 years. Most of the patient's presenting complain was heavy menstrual bleeding 33(60%). Majority 25(45%) of diagnosed as Abnormal uterine bleeding – leiomyoma. Majority 33(60%) of them had undergone total abdominal hysterectomy with or without bilateral salphingoophorectomy. Among this total abdominal hysterectomy with bilateral salpingectomy was 23 (42%) .In this study 23% of patients from associated with co morbidities. There was a statistically significant difference in majority of menopausal symptoms such as hot flushes, night sweating ,sleep problems,

Anxiety, physical and mental exhaustion, sexual problems and joint and muscular discomfort between six weeks and three months postoperatively. Among 55 patients only 12 (21.8%) patients were aware about menopausal symptoms and only 5 (9%) patients have knowledge regarding HRT.

### Conclusion

This study concluded that the Bladder symptoms, joint and muscular discomfort, sexual problems and physical and mental exhaustion were significantly higher after 3 months of post hysterectomy patients. awareness regarding menopausal symptoms and knowledge regarding usage of HRT among hysterectomized patients were poor. Health education and organizing awareness program and issuing leaflets for who underwent hysterectomy at ward level or clinic level.

## Understanding the Socioeconomic Factors that Influence Menopausal Experiences and Healthcare Seeking Behaviour in Postmenopausal Women in Selected MOH areas in Colombo District

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### Background

The objective of this study is to understand the socioeconomic factors that influence menopausal experiences and healthcare seeking behaviour in post-menopausal women in selected medical officer of health (MOH) areas in Colombo district.

### Methods

A cross-sectional descriptive study was conducted and a sample of 384 post-menopausal women were selected using stratified random sampling from three MOH areas in Colombo district. A structured and pre-tested interviewer administered questionnaire was used to collect data.

### Results

Majority of the women (78%) had negative overall experience of menopause. Almost all women (91%) had at least one post-menopausal symptom but only 8% (n=28) of them sought medical care. Among those who sought medical care, 75% women were satisfied with the health service they received. Those who passed their A/L exam ( $X^2 = 6.69$   $P=0.009$ ) and those employed ( $X^2= 4.46$   $P= 0.03$ ) shows significant association in seeking medical care for post-menopausal symptoms. Monthly income, ethnicity, residence area or having a health insurance doesn't associate significantly with seeking medical care. The women those living in rural areas show significant association with positive overall experience of menopause ( $X^2 =10.2$  $P=0.001$ ). But none of the other socioeconomic factors (Monthly income,



education level, ethnicity, occupation, or marital status) show significant association with positive overall experience of menopause.

### Conclusions

Socio-economic factors are interdependent on each other. A larger study with control

for confounding factors is the way forward. Women especially those with low education level need to educate on importance of seeking medical care for the post-menopausal symptoms.

## Rare Case of Malignant Vulval Melanoma in a Postmenopausal Woman – A Case Report

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### Introduction

Vulval melanoma is the commonest genital tract melanoma which accounts for 76.7% of cases, with an incidence of 1 per 100000 women. It is commonly found in Caucasian women and associated with chronic irritation, inflammation, viral infections and genital mutations. Median age of the cancer development is 68 years. It has a very poor prognosis with high recurrence rate.

### Case report

A 84-year-old postmenopausal woman presented with ulcerated hyperpigmented vulval lesion for 6 months with vaginal discharge, vulval itching, discomfort and pain for 4 months duration. On examination her BMI was 18.1Kg/m<sup>2</sup> and vaginal examination revealed hyperpigmented ulcerated lesion in vulva and the lower third of the vagina with bilateral inguinal node enlargement. Her cervix, uterus, adnexa

were unremarkable. Vulval biopsy revealed malignant vulval melanoma. Her contrast enhanced CT pelvis, abdomen and chest was negative except for inguinal lymphadenopathy. She underwent partial vulvectomy with lymph node clearance and was referred to a gyne-oncology unit for further management.

### Discussion

Management of vulval melanoma is a multidisciplinary team process. Surgical resection is the mainstay of treatment which should be ideally performed by gyne-oncosurgeon with a tumor free margin of more than 10mm. Adjuvant radiotherapy can be given to prevent local recurrence. Chemotherapy with alkylating and biological agents can be considered to treat systemic disease and to reduce metastasis.

### Conclusion

Vulval melanoma is a rare cancer with very poor prognosis and high rate of recurrence. Thus, long term follow-up is mandatory. Multidisciplinary team approach is extremely important for timely intervention.



## Urethral Diverticulum Leading to Chronic Urine Retention and Obstructive Uropathy in a Postmenopausal Woman – A Case Report.

Dissanayake MMH<sup>1</sup>, Walisundara WMAPB<sup>1</sup>, Karunathilaka C<sup>1</sup>, ChandrasiriSSN<sup>2</sup>, Fernando LGN<sup>1</sup>

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### Introduction

Urethral diverticulum is a rare condition in which mucosal sac forms along the urethra with the size varying from 3mm to 4cm and it may have single or multiple ostia. It is an underdiagnosed condition with unknown prevalence. Usually, it presents between 30 to 60 years of age.

### Case report

66-year-old women presented with post-micturition dribbling, urinary incontinence for 1 year duration with recent weight loss, loss of appetite for 3 months duration. On examination her BMI was 18.6kg/m<sup>2</sup>, distended abdomen with bladder dullness up to the umbilicus and bilateral ballotable kidneys. On vaginal examination she had a small lump in her anterior vaginal wall with demonstrable stress incontinence and coiling of catheter during urinary catheterization. Ultrasound scan revealed grossly distended bladder with grade IV

hydronephrosis and hydroureter. Her haemoglobin was 7.9g/dl, serum creatinine was 345micromol/l and blood urea were 23mmol/l. X-ray cystogram showed the evidence of urethral diverticulum with bilateral hydronephrosis and hydroureters. Urgent urology and nephrology opinions were taken and transferred for correction of diverticulum and management of chronic kidney disease.

### Discussion

Dysuria, post-micturition dribbling, and dyspareunia are the classical triad of symptoms in urethral diverticulum. Surgical correction is the definitive treatment, but it is only indicated in symptomatic and complicated cases, which should be performed by an urogynaecologist or urologist. The underlying complications should be sorted before definitive surgical treatment.

### Conclusion

Obstructive uropathy is a rare complication of urethral diverticulum. Multidisciplinary team management was helpful to improve the clinical outcome.

## Prevalence of Sleep Disorders and Quality of Sleep Among Perimenopausal and Postmenopausal Women in Urban Sri Lanka

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### Objectives

This study aims to assess the prevalence of sleep disorders and quality of sleep among the menopausal and perimenopausal women.

### Method

A cross sectional study was conducted among a convenient sample of women aged 45 to 60 years attending gynaecology clinic, with diverse symptoms, at a tertiary care hospital. A validated Sinhalese version of Pittsburgh Sleep Quality Index (PSQI)



along with a self-administered background questionnaire was answered by the participants.

### Results

The mean score among the participants was 11.1 (SD 3.2). Only 39.5% (32) of the participants were free of a sleep disorder (PSQI <5). Mild sleep disorder (PSQI score 5-10) was prevalent among 34.5%, whereas moderate disorder (PSQI score 11-16) and severe disorder (PSQI score 17-21) were prevalent 19.7% and 6.1% respectively. The mean time taken to fall asleep was 22 minutes whilst 8.6% spent more than 1 hour to fall asleep. Twenty-five participants (30.8%) had to wake up at least once a night

to use the bathroom more than three days per week, out of which 10 (40%) were diagnosed diabetics. Only 14.8% rated their sleep quality as 'very good' and 4.9% were taking over the counter medications to fall asleep.

### Conclusion

This study revealed a high prevalence of sleep disorders among menopausal women. This could be a direct result of menopause as well as an indirect manifestation of vasomotor and urogenital symptoms. Nonetheless, prompt assessment of sleep related issues among menopausal women would contribute to the improvement of the quality of life.

## Assessment of Knowledge of Lifestyle Modifications and Non-hormonal Treatment for Postmenopausal Symptoms in Non-specialist Medical Officers in Gynaecology Units at National Hospital Kandy

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### Objective

To assess the knowledge of non-specialist medical officers (NMOs) on lifestyle modifications and non-hormonal treatment options for post-menopausal symptoms.

### Methods

A pre-validated interviewer administered questionnaire with sections on demographic information, knowledge assessment of lifestyle modifications and non-hormonal treatments, and additional information regarding training and confidence levels was used. Data were analyzed using SPSS 26.

### Results

A total of 25 non-specialist medical officers participated in the study, including 12 house officers, 8 senior house officers (SHO) and 5 registrars, all of them holding MBBS degrees. 40% (n=10), 64% (n=16) and 60% (n=15) strongly agreed

that regular exercise, balanced diet and stress management was beneficial in managing menopausal symptoms respectively. Only 40% (n=10), 28% (n=7), 24% (n=6) and 48% (n=12) agreed that non-prescription remedies, SSRIs and SNRIs, gabapentin and CBT improved menopausal symptoms. Majority 64% (n=16) were not received training on menopause management and 80% (n=20) were not confident in managing menopause.

### Conclusion

Majority were unaware that non-prescription remedies, SSRIs and SNRIs, gabapentin and CBT improved menopausal symptoms and had not received training and were not confident in managing menopause. This study highlights the need for targeted educational interventions to enhance the knowledge and understanding of non-specialist medical officers regarding lifestyle modifications and non-hormonal treatment options for post-menopausal symptoms. Further research is warranted to evaluate the effectiveness of educational



interventions in enhancing knowledge and clinical practice in this area.



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If any of the following conditions are present, have occurred previously, and/or have been aggravated during pregnancy or previous hormone treatment, the patient should be closely supervised such as laboratory (uterine fibroids) or endometrial, risk factors for thromboembolic disorders, risk factors for oestrogen dependent tumours, e.g. 1st degree family for breast cancer, hypernatraemia, liver disorders (e.g. liver adenoma), diabetes mellitus with or without vascular involvement, cholelithiasis, migraine (or severe) headache, systemic lupus erythematosus, history of endometrial hyperplasia, epilepsy, asthma, osteoporosis. Therapy should be discontinued in case a contraindication is discovered and in the following situations such as: jaundice or deterioration in liver function, significant increase in blood pressure, new onset of migraine-type headache and pregnancy. PREGNANCY & LACTATION: FemostonTM is not indicated during pregnancy. 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