

A clinical audit of the outcomes of the multidisciplinary Menopause Hub

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Introduction

Menopause is characterised by a decline in ovarian follicular function and a sustained decrease in endogenous oestrogen levels, the onset of which can cause significant debilitating physical and psychological symptoms. Royal North Shore Hospital, as part of an Agency of Clinical Innovation strategy, has recently expanded its existing menopause clinics, and implemented a MDT model of care for complex menopause management. The referral criteria has changed to incorporate women with complex medical history including cardiovascular disease, venous thromboembolism, current or history of cancer and migraine. Women with complex care needs may require input from specialist or multi-disciplinary team (MDT) care providers. The benefit of such multidisciplinary specialist care is shown in studies (1). Patients attending multidisciplinary specialist care tended to have multiple comorbidities, a personal or family history of cancer, treatment resistance or premature ovarian insufficiency (1). Moreover, menopause clinics at hospitals offering multidisciplinary specialist care for women, including those with complex conditions like breast cancer, have been demonstrated to improve symptoms and QOL at follow-up compared to baseline (2).

Study Aim

The purpose of this observational clinical audit is to evaluate the characteristics, menopause symptoms, and treatment progressions in women cared for at the newly developed Menopause Hub, as compared to quality standards, in order further develop and improve this service. We aimed to evaluate whether attendance facilitated improved symptom severity.

Methods

Anthropometric data, reason for patient referral, past medical history and comorbidities were collected from the pre-existing electronic medical record for newly referred patients with their first appointment within the Menopause Hub between 1/1/2025 and 7/4/2025. Baseline and follow up MENQOL surveys were done to objectively measure symptom severity and improvement with management. The rate of completion was assessed. All data were already collected as part of usual standard of care.

Results

	Patients	Number of responses
Age (mean ± std deviation)	52.7 ± 8.9	123
Patients >60 (%)	13.8	123
Smokers (%)	4.6	109
Alcohol consumption (%)	61.5	104
History of mental health conditions (%)	31.7	123
History of breast cancer (%)	17.1	123
History of endometrial cancer (%)	1.6	123
History of venous thromboembolism (%)	2.4	123

Occurrence Of Medical Comorbidities (n=123)

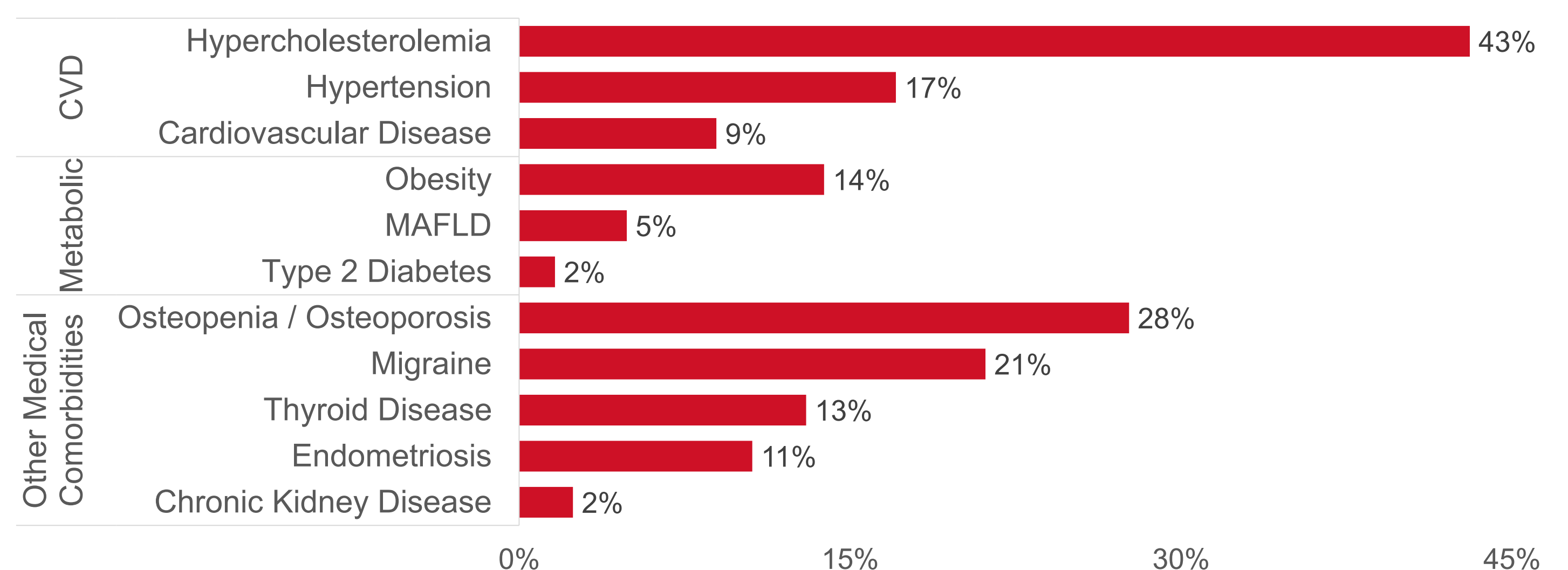


Table 1: Baseline characteristics of patients (n=123). Number of responses indicates number of patients with data recorded for the field.

Figure 1: Occurrence of medical comorbidities as grouped into cardiovascular disease, metabolic disorders and other medical comorbidities that were most frequently observed among patients treated within the Hub.

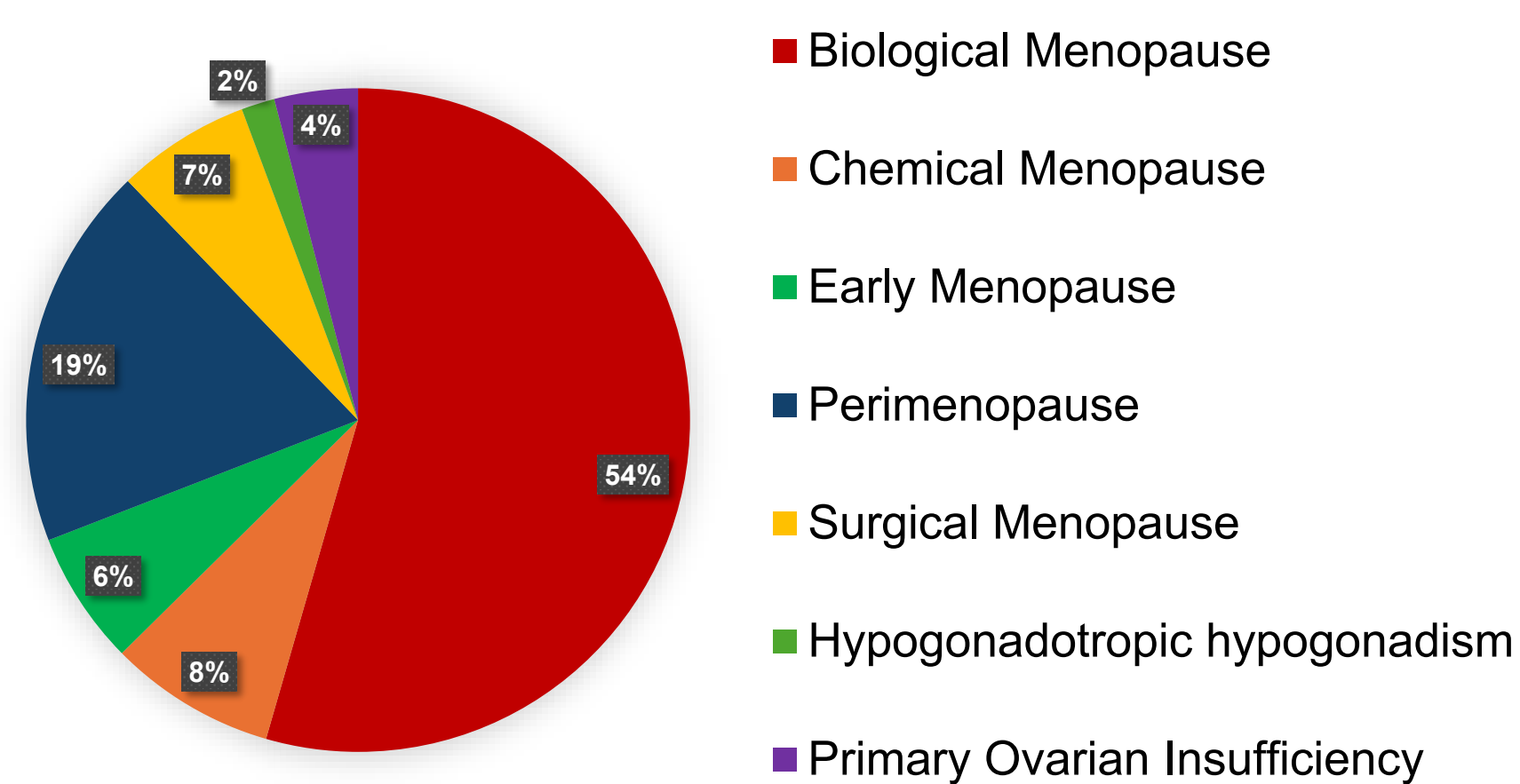


Figure 2: Reason for referral to the Menopause Hub

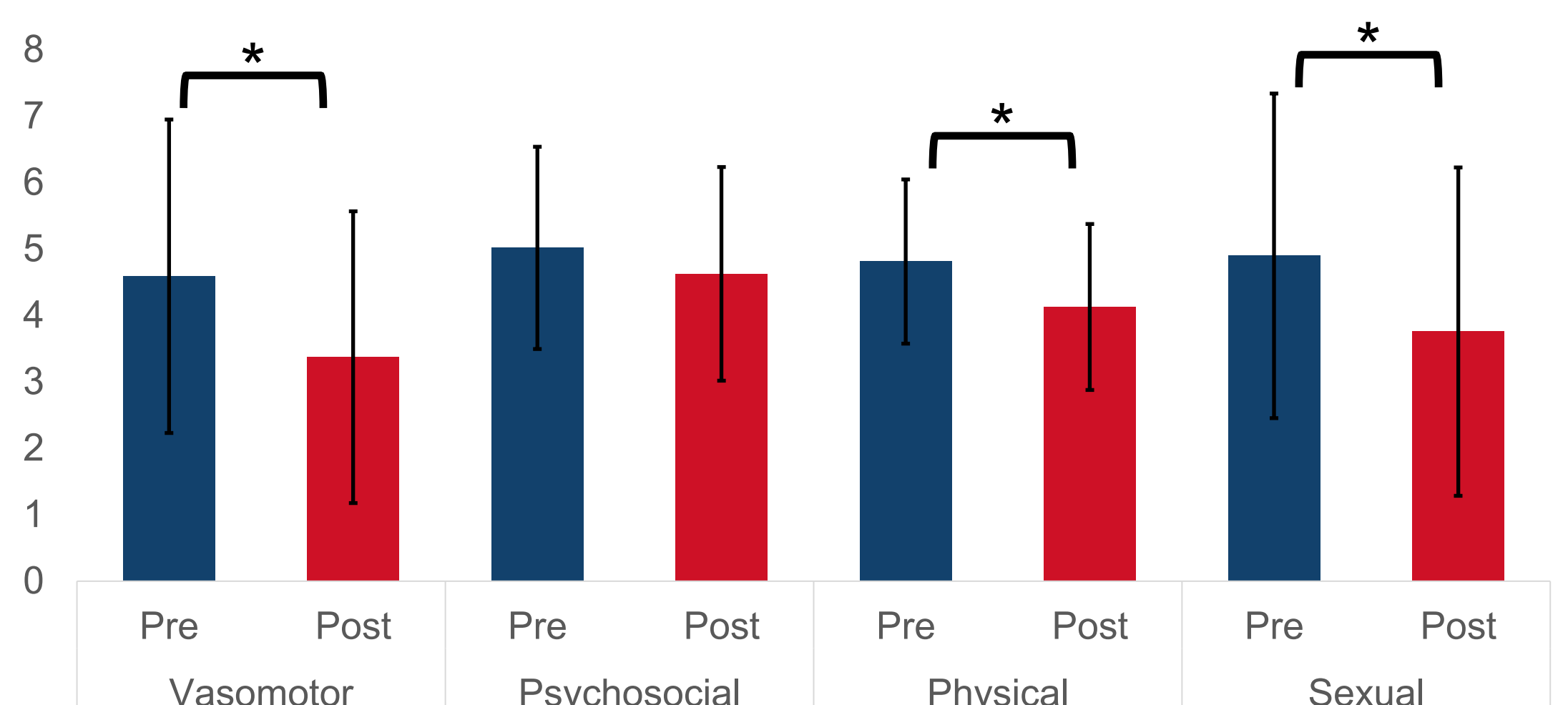


Figure 3: Average MENQOL scores for 26 patients who completed a baseline survey at time of first appointment and a follow up survey at a follow up appointment within the Hub.

N=123 patients had their first appointment between 1/1/25 and 7/4/25. Mean age was 52.7 ± 8.9. A total 17.1 had current or a history of breast cancer (Table 1). Of the women with comorbidities identified, 9% had CVD or risk factors for CVD, which included ischemic heart disease, obstructive sleep apnea, valvular heart disease and chronic pericarditis (Figure 1). A total 43% had hypercholesterolemia, defined as total cholesterol >5.5 mmol/L or LDL cholesterol >2.5 mmol/L. 17% of patients had hypertension as recorded in their past medical history. 14% patients had obesity with previous or current treatment with weight-loss medication and/or bariatric surgery (Figure 1). A total 28% had either osteopenia or osteoporosis and 21% had migraine.

The main reason for referral to the Hub was biological menopause, occurring after age 45 (Figure 2). 8% of patients had chemical menopause, which included patients on GnRH agonists or anti-estrogen therapy. Early menopause was defined as patients with perimenopause or menopause between ages 40-45 and accounted for 19% of referrals. Perimenopause included patients with menopause symptoms who were not yet 12 months post last menstrual period. Surgical menopause indicated patients with bilateral salpingo-oophorectomy and accounted for 8% of patients.

The results of the MENQOL assessments were examined. The rate of completion of baseline MENQOL was 89.4%, which was done at the time of first appointment. The rate of completion of follow up MENQOL was 23.6%, which was done at a follow up appointment. For patients who completed more than one follow up survey, results of the latest survey were recorded. 21.1% of women completed both initial and subsequent MENQOL (Figure 3). There was a statistically significant difference in pre and post values in all but the psychosocial domain (Figure 3).

Conclusions

There are a large number of women with relative contraindications to MHT in the Menopause Hub who were appropriately referred as cases of complex menopause. There are a significant number of women with mental health conditions, suggesting that the Hub would benefit from psychological services. While the multidisciplinary Hub has been effective in treating women with menopause symptoms, as evidenced by an improvement in MENQOL scores, the rate of follow up MENQOL completion remains low and requires improvement.

References 1. Sydora, B.C., et al. Menopause, 2017. 25: p. 102–105.

2. Sydora, B.C., et al. Menopause, 2019.