Cardiometabolic profile of women followed in the Menopause Clinic of a University Hospital in Greece

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Introduction and Objectives

The National and Kapodistrian University of Athens has constructed a large cohort of peri- and post-menopausal women (3.965 women, with more than 12.363 visits) complete with individual – family history, physical examination, medical treatment and laboratory parameters.

Data extracted and used from this cohort aimed to describe the cardiometabolic profile of the participants, as regards to lifestyle (smoking, physical exercise) and metabolic parameters of the dataset [body mass index (BMI), waist-to-hip ratio (WHR), homeostatic model assessment (HOMA), glycosylated hemoglobin (HbA1c), lipid profile].

Materials and Methods

Studied parameters were:

Demographic factors:

- Age
- Menopause Age
- Years since menopause
- BMI

Menopausal symptoms

Menopausal symptoms were evaluated by the Greene Scale total score and sub-scores. The Greene Scale provides a quantification of menopausal symptoms in an easy and concise way. It can be used to assess changes in symptoms, focusing on four main areas: psychological (items 1 - 11), physical (items 12 - 18), vasomotor (items 19, 20) and sexual (item 21). Each question is answered on a 4-point scale (0- not at all, 1- a little, 2-often, 3- extremely) , in a total score out of 63.

Materials and Methods

Furthermore, the following parameters were assessed:

Lifestyle factors:

- Smoking
- Alcohol
- Exercise
- Diet

Metabolic syndrome traits:

- WHR
- HDL, LDL, TRG
- Cholesterol
- HOMA
- Hypertension
- Diabetes or prediabetes

Results

Demographic and anthropometric characteristics of the women of our cohort.

Variable	Mean (SD) or N (%)
Age (years)	53.8 (7.67)
Age at menopause (years)	49.2 (3.77)
Years since menopause (years)	7.90 (6.96)
Greene climacteric scale total score	11.0 (8.20)
Psyschological subscore	5.60 (5.26)
Physical subscore	3.17 (2.68)
Vasomotor subscore	1.79 (1.51)
Sexual subscore	0.32 (0.71)
BMI (kg/m^2)	27.0 (5.00)

Results

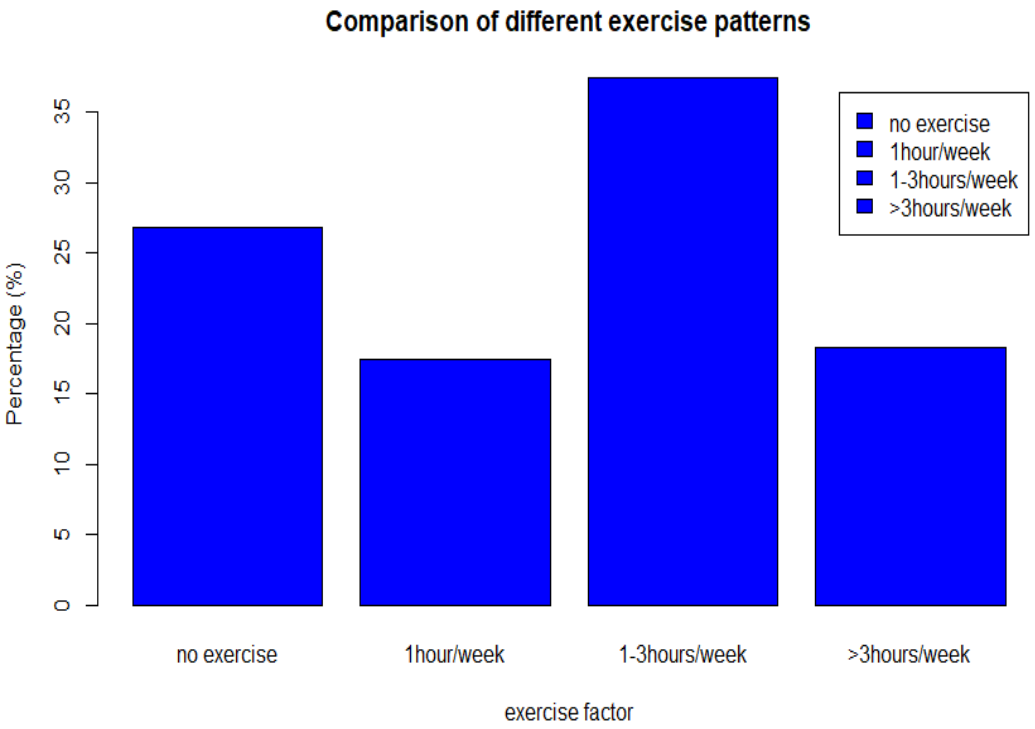
Cardiometabolic characteristics of the women participating in our cohort study.

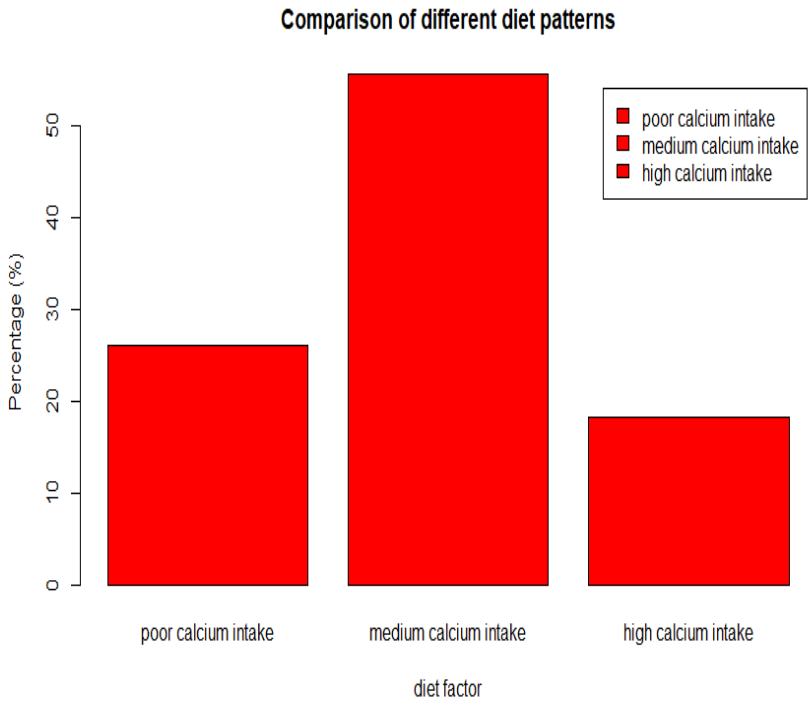
Variable	Mean (SD) or N (%)
SAP (mmHg)	119.0 (17.0)
DAP (mmHg)	73.0 (11.0)
WHR (cm/cm)	0.84 (0.08)
Cholesterol (mmol/dL)	216.0 (37.0)
HDL (mmol/dL)	63.0 (15.0)
LDL (mmol/dL)	134.0 (34.0)
Triglycerides (mmol/dL)	96.0 (46.0)
HbA1c (mmol/dL)	5.40 (0.59)
HOMA (mIU/L)	1.90 (1.30)
Insulin (mIU/L)	8.20 (5.30)
Glucose (mmol/L)	94.0 (13.0)

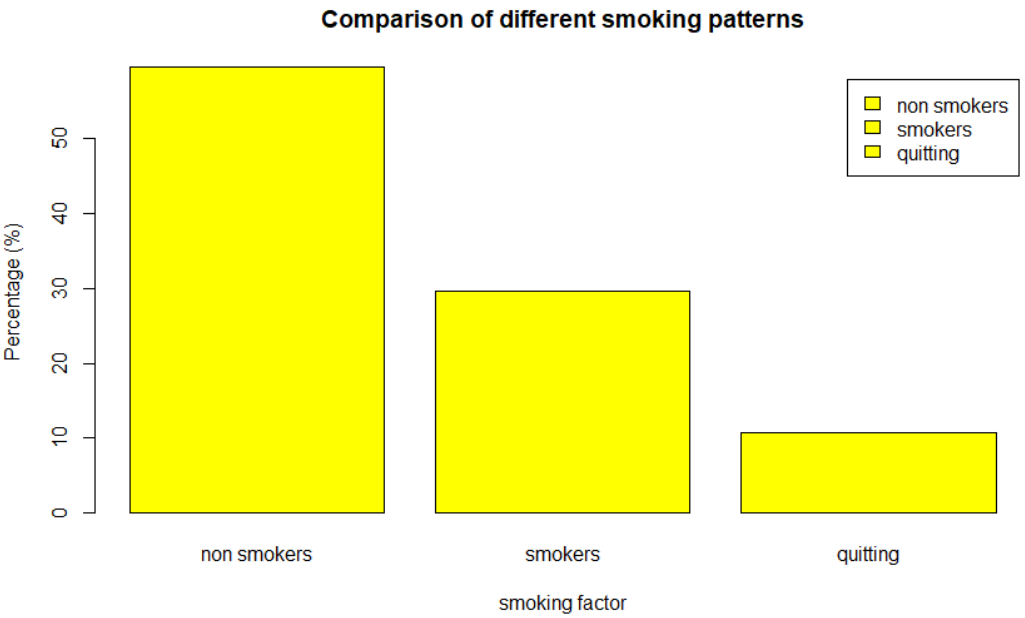
Results

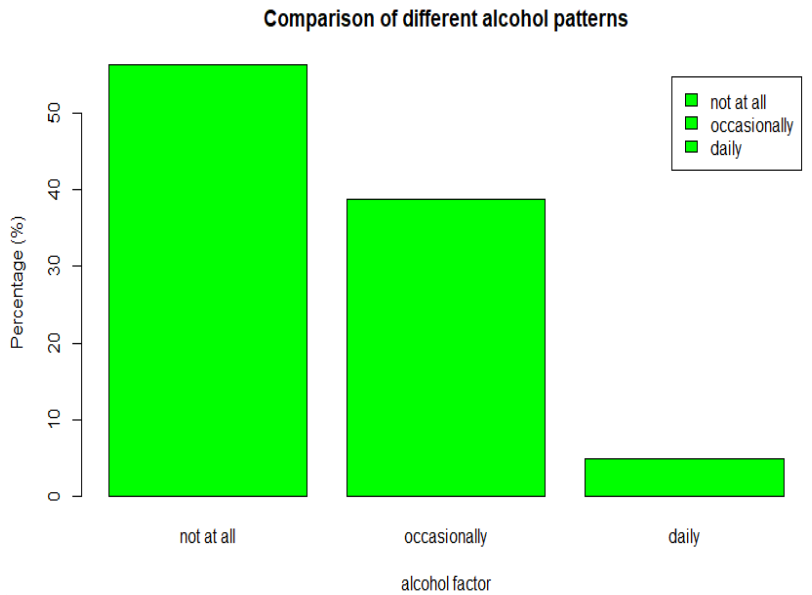
Patients' profile:

- ✓13.1% are under statin treatment
- ✓16% are under hormonal replacement treatment
- ✓18.3% are diagnosed with hypertension
- ✓5.2% are in a pro-diabetic or diabetic state
- ✓25.8% are diagnosed with dyslipidemia
- ✓55.1% are overweight
- ✓19.5% are obese
- ✓59.2% have central obesity
- ✓27.2% are sedentary or engage in minimum exercise
- ✓28.5% are active smokers
- ✓26% have inadequate daily calcium intake
- ✓4.5% mention daily alcohol consumption


Comparison of different exercise patterns
Percentage (%)
0
5
10
15
20
25
30
35
no exercise
1hour/week
1-3hours/week
>3hours/week
exercise factor


Comparison of different diet patterns
Percentage (%)
0
10
20
30
40
50
poor calcium intake
medium calcium intake
high calcium intake
diet factor


Comparison of different smoking patterns
Percentage (%)
0
10
20
30
40
50
non smokers
smokers
quitting
smoking factor


Comparison of different alcohol patterns
Percentage (%)
0
10
20
30
40
50
not at all
occasionally
daily
alcohol factor

Conclusions

Our cohort of peri- and postmenopausal women has a high prevalence of cardiometabolic risk factors, as 29% of the participants were hypertensive, 25.8% had dyslipidemia, 59.2% had central obesity and 5.2% had diabetes or prediabetes. Furthermore, 28% of women had the metabolic syndrome. These figures highlight the importance of early screening and prompt intervention in women at midlife.

References

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