ISGE
GYNECOLOGICAL ENDOCRINOLOGY
THE 18TH WORLD CONGRESS
7-10 MARCH 2018 FLORENCE, ITALY

P252. Heavy menstrual bleeding, iron deficiency and its impact in exercising females in Singapore

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Context
Heavy Menstrual Bleeding (HMB) affects a quarter of the general population and is a frequent cause of iron deficiency (ID) and anaemia in women. The onset of anaemia and ID can be insidious and is frequently undetected and under reported.
Objective
The aim of this study was to determine HMB and ID prevalence in healthy exercising females in Singapore and its potential impact on quality of life.
Methods
This is a cross sectional study which looked at Singaporean females at routine healthcare assessment clinic
Patients
A total of 271 females who reported regular menses who reported at least an hour's exercise per week or took part in races in a non-competitive manner.
Intervention
They completed the 'Female Health Questionnaire', the Multi Fatigue Inventory (MFI) and had a venous blood sample and answer the Multi Fatigue Inventory (MFI) quality of life questionnaire.
Results
The mean age was 36.3±9.6 years, body mass 58.3±12.5kg, height 1.59±0.12m.
Among these women,22.4% reported HMB. When these women were broken into groups based on their iron status 18.8% had anaemia ([Hb]<12.0g/dL,) and 30.0% had severe iron deficiency (serum ferritin<16ug/L) and 48% had moderate iron deficiency (serum ferritin <30ug/L).
Women with HMB are associated with anaemia and iron deficiency ($p<0.05$)
More women with HMB reported negative impact of their menses on their training and performance (50.0% vs 19.4%; $p<0.05$)
Unsurprisingly, more women with anaemia were also more likely to report negative impacts of their menstrual cycle on their training and performance(37.3% vs 23.6%, $p<0.05$)
Almost two thirds (62.7%) of those with anaemia were unaware, while 59.8% of those with ID-16 and 66.2% with ID-30 were unaware that they were iron deficient
Conclusion
Even among healthy exercising women, heavy menstrual and iron deficiency is quite common. HMB unsurprisingly is associated with IDA and iron deficiency and this has an impact on their training and

performance.

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