51

Adami D[1], Botelho S[2], Pereira L[3], Alves F[3], Marques J[2], Palma P[3], Riccetto C[3]
1. *Pontifical Catholic University of Minas Gerais - PUC MG and State University of Campinas - UNICAMP MINAS,* ***2.*** *Federal University of Alfenas - UNIFAL/MG and State University of Campinas - UNICAMP,* ***3.*** *State University of Campinas - UNICAMP*

INFLUENCE OF DIFFERENT PHYSICAL MODALITIES ON THE FEMALE SEXUAL FUNCTION

Hypothesis / aims of study

According to the World Health Organization, sexual health is a state of physical, mental and social well-being related to sexuality. Sexual dysfunction is a quite prevalent problem among women of all age groups. Studies presented by the National Health and Social Life Survey, 43% of women have sexual dysfunction [1]. Female sexual dysfunction (FSD) may be associated with negative experiences in sexual relationships and physiological events in a woman's life, such as pregnancy, breastfeeding and menopause. However, little is known about the physical activity on female sexual function. The aim of this study was to investigate if the type of physical activity can influence female sexual function.

Study design, materials and methods

Exploratory clinical study, consisting of 161 volunteers who were divided into two groups : (a) sedentary : n = 37 , (b) physically active : n = 124 . Among the physically active were 19 volleyball players, 29 performed muscle-strengthening exercises, 76 practiced walking. All participants were then assessed by interview about personal and demographic data, and application of validated version of the questionnaire to the evaluate sexual function: Female Sexual Function Index (FSFI) . FSFI is a multidimensional, self-administered questionnaire , Consisting of 19 items that propose to evaluate the female sexual function , through six domains: sexual desire , sexual excitation , vaginal arousal , orgasm , sexual satisfaction and pain / discomfort . The total score as well as the individual score of each domain were considered for analysis of the results. The points in each correspondent Obtained question, multiplied by the correction factor represent the score of each domain and They are added in order to obtain the total score. For the points of each domain adds points number of the correspondent question multiply the correction factor of obtained. Domains with values lower than three are to be compromised considered (dysfunction), except for the pain / discomfort domain, which changes starting from values greater or equal to three . The overall score is obtained by adding the scores of the domains, and it presents a variation ranging from 2 to 36. The lower the score the worse is the sexual function. The total score less than or equal to 26 suggests sexual dysfunction [2]. The findings were submitted to statistic tests (Linear Regression Analysis as well as Univariant and Multivariate Stepwise Logistic with criterion) to determine the risk factors for sexual dysfunction . The significance level was 5 % .

Results

The mean age of the volunteers was 55.43 years (± 12.87), with 77% practicing regular physical activity by the average period of 41.37 months and 23% sedentary. Regarding sociodemographic data, most were married (69.57%), white (79.5%), with elementary school as educational level (54.04%). As the clinical variables showed BMI of 27.20 kg/m2 and presence of sexual activity (62.73%). In our study all the groups presented sexual dysfunction. However, there were significant variations between the results of sedentary participants (mean score 15.71±11.74) and those who practice walking (mean score 14.33 ±10.82) compared to participants who practice volleyball (mean score 23.54±9.28) and strengthening exercises (mean score 22.26 ± 11.33) (p = 0.0007).

Interpretation of results

There are several factors related to the occurrence of sexual dysfunction in women, from physical , emotional and cultural aspects . Regular physical activity is growing between the modern population, especially among women. However, little is known about its impact on sexual function. In this study, the participants presented sexual dysfunction according to FSFI questionnaire evaluation. Women who score 26 or less on the total score should be considered at risk for sexual dysfunction [2].However, we noticed that those who were sedentary or practice walking, scored less when compared to those who practice volleyball and muscle strengthening exercises. Karatas et al. (2010) showed that elite female athletes presented sexual function better as compared with sedentary healthy females. According to these authors, this finding might be related to the positive effect of regular exercising on blood circulation and even sense of wellbeing in female athletes [3] . Few studies have yet been published investigating the effects of regular exercise on female sexual function. Further studies are needed.

Concluding message

The modality of physical activity interferes on the female sexual function, and in this study, sedentary subjects and those who practice walking presented bigger sexual dysfunction than those who practice volleyball and muscle strengthening exercises.

References

1. Laumann E, Paik A, Rosen R (1999) Sexual dysfunction in the United States: Prevalence and predictors. J Am Med Assoc 281: 537–44.
2. Wiegel M, Meston C, Rosen R (2005) The female sexual function index (FSFI): cross –validation and the development of clinical cutoff scores. J. Sex Mar Ther 31:1-20
3. Karatas O F, Baltaci G, Ilerisoy Z, Bayrak O (2010) The Evaluation of Clitoral Blood Flow and Sexual Function in Elite Female Athletes. J Sex Med 10;7:1185–1189.

Disclosures

Funding: Nothing to declare **Clinical Trial:** Yes **Registration Number:** Faculty of Medical Sciences – State University of Campinas UNICAMP CAAE: 0116.0.213.146-11 **RCT:** No **Subjects:** HUMAN **Ethics Committee:** State University of Campinas - UNICAMP Brazil, Committee the Ethics and Research **Helsinki:** Yes **Informed Consent:** Yes