Introduction: The metabolic syndrome (MetS) is a complex disorder with high prevalence, represented by a set of cardiovascular risk factors responsible for the increase in mortality. No reports studies assessing the relationship between sexual function and MetS in Brazilian postmenopausal women. Objective: To assess the sexual function of postmenopausal women diagnosed with MetS and compare results against age-matched controls without MetS and to determine the components of sexual response (desire, arousal, lubrication, orgasm, satisfaction, and pain) impacted by MetS and diagnostic components associated with Sexual Dysfunction (FSD). Method: A total of 272 postmenopausal women were interviewed (FSH > 30 mUI/mL). After application of inclusion and exclusion criteria, 77 subjects were excluded. The 195 subjects were divided into healthy Control group (HC) n=87 and MetS Group n=108. MetS patients were diagnosed based on the National Cholesterol Education Program - Adult Treatment Panel III (NCEP-ATP III) criteria. The Female Sexual Function Index (FSFI) questionnaire was employed to assess sexual function. Results: Postmenopausal women with MetS exhibited higher rates of FSD compared with HC group (62/108 [57.4%] vs. 16/87 [18.39%], p< 0.001). There were statistically significant differences between median weight, Body Mass Index (BMI), waist, total cholesterol (TC), high density cholesterol (HDL), triglycerides and glycemia in HC and MetS Groups. We found statistically significant differences between the median scores for desire, arousal, lubrication, orgasm and satisfaction in the HC and MetS groups (p <0.001). Pain scores for the difference was not statistically significant. Conclusion: Postmenopausal women with MetS were found to have greater sexual dysfunction than age-matched women without the syndrome.