

Investigation into Levels of Pain, Quality of Life, and Depression by Stage of Endometriosis

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*Disclaimer: The findings in this abstract are those of the authors and do not necessarily represent the views or policy of the E.P.A.

Abstract

Objective: Despite the high prevalence of endometriosis, controversy exists surrounding the association between the stage of endometriosis and long-term treatment outcomes. The objective of the present study was to investigate the post-surgical long-term pain, quality-of-life, and psychological distress among women with differing stages of endometriosis.

Methods: This cross-sectional study was conducted between 2008 and 2009. Women who had undergone surgery for pelvic pain at UNC Hospitals from 2003 to 2006 were mailed questionnaires to collect information on demographics, pain, sexual dysfunction, quality of life, and depression. Descriptive statistics and ANOVAs were used to examine the distribution of these variables by stage of endometriosis.

Results: The study population included women aged 22 to 50 years old (mean age 36 years). Of the 82 women, 38 (46%) were classified as having stage 1 endometriosis, 26 (32%) having stage 2 endometriosis, 13 (16%) having stage 3 endometriosis, and 5 (6%) having stage 4 endometriosis. Across the four stages, there was no pattern of increased overall pain, pelvic pain, quality-of-life, or depression with increasing stage of endometriosis. The mean scores (standard deviation) on an adapted version of the McGill Pain Questionnaire for total pain were 8.0 (7.8), 10.4 (10.8), 4.6 (7.5), and 9.4 (13.4) for stages 1, 2, 3, and 4, respectively (ANOVA p-value 0.34). The mean scores for intensity of pelvic pain (possible score range of 0-5) were 1.5 (1.4), 1.7 (1.4), 1.0 (1.6), and 1.6 (0.9), respectively (ANOVA p-value 0.56). Using the SF12 quality-of-life measure the mean (standard deviation) mental and physical component standardized scores were 43.2 (10.3) and 45.6 (11.7) for stage 1, 45.5 (11.4) and 44.1 (10.2) for stage 2, 47.3 (12.8) and 50.4 (9.4) for stage 3, and 36.0 (14.8) and 43.3 (8.7) for stage 4 (ANOVA p-values 0.30 and 0.39 for the mental and physical components, respectively). Finally, scores on the Beck Depression Inventory were also similar by stage, although women with stage 4 endometriosis did score higher than the other three stages [stage 1: 9.2 (7.9), stage 2: 10.9 (7.5), stage 3: 8.3 (8.4) and stage 4: 16.2 (12.3)] (ANOVA p-value 0.26).

Conclusions: These results indicate that long-term treatment outcomes in women undergoing laparoscopic surgery for pelvic pain may not be related to the stage of endometriosis. Regardless of endometriosis stage, most women were found to have residual pain symptoms. Further research to understand chronic pain, quality-of-life, and psychological distress and endometriosis is warranted.

Summary: This study has shown that among women who underwent surgery for pelvic pain at UNC Hospitals, level of pain, quality-of-life, and depression do not increase with increasing stage of endometriosis.

Introduction and Objective

The exact prevalence of women suffering with endometriosis is unknown, however, estimates range from about 6-10%. The most common symptom accompanying endometriosis is pelvic pain. In addition, approximately 30-40% of women with endometriosis are not able to have children.

- Commonly a woman's level of disease is categorized by its stage, given as follows
 - Stage I (Minimal): Findings restricted to only superficial lesions
 - Stage II (Mild): Some deep lesions are present
 - Stage III (Moderate): Presence of endometriomas on the ovary and more adhesions
 - Stage IV (Severe): Large endometriomas, extensive adhesions

The objective of our research was to examine pain, quality-of-life, and psychological distress among women with varying stages of endometriosis.

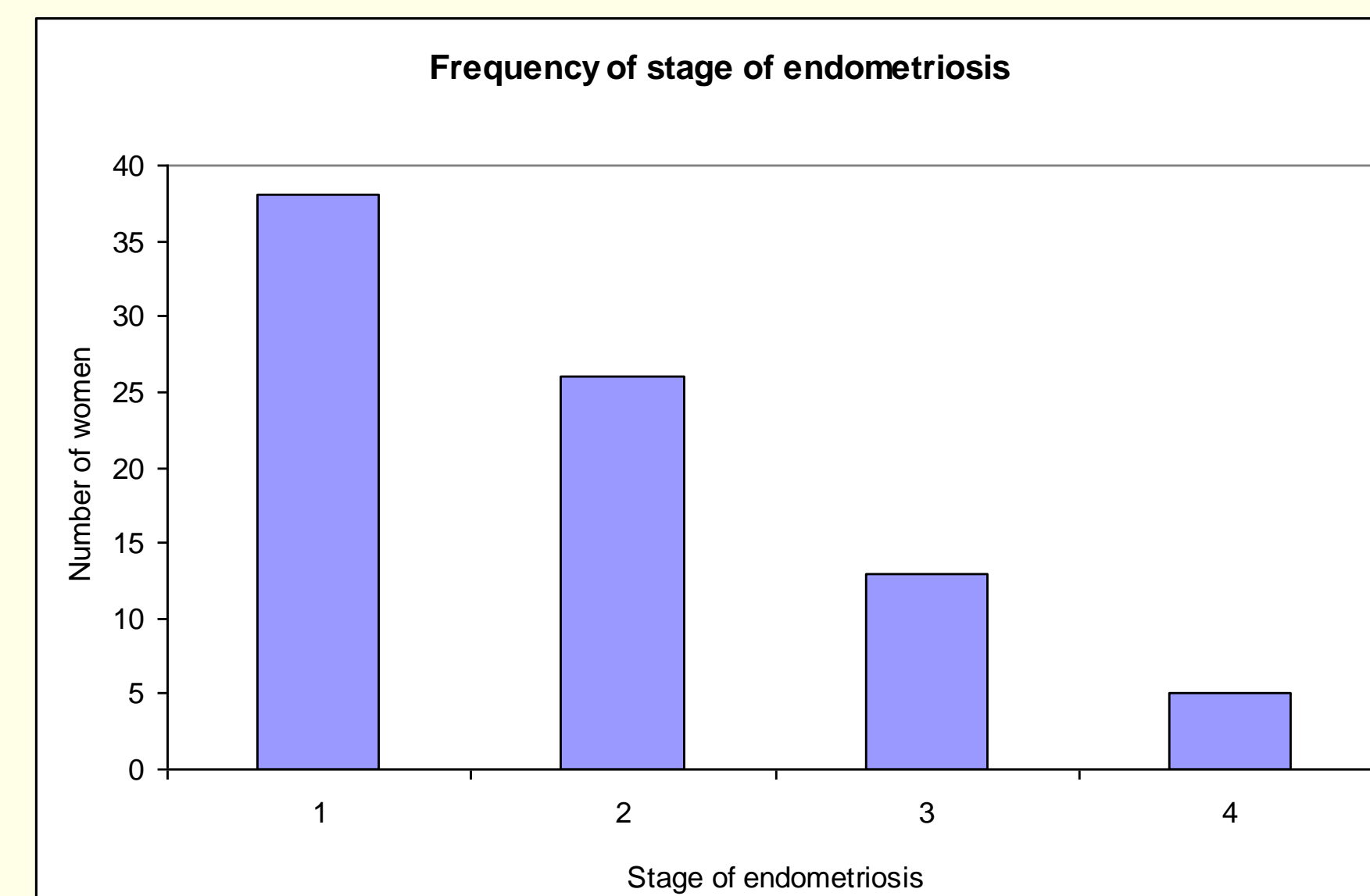
Methods

Study population: women who had undergone surgery for pelvic pain at UNC Hospitals from 2003 to 2006 (n=212)

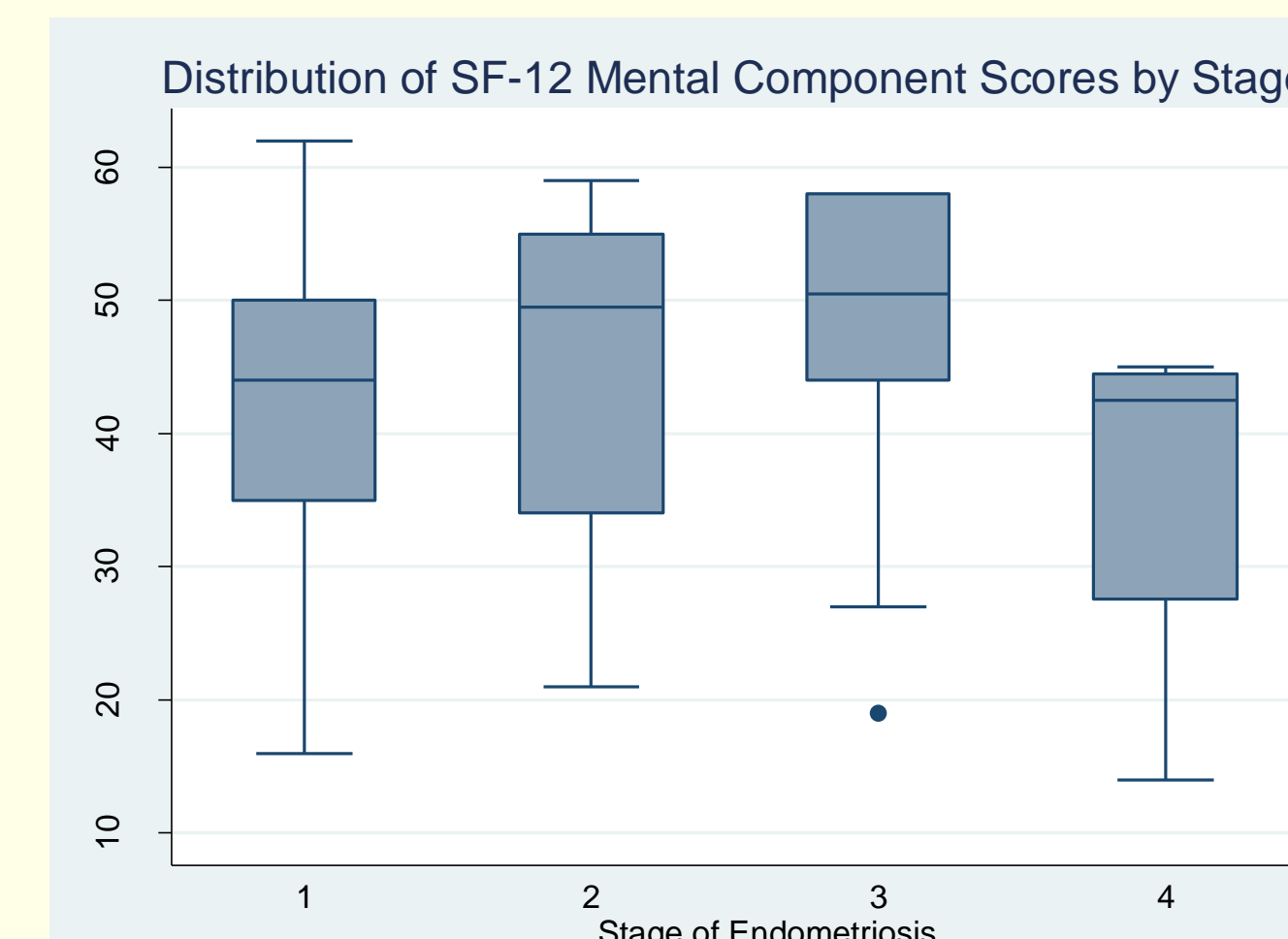
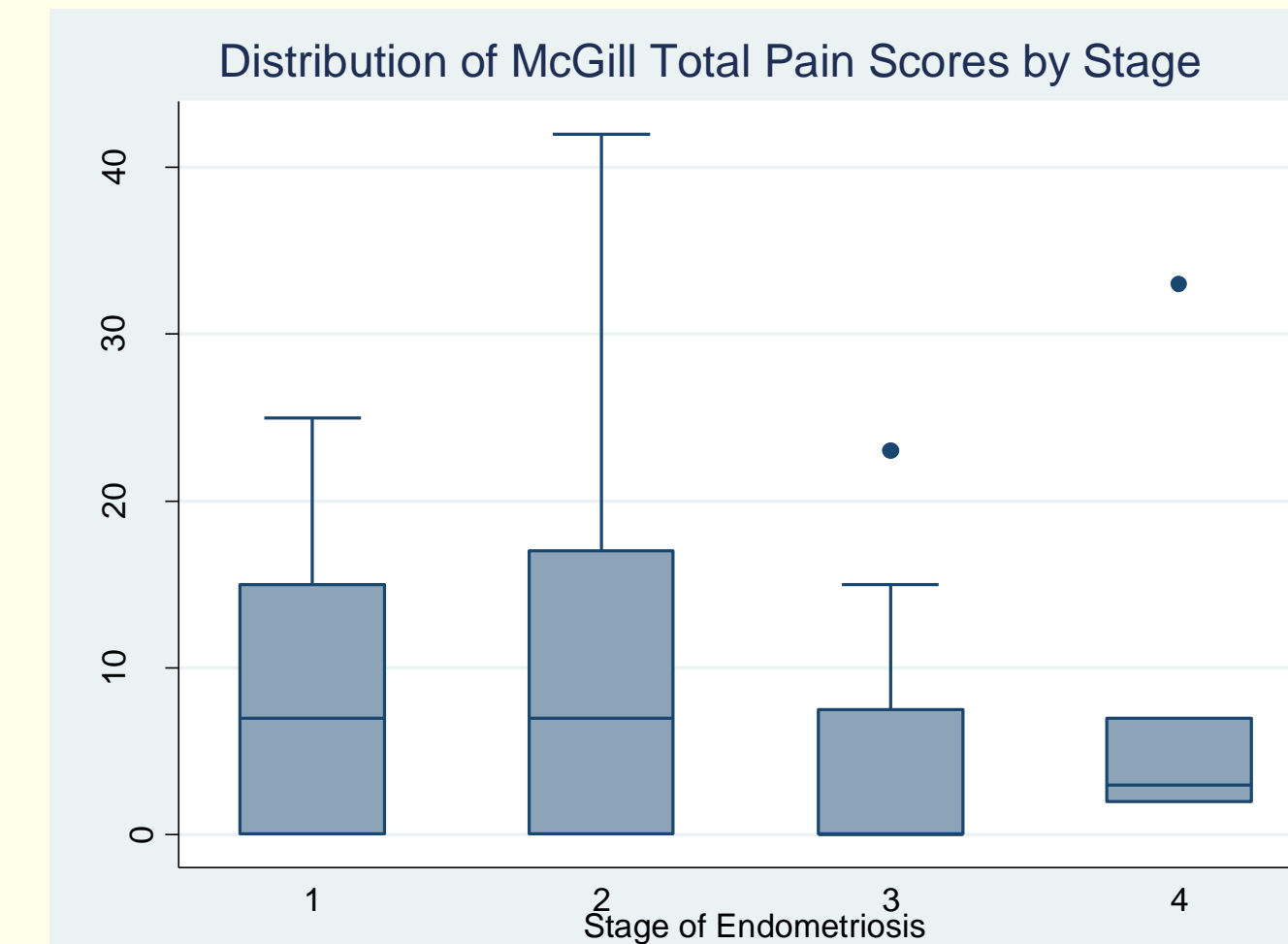
Data collection: Between 2008 and 2009, women from the surgical database were called and asked to participate in the study. Women who consented (n=120) were mailed questionnaires that inquired about demographics, pain, sexual dysfunction, quality of life, and depression. Eight-two women completed and returned the questionnaires.

Analysis: Descriptive statistics and ANOVAs examined the distribution of responses among each of the four stages of endometriosis

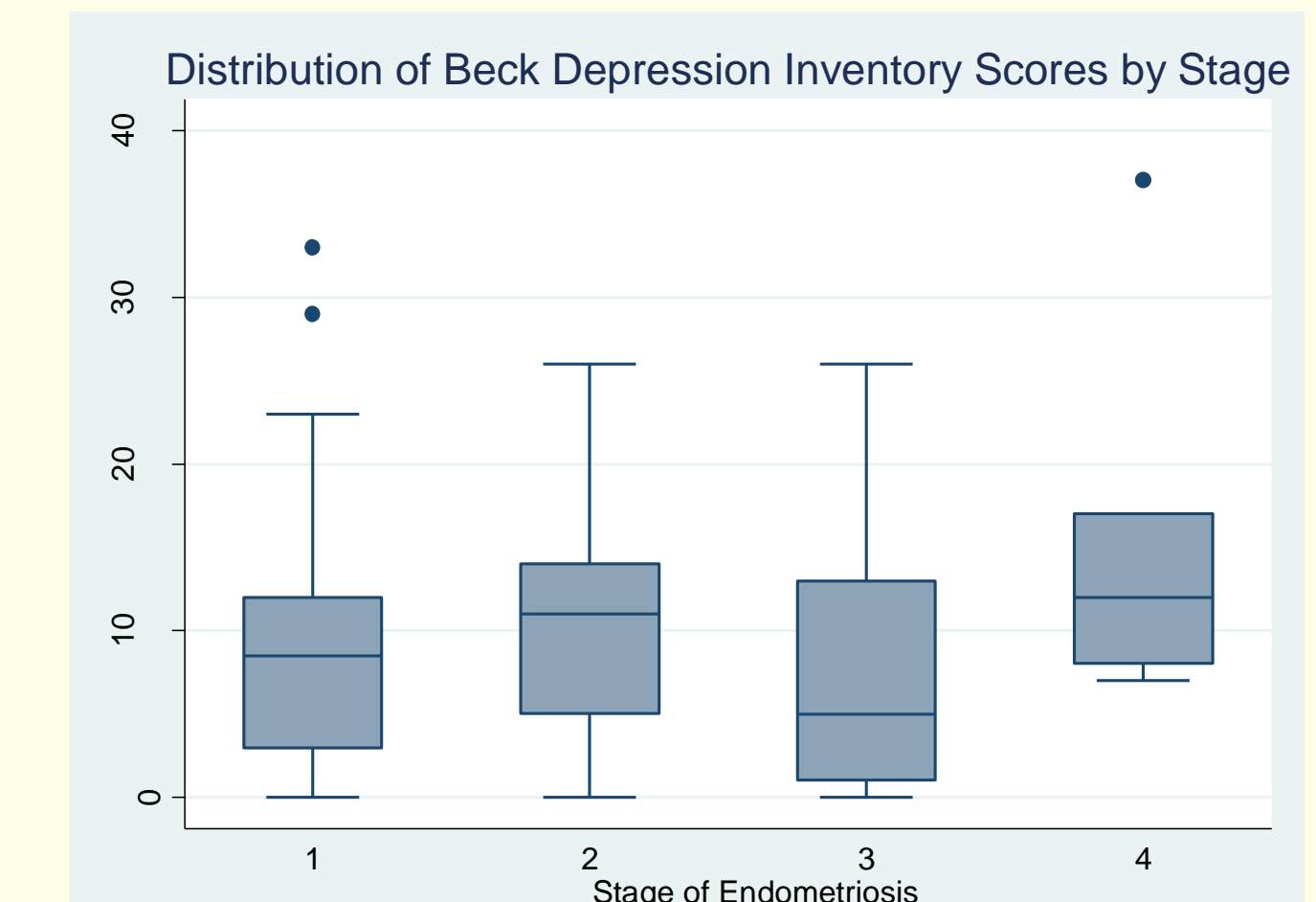
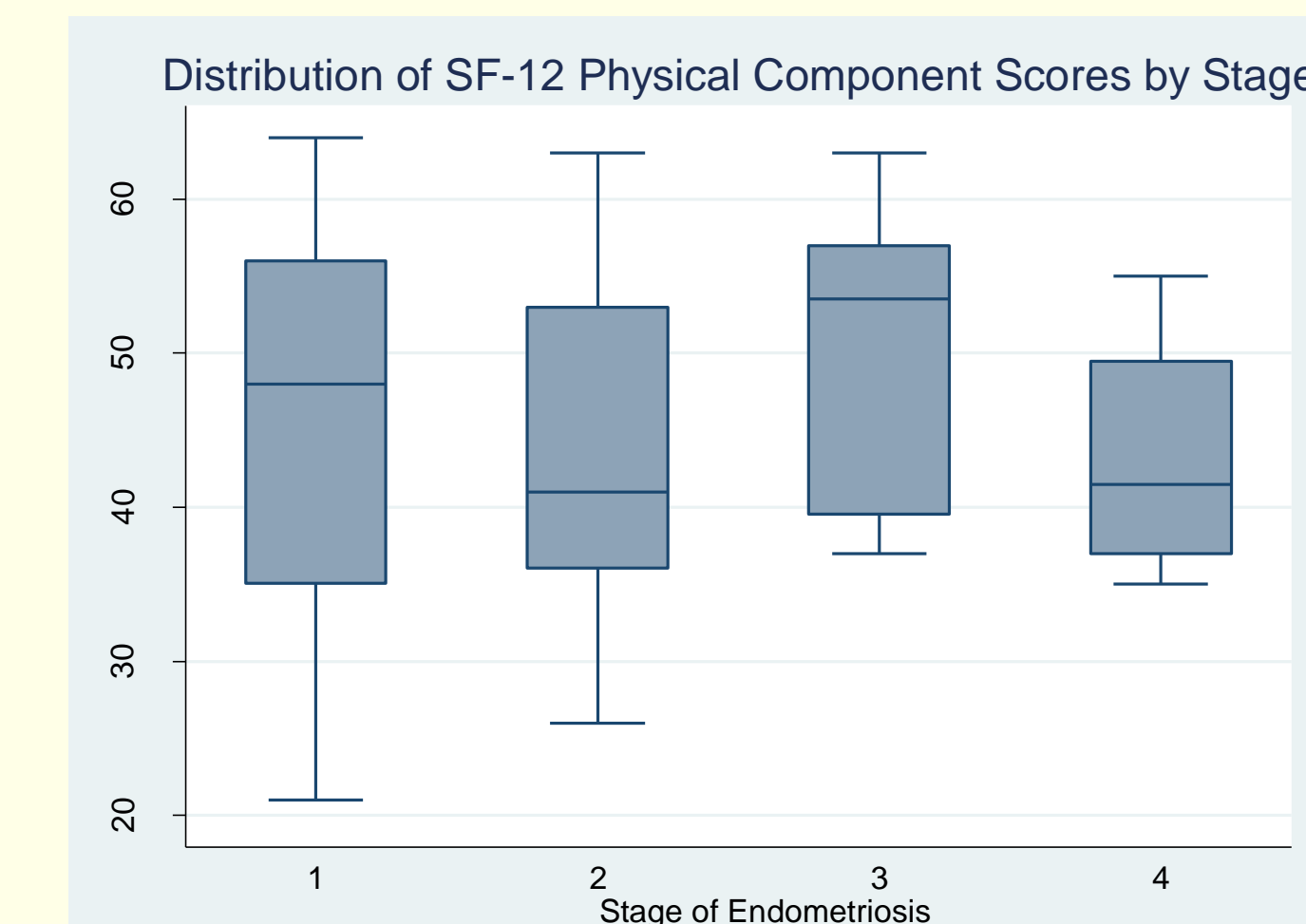
Results



Results (continued)



Results (continued)



Conclusions

- There was no pattern of increased pelvic or total pain among women with different stages of endometriosis who had undergone surgery for pelvic pain.
- Neither mental nor physical component scores on the SF-12 quality-of-life measure had large variation by stage of endometriosis.
- Mean scores on the Beck Depression Inventory were higher for women with stage 4 endometriosis compared to the other three stages, although the distribution of scores covered a similar range.
- In summary, among women who underwent surgery for pelvic pain at UNC Hospitals, there was no increase in overall pain, pelvic pain, or quality-of-life measures with increasing stage of endometriosis.