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Treating Depression with Physical Activity

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Blumenthal et al exercise vs. medication

156 men and women

Over 50 years old

Major depressive disorder by clinical interview, BDI,
HAM-D

Randomized to – aerobic exercise (n=53),

- Zoloft (n = 48) or

- aerobic exercise + Zoloft (n=55)

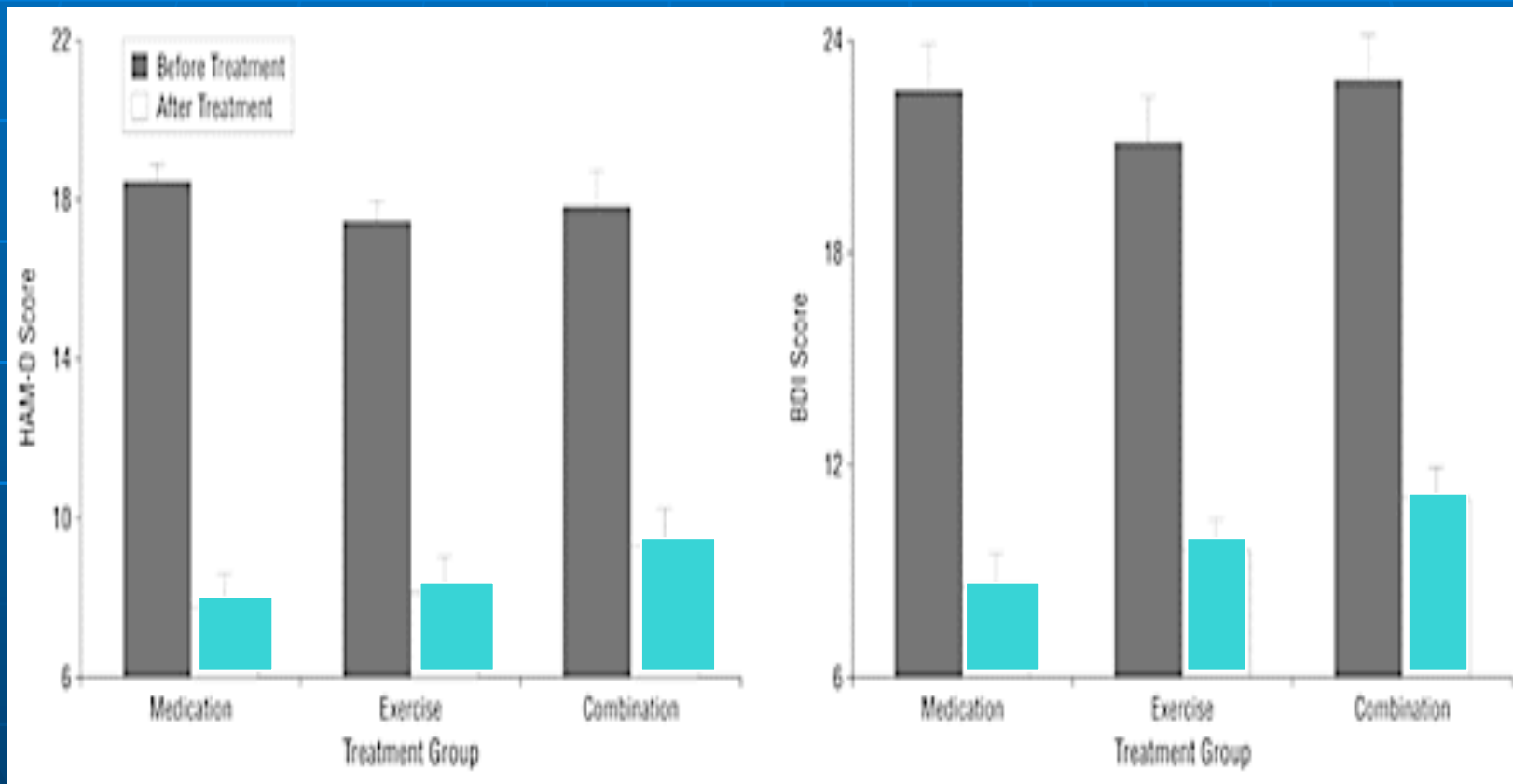
For 16 weeks

Source: Blumenthal et al 1999 Archives of Internal Medicine

The Exercise Intervention

- 3 supervised exercise sessions / week
 - 10 minute warm up
 - 30 minutes walking or jogging at 70 to 85% of heart rate reserve.
 - 5 minute cool down
- 16 weeks

Blumenthal's Results



Blumenthal's Conclusion

- Exercise is as good as Zoloft in the treatment of Depression.

Correct Conclusion

- Among highly motivated but depressed individuals, those who can successfully participate in a structured exercise program will probably significantly decrease their depressive symptoms.

Meta-Analysis

- 14 Randomized Controlled Trials
- All but two studies showed an independent, statistically and clinically significant improvement in depressive symptoms.
- Effect Size -1.1 (95% CI -1.5 to -0.7)
- Comparing Exercise to No treatment Control

100's of Observational Studies

- People who are not depressed now but are physically active now are less likely to be depressed in the future.
- Physical Activity reduces depression relapse
- College students who were physically active are less likely to become depressed later

One more point.

- We know that it is hard to start an exercise program and harder to stick with it.
- How many of our depressed patients successfully initiate and maintain a medication program? 20% to 60% stop taking med in 1st week.

How Can You Help Depressed Patients Become More Active

- Recommend exercise and say that there are some clinical trials showing exercise reduces depression symptoms.
- Write out an exercise prescription along with the anti-depressant script
- Discuss types of exercise, Ways of fitting in exercise, How to get started

PEDOMETERS

- Count Daily Steps and record on a calendar
- Bring in Calendar to review after one week
- Obese patients may not get accurate step counts
- Caution with 10,000 steps a day target!
- Wear the pedometer all day every day
- Digi-walker SW200 (\$20.00)

Watch out for Biases

- Who do we think will not or should not exercise
 - Poor patients
 - Sick patients
 - Minority Groups
 - Older patients
 - Depressed Patients

More Reasons for Depressed Patients to Exercise

- Medications for Depression cause weight gain, diabetes
- Number 1 cause of death in depressed patients is still heart disease.
- Diabetes is about 2 x as prevalent in depressed patients as it is among non-depressed patients.

Additional Source Information

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Slide 4: Blumenthal et al 1999 Archives of Internal Medicine

Slide 6: Blumenthal et al Archives of Internal Medicine 1999:159:2349-2356