

Pilot Program Progress Report

The Education and Awareness Program for Teenage Depression is an educational effort to raise awareness and understanding among students, faculty and parents about mood disorders - depression and bipolar disorder. The Johns Hopkins Department of Psychiatry and DRADA (the Depression and Related Affective Disorders Association) have been educating the general public about these disorders for over ten years. In 1999 a new effort, the Young People's Outreach Program, began with the purpose of developing a school-based curriculum for students, faculty and parents about teenage depression and related psychiatric disorders.

The primary goal for the first year was to develop a model curriculum to educate students, faculty and parents about teenage depression. We assessed the curriculum by getting detailed feedback from the students, faculty and parents following each session and conducting focus groups with students and faculty following the programs. Additionally we compared the Intervention Program and the Control Program by conducting pre-tests and post-tests and tracking the number of referrals for treatment following the programs.

During the 1999-2000 school year Dr. Karen Swartz, Dr. Todd Cox, Sallie Mink, R.N. and Nichole Rohrer, M.S. made over 45 presentations at schools in the Baltimore area. In four schools we conducted an intensive "intervention program" involving a series of 4 sessions with students, 3 sessions with faculty and 2 sessions with parents. The video *Day for Night: Recognizing Teenage Depression* was a critical part of this curriculum. This video highlights teenagers discussing their own experiences with depression and bipolar disorder; it was produced in cooperation with DRADA. In four schools a "control" program included a single presentation to students including the video. In other schools, additional programs included portions of this material presented at single sessions.

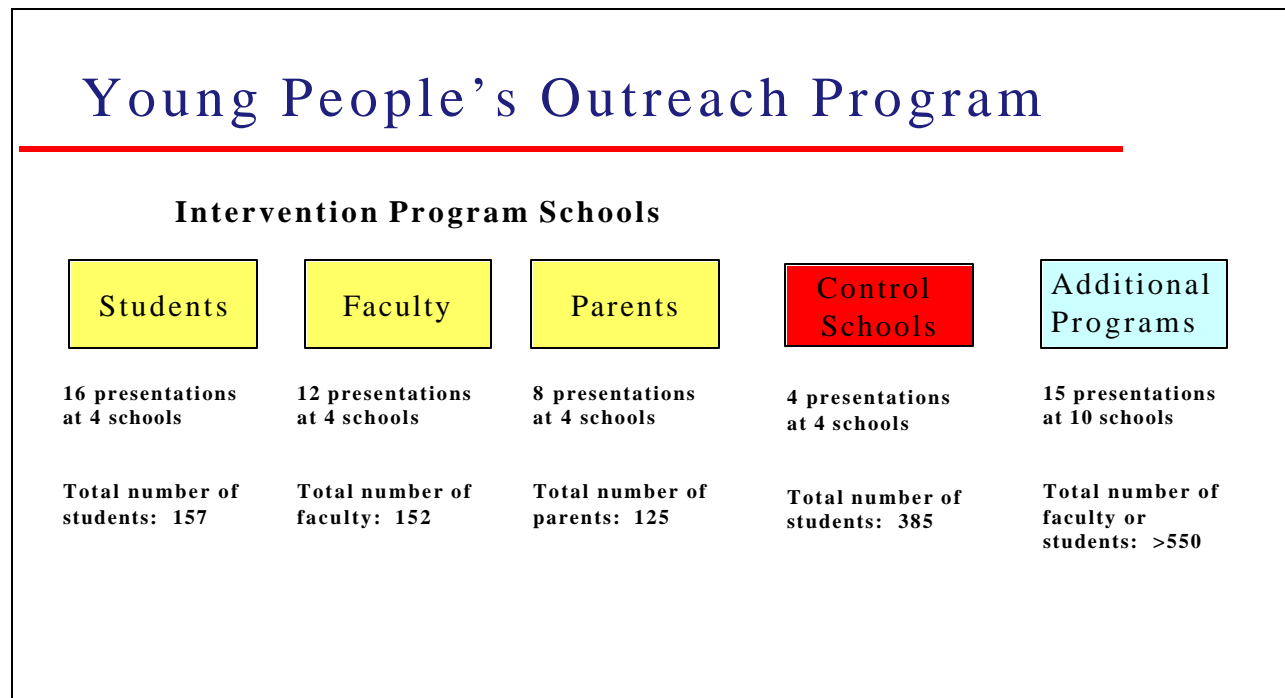


Figure 1: Overview of presentations and total number of students

Study Results:

To assess the effectiveness of the Intervention Program, we made a series of comparisons between the Intervention Schools and the Control Schools. We hypothesized that the Intervention Program with multiple sessions would be more effective than the Control Program with one session. We planned to assess the effectiveness of the Education component of the program by comparing the Pre-test and Post-test results for the students at the Intervention schools with the students at the Control schools. To evaluate the Awareness component of the program, the number of referrals for treatment made was compared.

Figure 2: Results of the overall test score.

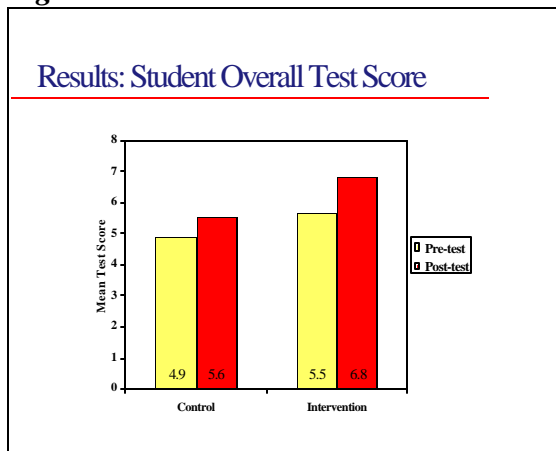
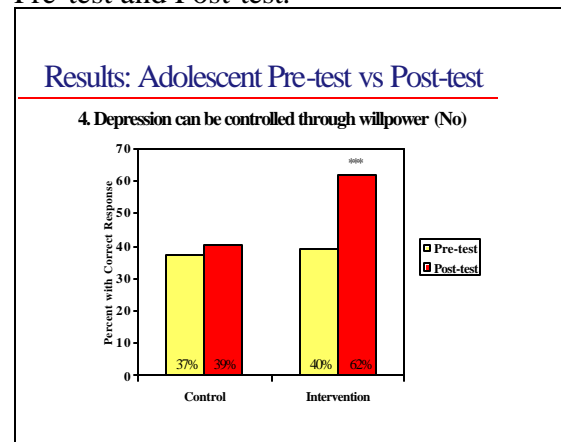


Figure 2 illustrates the overall test scores for the Control Schools versus the Intervention Schools. The Pre-test and Post-test included eight questions to assess knowledge about depression. Other questions included in the pre-test and post-test asked students, parents and faculty about their attitudes about treatment and which factors would influence their decision to seek treatment for themselves or help someone else get into treatment for depression. The pattern seen in the overall test scores is seen for many of the individual questions – the students in both groups demonstrated improved test scores but the

Intervention schools' students had a greater improvement in their scores.

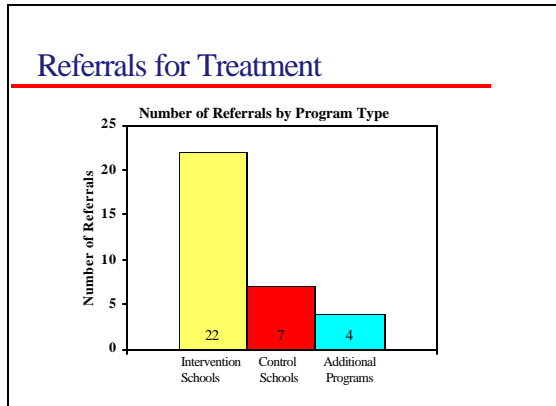
Both versions of the curriculum have the same key message: *Depression is a treatable medical illness*. We believe that the fourth question asked, "Depression can be controlled through willpower" most directly assesses having a complete understanding of that concept. As is illustrated in Figure 3, the majority of students incorrectly answered this question on the pretest. There is a dramatic and statistically significant difference in the percent of the students who correctly answered this question "no" on the post-test comparing the Intervention and Control schools.

Figure 3: Results from Question 4 of the Pre-test and Post-test.



To assess the change in awareness about teenage depression, we tracked the number of calls made to DRADA for referral information as well as tracking the number of referrals made by school counselors. As is illustrated in Figure 4, the number of referrals following the Intervention program (22) was significantly greater than for the Control program (7) or the Additional programs (4). Of the 33 referrals, 31 were for students and 2 for faculty members.

Figure 4: Referrals for Treatment



As students, faculty and parents were not asked directly about seeking treatment themselves or referring someone for treatment, we believe that these results may represent an underestimate of the number of individuals who sought treatment for depression following these programs. By focusing on education, we hoped to produce lasting changes in knowledge and attitudes about depression, therefore the impact of this type of program may not be measurable at the conclusion of the first year.

First Year Conclusions and Future Goals:

The Intervention Program was more effective than the Control Program. Evaluating the educational component of the program, the pre-test versus post-test comparisons between the Intervention and Control Schools illustrates the benefit of the more intensive program. The difference in the number of referrals generated by the various programs suggests the differences in awareness among the schools following the programs.

While this has been a very successful year and the results of our program assessment are very encouraging, we believe that the curriculum would benefit from ongoing refinement. The feedback from the students, faculty and parents has been invaluable in our planning for a revised curriculum. Based on the feedback from this year’s program we hope to refine the curriculum developed during the past year and to intensify the assessment of the curriculum by expanding the evaluation done before and after the program.

In refining the current curricula, we asked for and obtained written and verbal critiques from the students, faculty and parents. Each group gave feedback encouraging the development of more specific programs for each of them. For example, the students suggested that we format the sessions as more interactive lectures. We will also develop detailed speaker’s notes including appropriate questions to ask the students, examples to illustrate the symptoms of the illnesses and answers to frequently asked questions. The expanded assessment of the program will involve a baseline survey of the participating schools to determine the previous education programs addressing teenage depression, suicide and other psychiatric disorders as well as expanding the pre-tests and post-tests. These will be given to students, faculty and parents at the intervention schools and to students and faculty at the control schools.

During the period of program development, we will continue to use a psychiatrist as the professional making the presentations. The long-term goal will be for the material to be incorporated into the health curriculum with the schools’ faculty taking the primary educational role with a limited role for mental health professionals or other guest speakers. Therefore, the program development will need to include a plan to train other professionals as speakers with an assessment of the effectiveness and impact of these speakers. With depression affecting over 5% of teenagers, it is critical to continue this effort to educate the students as well as their teachers and parents about this common and treatable illness.