


A Case Report of College Students' Rating of a Shared Decision-Making Tool for Taking Antidepressant Medication

Journal of Patient Experience
Volume 8: 1-4
© The Author(s) 2021
Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/23743735211007352
journals.sagepub.com/home/jpx


Janet Reis, PhD¹ 

Abstract

Forty-nine students enrolled at a medium size public university volunteered to review an interactive decision-making tool constructed to present the pros and cons of taking antidepressant medication. The tool is built according to guidelines for shared decision-making with 7 educational sections followed by 4 queries on expectations about antidepressants, 3 key knowledge questions, and determination of readiness to take action. The most frequently cited reason for the content being helpful was improved understanding (78%) followed by increased personal confidence (37%) and helped me take action (14%). The most frequently cited reason for the content not being more helpful was already known information (74%) followed by not enough information (12%). The range of personal preferences underscores the complexity of motivations in responding to depressive symptoms. The prevalence of depression in the college population with a range of treatment options, limitations on resources, and new challenges mounted with the pandemic for campus life recommends further study of such tools.

Keywords

antidepressant medication, shared decision-making

Introduction

Depression is a major reason college students seek help from their student health services and advise about antidepressant medications (1,2). Depression as a health problem does not have a single, definitive gold standard treatment and is thus a candidate for shared decision-making. This paradigm brings the patient and health care provider together to review the continuum of options and explore patient preferences (3). Treatment options span lifestyle changes to medication, each option with its own pros and cons. Patients may be encouraged to try and alter sleep, exercise, and diet before attempting antidepressant medications. These medications may have side effects including suicidal thoughts and behaviors in children and adolescents. Education on the potential range of medication side effects is a priority (4).

This case report summarizes college students' responses to a shared decision-making tool designed to help consumers make informed decisions about the treatment of depression in collaboration with their health care provider. Opportunities for shared decision-making may be particularly attractive for college students coping with depression given the range of treatment options and the inclination of many students to be active decision makers (5).

Shared decision-making tools addressing treatment options for depression have been tested with adult patients

but not college students. For middle-aged adult patients, the tools have been shown to help determine personal preferences for action and satisfaction with the course of treatment chosen (6,7). With regard to the concept of shared decision-making for college students, a systematic review of 12 studies of reactions to guide for the appropriate use of antibiotics for respiratory tract infections found an overall positive rating of such tools (5). This limited information on college students points to the merit of additional queries on shared decision-making for other common health problems such as depression within the context of increased demand for mental health services on college campuses (8–10).

Description

The shared decision-making tool tested in this pilot study is 1 of over 170 shared decision-making tools created by Healthwise, a nonprofit organization specializing in consumer health education. The tool "Depression: Should I take an

¹ College of Health Sciences, Boise State University, ID, USA

Corresponding Author:

Janet Reis, College of Health Sciences, Boise State University, ID 83725, USA.
Email: janetreis@boisestate.edu



Antidepressant” contains 7 educational sections followed by 4 queries on expectations about antidepressants, 3 key knowledge questions, and determination of readiness to take action. The follow-up questions are presented in an interactive format. The structure and content of the tool follow the International Patient Decision Aid Standards for shared decision-making used by an array of similar tools (11).

Educational topics covered include symptoms of depression, an explanation of antidepressants, a summary of how well the medications work and associated common side effects, review of other treatments, a comparison of treatment options, and personal stories of coping with depression. User feedback can be captured in a 1-page summary. The shared decision-making tool was loaded onto an Apple iPad Pro which was connected to a printer for production of the anonymous user feedback at the end of the session.

Students had opportunity to review the shared decision-making tool when they arrived for an appointment at the University’s Health Services Center during the 2018 spring semester. A graduate student was stationed at a small, separate table in the lobby with a poster offering a \$5 gift certificate for coffee in return for participation. (Do you like coffee? Your feedback = STARBUCKS! Interested? Please take a few minutes to share your thoughts on Mental Health & Antidepressants) A brief explanation of the project was given to students expressing interest, and students agreeing to participate were handed an iPad confirming their informed consent as approved by the institutional review board of the university. The user session took 5 to 10 minutes to complete. No personally identifying information was collected. Upon returning the iPad, students were handed a page asking them to rate the helpfulness of the content and to share why the content was helpful and, conversely, why the content was not more helpful. Responses to the shared decision-making tool and ratings were linked with a user ID with no other personal identifying information. The protocol was approved by the institutional review board of the university. Chi-square tests of association were used to assess relationships between key variables.

Results

Forty-nine students volunteered to use the shared decision-making tool in the study time period of 3 months. Seventy-two percent reported the content of the tool as helpful (43%) or very helpful (29%). Six reasons for rating the content helpful and 9 reasons for rating the content as not more helpful were generated from students write in responses. The most frequently cited reason for the content being helpful was improved understanding (78%) followed by increased personal confidence (37%) and helped me take action (14%). The most frequently cited reason for the content not being more helpful was information already known (74%) followed by not enough information (12%). However, 70% (25) of students asserting that they already knew the information also relayed that their understanding of antidepressant medications had been improved.

Ninety-five percent or more of the respondents had the correct response that antidepressant medications are not for everyone, that side effects of the medication can be managed, and individuals taking these medications do not start feeling better immediately. Similarly, for the 3 key elements of shared decision-making, 95% or more of the students rated themselves as being clear about the treatment options available, the benefits and side effects of the medication, and having enough support in their decision-making. These 3 elements were cross tabulated with the rating of helpfulness; 70% or more of the students agreed that the tool was both helpful and ascribed positively to the shared decision-making feature. No statistically significant associations found in any of the relationships tested.

Table 1 summarizes the student’s responses to 3 questions assessing the balances to be struck in making a decision to use antidepressant medication using the tool’s interactive rating scale. These questions are known to be salient issues in patient’s decision-making process in deciding whether or not to use the medications. Concern about the impact of symptoms of depression were more important than use of a medication to control these symptoms. Willingness to take the medication for the length of time required was approximately equally distributed along the decision-making continuum.

Lessons Learned

Campus mental health issues are projected to increase with our current situation with COVID-19 (12) and students return to various instructional forums (13). At the level of the individual student, feedback from this group of volunteers suggests that offering an opportunity to use a shared decision-making tool may help clarify questions and prioritize personal options. Management of symptoms of depression was a salient issue for this group of volunteers and may be a generalized concern.

Student feedback did not include assessment of either their knowledge or perceived support in making a decision about treatment. However, positive associations were found between ratings of the usefulness of the tool and dimensions of shared decision-making. Further exploration is warranted of these dynamics. Selecting a treatment for depression is personal and challenging. Recognizing that not everyone wants to engage in a partnership with their providers, shared decision-making tools are one method of prioritizing preferences and expanding conversations (14).

Conclusions

A number of key questions remain for future research going beyond this group of college student volunteers. One set of questions is methodological. More testing is needed with a broader sample of students, and incorporation of a pretest–posttest design would document changes in knowledge, intentions, and so on, before and after use of such a tool.

Table 1. Summary of Students' Assessment of Reasons to Take Antidepressant Medications.

More important	Equally important					More important
My symptoms keep me from living a normal life						My symptoms aren't bad enough to get in the way of my life
12 (25%)	11 (22%)	5 (10%)	4 (8%)	6 (12%)	6 (12%)	5 (10%)
I'm willing to take medicine every day for at least 6 months, maybe longer						I don't like the idea of taking medicine for a long time
10 (20%)	5 (10%)	7 (14%)	2 (4%)	14 (29%)	5 (10%)	5 (10%)
My symptoms are worse than the possible side effects of the medicines						I think the side effects will be worse than my symptoms
10 (20%)	7 (14%)	12 (25%)	9 (18%)	5 (10%)	1 (2%)	5 (10%)

Collection and analysis of demographic information which was not available for this case report would also add to understanding of how best to use such shared decision-making tools for certain groups of students.

The connection between intentions and behavior is another important issue. Treatment preferences for a health issue like depression do not necessarily translate into a patient's subsequent actions. Understanding of the relationship between concerns about medication side effects and long-term use of these medications is particularly important. Failure to continue with the recommended course of medication for depression is a well-known problem (15–17). The question of medication adherence has not been studied with college studies but warrants attention.

Lastly, additional work is also needed around the incorporation of such tools into clinic workflows. Experience with introducing new protocols into day-to-day clinic operations shows that this is not a trivial undertaking. Staff need to understand the potential value of making changes, perhaps taking more time with patients, answering more questions, and so on (18). Introducing assessment tools on the internet prior to scheduled appointments may offer a solution to easing workflow bottlenecks. Although this effort would require technical support and precautions with patient's protected health information, an online portal could set up to be convenient and private.

The role of internet-based mental health services in fact has long been recognized and has been extended to patient decision aids (19). As college and university health services search for methods to more efficiently and effectively serve their patients, shared decision-making tools stand as candidates to be incorporated as part of online assessments (20).


Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

ORCID iD

Janet Reis  <https://orcid.org/0000-0001-7574-0837>

References

1. Beiter R, Nash M, McCrady M, Rhoades D, Linscomb M, Clarahan M, et al. The prevalence and correlates of depression, anxiety, and stress in a sample of college students. *J Affect Disord.* 2015;173:90-6.
2. Kadison R. Getting an edge—use of stimulants and antidepressants in college. *N Engl J Med.* 2005;353:1089-91.
3. Ryan N. Treatment of depression in children and adolescents. *Lancet.* 2005;355:933-40.
4. Khawam E, Laurencic G, Malone D. Side effects of antidepressants: an overview. *Cleve Clin J Med.* 2006;73:351-3.
5. Blyer K, Hulton L. College students, shared decision making, and the appropriate use of antibiotics for respiratory tract infections: a systematic literature review. *J Am Coll Health.* 2016; 64:334-41.
6. Joosten EA, DeFuentes-Merillas L, de Weert GH, Sensky T, van der Staak CP, de Jong CA. Systematic review of the effects of shared decision-making on patient satisfaction, treatment adherence and health status. *Psychother Psychosom.* 2008;77: 219-26. doi:10.1159/000126073
7. Loh A, Simon D, Wills C, Kriston L, Niebling W, Härter M. The effects of a shared decision-making intervention in primary care of depression: a cluster-randomized controlled trial. *Patient Educ Couns.* 2007;67:324-32.
8. Lipson S, Lattie G, Eisenberg D. Increased rates of mental health service utilization by U.S. college students: 10-year population-level trends (2007–2017). 2018;70:60-3. Accessed February 8, 2021. doi:10.1176/appi.ps.201800332
9. Binkley C, Fenn L. More students at public universities are turning to mental health services on campus, but they're facing

- long wait lists. Published 2019. Accessed February 8, 2021. <https://www.usnews.com/news/healthiest-communities/articles/2019-11-25/colleges-struggle-with-soaring-student-demand-for-counseling>
10. Lara VA, Dowsey MM, Ride J, Kinder S, Castle D. Shared decision making in mental health: the importance for current clinical practice. *Australas Psychiatry*. 2017;25:578-82. doi: 10.1177/1039856217734711
 11. Volk R, Thomas HL, Stacey D, Elywn G. Ten years of the International Patient Decision Aid Standards collaboration: evolution of the core dimensions for assessing the quality of patient decision aids. *BMC Med Inform Decis Mak*. 2013;13:S1.
 12. Best Colleges. Mental health problems for college students are increasing. Published 2020. Accessed February 8, 2021. <https://www.bestcolleges.com/resources/top-5-mental-health-problems-facing-college-students>
 13. Centers for Disease Control and Prevention. Interim guidance for administrators of US institutions of higher education plan, prepare, and respond to coronavirus disease 2019 (COVID-19). Published 2020. February 8, 2021. <https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-ihe-response.html>
 14. Levinson W, Kao A, Kuby A, Thisted R. Not all patients want to participate in decision making. *J Gen Intern Med*. 2005;20:531-5.
 15. Bambauer KZ, Soumerai SB, Adams AS, Zhang F, Degnan DR. Provider and patient characteristics associated with antidepressant nonadherence: the impact of provider specialty. *J Clin Psychiatry*. 2007;68:867-73.
 16. Akincigil A, Bowblis JR, Levin C, Walkup JT, Jan S, Crystal S. Adherence to antidepressant treatment among privately insured patients diagnosed with depression. *Med Care*. 2007;45:363-9.
 17. Serna M, Cruz I, Real J, Gascó E, Galván L. Duration and adherence of antidepressant treatment (2003 to 2007) based on prescription database. *Eur Psychiatry*. 2010;25:206-13.
 18. Elwyn G, Scholl I, Tietbohl C, Mann M, Edwards A, Clay C, et al. Many miles to go . . . : a systematic review of the implementation of patient decision support interventions into routine clinical practice. *BMC Med Inform Decis Mak*. 2013;13:S14.
 19. Schlegelmilch M, Keleher H. Mental health matters: tech and telehealth in higher Ed. Published 2020. Accessed February 8, 2021. <https://blogs.cisco.com/education/mental-health-matters-tech-and-telehealth-in-higher-ed>
 20. Hoffman A, Volk R, Saarimaki A, Stirling C, Li LC, Härter M, et al. Delivering patient decision aids on the internet: definitions, theories, current evidence, and emerging research areas. *BMC Med Inform Decis Mak*. 2013;13:S13. doi:10.1186/1472-6947-13-s2-s13 PMID: 24625064 PMCID: PMC4043476

Author Biography

Janet Reis is currently a research professor at Boise State University. Prior to joining BSU, she was a professor in Family Medicine at the University of Illinois, College of Medicine, Champaign-Urbana.