Information about the Critically Appraised Topic (CAT) Series

The objective of the Doctor of Nursing Practice (DNP) program at George Mason University is to prepare graduates for the highest level of nursing practice. Emphasis is placed on evaluating and applying the evidence that supports practice, understanding and creating practice delivery systems based on patient outcomes, and assuming leadership roles in practice settings. Graduates of the program will be able to assume many roles in the health care system, including direct patient care, clinical nursing faculty, practice management, and policy development.

All DNP students take an evidence-based practice course titled Evidence Based Practice in Nursing and Healthcare (NURS 883). This hallmark course for the DNP program builds on knowledge of research methodologies to analyze the selection and evaluation of research underlying evidence based practice. Emphasis is placed on the translation of research in practice, the evaluation of practice and the improvement of the reliability of health care practice and outcomes.

The first assignment students complete is a Critically Appraised Topic (CAT). CATs are mini-systematic reviews and considered a snapshot of the literature on a topic of interest. Students critically appraise literature related to a focused clinical question and summarize the best available research evidence on the topic of interest. CATs conclude with clinical bottom lines for practitioners to quickly take away for consideration in practice.

The CATS published in MARS (Mason Archival Repository Service; mars.gmu.edu) are submitted by students after they have been reviewed, revised, and approved by their instructor. All CATs are current at the time of original publication but will not be updated over time.

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The Role of Patient Attitudes and Beliefs Regarding Depression on Antidepressant Adherence

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Clinical Scenario: According to the World Health Organization (WHO, 2012), more than 350 million persons worldwide suffer from depression. Depression is a treatable condition; however, nearly 50% of patients prematurely discontinue antidepressant therapy (Sansone, & Sansone, 2012). Although many studies have concluded that patient adherence to antidepressants is problematic (Sansone, & Sansone, 2012; Warden et al., 2007; Van Geffen et al., 2011; McMullen & Herman, 2009), few studies have focused on the roles of patient attitudes and beliefs regarding depression as a specific reason for non-adherence to antidepressant treatment.

Question: How do attitudes and beliefs regarding depression contribute to antidepressant adherence?

Search Strategy: CINAHL, PsycINFO, and Medline databases were searched for the following keywords: depression, compliance, adherence, attitudes, and beliefs. The search was further narrowed to include adults over the age of 19 and less than the age of 64. Only articles in the English language were included, and research subjects with comorbid psychiatric diagnosis were excluded.

Search Results: 33 articles were retrieved utilizing the above noted key words. Articles published prior to 2007 were excluded. After removal of duplicate articles, a review of major subject headings and a review of abstracts for appropriate content, 10 articles remained. After further manual review, four studies appropriate to the topic and ranking from level 1a – 2b evidence quality based on criteria from the Center for Evidenced Based Practice (2009), were selected for the critical appraisal.

Selected Articles:

- Chakraborty, K., Avasthi, A., Kumar, S., & Grover, S. (2008). Attitudes and beliefs of patients of first episode depression towards antidepressants and their adherence to treatment. *Social Psychiatry and Psychiatric Epidemiology*, 44(6), 482–488
- Holma, I. A. K., Holma, K. M., Melartin, T. K., & Isometsä, E. T. (2010). Treatment attitudes and adherence of psychiatric patients with major depressive disorder: A five-year prospective study. *Journal of Affective Disorders*, 127(1-3), 102–112.
- Gabriel, A., & Violato, C. (2010). The development and psychometric assessment of an instrument to measure attitudes towards depression and its treatments in patients suffering from non-psychotic depression. *Journal of Affective Disorders*, 124(3), 241–249.
- Edlund, M. J., Fortney, J. C., Reaves, C. M., Pyne, J. M., & Mittal, D. (2008). Beliefs About Depression and Depression Treatment Among Depressed Veterans. *Medical Care*, 46(6), 581–589. doi:10.1097/MLR.0b013e3181648e46

Evidence Retrieved:

Chakraborty, et al. (2008) studied the attitudes and beliefs of patients with first episode of depression towards antidepressant treatment. The researchers surveyed 50 outpatients in a psychiatric clinic in India diagnosed with first time unipolar depression. Multiple tools including: Sociodemographic profile sheet, Clinical profile sheet, Mini international neuropsychiatric interview (MINI), Becks depression inventory (BDI), Antidepressant compliance questionnaire (ADCQ) and the Questionnaire for assessment of treatment adherence were utilized. Statistical analysis included, descriptive statistics for demographic variables. Correlations between ADCQ score and items of treatment adherence were studied using the Pearson product moment correlation. Pearson's was also utilized for studying correlations between other continuous variables and for dichotomous variables Spearman's rank correlation was utilized. Males scored lower on ADCQ, suggestive of poor attitudes and beliefs towards antidepressants (Spearman 'rho': -0.323, p < 0.05). Females scored higher on ADCQ suggesting they had positive attitudes and beliefs (Spearman 'rho': -0.371, p < 0.01). Significant negative correlation (Spearman rho: -0.33, p < 0.05) between total ADCO score and percentage of days medicines were missed suggested that subjects with negative attitudes had poorer adherence. The researchers concluded that most patients have erroneous beliefs about antidepressants these beliefs may influence drug compliance. This prospective study utilized valid and reliable tools but the small sample size and setting limit the generalizability of the results.

In a prospective five-year study conducted in Helsinki, Finland, Holma, et al. (2010) found that among psychiatric patients with a diagnosis of major depression, treatment attitudes and adherence to treatment were and remained positive. Patients were evaluated at baseline, 6 months, 18 months and 5 years. Employment predicted a positive attitude (OR = 1.97, 95% CI 1.01-3.83 p = 0.046), and a larger social network was associated with greater adherence to treatment (OR= 1.11, 95% CI 1.00-1.23, p = 0.042). Cluster B personality disorder predicted a more negative attitude towards treatment (OR = 0.82, 95% CI 0.70-0.96, p = 0.012) and poor adherence (OR = 0.83, 95% CI 0.72-0.95, p = 0.007). Cluster C patients had a more positive attitude to treatment (OR = 0.30, 95% CI 0.9-1.54, p = 0.003). The study had a sizable sample n=0.542 and they were followed for five years. During that time the researchers were able to investigate the role of a wide variety of variables. Methodological limitations noted included the fact that 0.5% of eligible patients dropped out from all prospective phases and 0.5% dropped from the 0.5% repair follow-up. Patient self-report of adherence to treatment is another limitation of this study but overall the strength of the evidence is high.

While developing and testing a tool to measure attitudes towards depression and treatment for depression, Gabriel & Violato (2010) found that patient's attitudes towards depression and biological treatments were generally negative. Utilizing a 27-item Likert type instrument with internal consistency and reliability 0.79 (Cronbach's alpha), this Canadian study also found that patients indicated feelings of shame about being depressed and had a more favorable attitude towards psychotherapy than towards biological treatments such as antidepressants. 63 patients age 18-65 years of age (mean = 43 years) participated in this study. Most of the sample was Caucasian and had suffered from depression for a mean number of 8.9 years (SD =6.3) The small sample size limits the generalizability of the findings but the study's design and the findings that the instrument is a reliable, valid and empirical measure to assess attitudes towards depression and its treatments make this an important study for the appraisal.

In a randomized control trial conducted by Edlund, et al. (2008). Researchers found that a sample of United States rural southern male veterans administration health system patients, n=395, had little change in their beliefs regarding depression and depression treatment following an intervention. The researchers hypothesized that the group of patients receiving specialized education and support would experience positive changes in their beliefs about depression and treatment. Although no significant changes were noted from the intervention, the researcher did find that their summary measure of overall beliefs regarding depression was predictive of both antidepressant initiation and adherence (OR = 1.14. 95% CI = 1.01-1.29, P = 0.04). Because of the sample's characteristics it is difficult to generalize this study's findings to larger populations however, it is an important study because it suggests the need for further study regarding the influence of patient beliefs on treatment outcomes.

Clinical Bottom Line:

Depression is a serious illness and although antidepressants have been proven efficacious, adherence to these medications can be challenging. People who suffer with depression have a wide range of attitudes and beliefs regarding depression and these attitudes and beliefs can contribute to antidepressant adherence. The influence of culture, gender, economic status, and geography, as well as personality disorders and multiple other variables can impact attitudes and beliefs and have to be considered in regards to future research on this topic. Future research is also needed that focuses on larger, more heterogeneous samples from a variety of psychiatric settings and clinics. Armed with an improved understanding of patient's attitudes and beliefs about depression, providers can be better informed about factors that can affect adherence to depression treatment.

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