



Acceptability of the Stepped Care Model of Depression Treatment in Primary Care Patients and Providers

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Abstract

Primary care has become the first and only point of contact for a majority of individuals experiencing depressive symptoms. One alternative model of care that has been adopted in international primary care settings as an alternative to standard care is the stepped care model. Emerging evidence suggests that the stepped care model is at least as effective as standard care for depression; however, little is known about attitudes of patients and providers regarding this model, especially within the US. The current study utilized a cross-sectional survey to inquire about general attitudes towards the stepped care model, the individual steps, and the treatments offered within each step. We also examined the step that participants would prefer if prescribing or seeking help and the strength of those preferences. Descriptive and inferential statistics indicated that participants view the stepped care model as an acceptable form of treatment for depression and it is an improvement upon standard care. Results also indicated that our patient sample generally preferred self-help interventions over other treatment options, while most of our provider sample would prefer to treat patients in a manner consistent with the stepped care model. These results highlight the importance of collaboration and assessing preferences for treatment choices.

Keywords Depression · Stepped care model · Primary care · Treatment preferences

Introduction

Depression is one of the most debilitating and prevalent psychological disorders, affecting over 16 million US adults a year (National Institute of Mental Health, 2015). Approximately 8.7 million people receive some form of treatment for depression, and 40–60% will seek those services in primary care settings (Kessler and Stafford, 2008; Marcus and Olfson, 2010; Reeves et al., 2011). While the standard of care for treating depression within primary care typically involves prescribing antidepressant medication, referral for outpatient psychotherapy, or some combination of these two treatments (Trangle et al., 2016), many patients do not follow with these recommendations (Scholle et al., 2003) or discontinue treatment prematurely (Sansone & Sansone, 2012). Given the problems associated with treating depression in

primary care, alternative models of care have been proposed to increase efficiency, access to, and effectiveness of mental health services.

A stepped care (SC) model is one type of model that has been developed in primary care settings as an alternative to standard care for depression (Scogin, Hanson, & Welsh, 2003; van Straten, Hill, Richards, & Cuijpers, 2010). In the SC model, depressive symptom severity is assessed and an intervention is prescribed that matches the severity (Franx et al., 2012; van Straten et al., 2015). Thus, SC models offer a variety of levels of treatment that range from low to high intensity (Brotten et al., 2011). While there is some variability across diagnoses regarding the combinations, sequences, and number of steps offered to patients (Ho et al., 2016), Brotten et al., (2011) have delineated a SC model for depression that is widely accepted and is comprised of four steps. The first step includes watchful waiting where symptoms are simply monitored over time. The second step includes psychoeducation and/or some form of self-help intervention. The third step includes psychotherapy, medication, or a combination of the two. The final step includes intensive outpatient, partial day programs, or inpatient care.

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Studies examining the effectiveness of SC suggest that it is at least as effective as usual care (Firth et al., 2015; Katon et al., 1999; van Straten et al., 2015) in addition to being cost-effective (van't Veer-Tazelaar et al., 2010). Further, its implementation may decrease patient drop out because care can be tailored to the patient's treatment preferences (Firth et al., 2015). Previous literature indicates that incorporating treatment preferences improves clinical outcomes (Firth et al., 2015; Lin et al., 2005; Swift & Callahan, 2009), adherence (Kwan et al., 2010), and attrition rates (Swift & Greenberg, 2015). Additionally, two studies have reported that patients with depression and comorbid health problems who were randomized to SC reported greater satisfaction with care and greater reduction of depressive symptoms compared to patients in standard care (Davidson et al., 2010; Ell et al., 2011).

Despite evidence suggesting the possible value of SC, there remain gaps within the literature. First, little is known about how acceptable this model, and the treatments outlined within the model, is to patients and providers. Second, although numerous studies suggest that primary care patients prefer psychotherapy over pharmacotherapy when seeking treatment for depression (Dwight-Johnson et al., 2000; Lin et al., 2005; McHugh et al., 2013; van Schaik et al., 2004; y Garcia et al., 2011), these studies do not examine preferences related to types of evidence-based psychotherapies for depression (e.g., cognitive behavioral therapy, mindfulness, interpersonal psychotherapy) or alternative forms of treatment (e.g., bibliotherapy, internet-based interventions, or mobile applications). Finally, we are unaware of any studies that specifically ask both patients and providers where they would prefer to start treatment from within a SC model. The purpose of this study was to address these gaps in the literature. To do so, we developed two parallel surveys that were presented to patients and providers in primary care settings.

Method

Setting and Procedure

Participants were recruited through four primary care practices in a School of Osteopathic Medicine in the northeastern United States from March 2017 to February 2018. English-speaking adult patients (age 18 or older) were eligible to participate. Participants were non-treatment seeking primary care patients who may or may not have been experiencing depressive symptoms. Potential participants were approached by undergraduate or graduate research assistants in examination rooms while they waited for their provider. Patients were informed that no personal information would be gathered other than general demographic data; therefore, data collected were anonymous. After eligibility was verified

and informed consent secured, patients completed the survey in the examination room by themselves or with assistance from the research assistant. The survey was hosted online and completed using an electronic tablet. The survey took approximately 15 min to complete.

All family medicine attending physicians and residents (heretofore referred to as providers) affiliated with the School of Osteopathic Medicine were contacted via email and asked for their voluntary participation in an anonymous online survey. If they agreed to participate, providers clicked a link in the email and were connected to the informed consent and online survey which took approximately 15 min to complete. This study was approved by the university's Institutional Review Board.

Participants

Two samples ($N = 161$) were recruited; a provider sample and patient sample. For the provider sample, 32 of the 40 providers invited to participate completed the survey (80% response). Provider age ranged from 26 to 72 ($M = 35.03$; $Mdn = 35$; $SD = 11.44$). For the patient sample, 131 of the 170 patients approached completed the survey (77% response). Patients age ranged from 18 to 81 ($M = 47.91.01$; $Mdn = 47$; $SD = 15.87$). Additional demographics are displayed in Table 1.

Measures

Two surveys were created to assess acceptability of, and preferences toward, the SC model and treatments offered within each step. The general format and content of both surveys were similar and consisted of three sections. First, participants provided acceptability ratings for the SC model and individual treatments within the model. Second, participants were asked which step they would prefer to begin with in the model. Finally, demographic and background information about participants was gathered. Descriptions of the SC model and treatments within the model are presented in Table 2.

Patient Survey

The patient survey consisted of 25 to 32 items depending on responses and skip logic. In the first part, patients were provided with a description of the SC model and individual treatments within the model and asked to rate how acceptable they found each on a 5-point Likert scale ranging from 1 (*not acceptable*) to 5 (*very acceptable*). Interventions were rated as "acceptable" if rated 4 or above.

Patients who rated self-help interventions and psychotherapy as acceptable (i.e., rating of 4 or above) were also asked to indicate their preferred modality of treatment and

Table 1 Demographic characteristics of study sample ($N=163$)

Characteristic	Patients ($n=131$) n (%)	Providers ($n=32$) n (%)
Gender		
Female	85 (64.9)	18 (56.3)
Male	44 (33.6)	14 (43.8)
Other	1 (0.8)	–
Prefer not to answer	1 (0.8)	–
Race		
White	92 (70.2)	17 (53.1)
Black or African American	24 (18.4)	3 (9.4)
Asian	2 (1.5)	9 (28.1)
Native American or Pacific Islander	2 (1.5)	1 (3.1)
Prefer not to answer	7 (5.3)	1 (3.1)
Other	4 (3.1)	1 (3.1)
Ethnicity		
nonhispanic/latino(a)	113 (86.3)	28 (87.5)
Prefer not to answer	10 (7.6)	3 (9.4)
Hispanic/latino(a)	8 (6.1)	1 (3.1)
Type of provider		
Resident	–	21 (65.5)
Full-time PCP	–	8 (25)
Part-time PCP	–	3 (9.4)
Years of experience		
0–2 years	–	22 (68.8)
3–6 years	–	3 (9.4)
7–10 years	–	1 (3.1)
10+ years	–	6 (18.8)
Previous experience with mental health treatment		
No	74 (56.5)	–
Yes	57 (43.5)	–
Type of services received		
Combination of psychotherapy and medication	38 (66.7)	–
Medication	15 (26.3)	–
Psychotherapy	3 (5.3)	–
Other	1 (1.7)	–

strength of those preferences on a 5-point Likert scale ranging from 1 (*Not Strong*) to 5 (*Very Strong*). More specifically, participants were provided with a brief description of unguided and guided self-help and asked to indicate their preference and strength of that preference. Additionally, they were asked to indicate preference for specific types of self-help interventions (i.e., books, internet-based programs, and mobile applications) and the strength of preference. For those who viewed psychotherapy as acceptable, they were provided with a brief description of individual and group psychotherapy and asked to indicate their preference and strength of preference. Participants were then provided with brief descriptions of cognitive therapy, behavioral activation, problem-solving and mindfulness and asked to indicate (a) which of those treatments would they prefer if seeking

psychotherapy and the strength of that preference. Descriptions for the treatments were modified from the APA Division 12 website. Description for mindfulness was modified from Segal, Williams & Teasdale (2001). The section concluded with patients indicating whether they believed the SC model is an improvement upon standard care. Standard care was defined as psychotherapy, medication, or a combination of the two.

In the second section, patients were provided with a vignette and asked to imagine that they were experiencing symptoms depicted in the vignette. Specifically, they were asked to imagine (a) they had been experiencing symptoms of depression (e.g., sadness, loss of pleasure/interest in activities, guilt/worthlessness) and (b) they had decided to seek help for these symptoms. Following the vignette,

Table 2 Description of the stepped care model and individual treatments

Treatment	Description
Stepped care model	The purpose of the stepped care model of treatment for depression is to match a patient with a level of treatment that is consistent with the level of symptoms they are experiencing and their preferred type of treatment. Matching a patient to their preferred step is done collaboratively with their provider. A patient may begin at any one of the four “steps,” and some steps have different options within them. This goal of the model is to begin with the least intensive form of treatment
Step one: watchful waiting	At this step, no treatment is provided. Instead, depressive symptoms are monitored to see if they go away or decrease significantly over time
Step two: psychoeducation	This treatment includes learning about depression through reading materials, websites, or other material. Topics that might be addressed include signs/symptoms; what one can expect when experiencing a depressive episode; and/or different ways to cope with depressive symptoms
Step two: self-help	Self-Help is defined as a self-directed activity aimed at decreasing depressive symptoms. Goals of self-help might include learning problem-solving skills, gaining insight and awareness, managing difficulties you may be experiencing, improving relationships, and/or reaching your goals. Self-help might be delivered by via a book, an internet site, and/or using a depression-specific mobile app
Step three: medication	Treatment consists of meeting with your doctor or another medical professional and taking medication on a regular/daily basis. Antidepressant medications work to balance some of the natural chemicals in our brains which affect mood and other symptoms of depression
Step three: psychotherapy	Treatment consists of engaging in weekly talk-therapy sessions in order to develop skills to cope with and manage your depressive symptoms
Step four: intensive outpatient/partial day program	This treatment method includes actively attending a day program 3–5 times a week, for 3–6 h each day. During this time, the member participates in group activities and group sessions that focus on various topics that surround depression as a mental illness
Step four: inpatient program	This treatment method includes hospitalization for 24 h a day. During this time, mental health professionals will work to get you stabilized within a 72-h period in order to refer you to a lower level of care

patients were asked to indicate the step they would prefer to start with if seeking treatment and the strength of that preference of a 5-point Likert scale ranging from 1 (*Not strong*) to 5 (*Very Strong*).

The “imagine if” vignette was used because our sample consisted of non-treatment seeking patients who may or may not have been experiencing depressive symptoms. Previous research has found that participants will experience thoughts similar to others when they are asked to imagine themselves in another’s position or to assume another’s perspective (Davis et al., 2004). Additionally, studying acceptability and preferences in non-treatment seeking samples has been done frequently, with a recent meta-analysis suggesting that such samples have similar preferences to treatment seeking populations (McHugh et al., 2013).

In the final section, patients were asked about previous experience with mental health treatment, type(s) of services received, and other demographic questions.

Provider Survey

The provider survey consisted of 32 items. In the first part, providers were presented with the same descriptions of the SC model and individual treatments within the model as

patients. Following each description, they were asked to rate acceptability on a 5-point Likert scale ranging from 1 (*not acceptable*) to 5 (*very acceptable*). Interventions were rated as “acceptable” if rated 4 or above.

Providers were also asked a number of other questions about their knowledge and use of self-help interventions in the first part. Specifically, they were asked to rate how familiar they were with different types of self-help, including books, web-based programs, and mobile apps, on a 5-point scale from 1 (*not at all familiar*) to 5 (*extremely familiar*). Finally, providers were asked to indicate what self-help resources they present to patients with depression, with options including psychoeducational, self-help, and “other” materials.

In the second section, providers were given the same vignette as patients and asked to imagine they had a patient presenting with those symptoms. Providers were then provided with a list of each intervention from within each step in the SC model and asked to indicate in what order they would deliver each intervention. Finally, providers were asked to indicate the treatment they most frequently recommend to patients experiencing symptoms of depression.

In the final section of the survey, providers indicated provider status (e.g., PCP, resident), years of experience, and other demographics.

Data Analyses

Data analyses were conducted using SPSS-24. Descriptive analyses are used to present the acceptability of the model, individual treatments, and treatment preferences. To examine differences between the acceptability ratings of patients and providers, comparisons were made using independent samples *t*-tests for normally distributed variables and Mann–Whitney *U* tests for skewed data. Normality of the patient distributions were examined through visual inspections of histograms and normal Q-Q plots of each variable. Given the size of the provider sample, the Shapiro–Wilk test was used to determine whether provider data were normally distributed. None of the dependent variables were found to be normally distributed: watchful waiting ($W=0.90, p<.05$), psychoeducation ($W=0.86, p<.001$), self-help ($W=0.86, p<.001$), medication ($W=0.70, p<.001$), psychotherapy ($W=0.54, p<.001$), combination of psychotherapy and medication ($W=0.40, p<.001$), intensive outpatient/partial day ($W=0.73, p<.001$), and inpatient ($W=0.76, p<.001$). Chi square goodness-of-fit analysis was used to determine whether the four steps were preferred equally. We also examined whether acceptability ratings and treatment preferences varied by a number of participant characteristics, including race, gender, and treatment history for patients, and gender, years of experience, and type of provider for providers. Given the limited participants that identified other than Caucasian and African American, comparisons were only examined between those groups.

Results

Acceptability of the SC Model

Eighty-four percent of providers ($n=27$) and 71% of patients ($n=93$) viewed the SC model as an acceptable form of treatment. No significant differences were found between patients

and providers regarding their acceptability rating of the SC model. Additionally, 72% of providers ($n=23$) and 66% of patients ($n=86$) viewed the model to be an improvement upon standard care.

Treatments Offered Within Each STEP

Means and standard deviations for the acceptability ratings of the individual treatments offered within each step are presented in Table 3.

Step One

Thirty-two percent of patients ($n=42$) and 38% of providers ($n=12$) viewed watchful waiting as an acceptable treatment. No significant differences between patients and providers or patient or provider characteristics were found in regard to the acceptability of watchful waiting.

Step Two

Psychoeducation Fifty-two percent patients ($n=68$) and of 50% of providers ($n=16$) viewed psychoeducation to be an acceptable treatment. No significant differences were found between patients and providers regarding their attitudes towards psychoeducation. There were no significant differences between acceptability ratings of psychoeducation and patient and provider characteristics.

Self-Help

Fifty-one percent of patients ($n=67$) and 69% of providers ($n=22$) considered self-help interventions to be acceptable. The acceptability rating for self-help was higher among providers than patients ($p<.05$). No significant differences were found between the acceptability rating of self-help and patient and provider characteristics.

Table 3 Mean acceptability ratings of the treatments offered within each step among patients and providers

Treatments	Total		Patients		Providers		<i>U</i> <i>t</i> value
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Watchful Waiting	3.01	1.33	2.96	1.35	3.22	1.24	−1.03
Psychoeducation	3.64	1.10	3.66	1.10	3.59	1.10	0.30
Self-help	3.60	1.15	3.53	1.18	3.91	0.96	−1.91
Medication	3.75	1.23	3.58	1.26	4.47	0.76	1247.50***
Psychotherapy	4.20	0.98	4.08	1.02	4.72	0.58	1335.00***
Combination	4.15	1.13	3.98	1.18	4.84	0.45	1181.00***
IOP/partial day	3.64	1.22	3.44	1.23	4.44	0.72	1106.00***
Inpatient	3.55	1.32	3.40	1.33	4.16	1.10	−3.46***

Ratings were measured on a 5-point Likert Scale ranging from (1) Not Acceptable to (5) Very Acceptable. * $p<.05$, ** $p<.01$, *** $p<.001$

Ninety percent of patients ($n=60$) indicated a preference for guided self-help interventions versus unguided (10%, $n=7$). Approximately thirty-four percent of patients ($n=23$) reported that their preferred delivery method is a mobile application, followed by internet-based programs (34%, $n=23$) and books (31%, $n=21$). No significant differences were found between patient characteristics and their preferred delivery method for self-help interventions.

Thirty-one percent of providers ($n=10$) reported being familiar with self-help books, while 19% ($n=6$) reported familiarity with internet-based programs and 13% ($n=4$) with mobile applications. No provider could name a specific self-help book, mobile application, or internet-based program they would recommend to patients.

Step Three

Medication Fifty-one percent of patients ($n=67$) and 91% of providers ($n=29$) viewed medication as an acceptable treatment. Results revealed the acceptability rating for medication was higher among providers than patients ($p < .001$). Examination of patient characteristics revealed the acceptability rating for medication was higher among Caucasian patients than African-American patients ($U=645.50$, $p < .001$). Additionally, the acceptability rating for medication was higher among patients with a history of mental health treatment than individuals who have never received treatment ($U=1536.50$, $p < 0.01$). No significant differences were found between the acceptability rating of medication and provider characteristics.

Psychotherapy Seventy-two percent of patients ($n=94$) and 94% of providers ($n=30$) rated psychotherapy as an acceptable treatment. Results indicated the acceptability rating for psychotherapy was higher among providers than patients ($p < .001$). No significant differences were found between the acceptability rating of psychotherapy and patient and provider characteristics.

Eighty-three percent of patients indicated they would prefer individual ($n=78$) over group therapy (17%, $n=16$). Results indicated that 70% of patients ($n=92$) expressed a strong to very strong preference for the treatment they chose ($M=4.05$, $SD=0.90$). Additionally, 28% of patients indicated a preference for cognitive therapy ($n=26$), followed by problem-solving therapy (25%, $n=24$), mindfulness (18%, $n=17$), behavioral activation (17%, $n=16$), and interpersonal psychotherapy (12%, $n=11$). Results indicated that 64% of patients expressed a strong to very strong preference for the treatment they chose. The type of psychotherapy preferred by patients did not vary based on patient characteristics.

Combination of Medication and Psychotherapy Sixty-eight percent of patients ($n=89$) and 97% of providers ($n=31$) found a combination of medication and psychotherapy to be acceptable. Results revealed the acceptability rating for a combination of medication and psychotherapy was higher among providers than patients ($p < .001$).

Examination of patient characteristics revealed that the acceptability rating for a combination of medication and psychotherapy was higher among Caucasian patients than African-American patients ($U=650.50$, $p < .001$). Additionally, the acceptability rating for a combination of medication and psychotherapy was higher among patients with a history of mental health treatment than individuals who have never received treatment ($U=1700.50$, $p < .05$). There were no differences found between provider characteristics and the acceptability rating of a combination of medication and psychotherapy.

Step Four

Intensive Outpatient/Partial Day and Inpatient Programs Fifty percent of patients ($n=66$) and 88% of providers ($n=28$) rated intensive outpatient/partial day programs as acceptable compared to 48% of patients ($n=63$) and 78% of providers ($n=25$) who rated inpatient programs as acceptable. Results indicated the acceptability rating for intensive outpatient/partial day and inpatient programs was higher among providers than patients ($p < .001$). No significant differences were found between patient and provider characteristics and acceptability ratings.

Treatment Preferences

Patients most frequently endorsed a preference for step two (44%, $n=57$) and three (36%, $n=47$). There were statistically significant differences in treatment preferences for patients ($\chi^2(3)=49.37$, $p < .001$), with less people preferring step one ($n=20$) and step four ($n=7$), compared to either step two ($n=57$) and step three ($n=47$).

For those who preferred step two, 79% ($n=45$) would prefer to begin with a combination psychoeducation and self-help versus either of those alone. Of the patients who preferred step three, 79% ($n=37$) would prefer to begin with a combination of psychotherapy and medication versus either of those treatments alone. Results indicated that 70% of patients ($n=92$) expressed a strong to very strong preference for the treatment they chose ($M=4.05$, $SD=0.90$).

When providers were asked to indicate in what order they would deliver each intervention in the SC model, 54% ($n=14$) ranked watchful waiting first, followed by psychoeducation (38%, $n=10$), self-help interventions (50%, $n=13$), psychotherapy (58%, $n=15$), medication (46%, $n=12$), combined psychotherapy and medication (54%, $n=14$),

intensive outpatient (76%, $n=20$), and lastly inpatient (85%, $n=22$). These results indicate that providers generally would prefer to prescribe the treatments consistent with how they are laid out within the SC model. However, the greatest variability in the rankings came between interventions from step one and two.

Providers were then asked to indicate the treatment they most frequently recommend to patients experiencing symptoms of depression. Thirty-four percent of providers ($n=11$) indicated that they recommend psychotherapy and medication most often, followed by psychotherapy (22%, $n=7$), medication (19%, $n=6$), psychoeducation (13%, $n=4$), self-help (9%, $n=3$), and intensive outpatient or partial day programs (3%, $n=1$).

Discussion

Our first goal was to examine perceptions of the SC model at a global level. Results indicated the model was seen as acceptable and an improvement upon standard care by providers and patients. Findings are consistent with qualitative data from implementation studies that assessed patient and provider satisfaction (Davidson et al., 2010; Ell et al., 2011; Franx et al., 2012). However, Franx et al. (2012) noted several barriers to implementation, including contrasting views among the multidisciplinary healthcare team regarding how depression should be treated. The methodology and results from the current study might be used to combat these barriers prospectively and thus better inform outreach, treatment planning, and implementation efforts.

Our second goal was to examine acceptability of interventions at each step. A number of observations can be made based on these data. First, providers found standard care interventions (Step 3) more acceptable than patients. This difference might reflect providers' comfort level with standard care. This possibility is supported by providers in our sample indicating that they recommend a combination of psychotherapy and medication most often. These findings are consistent with other SC research which indicates that providers question the effectiveness of lower intensity treatment options and view them as less appropriate (Franx et al., 2012). However, this finding suggests that an open dialogue between patient and provider might expose these differences and lead to better collaboration, treatment matching and, in turn, greater adherence, efficacy, and satisfaction with treatment (Lin et al., 2005; Swift & Greenberg, 2015).

Second, 50–69% of patients and providers found self-help and psychoeducation to be acceptable. Furthermore, patients preferred self-help via mobile applications or internet most frequently, followed by books. These results stand in contrast to the provider data which indicated they have limited familiarity with self-help interventions and recommend

psychoeducation or self-help less than standard care. In addition, when asked what types of self-help interventions they were most familiar with, their list was in opposite order from patients. These results point to a potential gap in primary care with patients who desire certain types of intervention and providers who are not familiar enough to deliver those interventions. Future research examining methods for closing this gap seem warranted.

Third, watchful waiting was rated as the least acceptable step in both samples. This finding is consistent with previous studies which found that primary care providers and patients prefer an active treatment over watchful waiting (Dwight-Johnson et al., 2006; Lin et al., 2005; Jaycox et al., 2006). It is possible that when patients are seeking help for depression, they want to receive an active treatment and providers may want to be more involved in the care. However, given the evidence suggesting that depressive symptoms naturally remit over time for some individuals (van Straten et al., 2010) and the low ratings for this step, implementation efforts might be aided by providing a clear rationale for this step to providers and patients.

Our third goal was to assess whether demographic factors impact acceptability ratings. Results indicated that Caucasian patients and those with previous mental health treatment found medication and a combination of psychotherapy and medication more acceptable. This finding is consistent with previous literature that has identified specific factors associated with patient treatment preferences (Cooper et al., 2003; Dwight-Johnson et al., 2000; Givens et al., 2007). Additional research is needed to better understand how demographic variables might impact treatment preferences or acceptability for alternative treatments, as our results suggest such factors are important.

Our final goal was to examine patient preferences for treatments within the SC model. Patients most frequently indicated they would prefer to start with a combination of psychoeducation and self-help, followed by a combination of psychotherapy and medication. These findings are inconsistent to previous studies, which found primary care patients generally prefer psychotherapy (Givens et al., 2007; McHugh et al., 2013). However, these studies only assessed preferences for medication, psychotherapy, or a combination. It is possible these differences result from the number and types of treatment options presented to patients or influence from prior experiences with this treatment modality. Our results highlight that patients find self-help acceptable and many strongly prefer it over standard care. Perhaps self-help interventions are more appealing because they decrease barriers to accessing psychological care, including geographical location, costs, and mental health stigma (Boschen, 2009).

In addition, patients expressed certain preferences regarding a number of different types of psychotherapy. Stepped care incorporates such preferences throughout

treatment formulation. Therefore, this finding may have important clinical implications, specifically when thinking about the implementation of Step 2. While it may not be feasible to provide patients with their specific choice of psychotherapy within primary care, self-help materials allow for greater flexibility and inclusion of patient preferences. Thus, depending upon patient preferences and severity of symptoms, a provider could recommend a self-help intervention that aligns with the patient's preferred theoretical orientation.

Although the results of the current study are encouraging, a number of limitations should be considered. First, the current sample was relatively homogeneous and came from the same geographic region. Thus, generalizations beyond this particular population should be made tentatively. Second, we did not assess for the presence of depressive symptoms. It is possible that individuals who are currently experiencing depressive symptoms may have different treatment preferences than those without depressive symptoms. There is some evidence to support the notion that the presence of depressive symptoms does not influence treatment preferences, with one recent meta-analysis finding that across all subsamples, patients preferred psychotherapy over medication (McHugh et al., 2013). However, further exploration into the possible effect of depressive symptoms and severity of symptoms on treatment preferences is warranted.

Third, information about the benefits and risks of each treatment were not presented to patients, which might influence treatment preferences. Future research might include assessing these variables. Finally, while it is clear that patients and providers have specific treatment preferences, we do not know why those preferences exist. Our results provide preliminary evidence that factors such as previous treatment experience and ethnicity may impact acceptability and preference ratings; however, further assessment of the impact of other variables is warranted.

Compliance with Ethical Standards

Conflict of interest The authors Jim A. Haugh, Krista Herbert, Seo Choi, Joanna Petrides, Meagan Vermeulen, and Juliana D'Onofrio declare that they have no conflict of interest.

Human and Animal Rights All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed Consent Informed consent was obtained from all individual participants included in the study.

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