

Facilitators and Barriers to the Integration of Mind–Body Medicine into Primary Care

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Abstract

Purpose: To improve understanding of the facilitators and barriers affecting the integration of mind–body medicine (MBM) into primary care and describe the experiences of mind–body primary care providers.

Methods: The authors conducted a qualitative analysis of semi-structured telephone interviews with mind–body primary care providers selected via a maximum variation sampling strategy.

Results: Four main themes emerged: (1) MBM is an approach to patient care as well as a set of modalities, (2) time and reimbursement pose significant challenges to MBM, (3) support for MBM in one’s practice setting is a key facilitator, and (4) commitment to MBM comes from personal experience. “Insufficient time” was the most highly ranked barrier among survey respondents. Interviewees described innovative strategies to overcome barriers, including customized intake forms, MBM training for staff, MBM group visits, and discounted referrals for low-income patients.

Conclusions: While increased MBM and self-care training for providers may facilitate the integration of MBM into primary care, systematic changes are needed to decrease time pressures on providers and incentivize patient wellness. Despite barriers, providers are using innovative strategies to provide mind–body primary care in diverse practice settings.

Introduction

THE NATIONAL CENTER for Complementary and Integrative Health at the National Institutes of Health (NIH) defines mind–body medicine as a diverse set of therapies that focus on the interactions among the brain, mind, body, and behavior, and on the “powerful ways in which emotional, mental, social, spiritual, and behavioral factors can directly affect health.”¹ Modalities that fall under mind–body medicine (MBM) include mindfulness-based therapies, relaxation, hypnosis/autogenic training, visual imagery, meditation, yoga, biofeedback, *t’ai chi*, cognitive-behavioral therapies, group support, and spirituality.^{2,3} These therapies have now become part of our healthcare landscape^{4,5} and have been the subject of numerous clinical trials.^{3,6–8}

Although studies have evaluated primary care physicians’ use of and attitudes toward MBM,^{9–12} a literature review revealed no studies focusing on the experiences of primary care providers who have integrated MBM into their practice. The current study used qualitative interviews to better understand the facilitators that enhance and the barriers that impede the integration of MBM into primary care.

Increasing literature documents MBM’s potential to enhance the treatment of conditions that are poorly managed by biomedicine alone, such as chronic pain, irritable bowel syndrome, and insomnia.^{4,6} Furthermore, MBM offers a safe, low-tech, and potentially cost-saving complement to the management of chronic diseases, pre- and postoperative care, and mental health disorders.^{3–5,13,14} Many of the common primary care symptoms have strong psychoemotional components and are the same conditions for which the evidence for MBM is the strongest.² A recent study of older adults with low back pain, for example, demonstrated statistically significant improvement in physical function, improved pain acceptance, and sustained reductions in pain and sleep medication after an 8-week mindfulness-based meditation program.¹⁵ The current study focuses on the most widely used MBM modalities: mindfulness-based therapies, relaxation techniques, meditation, guided imagery, hypnosis, and biofeedback.^{3,5}

Materials and Methods

This study used semi-structured telephone interviews of providers who offer integrated MBM and primary care, or “mind–body primary care.”

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Recruitment

Participants were recruited via email outreach to integrative medicine interest groups within family medicine, pediatrics, and internal medicine professional societies; an announcement in the Consortium of Academic Health Centers for Integrative Medicine newsletter; and an advertisement in the online journal *Mindfulness Research Guide*. Invitations were also sent via personal emails to mind–body primary care providers known to the study team. To encourage participation, interviewees received a \$10 Amazon gift card. To select interview participants, a maximum variation sampling strategy was used to select physicians and nurse practitioners from the three major primary care specialties and diverse practice settings. Maximum variation sampling is a purposeful sampling strategy designed to maximize the diversity and heterogeneity of the participants. Respondents were included if they consented to participate and met the inclusion criteria of being a healthcare provider who has provided primary care and either provided or referred patients to MBM within the past 6 months.

Tool development

To begin to understand the barriers and facilitators to MBM in primary care, a survey on this topic was sent via the outreach avenues described above. The survey tool was developed through literature review^{9,16,17} and informed by discussions with local mind–body primary care providers. A total of 68 responses to that survey were received, and these data and a literature review were used to create a priori hypotheses regarding the research question. Interviews were

conducted using a semi-structured interview guide whose questions were based on these initial hypotheses. After a pilot interview, the guide was shortened and questions were re-ordered. The pilot data were not included in the analysis. The same finalized guide was used for all 12 interviews (Table 1).

Data collection

A co-principal investigator (C.M.) conducted most interviews; the research assistant (J.G.) conducted a minority of the interviews. Verbal consent was documented before each interview began. Interviews were audio recorded and transcribed. The authors stopped after 12 providers were interviewed, having satisfied the requirements for variation and having reached a point with limited new themes emerging from the interviews related to the hypotheses. All interviewees were also asked to provide demographic information (Table 2).

Analysis and measurement

The initial hypotheses was used as a basis for developing an a priori code set for the qualitative analysis. The authors hypothesized that the ability of primary care providers to integrate MBM into their practice would be enhanced or inhibited by such factors as time; staff support; reimbursement; attitudes of patients, staff, administrators and fellow physicians; availability of space and referral networks; and the providers' confidence in their MBM skills. In addition to these preset concepts, which had emerged from the survey, the two readers (C.M. and J.G.) independently identified

TABLE 1. SEMI-STRUCTURED INTERVIEW GUIDE

Questions	Follow-up questions/Prompts
Imagine one of your primary care patients comes to the clinic. Can you walk me through how you might integrate a mind–body approach to their primary care visit? Feel free to tell a story about a specific patient.	What makes someone a good MBM candidate? Specific diagnosis, patient relationship, patient attitudes?
How has your use of mind–body medicine as part of your primary care practice evolved over time?	Can you tell me more about the specific factors that lead to those changes? Recent changes, challenges, support, referrals, interpersonal interactions/attitudes, physical space?
Thinking about your experience providing primary care over the past 6 months, what would you say is the most important facilitator that allows you to integrate MBM into your practice of primary care?	How do you think that factor could help facilitate other provider's ability to integrate MBM into their practice of primary care?
Still thinking about your experiences over the past 6 months, what would you say is the most important barrier that makes it difficult to integrate MBM into your practice of primary care in the way you'd like?	What are some strategies you have used to get around that barrier?
How would you change your clinic to better be able to offer MBM to your primary care patients?	Could you share any advice to other providers who may be struggling with the same barrier? Physical space, staff, insurance reimbursement, scheduling, referral networks, etc?
How are the challenges you face now different from the challenges you initially faced when first attempting to integrate MBM into your primary of primary care?	Based on your experiences, could you offer any advice for medical providers who are interested in incorporating MBM into their practice, but have not yet started?
What initially drew you to offering a mind–body approach to primary care?	Why do you continue to practice primary care in this way? Why is it important to you to do so?
Do you have any additional thoughts on this topic that we did not cover today?	Anything else?

MBM, mind–body medicine.

TABLE 2. CHARACTERISTICS OF SURVEYED PROVIDERS

Characteristics	Interviewee (%) (n=12)
Age	
25–44 yr	25.0
>45 yr	75.0
Sex	
Male	58.3
Female	41.7
Specialty	
Family medicine	58.3
General internal medicine	25.0
General pediatrics	16.7
Profession	
Physician	83.3
Nurse practitioner	16.7
Practice type	
Academic	50.0
Private practice	8.3
Hospital-based Practice	16.7
Solo practice	0.0
Group practice	33.3
Other – health center	16.7
Other – military	8.3
Other – college health	8.3
Payer mix	
Uninsured (low-income)	18.4
Public insurance	32.9
Private/commercial	45.8
Tricare	0.8
Self-pay (high-income)	2.1
Finished medical training	
≤10 yr ago	25.0
>10 yr ago	75.0
First integrated MBM	
<10 yr ago	50.0
≥10 yr ago	50.0

additional emergent concepts from the pilot interview, which informed the development of a revised code set.

A senior qualitative researcher (B.K.) reviewed this coding strategy and commented on the appropriateness of the code set. The coders (C.M. and J.G.) then coded the first two interviews. The data were coded using Dedoose,¹⁸ an online qualitative data analysis program. The coders collaboratively examined the coding of this first set of interviews for consistency and any discrepancies were discussed until consensus was reached on a definition for each code. A finalized set of codes and definitions was developed and used to recode the first two interviews and to code all remaining transcripts. C.M. and J.G. independently coded all interviews, with a high degree of consistency between coders.

Once the coding was complete, the immersion/crystallization approach, as described by Crabtree and Miller,¹⁹ was used to look for emergent patterns. After describing these initial themes, two of the authors reviewed the original interview material, searching for disconfirming data. As a final validation, two interviewees were invited to review and provide feedback on the results.

The institutional review board approved all research methods.

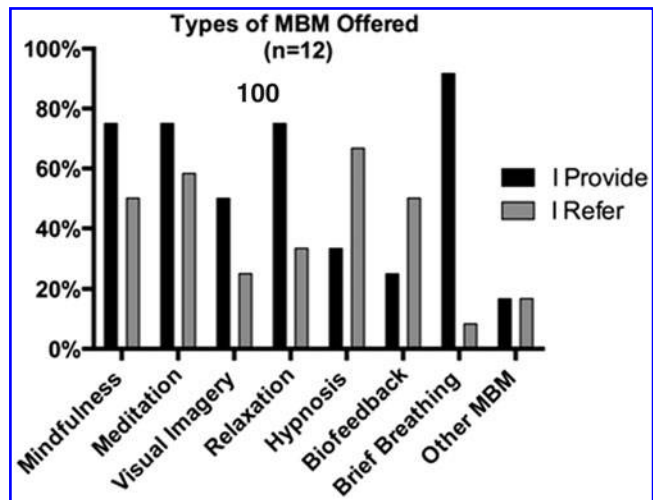


FIG. 1. Types of mind–body medicine (MBM) offered.

Results

Sample characteristics

Of the 12 interviewed providers, 75% were older than age 45 years and 58% were male. The sample included 7 family medicine providers, 3 internal medicine providers, and 2 pediatrics providers; 2 participants were nurse practitioners and 10 were physicians (Table 2). Providers from all four major regions of the United States were interviewed—Northeast, South, Midwest, and West—and providers working in a variety of socioeconomic settings were included. The most commonly offered type of MBM in the surveyed sample was brief breathing exercises (Fig. 1). Hypnosis was the most common MBM referral. Ten of the providers reported to “directly provide one or more MBM therapies to my patients during normally scheduled office visits,” and 4 providers offer MBM “during specially scheduled clinic time (i.e. time reserved for MBM).”

Analysis

The analysis of the qualitative data generated four specific themes.

Theme I: MBM in the primary care setting can be understood in two main ways: (1) an “approach” to one’s primary care practice or (2) a set of specific modalities offered in conjunction with or in addition to conventional primary care. A “mind–body medicine approach” to primary care can be understood as a holistic or a bio-psycho-social-emotional approach to healing, which involves techniques such as generous listening and attentive use of language during an interview and the therapeutic use of touch during a physical examination.

It’s a philosophical approach to the way that I approach my patients. I really engage them from a whole-person perspective. [Nurse Practitioner 011]

I try to be aware of the power of words to evoke responses [...] an awareness of the power of language and metaphor in the consult room. [Internal Medicine 010]

MBM also often refers more concretely to specific therapies, such as biofeedback or clinical hypnosis sessions, which may be offered within the primary care visit, during

separately scheduled sessions, or by other providers through referrals: *Myself, it's mostly the breath-work, and then I refer to our in-house mindfulness-based stress reduction (MBSR) or in-house yoga. Or outside, either to a more full MBSR program, hypnotherapy, or t'ai chi.* ^[Internal Medicine 08] This distinction was important because the majority of discrete facilitators and barriers were identified when the participant was referring to specific MBM modalities, as opposed to the “mind–body approach to primary care.” For example, when a particular MBM therapy, such as an MBSR class (which requires a group meeting room) or biofeedback (which requires space for the machine) is considered, availability of space emerged as an important factor. There are no space requirements, however, to taking a MBM approach to the patient encounter: *You can do mind–body medicine anywhere. That is one of the benefits of it.* ^[Internal Medicine 012]

Theme II: There was a clear consensus among participants that time and reimbursement pose challenges to the integration of MBM into primary care. All interviewees expressed the great importance of having sufficient time with each patient. Reimbursement was discussed as a significant factor in determining the amount of time a provider has with each patient because most primary care providers do not receive reimbursement for MBM and can bill only for the time spent counseling patients:

We are relying on insurance reimbursements for our time. We don't bill [...] for mind–body treatments. ^[Pediatric Medicine 01]

It doesn't make sense that we are tied to that number of visits [but] we still [...] have numbers we have to meet. ^[Family Medicine 07]

Providers shared several strategies that help them get around the time and reimbursement barriers. Those working in private practice may use a retainer fee as a way of covering their costs. Others offer group visits, provide resources for home practice or referrals, or schedule patients back for separate MBM sessions:

Patients pay an add-on fee once a year [...] that extra revenue allows me to keep my schedule the way it is and not have to see 50 kids a day. ^[Pediatric Medicine 01]

The biggest way of overcoming that barrier is being comfortable and trained in group visits, because you can see more patients in the same amount of time. ^[Family Medicine 04]

I will practice it with them in the office a little bit, and then steer them towards YouTube videos to try to have them continue it at home. ^[Family Medicine 07]

Schedule them back for a dedicated MBM appointment. That's a way around the time barrier. The other thing is to have a resource to refer them to. ^[Family Medicine 06]

Five of the providers we interviewed work in settings where more than half of their patient population have public insurance or are low-income and uninsured. Specific strategies for providing MBM to low-income patients included having volunteer staff, establishing agreements with outside MBM providers for discounted services, and acquiring grant funding to subsidize the provider's time:

Having some programs here for free in-house definitely helps [...] and having relationships with people in the community who will do discounts. ^[Internal Medicine 08]

We have good grant support for these integrative medicine group visits, which subsidizes my time and allows me to do this kind of work. ^[Family Medicine 04]

Theme III: The level of support by providers' administration, colleagues, staff, and professional community is a significant factor in their success in integrating MBM. Lack of support from one's administration can make offering MBM more difficult or can even prevent certain modalities from being offered: *We were not allowed to do certain things because we really didn't have great support from the administration.* ^[Nurse Practitioner 09] Administrative buy-in is required, for example, to do mind–body training with clinic staff, to change an intake form, or to have more MBM services co-located at one's clinic:

Have it introduced by the medical assistants [...] [they] are more from their community, [...] so if they say “Oh, you're expressing that you're having this pain for months [...] ask Doctor X, he knows a lot about techniques to help with that, like meditation, ask him about that.” Normalize it a bit. ^[Internal Medicine 08]

On [our] intake form, there is a whole list of stress reduction activities that we ask if they do, including a number of mindfulness interventions. ^[Family Medicine 05]

One participant offered an analogy with onsite integrated mental health services as an already proven model that could facilitate greater integration of MBM in the primary care setting:

Having on-demand mental health care in a primary care clinic helps improve outcomes [...] I would love to have that for mind–body medicine. [...] Say “I need to move on to the next patient, but [...] my colleague Theresa does biofeedback and since you and I discussed it and you seemed interested, you could go do it right now.” ^[Family Medicine 06]

Theme IV: Providers who integrate MBM into their primary care practice have a deep commitment to MBM that comes from a place of personal conviction and experience. Providers' commitment is largely rooted in personal experiences of healing or benefit from mind–body practices, and this personal commitment is important in finding a way to overcome the obstacles:

It was my own experience in medical school, I had depression, severe, major depression, and mindfulness was personally very helpful for me. [...] I started, thinking, “boy, this would be great for the patients too.” ^[Family Medicine 06]

This is my dharma, if you will, to have a practice that reflects the values that I live with my family, that I believe in [...] I could never really imagine practicing any other way. ^[Pediatric Medicine 01]

Providers also spoke of a reciprocal benefit of offering MBM; not only do patients benefit from a MBM approach, but it also has a healing and energizing effect on the provider:

I can't tell you what an amazing thing it is to get to see patients, take care of them, and also get to meditate with them. ^[Family Medicine 04]

I incorporate it more into my own life, because if I'm taking care of myself, it's a lot easier to be fully present. ^[Nurse Practitioner 09]

Mind–body medicine, practicing that and doing that with my patients, for me, has been the best way to really build and develop these relationships over time. ^[Pediatric Medicine 01]

Discussion

The potential of MBM to improve delivery of healthcare remains far from fully realized, especially within primary care. This study investigated a set of hypotheses about the most important facilitators and barriers experienced by mind–body primary care providers. Insufficient clinic time was identified as a significant barrier by all interviewees, a finding that mirrored a 2007 study of the factors limiting physician interest in MBM.¹⁷ Participants described increasing time pressures on primary care, which are compounded by the push for meaningful use and patient-centered medical home certification, higher patient demand generated by increased insurance coverage by the Affordable Care Act, and an avalanche of new preventive and chronic disease management guidelines to address in each visit. As one participant described it: “[It’s] just the stress that primary care is experiencing, there is more demand for our time, and more demand for our work in terms of productivity.”¹⁸ [Family Medicine 04] The findings related to reimbursement for mind–body primary care were nuanced. Apart from one physician whose private practice charges a retainer fee, very few providers indicated that they receive any enhanced reimbursement for offering MBM. However, one provider argued that when “incorporating [MBM] as a foundational intervention [...] there is no need to worry about reimbursement. It is just part of your visit.”¹⁹ [Family Medicine 05] This quote highlights the distinction described in theme I: MBM is both an approach to patient care as well as a set of discrete therapies. How mind–body primary care is defined has important implications for the expansion of the field. Should providers seek training in particular MBM modalities and offer those therapies as an expanded scope of practice? Or should the focus be on training more providers to take an MBM approach to all aspects of patient care, including how they interview, examine, counsel, and engage with patients? Our data suggest that the “mind–body primary care approach” may eliminate some of the potential barriers to implementation posed by the challenge of offering specific modalities in this setting. Eighty-three percent of surveyed providers offer MBM directly within their regularly scheduled primary care visits, whereas only 33% offer MBM in separately scheduled visits dedicated to MBM; this may suggest that the current trend is more toward the former approach rather than the latter.

One of the encouraging findings from the interviews was the abundance of innovative strategies providers use to overcome the identified barriers. Clinic-level strategies, such as developing customized intake forms that ask about stress management and the use of MBM, or training medical assistants to ask these questions, are both ways to help start the conversation about MBM with the patient even before the provider enters the room. Group visits, which may improve patient and provider satisfaction²⁰ and financial efficiency,²¹ are an exciting strategy for mind–body primary care delivery. Providers also discussed several specific strategies for providing MBM in underserved settings. The importance of developing referral networks with discounted services was one such strategy.

This research suggests that a provider’s dedication to MBM comes from personal experience with mind–body practices and also highlights the overlap between providers’

commitment to MBM and their own self-care. Increasing the amount of combined MBM and self-care training in medical school, residency, and continuing medical education could build a foundation for targeting this key facilitator identified. Importantly, teaching self-care through mindfulness and other mind–body interventions may also be effective in mitigating physician burnout.²²

Limitations

Although the recruitment methods were designed to be as broad as possible, a limitation of the study is that the sample was nonrandom and potentially subject to responder bias.

Conclusions

This exploratory study provides some useful insights into the facilitators of and barriers to the use of MBM among primary care providers. The findings suggest the need for systematic changes to decrease the time pressures on primary care and incentivize patient well-being. As we move toward value-based care, shared savings, and accountable care, as well as the use of patient-reported outcomes measures to evaluate quality of care, these changes will potentially become even more of a priority. Whether MBM is considered an approach to patient care or a set of specific modalities, it is clear that time and reimbursement will continue to be a challenge until the healthcare system begins to truly incentivize wellness instead of diagnoses and procedures. As noted by one respondent: “We need to develop a healthcare system that values wellness [...] and rewards patients for self-care. Until we do that, we are not going to have success with mind–body.”²³ [Pediatric Medicine 01] This requires increased MBM and self-care training for practitioners and engagement of mind–body primary care providers at the policy level working to restructure delivery of care.

Acknowledgments

An Albert Einstein College of Medicine Senior Research Fellowship funded this research. The authors would like to thank Dr. Ellen Tattelman for her support and feedback, along with Dr. Katherine Gergen-Barnett, Dr. Arthur Blank, Galina Umanski, Christy Duan, Dr. Darwin Deen, and Dr. Andreas Cohrsen for their contributions and reflections.

As of May 2, 2016, Dr. Kligler is the National Director of the Integrative Health Coordinating Center at the Veteran’s Health Administration, Washington, DC.

Author Disclosure Statement

No competing financial interests exist.

References

1. National Center for Complementary and Integrative Health. Mind-body medicine: an overview. Background. Bethesda, MD: National Institutes of Health; 2007.
2. Barrows KA, Jacobs BP. Mind-body medicine. An introduction and review of the literature. *Med Clin North Am* 2002;86:11–31.
3. Astin JA, Shapiro SL, Eisenberg DM, Forsys KL. Mind-body medicine: state of the science, implications for practice. *J Am Board Fam Pract* 2003;16:131–147.

4. Gordon NP, Sobel DS, Tarazona EZ. Use of and interest in alternative therapies among adult primary care clinicians and adult members in a large health maintenance organization. *West J Med* 1998;169:153–161.
5. Wolsko PM, Eisenberg DM, Davis RB, Phillips RS. Use of mind-body medical therapies: results of a national survey. *J Gen Intern Med* 2004;19:43–50.
6. NIH Technology Assessment. Integration of behavioral and relaxation approaches into the treatment of chronic pain and insomnia. NIH Technology Assessment Panel on Integration of Behavioral and Relaxation Approaches into the Treatment of Chronic Pain and Insomnia. *JAMA* 1996;276:313–318.
7. van Tulder MW, Ostelo R, Vlaeyen JW, et al. Behavioral treatment for chronic low back pain: a systematic review within the framework of the Cochrane Back Review Group. *Spine* 2001;26:270–281.
8. Goyal M, Singh S, Sibinga EM, et al. Meditation programs for psychological stress and well-being: a systematic review and meta-analysis. *JAMA Intern Med* 2014;174:357–368.
9. Astin JA, Goddard TG, Forsys K. Barriers to the integration of mind-body medicine: perceptions of physicians, residents, and medical students. *Explore* 2005;1:278–283.
10. Astin JA, Soeken K, Sierpina VS, Clarridge BR. Barriers to the integration of psychosocial factors in medicine: results of a national survey of physicians. *J Am Board Fam Pract* 2006;19:557–565.
11. Berman BM, Singh BB, Hartnoll SM, Singh BK, Reilly D. Primary care physicians and complementary-alternative medicine: training, attitudes, and practice patterns. *J Am Board Fam Pract* 1998;11:272–281.
12. Avey H, Matheny KB, Robbins A, Jacobson TA. Health care providers' training, perceptions, and practices regarding stress and health outcomes. *J Natl Med Assoc* 2003;95:833, 836–845.
13. Kligler B. Mind-body medicine in clinical practice: challenges and opportunities. *Explore* 2009;5:137–138.
14. Montgomery GH, Bovbjerg DH, Schnur JB, et al. A randomized clinical trial of a brief hypnosis intervention to control side effects in breast surgery patients. *J Natl Cancer Inst* 2007;99:1304–1312.
15. Morone NE, Greco CM, Weiner DK. Mindfulness meditation for the treatment of chronic low back pain in older adults: a randomized controlled pilot study. *Pain* 2008;134:310–319.
16. Benzer JK, Beehler S, Miller C, et al. Grounded theory of barriers and facilitators to mandated implementation of mental health care in the primary care setting. *Depression Res Treat* 2012;2012:597157.
17. Sierpina V, Levine R, Astin J, Tan A. Use of mind-body therapies in psychiatry and family medicine faculty and residents: attitudes, barriers, and gender differences. *Explore* 2007;3:129–135.
18. Dedoose. Version 6.2.2. Web application for managing, analyzing, and presenting qualitative and mixed method research data. Los Angeles, CA: SocioCultural Research Consultants, LLC; 2016.
19. Crabtree BF, Miller WL. *Doing Qualitative Research*. Thousand Oaks, CA: SAGE Publications; 1999.
20. Jaber R, Braksmajer A, Trilling JS. Group visits: a qualitative review of current research. *J Am Board Fam Pract* 2006;19:276–290.
21. Spann SJ. The Executive Editorial Team Task Force. Report on financing the new model of family medicine. *Ann Fam Med* 2004;2 Suppl 3:S1–21.
22. Krasner MS, Epstein RM, Beckman H, et al. Association of an educational program in mindful communication with burnout, empathy, and attitudes among primary care physicians. *JAMA* 2009;302:1284–1293.

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