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Invited Commentary

Invited Commentary: Religious Service Attendance and Implications for Clinical Care, Community Participation, and Public Health

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In this commentary, we review the evidence concerning associations between religious service attendance and subsequent health and wellbeing outcomes. The evidence base for a link between religious service attendance and health has increased substantially over the past 2 decades. The interpretation and implications of this research require careful consideration (*Am J Epidemiol*. 2022;191(1):20–30). It would be inappropriate to universally promote service attendance solely on the grounds of the associations with health. Nevertheless, a more nuanced approach, within both clinical care and public health, may be possible—one that encouraged participation in religious community for those who already positively self-identified with a religious or spiritual tradition and encouraged other forms of community participation for those who did not. Discussion is given to potential future research directions and the challenges and opportunities for promotion efforts by the public health community.

community; mental health; randomized encouragement trial; religious service attendance; social support; spirituality

Abbreviation: COVID-19, coronavirus 2019.

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Religious and spiritual traditions have, for millennia, provided communities, practices, rituals, and services wherein individuals come together to make sense of life, support one another, and seek the transcendent. Increasingly rigorous research has indicated that religious service attendance is associated with a number of important health and wellbeing outcomes (1–8). In this issue of the *Journal*, Aksoy et al. (9) contributed further to this literature and raised the challenging question of the implications of such research for public health. In this commentary, we summarize some of the existing evidence for associations between service attendance and health and discuss clinical and public health implications, future research directions, and the challenges and opportunities for promotion efforts in the public health community.

THE EVIDENCE

Over the past decades, the evidence that religious service attendance has effects on health has become increasingly strong (1–8). Much of the early research on this connection was methodologically weak, using cross-sectional data that is insufficient to discern the direction of causation. With such cross-sectional data, concerns about reverse causation—whether religious participation promotes health or whether it is only the healthy who can attend services—cannot be addressed. For example, although service attendance may protect against depression, there is also evidence that those who become depressed are more likely to stop attending services; however, these explanations cannot be distinguished with cross-sectional data (10–12).

Increasingly sophisticated research designs using longitudinal data with control for baseline physical and mental health outcomes have been used to address these methodological challenges. Analyses of major epidemiologic cohorts, with sample sizes in the tens of thousands, have examined these

relationships and have indicated service attendance is associated with reduced all-cause mortality rates (6, 8, 13–18). Such analyses, now also including those of Aksoy et al., likewise suggest evidence for similar beneficial effects on psychological distress and mental wellbeing (7–9, 11, 19–21). Meta-analytic estimates from rigorous longitudinal studies indicate a 27% (95% confidence interval: 16, 37) reduction in all-cause mortality risk (6) and a roughly 33% (95% confidence interval: 19, 42) reduction in the odds of subsequent depression (7, 19) for those attending services at least weekly versus not at all.

Although many of these studies controlled for baseline physical and mental health and for numerous other social, demographic, and economic variables, unmeasured confounding is always a possibility. However sensitivity analyses (22) indicates that to explain away the meta-analytic estimate for mortality, an unmeasured confounder associated with both attendance and reduced mortality by risk-ratios of 2.08-fold each, above and beyond the measured covariates, could suffice; however, weaker joint confounder associations could not. Such strong unmeasured confounding, above and beyond everything for which investigators have already controlled, seems unlikely given the few risk factors that approach this degree of effect. Likewise, even to shift the confidence interval for the mortality estimate to include within it the possibility of no effect, unmeasured confounding risk ratios for attendance and reduced mortality of 1.67-fold each could suffice, but weaker confounder associations could not. Similarly, fairly strong confounding would be needed to explain away the estimates for depression (19).

Results from other longitudinal studies that have controlled for baseline confounders and outcomes have likewise indicated evidence for effects of religious service attendance on better outcomes for suicide, smoking, substance use disorders, cancer and cardiovascular disease survival, divorce, social support, meaning and purpose, life satisfaction, charitable giving, volunteering, and civic engagement (1–5, 8, 9, 16, 20, 23–30). In some cases, the more rigorous longitudinal evidence comes from only a few studies and is not yet suitable for meta-analytic synthesis (3, 31). The evidence -base for such outcomes, although not yet as definitive as that for all-cause mortality and depression, is nevertheless rapidly expanding.

Results from the studies to date have indicated that it is the social or communal aspects of religion that have especially powerful associations with health and wellbeing. The most robust evidence concerning longitudinal associations with health arises when considering religious service attendance as the exposure, rather than private religious practices, affiliation, or self-assessed religiosity or spirituality. Analyses have found inconsistent associations with these other religious/spiritual variables, with effect size estimates that are considerably smaller (3, 6, 17, 21, 32). Such was also the case in the study of Aksoy et al. (9), in which service attendance was robustly associated with mental wellbeing, but the associations with religious importance and affiliation were more mixed and depended in part on minority religious status. For religious service attendance, however, the evidence for an effect on many outcomes is now relatively strong. This body of research on religion and health prompts further consideration of potential clinical and public health implications.

IMPLICATIONS FOR CLINICAL CARE AND INDIVIDUAL COMMUNITY INVOLVEMENT

The clinical implications of this research should not be interpreted as leading to a universal "prescription" of religious service attendance, which as Aksoy et al. (9) note, would be inappropriate. People's religious commitments are generally not shaped by concerns of health but rather by values, experiences, relationships, truth claims, evidence, and systems of meaning. On the other hand, however, individuals who already positively self-identify with a religious tradition may welcome and benefit from discussions about, and even encouragement towards, participation in a religious community.

In determining whether such discussions might be appropriate, clinicians could potentially pose neutral questions, such as, "Are religion or spirituality important to you in thinking about health and illness or at other times?" and "Do you have, or would you like to have, someone to talk to about religious or spiritual matters?" Longer spiritual history assessments are also available but require more time (33, 34). However, the simple questions above could be integrated into a social history and can be asked even if the clinician and patient view religious matters very differently. For patients who positively identify with a religious or spiritual tradition, clinicians could also inquire about and even encourage communal involvement, when appropriate. For patients without such beliefs and affiliations, other forms of community involvement could likewise be encouraged.

Such conversations within clinical care must also be sensitive to those who may have suffered past negative experiences or even abuse from religious communities. The relatively neutral questions above may help uncover such painful past experiences, which can then prompt empathy, support, and referrals to appropriate specialists.

Both anecdotal evidence and results from studies of patient experience suggest that when these issues are handled in a patient-centered fashion, raising questions of religion or spirituality within the clinical context can be nearly universally positive (35, 36). Moreover, it is desired by a large proportion of patients (37–39). For the roughly half of all Americans who report a religious affiliation but do not participate in a community, such discussions of religious community may be appropriate and help promote health.

This more sensitive, nuanced approach is not a universal prescription, but rather respects and encourages other forms of community participation for those who do not self-identify as religious. This approach also helps address prior objections about these discussions (40, 41), such as clinicians and patients having different beliefs, the topic being too sensitive, the instrumentalizing of religion, lack of clinician training, and concerns about proselytization and abuse of power. The 2 neutral questions above can be posed without the clinician and patient sharing the same beliefs; referrals to a chaplain or religious leader can be made as appropriate. Although matters of religion/spirituality can be sensitive, so too are other topics in clinical settings, such as sexual behaviors and mental health issues. Rather than

instrumentalizing religion, the approach above acknowledges that religious commitments are typically shaped by concerns other than health but also recognizes that, with respect to communal participation for those who already positively self-identify with a religious tradition, there will generally be consonance between health-related, social, and spiritual ends.

Lack of clinician training certainly does require attention, as prior training in spiritual care is one of the strongest predictors of clinicians providing such care (37). Although many medical schools now offer electives in spiritual care (42), this is not likely sufficient because few participate. As part of the core curriculum, a 1-session training module that reviews neutral spiritual-history assessment questions in the context of existing epidemiologic evidence may more powerfully facilitate an approach to raising issues of service attendance and other forms of community participation within clinical contexts.

For those still not convinced, one might also turn the question around: Given the strength of the evidence on service attendance and health, are we doing harm if this information is withheld? A sensible approach to navigating these challenging issues within medicine is possible. It is perhaps time for clinical practice to start taking these issues seriously and wrestle with the implications.

IMPLICATIONS FOR PUBLIC HEALTH AND COMMUNITY HEALTH PROMOTION ACTIVITIES

The challenges concerning the implications of the service attendance research are perhaps greater still when considering promotion activities in the public health community. If outreach efforts are made at the community level, it may no longer be possible to have the more nuanced assessment of an individual's specific religious affiliation or lack thereof or to be sufficiently attentive to past abuse in religious settings.

Various alternative approaches could include more targeted tradition-specific promotion activities. Materials could be tailored to each specific religious tradition, describing the research on service attendance, noting the theological understanding of the importance of community within that tradition, listing local communities inviting participation, and ideally also offering resources or contact information for those who have experienced abuse within religious contexts (3). Such promotional materials could be sent to lists of those who have previously indicated a particular religious affiliation.

Other efforts to promote community participation more broadly might also be pursued wherein the health benefits of community participation could be put forward, with a list of local community opportunities provided, including, but not restricted to, religious service attendance.

Although such efforts in the United States at present are limited, the practice of "social prescribing" saw dramatic increase in clinical and public health contexts within the United Kingdom over a few short years (43). Neglect of these opportunities and of community life and service attendance as social determinants of health is itself perilous. Of the recent increase in suicide rates within the United States, extrapolation of estimates from epidemiologic studies of service attendance suggest that approximately 40% of the rise in suicide rates between 1999 and 2014 may be attributable to declining service attendance (44). Neglecting community participation and service attendance promotion efforts, when these are appropriate, might well result in adverse effects on the public's health.

FUTURE RESEARCH DIRECTIONS

A number of future research directions may facilitate community participation and service attendance promotion efforts. Aksoy et al. (9) rightly note that randomization of religious participation itself will often be unethical and infeasible. However, person-centered *encouragement* interventions, such as those described above, could be amenable to randomized trial evaluation (3). Within clinical contexts, practice-level group-randomized trials could involve interventions that study the effects of providing training to implement spiritual-history assessment and, when appropriate, community-engagement encouragement. Likewise, individual-level randomized encouragement trials of tradition-specific outreach materials or community-level group-randomized trials of broad social-participation encouragement could be implemented. Because such promotion efforts would likely only change participation for a small minority, relatively large sample sizes would be required to have adequate power to detect effects. Any concerns about negative spillover effects on non-religious individuals by promoting religious participation (9, 45) could be addressed by collecting outcome data on other members of the community. Such spillover might conceivably be negative or positive because of, for example, increased intolerance or, alternatively, increased volunteering or charitable activities within communities (4, 8, 30, 44).

Further research could also examine which forms of non-religious community participation most powerfully affect health and wellbeing. Research suggests the effect sizes for other forms of social participation, although not as strong, (17, 28, 46), are still meaningful (47). However, a better understanding of which forms contribute to health would be valuable. Some research has suggested that participation in arts and education organizations and religious communities most powerfully promotes life satisfaction and happiness (48). Other research has suggested that participation in volunteering organizations may be especially effective in promoting health and wellbeing (49). We would speculate that participation in communal activities that more closely resemble religious communities in having a shared set of values, a common purpose, a set of caring relationships, and a history that extends beyond the life of the individual may most powerfully affect health and wellbeing. However, further research on these questions is needed.

Research should also explore how the effects of religious service attendance vary cross-culturally or within minority communities and whether service attendance in fact helps serve as a buffer for stresses experienced by minority communities. Aksoy et al. (9) make some important contributions in this regard. However, considerable work remains to be done because, as noted by Aksoy et al., most of the existing longitudinal research has been carried out in the

West and in predominantly Christian contexts. Further research could also investigate whether other religious or spiritual practices across traditions might also contribute to health and wellbeing (50) though, as noted above, the existing research suggests communal and social forms of participation seem to be especially powerful.

CHALLENGES AND OPPORTUNITIES AFTER THE CORONAVIRUS 2019 PANDEMIC

Many of these possibilities for community promotion may seem theoretical in the face of social distancing and isolation during the coronavirus 2019 (COVID-19) pandemic. However, limitations of community participation may in fact be partially responsible for the documented increase in psychological distress (51, 52), exacerbating prepandemic trends, as Western societies continue to become more individualistic. Our experience of COVID-19 may itself prompt reflection upon the importance of community and on the role of religion in life and society (53). Community participation in the United States has declined dramatically over the past decades (54). Although religious service attendance in the United States is still comparatively high when contrasted with other forms of community involvement, these rates have also been declining (54, 55). The world after COVID will require extensive efforts to rebuild society and community life. The strategies above to promote community participation, religious or otherwise, may prove critical in revitalizing our communities, thereby also promoting health and wellbeing.

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