

# Women in Podcasting: We Should Tune In

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## INTRODUCTION

Since the early 2000s, podcasting, or *audioblogging*, has been gaining popularity as an easy and inexpensive way to disseminate information.<sup>1</sup> In medicine, podcasts are increasingly used as an education tool, both in graduate medical education and for continuing medical education (CME).<sup>2</sup> The 2019 Infinite Dial study found that the total number of Americans aged 12 or older who have ever listened to a podcast exceeded 50% for the first time ever.<sup>3</sup>

Despite this rise in podcast consumption, there are still important sex-based differences between podcast hosts and listeners. The 2019 Infinite Dial study also found that among monthly podcast listeners, women lag behind men, with 46% of listeners identifying as women and 54% identifying as men.<sup>4</sup> Similarly, the role of podcast host has traditionally been held by white men and has been slow to change.<sup>5</sup> In fact, in 2017, only about one-third of the top 100 podcasts on Apple were hosted or co-hosted by women.<sup>6</sup>

This commentary explores sex and gender differences in podcasting, including why it matters to have diverse representation, sociocultural barriers to acquiring technological expertise, the impact of voice preference, and future directions for women entering the podcasting sphere. In researching this commentary, the authors found a relative dearth of information regarding women in the podcasting space, specifically regarding medical podcasts. This furthers the idea that more investigation into this topic needs to be done and is a possible area for future research.

## WHY SHOULD WE CARE?

Podcasts have influence. In the mainstream, this is evidenced by the massive rise of advertisers using podcasts for profit. A study by the Interactive Advertising Bureau reports that podcast advertising is expected to exceed \$1 billion by the year 2021.<sup>7</sup>

In medicine, residents and young physicians are increasingly using knowledge gained from podcasts to inform their practice. In a 2017 study, Riddell et al<sup>8</sup> found that of the residents surveyed, 88.8% listen to a podcast at least once a month, and 72.2% said podcasts changed their clinical practice. Another study published in 2020 found that nearly every medical specialty has produced a podcast.<sup>9</sup> To recount a more personal vignette, on a recent work shift with one of the authors of this commentary, a resident suggested esmolol for a case of refractory ventricular fibrillation. When asked what source he had used, he answered: a podcast.

With so many people listening to podcasts both in and out of medicine, the importance of diversity should be clear.

The beauty of a podcast is the freedom a host has in producing its content. Without diverse representation behind the microphone, we are missing out on unique perspectives, narratives, and learning points.

## TRADITIONALLY A MAN'S GAME

Podcasting, an amalgam of “iPod” (Apple Inc, Cupertino, CA) and “broadcast,” began in the early 2000s when a software developer and a video jockey from MTV (Music Television Network; Viacom International Inc, New York, NY) collaborated to create a new form of audio media distribution.<sup>10</sup> The rudimentary technology developed at a time when broadband Internet was not yet widely available. The podcast directories we use today, such as Apple’s iTunes, which allows users to stream, download, and subscribe to podcasts, also did not exist.<sup>11</sup> In fact, the only way to access podcasts was to search for specific content, then listen to it on your computer or wait for it to download to your iPod. The act of creating a podcast was even more complex and required multiple, specialized steps to record and distribute content. As Melissa Kiesche, Edison Research senior vice president, notes, “it was a tech heavy ask for people.... [I]t makes sense that this was an industry born from the depths of male tech culture.”<sup>4</sup>

Unfortunately, women still are playing catch-up. It is difficult to say if women’s underrepresentation on Apple’s top 100 podcasts is because women are not hosting as many podcasts or because they are not receiving recognition for their podcasts. A possible deterrent from women creating podcasts is that the mechanical process of producing a podcast requires knowledge and experience with recorders, microphones, and computerized editing software—a realm that has been historically associated with maleness.<sup>12</sup> A recent article in *Forbes* argued that women are not involved in technology and entrepreneurship because “society teaches girls to focus on perfecting rather than building, abiding by rules rather than breaking them.”<sup>13</sup>

## VOICE MATTERS

Another bias that may be limiting women’s access to equal success in podcasting is voice pitch. Studies show that

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both women and men prefer lower-pitched voices. In an article by Tigue et al,<sup>14</sup> “Voice Pitch Influences Voting Behavior,” the researchers modified recorded audio to make a lower-pitched and a higher-pitched version of each. They then assessed associations that study participants had with voice pitch for a number of traits, including level of attractiveness, dominance, intelligence, and leadership abilities. The study found that favorable personality traits were associated with lower-pitched voices.<sup>14</sup> Similarly, previous work found that people with lower-pitched voices are perceived as more competent and equipped to lead than people with higher voices.<sup>15</sup> Both men and women perceived those with lower vocal pitch to be more dominant than those with higher voices.<sup>16,17</sup>

Artificial intelligence such as Alexa (Amazon, Seattle, WA) and Siri (Apple) may further undermine the perceptions of women when it comes to voice. A recent United Nations report discussed the problems of having a virtual assistant with a woman’s voice and a submissive identity. It notes that “people like the sound of a male voice when it is making authoritative statements, but a female voice when it is being helpful.”<sup>18</sup> As these female virtual assistants become more ubiquitous, they perpetuate a gender stereotype of “woman” as “assistant.” The report goes on to explain that “this demonstrates that powerful technology can not only replicate gender inequalities, but also widen them.”<sup>18</sup>

It is not too far a stretch, then, to suggest that women, who generally have higher-pitched voices than men, may be at a disadvantage when podcasting. Not only may their voices be less popular, but they may be perceived as having less authority on a topic simply because they do not speak as deeply as a male counterpart.

There are important sex-based biological differences that contribute to voice pitch, which is primarily determined by the vibratory rate of the vocal folds. Longer vocal folds tend to vibrate at a lower frequency, which we interpret as a lower pitch. When testosterone levels rise during puberty in males, the vocal folds undergo hypertrophy. As a consequence, men’s vocal folds are approximately 60% longer than women’s and have a vibratory frequency 5 standard deviations lower.<sup>19</sup> Over the years, women have tried to compensate for this inherent difference. Margaret Thatcher, former British Prime Minister, famously underwent voice coaching to sound more powerful.<sup>20</sup>

This preference for lower voices makes one wonder that perhaps what is at play in the gender disparity of podcasting is a form of unconscious (implicit) bias. *Unconscious bias* is a prejudice or preference outside a person’s awareness. It is an automatic, quick judgment that happens in the brain based on people’s own culture, experiences, and environment.<sup>21</sup> Calvin Lai, who researches unconscious bias at Harvard University, suggests with coauthor Mahzarin Banaji<sup>22</sup> that

gender associations become more established the more that we are exposed to them. However, there is research to suggest that implicit bias may be malleable on the basis of social cues.<sup>23</sup> Changing the context in which we see or hear something may help to change our prior perceptions.<sup>24</sup> What the authors of this commentary would like to suggest is that rather than expecting women to adjust their voices to sound more masculine, perhaps *promoting* women’s voices by increasing their representation in podcasting will help to deconstruct this prejudice. By hearing more women as podcast hosts, in positions of authority, we may change our idea of what a leader should sound like.

As noted earlier, women’s podcast listenership approaches that of men but lags slightly behind. A recent study by Edison Research found that 61% of women would listen to podcasts if there were topics they were interested in.<sup>25</sup> Increasing the visibility of women-hosted podcasts would likely introduce more topics relevant to female listeners.

## WHAT ELSE CAN WE DO?

As podcasting has become more prevalent and lucrative, initiatives have started to address the underrepresentation of women. Current editing software such as GarageBand (Apple Inc), Adobe Audition (Adobe Systems, San Jose, CA), Hindenburg (Hindenburg Systems, Hvidovre, Denmark), and others, as well as hosting platforms such as Apple and Libsyn (Liberated Syndication, Pittsburgh, PA), have made it easier than ever to create, publish, distribute, and listen to podcasts. Spotify (Stockholm, Sweden) and Google (Mountain View, CA) offer training programs and access to podcasting mentors. New York City public radio, WNYC, hosts an annual festival specifically for women in podcasting called “Werk It!” which similarly provides instructive courses and networking opportunities.<sup>26</sup>

Long-established male leaders in the field with large audiences of their own are creating platforms to highlight female podcast hosts. Roman Mars from Radiotopia started a Kickstarter campaign to fund 3 new podcasts for the network, each specifically hosted by women.<sup>27</sup> Ira Glass, of *This American Life*, similarly seeks to highlight female hosts to continue the momentum. In the world of medical podcasting, Mel Herbert, MD, of Emergency Medicine Reviews and Perspectives (EM:RAP), a major CME podcast for emergency physicians, stepped down as co-host and hired a female emergency medicine doctor, Jan Shoenberger, MD, to replace him.<sup>28</sup> Hippo Education, another major medical CME podcast, has a female physician, Mizuho Morrison, DO, as editor-in-chief.<sup>29</sup> Despite those gestures, we still have a long way to go in bridging the gender divide. A quick search of the top 25 medical podcasts reveals that only 2 are hosted by women.<sup>30</sup>

A groundbreaking podcast for female hosts, and for the field in general, was the true-crime podcast, “Serial,” which came out in 2014 and had a million listeners within 1 month of its launch. This highly successful podcast series was created, produced, and hosted by women: host Sarah Koenig co-created and co-produced with Julie Snyder.<sup>31</sup> This demonstrated that women have what it takes to create exceptional, popular content regardless of voice pitch. Koenig has become a role model for women podcasters, and her work likely opened the door for other women to achieve success in the field.

We are on the right track, but this commentary is meant as a call to action. It has become clear that podcasts have power. They carry economic weight, and they can influence our thinking in the public sphere and in our medical practice. The voices we hear matter, and gender diversity is imperative for representing a breadth of viewpoints and experiences. Feminist allies need to provide mentorship and sponsorship for female hosts. As listeners, we should amplify women’s voices by actively seeking out podcasts created and hosted by women. ❖

#### Disclosure Statement

The author(s) have no conflicts of interest to disclose. Dr Werner is a podcast host for EMRA\*Cast. Dr Lewiss is the host and creator of the Visible Voices podcast. Dr Pensa is the host and creator of Doctors and Litigation: The L Word. Dr McGregor has no conflicts of interest to disclose.

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