


Improved Patient Experience and Outcomes: Is Patient–Provider Concordance the Key?

Journal of Patient Experience
Volume 9: 1-7
© The Author(s) 2022
Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/23743735221103033
journals.sagepub.com/home/jpx


Sonia V. Otte, MMS, PA-C¹ 

Abstract

Health disparities remain ubiquitous in the United States despite initiatives by the federal government and other organizations. A long-term solution for health inequity is needed in order to help improve patient outcomes for all. The purpose of this review is to examine if racial, gender, or multifactorial concordance (eg, race, age, gender, education, language) between patient and provider leads to a better patient experience and improved health outcomes. A PubMed search for articles published between 2016 and 2021 resulted in 23 separate studies that met inclusion criteria. The results from these studies were inconclusive in determining an association between patient–provider concordance and patient outcomes. Further research is needed to evaluate the positive, neutral, and sometimes negative impact of patient–provider concordance. By diversifying healthcare professions and improving cultural competency and communication training programs, providers may be better prepared to care for diverse populations in both concordant and discordant patient relationships.

Keywords

clinician–patient relationship, communication, culture/diversity, patient/relationship-centered skills, patient engagement, patient satisfaction, patient–provider concordance, patient outcomes

Introduction

Proper access to health care in the United States (US) allows communities to receive the preventive, acute, chronic, and emergent care services needed to maintain and preserve health. However, there are a number of complex systemic issues that prohibit all US communities from receiving equitable care. The *social determinants of health* are factors that collectively affect the health of a group or individual, including age, race, ethnicity, gender, sexual identity, disability status, socioeconomic standing, and geographic location (1). If these factors lead to a better or worse health outcome for one group compared to another, it is known as a *health disparity* (1). Health disparities are often based on a social, financial, physical, or other disadvantage faced by a specific group or population (1). These differences limit the ability of all people to attain optimal health, known as *health equity* (1). Although a number of initiatives and efforts by the federal government and other organizations have been made to minimize these existing gaps in healthcare, health disparities remain ubiquitous in the United States.

Significant research is needed to examine factors that affect patient outcomes and promote progress towards

health equity. Prior research has hypothesized that racial and ethnic disparities may be mitigated if the patient and provider share the same race due to improved communication and increased trust (2). This shared identity between patient and provider is known as *patient–provider concordance* (3). In addition to race, many factors can contribute to patient–provider concordance, including language, age, gender, values, and socioeconomic status (3). Thus, later research has evaluated how a broader range of patient–provider concordance can affect the patient experience and overall care of the patient. Most of these studies continue to focus on individual forms of concordance and do not consider the impact of multiple factors at once. Therefore, additional research may be beneficial to assess if racial, gender, or multifactorial concordance of the patient and provider leads

¹ Independent Scholar.

Corresponding Author:

Sonia V. Otte, Independent Scholar.
Emails: soniavotte@gmail.com



to a better patient experience and improvement in health outcomes.

Methods

A comprehensive PubMed search was conducted for this review. The initial search utilized the terms “patient,” “provider,” and “race concordance.” To ensure a range of proper search terms were used, 3 additional searches were conducted using alternate terms for “provider,” including “physician,” “clinician,” and “practitioner.” These same 4 searches were conducted again by replacing “race concordance” with “racial concordance,” “gender concordance,” “social concordance,” and “multifactorial concordance,” respectively. As summarized in Table 1, the search was limited to studies published between 2016 and 2021. Exclusion criteria included publication date greater than 5 years, lack of applicability to the topic, patients < 18 years old, use of dental services, focus on patient’s preference of provider, and lack of a defined patient outcome. Inclusion criteria included studies that evaluated patient–provider concordance (ie, race, gender, social, and multifactorial) and used a measurable patient outcome. Based on these criteria, a total of 23 separate studies were included in this review.

Discussion

Although most studies consider only one aspect of concordance, a 2019 study by Rand and Berger combined patient–provider racial, gender, and value concordance in their consideration of the logistical and ethical impact of accommodating patients’ requests for specific providers (4). While their study included different forms of patient–provider concordance, the review did not evaluate the interconnection of racial and gender concordance, as well as the potential cumulative effect of multiple shared traits (4). This review focuses on the individual and combined impact of racial, gender, and multifactorial concordance on patient experience and outcomes. The overall results of this review are summarized in Tables 2 and 3.

Racial Concordance

In many countries and cultures, people often find comfort in interacting with those who share the same racial background. Through a presumed likeness, many may feel that there is an instant shared connection, natural relatability, and an increased level of trust from the start. Therefore, some researchers have explored how well this racial connection translated into the patient experience. During patient visits that often involve increased vulnerability or a need for guidance, most people may find comfort in turning to someone

Table 1. Literature Review Process and Application of Exclusion Criteria.

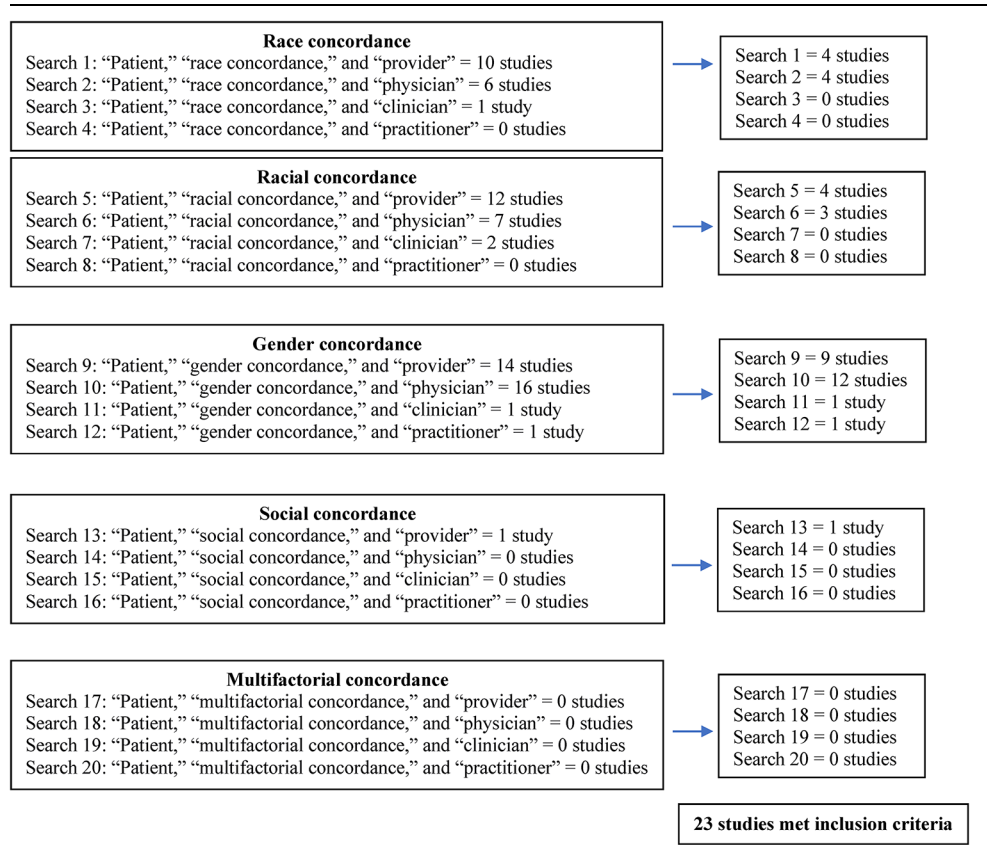


Table 2. Results of Individual Studies.

Year	First author	Study focus	Concordance type	Findings
2021	Chu, J	Patient satisfaction in immigrant patients	Racial concordance	× RC
2021	Lau, ES	Patient outcomes	Gender concordance	× GC
2021	Mendoza-Grey, S	Mammography screening in Latinas	Racial concordance; Gender concordance	× RC +GC
2021	Prasad, T	Patient experience	Gender concordance	× GC
2020	Chekijian, S	Patient satisfaction with emergency care	Gender concordance	+GC
2020	Delpech, R	Preventive practices	Gender concordance	× GC
2020	Saha, S	Patients' ratings of physicians and decision-making	Racial concordance	+RC
2020	Takeshita, J	Patient experience ratings	Racial concordance; Gender concordance	+RC × GC
2019	Assari, S	Physician visit satisfaction	Racial concordance	+RC
2019	Crawford, D	Hospitalist performance	Racial concordance; Gender concordance	× RC × GC
2019	Ma, A	Provider visits	Racial concordance	+RC
2019	Nazione, S	Patient trust, perceptions, and intentions	Racial concordance	× RC
2019	Oguz, T	Patient satisfaction in Hispanic patients	Racial concordance	– RC (Hispanic men) × RC (Hispanic women)
2019	Zhao, C	Surgical outcomes	Racial concordance; Gender concordance	× RC +GC
2018	Eggermont, D	Antibiotic prescribing	Gender concordance	+GC
2018	Greenwood, B	Survival following acute myocardial infarction	Gender concordance	+GC
2018	Noro, I	Patient satisfaction in Japanese patients	Gender concordance	+GC
2018	Shen, M	Patient-physician communication	Racial concordance	× RC
2018	Smith, GH	Patient trust, satisfaction, and decision-making propensity	Racial concordance; Gender concordance	× RC × GC
2017	Malhotra, J	Cancer screening	Racial concordance; Gender concordance	– RC (Hispanics) +GC
2017	Scheid, T	Patient trust for low socio-economic status women	Racial concordance; Gender concordance	× RC × GC
2016	Engler, J	Cancer screening	Gender concordance	+GC (male) × GC (female)
2016	Kurek, K	Cardiovascular risk factor control in patients with type 2 diabetes	Social concordance	+SC (blood pressure control)

Abbreviations: RC, racial concordance; GC, gender concordance; SC, social concordance. +, positive impact on patient outcomes; ×, neutral impact on patient outcomes; –, negative impact on patient outcomes.

Table 3. Summary of Results.

	Patient outcome			Total studies identified
	Positive impact	Neutral impact	Negative impact	
Racial concordance	4 (28.6%)	8 (57.1%)	2 (14.3%)	14
Gender concordance	8 (53.3%)	7 (46.7%)	0 (0%)	15
Multifactorial concordance (eg, social concordance)	1 (100%)	0 (0%)	0 (0%)	1

who looks like them, speaks like them, and understands their background (4).

Although a complex topic to address, researchers around the world have taken a variety of approaches to evaluate

the importance of racial concordance in the patient–provider relationship. Through one-time simulated scenarios, phone interviews, focus groups, surveys, and retrospective data, researchers have attempted to find a one-size-fits-all answer to this question. For instance, older studies often used only 2 different races (eg, White and Black) to evaluate the overall impact of patient–provider racial concordance. Due to their limited scopes, the results of these studies were either mixed or were not broadly applicable. However, when the range of participants' races broadened, different trends emerged.

A 2019 Ma et al (5) study reviewed Medical Expenditure Panel Survey (MEPS) data from 2014 to 2015 to evaluate if patient–provider racial concordance affected patient visits to a provider. Using 25 045 respondents, they found that Hispanic and Asian patients in racially concordant patient–provider relationships were more likely to seek preventative care, as well as visit a provider for new and ongoing medical concerns (5). However, another recent study about patient–provider concordance of Hispanic patients yielded different results. A 2017

study by Malhotra et al (6) revealed that Hispanic patients were noted to have improved patient outcomes (eg, higher cancer screening rates) with racially discordant patient–provider relationships. In a 2019 study of 11 514 respondents, Oguz (7) further explored the racially discordant patient–provider relationships within Hispanic communities by separating the results based on gender. Hispanic women were not found to have any significant association between patient–provider racial concordance and overall satisfaction (7). However, Hispanic men in racially concordant patient–provider relationships were noted to have less satisfaction with their overall medical care based on the provider’s listening skills and ability to provide clear explanations (7). Therefore, the cause of the dissatisfaction for Hispanic men was most associated with provider communication.

Of the 14 identified studies, 4 (5,8–10) found that patient–provider racial concordance led to a positive impact on patient outcomes. In a study by Saha and Beach (8), racial concordance was evaluated by using physician video vignettes with 107 Black and 131 White participants. The study concluded that patient–provider racial concordance in combination with patient-centered communication led to improved decision-making outcomes for Black patients (8). Studies featuring surveys also noted the positive effects of racial concordance through higher patient experience scores (9) (via the 117 589 Press Ganey Outpatient Medical Practice Surveys evaluated) and satisfaction (10).

Regardless of the methodology and patient setting, most reviewed studies resulted in no significant association between patient–provider racial concordance and improved patient outcomes. Racially concordant care did not affect factors such as quality of surgical care (11), hospitalist performance (12), patient trust (13,14), and quality of care outcomes (ie, trust, satisfaction, and decision-making propensity) (15,16). Two of the studies focused primarily on provider communication (14,16). The results found that patient-centered communication (16) and provider self-disclosure (14) were more influential than racial concordance alone in improving patient outcomes.

Gender Concordance

When considering the overall patient experience and patient-centered care, the effect of patient–provider gender concordance is another important factor to assess. Similar to racial concordance, a presumed likeness may cause the patient to feel more comfortable with the provider from the onset. In 8 of the 15 studies identified, patient–provider gender concordance had a notable positive impact on patient outcomes. The specifics of the specialty and clinical scenario often influenced if the patient–provider gender concordance improved patient outcomes in only females, only males, or both. In 2 of these studies, patient–provider gender concordance for both females and males led to positive patient care measures, including improved quality of surgical care (11) and increased cancer screening rates (6).

Conversely, patient–provider gender concordance in only one gender led to improved patient outcomes in the remaining 6 studies. In a retrospective study of 581 797 patients by Greenwood et al (17), patient–provider gender concordance for females was found to increase the likelihood of survival from an acute myocardial infarction (AMI). The study noted that female patients managed by male physicians had a decreased likelihood of surviving an AMI unless the male physician had historically treated more female patients or worked with more female health professionals (17). In the same study, female physicians garnered similar care outcomes for both male and female patients (17). These outcomes suggest the impact of gender concordance varies based on the clinical scenario. Among the other identified studies, female patient–provider gender concordance was associated with reduced antibiotic prescribing for sore throat (18), greater likelihood of recent mammography (19), and patient satisfaction with primary (20) and emergency care (21). Male patient–provider gender concordance was associated with preventative care-focused outcomes, including increased male-specific cancer screenings (22).

The final 7 studies found no strong association between patient–provider gender concordance and improved patient outcomes. Although a 2021 review noted a possible effect of gender concordance on patient outcomes, Lau et al (23) determined that the data was too limited to be conclusive. With more definitive results, the remaining identified studies found that patient–provider gender concordance had no impact on patient experience and satisfaction ratings of outpatient visits (9) (via the Press Ganey Outpatient Medical Practice Survey), hospitalist performance (12) (via the Tool to Assess Inpatient Satisfaction with Care from Hospitalists), quality of care outcomes (ie, trust, satisfaction, and decision making propensity) (15), patient trust (13), patient experiences (24), and preventive practices (25).

Multifactorial Concordance

Although often studied in individual components, the patient–provider relationship is notably complex and multifaceted. A prominent 2008 study by Street et al (26) originally alluded to a cumulative effect by stating that perceived personal similarity to a provider “is a multidimensional construct with some components more strongly related to outcomes than others.” Therefore, assessment of the collective multifactorial impact of patient–provider concordance on patient outcomes may provide greater insight than a siloed approach.

Based on the close connection between social characteristics and health disparities, Johnson et al (27) termed the concept of patient–provider social concordance in 2011. Their study defined social concordance as an aggregate measure of age, education, gender, and race (27). In this seminal study of 489 patients and 64 physicians, their findings revealed that patient–provider social concordance is correlated to increased patient satisfaction and patient positive affect. They also incidentally noted that racial concordance

was the most dominant factor within social concordance. In spite of this high correspondence, Johnson et al (27) insisted that patient–provider relationships are “more complex and rich than is represented by a single marker” such as race.

Due to limited research surrounding multifactorial concordance, only one study was identified that met the inclusion criteria for this review. Social concordance was reevaluated and redefined by Kurek et al (28) using “age, gender, language, and race/ethnicity” in a 2016 study of 994 adult diabetic patients. Using a composite score, the results revealed that patient–provider social concordance was associated with improved blood pressure control in patients with Type 2 diabetes but not with mitigation of other cardiovascular risk factors (28). Of the 4 components of social concordance in this study, the impacts of language and racial concordance were noted as the most influential (28).

The definitions for social concordance used for these 2 studies were not identical but aligned in 3 of the 4 areas. Although the social factors varied, the results of both of these studies suggest that social (or multifactorial) patient–provider concordance leads to improved patient outcomes. With the inclusion of factors such as education in the Johnson et al (27) study, the potential association of patient–provider social concordance with health disparities becomes more pronounced.

Limitations

Overall, the direct findings from these studies were inconclusive in establishing the effect of patient–provider concordance on patient experience and outcomes. Although several studies found that racial, gender, or multifactorial concordance improved patient outcomes (eg, improved cancer screening rates), there are significant limitations in the number of studies available, as well as the methods in which the studies were conducted (6). Of note, a majority of studies included only one encounter with the provider, were retrospective in nature, included simulated scenarios, or produced varied results based on the races/ethnicities of the patients. In addition, these studies largely did not consider the impact of (1) racial concordance on patients identifying with more than one racial background or (2) gender concordance with patients identifying as other than male or female.

Recommendations and Future Impact

As many of the reviewed studies highlighted, further research in this domain is required to determine if patient–provider concordance is associated with improved patient experience and outcomes. Due to the current lack of diversity amongst healthcare providers, advocating for patient–provider concordance without conclusive evidence may lead to harmful outcomes, including exacerbation of health disparities, “increased stereotyping, social segregation, and xenophobia.” (4) Therefore, in addition to promoting further research, many studies supported some combination of cultural competency, cultural humility, and communication training for

graduate medical students and practicing providers (9,11,14,29–32). Although promising to know that patient–provider concordance may not be required to achieve positive patient experiences and outcomes, many may contest that it is difficult or even impossible for providers to obtain these skills within a homogenous classroom setting. However, it may be possible if the classroom could capture the unique life experiences and perspectives of both faculty and students of diverse genders, gender identities, sexual orientations, racial/ethnic backgrounds, religions, socioeconomic statuses, and ages. Thus, regardless of the effectiveness of cultural competency, cultural humility, and communication training, diversity within graduate medical education programs and the provider workforce remains an imperative step towards eliminating health disparities.

Conclusion

Data from this review revealed no conclusive relationship between patient–provider concordance (ie, racial, gender, and multifactorial) and improved patient experiences and health outcomes. These inconclusive results demonstrate the positive, neutral, and sometimes negative impact of patient–provider concordance. Through further inclusive research, providers and healthcare facilities can learn to maximize the positive impact, evaluate the neutral impact, and minimize the negative impact of concordant patient–provider relationships. Diversifying the healthcare professions and improving cultural competency and communication training programs may also better prepare providers to care for diverse populations in both concordant and discordant patient relationships. These combined efforts will help with further progress towards health equity.

Acknowledgments

I would like to express sincere gratitude to Laura Witte, PhD, PA-C, who provided continuous guidance and support throughout the process.

Declaration of Conflicting Interests

The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author received no financial support for the research, authorship, and/or publication of this article.

ORCID iD

Sonia V. Otte  <https://orcid.org/0000-0001-7310-516X>

References

1. U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Disparities, <https://www.healthypeople.gov/2020/about/foundation-health-measures/Disparities#6> (accessed 13 February 2021).

2. Meghani SH, Brooks JM, Gipson-Jones T, Waite R, Whitfield-Harris L, Deatrick JA. Patient-provider race-concordance: does it matter in improving minority patients' health outcomes? *Ethn Health*. 2009;14(1):107-30. DOI: 10.1080/13557850802227031.
3. Cooper LA, Powe NR. Disparities in patient experiences, health care processes, and outcomes: the role of patient-provider racial, ethnic, and language concordance. Report, The Commonwealth Fund, July 2004.
4. Rand LZG, Berger Z. Disentangling evidence and preference in patient-clinician concordance discussions. *AMA J Ethics*. 2019;21(6):E505-512. DOI: 10.1001/amajethics.2019.505.
5. Ma A, Sanchez A, Ma M. The impact of patient-provider race/ethnicity concordance on provider visits: updated evidence from the medical expenditure panel survey. *J Racial Ethn Health Disparities*. 2019;6(5):1011-20. DOI: 10.1007/s40615-019-00602-y.
6. Malhotra J, Rotter D, Tsui J, Llanos AAM, Balasubramanian BA, Demissie K. Impact of patient-provider race, ethnicity, and gender concordance on cancer screening: findings from Medical Expenditure Panel Survey. *Cancer Epidemiol Biomarkers Prev*. 2017;26(12):1804-11.
7. Oguz T. Is patient-provider racial concordance associated with Hispanics' satisfaction with health care? *Int J Environ Res Public Health*. 2019;16(1):31. DOI: 10.3390/ijerph16010031.
8. Saha S, Beach MC. Impact of physician race on patient decision-making and ratings of physicians: a randomized experiment using video vignettes. *J Gen Intern Med*. 2020;35(4):1084-91. DOI: 10.1007/s11606-020-05646-z.
9. Takeshita J, Wang S, Loren AW, Mitra N, Shults J, Shin DB, et al. Association of racial/ethnic and gender concordance between patients and physicians with patient experience ratings. *JAMA Netw Open*. 2020;3(11):e2024583. DOI: 10.1001/jamanetworkopen.2020.24583.
10. Assari S. Psychosocial determinants of communication satisfaction in racially concordant and discordant patient-physician interactions. *J Med Res Innov*. 2019;3(2):e000165. DOI: 10.32892/jmri.165.
11. Zhao C, Dowzicky P, Colbert L, Roberts S, Kelz RR. Race, gender, and language concordance in the care of surgical patients: a systematic review. *Surgery*. 2019;166(5):785-92.
12. Crawford D, ParANJI S, Chandra S, Wright S, Kisuule F. The effect of racial and gender concordance between physicians and patients on the assessment of hospitalist performance: a pilot study. *BMC Health Serv Res*. 2019;19(1):247. DOI: 10.1186/s12913-019-4090-5.
13. Scheid TL, Smith GH. Is physician-patient concordance associated with greater trust for women of low socioeconomic status? *Women Health*. 2017;57(6):631-49. DOI: 10.1080/03630242.2016.1202881.
14. Nazione S, Perrault EK, Keating DM. Finding common ground: can provider-patient race concordance and self-disclosure bolster patient trust, perceptions, and intentions? *J Racial Ethn Health Disparities*. 2019;6(5):962-72.
15. Smith GH, Hampton C, Brandon WP. Physicians, physician extenders and health outcomes: race, gender and patient-health provider concordance in North Carolina Medicaid. *J Health Care Poor Underserved*. 2018;29(1):530-55. DOI: 10.1353/hpu.2018.0035.
16. Chu J, Wang N, Choi YS, Roby DH. The effect of patient-centered communication and racial concordance on care satisfaction among U.S. immigrants. *Med Care Res Rev*. 2021;78(4):404-12. DOI: 10.1177/1077558719890988.
17. Greenwood BN, Carnahan S, Huang L. Patient-physician gender concordance and increased mortality among female heart attack patients. *Proc Natl Acad Sci U S A*. 2018;115(34):8569-74.
18. Eggermont D, Smit MAM, Kwestroo GA, Verheij RA, Hek K, Kunst AE. The influence of gender concordance between general practitioner and patient on antibiotic prescribing for sore throat symptoms: a retrospective study. *BMC Fam Pract*. 2018;19(1):175. DOI: 10.1186/s12875-018-0859-6.
19. Mendoza-Grey S, Ramos-Muniz J, Armbrister AN, Abraido-Lanza AF. Mammography screening among Latinas: does gender and ethnic patient-physician concordance matter? *J Immigrant Minority Health*. 2021;23(5):986-92. DOI: 10.1007/s10903-021-01170-2.
20. Noro I, Roter DL, Kurosawa S, Miura Y, Ishizaki M. The impact of gender on medical visit communication and patient satisfaction within the Japanese primary care context. *Patient Educ Couns*. 2018;101(2):227-32. DOI: 10.1016/j.pec.2017.08.001.
21. Chekijian S, Kinsman J, Taylor RA, Ravi S, Parwani V, Ulrich A, et al. Association between patient-physician gender concordance and patient experience scores. Is there gender bias? *Am J Emerg Med*. 2021;45:476-82. DOI: 10.1016/j.ajem.2020.09.090.
22. Engler J, Dahlhaus A, Güthlin C. The readiness of German GPs to recommend and conduct cancer screening is associated with patient-physician gender concordance. Results of a survey. *Eur J Gen Pract*. 2017;23(1):11-9.
23. Lau ES, Hayes SN, Volgman AS, Lindley K, Pepine CJ, Wood MJ. Does patient-physician gender concordance influence patient perceptions or outcomes? *J Am Coll Cardiol*. 2021;77(8):1135-8. DOI: 10.1016/j.jacc.2020.12.031.
24. Prasad T, Buta E, Cleary PD. Is patient-physician gender concordance related to the quality of patient care experiences? *J Gen Intern Med*. 2021;36(10):3058-63. DOI: 10.1007/s11606-020-06411-y.
25. Delpech R, Bloy G, Panjo H, Falcoff H, Ringa V, Rigal L. Physicians' preventive practices: more frequently performed for male patients and by female physicians. *BMC Health Serv Res*. 2020;20(1):331. DOI: 10.1186/s12913-020-05136-2.
26. Street RL, O'Malley KJ, Cooper LA, Haidet P. Understanding concordance in patient-physician relationships: personal and ethnic dimensions of shared identity. *Ann Fam Med*. 2008;6(3):198-205.
27. Johnson Thornton RL, Powe NR, Roter D, Cooper LA. Patient-physician social concordance, medical visit communication and patients' perceptions of health care quality. *Patient Educ Couns*. 2011;85(3):e201-8.
28. Kurek K, Teevan BE, Zlateva I, Anderson DR. Patient-provider social concordance and health outcomes in patients with type 2 diabetes: a retrospective study from a large federally qualified health center in Connecticut. *J Racial Ethn Health Disparities*. 2016;3(2):217-24.

29. Shen MJ, Peterson EB, Costas-Muñiz R, Hernandez MH, Jewell ST, Matsoukas K, et al. The effects of race and racial concordance on patient–physician communication: a systematic review of the literature. *J Racial Ethn Health Disparities*. 2018;5(1):117-40.
30. Jetty A, Jabbarpour Y, Pollack J, et al. Patient–physician racial concordance associated with improved healthcare use and lower healthcare expenditures in minority populations. *J Racial Ethn Health Disparities*. 2021;9(1):68–81. DOI: 10.1007/s40615-020-00930-4
31. Snyder CR, Truitt AR. Exploring the provider preferences of multiracial patients. *J Patient Exp*. 2020;7(4):479-83.
32. Wiltshire J, Allison JJ, Brown R, Elder K. African American women perceptions of physician trustworthiness: a factorial survey analysis of physician race, gender and age. *AIMS Public Health*. 2018;5(2):122-34.