


The Influence of In-Group Membership on Trust in Health-Care Professionals in Kazakhstan

Journal of Patient Experience
2020, Vol. 7(4) 554-560
© The Author(s) 2019
Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/2374373519864827
journals.sagepub.com/home/jpx


Brett J Craig, PhD¹ , Gulaiim Almatkyzy, MS²,
and Yuliya Yurashevich, MA³

Abstract

Background: Trust in providers is key to positive health outcomes. However, perceptions of trust in health-care professionals can vary by population. Factors beyond the immediate behaviors of health-care professionals such as group association may influence perceptions of trust. **Objective:** To examine the possible association of in-group membership and levels of trust in health-care professionals in Kazakhstan. **Method:** We used an online survey including the General Trust in Physicians scale along with demographic questions and a question regarding family members as health-care professionals. Bivariate analysis was used to compare the mean differences between general levels of trust and sociodemographic characteristics. Then multivariate analysis was conducted to examine the association between having a family member who is a health-care professional and general level of trust in health-care professionals among Kazakhstani citizens. Statistical tests were 2-sided. **Results:** A total of 497 Kazakhstani participants completed the survey. In adjusted multivariate regression, participants with family members as health-care professionals scored significantly higher on the trust scale ($P < .001$), and other factors such as language ($P < .001$) and interaction term of language and education ($P < .05$) were also shown to be influential in the general level of trust. **Conclusion:** Further examinations of how group membership influences reported trust levels in health-care professionals in Kazakhstan are warranted. Such studies would be beneficial if trust in health-care professionals is to be understood and improved in order to achieve more desirable health outcomes.

Keywords

trust, cultural characteristics, language, Kazakhstan, health-care professionals

Introduction

There are many positive outcomes when trust is present in the patient–provider relationship. When patients have greater trust in their provider, they have been more comfortable disclosing sensitive information (1), more satisfied with the interaction (2–4), and more adherent to treatments prescribed by their providers (2,5,6). Conversely, patients who report difficulty in disclosing sensitive information to their providers are less likely to be accurately diagnosed (7–9) and adhere to the treatment (2,6). Greater patient trust is also associated with greater persuasiveness of provider communication (5), patient perceptions of improved health status (6), and higher ratings of provider caring (7). The positive outcomes of a trusting relationship with a doctor are significant but understanding what creates trust in health-care providers is not as straightforward, and it may extend beyond provider behavior.

Trust in Health-Care Providers

Trust is characterized as a patients' confidence in a doctor's ability to choose the best course of action in a vulnerable situation, to keep a patient's best interests in mind when choosing the course of treatment (3,10–12). Trust is central to the provider–patient interaction because the situation

¹ Liberal Arts Department, St Louis College of Pharmacy, St Louis, MO, USA

² School of Social and Behavioral Health Sciences, College of Public Health and Human Sciences, Oregon State University, Corvallis, OR, USA

³ Communication Department, College of Letters and Science, University of Wisconsin-Milwaukee, Milwaukee, WI, USA

Corresponding Author:

Brett J Craig, Liberal Arts Department, St Louis College of Pharmacy, 4588 Parkview Pl, St Louis, MO 63123, USA.
Email: brettjcraig@gmail.com



itself is one of vulnerability, where the patient is dependent on the assistance of the provider (4,12,13). Trust or a lack of trust can emerge from this dependence through the provider's behavior.

Behaviors that contribute to building patient trust include nonverbal cues (10), verbal messages (3,13), and empathy and listening skills (1,2,4,10,13,14). As a result of trust established through interaction, providers make more accurate diagnoses (9) and persuade patients to address a health concern and change behavior (5).

A patient's perception of a provider's medical competence was another requirement for trust (1,11,15,16). Technical excellence in performing medical procedures is not enough for a patient to trust a provider (13). A provider's effective conveyance of all the nuanced medical language in lay terms promotes patients' trust (13).

Beyond Patient–Provider Interactions

In addition to the factors immediately relevant to the interpersonal interactions between providers and patients that influence trust, there are other factors which contribute to provider behaviors and attitudes which can then influence patient trust. For example, a negative work environment which creates distress among physicians can prevent them from providing quality care (7,17). Additionally, providers that are inundated with time-consuming bureaucratic work lose time and energy on tasks, leaving little left for their patients (7). These work-related factors occur outside the provider–patient interaction but are relevant as they influence provider behavior which then influences patient trust.

Similarly, factors outside of the provider–patient interaction and even outside of work-related factors can influence both provider and patient behavior in health-care settings. At the societal level are norms that govern group membership, and interactions provide the space for these norms to play out. Therefore, in issues of trust and perception, cultural contexts and political histories become relevant in contemporary provider–patient interactions. In societies where social group boundaries often take precedence over individual identities, the salience of such boundaries can greatly influence the regulation of relationships with in-group and out-group members (18). Social group boundaries frequently include race, ethnicity, gender, and age while in some context, boundaries are drawn at even smaller levels to distinguish who belongs and who is familiar and who is not (19–22). Group membership relates to trust (23), and another's group membership can cue someone to either trust or not trust (24).

Trust and Health Care in Kazakhstan

Trust in health-care professionals during Soviet times suffered as doubts about the government's ability to provide medical services that created feelings of abandonment within the population (25). Many changes have occurred

since independence in the early 1990s, with a move toward a primary health-care model that aims to be patient-centered rather than disease-centered (26). However, corruption and informal payments are still prevalent (27,28), and Kazakhstan continues to struggle toward promised universal health coverage (29). Promises made by Kazakhstan's government of providing health care to all were not reflected in reality as out of pocket costs increased while quality did not (29). Perceptions of low quality were (and continue to be) influenced by long queues, disrespectful attitudes from providers, and the lack of available medicines. Thus, informal payments increasingly became necessary in accessing quality or even low-quality services (30,31).

Research in Western settings indicates a predisposition of general trust in health-care providers (32,33). However, many post-Soviet countries are described as having a general lack of trust, and some evidence suggests that Kazakhstan experiences some of this as well due to these historical influences (25,27,28,30,34). This could be in large part due to continued inequality in access to publicly funded health-care services and perceptions of quality (34).

In addition to historical influences on the perception of health care, contextual influences such as social identities that affect interactions are also relevant. Among Kazakhs, ethnicity and family are very important, having an indirect effect on interpersonal trust in others. This lack of trust includes the belief that others will not try to be helpful if a need presents itself (20). The following research has found contemporary perceptions and preferences that also influence provider–patient interactions. A prioritization of familial support over health literacy in maternity care (35) as well as the salience of ethnic identities in patient responses to provider attempts to encourage health behavior change (36) that indicates the relational aspects of trust as it pertains to in-group belonging. The salience of group boundaries and preference for family networks may add additional influences on trust in providers in Kazakhstan. In order to examine whether having family members as health-care providers in Kazakhstan affected the general level of trust in health-care providers, we tested the following research questions:

R1: What is the general level of trust in health-care professionals among Kazakhstani citizens?

R2: Do people in Kazakhstan with family members as health-care professionals trust health-care professionals in general more than those without family members in the health-care field?

Methods

Participants

After receiving approval from ethics committees from research and educational institutions in both the United States and Kazakhstan, we conducted an online questionnaire. Eligible participants were citizens of the Republic of

Kazakhstan and at least 18 years of age. After being presented with informed consent information, participants completed structured questionnaires containing basic demographic questions as well as a scale measuring general trust in physicians. Participants were able to complete the questionnaire in either Russian or Kazakh, depending on language preference. We used snowball sampling through an online posting of the questionnaire on social media sites to recruit participants to take the questionnaire and then repost upon completion.

Measures

The questionnaire contained the following variables which were collected by self-report: language (Russian and Kazakh), ethnicity (Russian, Kazakh, and Other), gender, age in years, years of education, and region of residence. For the region of residence, we coded responses as belonging to 1 of the 14 regions in Kazakhstan, including the 4 cities (Almaty, Astana, Baikonur, and Shymkent) not belonging to the surrounding regions. In addition, a question regarding whether the participant has a family member in the health-care professions was included.

The General Trust in Physicians scale is one measure that can be used to assess trust in physicians in general and not a specific provider (37). This scale uses the definition of trust as

... the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party. (p. 712, 38)

Building on this definition of trust, the scale measures general trust (as opposed to interpersonal trust) which focuses on the attitudes toward collective systems or social organizations (39). The scale measures a participant's general level of trust in physicians by soliciting responses to statements such as "Doctors always use their very best skill and effort on behalf of their patients" or "Doctors in general care about their patients' health just as much or more as their patients do." The scale contains 11 statements, and scores range from 11 to 55 with higher scores indicating more trust in doctors generally. Questions requiring recoding were recoded before analysis and summed. The scale was translated into both Russian and Kazakh languages and then back-translated into English by different translators. Any discrepancies were then resolved.

Statistical Analysis

This study hypothesized that participants with family members as health-care professionals would have a higher level of general trust than those without family members in the health-care field. We used descriptive statistics to describe sociodemographic characteristics of eligible participants.

Then bivariate analysis was conducted to see the mean differences between groups. Two-sample *t* test was used for 2 groups (gender, language preference, and whether a person has a doctor-relative or not in the family) and 1-way analysis of variance (ANOVA) was used for multiple groups (ethnicity, residential region, age, and education level). The dependent variable in bivariate analysis was the general level of trust in health-care professionals. If ANOVA showed significant differences, then Tukey simultaneous test was conducted to see the mean differences between a pair of groups. Further, we conducted multiple linear regression analysis to predict the effect of having a family member who is a health-care professional on the general level of trust in health-care professionals after adjusting for language preference, education level, residential region, and age groups. The language preference was recoded as 1 for Kazakh and 0 for Russian, education level was recoded as 1 for graduate level and 0 for otherwise, and having a doctor-related was recoded as 1 for yes and 0 for no. Other variables (region and age) had categorical responses. We also included the interaction term between education level and language preference. All statistical tests were conducted at a 2-sided significance level of 0.05 using R software (version 3.5).

Results

A total of 497 participants completed the online questionnaire, and 490 of them were eligible to participate in our study. Individuals excluded from the study ($n = 7$) did not meet the citizenship criteria ($n = 3$) or did not answer the citizenship question ($n = 4$).

Demographic Characteristics

The sociodemographic characteristics of participants ($n = 490$) can be seen in Table 1. A majority of the participants were young adults aged either between 18 and 24 (37.6%) or 25 and 34 (43.7%). There were more female participants (69.2%), and more than three-quarters (76.7%) preferred to take the Russian version of the questionnaire. More than 90% of the individuals were ethnic Kazakhs, whereas ethnic Russians consisted of 6%. Most of the participants had a college degree (65.5%), and the region with the largest percentage of participants (46%) was living in the capital city, Astana. Around half of the participants answered that they have a family member who is a medical professional (51.3%) in their household (Table 1).

Bivariate Analysis

Two-sample *t* test analysis showed that there was significant population mean differences between those who have family members who are medical professionals and those who do not, and the former had an average of 31.6 score, whereas the latter had a slightly lower score, 28.2 (P value $< .001$, 95% confidence interval [CI]: 1.93-4.86; Table 2). We also

Table 1. Demographic Characteristics of Eligible Participants in Trust Study (N = 490).

Question Items	n (%)	Question items	n (%)
Age		Residential region	
18 to 24	184 (37.6)	Astana	224 (46.5)
25 to 34	214 (43.7)	Almaty	106 (22)
35 to 44	53 (10.8)	Kyzylorda	74 (15.3)
45 to 54	30 (6.1)	Karaganda	14 (2.9)
55 to 64	9 (1.8)	Pavlodar	9 (1.9)
Total	490	Aktobe	35 (7.3)
Gender		Other	20 (4.1)
Female	339 (69.2)	Total	482
Male	151 (30.8)	Education	
Total	490	High school	25 (4.9)
Language		Some college	51 (10.4)
Russian	375 (76.7)	College degree	321 (65.5)
Kazakh	114 (23.3)	Total	489
Total	489	Are any of your family members medical professionals?	
Ethnicity		Yes	251 (51.3)
Kazakh	443 (90.6)	No	238 (48.7)
Russian	29 (5.9)	Total	489
Other	17 (3.5)		
Total	489		

Table 2. Bivariate Analysis to Compare the Mean Differences Between Groups.

Variables	Mean Scores	P Value	95% CI
Language ^a		.09	(-3.62 to 0.32)
Russian	29.6		
Kazakh	31.2		
Doctor-relative ^a		< .001	(1.93 to 4.86)
Yes	31.6		
No	28.2		
Gender ^a		.91	(-1.76 to 1.56)
Male	30		
Female	29.9		
Region ^b	Differences		
Aktobe-Kyzylorda	5.94	.007	(1.01 to 10.87)
Aktobe-Astana	5.71	.002	(1.39 to 10.04)

Abbreviation: CI, confidence interval.

Bold values significance $p < .05$.

^aTwo-sample t test.

^bTukey simultaneous test.

compared the mean differences between Russian-speaking and Kazakh-speaking groups and their general trust level in health-care professionals. Although Kazakh speakers had a higher average score (31.2) than Russian speakers (29.6), the differences in their mean scores were not statistically significant (P value = .09). Also, there was no statistically significant mean difference between female and male participants and their total trust scores (P value = .91). One-way ANOVA test did not show any statistically significant differences between groups except for the regional differences and the participants' general trust level in health-care

Table 3. Multiple Linear Regression Analysis to Predict the Effect of Having a Family Member Who Is a Health-Care Professional on the Estimated Average of General Level of Trust in Health-Care Professionals in Kazakhstan (N = 417).^a

Predictors	Trust Total		
	Estimates	95% CI	P
Intercept	28.23	26.27 to 30.18	<.001
Age	-0.67	-1.48 to 0.15	.11
Language (Kazakh)	3.87	1.73 to 6.01	<.001
Education (graduate degree)	-0.46	-2.80 to 1.87	.696
Region (Astana)	Reference		
Almaty	1.12	-0.80 to 3.03	.252
Kyzylorda	-0.99	-3.25 to 1.27	.39
Karaganda	1.45	-2.58 to 5.47	.48
Pavlodar	-1.47	-6.40 to 3.46	.558
Aktobe	5.62	2.85 to 8.39	<.001
Other	2.51	-1.45 to 6.47	.214
Doctor-Relative (Yes)	3.78	2.33 to 5.22	<.001
Language × Education	-4.74	-8.60 to -0.88	.016

Abbreviation: CI, confidence interval.

Bold values significance $p < .05$.

^aGoodness-of-fit of the model. R^2 : 0.135 or 13.5% of variation explained by the model. Adjusted R^2 : 0.112 or 11.2% of variation explained by the model after adjusting for the included predictors.

professionals in Kazakhstan ($P = .004$; data not shown). Furthermore, the Tukey's simultaneous test revealed that there are significant population mean differences between the Aktobe region and Astana residents ($P = .002$, 95% CI: 1.39-10.04) and between the Aktobe and Kyzylorda regions' responses (P value = .0073, 95% CI: 1.01-10.87; Table 2).

Multivariate Analysis

After controlling for covariates, respondents who have a doctor-relative had a statistically significant estimated mean trust score that is 3.78 points higher than those respondents who do not have a doctor-relative in their households (P value < .001, 95% CI: 2.33-5.22; Table 3). In addition, Aktobe residents had statistically significant higher (by 5.62 points) than the Astana residents (P value < .001, 95% CI: 2.85-8.39). Also, Kazakh speakers had an estimated trust score that was 3.87 points higher than Russian speakers (P value < .001, 95% CI: 1.73-6.01). Respondents' age and education level did not show statistically significant differences from the given reference categories. The interaction term between education level and language preference showed a statistically significant difference between groups as well (P value = .016, 95% CI: -8.60 to -0.88).

Discussion

The clearest finding in this study is that there is a significant difference in general trust in health-care professionals among those with a family member in that profession than

those without. The fact that participants with a family member as a health-care professional on average scored higher on the trust scale indicates that this familial relationship may influence their perception of health-care professionals as a whole. This could be due to this family member being cognitively accessed as a prototypical example when asked about trust in health-care professionals or even because of experience receiving care from this family member. This seems to indicate that having a family member as a health-care professional makes health-care professionals in general more familiar and more trustworthy to these participants, either due to in-group favoritism or experience.

When people view themselves and others as members of different groups, those outside the group are viewed as less trustworthy compared to those within the group (40). Similarly, favoring those in one's own group has long been observed which causes individuals to hold more positively held views of themselves and their own group and more negative views of those categorized as outside their own group (18). This categorization process does not have to be that meaningful for it to create judgmental effects on the intergroup perceptions of the members (41). It is possible that family relations are influencing the perceptions of the public in Kazakhstan regarding the familiarity and subsequent trustworthiness of health-care professionals, and future research should examine these dynamics.

While general trust scores were not significantly different among Kazakh- and Russian-speaking participants in bivariate analysis, the multivariate analysis revealed a significantly higher average trust score among Kazakh speakers. When language and education level were examined together, it became clear that both Kazakh and Russian speakers had lower trust scores the more education they received. While neither language nor education made a significant difference in trust, speakers of each language were significantly less trusting of health-care professionals in general when they had a graduate-level education compared with those within the same language group of a lower education level. The cultural influence of language on perceptions of norms of interaction as well as education may be relevant and should be examined further in future studies.

Language preference most likely indicates the language of instruction in the participant's educational experience, but it does not necessarily equate to ethnicity. In Kazakhstan, approximately 63% of the population is ethnically Kazakh while less than 24% is ethnically Russian (42). However, many ethnic Kazakhs speak Russian due to the history of Russian-European presence and sociocultural influence in Kazakhstan, also known as *Russification* (43). Language preference also indicated a degree of cultural influence as ethnic Kazakhs living in more *russified* areas took on more culturally Russian behaviors (44). The prevalence of ethnic Kazakhs preferring to use the Russian language is demonstrated by the participants of this study as nearly 77% chose to complete the questionnaire in Russian while less than 6% reported to be ethnically Russian.

The Russification of some Kazakhs may also help explain the significant differences found when comparing participants living in different regions within Kazakhstan. While there were no significant differences between many of the regions, participants living in the region of Aktobe were significantly more trusting of health-care professionals than the regions of Astana in multivariate analysis. A possible explanation could be that the proximity of the region of Aktobe to Russia has caused it to be more russified than other regions in Kazakhstan. In 2017, both Aktobe and Astana cities had 77% ethnic Kazakhs; however, 16% of Aktobe residents were Russians and other ethnic minorities included Ukrainians, Tatars, and Germans. On the other hand, 14% of Astana residents were Russians, and other ethnicities included Ukrainians, Uzbeks, and other Turkic ethnic groups (45). In addition, Aktobe is located in the western part of the country and 1 of the 4 oil-producing regions with the highest gross regional product (46). Multiculturalism and diversity have been found to reduce the effects of categorization salience and in-group bias (47). More ethnic diversity within the region of Aktobe could have led to less group salience when it comes to trust in general which would have an effect in health care as well as other social settings. Other historical and social factors could play a role in this level of trust as well, but taken with the other findings related to group salience and trust, it is likely that the cultural importance of group membership and trust may be related to how culturally homogenous a region is. This does, however, conflict with the finding that the average trust score of Russian speakers overall was lower than Kazakh speakers.

Perhaps the most important finding of this study, among these several variations that could be affecting trust in health-care professionals, is that the total average trust score out of a possible total of 55 for this sample is in the neutral to low range ($M = 29.9$, $SD = 7.78$) (37,48). However, we should also keep in mind that our regression model explains only 11.2% of the variability in the general trust score, and there might be other social, cultural, and clinical predictors that could influence the participants' trust level. Hence, while a low level of trust in physicians in a post-Soviet country may not come as a surprise (25,49,50), it is important to recognize other sources of low trust and that they may extend beyond the doctor-patient interaction if efforts are to be made to increase trust. Nevertheless, in social sciences, it is difficult to predict all the variability of the response data, and in our model, we could still find significant results, and variables such as language preference, a specific region, and having a relative who is a health-care professional were associated with the general trust level.

Limitations

There are several limitations to this study given that it was a pilot study to explore possible relationships between general levels of trust in health-care professionals and sociocultural

factors. This study was conducted online with participants who had social media accounts and thus excluded participants who are not on social media. These findings should not be generalized to the larger population because of the limits in sample size and representation (age, region, gender, and ethnicity). Furthermore, we cannot make a causal inference due to the observational nature of the study. However, the results do suggest that the low levels of trust in health-care professionals do vary by social group and thus merit further research.


Declaration of Conflicting Interests

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

Funding

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

ORCID iD

Brett J Craig, PhD  <https://orcid.org/0000-0002-1899-335X>

References

1. Thom DH. Physician behaviors that predict patient trust. *J Fam Pract.* 2001;50:323-8.
2. Eton DT, Ridgeway JL, Linzer M, Boehm DH, Rogers EA, Yost KJ, et al. Healthcare provider relational quality is associated with better self-management and less treatment burden in people with multiple chronic conditions. *Patient Prefer Adherence.* 2017;11:1635-46.
3. Rolfe A, Cash-Gibson L, Car J, Sheikh A, McKinsty B. Interventions for improving patients' trust in doctors and groups of doctors. *Cochrane Database Syst Rev.* 2014;3:CD004134.
4. Van Den Assem B, Dulewicz V. Doctors' trustworthiness, practice orientation, performance and patient satisfaction. *Int J Health Care Qual Assur.* 2015;28:82-95.
5. Kreuter MW, McClure SM. The role of culture in health communication. *Annu Rev Public Health.* 2004;25:439-55.
6. Ozawa S, Sripad P. How do you measure trust in the health system? A systematic review of the literature. *Soc Sci Med.* 2013;91:10-4.
7. Brown PR, Calnan MW. Chains of (dis) trust: exploring the underpinnings of knowledge-sharing and quality care across mental health services. *Sociol Health Illn.* 2016;38:286-305.
8. Sue DW, Sue D. Barriers to effective cross-cultural counseling. *J Couns Psychol.* 1977;24:420.
9. Thom DH, Hall MA, Pawlson LG. Measuring patients' trust in physicians when assessing quality of care. *Health Aff.* 2004; 23:124-32.
10. Benbenishty JS, Hannink JR. Non-verbal communication to restore patient-provider trust. *Intensive Care Med.* 2015;41: 1359-60.
11. Goudge J, Gilson L. How can trust be investigated? Drawing lessons from past experience. *Soc Sci Med.* 2005;61:1439-51.
12. Mechanic D, Meyer S. Concepts of trust in patients with serious illness focused on physician interpersonal and technical competence. *EvidenceBased Nursing.* 2001;4:95.
13. Skirbekk H, Middelthon AL, Hjortdahl P, Finset A. Mandates of trust in the doctor-patient relationship. *Qual Health Res.* 2011;21:1182-90.
14. Cooper LA, Ghods Dinoso BK, Ford DE, Roter DL, Primm AB, Larson SM, et al. Comparative effectiveness of standard versus patient-centered collaborative care interventions for depression among african americans in primary care settings: the BRIDGE study. *Health Serv Res.* 2013;48:150-74.
15. Gabay G. Perceived control over health, communication and patient-physician trust. *Patient Educ Couns.* 2015;98: 1550-7.
16. Nannenga MR, Montori VM, Weymiller AJ, Smith SA, Christianson TJ, Bryant SC, et al. A treatment decision aid may increase patient trust in the diabetes specialist. The Statin Choice randomized trial. *Health Expect.* 2009;12:38-44.
17. Topp SM, Chipukuma JM. A qualitative study of the role of workplace and interpersonal trust in shaping service quality and responsiveness in Zambian primary health centres. *Health Policy Plan.* 2015;31:192-204.
18. Brewer M, Brown R. Intergroup relations. In: Brown R, Gaertner S (eds), *Blackwell Handbook of Social Psychology: Intergroup Processes.* Vols. 1 and 2. New York, NY: McGraw-Hill; 1998:554-594.
19. Chan CS-C, Yao Z. A market of distrust: toward a cultural sociology of unofficial exchanges between patients and doctors in China. *Theory Soc.* 2018;47:737-72.
20. Spehr S, Kassenova N. Kazakhstan: constructing identity in a post-Soviet society. *Asian Ethn.* 2012;13:135-51.
21. Tilly C. *Identities, Boundaries and Social Ties.* Abingdon, England: Routledge; 2015.
22. Smith JN. 'Making culture matter': Symbolic, spatial and social boundaries between uyghurs and han Chinese. *Asian Ethn.* 2002;3:153-74.
23. Tanis M, Postmes T. A social identity approach to trust: interpersonal perception, group membership and trusting behaviour. *Eur J Soc Psychol.* 2005;35:413-24.
24. Kramer RM. Trust and distrust in organizations: emerging perspectives, enduring questions. *Annu Rev Psychol.* 1999;50: 569-98.
25. Barr DA. The ethics of Soviet medical practice: behaviours and attitudes of physicians in Soviet Estonia. *J Med Ethics.* 1996; 22:33-40.
26. Kurmanova S. Enhancing the role of primary care and modernization of Astana. *Clin Med Kazakhstan.* 2012; 25:30.
27. Habibov N. Effect of corruption on healthcare satisfaction in post-soviet nations: a cross-country instrumental variable analysis of twelve countries. *Soc Sci Med.* 2016;152:119-24.
28. Stepurko T, Pavlova M, Gryga I, Murauskiene L, Groot W. Informal payments for health care services: the case of Lithuania, Poland and Ukraine. *J Eurasian Studies.* 2015;6:46-58.
29. Dorjsuren B. Striving to provide universal health coverage in Kazakhstan. *Bull World Health Organ.* 2019;97:250-1.

30. Ensor T, Savelyeva L. Informal payments for health care in the Former Soviet Union: some evidence from Kazakhstan. *Health Policy Plan.* 1998;13:41-9.
31. Habibov N, Cheung A. Revisiting informal payments in 29 transitional countries: the scale and socio-economic correlates. *Soc Sci Med.* 2017;178:28-37.
32. Hupecey JE, Penrod J, Morse JM. Establishing and maintaining trust during acute care hospitalizations. *Sch Inq Nurs Pract.* 2000;14:227-42; discussion 43-8.
33. Thompson VL, Hupecey JE, Clark MB. The development of trust in parents of hospitalized children. *J Spec Pediatr Nurs.* 2003;8:137-47.
34. Riekkinen M, Riekkinen P, Kozhabek K, Zhatkanbayeva A, Chebotarev G. Equal access to publicly funded health care services: the legal experiences of Finland and Kazakhstan. *Int Comparat Jurisprud.* 2015;1:121-32.
35. Craig BJ, Kabyzbekova Z. Culture and maternity care in Kazakhstan: what new mothers expected. *Health Care Women Int.* 2015;36:41-56.
36. Craig BJ, Kapsysheva A. Situated influences on perceived barriers to health behavior change: cultural identity and context in Kazakhstan. *Ethn Health.* 2018;23:831-46.
37. Hall MA, Camacho F, Dugan E, Balkrishnan R. Trust in the medical profession: conceptual and measurement issues. *Health Serv Res.* 2002;37:1419-39.
38. Mayer RC, Davis JH, Schoorman FD. An integrative model of organizational trust. *Acad Manage Rev.* 1995;20:709-34.
39. Mechanic D. The functions and limitations of trust in the provision of medical care. *J Health Polit Policy Law.* 1998;23:661-86.
40. Brewer MB. In-group bias in the minimal intergroup situation: a cognitive-motivational analysis. *Psychol Bull.* 1979;86:307.
41. Tajfel H. Experiments in intergroup discrimination. *Sci Am.* 1970;223:96-103.
42. Factbook C. *The World Factbook.* Langley, VA: Central Intelligence Agency; 2018
43. Agadjanian V, Dommaraju P, Glick JE. Reproduction in upheaval: ethnic-specific fertility responses to societal turbulence in Kazakhstan. *Popul Stud.* 2008;62:211-33.
44. Sharygin EJ, Guillot M. Ethnicity, russification, and excess mortality in Kazakhstan. *Vienna Yearb Popul Res.* 2013;11: 219-246.
45. Committee S. Demographic statistics of Kazakhstan by ethnic groups. "Chislennost' naseleniya Respubliki Kazakhstan Po Otdelnym Etnosam na Nachalo 2017 Goda". Ministry of National Economy of the Republic of Kazakhstan; 2017.
46. Turganbayev Y. Convergence across Kazakhstan regions (Master's thesis). Scotland, UK: Robert Gordon University; 2013.
47. Wolsko C, Park B, Judd CM, Wittenbrink B. Framing inter-ethnic ideology: effects of multicultural and color-blind perspectives on judgments of groups and individuals. *J Pers Soc Psychol.* 2000;78:635.
48. Lee YY, Ng CT, Siti Aishah MG, Ngiam JZ, Tai BC, Lim MK, et al. Public trust in primary care doctors, the medical profession and the healthcare system among Redhill residents in Singapore. *Ann Acad Med Singapore.* 2007;36:655-61.
49. Mishler W, Rose R. Trust, distrust and skepticism: popular evaluations of civil and political institutions in post-communist societies. *J Polit.* 1997;59:418-51.
50. Radin D. Too ill to find the cure? Corruption, institutions, and health care sector performance in the new democracies of Central and Eastern Europe and Former Soviet Union. *East Eur Polit Soc.* 2009;23:105-25.

Author Biographies

Brett J Craig is a health communication and behavior change expert working globally to improve provider-patient relations within primary health care primarily in low resource settings.

Gulaiim Almatkyzy is a doctoral student focusing on behavioral health issues from a public health perspective in both the US and internationally.

Yuliya Yurashevich is a doctoral student focusing on organizational and health communication from an interpersonal perspective.