Prioritizing social determinants of health in East Azerbaijan: a qualitative research

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Abstract

Background: In order to improve health-centered decision making and planning to reduce inequalities in health, it is important to identify, classify, and prioritize social determinants of health. This study aimed to identify and rank three major social determinants of health in East Azerbaijan**.**

Methods: This research was conducted using a qualitative approach in grounded theory. Through purposeful sampling, 40 key informants from East Azerbaijan, North West of Iran, were selected and in-depth interviews were performed. The collected data was analyzed with a three-step coding method including open, axial, and selective coding using Corbin and Strauss's systemic approach. Also, Interpretive Structural Modeling and "Matrice d'Impacts Croisés Multiplication Appliquée à un Classement" (MICMAC) analysis were used to identify and rank social determinants of health in East Azerbaijan.

Results: Of the 40 participants, 27 (68%) were male and 13 (32%) were female. The mean age was 39.28± 12.46 years. 63% had a doctoral degree. According to the result of MICMAC analysis, social harm, social capital, and good governance were identified as three major social determinants of health in East Azerbaijan province.

Conclusion: Social determinants of health have a significant and crucial role in human welfare and by identifying and prioritizing social determinants of health at a local level and/or national level, the first step can be taken toward social welfare.

Introduction

During the last two decades, evidence has shown that social factors play a significant role in health. This does not deny the role of medical care in health, but medical care is not the only factor that affects health and its role may be less than what it has often been assumed, particularly in determining who is suffering from illness or injury (1). The idea that biomedicine may have less impact on health than previously thought is based in part on the rapid increase in life expectancy during the 20th century. In the first half of

the 20th century, life expectancy increased up to 30 years; 25 years is attributed to improved public health and about 5 years is attributed to biomedicine (2, 3). Evidence showed that poor people with less education have more health problem than rich people with more education. This inequality can be observed even in developed countries (4).

The World Health Organization (WHO) states that "social determinants of health include the conditions in which people are born, grow, live, work, and age and the wider set of forces and systems that shape the conditions of daily life. These forces and systems consist of economic policies and systems, development plans, social norms, social policies, and political systems" (5, 6). The Commission on Social Determinants of Health (CSDH) stated, "Social Determinants of Health (SDH) can be identified as the structural determinants and conditions of daily life which are responsible for a major part of health inequities between and within countries" (7). In recent decades, interest in studying and describing these determinants has increased. It is obvious that social determinants of health are related to health problems and their consequences, including higher levels of mental disorders and other medical conditions (8). Lorant et al., in a meta-analysis reported that depression in people in lower socioeconomic conditions was 1.8 times higher than people in higher socioeconomic conditions (9). Lett et al. also demonstrated that the risk of coronary artery disease in healthy people or its adverse consequences in people with coronary artery disease increases by 1.5-2 times (10). According to the results of a cohort study, the mortality rate of stroke was higher in Japanese men with low social supports (11).

For improving health equality, it is essential to understand causes of poor health and to address the underlying causes (4). One way to identify these causes is to use grounded theory, the data-based theory originated in 1967 by Anselm Strauss and Barney Glaser (12). Grounded theory enables researchers to identify concepts and build theory from qualitative data (13, 14). The current study was conducted to identify social determinants of health in the province of East Azerbaijan and to classify and prioritize these determinants.

Methods

After receiving ethical approval (IR.TBZMED.REC.1396.380), in-depth interviews took place, face-to-face, by two interviewers with doctoral degrees in sociology between July 2018 and April 2019. Interviews were conducted with respect to the ethical rights of the participants, and verbal consent was obtained for audio recording of the interviews. The interview guide consisted of this question: "What are the social factors affecting health in East Azerbaijan?" Interviews lasted 60 minutes. Interviews were also recorded by the same interviewer in notes. The participants were key informants in East Azerbaijan (professors of Sociology, Psychology, Epidemiology, Economics, community medicine, health management and Health Policy, senior experts of the Provincial Health Center) in the field of health, and purposive sampling was undertaken to identify the subjects for this study. Sampling continued until information saturation occurred, the point at which no new information was emerging from the data (15). After 40 interviews, the study reached theoretical saturation.

All interviews were recorded and transcribed texts were sent to the participants to confirm their accuracy. The data was coded manually using Strauss & Corbin's three-step methodology, including open, axial, and selective coding. During open coding, the text of interviews was read thoroughly line by line several times. The text was broken down into

concepts and categories. Codes that were conceptually similar to each other were adjusted for clustering. During axial coding the initial codes and categories created in open coding were compared to each other. After integrating the same codes, the categories that were related to each other were placed on a common axis. As a final step, selective coding was used to integrate the different categories into a single model (16). In order to analyze the structural relations between the identified factors and to determine three main social determinants of health in East Azerbaijan, Cross-impact / structural analysis by using MICMAC method was used (17). Based on the number of identified factors, a 10*10 cross-impact matrix was developed to find the contextual relationship among the identified factors (18). The cross-impact matrix was rated by 7 experts in the field of sociology, community medicine, economic, and director of non-communicable diseases control in the province. Given the severity of relationships between factors (0: no relation, 1: weak relation, 2: moderate relation, 3: strong relation). After rating the cross-impact matrix data was entered to MICMAC software, and was analyzed.

Validity strategy

In order to have valid results, some techniques were used as follows: 1) investigator and data source triangulation; 2) frequent debriefing; 3) member checks; and 4) researcher self-monitoring (19, 20).

Reliability strategy

In quantitative research, the concept of reliability refers to exact repeatability of the processes and results, but in qualitative research, this definition of reliability is challenging. Therefore, the essence of reliability for qualitative research lies with consistency (19). In this study, in order to achieve reliable results, the following methods were used: 1) navigation of the interview process to have a convergent interview; and 2) using structural processes in encoding (i.e. coding according to the Strauss & Corbin methodology approaches).

Ethical considerations

This study received approval from the Ethical Committee of the Tabriz University of Medical Sciences (IR.TBZMED.REC.1396.380). The verbal consent was obtained from each participant for audio record.

Results

Of the 40 participants in this study, 27 (63%) were male, and 13 (31%) were female. The mean age of participants was 39.28± 12.46 years. Most of the participants (62.5%) had the Ph.D. (see Table 1).

Identifying social factors affecting health from the key informants' perspectives

After transcription of the interviews, coding was carried out using Strauss & Corbin's three-step methodology, including open, axial, and selective coding. During open coding, 111 concepts were identified, and after relating similar codes (categories and concepts) to each other during axial coding, 19 subcategories and 10 categories were identified. The 10 identified categories about social factors affecting health were outlined as follows: 1) family quality; 2) social empowerment; 3) social harms; 4) social capital; 5) good governance; 6) health and social inequity; 7) ambivalence in development; 8) health-centered social prevention; 9) cultural pressures; 10) demographic variables (see supplementary 1-10). The identified factors are as follows:

1. Family quality

The construct of family quality, with dimensions such as a healthy family, initial socialization, and the prenatal care, is another social determinant of health. Participants emphasized healthy

marriages, family pressures, parental health, family health, family conflict, changing gender roles, family upbringing styles, upbringing based on internal and external control, parental role in child growth, healthy pregnancy, and quality of childcare. For example, interviewees stated:

> *"Family upbringing affects the individual's mental health. When a person is born in a family with a high level of intellectual, education, awareness, and socioeconomic welfare, that person will live with this ideology and this condition can affect his/her health, and even the community."*

> *"I think people's behavior is based on upbringing in the family. The first place where education begins is the family. Parents can train their children with internal and/ or external controllers. If children are trained with internal controllers, they can easily adapt his/him with problems.*

> *"Family disputes have a huge impact on mental health. A man or a woman who begins her life with tension, is more stressed, especially duo to the feminist movements, men and women are unaware of their gender roles and sometimes their role has been replaced."*

1. Social harms

Social harms such as drug addiction and the tendency to abuse drugs, divorce, assault and battery, illegal relationships, violence, poor adherence to norms and ethics, and social anomie, play a significant role in the health of citizens in East Azerbaijan. In fact, participants mentioned the following: high divorce rates, lack of ethical commitment, weakening ethics in society, disobedience to traditions, poor adherence to ethical standards, unwillingness to comply with laws, anomie in society,

Table1. Socio-demographic characteristics of interviewees in the study (n=40)

Variable	Number	Frequency (%)
Gender		
Female	13	32.5%
Male	27	67.5%
Marital status		
Married	27	67.5%
Single	13	32.5%
Education		
Diploma	1	2.5%
Bachelor of science	3	7.5%
Master of science	9	22.5%
Ph.D.	27	67.5%
Academic major		
Sociology	8	20%
Social Science Research	7	17.5%
Health policy	4	10%
Community Medicine	3	7.5%
Health services management	3	7.5%
Health Education & Promotion	3	7.5%
Medicine	2	5%
Health Education	2	5%
Health Economics	2	5%
Epidemiology	2	5%
Economic sciences	2	5%
Psychology	2	5%

failure to maintain values, and lack of standard controls. Therefore, social harms can be considered as another social determinant of health. One participant said:

Divorce has increased in our country and province. It affects the health of family, child, husband and so on. Because of the mental and social dimensions of divorce, it affects all factors of health. Increasing the crime and non-commitment to the family relationship is another issue that is relatively common in our province. It increases non-communicable diseases and affects social and mental health, especially in suburbs which have high levels of illegal relationships and immorality.

2. Health and social inequity

Participants mentioned that inappropriate distribution of health resources, inequity in distribution and use of such resources, inaccessibility to correct and reliable information in various areas, poor allocation of medical specialists and staff in urban areas, and lack of mental health background in medical staff, play a key role in the health of East Azerbaijan's citizens. The social, physical and mental health of citizens decreases as social inequity increases, and vice versa. A participant stated:

The main structural factor is inequity in the distribution of power. Power not only means political power but also means any kind of power for accessing something like shelter or else. An unjust social organization benefits to some people, but not to all people. These organizations may divide people into capable and incapable people. Capable people are necessarily more physically and psychologically healthy than incapable ones.

3. Cultural pressure

Participants considered, competition between families, increasing social expectations, the prevalence of emulation (keeping up with the Joneses) in society and mental tension and stress caused by this emulation, as social determinants of health in East Azerbaijan. For examples, Interviewee number 10 stated: *"I think, culture and emulation are very impressive. Perhaps my child is interested in sport, but when I hear that my colleague has sent his son to a math class, I decide to send mine, too and I do not care for her/ his interest."*

4. Good governance

According to results, good governance - that consists of a need for good convergence among all organizations about health, cooperation, and coordination between responsible institutions, need for completing the missions by another organization, the responsibility of organizations- is another social determinants of health in this province. One participant said:

To identify the health, we need a convergence among the various organizations, especially among the policymakers, people, NGOs, government, broadcasting, and other organizations. I think all organizations are involved in health. We need a convergence among these organizations.

5. Social capital

Social capital, with dimensions like public participation, is one of the social determinants of health. The key informants emphasized concepts such as social support among citizens, family support of patients, financial support structures, mutual respect between neighbors, social cohesion, public participation in economic and management scopes, cooperation between NGOs, and encouraging people to participate in sports

clubs, all have a key role in health. One participant stated:

The behavior of individuals with together has a positive or negative impact on their life. Although I've been in this city for 20 years, people who are living in my neighborhood do not have a greeting, and even they do not know each other. Perhaps this looks like a simple issue but shows that some people don't have good social interaction. This issue is for only 60% of the population, not all. By the way, we can observe a mild psychological pressure in their behavior.

6. Health- centered social prevention

The key informants believed that health-centered social prevention, related to concepts such as organized prevention, providing health services, and prevention in childhood, adulthood, and aging, is a key social determinant of health in this province.

7. Social empowerment

This category includes women's social welfare, paying attention to women' s health, promoting individual and social behaviors of people, promoting social performance among all people, and paying attention to the role of other social agents (e.g., bakers, manufacturers, vendors, etc.). One participant noted:

I think the social welfare of women has a significant impact on family health. A healthy woman can have a positive effect on the psyche of her husband or her children. Disruption in a woman has a direct impact on all family members.

9. Ambivalence in development

Results demonstrated that the ambivalence in development (behavioral dichotomies in public areas, the dichotomy in the development process, centralization, and instability) is a social determinant of health. Regarding social determinants of health in the city, one participant said, "I think these dimensions are related to sustainable and unsustainable development. Because of reductions in its sustainable development, health in this city is declining".

1. Demographic variables

Demographic variables such as social position, social and economic class, marital status, place of residence, and educational level were also classified as social determinants of health in East Azerbaijan. A participant said, "The health status of citizens is related to their social class, which means that health in each class is different in terms of education, income, and even residence."

Classifying and prioritizing social determinants of health through cross-impact/ structural analysis and MICMAC analysis

The MICMAC analysis showed that filling rate is 90.08%, which proves that 90.08% of identified factors interact with each other. Of the total 90 relations, in 4 cases, there was no relation (see Table 2).

According to the results of the structural analysis, the ranked social determinants of health in East Azerbaijan are as follows: 1) Social harm, 2) Social capital, 3) Good governance, 4) Health and social inequity, 5) Ambivalence in development, 6) Social empowerment, 7) Family quality, 8) Health-based social prevention, 9) Cultural pressures, 10) Demographic variables (see Table 3).

The purpose of the MICMAC analysis is to analyze the driving and dependence power of the variables, and, based on their power, the variables are classified into four categories as follows: 1) Driving variables, 2) Linking variables, 3) Autonomous

Table 2. Primary analysis of matrix data and its statistics

Matrix size	Iteration	Non-relationships (0)	Weak relationships (1)	Moderate relationships (2)	Strong relationships (3)	Total	Matrix fill rate
10*10	2	10	4	62	24	90	90%

variables and 4) Dependent variables (21, 22). Driving or independent variables are variables which have strong driving power and weak dependency power. Linking variables have strong driving power and high dependence power. Autonomous variables have weak driving power and weak dependence power. Dependent variables have weak driving power and strong dependence power (23). The key factors are factors which have strong driving power and weak or high dependency power (20). According to the results of the MICMAC analysis, factors including social harms, social capital, and

Table 3. List of influential key social determinants of health

Rank	Determinants	Direct influence
1	Social harm	1200
2	Social capital	1100
3	Good governance	1100
4	Social and health inequity	1050
5	Ambivalence of development	1000
6	Social empowerment	1000
7	Family quality	950
8	Health-based social prevention	950
9	Cultural pressure	900
10	Demographic variables	750

good governance are the top three social determinants of health in East Azerbaijan (see Figure 1 and 2).

Discussion
Thematic analysis revealed a core set of ten identified elements for social determinants of health in East Azerbaijan as follows: social harm; social capital, good governance, health and social inequity, ambivalence in development, social empowerment, family quality, health-centered social prevention, cultural pressures, and demographic variables. In order to classify and prioritize these ten factors, cross-impact/structural analysis and MICMAC analysis were used. According to the MICMAC analysis, factors such as family quality, health-centered social prevention, cultural pressures, and demographic variables fell into the autonomous quadrant, which means these factors play a weak role as social factors of health in East Azerbaijan. Factors such as social harm, social capital, social inequity, and social empowerment fell into the linkage category, which means these factors have a strong influence on other factors as well as a strong dependency on other factors. Good governance and ambivalence in development had a strong influential power, but a weak dependency on other variables. Thus, these factors can independently influence other factors. Finally, factors with very strong influential power were selected as the main social determinants of health: social harm, social capital, and governance. According to the key informants, a high divorce rate, lack of ethical commitment, weakening ethics in society, disobedience to traditions, poor

adherence to ethical standards, unwillingness to comply with laws, anomie in society, failure to maintain values, and lack of standard controls, all included in the social harm category, are identified as some of the most important social determinants of health in East Azerbaijan. It seems that social policies at the macro level are necessary to tackle social harms. With macro-level policymaking, it will be possible to design pathways to avoid arbitrary decision making, to get all capacities, whether in governmental or non-governmental organizations, to begin inter-organizational coordination, manage sources effectively, determine priorities for policymaking, administer programs comprehensively, inclusively, adequately, and finally, to do a better work division among related organizations at different levels (24). Studies indicated that social capital (as second social determinants of health in East Azerbaijan) is significantly related to a variety of positive health outcomes. It may reduce stress through supportive relationships, trust, and the benefits of socializing (25- 29). Zaboli at al., in their study on prioritizing social determinants that affect health inequities, have demonstrated that socioeconomic status, living facilities, and social integrity have a significant impact on reducing health inequities (30). Based on our results, good governance is the third most important social determinant of health in this province. Good governance refers to "a complex system of interactions among structures, traditions, and functions that are characterized by key values such as accountability, transparency, responsibility, citizen participation, equitable and inclusive, effective and efficient, consensus-oriented and follows the rule of law" (31). There is an international consensus on the need to promote sound governance as a foundation for development (32). In order to have good governance, active and productive cooperation is needed among three sectors; public, private, and civil society organizations (33). In this regard, key informants in this study believed that to have healthy citizens, we need cooperation and coordination between the various organizations as well as the social responsibility of all organizations. The relationship between governance and the human development index has been established in different studies (34, 35). Given that the impact of social determinants on human health is much greater than those of health care and health system performance, efforts to cooperate, coordinate and participate among all health and non-health-related organizations to achieve health has an important role in decreasing inequity. Finally, since social harms were the most important social determinants of health in East Azerbaijan, it is recommended that by holding the empowerment educational workshops in the suburb areas of the province and also by providing educational programs through social media can somewhat decrease the consequences of the social harms.

This study was conducted based on a qualitative approach. Therefore, care should be taken when generalizing the results. Another limitation of this study was the low knowledge of the participants about the social determinants of health.

From a community-based care approach, we can compare health and its determinants to an iceberg: the tip of the iceberg, the visible factors affecting health, can be seen and addressed. However, the rest of the iceberg contains factors that affect health, most of which are outside the direct control of the health sector. By strengthening social determinants of health through the consideration of "health in all policies," an important step can be taken in improving the health indicators of citizens.

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Conflict of interest
There are no conflicts of interest.

References

1. Braveman P, Gottlieb L. The Social Determinants of Health: It's Time to Consider the Causes of the Causes. Public Health Rep. 2014; 129(2): 19-31. DOI:10.1177/00333549141291S206.
2. Mcginnis J.M, Williams-Russo P, Knickman JR. The Case For More Active Policy Attention To Health Promotion. Health Aff (Millwood). 2002; 21(2): 78-93. DOI:10.1377/hlthaff.21.2.78.
3. Faulx D. The Social Determinants as part of the Medical School Curriculum, in School of Public Heath - Health Services. *University of Washington*; 2012: 34.
4. Andermann A. Taking action on the social determinants of health in clinical practice: a framework for health professionals. CMAJ. 2016; 188(17-18): E474-E483. DOI:10.1503/cmaj.160177
5. Social determinants of health - World Health Organization; 2017 (*www.who.int/social_determinants*, *accessed 2018 Nov. 8*).
6. Schroeder K, Kohl Malone S, McCabe E, Lipman T. Addressing the Social Determinants of Health: A Call to Action for School Nurses. The Journal of School Nursing. 2018; 34(3): 182-191. DOI:10.1177/1059840517750733
7. Marmot M, Friel Sh, Bell R, Houweling T.AJ, Taylor S. Closing the gap in a generation: health equity through action on the social determinants of health. Lancet. 2008; 372(9650): 1661-1669. DOI:10.1016/S0140-6736(08)61690-6
8. Vivian Li, McBurnie MA, Simon M, Crawford Ph, Leo M, Rachman F et al. Impact of Social Determinants of Health on Patients with Complex Diabetes Who Are Served by National Safety-Net Health Centers. JABFM. 2016; 29(3): 356- 370. DOI:10.3122/jabfm.2016.03.150226.
9. Lorant V, Deliège D, Eaton W, Robert A, Philippot P, Ansseau M. Socioeconomic inequalities in depression: a meta-analysis. Am J Epidemiol. 2003; 157(2): 98 –112. DOI: 10.1093/aje/kwf182.
10. Lett HS, Blumenthal JA, Babyak MA, Strauman TJ, Robins C, Sherwood A. Social support and coronary heart disease: epidemiologic evidence and implications for treatment. Psychosom Med. 2005; 67(6): 869 – 78. DOI:10.1097/01.psy.0000188393.73571.0a.
11. Ikeda A , Iso H, Kawachi I , Yamagishi K , Inoue M, Tsugane Sh. Social Support and Stroke and Coronary Heart Disease: The JPHC Study Cohorts II. Stroke. 2008; 39(3): 768–775. DOI:10.1161/STROKEAHA.107.496695.
12. Goulding Ch. Grounded Theory Methodology and Consumer Behaviour, Procedures, Practice and Pitfalls. Advances in Consumer Research. 2000; 27: 261-266.
13. Foley G, Timonen V. Using Grounded Theory Method to Capture and Analyze Health Care Experiences. Health Serv Res. 2015; 50(4): 1195–1210. DOI:10.1111/1475-6773.12275.
14. Holton JA. Grounded Theory as a General Research Methodology. Grounded Theory Review journal. 2008; 7(2): 67-89.
15. Danaifard H, Emami M. Qualitative research strategies: Grounded theory. Management thought. 2007; 1 (2): 69-97 [Full text in Persian].
16. Rothgangel M, Saup J. Classroom research in religious education: The potential of grounded theory. HTS Teologiese Studies/Theological Studies. 2017; 73(4): a4638. DOI: https://doi.org/10.4102/hts.v73i4.4638.

17. Molayi MM, Talebian M. Foresighting of Iranian Issues by Structural Analysis. Parliament and strategy journal. 2016; 23 (86): 5-32 [Full text in Persian].
18. Leung L. Validity, reliability, and generalizability in qualitative research. J Family Med Prim Care. 2015; 4(3): 324–327. **DOI:** 10.4103/2249-4863.161306.
19. Dewangan DK, Agrawal R, Sharma V. Enablers for Competitiveness of Indian Manufacturing Sector: An ISM-Fuzzy MICMAC Analysis. *Procedia* - Social and Behavioral Sciences. 2015; 189: 416 – 432. https://doi.org/10.1016/j.sbspro.2015.03.200
20. 20. Carter N, Brayant-Lukosius D, DiCenso A, Blythe J, J. Nevile A. The Use of Triangulation in Qualitative Research. Oncology Nursing Forum . 2014; 41(5): 545–547. doi: 10.1188/14.ONF.545-547
21. Attri R, Dev N, Sharma V. Interpretive Structural Modelling (ISM) approach: An overview. Res. J. Management Sci. 2013; 2(2): 3-8.
22. Sushil. Interpreting the Interpretive Structural Model. Global Journal of Flexible Systems Management. 2012; 13(2):87–106. DOI: 10.1007/s40171-012-0008-3.
23. Dubey R, Samar Ali S. Identification of Flexible Manufacturing System Dimensions and Their Interrelationship Using Total Interpretive Structural Modelling and Fuzzy MICMAC Analysis. Global Journal of Flexible Systems Management. 2014; 15(2): 131–143. DOI 10.1007/s40171-014-0058-9.
24. Mousavi Chelak H, Samaram E, Hoseini Hajibekandeh SA. Suggested Social Policies to Control Social Harms in Iran. Social Welfare Quarterly. 2019; 18(70):77-104.
25. Younsi M, Chakrounb M. Does social capital determine health? Empirical evidence from MENA countries. The Social Science Journal. 2017; 54: 238–247.
26. Haery S M, Tehrani H, Olyaeimanesh A, Nedjat S. Factors Influencing the Social Health of Employees of the Ministry of Health and Medical Education in Iran. Iran J Health Educ & Health Promot. 2016; 3 (4):311-318
27. Xue X, Reed WR, Menclova A. Social capital and health: a meta-analysis. Journal of Health Economics. 2020 Jul 1; 72:102317. DOI: 10.1016/j.jhealeco.
28. Abdi B, Benifatemeh H, Shahamfar J, Alizade Aghdam MB, Benifatemeh H. Health and its Social Determinants: A Study on Health Inequalities among Tabriz Citizens. Journal of Applied Sociology. 2014; 25(4): 73-89.
29. 29. Green J, Buckner S, Milton S, Powell K, Salway S, Moffatt S (2017). A model of how targeted and universal welfare entitlements impact on material, psycho-social and structural determinants of health in older adults. Social Science & Medicine. 2017; 187: 20-28. DOI: 10.1016/j.socscimed.2017.06.015.
30. Zaboli R, Tourani S, Seyedin SH Oliaie Manesh A. Prioritizing the Determinants of Social-health Inequality in Iran: A Multiple Attribute Decision Making Application. Iran Red Crescent Med J. 2014; 16(4): e12607. DOI: 10.5812/ircmj.12607.
31. Human Development Report 2002. (hdr.undp.org/sites/default/files/reports/263/hdr_2002_en_complete.pdf, accessed 2018 October 12).
32. Kardos M. The reflection of good governance in sustainable development strategies. Procedia-Social and Behavioral Sciences. 2012 Oct 12; 58:1166-73.
33. Keping Y. Governance and Good Governance: A New Framework for Political Analysis. Fudan J. Hum. Soc. Sci. 2018; 11(1):1–8. https://doi.org/10.1007/s40647-017-0197-4.
34. Makkian SN, Bibak M. The Effect of Good Governance on Human Development: An Intergovernmental Analysis. Journal of Economic Modeling. 2015; 9 (2): 131-147. [Full text in Persian].
35. Keser A, Gökmen Y. Governance and Human Development: The Impacts of Governance Indicators on Human Development. Journal of Public Administration and Governance. 2017; 8(1): 26-39. DOI: 10.5296/jpag.v8i1.12336.