



Analysis of Policies for Organizing and Managing Informal Settlements in Iran: A Content Analysis Method

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ABSTRACT

Background: Due to the increasing growth of informal and marginal settlements in Iran, the present study was conducted to analyze the contents of upstream national documents regarding city slum in Iran.

Methods: This qualitative study with content analysis approach was done in 2020. MAXQDA version 12 software and conventional content analysis method was used to analyze the data.

Results: The findings of this study could be classified in two main categories and 11 subcategories. The main categories included the policies related to preventing the creation of slum areas, and policies related to providing service and rehabilitation of slum areas. The 11 subcategories included preventing migration from inner cities to slum areas, poverty alleviation, preserving the rural fabric through the village guide plan, balanced distribution of population with landscaping and land development approach, creating green belts around cities, forced confrontation with illegal constructions in slum areas, impulsive phenomenon of social harms, allocation of state financial facilities to organize informal settlements, renovation of informal settlements, creating satellite towns, and providing primary health care services in the form of health care network system.

Conclusion: Although providing service and rehabilitation of slum areas can play an important role in reducing harm in these areas, policymakers in Iran should be aware of a moral dilemma; since these policies can also encourage the phenomenon of city slum.

Key words: City slum, Informal settlements, Document analysis, Qualitative study, Iran.

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Introduction

More than 55 % of the world's population lives in cities. The world's urban population has grown rapidly from 30 % in 1950 and is projected to reach 68 % by 2050. By increasing urbanization, the countries have been facing the problem of city slum (1).

Slum is a phenomenon that has been formed and expanded as a result of uncontrolled growth of urbanization, the concentration of all facilities in cities, especially large cities, and migration from rural to urban areas to seek greater prosperity. This phenomenon has been caused by the unbalanced development of cities. In the simplest definition, slum is a densely populated human habitat without standard housing, and with dirty and polluted neighborhoods. According to the United Nation Center of Human Settlement, one in eight people in the world live in slum condition (2).

The slum areas face numerous social, economic, cultural, and health challenges, and the scope of these challenges extends to urban areas. Most of the residents of these areas have poor economic conditions and due to lack of knowledge and expertise, it is not possible for them to find suitable jobs. On the other hand, cultural homogeneity is weak in these areas; therefore, social cohesion and control is low (3). Also, according to the Chicago School, the city is an alien world where criminals get lost in the crowd. Therefore, a suitable context is provided for the occurrence of crime, as slum dwellers can come to the centers of the city commit crime and return to their slum (4).

Slum areas also have numerous health challenges, because they are a perfect place for the transmission of various infections, including tuberculosis, respiratory infections, AIDS and hepatitis. These areas also have some environmental health and nutritional challenges, including access to safe drinking water, proper nutrition, waste disposal, and air pollution (5-7).

On the other hand, this phenomenon also creates some challenges for the places that migrants come from. For instance, first of all work force leaves these places and this leads to further underdevelopment of these areas (8), and second, it

will increase unemployment rate in the cities. Also, the age and gender composition of the population in places where the migrants come from is disturbed, which can make marriage difficult and consequently, reduce the marriage rate (9).

Urban population growth and the phenomenon of slum are not unique to developed countries, and developing countries are also not immune to this problem. Estimates indicate that, the urban population in these countries, with a 6-fold growth between 1925 and 2025, will reach to 57 % (10). According to the United Nations Center for Human Settlement, informal settlements are a phenomenon that accounts for more than 50 % of the city population in low-income countries and 20 % in the middle-income countries. Obviously, the consequences of this challenge will be more tangible in these countries; since overcrowding in a few urban areas makes it more difficult to manage these areas (11). Iran is also one of the middle-income countries that face this problem (12).

The growth of urbanization and marginalization in Iran has been significant in the last fifty years. Thus, the urban population of Iran has escalated from 31 % to 71 % and the rural population has decreased substantially from 68 % to 28 % during 1956-2011. In the interim, however, the global urbanization rate has increased from 34 % to 54 %. These statistics indicate the rapid shift of Iran towards the urban settlement pattern. This pattern shift has led to the increasing growth of informal and marginal settlements not only around large cities, but also around small towns in Iran, and consequently many challenges have been posed in these areas (13).

In general, creation and expansion of city slums is one of the concerns of policy-makers and over the years, many policies have been developed in this regard worldwide (14) with Iran being no exception. In this regard, many documents have been created that are valuable asset for the analysis of policies and detection of overall approaches taken by government to deal with city slums. Therefore, since almost all studies on city slums have been focusing on different challenges of

slums in Iran, and very few studies have been conducted to review and analyze the upstream national documents related to city slums, the present study was conducted to identify and analyze the upstream national documents related to city slums in Iran. In order to identify the actions and policies related to city slums in Iran.

Materials and Methods

This was a qualitative study with content analysis approach that was conducted to analyze the upstream national documents related to city slums in Iran. Upstream national documents refer to all government documents related to city slums published during Feb 1979 to Dec 2020 (published after the Iranian revolution to the time of the study) in Iran, which are made available to the public free of charge. All documents which were produced by private organizations and state documents which were not available to the public were excluded from the study.

The research team purposefully identified the key upstream national documents by searching through the websites of ministries of health and medical education, interior, and roads and urban development, as well as anti-narcotics headquarters, welfare organization, judicial system, Islamic consultative assembly, and the office of supreme leader, and also by attending the state organizations, including housing and urban development, municipality, Bam University of Medical Sciences and the office of the governor. The documents of interest were selected based on Jupp's four considerations, including originality, validity (accuracy), being representative (all the documents in that class), and meaning (what is said). According to these considerations, documents can be reviewed and analyzed only if their contents are drawn up by the competent authority, the accuracy of their contents is ensured, are comprehensive among other documents related to the field of interest, and fully convey the concept. The documents in the current study were evaluated separately and selected by two members of the research team based on the mentioned considerations. Disputes were discussed and

resolved in a meeting attended by all members of the research team. The review process was initiated after selecting the documents (15).

Finally, 26 upstream national documents were reviewed in this study (Table 1).

The conventional content analysis method was used for data analysis. First, the documents were reviewed several times by two members of the research team and sections related to city slums were identified. Then, each selected section was reviewed again by the same two members of the research team and the content of each section was extracted and formulated into a code. After encoding the whole text, the identified codes were merged based on their similarities and differences and then, the similar codes were classed in the main category.

The identified codes and sub-category were then evaluated by each of the two members and the dissimilarities were identified. In a meeting attended by all the team members afterwards, the dissimilarities were inquired and resolved.

Accuracy and stability of the findings

Spending enough time on data analysis and in the research environment, external review, and researcher's competence were required to boost the acceptability of the qualitative research. Overall, four characteristics, including validity (and reliability), credibility, transferability, and confirmability have been proposed for the acceptability of the qualitative research. In the current research, the validity and reliability of the data were determined using Lincoln and Guba's criteria (16). To ensure the credibility of the results, the issues raised at different stages of the study were resolved by a collaborative reflection of all the team members. Confirmability was guaranteed by preserving the documents in all stages of the research. The researchers' interest in the study subject, their long-term engagement with the data, and the attempt to obtain other team members' opinions were also considered to enhance the confirmability of the findings. Besides, the implementation of the present study as a team project, benefiting from the guidance and

supervision of experts, further assured the validity and reliability of the findings.

This study was extracted from a Ph.D dissertation in health services management at the North Tehran Branch Islamic Azad University. This study was approved by the Ethics Committee of the North Tehran Branch Islamic Azad University (Ethics code: IR.IAU.TNB.REC.1399.003.). Thanks are owed to all the people who cooperated in conducting this study.

Results

A total of 26 documents were reviewed with the aim of analyzing the content of upstream national documents in the field of city slums in Iran. Table 2 shows the main categories and subcategories identified in this study. In total, two main categories of policies related to preventing the creation of slums, and policies related to providing service and rehabilitation of slum areas were identified.

Policies related to preventing the creation of slums

Policies related to preventing the creation of slum areas is one of the main categories identified in this study. It refers to the fact that policies have been adopted to prevent the emergence of slum areas. This prevention includes preventing migration to cities, especially large cities, providing facilities and paying special attention to rural areas, forced confrontation, creating physical barriers, and preventing migration from inner cities to slum areas. Therefore, this category consists of 6 sub-categories, including preventing migration from inner cities to slum areas, poverty alleviation, preserving the rural fabric through the village guide plan, balanced distribution of population with landscaping and land development approach, creating green belts around cities, and forced confrontation with illegal constructions in slum areas.

Preventing migration from inner cities to slum areas

This sub-category refers to one of the significant factors in creation of slum areas, where migration from inner cities to slum areas is due to the

inability of low-income families to pay accommodation rent. Various documents point to the prevention of migration from inner cities to slum areas through the production of affordable housing and/or supply of land to low-income families living in cities with the help of public sectors. "The strategy of strengthening, ensuring, and regulating the role of public sector for public access to affordable housing, especially for low-income urban dwellers" (17).

Poverty alleviation

Another sub-category identified in the field of prevention is poverty alleviation. This sub-category points out that one of the reasons for living in slum is the poor living conditions of people in villages and small towns, and also the favorable socio-economic and cultural conditions of the cities. The difference in income, the difference between city and village as well as between big cities and small towns, and the dream of a desirable life and high income in cities cause people to migrate from villages and small towns to big cities. However, after migration to big cities, due to poverty and inability to pay for appropriate housing in cities, people are forced to live in slum areas. Thus, poverty alleviation has been mentioned as one of the policies to prevent city slums in the upstream national documents. Poverty alleviation refers to the elimination of poverty in all economic, social and cultural dimensions. *"Paying attention to poverty alleviation programs and creating a link between physical and socio-economic development of the city were among factors mentioned in the upstream national documents"* (18).

Preserving rural fabric through the village guide plan

Another sub-category identified in this study is the preservation of rural fabric through the village guide plan. This plan intends to examine the existing fabric of village and modify and organize it. In fact, this study aimed to create a suitable ground for the development of villages according to cultural, economic, and social conditions and also to create the necessary facilities to improve

the housing of villagers and provide environmental and public services.

"Village guide plan is a plan that while organizing and modifying the existing fabric, determines the amount and location of future expansion and use of land for various residential, productive, commercial and agricultural purposes. It also determines the facilities, equipment, and general needs of villages through approval plans for organizing space and rural settlements or comprehensive regional plans."(19).

Balanced distribution of population with landscaping and land development approach

This sub-category refers to the logical and geographical distribution of population and activities in Iran, which makes it possible to improve the physical structure of country's development by emphasizing on the organization and strengthening the links between populations in organized urban centers and rural and nomadic areas. According to this policy, population growth should be limited in saturated areas where the population is larger than the infrastructure capacity of the regions. Also, medium cities should be equipped and strengthened to accept the overflow of population from rural areas. Small towns should also be equipped and strengthened as a link between urban and rural societies by improving the service capacity of these cities, especially in the field of service delivery, to develop integrated urban and rural communities. Moreover, the migration from rural to urban areas should be limited and the capacity of rural facilities should be increased in order to reduce the gap in social services. The trade between urban and rural communities should also be promoted and strengthened. Furthermore, rural centers and central villages should be strengthened and city village should be created in order to facilitate services to rural areas by creating suitable grounds for establishing non-agricultural activities in rural areas. Finally, the maintenance of nomadic population should be based on the balanced relationship between livestock ratio and rangeland capacity, and provision of productive jobs for

surplus nomads in population centers with priority in rural areas, by creating suitable places in accordance with the characteristics of nomadic production.

Creating a green belt around the cities

Another subcategory identified in this study is the creation of green belts around the cities. By creating a green belt around cities, in addition to helping to reduce pollution, the empty space around cities, which can be a good place for creating slum and informal settlements, will be eliminated. *"Design and creation of green belts around population centers by municipalities with the participation of the government to reduce the empty space around cities"* (20).

Forced confrontation with illegal constructions in slum areas

This sub-category refers to the fact that clear and unambiguous restraining laws should be enacted regarding unauthorized constructions in slum areas. Illegal constructions in slum areas should also be demolished with the cooperation of judicial system. *"Establishing preventive regulations and enforcing the ban on all infrastructure services for illegal constructions outside the city and villages, and also demolition of illegal settlements with the cooperation of the judiciary"*(20).

Policies related to providing services and rehabilitation of slum areas

Policies related to providing services and rehabilitation of slum areas were identified as the main category in this study. This category refers to the fact that policies have been adopted to provide service and rehabilitate the slum areas. This means that, the phenomenon of city slum has been accepted and measures have been taken to rehabilitate and reduce the harm in these areas. This category consists of several subcategories, including the impulse phenomenon of social harms, the allocation of state financial facilities to organize informal settlements, the renovation of informal settlements, the establishment of satellite towns, and the provision of primary health care services in the form of health care network system.

Impulse phenomenon of social harms

One of the identified subcategories in this study is the impulse phenomenon of social harms. This subcategory means that social harms have acted as an impulse phenomenon for the discussion about city slum. In fact, social harms and their consequences have been raised as an important issue in the policy agenda, considering that slum areas are one of the socially vulnerable areas, so the discussion of slum areas entered the agenda with the help of social harms. *"In order to prevent and reduce social harms, the government is obliged to prepare a comprehensive plan to reduce social harms with an emphasis on the prevention of drug addiction, and also to identify vulnerable and socially critical areas in the urban and slum regions and focus on social support, health services, assistance, social and legal counseling, and employment programs by implementing a cross-sectoral cooperation strategy and social harm management system in these areas"* (21).

Allocation of state financial facilities to organize informal settlements

This sub-category indicates that the government has accepted the phenomenon of slum and seeks to provide various financial facilities, including granting legal status to informal settlements, and granting subsidized loans to improve the environment of informal and slum settlements. *"Matching the granting concessions of public and government sectors (such as granting legal status to informal settlements, providing services, such as loans and credits) with the qualitative and quantitative participation in promoting the environments of existing informal settlements"* (17).

Renovation of informal settlements

Another subcategory identified in this field was the renovation of informal settlements. This subcategory points out that, in order to accept the phenomenon of city slum and take measures to reduce the harm, the government has provided services, such as transferring of government-owned land at low prices and offering low interest rate loan to renovate informal settlements. *"The*

government is allowed to transfer the land under its ownership by applying a discount, installment or transfer of the right to use through a cheap leasing service in the form of a program to support the improvement and renovation of informal settlements" (22).

Establishment of satellite towns

This subcategory refers to the fact that one of the policies mentioned by the documents to serve the slum is to create satellite towns in the city suburbs to organize the slums. *"Organizing the suburban areas designated by the Supreme Council of Urban Planning and Architecture of Iran through the development and implementation of legal, financial, and cultural mechanisms to establish satellite towns in order to accommodate the migrant population"* (17).

Providing primary health care services in the form of health care network system

This sub-category refers to the fact that health services are provided in the form of referral system and health care network in Iran, and these services are provided especially in rural areas. One of the policies mentioned in the documents to provide health services in the slum areas was the provision of services in the form of health care network system. The services provided in these areas are similar to the services provided in health centers. The health service packages of this program include 4 groups of basic personal, general, medical, and special services. Public health services include service packages that are currently available to the community, and include environmental health services, school health services, and social health services. Primary personal health care includes health service packages that are integrated into health care networks, such as family and population health programs, infectious disease control programs, prevention and control of risk factors for chronic and non-communicable diseases, nutritional services, and mental health services that are provided according to the structure of population covered and different age groups. The package of medical services includes services that are

provided according to the individual's needs for referrals by the family health professional/expert. Special health services include services, such as rehabilitation services, addiction control, violence, and smoking cessation, which are provided based on the health problems and needs assessment. "Comprehensive and public health service system

will be redesigned based on primary health care, and its executive plan is approved with the coordination of the Deputy of High Council of Health and Food Security with the priority of benefiting less developed areas, especially villages, slums, and nomadic areas" (20).

Table 1. Studied upstream national documents

1	Constitution of the Islamic Republic of Iran(23)	1979
2	The first program of economic, social, and cultural development of the Islamic Republic of Iran(24)	1988
3	Executive regulations for preparing and approving rural guide plans(19)	1988
4	The second program of economic, social, and cultural development of the Islamic Republic of Iran(25)	1994
5	The third program of economic, social, and cultural development of the Islamic Republic of Iran(26)	2000
6	The Perspective of the Islamic Republic of Iran on the 2025(27)	2003
7	Document of empowerment and organizing informal settlements(17)	2004
8	The fourth program of economic, social, and cultural development of the Islamic Republic of Iran(21)	2004
9	Law on organizing and supporting the production and supply of housing(22)	2009
10	The general policies of the fifth development plan in the framework of the 20-year vision document(28)	2008
11	The fifth program of economic, social, and cultural development of the Islamic Republic of Iran(20)	2010
12	Comprehensive scientific map of the Islamic Republic of Iran(29)	2010
13	Law on support for rehabilitation, improvement, and renovation of dilapidated building and inefficient urban buildings(18)	2011
14	General policies of the housing and urban development sector(30)	2011
15	Health transition plan of the Islamic Republic of Iran(31)	2012
16	General employment policies(32)	2012
17	First level of health services document: for cities, slums, and rural areas(33)	2014
18	Policies of the resistance economy(34)	2014
19	Overall health policies(35)	2014
20	Program for providing and promoting primary health care in the form of expanding and strengthening the health care network in urban areas(36)	2015
21	Family policy(37)	2015
22	The sixth program of economic, social, and cultural development of the Islamic Republic of Iran(38)	2016
23	Family policy(39)	2016
24	General environmental policies(40)	2016
25	Social war on drugs document(41)	2018
26	National Women's Health Document of the Islamic Republic of Iran(42)	2019

Table 2. Main categories and sub-categories identified in this study

Main category	Sub-category
Policies related to preventing the creation of slums	Preventing migration from inner cities to slum areas Poverty alleviation Preserving the rural fabric through the village guide plan Balanced distribution of population with landscaping and land development approach Creating green belts around cities Forced confrontation with illegal constructions in slum areas
Policies related to providing service and rehabilitation of Slum areas	Impulsive phenomenon of social harms Allocation of state financial facilities to organize informal settlements Renovation of informal settlements Creating satellite towns Providing primary health care services in the form of health care network system



Discussion

The documents under review were classified in two categories of policies related to preventing the creation of slum areas and policies related to providing service and rehabilitation of slum areas. Policies related to preventing the creation of slum areas, included six sub-categories of preventing migration from inner cities to slum areas, poverty alleviation, preserving rural fabric through the village guide plan, balanced distribution of population with the landscaping and land development approach, creating a green belt around the cities, and forced confrontation with illegal constructions in slum areas.

Migration from cities to slum areas is one of the significant issues in the discussion of city slum in Iran. Because a significant number of slum residence, especially in large cities, includes urban residents who have been forced to migrate outside the cities due to unfavorable economic conditions and inability to pay rent (43). This is not unique to Iran and exists in many developing countries, which is consistent with the findings of Nassar & Elsayed study that showed one of the challenges of slums in Egypt is migration from inner cities to slum areas. This is due to economic reasons and cheaper housing in slum areas (44). The findings of Razavivand Fard's study also showed that one of the reasons for the creation of slum areas is migration from within the metropolises of Iran to slum areas due to the inability to pay the rising housing rent (45).

Another sub-category identified in this study is poverty alleviation. Unfavorable economic conditions, the difference in facilities between the village and the city, as well as between small towns and large cities, have created a beautiful showcase of city life in Iran. Residents of villages and small towns migrate to the city in the hope of a better life, but due to the significant cost of housing have no choice but to live in the slums (46). Results of the study by Mirehei showed that poverty and unbalanced distribution of facilities and services at national, regional, and local levels are the main reasons for migration and informal settlements in Iran (47). Biswas et al.(48) also

reported that one of the reasons for migration to cities and living in the slums in Bangladesh is looking for a better job, higher income, and better services. Therefore, adopting policies to reduce poverty and enable equitable distribution of facilities throughout Bangladesh can play a significant role in reducing urban migration and the phenomenon of slum.

Preservation of rural fabric through the village guide plan is another policy adopted that seeks to prevent marginalization through the development of villages and the provision of facilities. In this regard, the findings of a study by Zhou et al(49). showed that the policies adopted in China to target poverty reduction and rural empowerment, and also providing facilities to reduce poverty, improve rural living conditions, reduce migration, and creation of informal settlements were highly effective (49). In this regard, the balanced distribution of population with landscaping and land development approach was another policy mentioned in the documents. The findings of Dadi's study also showed that many of the problems related to informal settlements in Ethiopia are due to incorrect land management policies and population distribution over time, so that the accumulation of facilities in urban areas and rising housing prices in this areas have increased migration and reduced access to land for the low-income groups. Therefore, the low-income groups have been forced to live in low-cost settlements or to establish informal settlements and slums. Meanwhile the rural population has decreased over time and some villages have become uninhabited (50).

The creation of green belts around cities and the forced confrontation with illegal constructions in slum areas are other policies mentioned in the documents. Findings of Amakihe's study showed that the policy to demolish slum areas by the Lagos government in Nigeria did not yield the desired results, and residents of these areas settled in other slum areas and established new informal settlements (51).

The main category of policies related to providing service and rehabilitation of slum areas

had several subcategories, including the impulse phenomenon of social harms, allocation of state financial facilities to organize informal settlements and renovation of these settlements, establishment of satellite towns, and provision of primary health care services in the form of health network system.

In Iran, for many years, the issue of city slum was limited to the adoption of preventive policies. However, by increasing the volume and severity of social harms, increased attention of health policymakers to this issue and identification of slum areas as one of the main centers of social harms, the impulse phenomenon of social harm caused the policymakers in Iran to notice the issue of city slums (41). Therefore, policies were placed on the agenda with the intention of service provision and rehabilitation (52). In this regard, the documents refer to the issue of allocating state financial facilities to organize and renovate informal settlements. Findings of Nurdiansyah's study showed that the policy of improving and modernizing the housing situation in the slums of Jakarta in Indonesia had a significant impact on improving the situation of marginalized people and reducing their vandalism (53).

Another policy adopted in this regard was to establish satellite towns for marginalized people and immigrants. The findings of Ren's study showed that the construction of low-cost settlements on the outskirts of Guangzhou in China in cooperation with NGOs has been effective in improving the living conditions of residents in these areas and reducing social harm (54). Finally, the provision of primary health care services in the form of health care network system was identified as a policy to improve health status in the documents. In this regard, the findings of Adams & Rashid's study showed that with the introduction of primary health care in slum areas in Bangladesh, the level of access to health services and the use of services in these areas increased (55).

Although the provision of primary health services in the form of a healthcare network can affect the physical access of the marginalized

areas, the health of marginalized areas is not the only issue of health services and biomedical model of health. Not being sick alone cannot guarantee the health of these residents. Achieving the goal of providing health services requires the existence of an integrated approach to social factors affecting health and paying attention to all the aspects of health issue. Therefore, the public policy concerning the marginalization should be influenced by health policy in this area and the approach of social factors affecting health should govern all the other policies in this area (56). It should be noted that the only limitation of the present study was the inaccessibility of confidential as well as unpublished documents.

Conclusion

The aim of the present study was to analyze the upstream national documents concerning the city slums in Iran. Formation of the city slums in Iran is largely related to the rural-to-urban and small-town-to-metropolitan-area migrations. These migrations are mostly due to the unfavorable economic and social conditions and disproportionate distribution of facilities throughout the country.

The results of documentation review indicated that two categories of policies, namely the prevention of the slums formation and providing service and rehabilitation of slum areas, have been implemented in Iran. More policies have been adopted to prevent slums formation rather than to provide services and rehabilitation of slum areas. These policies are highly comprehensive and take various aspects of the issue into account. However, it should be noted that the policies for the provision of services and rehabilitation can affect the outcome of preventative policies. Although providing service and rehabilitation can play a significant role in harm reduction in these areas, Iranian policymakers should focus more on the fact that such policies can impose a moral dilemma. On the one hand providing service is vital for the residents of these areas, and on the other hand, it can encourage rural-to-urban and small-town-to-metropolitan-area migrations in the hope of



accessing government services and support, which in turn can escalate the issue of marginal settlement. Therefore, policymakers must consider the long-term consequences of their decisions and policies. Additionally, adopting the right policies and their meticulous implementation is essential for their effectiveness and success. Therefore, the implementation of such policies should be further studied.

Another point is that although the primary health services are provided in the form of a healthcare network, many issues, such as the rate of service utilization, high costs of health services despite the referral structures regarding benefiting from services, exist that require further investigation. On the other hand, the biomedical model is not enough, and health is a broad concept affected by various social, economic, and political factors. However, the approach of social factors affecting health has not been sufficiently considered by the health policymakers in the adopted policies.

Overall, health policymakers should pay attention to the impact of harm reduction and rehabilitation policies on marginalization preventative policies. Additionally, the approach of social factors affecting health instead of the biomedical model can be effective in adopting comprehensive and integrated policies in the field of health in marginalized areas. On the other hand, adopting the right policies is only the beginning of the policymaking process, the correct implementation and evaluation of the policies is equivalently crucial and can affect the outcomes. Therefore, conducting studies focused on the implementation and evaluation of such policies can be fruitful.

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Conflict of interests

The authors declared that there is no conflict of interests.

Authors' contributions

Poortaheri N, Alimohammadzadeh Kh, Hosseini SM, Maher A and Bahadori M designed research;

Poortaheri N, Alimohammadzadeh Kh, Hosseini SM, and Maher A conducted research; Poortaheri N and Bahadori MK analyzed data; and Poortaheri N, Alimohammadzadeh Kh, and Maher A wrote the paper. Alimohammadzadeh Kh had primary responsibility for final content. All authors read and approved the final manuscript.

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References

1. Sawhney U. Slum population in India: Extent and policy response. *Int J Res Bus Soc Sci*. 2013; 2(1): 47–56.
2. Pradhan NA, Tazeen AS, Hasnani FB, Bhamani SS, Karmaliani R. Measuring socio-economic status of an urban squatter settlement in Pakistan using WAMI Index. *J pakistan Med Assoc* [Internet]. 2018; 68(5): 709–14.
3. Ling G, Phua KH. Urbanization and slum formation. *Journal of Urban Health*. 2007; 84(1): 27–34.
4. Cavalcanti T, Da Mata D, Santos M. On the determinants of slum formation. *Econ J*. 2019; 129(621): 1971–91.
5. Mirzaei S, Khosravi S, Oroomie N. Female sex worker's children: their vulnerability in Iran. *Child Aust*. 2020; 45(1): 21–9.
6. Mirzaei S, Safizadeh H, Oroomie N. Comparative study of social determinants of health models. *Iranian Journal of Epidemiology*. 2017; 13(3): 222–34.
7. Ezeh A, Oyebode O, Satterthwaite D, Chen Y-F, Ndugwa R, Sartori J, et al. The history, geography, and sociology of slums and the health problems of people who live in slums. *Lancet*. 2017; 389(10068): 547–58.
8. Lilford RJ, Oyebode O, Satterthwaite D, Melendez-Torres GJ, Chen Y-F, Mberu B, et al. Improving the health and welfare of people who live in slums. *Lancet*. 2017; 389(10068): 559–70.
9. Patel A, Joseph G, Shrestha A, Foint Y. Measuring deprivations in the slums of Bangladesh: Implications for achieving sustainable development goals. *Hous Soc*. 2019;

46(2): 81–109.

10. Danso-Wiredu EY, Midheme E. Slum upgrading in developing countries: Lessons from Ghana and Kenya. *Ghana J Geogr.* 2017; 9(1): 88–108.

11. United Nation Habitat. Country activities report 2019 supporting the new urban agenda [Internet]. 2019. Available from URL: https://unhabitat.org/sites/default/files/2019/05/un-habitat_country_activities_report_-2019_web.pdf. Last access: 2 Jun, 2020.

12. NekoeiMoghadam M, Heidari N, Amiresmaeili M, Heidarijamebozorgi M. Prioritizing the health problems of slum residents using social determinants of health: A case study in a developing country. *Int J Health Plann Manage.* 2019; 34(2): e1323–33.

13. Azami M, Tavallaei R, Mohammadi A. The challenge of sustainability in informal settlements of Iran (case study: Sanandaj city). *Environ Dev Sustain.* 2017; 19(4): 1523–37.

14. Trindade TCG, MacLean HL, Posen ID. Slum infrastructure: Quantitative measures and scenarios for universal access to basic services in 2030. *Cities.* 2021; 110(March2021): 103050.

15. Sapsford R, Jupp V. Data collection and analysis. 2th ed. London: Sage. 2006. 139–44 p.

16. Lincoln YS. Emerging criteria for quality in qualitative and interpretive research. *Qualitative Inquiry.* 1995; 1(3): 275–89.

17. Delegation of ministers. Document of empowerment and organizing informal settlements. Tehran. 2004. Available from URL: <http://qavanin.ir/Law/PrintText/106646>. Last access: 8 September, 2020.[In Persian]

18. Islamic Consultative Assembly. Law on support for rehabilitation, improvement and renovation of dilapidated building and inefficient urban buildings. Tehran. 2011. Available from URL: <http://qavanin.ir/Law/PrintText/244595>. Last access:8 July, 2020. [In Persian]

19. Ministry of Roads and Urban Development of the Islamic Republic of Iran. Executive regulations for preparing and approving rural guide plans. Tehran. 1988. Available from URL: <https://www.mrud.ir>. Last access: 10 July, 2020. [In Persian]

20. Presidential organization. The fifth program of economic, social and cultural development of the Islamic Republic of Iran. 2010. Available from URL: <https://www.president.ir>. Last access: 9 July, 2020. [In Persian]

21. Presidential organization. The fourth program of economic, social and cultural development of the Islamic Republic of Iran. 2004. Available from URL: <https://www.president.ir>. Last access: 9 July, 2020. [In Persian]

22. Parliament. Law on organizing and supporting the production and supply of housing. Tehran. 2009. Available from URL: <https://www.parliran.ir>. Last access: 7 July, 2020. [In Persian]

23. Revolutionary Council. Constitution of the Islamic Republic of Iran. 1979. Available from URL: https://rc.majlis.ir/fa/content/iran_constitution. Last access: 9 July, 2020. [In Persian]

24. Presidential organization. The first program of economic,social and cultural development of the Islamic Republic of Iran. 1988. Available from URL: <https://www.president.ir>. Last access: 11 July, 2020. [In Persian]

25. Presidential organization. The second program of economic, social and cultural development of the Islamic Republic of Iran. 1994. Available from URL: <https://www.president.ir>. Last access: 12 July, 2020. [In Persian]

26. Presidential organization. The third program of economic, social and cultural development of the Islamic Republic of Iran. 2000. Available from URL: <https://www.president.ir>. Last access: 12 July, 2020. [In Persian]

27. Expediency Discernment Council. The perspective of the Islamic Republic of Iran on the 1404. 2003. Available from URL: <https://farsi.khamenei.ir/message-content?id=9034>. Last access: 13 July, 2020. [In Persian]

28. Supreme Leader Ayatollah Khamenei. The general policies of the fifth development plan in the framework of the 20-year vision document. Tehran. 2008. Available from URL: <https://>



www.leader.ir/fa/content/4666/www.leader.ir. Last access: 11 July, 2020. [In Persian]

29. Supreme Council of the Cultural Revolution. Comprehensive scientific map of the Islamic Republic of Iran. Tehran. 2010. Available from URL: <https://www.msrt.ir/file/download/page/1488284345-m01.pdf>. Last access: 14 July, 2020. [In Persian]

30. Supreme Leader Ayatollah Khamenei. General policies of the housing and urban development sector. Tehran. 2011. Available from URL: <https://farsi.khamenei.ir/news-content?id=11270>. Last access: 11 July, 2020. [In Persian]

31. Ministry of Health And Medical Education. Health transition plan of The Islamic Republic Of Iran. Tehran. 2012. Available from URL: http://treatment.sbm.ac.ir/uploads/HSE_Chapter_930207_1400.pdf. Last access: 11 July, 2020. [In Persian]

32. Supreme Leader Ayatollah Khamenei. General Employment Policies. Tehran. 2012. Available from URL: <https://farsi.khamenei.ir/news-content?id=16716>. Last access: 12 July, 2020. [In Persian]

33. Ministry of Health and Medical Education. First level of health services document: For cities, slums and rural areas. Tehran. 2014. Available from URL: <https://phc.umsu.ac.ir/uploads/instruction.pdf>. Last access: 8 July, 2020. [In Persian]

34. Supreme Leader Ayatollah Khamenei. Policies of the resistance economy. Tehran. 2014. Available from URL: <https://farsi.khamenei.ir/news-content?id=25370>. Last access: 7 July, 2020. [In Persian]

35. Supreme Leader Ayatollah Khamenei. Overall health policies. 2014. Available from URL: https://vct.iums.ac.ir/uploads/siasathaie_koli.pdf. Last access: 8 September, 2020. [In Persian]

36. Ministry of Health And Medical Education. Program for providing and promoting primary health care in the form of expanding and strengthening the health care network In urban areas. Tehran. 2015. Available from URL: <https://phc.umsu.ac.ir/uploads/instruction.pdf>. Last access: 15 July, 2020. [In Persian]

37. Supreme Leader Ayatollah Khamenei. Population policies. Tehran. 2015. Available from URL: <https://www.leader.ir/fa/timeline/12/www.leader.ir>. Last access: 8 September, 2020. [In Persian]

38. Presidential organization. The sixth program of economic, social and cultural development of the Islamic Republic of Iran. 2016. Available from URL: <https://www.president.ir>. Last access: 10 July, 2020. [In Persian]

39. Supreme Leader Ayatollah Khamenei. Family policy. 2016. Available from URL: <https://farsi.khamenei.ir/news-content?id=34254>. Last access: 12 September, 2020. [In Persian]

40. Supreme Leader Ayatollah Khamenei. General environmental policies. Tehran. 2016. Available from URL: <https://farsi.khamenei.ir/news-content?id=31422>. Last access: 11 July, 2020. [In Persian]

41. Anti-Narcotics Headquarters. Socially war on drugs document. Tehran. 2018. Available from URL: <http://www.dchq.ir>. Last access: 14 July, 2020. [In Persian]

42. Academy of Medical Sciences of the Islamic Republic of Iran department of women's health. National women's health document of the Islamic Republic of Iran. Tehran. 2019. Available from URL: <http://women.gov.ir/uploads/images/gallery/ejtemae/mostatad/vazeyat.pdf>. Last access: 14 July, 2020. [In Persian]

43. Naghdi A. Immigration and marginal settlement in Iran. *Popul Q*. 2011; 18(75): 35–55. [In Persian]

44. Nassar DM, Elsayed HG. From informal settlements to sustainable communities. *Alexandria Eng J*. 2018; 57(4): 2367–76.

45. Fard HR. Urbanization and informal settlement challenges: Case study Tehran metropolitan city. *Open House Int*. 2018; 43(2): 77–82.

46. Sami S, Daroudi M-R. Effect of fair distribution of urban facilities on advent of marginalization (Case Study: Islamshahr City, Iran). *Journal of Humanities and Cultural Studies*

R&D. 2017;2(1):1–13.

47. Mirehei M. Migration and informal settlements as apatial expression of social inequality in Iran. *Manag Res Pract.* 2017; 9(1): 28–43.

48. Biswas RK, Kabir E, Khan HTA. Causes of urban migration in Bangladesh: Evidence from the urban health survey. *Popul Res Policy Rev.* 2019; 38(4): 593–614.

49. Zhou Y, Guo Y, Liu Y, Wu W, Li Y. Targeted poverty alleviation and land policy innovation: Some practice and policy implications from China. *Land use policy.* 2018; 74(3): 53–65.

50. Dadi TT. The influence of land management on the prevalence of informal settlement and its implication for environmental management in Bahir Dar city, Ethiopia. University of south Africa. 2018.

51. Amakihe E. Forced eviction and demolition of slum: A case study of the Makoko slum in Lagos, Nigeria. *J Urban Regen Renew.* 2017; 10(4): 400–8.

52. Shaterian M, Heidary R, Shaterian M, Dolatyaran K. Modeling and analyzing the factors affecting the occurrence of crime in informal settlements (case study: Kashan Informal Settlement. *Reg Plan.* 2020; 10(37): 91–108.

53. Nurdiansyah A. Urban slum upgrading policy in Jakarta (case study: Kampung Deret program implementation). *Indones J Plan Dev.* 2018; 3(1): 19–31.

54. Ren X. Governing the informal: Housing policies over informal settlements in China, India, and Brazil. *Hous Policy Debate.* 2018; 28(1): 79–93.

55. Adams AM, Rashid SF. Mobilising demand for primary health care services among urban slums: insights from a case study in Bangladesh. *Dev Pract.* 2021; 31(9): 1–13.

56. Adler NE, Glymour MM, Fielding J. Addressing social determinants of health and health inequalities. *Jama.* 2016; 316(16): 1641–2.