Consumer Instigated Unnecessary Medicalization in Iran: A Qualitative Thematic Analysis of the Health Professionals’ Conjectures

Abdolreza Shaghaghi,1,2 and Parinaz Doshmangir1,*

1Health Education & Promotion Department, Faculty of Health, Tabriz University of Medical Sciences, Tabriz, Iran
2Medical Education Research Center, R&D Campus, Tabriz University of Medical Sciences, Tabriz, Iran
*Corresponding author: Parinaz Doshmangir, Health Education & Promotion Department, Faculty of Health, Tabriz University of Medical Sciences, Tabriz, Iran. E-mail: pdoshmangir@yahoo.com

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Abstract

Background: Medicalization of the natural lifelong socio-biological phenomena is one of the epitomes of challenges in front of modern societies. Empirical research findings have revealed that demand for some of the health care services is expanding, especially after commencement of the Health Transformation Plan (HTP) in Iran. Given the evidence about the precedents and probable streamline role of the sovereign market and consumers’ demands on the country’s surging medicalization trend, this study was aimed at exploring the healthcare professionals’ (HCPs) prospects about the demand side portrayal of the phenomenon.

Methods: Purposive and snowball sampling method were used to recruit a total of 31 key national informants to participate in 14 semi-structured interviews and 3 focus group discussions that were planned to acquire data and insights that were not accomplished during the interview sessions. The data were collected, transcribed, and analyzed from March 2016 to February 2017 using content analysis (inductive and deductive) approach to identify certain concepts and explore the underlying facts behind the discourses. The transcribed texts were indexed and codes were extracted and categorized into subthemes and themes. MAXQDA 12 software was used for better organizing and managing the data.

Results: Data were organized in 4 categories and 10 subcategories. Factors relating to national/provincial health policies and plans, healthcare consumers, the public expectations about health care professionals’ affluence, and community context were considered as key sets of factors to infuriate unnecessary medicalization in Iran with the HTP having considerable role as a suitable platform to boost the incongruous phenomenon.

Conclusions: The socio-cultural context and health policy making mechanisms could have a significant role in over utilization of health services and unrestrained medicalization in Iran. The dilemma should be regarded as a multidimensional embarrassment and until a multifaceted approach was not applied for its control, no major success could be expectable.

Keywords: Medicalization, Overuse, Qualitative Study, Health Transformation Plan, Iran

1. Background

Overwhelming scientific evidence exist regarding the priority of consummation of revisions in health care systems to empower communities for greater control over their health, however, baseline social impediments precluded the efforts in many countries of the world (1). Medicalization of the natural lifelong socio-biological phenomena such as child birth, occasional finite mode changes, and age-related degenerations is one of the epitomes of challenges in front of modern societies (2, 3). Such an approach in dealing with previously non-pathologic and clinically innocuous circumstances could provoke inferocious repercussions and unnecessary costs, especially for those communities that already suffer from economic constraints (4, 5). Escalation of demands for health care services, incremented stress level for community members, over-reliance on health professionals (6, 7), and lowered level of tolerance for discomfort or pain and depreciated self-care capacity could be other consequences (8).

Parma/medico companies and private healthcare sectors were suggested to benefit by bursting into the flame and augmentation of health care needs (9). Hence, the fiscal and non-financial resources of countries that could otherwise be efficiently used for health attainment will be demolished (10, 11). Pressure on health care policy makers from the demand side of the equation to allocate resources for expanded health care needs versus real health needs may even expedite the detrimental paradox (12-15). The
health insurance payments mechanisms and conscripted monopoly of health care professions in some countries were implied as other antecedents of redundant medicalization (16, 17). However, subordination of the health care professionals’ roles in expansion of medicalization and elaboration of market and consumers driven medicalization was highlighted in other annotations (18, 19). There are still debates regarding the degree of contribution each group of these factors (20, 21) might play in distension of the incident but robust research evidence exist that endorse provision of health care in accordance with patients’ preferences rather than their real care needs (22).

There are empirical research evidence that suggest demand for non over the counter (OTC) drugs from consumers’ side is pervasive in Iran (23). It is also propounded that a staggering demand exists for some of the medical procedures, among them search for rhinoplasty and caesarean section in case of uncomplicated deliveries are paramount (16, 24). Recent revamp in the Iranian national health system (INHS), which had been labeled as health transformation plan (HTP) since its commencement from Oct 2014, was also blamed to have an unfavorable effect on induced health care demands (25, 26).

2. Objectives

Given the meager research evidence about the precedents of medicalization in Iran and knowledge gap about the streamline role of the sovereign market, consumers’ demands on the country’s surging medicalization trend, and also evolving debates about the consequent repercussion of the HTP on over medicalization of life through inflaming demands for unnecessary health care, this study was aimed at exploring the health care professionals’ (HCPs) prospects about the demand side portrayal of the phenomenon.

3. Methods

Face to face interview and focus group discussion (FGDs) sessions were organized to collect data about the consumer side factors and their extent of influence the expansion of medicalization. Data collection, transcription, and analyses were performed from March 2016 to February 2017.

3.1. Research Participants

Policymakers, academic members, general managers of selected hospitals and health centers, general practitioners and specialists were recruited into the study. All study participants were familiar with the concept of medicalization, its developments and impacts. The proposed heterogeneity of the study participants from different vocational subgroups and organizations helped better understand the community driven precipitates and gauging further into the mystique aspects of the study subject.

3.2. Participants’ Recruitment and Data Collection

Purposive sampling method was used to recruit key informants from different health care settings including mid and higher level organizational layers (n = 31, 20 males and 11 females). Data collection was performed based on the 14 semi-structured interviews and two focus group discussions (FGDs) (Table 1). An interview guide was prepared based on the objectives of the study, the literature review outputs, experts’ opinions, and the study team members’ comments.

The interview and FGDs questions revolved around the consumer driven factors that might provoke medicalization in Iran.

The FGDs produced the data and insights that were not accomplished during the interview sessions. Concurrent data analysis procedure was operated and the data collection process was continued until the data saturation point, at which the retrieved codes became repetitive. The interview sessions were planned to be done at the participants’ choices of option (generally their offices) and FGDs comprising 8 - 9 participants in 1 of the Tabriz University of Medical Sciences’ general assembly halls.

3.3. Interviews and Focus Group Discussions

To insure study rigor, 2 pilot interviews were performed and the whole procedure was examined with the study team members before proceeding. Based on the pilot testing of the interview session, necessary amendments were performed in the operating agendum.

Each of the interviews were about 40 to 110 minutes and were arranged for the most convenient time of the interviewees. The FGDs were pursued for an average of 40 - 50 minutes. During the interviews and FGDs, the discourses were hand written and also recorded using a digital voice recorder. In the beginning of the interviews and FGDs, all efforts were done to develop a mutual relation with the study participants through explaining the study objectives. Their informed consent was obtained.

3.4. Ethical Considerations

Written informed consent procedures were followed before the data collection. Confidentiality of the stated ideas and opinions and also anonymity of the study participants were explained at the beginning of the interviews.
Table 1. The Interviewees’ Attributes in the Qualitative Inquiry of Iranian HCPs’ Prospects on Consumer Driven Medicalization

| Variables                        | Number of Interviews Attendees | Number of FGD Attendees |
|----------------------------------|--------------------------------|-------------------------|
| Sex                              |                                |                         |
| Male (*n* = 20)                  | 12                             | 8                       |
| Female (*n* = 11)                | 2                              | 9                       |
| Organization                     | Positions                      |                         |
| Ministry of health and Medical education (MoHME) |                                |                         |
| Former and current senior officials | 4                            |                         |
| Former minister of health         |                                |                         |
| Deputy ministers of public health |                                |                         |
| Universities of Medical Sciences |                                |                         |
| Faculty members                  | 4                              |                         |
| Deputy for treatment affair      |                                |                         |
| Academic researchers             |                                |                         |
| Educational hospitals            |                                |                         |
| Professional and general managers of hospitals | 8              |                         |
| Frontline health care providers  |                                |                         |
| Insurance organizations          |                                |                         |
| National level leading authorities | 4                        |                         |
| Monitoring and evaluation unit authorities |                    |                         |
| Vice-presidency office for planning and strategic supervision |                                |                         |
| Senior national officials        | 2                              |                         |
| Health research centers          |                                |                         |
| Heads of research centers        | 9                              |                         |
| Researchers                      |                                |                         |
| Total                            |                                | 31                      |

The assigned codes to the participants and all study data that could be attributed to the participants were kept in a confidential and secure place that is only accessible to the researchers.

3.5. Data Analysis

The interviews and FGDs were transcribed verbatim and inductive as well as deductive approach was performed to identify certain concepts in the texts and also to investigate their occurrence, repetition, relationships, and to explore the underlying facts behind the discourses. The deductive analysis approach extracted themes and subthemes based on a pre-existing framework. Inductive analysis helped to expand the themes or subthemes beyond the framework. The transcribed texts were indexed and codes were extracted and categorized into subthemes and themes. MAXQDA 12 software was used for better organizing and managing the textual data.

3.6. Validity

Credibility, transferability, dependability, and conformability (27) were validity indices. Integration of the research plan and review sessions was closely monitored to increase credibility. To increase transferability, a group of competent and heterogeneous study participants were selected and data collection and analysis were conducted simultaneously. To increase dependability, data were analyzed independently by the researchers and all efforts were done to reach a compromise in the case of mismatches. As for conformability, the researcher was able to explain the entire research procedure from beginning to the end.

4. Results

Findings related to the factors that might trigger medicalization were presented in 4 main themes and 10 subthemes (Table 2).

4.1. National/Provincial Health Policies and Plans

National and local health policies may provoke intense effects on health care utilization and expenditures and therefore, infuriate imbalance between the supply and demand sides of the resources in a health system. Policies such as debilitated health insurance plans and adoption of a pilot reformatory program without explicit synchronization and compilation of robust effectiveness evidence may exasperate redundant health care demand and utilization and lead to a waste of billions of dollars.
Table 2. The Identified Themes and Sub-Themes in the Qualitative Inquiry of Iranian HCPs’ Prospects on Consumer Driven Medicalization

| Theme                                           | Subtheme                                      |
|-------------------------------------------------|-----------------------------------------------|
| National/provincial health policies and plans    | Rampant over utilization of health care       |
|                                                 | Government-subsidized medical care            |
| Healthcare consumers beliefs and preferences     | The dominant cultural norms among individual patients |
|                                                 | The knowledge and awareness of patients       |
|                                                 | Personal preferences                         |
| The public expectations about health care        | The culture of the medical community          |
| professionals’ affluence                        | The social and professional prestige of physicians |
|                                                 | Profitability                                 |
| Community context                               | Role of the media                            |
|                                                 | Mainstream community culture                 |

"The health policies that are implementing in the country should subdue over medicalization but instead; they are actually aggravating the phenomenon in different ways." (P1)

Some of the interviewees referred to the impingement that was created by the implementation of recent HTP in the INHS. They addressed that the plan mainly rocketed the health care per capita expenditure through amplification of redundant demands and thus boosted over utilization of the health care.

"The HTP was coined by top authorities in the MoHME to reduce out of pocket payments and health care frauds e.g. receiving kickbacks or conspiracies related to receive of under-table money and also improve access to health care especially amongst underserved sub-groups of the population. But in practice, the plan has resulted to over utilization and surreal mix of real and induced health care needs. Excessive request for medical imaging or laboratory services as well as other diagnostic and therapeutic technologies even in public hospitals where patient’s problem can be easily identified with a clinical examination are examples of redundancies in the Iranian health care administrative and service delivery structures”. (FGD2)

The health insurance mechanisms and plans and government-subsidized health services were also pinpointed as a major cause of extravagant demand for health services and dominant impediments in front of efforts to reach the HTA objectives.

"With implementation of the HTP, we clearly saw that for instance, many of the clinical care tariffs had been doubled or even tripled. At least 10 million health insurance cards were issued to people who had not any health insurance. These newly insured people were allowed in the scheme to receive their required health care (i.e. included those services with increased price list) from private or public sectors. Thus, insurance companies were faced with bulk of demands with insufficient funds to cover their costs. The result was absolute chaos in the country’s health care market which is prevailing right now!” (P13)

4.2. Healthcare Consumer’s Beliefs and Preferences

The dominant cultural norms and beliefs among patients, their knowledge and awareness about health services, pharmaceutical products and medical procedures, and personal preferences were suggested to be important in expansion of health care demands as an exemplar case of medicalization.

According to the participants, the cultural norms among lay people, for instance about definition of health and illness and efficacy of special health care services might push the providers for unwilling provision of services that are not actually needed but requested imperatively by the consumers.

"In fact, people also like this; that is, if someone visits a doctor who measures their blood pressure and tells that there is nothing wrong with them, the patient may go to another clinics or physicians’ office, thinking that the previous doctor didn’t know what to do for them!” (P12)

4.3. The Public Expectations About Health Care Professionals’ Affluence

The overall community members’ expectations about level of affluence the high rank health care professionals (e.g. specialist physicians) should have actually rooted in people’s normative believes about the amount of salary or other income sources they might have after studying for several years. A couple of years ago, due to reasons such as manpower imbalance in the health sector, most of the health care professionals in Iran, especially physicians, had a relatively higher level of income and therefore, state of wealth compared to other professions. However, currently
due to the immense number of graduates and competition to find a job in public or private sector from one hand and economical turbulences in the country from other hand, many of the health care professionals should squeeze their budget for survival. This is while the public mind set about the health professions’ level of income and wealth has not changed yet. Such a social pressure from public side could force health care providers to increase their income and to do so, provoking of the health care demands will be one of the solutions.

“Unfortunately, making more money has become a competition in our industry, which is an important factor through the public prospects. If you want to find out one of the main reasons for the occurrence of the unfavorable phenomenon in the health care industry, it can be said that it goes back to money and financial issues and the pressure exist on the colleagues”. (P 6)

Such an impression was also confirmed in the group discussions:

“Medicalization and unnecessary prescription of medical procedures or drugs have their routes in the clinics and the physician’s offices”. (FGD1)

According to some of the study participants, physicians are often expected to see themselves as honest providers who should provide reasonable and evidence-based services and must ignore the social context they are living in.

“Most often providers are asked to do their job persistently and scientifically sound, but when you ask them to forget the system and social context as a whole identity they complain that they cannot ignore the surrounding atmosphere and must think about themselves and their families.” (P 10)

A number of study participants referred to the role of health system professions that might be played in overall community trends. Physicians for example are generally regarded as one of the main social groups. Such a social position gives them abundant power to pursue their wishes in relation to the level of affluence they desire. One of the participants quoted on the issue as follow:

“Because of the inherent social and political power of the physicians and the fact that they are regarded as one of the gate keepers they can do whatever they want without fear of being persecuted”. (FGD2)

4.4. Community Context

Media and mainstream community culture could play a significant role in promoting or prevention of medicalization. The role of media and community wide subjective expectations about the social position and income level of health care professions are factors that undeniably could contribute to medicalization.

The socioeconomic context had a significant role in the occurrence and development of many social phenomena in Iran including medicalization of life. The inflation rate, changing rules and regulations in the health system, and number of students that are accepted each year to study in the universities and inherent regional disparities are amongst the suggested precipitates.

“Our health system is running in an overall administrative, political and socio-cultural environment, and we are not working in isolation. When there are social pathologies like corruption and inadequacy of managerial and administration at macro level, the health care system and the working professions will be affected as well.” (P 9)

It was suggested that health care providers are being judged based on their level of income and wealth and not based on their expertise and performance in the health system.

“Being a physician is not attractive anymore for many of the community members, unless he or she has an expensive car or home.” (P 11)

According to the respondents’ opinions, media play a major role in contemporary societies and development of cultural norms, views, beliefs, values, and stereotyped social images. Many people receive a large part of their information from the media. Television broadcasts and advertisements can shape community preferences and thus their felt needs.

“Advertisements on TV are much more extensive and intrusive in Iran as many countries of the world. Therefore, media can play a major role in expansion or compression of the medicalization but it seems that negative impact of the TV programs supersedes currently the positive aspects”. (P 4)

5. Discussion

Medicalization of life in societies may have both social-cultural and health system related components (28). The study findings indicated that socio-cultural component of medicalization in Iran have an extensive effect on its extension. Despite the efforts to understand baseline antecedents of the phenomenon in many countries of the world a clear picture does not exist in developing countries about all the probable contributory factors. This is the topic that is rarely taught in medical education curriculum worldwide while it is a rapidly spreading hindrance (29). Given the adverse impacts of medicalization on communities health and wasting of financial resources, urgent need for close monitoring of provided healthcare services and administering necessary revisions as recommended in the Ottawa Charter is required (30, 31). Beyond that, this study...
results pinpointed the need for consideration of communities driven forces that might directly or indirectly have an effect on medicalization and its extend.

According to the findings of this qualitative study, media could have both positive and negative implications on the medicalization of life. There is research evidence to indicate negative impacts of media on medicalization spread, for example by increasing demand for cosmetic surgeries (19) or other unnecessary surgeries (22).

The results were also implied that the country’s health polices, administered rules and regulations, and extemporaneous preferment plans could be regarded as one of the main precursor in exasperation of the over utilization and rampant health care demands. The available research evidence consistently revealed that utilization of outpatient services were declined in favor of overall increase in health care utilization and inpatient care services (26).

In terms of the occurrence of the medicalization, the findings showed that public opinions, their expectations, and dominant cultural norms could direct health systems and cause challenges for evidence based care provision. Therefore, attempts to deal with the devastating phenomenon must not focus only on health systems per se, but on other wider socio-economic and cultural determinants. Corruptive mechanisms, communities’ economic status, cultural norms and appreciating fundamental human dignity could infuriate efforts to achieve best practice goals in health care provision. Deviation from the codes of ethics in the health care systems when community circumstances are not favorable was well proved (22).

5.1. Conclusion

The healthcare providers and consumers play significant roles in occurrence of medicalization in Iran. The community driven factors were indicated that the issue is a multidimensional embarrassment for us and until a multifaceted approach was not applied for its control, no major success could be expectable. Further studies are recommended to inspect all potential ingredients of the deplorable enigma in order to reduce surplus costs and other inconveniences that might be imposed on individuals and the health system.

References

1. World Health Organization. Milestones in health promotion: Statements from global conferences. 2009. Available from: http://www.who.int/healthpromotion/Milestones_Health_Promotion_05022010.pdf.
2. Arunima SK. Medicalization: A growing menace. Delhi Psychiatry J. 2012;25(2):255-9.
3. Sholl J. The muddle of medicalization: pathologizing or medicalizing? Theor Med Bioeth. 2017;38(4):265-78. doi: 10.1007/s11077-017-9414-4. [PubMed: 28674861].
4. Clark J. Medicalization of global health: has the global health agenda become too medicalized? Glob Health Action. 2014;7:23998. doi: 10.3402/gha.v7i2.23998. [PubMed: 24848659].
5. Williams SJ, Covenev C, Gabe J. The concept of medicalisation re-assessed: a response to Joan Busfield. Social Health Illn. 2017;39(5):775-80. doi: 10.1080/01469566.2017.1433676. [PubMed: 28425060].
6. Kvaale EP, Haslam N, Gortzien WH. The ‘side effects’ of medicalization: a meta-analytic review of how biogenetic explanations affect stigma. Clin Psychol Rev. 2013;33(6):782-94. doi: 10.1016/j.cpr.2013.06.002. [PubMed: 23831866].
7. Morgan DJ, Brownlee S, Leppin AL, Kressin N, Dhrusa SS, Levin L, et al. Setting a research agenda for medical overuse. BMJ. 2015;351:e4534. doi: 10.1136/bmj.e4534. [PubMed: 26306661].
8. Berral A, Pira E, Romano C. [Overdiagnosis and defensive medicine in occupational medicine]. G Ital Med Lav Ergon. 2014;36(4):321-31. [PubMed: 25558728].
9. Gabe J, Williams S, Martin P, Covenev C. Pharmaceuticals and society: power, promises and prospects. Soc Sci Med. 2015;131:191-8. doi: 10.1016/j.socscimed.2015.02.031. [PubMed: 25727500].
10. Moynihan R, Doust J, Henry D. Preventing overdiagnosis: how to stop harming the healthy. BMJ. 2012;344:e3502. doi: 10.1136/bmj.e3502. [PubMed: 22645185].
11. Conrad P, Mackie T, Mehrora A. Estimating the costs of medicalization. Soc Sci Med. 2010;70(12):1943-7. doi: 10.1016/j.socscimed.2010.02.009. [PubMed: 20923822].
12. Correia T. Revisiting medicalization: A critique of the assumptions of what counts as medical knowledge. Frontiers Soc. 2017;2. doi: 10.3189/20700004.2017.121316.
13. Hofmann B. Medicalization and overdiagnosis: different but alike. Med Health Care Philos. 2016;19(2):253-64. doi: 10.1007/s11017-016-9693-6. [PubMed: 25692167].
14. Blasco-Fontecilla H. Medicalization, wish-fulfilling medicine, and disease mongering: toward a brave new world? Rev Clin Esp (Basc). 2014;214(2):104-7. doi: 10.1016/j.ice.2013.08.012. [PubMed: 23772477].
15. van Dijk W, Faber MJ, Tanke MA, Jeurissen PP, Westert GP. Medicalisation and Overdiagnosis: What Society Does to Medicine. Int J Health Policy Manag. 2016;5(1):619-22. doi: 10.10171/hjpm.2016.121. [PubMed: 27801356].
16. Naraghi M, Saberi H, Mirmohseni AS, Nikdad MS, Afarideh M. Management of advanced intracranial intradural juvenile nasopharyngeal angiofibroma: combined single-stage rhinosurgical and neurosurgical approach. Int Forum Allergy Rhinol. 2015;5(7):755-8. doi: 10.1002/air.21507.
17. Jamoulle M. Quaternary prevention, an answer of family doctors to overmedicalization. Int J Health Policy Manag. 2015;4(2):68-4. doi: 10.15171/hjpm.2015.24. [PubMed: 25674569].
18. Conrad P. The shifting engines of medicalization. J Health Soc Behav. 2005;46(1):3-14. doi: 10.1177/0022146504060002. [PubMed: 15869117].
19. Merianos AI, Vidoureski RA, King KK. Medicalization of female beauty: A content analysis of cosmetic procedures. Qual Rep. 2013;18(6):3-14.
20. Mintzes B. For and against: Direct to consumer advertising is medicalising normal human experience: For. BMJ. 2002;324(7342):908-9. doi: 10.1136/bmj.324.7342.908. [PubMed: 11950745].
21. Wyatt WJ. Behavior analysis in the era of medicalization: the state of the science and recommendations for practitioners. Behav Anal Pract. 2009;2(2):49-57. doi: 10.1017/BFO319748. [PubMed: 22477707].
22. Dwarsswaard J, Hilhorst M, Trappenberg M. The doctor and the market: about the influence of market reforms on the professional medical ethics of surgeons and general practitioners in the Netherlands. Health Care Anal. 2011;19(2):188-402. doi: 10.1007/s10728-010-9168-2. [PubMed: 21267659].
23. Khalifeh MM, Moore ND, Salameh PR. Self-medication misuse in the Middle East: a systematic literature review. Pharmaco Res Perspect. 2017;5(4). doi: 10.1016/j.prp.2017.04.001. [PubMed: 28805984].
24. Omani-Samani R, Mohammadi M, Almasi-Hashiani A, Maroufizadeh S. Cesarean Section and Socioeconomic Status in Tehran, Iran. J Res Health Sci. 2017;17(4). e00394. [PubMed: 29233956].
25. Ferdosi M, Kabiri S, Keyvanara M, Yarmohammadlan MH. Challenges of Iran health transformation plan about inpatients payment: Viewpoint of experts. Health Scope. 2017; In Press [In Press]. doi: 10.5812/healthscope.14388.
26. Homaei Rad E, Yazdi-Feyzabad V, Yousefzadeh-Chabok S, Afkar A, Naghibzadeh A. Pros and cons of the health transformation program in Iran: evidence from financial outcomes at the household level. Epidemiol Health. 2017;39. e2017029. doi: 10.4178/epih.e2017029. [PubMed: 28728347].
27. Noble H, Smith J. Issues of validity and reliability in qualitative research. Evid Based Nurs. 2015;18(2):34–5. doi: 10.1136/eb-2015-102054. [PubMed: 25653237].
28. Carter SM. Overdiagnosis: An Important Issue That Demands Rigour and Precision Comment on ‘Medicalisation and Overdiagnosis: What Society Does to Medicine’. Int J Health Policy Manag. 2017;6(10):611–3. doi: 10.15171/ijhpm.2017.24. [PubMed: 28949478].
29. Vian T. Review of corruption in the health sector: theory, methods and interventions. Health Policy Plan. 2008;23(2):83–94. doi: 10.1093/heapol/czm048. [PubMed: 18281310].
30. Lantz PM, Lichtenstein RL, Pollack HA. Health policy approaches to population health: the limits of medicalization. Health Aff (Millwood). 2007;26(5):1253-7. doi: 10.1377/hlthaff.26.5.1253. [PubMed: 17848434].
31. McQueen DV, De Salazar L. Health promotion, the Ottawa Charter and ‘developing personal skills’: a compact history of 25 years. Health Promot Int. 2011;26 Suppl 2:i194-201. doi: 10.1093/heapro/dar063. [PubMed: 22080074].