

The Different Structures of Healthcare for Prisoners: A Review Study

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Abstract

Background & Aims: Health and medical problems of prisoners are health challenges. In an environment where the most important priority is maintaining order, control, and discipline, maintaining health and providing healthcare will have its own challenges. For this reason, some countries have transferred the responsibility for providing health services in prison to the Ministry of Health. We aimed to investigate the developments and changes in providing health services to prisoners and their different structures in different countries.

Materials & Methods: English language articles in Scopus, Google Scholar, and PubMed databases were searched. Advanced search options were used, initially based on the titles and keywords. Articles published until September 2019 were included using the following keywords: Prison, Jail, Primary care, Correlational health, Nursing, Prisoners, Health, and Healthcare.

Results: Prison health was addressed not as an independent matter but as part of the duties of the Ministry of Health and the National Health System or the Ministry of Justice in each country. Reports from research carried out in France, Scotland, the Netherlands, Norway, Afghanistan, England-Wales, and New South Wales suggest a fundamental shift in the health care of prisoners in these countries and the process of transferring responsibility from the Ministry of Justice to the Department of Justice are among gained achievements.

Conclusion: The priority of the Department of Justice and the Prisons Organization is to maintain prison rules and regulations, so the quality of work and staff productivity will be greater when the responsibility of providing prison health services is transferred to the Ministry of Health and the National Health System. The opportunity for advanced research and training in this field will also increase.

Keywords: Health services, Prison, Ministry of Health, Department of Justice

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Introduction

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Evaluating the prisoners' health condition and providing suitable healthcare services to the group at risk has been among the important concerns of healthcare policymakers in different countries. Healthcare issues of prisoners are still among the most challenging issues in the healthcare industry (1). The health needs of prisoners are similar to those of the general public; however, these needs are often overshadowed or ignored as a result of high-risk behaviors such as drug abuse, mental health needs, and suicide (2). Moreover, certain health issues are specific to prisoners. Being a prisoner limits family support and access to non-prescription medication (3). Prisons are crowded and prisoners suffer from emotional deprivation and might even become addicted to drugs in prison. Being a prisoner also complicates other healthcare needs in cases such as chronic diseases, diabetes, tuberculosis, and epilepsy (4). On the other hand, prisoners have certain health policies of their own, such as screening and examinations upon entry. Currently, prisons provide primary healthcare services. Providing healthcare services in prisons face several challenges that are not experienced in the general public. Life conditions in most prisons are not healthy worldwide, due to the crowded environment, aggression, lack of light and fresh air, food deprivation, and potentially infective activities such as tattooing and high-risk sexual behavior. Many prison management systems cannot solve their infrastructural problems. These problems include weakness in the prison sewage system, exacerbated by the increasing density of inmates in small environments with limited sanitation. Some prisons do not have suitable sewage systems and tap water. Moreover, malnutrition increases the prisoners' susceptibility to infective diseases. Prisons are suitable environments for the spread of communicable diseases such as tuberculosis, AIDS, and hepatitis B and C. The prevalence of HIV and hepatitis B and C in prisons is much higher than in the general population. In such

conditions, prisons are dangerous for both prisoners and personnel. Crowded prisons with low sanitation with prisoners suffering from contagious diseases are at a very high risk of disease outbreaks and should be dealt with immediately. Many prisons fail to provide the most basic healthcare needs (5). 24-hour access to physician is not possible, medication shelves are empty, and medical rooms are often crowded with patients and access to medication and doctor is not systematic and organized. One of the important principles of healthcare in prisons is that it should be done free of charge (5). The main purpose of transferring criminals to prisons is to maintain and rehabilitate them; and it is the responsibility of physicians, nurses, and health personnel to provide primary healthcare in such places (6).

In Iran, healthcare services are provided in prisons by the Ministry of Justice and General Directorate of Prisons Health. Obviously, in an environment where priority is to maintain order, control and discipline, maintaining health and providing health services will present its own challenges (7). Imprisonment affects self-care because it deprives individuals of independent behaviors and inmates depend on prison staff for their simplest health needs. Due to security reasons, access to medical team is limited for prisoners and nurses might be asked to perform tasks not related to their profession. Some prisoners might try to get unnecessary medication by imitation and this leads to a lack of trust in healthcare personnel (7). Because of their inherent nature, prisons threaten people's health, which is why some countries, such as France and the United Kingdom, have transferred the responsibility of the prison health service to the Ministry of Health (8,9). This solution can also be effective in other countries. Previous studies in other countries have shown that paying attention to the issue of prison health has become the focus of research (10). Therefore, in this study we aimed to evaluate the changes in healthcare provided to prisoners and its

different structures in different countries with a standard healthcare service system. In this regard, studies focusing on developments in prison healthcare management were selected and their results were extracted.

Materials and Methods

In this review, in order to discuss the evolution of prison healthcare services, and its structures and achievements, English language articles in Scopus, Google Scholar, and PubMed databases were searched. Advanced search options were used, initially based on the titles and keywords. Articles published until September 2019 were included using the following keywords: Prison, Jail, Primary care, Correlational health, Nursing, Prisoners, Health, and Healthcare. Inclusion criteria were as follows: full-text English articles, having either qualitative or quantitative design and assessing the process the healthcare services in prisons. Unrelated studies, abstracts, letter to editors and articles in other languages were excluded. The included studies were assessed with respect to the sampling method, using valid tools, suitable data analysis, ethical considerations, and the existence of inclusion and exclusion criteria. After initial evaluation and omitting repeated and unrelated studies, related studies were

selected. In order to access more articles, the references of the searched articles were also checked, and four more articles were added through this.

The keywords and searches were determined by two experts in healthcare. Then, the search and evaluation processes were repeated by one of the authors to reassure the search quality. To check that the titles of the articles matched the aims of the research, the titles were first checked and then the abstracts. After that, the full texts were read. The results of the included studies were assessed and confirmed by other authors and disagreements were discussed and resolved.

Results

The results showed that the health status of prisons is not separate from the general public and it should be considered under the responsibility of the Ministry of Health, the National Health System, or the Department of Justice in each country. The results obtained from studies in France, Scotland, the Netherlands, Norway, Afghanistan, England, Wales, and Australia's New South Wales indicated the changes created in the healthcare of prisoners. The transfer of health responsibility from the Department of Justice to the Ministry of Health was one of the changes experienced in these countries (Table 1).

Table (1): Studies conducted in different countries regarding the structure of prison healthcare

| Row | Title of study | Author(s) | Date of Publication | Research method |
|-----|--|---------------------------------------|---------------------|-----------------|
| 1 | Organizational Models of Health Care Services in Four French, Scottish, Swiss, and Dutch Prisons | Christopher DuBois | 2017 | Cross-sectional |
| 2 | Evaluation of the Health Services of Afghan Prisons | United Nations legal unit | 2016 | Cross-sectional |
| 3 | Proposed models of healthcare delivery in adult male prisons | Several authors | 2009 | Cross-sectional |
| 4 | Public Health and Prison Health: Integrating Prison Health Services | Regional report of the European Union | 2004 | Cross-sectional |

France: In 1994, the French health system adopted a law entitled "Health and social protection" as part of the prisoners' health system in which health insurance and standard care like other citizens were incorporated into the prisoners' healthcare system (8, 9). Before 1994, prison health was managed by the Department of Justice and the prisoners lost their salary as an excuse for social protection. Because of their innate nature, prisons endanger inmate health and such problems forced the French Department of Justice to transfer this responsibility to the country's Ministry of Health. Healthcare services were provided for each prison by the nearest general hospital based on the agreements made by the Ministry of Health. This hospital provides the same care for prisoners as it does for the rest of the people. Each hospital has a counselling and healthcare unit in the prison, which is responsible for providing all primary and secondary healthcare services to prisoners. These services include initial examinations upon entry, nursing care and drug distribution, screening for communicable diseases, oral health and health education around the clock. Mental health services requiring admission of one day are handled in the healthcare unit in the prison while prisoners who need further care (more than 48 hours) are transferred to the interregional secure hospital unit. These units also organize the continuity of care services after being released from prison (10, 11).

Scotland: In line with the integration of health services and tackling inequalities in health, the Prisons Health Service was transferred from the Scottish Prison Service Center to the National Health Service in 2011. This was an opportunity for professional development and an important factor for keeping employees in the prison setting. In this system, nurses play an important role in providing primary care and some of the night shift officers have been trained for providing primary care. Secondary healthcare is provided by specialists.

Officers are allowed to transfer prisoners outside if necessary, and this is done by the Scottish prison service. Prisoners with a prison sentence of less than two months are usually kept in the National Health Service under the public registration system, but those with sentences more than six months need to be registered in the aforementioned system again. It is the responsibility of the regional and national health councils to provide services to prisoners that are equal to other members of the community (10). The average waitlist time for being visited by different medical personnel is relatively long in Scottish prisons. For example, 35% of prisoners have to wait for more than 10 days to be visited by a physician, 56% have to wait for more than 10 days to be visited by a dentist, and 42% have to wait this long for optometrist visits (12). The prisons' healthcare programs were effective in decreasing drug abuse. 30% of the prisoners quit drugs and 30% of them reduced their use.

Switzerland: Geneva is the capital of human rights where Jacques Bernheim expanded the first prison healthcare services independent from the prison and judiciary system. Currently, the Geneva 2012 announcement on healthcare in prisons has a legal basis for maintaining the standards and organizational structure of prison health in Geneva. The federal government of Switzerland has 26 cantons (states). Prisons and healthcare systems are active in national, cantonal and inter-cantonal frameworks. Each canton is highly independent in its operational domain leading to progress in local healthcare systems such as prison healthcare management. In this system, all healthcare workers are employed by the Department of Justice and in some cases, nurses and doctors are independently employed by the prisons and healthcare authorities, respectively. Despite its various successes, this system has several disadvantages such as the distribution of drugs by security officers. Moreover, the transfer of

prisoners' health information to hospitals is inadequate and incomplete. Due to a lack of professionally trained individuals, healthcare responsibilities are sometimes fulfilled by prison officers and this interferes with the confidentiality principle of healthcare services. Medical decisions are influenced by budget cuts. Not all prisoners have access to health insurance leading to further inequality (10). Access to a doctor in any prison regardless of type of crime and socioeconomic status, the principle of integrity in providing care, confidentiality of prisoners' health information, large-scale preventive healthcare in line with international programs, humanitarian assistance to vulnerable populations, the professional independence of staff, and provision of health care by experienced individuals are part of the goals of the Swiss healthcare system. Due to the complexity of the cantons' structure and organizational patterns, comprehensive information on health care in Swiss prisons is not available (10).

Netherlands: Services in the prisons of this country are under the supervision of the Department of Justice. Each jurisdiction has a health service consisting of a manager, several nurses and doctors affiliated with the judiciary and administrative staff. Doctors are not exclusively employed in the prison administration and are brought from other areas. Prisoners can be sent to the 56-bed Scheveniugen Prison Medical Center if basic medical services are not sufficient. Every inmate who complains about his or her health goes to a nurse first, the judiciary nurse is in charge of triage, and upon the arrival the prisoner undergoes a medical examination within the first 24 hours, which must be approved by a physician. The evaluation also includes a series of questions, including whether a prisoner needs to be screened for tuberculosis. If the complaint is simple, the nurse will resolve the problem and an ambulance may be required in severe cases. The mobile imaging unit

goes to the prison every week. Overall, the necessary standards in the field of care have been defined and improvements have been made in the quality of service over the past 10 years. Measures taken to prescribe and distribute orders have been standardized, but access to electronic process management systems and electronic medical records still needs to be improved. Some of the challenges in the prisons of France, Scotland, the Netherlands, and Switzerland include improving the structure of the health system based on the organizational framework available in each country, the need to pay attention to improve the quality of care services, dealing with health inequalities, meeting the specific needs of prisoners (10).

Afghanistan: In Afghanistan, similar to other parts of the world, lack of facilities in prisons might threaten the prisoners' health. When a governmental organization deprives an individual of public freedom, it is responsible for that individual's health. Prison authorities should provide healthcare services as well as other welfare facilities that prisoners need. During previous years, Afghanistan has taken important steps towards meeting necessary healthcare needs with the help of international organizations. The Ministry of Foreign Affairs has made an agreement with the Ministry of Health in this regard (13). According to national laws, prisoners have the right to have access to free healthcare services. If it is not possible to provide suitable services in the prison, the prisoner will be transferred to the hospital. In October 2015, an agreement was signed between the Ministry of Foreign Affairs and the Ministry of Health in which the responsibility of both organizations for providing free access to healthcare for prisoners was determined. The items of this agreement correspond to the international standards in the form of what is called Mandela Rules. The Mandela Rules emphasize that the government is

responsible for providing healthcare service to prisoners (14).

New South Wales, Australia: In New South Wales, the integration of prison healthcare in the country's public healthcare system occurred over time. Following a series of incidents in prison, a royal commission in New South Wales, known as the Nagel Commission, issued a report in 1987 that set out the bases for prisoners to have access to adequate health care. At that time, the responsibility of the prison health service was given to the Ministry of Health. In 1991, a chairman was appointed for Healthcare Services for Detention Centers, and in 1997, integrated regulations were drafted under the country's public health laws. On July 1st, 2004, the panel was renamed "Justice Health Services" to enhance its involvement and role in courts and juvenile correctional centers, as well as to provide services after release. Today, the service has three branches: penal health, drug and alcohol services, and mental health services. Health services provide health care to 31 prisons in New South Wales, as well as essential health services such as methadone treatment in temporary detention centers where offenders are temporarily sent there. It is also active in several police stations and courts (11).

Norway: Norway also uses the 'import' model that is, injecting services from other ministries or departments, other than the Prison Organization to provide services to prisoners and even other departments. For example, in 1988, the Ministry of Education, the public library and the public healthcare service were decentralized and administered by local authorities in each sector. These regulations were consolidated by the 1994 Health Act (15). According to these laws, health services in Norway operate under a three-tier system: level one is the central government level, level two is the regional level with 5 areas

responsible for hospitals and specialized health services, and level 3 consists of 432 municipalities which has decentralized the responsibility of providing services. Of these, 42 municipalities each have a prison in their area and are responsible for providing services to them. General practitioners work in groups of 2-6 with assistants and are required to attend prison one day a week. Health services are not provided round the clock in prisons and are provided by the local hospital emergency unit when the prison medical unit is closed (11).

Britain, England, and Wales: In 1997, a joint working group was set up by the Prisons and National Health Services to examine the healthcare situation in prison. The result of the group's report resulted in a regulation aimed at bringing prison healthcare standards to the community level. In 2002, it was decided that the responsibility and budget for healthcare in prison should be transferred to the national health care system. In 2003, the responsibility for funding was transferred from the prison administration to the Ministry of Health. In 2004, the Ministry of Health took responsibility for providing primary healthcare to some prisons, and was scheduled to be completed by 2006. Each prison has a defined health control group responsible for establishing local coordination between the prison and the health care providers.

Discussion

The World Health Organization and the European Union have strongly emphasized the close relationship between prison and public health (16). The Moscow Declaration on Prison Health as a Part of Public Health in October 2003 states that: "It is recommended that parties who accept this agreement establish a close working relationship between the Ministry of Health and the Ministry responsible for the management of prisons in each country and be assured of the application of high

standards of treatment for detainees, protection of personnel, training of professional specialists with modern standards for disease control, having skilled health personnel, ensuring continuity of treatment within and outside the prison and integrating statistics” (17). The European Union has also recommended that: “The role of the Ministry of Health should be strengthened in assessing the quality of health services in relation to the organization responsible for the provision of prison health services under national law and a clear division of duties and responsibilities between Ministry of Health and other ministries involved in implementing integrated health policies in prison should be set.” (18). But some countries concluded that this close relationship is not enough. They believe that prison health should be part of the country's public health service, rather than being a special unit under the ministry's or responsible organization's responsibility.

These changes have resulted in the following achievements:

Policy achievements

The experiences of the four countries of England and Wales, France, Norway and New South Wales in Australia show that significant benefits can be derived from the integration of prison health services and public health services (10). For example, according to the representative of France:

The January 18th law, which establishes an outpatient hospital counseling and service unit in each prison, which is responsible for providing primary care, has been a real revolution.

Most importantly, the integration and resulting change were followed by specific policy achievements that required the prison health system to take an active approach in face of prisoners with chronic diseases. The transfer of prison health responsibility to the national

health system also led to a greater analysis of the health and medical needs of the prison population as a whole, and actions were taken to respond to identified needs. It is noteworthy that there is a major difference between the procurement contract of out-of-prison healthcare providers and the integration of prison health services into the national health system. Ultimately, a contractor can be expected to provide favorable services to inmates, but integrating prison health services with the Ministry of Health can involve health professionals in policy issues such as assessing the impact of penalties and isolating prisoners based on mental health, dietary importance, sports and preventing the harmful effects of prison population density. In New South Wales, the integration of prison health services has convinced prison personnel that providing proper healthcare by the national health system in prisons can help improve overall management and order (18).

Naturally, the integration of prison health services with the national health system affects the overall situation of prisoners; for example, in France, the new system enables prisoners to connect with the social security system under the supervision of the Ministry of Health. Moreover, health professionals can get familiar with broader aspects of service provision in prison. In France, the new Institute of Medical Prevention and Health Education offers health education programs to the general population, and some of its staff are prison health professionals. In 1998, the Public Health Association held a national conference on prison health, one of the achievements of which was the inclusion of prisoners into the National Hepatitis C Strategy and the National AIDS Strategy (19).

Health Achievements: Better Healthcare:

The integration of prison health services as part of the national health system can improve healthcare quality and its delivery to prisoners (17). It also

facilitates access to social services such as community mental health services or dental services, which accelerates the presentation of psychiatric reports and reduces prisoner transfer time to hospitals outside the prison (20). On the other hand, it improves the quality of prison facilities and equipment and provides the opportunity to monitor the patient's situation inside and outside the prison. When in charge of prisoners' health, the Ministry of Health can further enhance existing health education programs provided by health professionals. In England and Wales, the transition process has led to the identification of prisons with poor service quality and efforts have been made by the national health system to improve the status of 17 prisons, whose qualities rose during 1999-2003 (21).

Human Resource Achievements: Better Conditions for Personnel:

It is often difficult to employ well-trained staff to provide healthcare in prison, but in an integrated system, recruitment is easier and more healthcare, research, and training opportunities are provided for prison staff (22). In France, health and prison staff provided joint training programs on topics such as suicide in prison. In New South Wales, jail-based nursing has become one of the main sub-disciplines of nursing. New South Wales College of Nursing approved and edited the Correctional Centers Nursing Degree. The University of Sydney, through an agreement with the administration of justice services, provided a program for medical students to conduct training sessions in prison (23).

Managerial Achievements: Measurement and Change Evaluation:

National health systems have proposed various ways to measure the progress and analysis of prison health service deficiencies (24). Examples include higher coverage of hepatitis B vaccination and increased birth weight of newborns born to imprisoned mothers. Prisoners' waiting time to receive treatment for mental

disorders and dental services is also one of the criteria for measuring performance in an integrated health care delivery system (25).

In general, as a result of the transfer of responsibility for prisoners' health services from the Department of Justice to the Ministry of Health, health workers who have not been under the supervision of prison management and have always been loyal to the goals of the national health system have found that independent decision-making was more feasible and meeting the basic needs of prisoners compared to other prison issues, has become a priority. Independent medical personnel will be able to defend the measures that must be taken to promote public health more strongly. One of these measures is harm reduction. Even if they face difficulties in the prison environment, inmates tend to trust medical staff under the supervision of the Ministry of Health more than prison officials and staff. Moreover, if a single organization is responsible for providing services in and out of prison, they are more likely to pursue post-release services (22). When prison health is a top priority for service personnel, the quality of work and productivity of staff are likely to be higher than when the priority is to maintain prison rules and regulations, and the opportunity for advanced research and training would increase (25).

Conclusion

When the prison's health management system is excluded from the responsibility of the judicial system and is authorized to or merged with the public health system of the countries, then the quality and the quantity of services offered will increase. This is because the public health system staff are independent in decision making and the needs assessment, planning for financial resources, education, prevention, control and treatment of various diseases in prisons will be facilitated and done more accurately.

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References:

1. Prisons and Health. Available from: http://www.euro.who.int/__data/assets/pdf_file/0005/249188/Prisons-and-Health.pdf.
2. Rezvani S, Ramezanzadeh O, Ghasemipoor S. Hygienic and mental rights and medical education of prisoners with relying on medical law of addicted prisoners. *Med Law* 2010;4(15):107-28.
3. Moradi Q, Farnia M, Jafari S, Rahmani K, Shahbazi M. Mechanisms to Improve and Promote Methadone Maintenance Therapy in Prisons in Iran: a Qualitative Study. *Social Health and Addiction* 2016;2(6):45-62.
4. Ahalt C, Trestman RL, Rich JD, Greifinger RB, Williams BA. Paying the price: the pressing need for quality, cost, and outcomes data to improve correctional health care for older prisoners. *J Am Geriatr Soc* 2013;61(11):2013-9.
5. Coyle A, Fair H. A human rights approach to prison management: Handbook for prison staff. Institute for Criminal Policy Research Birkbeck, University of London; 2018.
6. Farnia M, Shahbazi M, Moradi G, Alizadeh S, Ebrahi B, Kandi Kalle M. Evaluation of Harm reduction Programs in prisons from the attitude and viewpoint of Iranian prison staff. *J Sch Public Health Inst Public Health Res* 2013;11(1):29-44.
7. Health in prisons: fact sheets for 38 European countries. Available from: http://www.euro.who.int/__data/assets/pdf_file/0007/397915/Health_in_prisons_report_online.pdf.
8. Pizziferri L, Kittler AF, Volk LA, Honour MM, Gupta S, Wang S, et al. Primary care physician time utilization before and after implementation of an electronic health record: a time-motion study. *J Biomed Inform* 2005;38(3):176-88.
9. Crétenot M, Liaras B. Prison conditions in France. Rome: European Prison Observatory; 2013.
10. Health in Prisons. Available from: http://www.euro.who.int/__data/assets/pdf_file/0009/99018/E90174.pdf.
11. Dubois C, Linchet S, Mahieu C, François Reynaert J, Seron P. Organization Models Of Health Care Services In Prisons In Four Countries. *Health Services Research*; 2017.
12. Prison Health. Available from: http://www.prisonstudies.org/sites/default/files/resources/downloads/prison_health_4.pdf.
13. Piper M, Forrester A, Shaw J. Prison healthcare services: the need for political courage. *Br J Psychiatry* 2019; 9; 1-3.
14. UNAMA UNAMIA. Assessment of Afghanistan Prison Health Services. 2016.
15. Méndez JE. Right to a Healthy Prison Environment: Health Care in Custody Under the Prism of Torture. *Notre Dame Journal of International & Comparative Law* 2019;9(1):40.
16. Lov om vern mot smittsomme sykdommer [smittevernloven. (Norwegian Act relating to control of communicable diseases) available at http://lovdata.no/dokument/NL/lov/1994-08-05-55/KAPITTEL_7#§7-9.
17. Coyle A. 2. Standards in prison health: the prisoner as a patient. *Prisons and Health* 2014:6.

18. Fazel S, Baillargeon J. The health of prisoners. *The Lancet* 2011;377(9769):956-65.
19. Aebi MF ,Delgrande N. Council of Europe Annual Penal Statistics SPACE I: Survey 2012. Strasbourg: Council of Europe; 2014.
20. Verdot C, Godin-Blandeau E, Gremy I, Develay A-E. Monitoring systems and national surveys on prison health in France and abroad. *Eur J Public Health* 2014;25(1):167-72.
21. Butler B, Murphy J. The impact of policies promoting health information technology on health care delivery in jails and local communities. *Health Aff* 2014;33(3):487-92.
22. Silvestri A. Prison conditions in the United Kingdom. European Prison Observatory Detention Conditions in the European Union. Available from: <http://www.prisonobservatory.org/upload/PrisonconditionsintheUK.pdf>. 2013.
23. Organization WH. Good governance for prison health in the 21st century :A policy brief on the organization of prison health. World Health Organization. Regional Office for Europe; 2013.
24. Bruce D, Parry B. Integrated care: a Scottish perspective. *London journal of primary care* 2015;7(3):44-8.
25. Minkman M, Ahaus K, Fabbrocetti I, Nabitz U, Huijsman R. A quality management model for integrated care: results of a Delphi and Concept Mapping study. *Int J Qual Health C* 2008;21(1):66-75.
26. Develay A-E, Verdot C, Grémy I. Monitoring system on prison health: feasibility and recommendations. *Santé Publique* 2015;27(4):491-502.