A Legal Approach to Cancer Epidemiology in Public Health

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Abstract

The Public Health Act encompasses scientific research and law enforcement as causes, distributions, and preventive factors for diseases and injuries of a particular population. Today, the Public Health Law is growing into a field that expects to cultivate and utilize lawful practitioners who can apply specialized legal skills in health policy development and public health performance. The multidisciplinary approach of the Public Health Act integrates the legal and scientific elements of the field and the workforce, characterized by a more dynamic understanding of the health impact of legislation and the rapid deployment of effective policies. Thus, legal health interventions that manage and treat diverse populations need to be evaluated more rigorously and quickly. In addition, funding for policy surveillance and other legislation and policy mapping needs to be more sophisticated to maximize utility and avoid duplication. This study investigated legal interventions to manage and treat various groups of populations for health and discussed the necessity of public health laws.

Keywords: Cancer epidemiology- law epidemiology- public health act

Introduction

The Public Health Act encompasses both scientific research and law enforcement as causes, distributions, and preventive factors for diseases and injuries in specific populations (Burris et al., 2016). For centuries, public health lawyers have been providing legal expertise to public health practitioners and are looking for ways to develop and use lawful practitioners who can apply professional legal skills in health policy development and public health practice (Berman, 2013; Erickson et al., 2002). Indeed, most of the items in the 20th Century great public health outcomes that Centers for Disease Control and Prevention (CDC) described were possible through legal intervention (CDC, 1999). However, understanding of the role and importance of the public health law is still insufficient, and the expertise of modern public health lawyers has not improved much. Public health laws are usually used to define the authority of health agencies and to analyze legal issues that arise when applying the authority to specific cases. However, despite the importance of public health law to the health of the population, the debate on the scope, role and direction of public health law is insufficient and there is a lack of direction and direction for the practitioners concerned.

In modern countries, centering on regulation, public health laws have been used as easily as smoking suppression, traffic safety, and gun violence (Burris and Anderson, 2013). However, it did not recognize the public health law as a separate field, but merely considered the effect of legal intervention. The CDC’s Public Health Law Program (PHLP), launched in 2000, is supported by the Robert Wood Johnson Foundation (RWJF) as a systematic effort to introduce legal assessment research within the framework of public health legislation (Burris et al., 2016; Burris and Anderson, 2011). The task of the RWJF’s Public Health Law program was to establish a unique identity in public health law and to introduce stringent standards for scientific research into the impact of law enforcement on public health (Burris et al., 2010). The program has teamed up with researchers who study law across various interdisciplinary and public health topics through funding, method support, and intellectual leadership to define the field. In addition, CDC has gained more momentum as the PHLP has been improved with the aim of strengthening national public health legislation and scientific research infrastructure (Burris et al., 2016). The RWJF convened a panel of the Institute of Medicine (IOM) to review the state of public health legislation in 2010, established the Network for Public Health Law to support legal technology, Investment in ChangeLab Solutions and the Public Health Law Center to support a national community-based public health effort, including funding the Preemption and Movement Building in Public Health (Pertschuk et al., 2013). In addition, the RWJF helped to develop public health human capital through a fellowship program for a policy-making team comprised of the Attorney General, law professors, and national health officials (Burris et al., 2016).

These efforts in the United States, which have...
produced the most prominent academic achievements in the field of public health, have raised interest in public health legislation, but the gap between the legislation and public health practice still exists. Therefore, experts argue that a multidisciplinary model of public health law is needed, and that it is necessary to find the point of contact between law and science (Burris et al., 2016; Berman and Kim, 2015). In other words, the Public Health Act recognizes itself as an independent school and advocates strengthening the role of legal practice in public health intervention and practice (Goodman et al., 2006). Thus, this study investigated legal interventions to manage and treat various groups of population for health and discussed the necessity of public health laws.

**Practice and Intervention of Public Health Law**

In fact, the public health law has existed for more than a century in its own legal field, and in the 2000s it actively produced major researchers (Parmet, 2009; Goodman, 2007). It is also argued that it is difficult for public health law to be regarded as a separate legal field, such as constitutional or environmental law (Berman, 2013). According to this, the public health law should be limited to the problem of disease prevention and should not be extended to fundamental and social problems (Rothstein, 2002). Nonetheless, due to the increasing status of the public health sector today, the Public Health Act also aims to strengthen the protection of individuals involved in this process based on national responsibilities and obligations to identify and improve the health-related risks of the population (Gostin, 2000).

Public health professionals seek public health lawyers because they need legal help to play a role as government officials, law enforcement officials, and sound public policy advocates. The notion that the Public Health Law is only a field of lawyers overlooks the fact that those without a Juris Doctor (JD) degree enforce and evaluate public health law (Frieden, 2013). Lawyers who assist government officials in carrying out public health legislation should provide analysis and advice in light of the wide range of characteristics of public health law. Lawyers strengthen the legal capacity for public health practitioners, NGOs and community leaders to use laws to solve problems and improve health-related performance. Broadly speaking, lawyers are best described as working for tobacco control, human rights approaches to public health, and various health-related regulations, but they are usually focused on legal strategies to achieve specific policy objectives.

Although opinions and evidence on the impact of lawsuits as public health measures vary, litigation to enforce and defend public health laws and regulations is a key component of modern public health performance (Parmet, 2000). Public utility lawyers often take part in lawsuits by organizing community gatherings, lobbying, and other activities, and by submitting relevant information to the court through amicus curiae legal briefs. Lawyers appear to policy-making authorities, such as committees and regulators, to provide information or lobby according to customer status or wishes. Scholars can also see through the articles in the law journals that they perceive themselves as researchers and public advocates of a certain level. Attorneys in academia and NGO public interest organizations are particularly involved in analyzing normative frameworks (Wiley, Parmet, and Jacobson, 2015). Discussing law and public policy defines things that are harmful to health and that are prohibited by dealing with things that affect the public’s life context, such as national and community values and norms (Hodge et al., 2008; Courtney, Sherman, and Penn, 2013). For example, the Framework Convention on Tobacco Control is designed to determine the type of policy (Lehman et al., 2014).

**Public Health and Legal Epidemiology**

The practice of practicing public health legislation is of practical help from science intervening in the health of the population, such as epidemiology or etiology, because it requires the evaluation of relevant phenomena based on scientific rigor to determine the application and abolition of the law. Research and policy development that assess legal intervention has played a key role in strengthening public health at the national level and is in a complementary relationship between scientists and lawyers in the field (Berman and Kim, 2015). The task of conceptualizing, implementing, and evaluating the law for changes in the social environment makes use of science and technology that are used in various interventions in public health. This is referred to as the legal epidemiology of the population and the cause, distribution, and prevention of the disease in a scientific and legal perspective (Burris et al., 2016). In particular, interdisciplinary action to prevent illness and death, as well as effective public health enforcement, is the study of legal prevention and control, legal research and application, policy monitoring and analysis and management of legal policies (Chriqui, O’Connor, and Chaloupka, 2011; Jung, 2018).

Legal prevention and control are routinely used as a means of legal epidemiology to change unhealthy behavior and the environment. Several scholars have examined the history of interventional public health law research and discussed why it is important to apply the law to public health (Morain and Mello, 2013; Burris and Anderson, 2013). In particular, public health legislation has made substantial contributions to the widespread implementation of evidence-based public health intervention through solid scientific work (Moulton et al., 2009). Legal prevention and control includes the powers of the health authority to set the jurisdiction, authority and duties (Burris et al., 2010). How public health agencies understand and apply the law, and the resources they need, have not been well studied, although they affect the outcomes and outcomes of the agencies. It is therefore important to carefully consider how legal design is effective for a healthy social environment and behavioral regulation.

In fact, not all laws that affect health are part of traditional public health law. Most laws are enacted and enforced without consideration of health, but can have a
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DOI:10.31557/APJCP.2022.23.5.1447

Asian Pacific Journal of Cancer Prevention, Vol 23  1449

profound impact on public health (Collins and Koplan, 2009). Public health in one country is beyond the scope of health care, and individuals, such as smoking cessation or diabetes care, are made up of choices to maintain their health. Although there are unhealthy behaviors under personal control, they are often subject to a social or environmental impact beyond the individual, such as being exposed to a hazardous environment or lacking adequate medical care (Berkman and Kawachi, 2000). Public health legislation plays an important role in improving this social environment (Burris et al., 2010; Morain and Mello, 2013; Plough, 2015). Drug laws can affect the risk of drug addicts or HIV infection, and immigration policies can affect the health and accessibility of health services to illegal immigrants (Martinez et al., 2013; Miller et al., 2015a; Miller et al., 2015b). Public health law therefore deals with public health interventions that affect health throughout the public life and social determinants of health, social and environmental factors that are outside the scope of traditional health services (Braveman, Egerter, and Williams, 2011; DeJong et al., 2016).

Public health surveillance is a means of tracking disease, injury, risk factors, precursors, time paths, geographical distribution, results, and attributes between populations in charge of public health officials (Buchler, 2008). If law is important to health, policy makers, bureaucrats, and the public need basic information about the process known as policy monitoring, including the requirements and scope of the law. If the impact of the law is assessed empirically, it should be assessed in a way that generates data for evaluation. This generally proceeds with a quantitative coding scheme, but it is also necessary to collect longitudinal legal data as the most active evaluation design requires time-space changes (Anderson et al., 2013). Scientific coding procedures and the development of modern information technology have made it possible to efficiently publish digitized data on the Internet. Through the announcement, it is possible to spread policy quickly to health professionals, policy makers, and the public. Adopting policy monitoring as a standard practice for public health, as recommended by the IOM, will allow the legitimate practice of traditional multijurisdictional mapping to be consistent with the way public health monitors phenomena of interest. It will also help to spread the recommended policies and promising innovations more quickly (Burris et al., 2016).

Implications and Challenges

In order to be a place where the public health law fuses related research and practice, it is necessary to develop a common conceptual and methodological framework that encompasses various fields related to health, and to recommend so-called evidence-based public policies (Stokols et al., 2008). In particular, in order to integrate public health law and science, attorneys must master the language, concepts, and frameworks of public health sciences, and perform their duties in light of scientific value (Wagenaar and Burris, 2013). Attorneys are involved in conceptualizing and communicating behavioral and social scientific terms about how law achieves effectiveness, and transforming scientific evidence related to health into legal and policy forms. In particular, legal epidemiology should be able to explain the various ways laws affect the behavior of individuals and the social and physical environment, and be able to articulate the effects of legal intervention (Wagenaar and Burris, 2013). Today, public health is already an interdisciplinary discipline, and public health legislation plays an important role in integrating the legal aspects of what is known scientifically.

It is important to train legal practitioners to expand public health law (Wodarg, 2015; Berman and Kim, 2015). For example, laws and policies on public health curricula that educate attorneys, scientists, and health practitioners should be strengthened beyond interdisciplinary boundaries. It is also important for law school students to understand the legal system and the way they operate, and public health practitioners (MPH) must have a solid basic education on legal epidemiology. In recent years, the growth of the JD program in conjunction with the MPH has led to the emergence of more lawyers who understand both cultures. The goal of educating researchers is to empower all socio-behavioral researchers to observe and improve the phenomenon with a legal mind when the law is in the health phenomenon. This JD/MPH model will develop researchers who will play a leading role in the development of legal dynamics in the future. RWJF-supported programs, CDC’s PHLP, and so on (Hodge et al., 2013; Goodman et al., 2006). However, too much reliance on the foundation or government funds is hampering development (Burris and Anderson, 2013).

Efforts to regulate behavior and the environment and promote public health through laws and policies call for more effective cooperation opportunities in various fields. However, it is not easy to enact regulations for regulation because of the various interests (Pertschuk et al., 2013). Therefore, there is a need to improve collective action for public health more effectively in court that reflects public opinion (Wiley, Parmet, and Jacobson, 2015). Legal epidemiology provides policy makers with professional grounds for public health interventions when faced with these problems, coordinates stakeholders to promote specific policies, and rationalizes the interests of relevant legal regulations. It can give a boost to the promotion. In addition, through these processes, it is possible to persuade people to oppose specific health policies and also to appeal to the public the necessity and legitimacy of public health law (Wiley, Parmet, and Jacobson, 2015). Public health advocacy strategies to prevent disease and alleviate health inequalities have moral values in themselves, so lawyers need to use them to consolidate the foundation of legal epidemiology.

This article is based on the judgment that public health law and the alienation of practitioners are blocking the development of the field in spite of the rapid development of the field of public health. Public health legislation can enforce practical interventions and measures to improve the health of modern societies in a multidisciplinary manner. To do this, law and science must communicate, and public health practitioners and lawyers must develop policies and evaluate their legal effects. In broad support
and solidarity, public health legislation can attain its justification, and it can achieve a greater and precious value of health life than anxiety.

**Author Contribution Statement**

MJ wrote and revised the manuscript.

**Acknowledgements**

None.

**Funding**

This study was supported by the Dongduk Women’s University grant (2021-05658).

**Competing interests**

I declare that I have no conflict of interest.

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