Public health ethics education in public health masters in Spain: Current
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Revista de Bioética y Derecho

Perspectivas Bioéticas

DOSSIER ÉTICA Y SALUD PÚBLICA

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La educación en ética de la salud pública en los másteres de salud pública en España: Situación actual y recursos disponibles para la docencia

L'educació en ètica de la salut pública en els màsters de salut pública a Espanya: Situació actual i recursos disponibles per a la docència

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Public health ethics education in public health masters in Spain: Current
status and available resources for teaching - Andrea Burón, Andreu Segura
Rev Bio y Der. 2019; 45: 89-109

| 90

Abstract

Ethics education of public health (PH) professionals is insufficient, despite general consensus on the need for it. This article aims to describe the extent to which Spanish masters of public health (MPH) have adopted ethic courses, and to review teaching and/or learning resources on PH ethics available in English. We explored Internet sites from current MPH in Spain and searched for teaching resources using different strategies. A total of 14 MPH were identified out of which seven (50.0%) teach ethics. Ethics is taught together with other aspects of PH in all cases. A total of 12 textbooks on PH ethics were reviewed, 5 of them include case studies and most have good or high value as teaching tools.

Keywords: ethics; public health; education; teaching materials; reference books.

Resumen

La formación en ética de los profesionales en salud pública (SP) es necesaria pero insuficiente. Este artículo pretende describir el grado en que los masters de salud pública (MSP) en España incluyen la ética en su programa y revisar los materiales docentes de ética en SP disponibles en lengua inglesa. Examinamos en Internet el programa de los MSP y los materiales docentes utilizando diferentes estrategias de búsqueda. De los 14 MSP identificados, la mitad (7) incluyen la ética en su programa y en todos los casos ésta se enseña junto con otros aspectos de SP. Doce libros de texto fueron revisados, 5 de los cuales incluyen casos prácticos y casi todos tienen un alto valor como material docente.

Palabras clave: ética; salud pública; educación; materiales de enseñanza; libros de referencia.

Resum

La formació en ètica dels professionals en salut pública (SP) és necessària però insuficient. Aquest article pretén descriure el grau en què els màsters de salut pública (MSP) a Espanya inclouen l'ètica en el seu programa i revisar els materials docents d'ètica en SP disponibles en llengua anglesa. Examinem a Internet el programa dels MSP i els materials docents utilitzant diferents estratègies de cerca. Dels 14 MSP identificats, la meitat (7) inclouen l'ètica en el seu programa i en tots els casos aquesta s'ensenya juntament amb altres aspectes de SP. Dotze llibres de text van ser revisats, 5 dels quals inclouen casos pràctics i gairebé tots ells tenen un alt valor com a material docent.

Paraules clau: ètica; salut pública; educació; materials d'ensenyament; llibres de referència.

Public health ethics education in public health masters in Spain: Current status and available resources for teaching - Andrea Burón, Andreu Segura
Rev Bio y Der. 2019; 45: 89-109

| 91

1. Introduction

Public health (PH) policy and interventions are usually the product of controversy, and quite often they also remain surrounded by controversy as they are implemented (1). Along with scientific considerations, political and economic interests as well as the collateral ethical conflicts shape the routine of public health practice. The societal approach of public health raises not only conflicts between individual and community interests and values (2), but also questions of autonomy and social justice, debates over the meaning of health and well-being for different groups of people, disputes over the rationale of the community, reconciliation of multi-cultural values, disagreement on the limits of research, etc. (3)

All these issues pose ethical dilemmas that PH professionals must learn how to deal with. They need to learn how to balance the competing interests and conflicting values and choose the best option or, as C. Potter puts it, the "lesser evil" among them (4). On the other hand, due partially to its multidisciplinary nature, the ethical background and the moral values that PH professionals have will differ (4). It is hence also important to recognise the moral values that each of us brings along to the profession and maximise the synergies of each of the disciplines' ethical traditions to solve population health challenges.

If we agree that being able to identify, analyse and cope with moral ambiguity are necessary skills that all PH professionals must possess, then PH ethics must be taught and trained during the academic public health training programme (5). Knowing the ethical frameworks and principles that should guide PH practice and professional integrity should remain a relevant part of the teaching. But since ethical values only have a value to society when put into practice, we need to inculcate ethical reflection as a habit and use learner-centred methods of joint decision making and collective learning through additional approaches, like for instance case-studies, group discussion and role playing (4,6).

Despite teaching ethics in PH programmes being nowadays widely acknowledged as essential, evidence shows that even in countries with a longer tradition of teaching PH ethics, such as the United States, the United Kingdom, ethics education and ethical competencies of PH professionals are far from being the norm (7–9). In Europe, the W*orking Group of Ethics and Values in Public Health*, a collaboration of ASPHER (*Association of Schools of Public Health in the European Region*) and the *Ethics in Public Health section* of the *European Public Health Association* (EUPHA) have done a great effort over the last 10 years to address this issue. Along with a row of articles, seminars and workshops on the topic, they research and advocate for ethics training in the PH curriculum in Europe, including the proposal of a set of minimum PH competences that include

Public health ethics education in public health masters in Spain: Current status and available resources for teaching - Andrea Burón, Andreu Segura
Rev Bio y Der. 2019; 45: 89-109

| 92

ethical skills (8). Overall though, current European masters in public health do not regularly include modules in PH ethics and training in PH ethics in Europe cannot be said to be yet at the core of public health programmes (10). In Spain, the *Ethics working group* of the *Spanish Society of Public Health and Health Administration* together with the *Víctor Grífols y Lucas Foundation*, have organised several workshops, each of them accompanied by the later publication of a booklet (11–15). The situation regarding teaching PH ethics in formal PH training in Spain is relatively unknown although supposed to be insufficient (16).

In contrast with the overall erratic implementation of public health ethics training, the range of resources coming from the universities providing such training is impressive. Along with several textbooks intended for both students and instructors covering the most relevant ethical issues of PH, a series of manuals including well-documented real cases for ethics reflection and discussion have been published in the last 5-15 years. However, for those PH professionals trying to become familiar with PH ethics and/or searching for teaching materials on the topic, this abundant choice of textbooks can at first pose an additional difficulty, especially when lacking time.

The present paper has two aims. First, to examine and describe the extent to which Spanish accredited masters of public health (MPH) have adopted ethic courses in their curricula. Second, to review the main teaching and/or learning resources on public health ethics available in English language and to summarize their content.

2. Methods

In order to describe the PH ethics teaching in the MPH in Spain we explored the internet sites from all current official MPH in Spain. We reviewed their online programmes for the past and/or present academic year (2017-2018, 2018-2019) and looked for any mention of public health ethics. Specifically, we searched for terms beginning with "etic-" (Spanish for "ethic-"). We searched first within the subjects' titles and afterwards within specific subject's programme, i.e. we examined whether there was any specific subject of PH ethics and later whether there was any mention of PH ethics in other subjects' agenda or programme. We also assessed whether the particular subject was mandatory or optional.

Regarding the search for teaching resources for PH ethics we employed several strategies: a) Google and Google Scholar search using different combinations of key words (i.e. "public AND health AND ethics", "ethics AND preventive AND health", "ethics AND preventive AND medicine", etc.); b) references review from previously retrieved articles regarding PH ethics education on

Public health ethics education in public health masters in Spain: Current
status and available resources for teaching - Andrea Burón, Andreu Segura
Rev Bio y Der. 2019; 45: 89-109

| 93

Pubmed; c) references and recommended materials within the retrieved manuals and books. For each potentially pertinent document found, we assessed summary or description and index. We then searched all the resources deemed relevant for PH ethics teaching on the Internet to look for their online availability. When open access was not attainable, we assessed their availability, delivery options and price in common electronic commerce platforms and stores.

We reviewed their indexes and contents and examined the general structure of each resource and whether cases for discussion were included. The geographical context of each source was assessed based on the authors' affiliations and the context of the cases and PH general information included. We also aimed to assess the overall value as a teaching tool of each of the books in the context of MPH education. This perceived value encapsulates the authors' personal judgement and is based on whether the book content is deemed appropriate to use as part of the instruction material for students and/or suitable to prepare cases for discussion and debate sessions in class. Finally, in order to summarise the topics covered by the books we drew up a list of all topics included in the indexes, subsequently grouped similar topics into specific areas in PH and PH ethics and compiled a general list.

3. Results

We identified 14 masters of public health (MPH) currently active in Spain (Table 1). Most MPH are designed as on-site courses, two of them are online and two combine both modalities. The number of ECTS (European Credit Transfer and Accumulation System) credits was 60 for all except one of them that had 120.

Six (48.9%) MPH had a specific mention of PH ethics on the title of at least one of their subjects, and a further MPH mentioned PH ethics as one of the main topics of a subject. Hence, according to their online programs, a total of 7 (50.0%) of the current MPH in Spain are teaching PH ethics. One of the MPH includes two subjects with mention of PH ethics. Ethics is taught together with other aspects of PH in all cases: as part of a general introduction to PH in 3 of the MPH, together with legal issues and PH policy in 4, and with communication in PH in another 2 (in some of the MPH ethics is taught with both communication and legal issues). In all 7 of the MPH the courses on PH ethics or mentioning PH ethics were mandatory. However, one of these MPH also includes an optional subject of PH ethics.

A total of 12 textbooks on public health ethics were reviewed. Table 2 includes a list of them in alphabetical order by their (first) author or editor and some general characteristics including

Public health ethics education in public health masters in Spain: Current
status and available resources for teaching - Andrea Burón, Andreu Segura
Rev Bio y Der. 2019; 45: 89-109

| 94

online availability and purchase options and price. Only 4 of them are available to free download as a PDF and two of them are difficult to acquire from Spain through regular electronic commerce platforms. Approximate prices range between 17 and 130 euros, and two of the volumes available online cannot be purchased as printed books.

About half of the books are structured in two or more sections or parts, each of them including several chapters (Table 3). Some of the books are a collection of essays or already published articles dealing with specific aspects of ethics in PH and five books include cases for discussion or case studies. In most cases, each chapter (or article) is written by a different author or group of authors. The textbooks that include cases for discussion or case studies are specifically designed to use in teaching settings, i.e. the information for each case is organised and presented in a straightforward way to facilitate its usage in class. All of them provide a background and the particular ethical aspects on the case to take into account; some of them offer discussion questions and others include specific facts sheets and descriptions of the case that can serve directly as handouts.

Articles and cases are predominantly set in the United States, followed by the United Kingdom and Canada (Table 3). Five of them include chapters by international authors and/or covering cases set in other countries. Table 3 also includes an assessment of the overall value as a teaching tool of each of the books as judged by the authors. Almost all were deemed to be of high or good value for teaching PH ethics in MPH, either because the book content is useful as part of the instruction material for students and/or because it is suitable to prepare cases for discussion and debate sessions in class.

Table 4 summarises and categorises the content of the books and manuals into 9 broad areas. All textbooks include an introduction and most of them contain one or more chapters on general aspects of PH ethics. However only five include a specific chapter on frameworks and/or a guide incorporate how to approach ethical reasoning, and only two on the legal aspects of PH and its relationship with ethics. Most areas are included as chapters in all books except for environmental and occupational health (only covered by 6 books), health and social inequities (included in 7; one book deals exclusively with the ethics of social inequalities in health) and PH communication (in 3). The most common areas covered in the books were disease prevention and control (especially issues with vaccination and surveillance), followed by health promotion (in particular, obesity, smoking and alcohol), health policy and resource allocation. Some topics like smoking and HIV are used as examples and cases in several areas.

Public health ethics education in public health masters in Spain: Current
status and available resources for teaching - Andrea Burón, Andreu Segura
Rev Bio y Der. 2019; 45: 89-109

| 95

4. Discussion

Ethics in public health is taught in half (7 out of 14) of the existing masters of public health in Spain. In all of these 7 MPH, ethics is taught together with another area of PH (introduction to PH, legal and policy issues in PH, and/or communication of PH) and the subject is mandatory. On the other hand, there is a considerable extent of textbooks of ethics in PH that can be considered of high value for teaching. In this review we identified 12 books, five of them containing or consisting of case studies for discussion.

The scarcity of formal education in PH ethics detected in Spain comes perhaps as no surprise considering the insufficient and inconsistent teaching reported before in the US and in Europe (4,17). In the US, the country that has progressed most in this area in the last 25 years, things have significantly improved since 1974 when the first survey carried out to assess the extent and nature of instruction in ethics in schools of public health showed that the majority (10 out of 15) did not offer any such instruction (18). In 1996 another similar survey showed that ethics instruction was required for all MPH students only at 38% of the schools surveyed (19). A more recent study with similar methodology found that around 72% of schools of public health in the US offered a specific course on this subject, although the response rate was relatively low at 40% (17).

Regarding the situation in Europe, in 2003 Kessel et al found, after mailing a questionnaire survey on the content of teaching PH teaching in the United Kingdom, that 52% of the institutions providing postgraduate education on PH were teaching PH ethics. In 2010, a survey targeting the 82 members of ASPHER achieved a response rate of 52% of which 38 (95%) of the respondents schools reported that ethics was included in their master programmes (8). Given the relatively low response rates of the more recent surveys both in the US and Europe it is reasonable to argue that the overall real percentage of schools teaching ethics could be significantly lower.

This rather meagre picture of the teaching of ethics in PH contrasts with the comprehensive set of published codes and recommendations in public health education that include ethics and proficient ethical practice of PH. In the US, the Public Health Code of Ethics, promulgated by the Public Health Leadership Society and adopted by the American Public Health Association in 2002, describes 12 principles for the ethical behaviours of PH professionals and agencies (20). Its accompanying document, published in 2004, outlines the ethical skills to fulfil this code (21). Another 3 documents describe the competencies in PH: the Association for Schools of Public Health (ASPH) Core Competencies were developed among others for MPH students (22); the Competencies for Applied Epidemiologists in Governmental Public Health Agencies, published by the Centers for Disease and Control and Prevention (CDC) and the Council of State and Territorial

Public health ethics education in public health masters in Spain: Current
status and available resources for teaching - Andrea Burón, Andreu Segura
Rev Bio y Der. 2019; 45: 89-109

| 96

Epidemiologists (CSTE) (23); and the Core Competencies for Public Health Professionals from the Public Health Foundation's council on Linkages between Academia and Public Health Practice (PHF COL) (24). These documents set the expectations that PH professionals should be proficient in, including the areas of professional ethics, research ethics and public health ethics (9).

In Europe, ASPHER's European Public Health Core Competences Programme (EPHCCP) consists of the European Core Competences for MPH Education (ECCMPHE) and the European Core Competences for Public Health Professionals (ECCPHP) and both include an independent section on Ethics outlining the intellectual and practical competences expected from PH students and professionals (25). In Spain, in 2006 a set of 11 PH professional competences or activities was published, structured in 3 broad functions and each activity covering different competencies (26). Although specifically mentioned in one competency, i.e. "to assess the ethical aspects of health interventions", all activities include competencies based on core ethical values, such as addressing health and social inequities, taking into account population's opinion and needs, and providing adequate information on health risks and interventions.

All these sets of competencies include clear expectations for proficiency in ethics in public health, yet the inclusion of the pertinent instruction in the PH programmes seems to be far from achieved. Like Simón-Lorda et al conclude in their article, the introduction of PH ethics in the curricula of public health professionals is an evolving process in many regions of the world (17). In Spain this process seems to be at its dawn and much work remains to be done. Perhaps one step could be to explicitly mention ethical reasoning as a core competency in the MPH curricula, which will aid the development of specific courses on PH ethics as well as the incorporation of ethical aspects across other PH courses.

We might ask ourselves about the reasons of this apparent reluctance to expand and improve the teaching of PH ethics. On the one hand, Callahan and Jennings argue that "teaching ethics is controversial, intellectually difficult, institutionally challenging and expensive" (2) and Jennings affirms that "it is perfectly natural to feel uncomfortable with the subject matter of public health ethics and with the special challenges of teaching ethics" and points out several obstacles that facilitators might encounter when leading ethics discussions (27). On the other hand, many PH professionals are civil servants and hence their activity is not embodied within deontological codes but rather governed by a different set of rules and norms, contributing perhaps to their reduced interest and perceived need of an ethical background.

While good curriculum materials and textbooks can't do the work of good teaching, they can certainly facilitate it. With the review and description of relevant textbooks and manuals in PH ethics we hope to contribute to this process. Most of the 12 books reviewed here can help

Public health ethics education in public health masters in Spain: Current status and available resources for teaching - Andrea Burón, Andreu Segura
Rev Bio y Der. 2019; 45: 89-109

| 97

preparing classes, organising ideas and providing case examples for discussion. Some of the chapters and essays in the books could be included as part of the required readings, and the in-depth ethical analysis of relevant PH topics will certainly add perspective and arguments to enhance lectures and discussions.

However, traditional didactic approaches need to be supplemented with additional modalities such as case studies and role playing (4). When done effectively, these type of sessions have a lasting effect which is especially necessary given that there might be considerable gaps in time between learning about ethics and being confronted in "real life" to an issue containing ethical considerations. We want our students and PH professional to develop critical reasoning about ethical concepts, otherwise ethical principles and norms just become an additional jargon that practitioners use rather than effective tools for analysis and decision-making (28). The use of cases for discussion facilitates the development of these analytic reasoning skills because they can readily exemplify trade-offs among important values and interests and take seriously initially counter-intuitive positions. Five of the books considered in this review consisted or included cases for discussion more or less "ready-to-use" in class. When preparing this kind of debate sessions it might be useful to refer to the introduction in the on-line accessible textbook "Ethics and public health: model curriculum" which includes a guidance on teaching ethics and some "warnings", and also to Potter's and Tulchinsky's articles on the topic of teaching PH ethics (4,28).

The matter of how to organise the instruction of PH ethics is not a simple one and this can be observed also in the differences in the structure and topics covered by the textbooks here analysed. Most books agree on organising the ethical aspects around different broad areas of public health like health promotion or infectious diseases. However, Kessel thinks that PH ethics should be developed more in terms of analytical tools rather than in terms of a list of topics (7), and Coleman suggests a list of key ethical aspects in PH rather than broad PH areas (29). For the purpose of teaching in MPH it is perhaps best to employ the same structure of topics used in the master itself, i.e. the topics covered by the other subjects, which may facilitate students' learning and application.

Some limitations warrant mention. First, regarding the first objective, we collected information on the MPH Internet sites without confirming with master or school representatives whether the courses and curricula are being taught as described online. Although we have no reason to believe that the data online is inaccurate, validation of the fidelity of course implementation is beyond the scope of this study, as is the assessment of the quality and thoroughness of the teaching. Second, some of the online programmes offer more detail than others, so there is a possibility that some MPH offer some ethical training as part of subjects while

Public health ethics education in public health masters in Spain: Current
status and available resources for teaching - Andrea Burón, Andreu Segura
Rev Bio y Der. 2019; 45: 89-109

| 98

not being described online. This would mean that the number and share of masters teaching ethics could be indeed higher that what we describe here.

Regarding the second objective, it is feasible that we might have missed some books on PH ethics relevant for teaching. While we searched using several searching engines and strategies, we did not attempt to carry out a systematic review either. On the other hand, if a book is so difficult to find or so seldom mentioned in articles that we did not find it, one might argue it will most likely not be among the popular teaching books. Last, exploring books useful for teaching PH ethics in Spanish was outside the scope of this study for several reasons. We believe that the advances made in Spanish language in PH ethics are far behind those in English, most certainly due to the fact that United States followed by the United Kingdom are the countries that have progressed and published most in this area. Also, the differences in nature and scope of the publications in PH ethics in Spain would make comparisons with the rest difficult in the first place.

Nonetheless, there are at least two materials on PH ethics published in Spain worth mentioning. First, the already cited booklets on PH ethics from the *Ethics working group of the Spanish Society of Public Health and Health Administration* and the *Victor Grífols y Lucas Foundation*, who after organising several workshops published an accompanying booklet (11–15). Second, some of the more recent textbooks on epidemiology and/or public health in Spain include a chapter on ethics in PH (30) and some teaching manuals in bioethics include a chapter on ethics in PH (31). And third, there are a number of publications on the subject in Spanish journals (32,33).

On a final note, what we have explored here are formal approaches of teaching ethics in PH, i.e. we have assessed the level and materials of teaching of ethics within the academic settings and through specific courses and textbooks on *ethics in public health*. However, there are other ways of integrating ethics within the overall training program of public health and ethics instruction which can be done from an informal approach. Informal approaches involve interactions in which there may be no intent for such transfer, but transfer occurs (34). Some people argue that the informal sector is often more important than the formal one in forming the attitudes and opinions of young professionals. Hence, besides the formal ethics teaching, we must not forget the role that ethics plays in the academic environment in general. We need to integrate ethics throughout the training, pay attention to the importance allocated to it by other courses and departments, and set precedent through the attitudes of mentors and advisors as well as through ethical guidelines for student behaviour.

To conclude, with only half of the masters of PH including ethics explicitly on their programmes we can say that training in PH ethics is not yet at the core of public health

Public health ethics education in public health masters in Spain: Current status and available resources for teaching - Andrea Burón, Andreu Segura
Rev Bio y Der. 2019; 45: 89-109

| 99

programmes in Spain and there is room for improvement. On the other hand, the relative abundance and quality of resources suitable for teaching PH ethics should facilitate the task of further integrating the topic in the training of PH professionals. Offering ethics training, including ethical analysis of the PH issues involved, should be part of every PH curriculum both as a dedicated course and as part of other courses. Case studies are a key element for PH ethics education as they inculcate ethical reflection as a habit and serve to illustrate ethical conflicts that most PH professionals will face in the future. With this study, we have aimed to contribute in the evolving process of introducing and expanding PH ethics courses in the curricula of PH professionals in Spain and beyond.

Acknowledgements

Name of the teaching institution	Oficial name of the master	English translation of the name of the master	Teaching modality	Numer of ECTS
Instituto de Salud Carlos III	Máster de salud pública	Master of public health	On-site	60
Universidad Autónoma de Barcelona y Universidad Pompeu Fabra	Máster Universitario en Salud Pública	University master of public health	On-site	120
Universidad de Granada	Máster Universitario en Investigación y Avances en Medicina Preventiva y Salud Pública	University master of research and advances in preventive medicine and public health	On-site	60
Universidad de Granada; Ecole Des Hautes Etudes en Santé Publique Ehesp (Francia); Københavns Universitet -Copenhagen University (Dinamarca); University of Sheffield (Reino Unido); Université de Rennes (Francia) y Uniwersytet Jagiellonski(Polonia)	Máster Universitario Erasmus Mundus en Excelencia en Salud Pública / Europubhealth	University master Erasmus Mundus of excellence of public health / Europubhealth	On-site	60
Universidad de Murcia	Máster Universitario en Salud Pública	University master of public health	On-site	60
Universidad de Zaragoza	Máster Universitario en Salud Pública	University master of public health	On-site	60
Universidad del País Vasco/Euskal Herriko Unibertsitatea	Máster Universitario en Salud Pública	University master of public health	On-site	60
Universidad Europea (Campus Tenerife)	Máster en Salud Pública	Master of public health	Online	60
Universidad Internacional de Valencia	Máster en Epidemiología y Salud Pública	Master of epidemiology and public health	Online	60
Universidad Miguel Hernández y Universidad de Alicante	Máster Universitario en Salud Pública	University master of public health	On-site	60
Universidad Nacional de Educación a Distancia (UNED), Instituto Mixto Universitario Escuela Nacional de Sanidad (IMIENS)	Máster en Salud Pública	Master of public health	Combined online and on-site	60
Universidad Pública Navarra	Máster Universitario en Salud Pública	University master of public health	On-site	60
Universidad Santiago de Compostela	Máster Universitario en Salud Pública	University master of public health	Combined online and on-site	60
Universitat de València	Máster Universitario en Salud Pública y Gestión Sanitaria	University master of public health and healthcare management	On-site	60

Table 1. List of masters of public health in Spain active in 2018 and their teaching institution, teaching modality and number of European credits (ECTS).

Public health ethics education in public health masters in Spain: Current status and available resources for teaching - Andrea Burón, Andreu Segura
Rev Bio y Der. 2019; 45: 89-109

| 101

Editors (and/or main authors)	Title	Year of (last) edition	Publisher or funding institution	Number of pages	Open access PDF version	Purchase options of the printed format in Spain	Approximate price in Euros 1
Barret DH, Ortmann LW, Dawson A, Saenz C, Reis A, Bolan G	Public health ethics: cases spanning the globe	2016	Springer International Publishing	329	https://link.springer.com/content/pdf/10.1007%2F978-3-319-23847-0.pdf	Available on electronic commerce platforms	52
Bayer R, Gostin LO, Jennings B, Steinbock B	Public Health Ethics: Theory, Policy, and Practice	2007	Oxford University Press	432	Not available	Available on electronic commerce platforms	48
Bernheim RG, Childress JF, Bonnie RJ, Melnick AL	Essentials of public health ethics	2015	Jones & Bartlett Learning	259	Not available	Sold in the US; not easy to purchase from Spain	120
Canadian Institutes of Health Research - Institute of Population and Public Health	Population and public health ethics: cases from research, policy and practice	2012	University of Toronto Joint Centre for Bioethics	185	http://jcb.utoronto.ca/publications/documents/Population-and-Public-Health-Ethics-Casebook-ENGLISH.pdf	Not sold	-
Coughlin SS	Case studies in public health ethics	2009 (2nd ed)	American Public Health Association	139	Not available	Sold in the US; not easy to purchase from Spain	92
Dawson A	Public health ethics: key concepts and issues in policy and practice	2011	Cambridge University Press	239	Not available	Available on electronic commerce platforms	53
Dawson A, Verweij M	Ethics, prevention and public health	2007	Oxford University Press	234	Not available	Available on electronic commerce platforms	37
Goldberg DS	Public health ethics and the social determinants of health	2017	Springer International Publishing	56	Not available	Available on electronic commerce platforms	58
Holland S	Public health ethics	2015 (2nd ed)	Polity Press	276	Not available	Available on electronic commerce platforms	22
Jennings B, Kahn J, Mastroaianni A, Parker LS	Ethics and public health: model curriculum	2003	Association of Schools of Public Health (ASPH) and Health Resources and Services Administration (HRSA)	267	https://s3.amazonaws.com/aspph-wp-production/app/uploads/2014/02/EthicsCurriculum.pdf	Not sold	-
Nuffield Council on Bioethics	Public health: ethical issues	2007	Cambridge Publishers Ltd	191	http://nuffieldbioethics.org/wp-content/uploads/2014/07/Public-health-ethical-issues.pdf	http://nuffieldbioethics.org	17
Strech D, Hirschberg I, Marckmann G	Ethics in Public Health and Health Policy. Concepts, Methods, Case Studies	2013	Springer International Publishing	229	Not available	Available on electronic commerce platforms	130 (hardcover)

1 Price for the softcover format unless otherwise specified.

Table 2. Main characteristics of the textbooks and manuals on public health ethics.

Public health ethics education in public health masters in Spain: Current
status and available resources for teaching - Andrea Burón, Andreu Segura
Rev Bio y Der. 2019; 45: 89-109 | 102

Short reference	General structure	Are cases for discussion included (number of cases) and how are they organised	Geographical context	Value as a teaching tool[1]
Barret DH, et al. Public health ethics: cases spanning the globe	The book is structured in 2 sections: I) Introduction to public health ethics (2 chapters); II) Topics in public health ethics (7 chapters). Each chapter begins with the relevant ethical issues on that topic and lessons learnt from the cases.	Yes, it is basically a book of cases for discussion (40). Each case includes a background, a case description and discussion questions (but no comments on the case).	International. Each chapter and case has been prepared by different authors	High. Cases can be used directly in the classroom; the introductory ethical aspects in each chapter can be used as theory or as part of the material to prepare in advance for the cases, and/or to guide the discussion afterwards.
Bayer R, et al. Public Health Ethics: Theory, Policy, and Practice	The book is a collection of 25 essays, divided into six parts: I) PH Perspective, II) Autonomy and Paternalism, III) Justice and Health, IV) Infectious Disease, V) Regulation and Environmental and Occupational Health, and IV) Genetics and Public Health.	Not included.	Predominantly United States	Good. Each article considers a particular ethical aspect and/or topic in PH which can serve as a background theory for the class.
Bernheim RG, et al. Essentials of public health ethics	The book is structured in 2 parts: I) Foundations (4 chapters); II) Tools and interventions in PH (6 chapters). Each chapter covers in-depth ethical aspects on the particular topic and ends with a "Discussion questions" section.	Yes, most chapters in Part II include one or more "case studies" (11). Cases are not systematically structured, but usually include some background and ethical considerations or framework to approach the case.	Predominantly United States	High. Developed as a textbook both for teachers and students. Each chapter (topic) is well-organised and covers PHE aspects in detail, includes many examples in a case-approach way. The questions at the end can serve for discussion in class.
Canadian Institutes of Health Research. Population and public health ethics: cases from research, policy and practice	The book is structured in 3 parts: 1) Research (4 chapters); 2) Policy (6 chapters); 3) Practice (6 chapters). Each chapter is a case for discussion prepared by different authors.	Yes, it is basically a book of cases for discussion (16). Each case is divided in 2 parts. The first one is the presentation including and introduction, the case, a scenario shift and questions for discussion. The second is a discussion of the case, without a particular structure.	Mostly Canada with some cases set in other countries	High. The presentation of the cases can be used in the classroom. The discussion may serve the teacher as the basis of the students' material to prepare in advance the case and/or to guide the discussion in class.
Coughlin SS. Case studies in public health ethics	The book is structured in 17 chapters, the first one is an overview of ethical theories and methods of moral reasoning and the rest cover specific aspects of PHE. It ends with an Instructor's guide that succinctly covers relevant aspects of the cases in each chapter.	Yes, it is basically a book of cases for discussion (59). Each chapter includes: an overview on the relevant PH and ethical aspects of the particular topic; between 2 and 8 cases, each briefly described and with 2 to 4 discussion questions and references; and suggestions for further reading.	Many cases presented without an specific geographical setting; others international	High. The cases with the discussion questions can be used in the classroom; the description of cases is very brief hence allowing for shorter and more concise debate sessions. The Instructor's guide may serve the teacher to prepare in advance the case and/or to guide the discussion in class.
Dawson A. Public health ethics: key concepts and issues in policy and practice	The book is structured in 2 sections: 1) Concepts (4 chapters); 2) Issues (8 chapters). Each chapter is written by a different author and covers ethical aspects on a particular PH topic.	Not included.	Contributors to the chapters come from UK, US, Sweden, Australia and Netherlands	Good. Each chapter focuses on a particular topic in PH covering relevant ethical considerations and different moral perspectives.
Dawson A, et al. Ethics, prevention and public health	The book includes a series of 12 essays by different authors on a particular aspect of PHE.	Not included.	Predominantly United States	Good. The essays are useful to go more in depth in particular aspects of PHE and/or to provide more insight when preparing the discussion of cases.

[1] Perceived value by the authors of the article; based on the ethical aspects that are included and whether the book includes cases for discussion and/or other useful content to use in class and/or to prepare lectures.

Table 3. General content characteristics and value as a teaching tool of the textbooks and manuals on public health ethics. (PH: public health; PHE: public health ethics)

Public health ethics education in public health masters in Spain: Current
status and available resources for teaching - Andrea Burón, Andreu Segura
Rev Bio y Der. 2019; 45: 89-109 | 103

Short reference	General structure	Are cases for discussion included (number of cases) and how are they organised	Geographical context	Value as a teaching tool[1]
Goldberg DS. Public health ethics and the social determinants of health	The book is structured in 6 chapters, including an introduction and a conclusion ones.	Not included.	United States	Moderate. This brief book will be useful specifically to those interested in the ethical implications of the social determinants of health. It includes discussion questions at the end of each chapter.
Holland S. Public health ethics	The book is structured in 2 parts: I) Moral and political philosophy (4 chapters); II) PH activities (6 chapters). Each chapter focuses on a particular topic in PH covering relevant ethical considerations and different moral perspectives.	Not included.	United States	Good. The first part serves as a detailed introduction to PHE and the different philosophical foundations and frameworks. The other chapters help expand the PHE theory and arguments on particular PH topics.
Jennings B, et al. Ethics and public health: model curriculum	The book is structured in 9 modules, each by different authors and covering a particular PH area and one or more cases for discussion. Each module is prepared by different authors and contains an essay on the topic, a fact sheet, one or more cases for discussion, an analytic discussion section for each case and an assessment on tools for best practice and policy (9).	Yes (21). Each case includes a description of the case study, followed by a case discussion. The discussion in some cases includes: ethical problems, relevant values, necessary information, stakeholders, available options, and decision process. Others include just a background and questions for discussion.	United States	High. Developed as a textbook mainly for teachers. Each module is well-organised and covers the most relevant PH and PHE aspects, includes a fact sheet which could be used as a handout in class and the cases can be used directly. The case discussion sections could serve as an aid for the discussion in class.
Nuffield Council on Bioethics. Public health: ethical issues	Structured in 8 chapters: the first is an introduction, the second covers the ethical framework used, the third the ethical aspects of PH policy and practice, 4 case studies and the last chapter is a list of conclusions. Each chapter is organised in headings and subheadings and numbered paragraphs.	Not included.	Predominantly United Kingdom	Good. The introductory and general PHE chapters provide a thorough and organised overview; the 4 case studies focus on a particular topic in PH covering relevant ethical considerations that can be used by the teacher to aid the discussion in class.
Strech D, et al. Ethics in Public Health and Health Policy. Concepts, Methods, Case Studies	The book is organised in two introductory chapters, and then 3 parts, in total 14 chapters: I) concepts (3 chapters); II) methods and teaching (4 chapters); III) cases (5 chapters). Each chapter is conveived by different authors and is structured differently.	Not included.	Mostly United Kingdom with some cases set in other countries	Good. The introductory and "concepts" chapters provide a thorough overview on PHE; the 4 chapters on "methods and teaching" cover useful aspects to take into account as a teacher in PHE; the 5 last chapters focus on specific topics in PH with relevant ethical considerations that can be used by the teacher to aid the discussion in class.

[1] Perceived value by the authors of the article; based on the ethical aspects that are included and whether the book includes cases for discussion and/or other useful content to use either in class or as material for students.

Table 3 (cont.). General content characteristics and value as a teaching tool of the textbooks and manuals on public health ethics. (PH: public health; PHE: public health ethics)

Short reference	Introductory aspects of public health ethics; frameworks	Public health research; scientific evidence; epidemiology	Health policy and law; resource allocation; priority setting; healthcare system organisation	Disease prevention and control; surveillance (infectious diseases)	Health promotion (chronic diseases)	Environmental and occupational health	Case finding, screening, contact tracing; genetics	Health and social inequities; vulnerable populations	Public health communication
Barret DH, et al. Public health ethics: cases spanning the globe	PH and ethics; ethical frameworks; three-step approach to PH decision making	One chapter on "PH research" (4 cases)	One chapter on "Resource allocation and priority setting" (6 cases) and one on "International collaboration for global PH" (7 cases)	One chapter on "Disease prevention and control" (8 cases)	One chapter on "Chronic disease prevention and health promotion" (5 cases)	One chapter on "Environmental and occupational health" (4 cases)	Within the "Disease prevention and control" aspects of screening are covered together with surveillance issues (1 case)	One chapter on "Vulnerability and marginalized populations" (6 cases)	Not specifically covered
Bayer R, et al. Public Health Ethics: Theory, Policy, and Practice	Introduction covers ethical theory and frameworks; Part I (PH perspective) and partially Part II (Autonomy and paternalism) deal with ethical issues in PH	One essay on the concept of personal responsibility for health ("Who should be blamed for being sick"?); two on genetic research	Part II (Autonomy and paternalism) include legal aspects in smoking and drugs; Part III (Justice and health, 4 essays) covers policy and priority setting	Part IV (Infectious diseases: coercion and protection of society) includes 4 essays on the topic	One essay specifically on "Health promotion: ethical and social dilemmas of government policy"	Part V (Regulation and environmental and occupational health) include 3 essays on the topic	Part VI (Genetics and PH) includes 4 essays on the topic	One essay on "Why justice is good for our health: the social determinants of health inequalities" and one on "Genetic research and health disparities"	Not specifically covered
Bernheim RG, et al. Essentials of public health ethics	Framework for public health; moral considerations, bases and limits for PH interventions; political and legal context of PHE; PH perspectives	The chapter "PH perspectives" covers some aspects on evidence based approaches (no cases)	The chapter "political and legal context of PHE" and the one on "PH perspectives" cover some aspects (no cases)	One chapter on "Surveillance and PH data" (1 case), one on "Immunization" (4 cases) and one on "Containing communicable diseases" (2 cases)	Not specifically covered but partially included in the chapter on "Surveillance and PH data" and others	One chapter on "PH and the environment" (2 cases)	One chapter on "Case finding, screening testing and contact tracing" (2 cases)	Not specifically covered	One chapter includes a section on Health communication" (no cases)
Canadian Institutes of Health Research. Population and public health ethics: cases from research, policy and practice	Brief introduction on "Population and PHE"	There are 4 cases on research covering surveillance issues, sharing research data, conflict of interests and a tool for ethical analysis	There are 6 cases on policy covering different types of PH interventions	Four cases on infectious diseases control and prevention	One case on "Obesity surveillance in school children" and two on smoking	One case on occupational health (immunization) and one on environmental health	One case on cancer screening	One case on social determinants of health and another on health inequities	Not specifically covered

Table 4. General areas of public health and public health ethics included in the books. (PH: public health; PHE: public health ethics)

Public health ethics education in public health masters in Spain: Current
status and available resources for teaching - Andrea Burón, Andreu Segura
Rev Bio y Der. 2019; 45: 89-109 | 105

Short reference	Introductory aspects of public health ethics; frameworks	Public health research; scientific evidence; epidemiology	Health policy and law; resource allocation; priority setting; healthcare system organisation	Disease prevention and control; surveillance (infectious diseases)	Health promotion (chronic diseases)	Environmental and occupational health	Case finding, screening, contact tracing; genetics	Health and social inequities; vulnerable populations	Public health communication
Coughlin SS. Case studies in public health ethics	Case analysis and moral reasoning; Privacy and confidentiality protection	9 chapters specifically deal with research aspects, like for instance scientific misconduct, intellectual property and data sharing, publication and interpretation of findings, cross-cultural research.	One chapter on "Allocation of scarce resources and healthcare reform"	The chapter on "PH practice" covers some aspects and one chapter specifically deals with "AIDS prevention and treatment"	Not specifically covered	Not specifically covered	One chapter on "Genetic research and testing"	One chapter on "Studies of vulnerable populations"	One chapter on "Communication responsibilities of PH professionals"
Dawson A. Public health ethics: key concepts and issues in policy and practice	PHE; health, disease and PH; selective reproduction, eugenics and PH, risk and precaution	One chapter on "PH research"	The chapter on smoking includes policy aspects	One chapter on "Infectious disease control", another on "Vaccination ethics"	One chapter on "Smoking, health and ethics"	One chapter on "Environment, ethics and PH: the climate change dilemma"	One chapter on "population screening"	One chapter on "Equity and population health" and another on "Health inequities"	Not specifically covered
Dawson A, et al. Ethics, prevention and public health	Ethics, prevention and PH; meaning of *public* in PH; PH and civic republicanism; health of people; population-level bioethics	One chapter on "Ethical issues in applying quantitative models for setting priorities in prevention"	One chapter on "Reasonable limits to PH demands"	One chapter on "Parental choice and expert knowledge in the debate about MMR and autism" and one on "herd protection as a public good"	One chapter on "Tobacco discouragement"	Not specifically covered	One chapter on "Vertical transmission of infectious diseases and genetic disorders" and one on "Informed consent and the expansion of newborn screening"	Not specifically covered	Not specifically covered
Goldberg DS. Public health ethics and the social determinants of health	The whole book is intended as an introduction to the ethical aspects of the social determinants of health	Not specifically covered	Not specifically covered	Not specifically covered	Not specifically covered	Not specifically covered	Not specifically covered	These are covered in depth, aspects such as justice, compound disadvantage, social patterning of risky behaviour, etc.	Not specifically covered

Table 4 (cont.). Specific areas of public health included in the books. (PH: public health; PHE: public health ethics)

Public health ethics education in public health masters in Spain: Current
status and available resources for teaching - Andrea Burón, Andreu Segura
Rev Bio y Der. 2019; 45: 89-109

| 106

Short reference	Introductory aspects of public health ethics; frameworks	Public health research; scientific evidence; epidemiology	Health policy; resource allocation; priority setting; healthcare system organisation	Disease prevention and control; surveillance (infectious diseases)	Health promotion (chronic diseases)	Environmental and occupational health	Case finding, screening, contact tracing; genetics	Health and social inequities; vulnerable populations	Public health communication
Holland S. Public health ethics	Consequentialism; non-consequentialism; liberal political philosophy; beyond traditional liberalism	One chapter on "Epidemiology"	One chapter on "Harm reduction"	One chapter on "Immunization"	One chapter on "Health concepts and promotion" and another on "Health promotion and behaviour modification"	Not specifically covered	One chapter on "Screening"	Not specifically covered	Not specifically covered
Jennings B, et al. Ethics and public health: model curriculum	Introduction to the manual; Module 1 covers a general approach to PHE and PH law	One module devoted to the Tuskegee study and other research studies, and 2 modules devoted to PH research	One module on "PH and health system reform"	One module on "Ethics and disease control: STDs, HIV, TB"	One module on "Ethics oh health promotion and disease prevention"	One module on "Ethical issues in environmental and occupational health"	One module on "PH genetics: screening programmes and individual testing/counselling"	Not specifically covered	The module on health promotion includes a section on "Health communication campaigns and the censorship of advertising"
Nuffield Council on Bioethics. Public health: ethical issues	First chapter is an Introduction to general PHE aspects; the second covers PHE frameworks	Not specifically covered	One chapter on "Policy process and practice"	One chapter is a case study on "Infectious disease" and another on "Fluoridation of water"	One chapter is a case study on "Obesity" and another on "Alcohol and tobacco"	Not specifically covered	Not specifically covered	Not specifically covered	Not specifically covered
Strech D, et al. Ethics in Public Health and Health Policy. Concepts, Methods, Case Studies	The 2 first chapters are an introduction to PHE; 3 chapters on "paternalism and libertarian paternalism", "denormalisation strategies" regarding health related behaviours, and the "right not to think about health"	Not specifically covered	One chapter on "distributing vaccine fairly during influenza pandemics"	One chapter on "the introduction of a Child index in the Netherlands" and another on "influenza vaccination for health personnel in long-term care homes"	Not specifically covered	Not specifically covered	One chapter on "Cancer screening: risk stratification and the ethics of apt categorisation"	One chapter on "Asylum seekers and PHE"	Not specifically covered

Table 4 (cont.). Specific areas of public health included in the books. (PH: public health; PHE: public health ethics)

Public health ethics education in public health masters in Spain: Current
status and available resources for teaching - Andrea Burón, Andreu Segura
Rev Bio y Der. 2019; 45: 89-109

| 107

References

1. Jennings B, Kahn J, Mastroianni A, Parker L. Ethics and public health: model curriculum [Internet]. 2003. Available from: http://www.asph.org/UserFiles/EthicsCurriculum.pdf

2. Callahan D, Jennings B. Ethics and public health: forging a strong relationship. Am J Public Health. 2002 Feb;92(2):169–76.

3. Kass NE. An ethics framework for public health. Am J Public Health. 2001 Nov;91(11):1776–82.

4. Potter C. Teaching public health ethics. Public Health Rev. 2015;36:12.

5. Lee LM, Royo-Bordonada MÁ. Continuing the conversation about public health ethics: education for public health professionals in Europe. Public Health Rev [Internet]. 2015 Dec [cited 2018 Aug 15];36(1). Available from:
http://www.publichealthreviews.net/content/36/1/5

6. Lindert J, Potter C. Developing public health ethics learning modules – can we learn from critical pedagogy? Public Health Rev [Internet]. 2015 Dec [cited 2018 Aug 15];36(1). Available from:
http://www.publichealthreviews.net/content/36/1/7

7. Kessel AS. Public health ethics: teaching survey and critical review. Soc Sci Med 1982. 2003 Apr;56(7):1439–45.

8. Aceijas C, Brall C, Schröder-Bäck P, Otok R, Maeckelberghe E, Stjernberg L, et al. Teaching Ethics in Schools of Public Health in the European Region: Findings from a Screening Survey. Public Health Rev [Internet]. 2012 Jun [cited 2018 Aug 15];34(1). Available from:
http://publichealthreviews.biomedcentral.com/articles/10.1007/BF03391662

9. Lee LM, Wright B, Semaan S. Expected ethical competencies of public health professionals and graduate curricula in accredited schools of public health in North America. Am J Public Health. 2013 May;103(5):938–42.

10. Camps V, Hernández-Aguado I, Puyol A, Segura A. An ethics training specific for European public health. Public Health Rev. 2015;36:6.

11. Meneu R. Ética y salud pública [Internet]. Fundació Víctor Grífols i Lucas.; 2012. Available from: https://www.fundaciogrifols.org/es/web/fundacio/monographs

Public health ethics education in public health masters in Spain: Current status and available resources for teaching - Andrea Burón, Andreu Segura
Rev Bio y Der. 2019; 45: 89-109

| 108

12. Fundació Víctor Grífols i Lucas. Ética, salud y dispendio del conocimiento. [Internet]. Barcelona: Fundació Víctor Grífols i Lucas; 2016. Available from: https://www.fundaciogrifols.org/es/web/fundacio/monographs

13. Segura A. Maleficencia en los programas de prevención [Internet]. Fundació Víctor Grífols i Lucas.; 2010. Available from: https://www.fundaciogrifols.org/es/web/fundacio/monographs

14. Segura A, Burón A, Carrasco JM. Casos prácticos de ética y salud pública. Cuadernos de la Fundació Víctor Grífols i Lucas, 29. [Internet]. Fundació Víctor Grífols i Lucas; 2000 [cited 2018 Aug 15]. Available from: https://www.fundaciogrifols.org/es/web/fundacio/monographs

15. Segura i Benedicto A, Fundació Víctor Grífols i Lucas. Ética y salud pública en tiempos de crisis [Internet]. Barcelona: Fundació Víctor Grífols i Lucas; 2014. Available from: https://www.fundaciogrifols.org/es/web/fundacio/monographs

16. Segura A. Elementos y criterios para el diseño de un programa de ética y salud pública (una agenda). In: Ética y Salud Pública Cuaderno 27 [Internet]. Barcelona: Fundació Victor Grífols i Lucas; p. 67–74. Available from: https://www.fundaciogrifols.org/es/web/fundacio/monographs

17. Simón-Lorda P, Barrio-Cantalejo IM, Peinado-Gorlat P. Content of Public Health Ethics Postgraduate Courses in the United States. J Bioethical Inq. 2015 Sep;12(3):409–17.

18. Bluestone NR. Teaching of ethics in schools of public health. Am J Public Health. 1976 May;66(5):478–9.

19. Coughlin SS, Katz WH, Mattison DR. Ethics instruction at schools of public health in the United States. Association of Schools of Public Health Education Committee. Am J Public Health. 1999 May;89(5):768–70.

20. Thomas JC, Sage M, Dillenberg J, Guillory VJ. A code of ethics for public health. Am J Public Health. 2002 Jul;92(7):1057–9.

21. Thomas J. Skills for the ethical practice of public health [Internet]. Washington, DC: Public Health Foundation; 2010. Available from: https://nnphi.org/wp.../ph-code-of-ethics-skills-and-competencies-booklet.original.pdf

22. Association of Schools of Public Health (ASPH). Master's Degree in Public Health Core Competency Development Project [Internet]. 2006. Available from: https://www.aspph.org/teach-research/models/mph-competency-model/

Public health ethics education in public health masters in Spain: Current
status and available resources for teaching - Andrea Burón, Andreu Segura
Rev Bio y Der. 2019; 45: 89-109

| 109

23. Centers for Disease Control and Prevention (CDC), Council of State and Territorial Epidemiologists (CSTE). Competencies for Applied Epidemiologists in Governmental Public Health Agencies [Internet]. Available from: www.cdc.gov/AppliedEpiCompetencies/

24. Council on Linkages Between Academia and Public Health Practice. Core Competencies for Public Health Professionals [Internet]. 2014. Available from: www.phf.org/corecompetencies

25. ASPHER's European Core Competences for Public Health Professionals (ECCPHP) [Internet]. 2016. Available from: https://www.aspher.org/repository,13,0,0.html

26. Benavides FG, Moya C, Segura A, Lluïsa de la Puente M, Portaa M, Amela C. Las competencias profesionales en Salud Pública. Gac Sanit. 2006 May;20(3):239–43.

27. Jennings B, Kahn J, Mastroianni A, Parker L. Ethics and Public Health: Model Curriculum [Internet]. HRSA, ASPH; 2003. Available from: https://s3.amazonaws.com/aspph-wp-production/app/uploads/.../EthicsCurriculum.pdf

28. Tulchinsky T, Jennings B, Viehbeck S. Integrating ethics in public health education: the process of developing case studies. Public Health Rev. 2015;36:4.

29. Coleman CH, Bouësseau M-C, Reis A. The contribution of ethics to public health. Bull World Health Organ. 2008 Aug;86(8):578-A.

30. Hernández Aguado I, Lumbreras Lacarra B, Parker LA, Álvarez-Dardet Díaz C. Manual de epidemiología y salud pública para grados en ciencias de la salud. Madrid: Médica Panamericana; 2018.

31. Segura A. Cuestiones éticas en prevención y salud pública (Unidad 10). In: Título de Experto en Ética Médica. 3rd ed. Madrid: Fundación para la Formación de la Organización Médica Colegial de España; 2018.

32. Puyol Á. [Ethics, equity and social determinants of health]. Gac Sanit. 2012 Apr;26(2):178–81.

33. Ramiro Avilés MA, Lobo F. La justificación de las políticas de salud pública desde la ética y la eficiencia económica. Informe SESPAS 2010. Gac Sanit. 2010 Dec;24:120–7.

34. Hyder AA. Ethics and schools of public health. Am J Public Health. 2000 Apr;90(4):639–40.