

## Review Article

**Public health and ethics: An overview****Dya Eldin Mohammed Elsayed MD**

Assistant Professor, Department of Community Medicine, Faculty of Medicine, Alzaiem Alazhari University, Tel: +249185335898, Fax: +249185344510, P.O.Box: 1432, Khartoum, Sudan, e-mail: delsayed@alazhari.net

**Abstract**

*This article illustrates the ethical principles of medical care in the context of public health interventions. Emphases were made to describe the contemporary domain of public health in Sudan and to highlight several points that might help in conducting ethically sound interventions. It describes the main characteristics of public health interventions in our country in detail: performance of public health interventions in healthy people and their intrusive nature, the paternalistic temperament within which they are performed, lack of modern public health legislative code, and lack of evidence based interventions. It also examines several arguments that shape the moral and ethical bases for public health interventions. It argues that public health interventions must meet four requirements to be ethically sound: (1) political acceptance, (2) public justification and community participation, (3) equity and justice, and; (4) confidentiality.*

**Key words:** public health, code, moral, ethics

**Introduction:**

In recent years, ethics has become an increasingly important topic not only in clinical practice and research, but in public health as well. The moral and ethical principles in public health have emerged from professional practice in the field of clinical medicine, epidemiology, biomedical research, nursing, and the social and behavioral sciences<sup>(1)</sup>. Ethics can be "considered as dealing with the principles by reference to which any relevant particular or concrete human actions can be judged right or wrong, moral or immoral". More simply, ethics reflects the ways of "understanding and examining the moral life"<sup>(2,3)</sup>.

When the field of bioethics was developed in the 1950s and 1960s, it focused primarily on protection of individuals involved in clinical care and research. Because bioethics originally grew out of scandals and abuses which are less frequent (or

non-existent) in the field of public health, it is not surprising that little attention was paid to interventions in public health by early bioethicists. Generally accepted international bioethics guidelines state that clinical care and research should be conducted in accordance with four ethical principles: respect for autonomy, beneficence, nonmaleficence and justice<sup>(3)</sup>. The justification of these guidelines is to ensure that individuals are treated with respect from the time they are being engaged in medical care, interventions or research<sup>(4,5)</sup>. Does public health differ from medicine and research about ethical issues? Although public health shares many characteristics with other scientific disciplines, it has certain unique issues. It is a discipline that grew independently, though its findings often have immediate policy implications for clinical care and research. Public health focuses on identification and formulation of health policy,

while medicine makes use of the policy. Public health interventions are directed towards large populations, while clinical care targets individual persons <sup>(6)</sup>.

Rather than discussing universal ethical principles, this article will focus here on public health ethics in the particular setting of the Sudan. It will also examine problems pertinent to constructing general ethical guidelines for contemporary public health. These two tasks are challenging and important for several reasons. First, little has been written about the issues of public health ethics in Sudan. Second, there is no consensus about what constitutes public health in our country, and often it is mistakenly interpreted (sometimes intentionally) within the community medicine. Some officials and academicians interchangeably use the terms “public health” and “community medicine”, despite critical differences. Finally, in the historical domination of curative medicine, public health and public health ethics have been undervalued or ignored <sup>(7)</sup>.

There are many reasons why public health programs require unique ethical guidelines. First, most public health interventions involve healthy subjects. Second, they are intrusive by nature. They may also be performed with a paternalistic temperament. Also, most public health interventions are not supported by legislative code; finally, they are not evidence based interventions.

#### **Public health interventions involving healthy people**

Public health seeks to prevent diseases, improve the health of populations and prolong lives <sup>(8)</sup>. Preventive programs are often carried out in healthy (or at least apparently healthy) people. Most preventive interventions in Sudan are not undertaken as a response to the populations’ request. In contrast, they are implemented because some larger organization like the state or the World Health Organization has recommended the

particular intervention(s). Exploitation is an issue for Sudanese people, because their poverty, illiteracy and dire need for healthcare may lead to obedient agreement to the intervention without understanding the purpose of the intervention. Preventive activities performed on healthy people are meddlesome and sometimes inflict them to risks. Mass chemoprophylaxis for schistosomiasis and malaria are good examples for meddlesome practices.

#### **Paternalism**

Although public health programs are directed to the health of large populations, the public health indicators are aggregations of individuals’ health. With many public health interventions, individuals are not granted the choice of participation, but are required to participate. Public health workers may have significant data that supports their intervention, but such data may not always be communicated to the population, even though public health issues can be easily explained to almost every adult person <sup>(9)</sup>. Public health interventions as well as medical care in this country are undertaken in a paternalistic manner, leaving no place for individuals’ participation in decision-making. We adapted ourselves to function and behave according to the long existing social norms dictated by pluralism. In this background, paternalism outlines the whole aspect of our life. Social life is changing as knowledge and science are developing. Public health interventions touch significant and very personal issues. Individual decision becomes essential to accept or refuse interventions. Paternalism is rather odious when used as a justification for conducting public health programs. Adults make unlimited decisions in their everyday lives and often in very serious affairs. Therefore, it is not difficult for them to make similar decisions when their health is concerned. Another matter that merits attention in public health

is that these professionals rely on social and cultural factors to influence the individual's actions and to accomplish their agenda. It is noteworthy to show here that these influences may be efficient, but they are not ethical because they deny voluntariness.

The polio eradication campaigns are a good example of this ethical dilemma. It is known that the oral polio vaccine, which is currently used in Sudan, may induce poliomyelitis in under five children subjected to immunization. Indeed the incidence is low, but still the risk to develop poliomyelitis exists<sup>(10,11)</sup>. No public health officials or workers mentions this fact when dealing with adults or children who are participating in the campaign. In fact, the immunization program's authorities claim that the vaccine is safe and does not have or cause any adverse effects. While it is clear that polio immunization is intended to do good for our children, misinformation given by public health practitioners makes the procedure ethically questionable.

#### **Public health and law**

Public health is one of the few professions in Sudan that has legal power supported by the law of public health adopted by the Council of Public Health in 1975. However, law and moral standards are very different, in that breaching the law is considered a crime or that merits punishment, while breaching moral rules leads to violating social norms. The best known ethical and legal codes in Sudan are Medical Ethics and Medico-moral Problems adopted by the Sudan Medical Council (SMC) in 1969 and amended in 1979. In 1993, the SMC issued a new law known as The Sudan Medical Council Law, which was subsequently amended in 2004. Both laws are intended to govern ethical and legal liabilities of physicians. Breaching either of them is considered a serious violation of the rules and leads to legal liability. Public health, however, lacks such laws. Since its establishment in 1975, the

Sudan law of public health has not undergone any revision. All modern public health programs were introduced in the country long after that date (e.g. most of primary health care activities were created or introduced in the country after Alma Ata Declaration on PHC in 1978). It is known that many professional codes have been written, revised, and subsequently amended due to developments in technology and structural changes. Advanced technology has clearly generated new ethical dilemmas, making it necessary to modernize the existing law. Without modernization of the law of public health, many ethically questionable public health interventions are legal, simply, because they are not included in the existing and long forgotten law. Law revision and development will be successful only when they are accompanied by lengthy and genuine debate engaging the public health and medical professionals from the Ministry of Health and academic institutions. It is worthy to note here that we cannot rely on the law to substitute for ethical process, but we also cannot provide health care in its absence. Public health in our country needs specific laws in addition to ethical codes.

#### **Evidence based public health**

Decisions in public health need to be made based on science and knowledge. Public health, science and decision making process are often connected with each other. Evidence used in decision making about disease control or efficacy of preventive interventions arises from different sources: biological sciences, epidemiology and clinical sciences, and social and behavioral sciences. Certainly, research in these fields is especially useful for the decision-making process in public health. The methods used to disseminate scientific findings are publishing research results, and/or presenting at workshops, seminars, conferences etc<sup>(12)</sup>. Health research and research findings

dissemination in Sudan are neither advanced nor sustainable in their current forms. Very few opportunities exist to communicate knowledge for policy-making and planning for health development, so research in Sudan does not greatly impact local health policy. Since policy makers in Sudan do not have access to health research findings from Sudanese populations, it is obvious that they either introduce the new technology to the country based on research done in other countries or do empirical decisions. Both options are unethical and carry unpredictable consequences<sup>(13)</sup>. It is dangerous to apply imported interventions or locally produced new technologies without pre-testing. Evidence-based public health interventions require reliance on scientifically sound studies, thorough literature review and previous relevant work.

#### **The moral and ethical bases for public health**

We are not proposing a code for professional ethics. Rather, we would like to raise some important issues for consideration. This is a descriptive tool designed to help policy-makers and public health professionals identifying and considering ethical implications of interventions. We identified four issues that might assist in the creation of an ethical conduct code for public health. In order to be ethically sound, Public health interventions must have political acceptance, publicly justification and community participation, equity and justice, and confidentiality.

##### *1. Political acceptance:*

The provider of public health interventions is always the government. Government bears the responsibility of securing funds, organizing the effort, and facilitating desired interventions. It is also responsible for training of health personnel. However, the crucial role of the government is in setting the national health policy. Health policy in this article refers to a set of normative, enforceable

guidance produced by the Federal Government or official body such as Ministry of Health to govern public health conduct. National health policy shapes the health system in the country, including allocation of resources, and distribution of manpower and health services. All public health interventions should be carried out within the state's health policy. For example; if the national health policy determines that an expanded program on immunization should immunize under-five children against seven common infectious diseases, no one would have right to carry a six-disease immunization program, because this program would fail to protect children against the infection to which they are not immune.

A clear, goal-oriented and evidence-based health policy is of paramount importance. It prevents the country from the unruliness that could be created in the country by individual and self-determined interventions. The communities must evaluate whether the implemented interventions are supported by the state or just institutional entreaty.

##### *2. Population concern:*

Public health officials should address the fundamental health problems of communities and find appropriate means to solve them. To do so, they should assess the population's needs and establish health requirements<sup>(8)</sup>. Notwithstanding the overall responsibility of the government, involvement of communities in promotion and maintenance of their own health is an essential component in public health. There must be not only efforts to involve them, but a meaningful involvement in the planning, implementation and evaluation of public health interventions. Interventions must reflect the real health needs of the communities. Individual community members must understand that they are real contributors in public health, not just recipients of interventions. They also need to know that public health policy is

a response to their needs. Government and public health institutions should provide the communities with enough information to enable them to make informed decisions about the adoption of interventions.

### 3. *Confidentiality:*

Public health professionals survey people through daily routine work and surveys. They often have access to private information of individuals and communities unexposed otherwise to other professionals. Individuals and communities provide public health professionals with private information in confidence, and it is their right to have such information about them kept confidential. Failure to keep private information secured, and disclosing this information to third parties, deliberately or accidentally, is an infringement of confidentiality which may harm individuals and communities. For example, information on health status of a certain population groups may cause them to lose their work. Information on HIV/AIDS or genetically inherited conditions may bring social stigma and ostracism. Public health institutions, codes and professionals must protect private information and maintain confidentiality, and exceptions must be clearly stated in the code or any regulations.

### 4. *Justice and equity:*

There is an increasing global concern about equity and fair distribution of public health interventions for all populations <sup>(14)</sup>. Public health in developing countries, including Sudan, is characterized by extreme inequalities in coverage, accessibility and quality of services, and inadequate distribution of work force and other resources <sup>(15)</sup>.

Public health interventions must be made accessible to all people irrespective to their ethnicity, gender, age, occupation, religions or political orientation, their worth or socio-economic status. Justice also denotes fair distribution of risks and benefits of public health interventions <sup>(1)</sup>. The history of public

health and Sudan's health services has shown no evidence that health resources were equally distributed within the populations.

It is the government's responsibility to provide equitable distribution of health services in the country, irrespective of all humanitarian disparities. Health policy makers, decision-makers and public health professionals are also responsible for reflecting the principle of justice in their daily work. They can rely on the social heritage that highly values the qualities of support and solidarity with vulnerable people. These values have existed for a long time, are deeply rooted in our societies, and have great importance in Sudan.

### **Conclusion**

Ethical dilemmas in public health are not a rare phenomenon. They accompany each intervention and are seen in every working day, as an intrinsic component of public health. A long absence of public health ethics created an obvious void in our system. There is a perception in Sudan that public health interventions carried for the sake of people need no ethical justifications. Some of these interventions are interfering in individuals' life and may cause them inconvenience. Others are intrusive and lead to change in human physiology or immunity. Many of these interventions are done to improve the health of a community, even though any given individual may not directly benefit from the intervention. In this case, he/she may put him/herself at risk for the sake of others. Due to all of these factors, public health needs ethics. Ethics is not applied as an instructor or a directive superstructure, but it is directly related to public health activities. Application of ethical principles is not just a duty of individual public health workers; it is, rather, a collective responsibility of the whole system at its all levels. Ethical conduct will enrich public health workers, and it adds value to their practice.

**References:**

1. Coughlin SS and Beauchamp TL. *Ethics and Epidemiology*. 1st ed. New York Oxford: Oxford University Press. 1996.
2. Beauchamp TL and Walters LR. *Contemporary Issues in Bioethics*. 6th ed. Belmont, California: Wadsworth Publishing. 2003.
3. Beauchamp TL and Childress JF. *Principles of Biomedical Ethics*. 5th ed. New York: Oxford University press. 2001.
4. Levine RJ. *Privacy and Confidentiality*. In: *Ethics and Regulation of Clinical Research*. 2nd ed. New Haven: Yale University Press. 1988. p.163-180.
5. Emanuel EJ, Wendler D and Grady C. What makes clinical research ethical? *Journal of American Medical Association*. 2000; 283(20): 2701-2011.
6. Lucas AO and HM Gilles. *Short Textbook of Public Health Medicine for the Tropics*. 4th ed. London: Arnold. 2003.
7. Dickens BM. The challenges and opportunities of ethics. *American Journal of Public Health*. 2005; 95(7): 1094.
8. Mohamed HH. What is public health? *Sudanese Journal of Public Health*. 2006; 1(4): 271-276.
9. Cole P. The moral bases for public health interventions. *Epidemiology*. 1995; 6(1): 78-83.
10. Paul Y and Dawson A. Some Ethical Issues Arising from Polio Eradication Programme in India. *Bioethics*. 2005; 19(4): 393-406.
11. Park K. *Park's Textbook of Preventive and Social Medicine*. 18th ed. Jabalpur, India: M/s Banarsidas Bhanot Publishers, 2005.
12. Callahan D and Jennings B. Ethics and public health: forging a strong relationship. *American Journal of Public Health*. 2002; 92(2): 169-176.
13. Elsayed DM. National Health Research System: for better health. *J C Tech*. January 2007; vol (8): 1. 90-99.
14. Gwatkin DR. Health inequalities and the health of the poor: What do we know? What can we do? *Bulletin of the World Health Organization*. 2000; 78(1): 3-18.
15. Alwan A.. Challenges for public health in Arab countries. *Pan Arab Medical Journal*. 2004; 1: 49-51.