The issue is how to create institutions for better management in artificial intelligence projects.

# 3 - Strategic Document

The strategic document for the development of artificial intelligence in the country includes micro-policies, actions and projects, and in total more than a hundred projects and activities are considered under their categories. Institutions such as the Center for Virtual Space, parliament, Judiciary, Iranian National standards organization (INSO) and several other institutions are responsible for the realization of the document are involving in achieving the document.

#### 4-Management

Thanks to the ability of advanced computers to analyze large amounts of data and advanced capabilities in risk management and compliance, businesses can effectively and timely with low risks, identify risks, make more informed decisions, and manage risk. Continue to their activities.

#### -Risks

The compliance and the risks of artificial intelligence pose a challenge to traditional risk-Designing Al projects considering risk management can help us.

#### -Innovations

Artificial Intelligence (AI) transforms the administration companies and how innovation management is organized. Consistent with rapid technological development and the replacement of human organization, AI may indeed compel management to rethink a company's entire innovation process.

#### 5- Regulation

development of public sector policies and laws of promotion and advertising in artificial intelligence is a broad monitoring of algorithms, so that the managerial perspective has created new judicial and quasi-judicial issues, and now, for the purpose of social control, new technologies are used on risk management

#### -Standardization & certification

Many AI projects provide sensitive services that require training and certification when performed by individuals. These applications raise further questions about the standards to which AI systems are held, and the procedures and techniques available to ensure those standards are met.

# -Decision Making

Artificial intelligence algorithms can make faster and better decisions; but this decision-making for humans may have defects in various issues that affect their results. For this reason, it is necessary to regulate the process of the decision making by algorithms.

# 6- Challenges

In general, artificial intelligence faces with difficult problems. The most important of them are as follows:

# -Lack of Experienced and Trained People

In many organizations and companies, there are very few human resources proficient in artificial intelligence. And this is one of the main challenges of artificial intelligence in Iran and Most of the countries.

# -Data Protection & Privacy

In the big data world, it is very important that data protection monitoring are passed timely to properly protect people's privacy.

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Jniversity of Smart Medical Sciences

Department of Health Law

# 1 st Health Law Summer Schools Health Law



# Artificial Intelligence













# **Department of Health Law**

info@vums.ac.ir http://vums.ac.ir

Time: Tuesday, Wednesday, and Thursday, August 23-25 2022, from 8:30 a.m. to 4:30 p.m.

Place: No. 3, 1st Alley, Sarafraz St., Shahid Beheshti Street



# Introduction

Since the advent of artificial intelligence (AI) and its entry into the health, health law has experienced a new branch of modern sciences and has faced various ethical and legal challenges and also has paid more attention to the subjects such as policy making, regulation and management.

#### A. Health Law

Health law can be perceived in different levels, branches and approaches as follows.

#### 1- Levels

Health law can be studied in three main levels: national, international and comparative Levels.

#### 2- Branches

Generally, main branches of health law are classified as follows: 1- Classic branch referred to as medical law. 2 - Emerging or subsequently emerged branches which can be classified into two main categories: -Thematic branches such as nursing law, veterinary law, and pharmaceutical law -Transversal branches such as hospital law and social security law including health insurance.

# **3– Components**

Health law can be takes into account in different approaches as follows:

# -Right to Health

The right to health as a right to enjoy the highest attainable standard of health It is a fundamental right of all human beings to face any discrimination, protection and protecttion. Its components for achieving goals contains four elements: accessibility, affordability, availability and quality (AAAQ), which In order to realize them, the states have obligations such as the obligation to respect, support and implement.

#### -Public Health Law

"Public health law" deals with the government discretions at various jurisdictional levels to improve public health within societal limits and norms. Among the important topics of this area of public health are relations between populations, government, public health services and governmental power to exert force and pressure on individuals and businesses in order to support the health of members of the society, as well as medicine, food, occupational health and safety, and Vulnerable populations.

#### -Health Care Law

"Health care law" deals with both the individual and social aspects of the right to health care. It means the provision of health care for patients by specialists and centers providing health care services based on the legal principles that determine the standards of care as well as the legal rights and responsibilities of providers and recipients of said services. Among the most important legal issues in this field, privacy, confidentiality, informed consent and negligence and medical mal-practice.

#### -Bioethics

"Bioethics" is concerned with the ethical issues resulting from the developments in biology and medicine. Law has faced ethical dilemmas (choices) in performing important clinical procedures such as abortion and euthanasia (mercy killing) and with the rapid growth of clinical methods and especially biotechnology, ethical issues have also multiplied and as a result, bioscience has emerged. Issues related to this field can be divided into two groups: beginning and

the end of life. While assisted reproductive technologies and abortion are among the issues

of the beginning of life, brain death and euthanasia and physician-assisted suicide are related to the end of life.

# **B - Health Law & artificial Intelligence**

**Artificial intelligence in the area of healthcare** is the use of machine-learning algorithms and software or artificial intelligence (AI) to reduce human cognition in the analysis, presentation, and comprehension of complex medical and health care data.

# 1- Policymaking

The states have begun to rely on artificial intelligence (AI) to provide services and improve operations, but using it for helping policy making is just in the beginning of the way. The foundations of policymaking, specifically the ability to sense patterns of need, developing evidence-based programs, predicting outcomes, and analyzing the effectiveness a promises a brilliant future.

#### -Justice & Fairness

The most visible and developed area of AI policy involves the capacity of algorithms or trained systems to reflect human values such as fairness, accountability and transparency (FAT).

## -Cybersecurity

Cyber security for protecting people's information against cyber attacks can lead to preventing incidents such as hacking and damaging data and their property, hacking information and creating fake documents, so it is imperative to take steps to help secure data against cyber attackers. Artificial intelligence can help us to reduce the risks of a cyber attack with timely monitoring.

# -Inequality & Bias

The way to receive information from the environment surrounding artificial intelligence depends on the quality of the designed protocol and the algorithms given to it, if variables such as age, race, gender, etc. are not defined for a system, the system will have not any reaction to them.

#### 2- Governance

The governance of artificial intelligence is often placed next to the health and safety of artificial intelligence, although the goal of both of them are to help humanity to use artificial intelligence usefully, but the governance on artificial intelligence is centered on the institutions and contexts where artificial intelligence is built and used.

# - Values and principles

The main challengeable question is what are the demands of the general public, cultural groups, artificial intelligence researchers, elites, governments and different strata of artificial intelligence, and what are the common principles and values that humans can cooperate with each other based on? Some researchers have identified a set of policy deficiencies that are of great importance in super intelligent artificial intelligence, including: rapid development, safety of artificial intelligence, relative stability, public interest, continuity, thinking about basic principles, speed, and destiny., intelligence and adaptability.

#### - Institutions and Mechanisms

People intend to be secured and guaranteed against the safety of artificial intelligence by their governments in order to refrain from the spread of new technologies may impose them on serious risks. Such concerns require centralized control over the development of artificial intelligence or extensive monitoring over various artificial intelligence projects. Such security is likely to be made possible through the cooperation of various groups in the world and may require the concentration of power and wealth.