Genome Editing, Human Dignity and Legal Regulation

Dr. LIU Yigong

Department of Law, Faculty of Humanities and Social Sciences, Dalian University of Technology, Dalian 116024, China

Abstract. In recent years, Scientists have made rapid progress in genome editing technology. On November 26, 2018, He Jiankui, a scientist in Shenzhen, China, announced that a pair of gene-editing babies named Lulu and Nana, created by his team, were born in China. One of the twins'genes has been modified to make them naturally resistant to AIDS after birth. This is the world's first gene-editing baby immunized against AIDS. This incident has caused great controversy at home and abroad about the birth of genetically edited babies.

This paper is divided into three parts. At First, the paper discusses the human genome editing technology and the ethical and legal disputes caused by He Jiankui incident. Because human genome editing technology can benefit human beings and treat some congenital diseases, it is necessary to strengthen the research. However, human gene editing should have certain boundaries and should not be surpassed. Then, the paper analyses the relationship between genome editing technology and human dignity. Because of the special legal status of human embryos and the immaturity of human genome editing technology, CRISPR technology may miss the target, and bring unpredictable risks to human beings. Therefore, the application of human genome editing technology is discussed. At present, many countries in the world have passed the laws against editing human genes, and there is no specific legislation in China. Considering the rapid development of genome editing technology, in addition to requiring scientists to strictly abide by ethical norms, China should actively promote legislation in the field of gene editing, so as to better regulate the research and application of genome editing technology.

Key words: Genome Editing, Human Dignity, Legal Regulation, Legal Liability