

## Editor's Note: Journal of Clinical Research & Bioethics (Volume 8 Issue 2)

## Antonio G. Spagnolo\*

Institute for Bioethics and Medical Humanities, Universita' Cattolica del Sacro Cuore, Rome, Italy

\*Corresponding author: Antonio G. Spagnolo, Institute for Bioethics and Medical Humanities, Universita' Cattolica del Sacro Cuore, Rome, Italy, Tel: 39 0630155861; Email: antoniogioacchino.spagnolo@unicatt.it

Received date: June 20, 2017; Accepted date: June 30, 2017; Published date: July 03, 2017

Citation: Spagnolo AG (2017) Editor's Note: Journal of Clinical Research & Bioethics (Volume 8 Issue 2). J Clin Res Bioeth 8: 1000e115. doi: 10.4172/2155-9627.1000e115

**Copyright:** © 2017 Spagnolo AG. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

## **Editor Note**

The Journal of Clinical Research & Bioethics is dedicated to publishing the latest views and guidelines in Bioethics. The current issue of the Journal of Clinical Research & Bioethics presents some interesting thoughts pertaining to crucial topics such as vulnerability, universal health care, and ethical considerations surrounding CRISPR/ Cas9. Bajotto [1], investigated the Brazilian peoples' perception of vulnerability using a semi-structured interview format. Boudreau [2] authored a review regarding the issues surrounding the concept of universal health care in the USA. Rodriguez [3] has reviewed the ethical considerations of using CRISPR/Cas9 mediated genome editing in non-human organisms.

Vulnerability is usually defined as an increased risk of harm, and/or a decreased ability to protect oneself from harm. The discipline of Bioethics addresses the problem of people's risk of harm to their wellbeing and health, or to their autonomy; therefore, issues pertaining to human vulnerability are central to bioethical discussions. The understanding of the components of vulnerability allows for cognizance of the coping strategies. The demographic profile of Brazil has seen a sea change in the recent decades. This phenomenon has been attributed to the decline in women's fertility and infant mortality, increased life expectancy, urbanization, and migration. This dynamicity in the demographics of the Brazilian society can both create possibilities for growth as well as enhance the social inequalities of society. Bajotto [1], investigated the peoples' perception of vulnerability using the format of a semi-structured interview. Nine categories emerged as being strongly correlated to vulnerability: Health and Disease (25%); Behavior (20%); Autonomy (17%); Fragility (15%); Family, relationships, loneliness (9%); Violence (4%); Hunger (3%); Finances (2%); and Physical Age (2%). The authors observed that the individual's conception of vulnerability is related to disease or ill health; the age range, on the other hand did not affect the perception of vulnerability.

Though the USA is one of the wealthiest nations, the huge inequality in incomes is only surpassed by inequalities at the level of access to health care. Due to the close-knit relationship between health care and the fiscal health of the USA, the concept of universal health care has been proposed. Though most countries consider health care to be a basic human right, the USA is yet to create and fund a universal health care system that will help address the inequalities prevalent at the level of healthcare, and provide better preventative medicine and long-term care. While support exists for the introduction of a national health program, the fiscal conservatives view this program as a huge economic burden that cannot be afforded as it would expand the debt in an uncontrolled fashion. Boudreau [2] has authored a review on the factors surrounding the concept of universal health care in the USA.

For years, molecular biologists have trying their hand at genome editing. Genome editing involves intervention at the molecular level, to purposely alter the structural/functional aspects of biological entities. The development of novel techniques such as transcription activatorlike effector nucleases (TALENs) and zinc finger nucleases (ZFNs) has brought precision, efficacy, flexibility and cost-effectiveness to the field. Over the past decade, the CRISPR/Cas9 system has evolved to become the method of choice for genome editing; this system is relatively simple, yet precise and cost-effective. The CRISPR/Cas9 system has a multitude of potential applications due to its reliance on guide DNA which can be designed against any DNA sequence; the permutations and combinations are end-less. For the same reason, the CRISPR/Cas9 system is subject to significant ethical considerations. Side issues such as the possibility of inducing mutations, and ecological disruptions created by the engineered organisms upon their release into the environment, and the possibility of xenotransplantation between animals and humans, are some of the key aspects of ethical CRISPR related ethical considerations. Rodriguez [3] has reviewed the ethical considerations of using CRISPR/Cas9 mediated genome editing in non-human organisms.

## References

- Bajotto AP, Garcia LF, Goldim JR (2017) "What is Vulnerability?" A Qualitative Study about the Perception of Vulnerability in Adults and Older Adults. J Clin Res Bioeth 8: 299.
- 2. Boudreau R (2017) The Plausibility of Universal Health Care in the United States. J Clin Res Bioeth 8: 298.
- 3. Rodriguez E (2017) Ethical Issues in Genome Editing for Non-Human Organisms Using CRISPR/Cas9 System. J Clin Res Bioeth 8: 300.