

Stem Cell Research: Ethical Issues

The increasing repulsive tone of the issue of stem-cell research specifically those involved in the proposal of medical treatment uses have been an ongoing issue especially with the moralist and the religious whose arguments are based mainly on scriptural passages from the Bible and the ever reliance on the issue of ethics (Dranes). Indeed the issue of stem-cell research has increased the number of movements mainly advocating against any form of stem cell research and they are all arguing against the unbiblical and immoral value of the scientific technology of the 20th century (Patel and Rushefsky).

This recent event on stem cell research and the amount of protests it has received has a basic root on the centuries old issue of ethics. Thus many scientists especially those engaged in biotechnology has engaged in self-regulation in what they call now as “bioethics,” which is a recent value derived from the old value of ethics (Patel and Rushefsky). There is a however some misunderstanding on what ethics really means. Majority of the debate regarding ethical value of this kind of research have been widely based on the issue of creation. The main point is that through stem cell research, man is altering God’s design (Dranes).

Basically, the ethical issue is coming from the fact that there is the question of how far can people really go in controlling human functioning. The basic religious discourse is coming from deeply rooted Judeo-Christian tradition on the nature of the process and how it can become in conflict with the general moralistic view that “it is an alteration of God’s natural processes” (Scheller)

There is however a need to re-organize the value of ethics or bioethics in this case towards a clearer notion. The role indeed of ethics is to have a holistic view of the issue. This

entails careful consideration of the “consequences and circumstances, purposes and possibilities” (Dranes). Ethics should mean thinking and reflecting hard on the issue and not relying primarily on some religious norms and scriptural basis.

There is therefore a need to shift ethical perspective towards a more comprehensive outlook that would consider the issues of consequences and improvement in the lives of people, which is not contrary to God’s over-all design for man (Dranes). Most scientists and pro-stem cell research groups have emphasized the value of ability to conquer fertility and various diseases. For example, certain cell functioning can be readily studied with the help of stem-cell research and will be a big help to cancer patients. Certain diseases, which is brought about by an abnormal combination of genes of both parents can be more controlled (Young). There is however some form of control on how far this kind of technology could cover is very much needed. This is especially true with the high propensity of scientists to actually over emphasize benefits while downplaying possible dangers (Young).

The supporters of stem cell research are basically leaning towards the merits of therapeutic capacity of this kind of research. The argument on this side is that the ability and potential of the technology in advancing medical technology towards treatments of some of the diseases that devastates and destroys human lives is a good enough reason to push for the development of therapeutic stem cell research (Scheller).

Stem cell research could unlock several mysteries behind diseases that are still unconquered by the field of medicine. The use of stem cells in order to reproduce a certain tissue or cells will help the researches in medical field more rigorous and thus producing much more informed in their medical findings (Scheller).

This is highly based in the fact that several diseases, which may require replacement of critical tissues in order to be treated, can actually be treated and managed through cloning technology. Diabetes for example, which is caused by abnormal level of insulin production can be treated through stem cell research. What will happen is that the organ, which produces the level of insulin can be replaced such that the level of production will be normalized. Cancer cells can also be replaced with normal cells in order to stop the multiplication of the cells that causes cancer. In terms of surgery, the patient can most definitely benefit through reproducing the cells of the part or tissue that needs to be replaced. This is applicable for example in terms of heart surgery and kidney transplants. This is critical because compatibility of organs is very important in transplants. Stem cell research could definitely improve the availability of compatible organs through reproduction of a genetically identical organ of the patient (“Advances and setbacks in Cloning”).

A recent study for example has shown that embryonic stem cells created from cloned mice could be developed into dopamine producing nerve cells, which could treat Parkinson’s disease. This research shows a great potential of being replicated for humans. The reproduction of dopamine-producing cells through cloning technology could be injected to the brain of patients with Parkinson’s disease and thus would help with the recovery of patients with Parkinson’s disease (“Advances and Setbacks in Cloning”).

The main thrusts of those who advocates therapeutic cloning is that the potential of the technology in conquering diseases that are highly based on malfunctioning tissues or cells is worth a try. This is especially because research on reproducing cells to treat certain abnormality in cells and tissues show no particular evidence of latent malfunctioning. The number of lives

that the technology can save is really worth considering and therefore there is a need to stop the moratorium on temporary ban on cloning-related research.

Another important factor to consider is the commercial impact of stem cell research. Agricultural applications however are still seen as the biggest potential in terms of commercial success. The cloning of animals such as cows and swine could be seen as a more profitable venture in increasing the agriculture and poultry production. Obtaining quality oocytes from cows is actually much easier for animals like cows, thus they have higher rate of success compared to cats. While other companies are focusing on the development of more productive cows and swine, there are other companies that are more focused now on the medical field application of cloning. According to the latest research, development is underway on the production of cows that could contain human antibodies. These antibodies could help the people to actually absorb antibodies that would help them in biodefense. This would help in immunization of public from many pathogens. Other companies are also starting to produce collection and purification systems for antibodies (Oransky 42).

The third aspect that should be assessed is the positive implication of stem cell research on medical practitioners. Genetic factors are very important source of determination of a person's risk for disease, treatment planning and selection, and the over-all health of the person. Nurses in critical care practice provides a very important role in assessing the genetic risks for disease, treatment planning and facilitation, and educating people about the influences of genetics in health and diseases. They also provide patients with information related to the disease and ways of controlling and facilitating the provision of health care within families and the individual. There is thus an increasing push for more educational and training improvements for nurses in critical care. This is done through programs focused on genetics and its related health

care practices. There is still however a lack of complete training and educational facilities that would actually cater to this highly specialized programs (Williams).

The unraveling of the Human genome project for example will create a lot of positive impacts in terms of researches on diseases and how they are primarily related to issues of DNA sequence. This is in short will be helpful on uncovering possible treatments and medical and health care to support people battling with diseases like cancer, heart disease and hypertension. This would help the country to control diseases and decrease mortality rates on some of the critical diseases such as cancer (Federwisch).

Although, there are already a considerable number of projects regarding the completion of complete analysis of the DNA, there is still a considerable gap in research primarily because of the increased controversies in the Human Genome Project as it became related to the much debated issue of cloning. Despite this, the Human Genome Project has continually affective of the nursing professionals. This means that there is now an increase in the need for nursing professionals to gain substantial knowledge about the Human Genome Project in order for them to facilitate improved health promotions, preventive health practices, and symptom management. The Human Genome Project has helped nursing professional have a clearer grasp on genetic factors that affect the health of individuals and the form of controls that patients can do regarding the risks based on genetics (Federwisch).

This is done for example through development of protocols that would help the person gain substantial access to information on handling emotional consequences of a discovery of the diagnosis. For example, Huntington's disease's detection that the person carries the gene can have tremendous emotional impact on the person diagnosed. Nurses thus will be trained to handle issues like this and increase the knowledge in supporting these patients (Federwisch).

Despite however of the rising critical need for nurses to actually have a lot of information on genetics, majority of the nursing practitioners will still need to undergo massive trainings on the subject especially since Genetics is seldom given focused on health care education. Many of the nursing practitioners would have to improve their knowledge and trainings on genetics in order for them to cope fully well with the fast-changing needs for nursing professionals and genetics (Federwisch).

One of the most important advances in the medical field for example is what people know as gene therapy. This is done through the administration of corrected DNA sequence to a faulty DNA sequence. This is also extended to pharmacogenomics, which helps determine the responsiveness of genetically influenced diseases to medicines. Over-all, the availability of this kinds of information would help many health care professional especially those coming from the nursing sectors to embark on information drive towards the control of these diseases especially on peripheral areas where people are underserved clinically (Federwisch).

Virtually all health problems, except trauma is basically influenced by man's genetic make up. The ability to have a full grasps of the topic of genes and DNA sequence would help revolutionize health care from diagnosis to treatment to a more aggressive actions of prediction and prevention. Genetic risk assessment is an important knowledge that health care professionals must have in order to provide patients with the control of some of the common diseases such as diabetes, hypertension, cancer and mental disorders.

There is at the core the presence of inability to define ethics appropriately. Ethics is so defined narrowly such that it lacks philosophical rigorousness. The arguments on the issue of stem-cell research are largely based on the narrow belief that this is already a manipulation of God's work. One should consider the benefits of stem cell research on medical field and in

enhancing the health of individuals. These considerations should be assessed in discourses of ethics in order to provide a broader and modern perspective on scientific research and development.

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