Editing of genomes in human embryos is it the future

Science, Genetics

With the advancement of technology, things that could not have been in the past are actually being achieved and researched. With development of science, scientists have found different ways to manipulate the DNA in human embryos. An embryo is an unborn offspring in the process of development before child birth. The process of changing the genes is genome editing (Oxford Dictionaries | English, no date, no pagination). Gene editing is the process of altering DNA of organisms, this is done by removing or adding nucleotides to the genome. (Allelebiotech, no date, no pagination). Many have found fault with this process due to many reasons and others feel that this process is necessary for human life to thrive in the future. Das states that " Clustered Regularly Interspaced Short Palindromic Repeats or CRISPR is the method scientists use to modify human embryos. CRISPR has the ability to identify specific DNA sequences and can cut the targeted DNA sequence.

The edited region can be filled with a new, desired genes to change the genetic make-up of the organism" (Das, 2017, no pagination). With this rise in technology comes pros and cons where people will fight for what they think is right. According to Lewis, T " Four basic rules were brought to the surface for the use of gene editing in humans and sates that: the process should not be used for people to fall pregnant, that gene editing should apply to somatic cells which are non-reproductive cells, not edit genes in one's germline and form international forums discuss this rise of gene editing" (Lewis, 2015, no pagination). Laws are great way to ensure that abuse of this system does not occur and helps insure that people who use this treatment is protected by the law. According to Careerride " Countries have also

started to make laws and guidelines if people decide to get genome editing" (Careerride, 2016, no pagination). Diseases have been around since the beginning of time but with gene editing it is possible to change gene's that are undesirable and cause mutations in babies (Lewis, 2015, no pagination). Many people with chronic illnesses and diseases in their families have stood up for this treatment to better the lives of their future families (Lewis, 2015, no pagination). With the CRISPR method, Chinese researches experimented on human embryos to terminate a fatal blood disease, with this it was found that editing the genome could bring on unknown consequence which can be worse than the original diseases like cancer (Lewis, 2015, no pagination).

The above experiment was not successful and found faults so is really worth it investing our time in trying to find fix the genome of embryos, King states " that the money spent on these treatments and be used elsewhere in the medical field for finding actual cures for diseases (King, 2017, no pagination). Designer babies is a main topic when genome editing brought up. Mehta argues " that our DNA is too complicated to edit and add traits that are fitting to make a designer babies and that the process of genome editing will have very little effect on people wanting to have designer babies" (Mehta, 2017, no pagination). Although Mehta makes a valid point people in the modern day want to look a certain way, will push up the desire to have perfect children. Designer babies can be compared to modern day cosmetic surgery procedures where people want to look a certain way and don't care about the cost and consequences of these procedures, this can lead to eugenics (King, 2017, no pagination).

Many people don’t agree to genome editing due to ethical reasons and that embryos have no say about the genome editing. Chan brings an excellent reason in to why research for genome editing should carry on. Chan states “ to whom is this a risk to because an embryo is not a child and that in order for this research to thrive testing must be down to help find a result if this technology is useful to us” (Chan, no date, no pagination).