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Analysis of ethical challenges of human cloning and investigation of different kinds of people point of views about genetic science

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ABSTRACT

In the last decades progress of genetics studies has been improved noticeable and out lined by human genetic project in the last years. These studies try to document and provide a genetic resources map. It has become attractive because of potential power of genetic technology to quiet physical, moral and financial diseases effects. Therefore, this technology may increase social control on human situation, so that it creates severe controversy in human rights. In this paper, we analyzed people information about genetic science and it's relation with simulation and evaluation of people point of view in respect of cloning science and its effects on religious culture. Current study is a cross-sectional investigation using questionnaire and contact with different classes of society directly and collect the data randomly and do evaluations according to current state of society. people knowledge about genetic science and attitude of different people in respect to cloning is very little, so it is necessary to present instructional programs continually by broad casting and other mass media and give necessary instruction about good and bad results of cloning to increase culture level and families attitude about genetic and it's relation with health in future.

Key words: genetic, human simulation, human rights controversy, mass media

INTRODUCTION

In the past fifteen years progress of genetics studies has been improved considerably and outlined in the last years by genetic project that try to document and provide the genetic resources map. It has become attractive because of potential power of genetic technology to quite physical, moral and financial diseases effects [13]. Therefore, this technology may increase social control on human situation so that, it creates severe controversy in human rights [4]. What is the cloning? In Latin, clone means bud and rod and cloning means cutting and reproduction. In biology, cloning is the birth of a creature without sexual association and every one of new creatures is called clone. The clones are the same genetically and if their numbers increased, they will form colony. Colony is a group of organisms or groups of cells that reproduced from one organism without sexual association and cloning is transplantation of somatic cell to female ovule and transfer to embryo (embryo is the initial stages of growth that in human is since fertilization to the end of second month) [11]. At the first time asexual reproduction by somatic nuclear cell transfer or cloning performed on mammals in 1996 and by this way Ian Wilmut, Scottish embryologist can create a sheep without gamete or male cell [14]. When These news propagate in 1997 lead to concerns about future of this technique and involvement researchers of different scientific fields. The most important concern was

applying of this technique on human and invasive use of this development in genetic engineering [13]. In doing so, what will happen for human?

The most of organization such as WHO and UNESCO, Catholic Church and the most of Muslims i.e. Sunni convicted this action and brought variant reasons against it [4]. Of course, some of people, Shiite have a different views that is absolute prohibition to absolute license [9].

Opposition against human cloning is continued in different causes [9]. Some of them resort to doctrinal reasons and some insist on religious reasons and sometimes rely on moral reasons to prove incorrectness of human cloning [4, 12]. Types of cloning [3]: There are 2 types of cloning: (1) reproductive cloning whose purpose is generation survival and generating of one existence like a parent, 2) therapeutic cloning whose main purpose is to extract the stem cells from embryo which can be used to treat disabilities and diseases [8]. Since the stem cells are multi capacity, it seems that cloning by these cells to extract defective tissues and organs provided clear perspective from future to treat these diseases [5].

Cloning process: Human and animal cloning is a multistage process that include: 1) nuclear donor cells, 2) the recipient cells, 3) leaving the core of recipient oocyte, 4) nucleuses transform process, 5) embryo culture and transfer. Reconstructed embryos have been hold in culture for five days to evolve acceptably and possibly allow it to transfer is issued by non-surgical procedures. In this process, the embryo transferred to uterus through uterine tube and laparotomy [15].

Cloning will have different outcomes. That investigated in religious, social and moral areas. But the simplest way to study these outcomes is positive and negative effects [12]. We can create the animals by cloning and use from their organs for human transplants or transfer the healthy cells of damaged member to indefectible member by genetic surgery or we can use from materials that produced in animals body for pharmaceuticals cases, or by animal cloning kept the generation of endangered species of organisms [7]. The above samples are positive effects of cloning but negative effects have more reasons in view of moral, political, spiritual and physical aspects. For moral aspect, cloning opens the way for intolerance of family problems and family formation and intend to saturate sexual instinct by illicit lust ways and contentment to cloning towards getting the child and each man and woman give a one child arbitrarily from "sperm bank" [7]. People are born by cloning neither have family identity nor father nor mother, nor anyone else like his/her self. This way will lead to mortality among human emotions and there is a lake of identity in legal point of view [9]. Many physicians believed that human who are created by cloning have a lot of physical problems and deficiencies, because experience has shown that any deviation from normal channels will be associated with several problems such as non-breastfeeding or delivering by caesarean when it isn't necessary that lead to very problems [1]. The orphans haven't father but they aren't lonely but cloned child hasn't any one. The other emotional effects along with this way contain that cloned child know that his original parents have died blue to inherited disease when he was born, He will certainly have abnormal behavior because he know the time of his death [6]. Human cloning lead to production of same kinds (master race) of human and overthrow others. But the cosmos and omission of this trait lead to jeopardize the survival of human race [10]. Perhaps, start of cloning records became in hands of scientists and researchers. But, it's future is recognized by political equations and individual and public benefits. Now much of human explorations is in the path of human extinction [6]. Nuclear weapons That is stored in world are enough to the earth ten times. Today's world crazy persons who ruled in world and wish to have eternal government are a lot. If this technology continued in this way and one of the world dictator achieved to it, what will happen? [5].

MATERIALS AND METHODS

Current study is a cross-sectional investigation using from questionnaires and direct contact with people at home and face to face interview with people under research.

People of society statically are from Marand town. The samples selected randomly and sampled. Therefore according to 1385 census, with systematic sampling, 400 households and 20 university class selected and they became initial point of every cluster and the data analyzed by SPSS software and the results compared according to average age of women and men (31 years old) 50% and 50% respectively and educate levels in three groups include illiterate, middle literate and educated persons and in respect of residence i.e. rurality and urbanization.

Research questions include: Knowledge rate of different people about genetic science, Awareness rate about cloning and its efficiency, Religion and its attitude about genetic science statically community are from Marand town. Sampling method is available typically we used from following tools to measure. Multi option questioner: this questioner measured attitude rate of people questions of Questioner is closed-ended and it concluded 5 Questions

that measured attitude rate of people about genetic science. Instructional brochures and educational CD'S about genetic science and its advantages: These topics have been designed to increase awareness of people about cloning. That after filling of Questionnaire is given to people.

RESULTS AND DISCUSSION

The results of research about different people awareness in respect to cloning in two groups (rurally and urban) and it's relation with education rate of people is compared and investigated and took necessary conclusions. Information rate about genetic science was 43 to 1000 while this rate is 500 to 1000 persons in developed countries and we can decrease unawareness by different instructions. This study show that information and familiarity rate of 60% people of this restrict about genetic science and it's relation with future of human and health system is in medium level and lower that medium level and also, there was significant difference ($p < 0.05$) between peoples with different education levels. According to later results in current community, it seems that initial information of people about genetic science and cloning to product adult human and animals and increasing of society moral health rather that negative effects of cloning are lower than medium. Also it expected that with promoting of educational rate in this district, human cloning knowledge increased in future.

Cloning purpose isn't pure simulation. What is the advantage of that sheep can be born so straight, to build with sophisticated laboratory techniques? Aside from media clamor about human cloning scientists are looking for ways to treat diseases and deformities.

Multi day embryonic stem cells have ability to create any tissue and scientists are trying to treat a variety of illness such as diabetes and cancer or make different members of human to implant to people who lost their organ or obliged a organism to do something new [2].

Like a sheep that is able to produce human insulin. But opponent say that cloning of human embryo for research or therapeutic use is unethical [14]. Most of laws don't permit this embryo transferred to woman uterus. However, critics say that science hasn't any bound and as long as the global ban has been imposed, cloning is threatening for human beings [7].

Some of simple hearted persons think that cloning is interference in creative work, but what makes man noble human body is his life and we can't clone it's soul. In fact, cloning is on answer to fundamental questions of biology, i.e. the way of distinction of cells, and aside from media clamor, it can lead to emerge of solutions in today medicine problems [5].

CONCLUSION

people information rate about genetic science and attitude of different people in respect to cloning is very little, so it is necessary to present instructional programs continually by broad casting and other mass media and give necessary instruction about good and bad results of cloning to increase culture level and families attitude about genetic and it's relation with health in future.

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