Stem Cells Studies: Research and Ethical Aspects Experts in Team 2011

Stem cell research around the world

Project Report for group 3

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Abstract

The EiT village objective is to investigate different aspects involved in stem cell research. The main goal for this project was to increase the public awareness about the current stem cell research and how religion, politics and legislation affect stem cell research in general. As we have taken a world perspective on this subject we wanted to reach a larger audience and chose to do this through a blog. Our target group was people with some prior knowledge about stem cell knowledge and who wants to learn more about what influences stem cell research in different countries. The product of this project is visible on the webpage: http://embrybros.wordpress.com/. It has become evident for the group that stem cell research does not have a clear answer and that funding, the intrinsic value of the foetus and legislation are some of the main issue surrounding stem cell research. Learning about the countries different approaches to stem cell research can be a way of creating a better understanding of cultural diversity

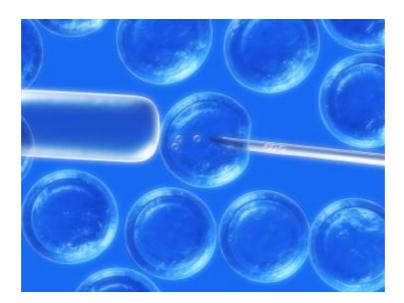


Table of Contents

1	In	troduction	1
2	M	lethod and work progress	2
		esult	
		onclusion	
		rief Account	
		eferences used in the blog	
		Photo References	
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1 Introduction

The objective for Experts in Team (EiT) is for students to learn how to utilize their knowledge in a team and to be prepared for interdisciplinary tasks in the future. The EiT village goal is to investigate different aspects involved in stem cell research. As it is written in the Stem Cell Village web page "In the last 20 years stem cell research has been one of the most discussed fields in science, both for its possible future applications and for the ethical issues involved". We wanted a research question that embraced these thoughts and decided upon:

"How have religion, political views and legislation affected the advancement of stem cell research in the following countries: Iran, Norway, South Africa, South Korea and The United States of America?"

These five countries were chosen because the group thought they would represent the main views around the world, both concerning religion and political background. The group chose Norway to represent Europe, as four of the group members are Norwegian and it felt like a natural choice. Like Norway, the whole world has their eyes upon The United States of America, a country filled with both cultural and religious diversity was chosen to represent the Americas. South Africa was chosen as this is the only African country that is doing stem cell research. We picked out two countries in Asia as it is a huge continent with large contrasts; Iran, as we were interested in Islams' view of the embryos intrinsic value and how it affects stem cell research. South Korea was chosen due to the famous Hwang scandal in 2005.

As we have taken a world perspective on this subject we wanted to reach a larger audience. The group discussed different media and decided to make a blog. A natural place to seek new information is on the internet and a blog is a website that usually consists of texts, pictures and videos related to a specific subject. The word *blog* is derived from web log, meaning it's a personalized space on the internet where the user can publish different contents. A blog is also interactive in the way that visitors can leave comments to the entries made.

Something equally important as choosing the right media is specifying which audience the group wants to reach. Blogging is a world phenomenon and there is a large diversity in the

audience. The group is trying to target people that have some prior knowledge about stem cell knowledge and want to learn more about what influences stem cell research in different countries. A criterion the group laid down was that the content of the blog would not be in a difficult scientific language as this blog was not intended for academic people, but we introduced a glossary for the most difficult words.

2 Method and work progress

None of the group members had participated in such a long going project before. Since the project was going to last over a whole semester it was important for the group that everybody agreed on the research question. The decision of the group, concerning the research question, was based on a consensus, so everybody would be motivated to do a good job. The group used a brainstorming method and everybody got to state their opinion and all the suggestions were discussed. It was also important for all group members that they felt that they could contribute with something. The way to go about this problem was to try to find the strength to each group members and find a way to utilize these strengths in the best way possible. All the group members have a background from natural sciences, so a common strength was knowledge about cells in our body. Since most of the group members enjoyed writing the group wanted to have a written product in someway. The group also wanted to exploit Espen's computer skills and the idea of a blog was born. Other talents we wanted to embrace were Etornam's and Tom Erik's proofreading skills and the group really appreciated Nora's ability to take initiative.

In order to present our project in an orderly and creative way, it was decided to make a blog. Wordpress.com was chosen as a web host and provider of blog services. This was mainly due to it being free, easy to use and highly customizable when it comes to appearance.

Our blog consists of a series of articles and videos on the subject of stem cells. The content is displayed in reverse chronological order of when it was published and categorized in different categories. If one wishes to only display the articles concerning a specific category, one can do so by choosing that specific category. The articles are also tagged with different keywords describing the main points of each article. If one wishes to only display articles that are tagged

with a specific keyword, one can do so by choosing this specific tag. In addition there is a search field where one can search the blog for words of specific interest. Hits will be displayed as articles containing that specific word. On the bottom of each article, the references used are listed. The references are displayed in APA-style.

It was important for the group to use good references, like scientific and government databases, so that the information can be as accurate as possible. The group used sources like PubMed, Science and government homepages of the different countries as some examples. At the same time the group wanted the product to be as updated as possible and used popular science magazines. A useful method was that all the entries in the blog were discussed both on the discussion forum and as a group every Wednesday. This way everybody could get an update on what the other group members had produced and the progress of the project.

3 Result

The product of this project is visible on the webpage: http://embrybros.wordpress.com/

The articles and glossary were all written by the group members, while the videos were retrieved from other sources. To have a tidy and lucid blog all the articles are considering only one country at the time and only take one subject into account. One post for example is about South Korea and the topic is the Hwang scandal. There are however, some articles that have more then one subject because it was not natural to divided them. In order to explain important and difficult words, a glossary has been added. These words are linked directly from within the articles and to the glossary using HTML-codes. In addition to the articles, one can read short texts about the group ("About us") and what the blog is about ("Introduction") so the audience will know our background and how the blog should be perceived.

4 Conclusion

It is evident that research on stem cells and associated technologies can help to treat challenging diseases of the future. Laws and legislations need however, to be clarified to avoid misinterpretations and conflicts. Conflicts with the general public and lawmakers are typical problems of today. Vague laws can also prevent results in research, since this will make it more difficult for countries to cooperate. A way of controlling research is by using strict penalties in case of violations or unethical applications of the technology.

The intrinsic value of the fetus has been the major obstacle in religions of the western world, when it comes to embryonic stem cell research. One religious country that has shown great strides is Iran. Iran got a well defined stem cell fatwas, which has made it possible for the technology to thrive. This shows that religion may aid stem cell research, as well as being a major obstacle.

Another important factor is that the public understands what stem cell research is, both its advantages and disadvantages. Decisions made on stem cell research should mirror this majority, and not only influential people in leadership position.

At the end of the project it became apparent that money is an important factor for results. Funds should be made available where possible, and not only advance research; but encourage it as well. This will lead to a healthy and broad development of this interesting field. However, all parties which have a stake in ethics and legislation should be brought on board so that the views of interested parties will be heard. This will ensure that the results and decisions made will serve the entire community in the long run.

5 Brief Account

The main goal for this project was to increase the public awareness about the current stem cell research and how religion, politics and legislation affect stem cell research in general. The blog was a key element of realizing this goal as the internet is an important tool of communication and on world basis over 2 billon people use the internet. Increasing the awareness around stem cells has an important public utility as people can have a clear view on how stem cells can be used at the present. Learning about the countries different approaches to stem cell research is also a way of creating a better understanding of cultural diversity.

As already mentioned stem cell research is evolving every day and an idea would be to keep on updating the blog in the future and to broadcast the blog to more people through various social networking sites and discussion platforms.

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