

In the Name of God, most Gracious, most Merciful. Peace and Mercy of God be Upon You.

Dear Respected Dr. Yusuf Al-Qaradawi,

We would like to know your position concerning the following questions:

- What is the Islamic stance towards "the umbilical cord blood bank", i.e. the collection of stem cells taken from the umbilical cord blood immediately after a baby has been born and after the umbilical cord has been cut and clamped, frozen and stored in purpose built containers, to be used as a new potential for regenerative medicine in the treatment of certain illnesses and conditions by allogeneic transplants or autologous transplants.
- 2. Is it allowed to donate these cells to specialized banks, which store them and then use them mainly in allogeneic transplantations?
- 3. Is it permitted for the bank to charge a certain amount for carrying out the process?

Below, is a brief summary about what are these cells, the collection and storage process, and what they can be used for.

#### What are stem cells?

Stem cells are very early cells that can develop into almost all other types of cell and tissue.

#### What they do?

They can help the body to heal and regenerate itself after injury or illness.

#### How they work?

Stem cells help produce new, healthy cells to replace damaged tissue.

#### Where can they be found?

Stem cells are found throughout the body, but especially in bone marrow, in peripheral blood (circulating blood) and in the umbilical cord.

The stem cells found in cord blood are particularly versatile, collected using a straightforward technique and, because they are brand new, they are also at their most vital.

Umbilical cord blood stem cell transplants are less prone to rejection than either bone marrow or peripheral blood stem cells. This is probably because the cells have not yet developed the features that can be recognized and attacked by the recipient's immune system.

Transplant quality cord blood banking

Both the versatility and availability of umbilical cord blood stem cells makes them a potent resource for transplant therapies.

## What does "banking" mean?

Generally a private cord blood bank extracts these cells from the cord blood, collects, counts, tests, freezes and stores them for future use.

#### **Collection Procedure**

This takes place after birth, as the umbilical cord will have been cut and clamped. The process of collecting the umbilical cord blood stem cells uses a tube with a needle on one end and a bag on the other. This procedure is simple and is completely painless and bares no harm to the child or the mother.

## Who is benefiting from the samples?

Samples can be used by:

- 1. Donor / Child (Autologous use)
- 2. Any family member or other person (Allogeneic / Heterologous use)

### What illnesses can stem cell treat?

Stem cells derived from umbilical cord blood can be used for the treatment of the following diseases:

Thalassemia, Leukemia, Diabetes, Bone Fractures, Strokes, Multiple Sclerosis, Alzheimer's Disease, Parkinson's Disease, Fankoni's Anemia, etc.

Note: It is very important to emphasize that the stem cells derived from umbilical cord blood and its usage have nothing in common with the controversial process of cloning, which is forbidden in Islam.

In anticipation for your response on this important matter.

May God reward you,

Best regards, Sali Shahsivari

#### Dr. Al-Qaradawi:

All the praise is to God, and may His peace and mercy be upon the Prophet.

By looking at the questions and all the explanations about the whole process, I do not see in that anything which contradicts Shariah law, since the specialized doctors have decided and declared that this process is beneficial for the humanity, and the whole process does not contain any big or small sin, or fear of any harm from that in the future. The Islamic law (Shariah) adheres to incurring interests and benefits for mankind and fending off harms and evils.

This issue enters under the chapter "Unrestricted Interest" (Maslahah), and those are the interests, for which there is no clear proof in Shariah so they could be considered or ignored. These interests are unrestricted, and they are included within the frame of Shariah consideration for everything that incurs good and benefit for the person or the society, and everything that fends off evil or harm from the person and the society.

Among the conditions of the "Unrestricted Interest" are:

Concerning the <u>first question</u>: Is it allowed to donate these cells to specialized banks, which store them and then use them mainly in allogeneic transplantations?

The <u>answer is</u>: Yes, it is allowed, even recommended, and the donator deserves a reward from God for that, even if such thing does not cost him any effort or money, but still, he is a good mediator in bringing the benefit to those in need for that.

Concerning the <u>second question</u>: Is it permitted for the bank to charge a certain amount for carrying out the process?

<u>We say</u>: Yes, it is permitted to charge for that, because it is a fee in exchange for a legal effort and work, therefore, there is no deterrent for taking such a fee, since we see that Islam gives the fee to zakah (alms) workers from the same budget, in order not to breakdown the process of its collection and distribution, so as not to result in not finding anyone who could volunteer for such a work. In this context, the working team in the project can be given enough amounts, even if it is from the donators' donations.

# **Figh Council Resolution**

The 2003 fatwa (edict) issued in Saudi Arabia by the Fiqh (Islamic Jurisprudence) Council of the Muslim World League. This fatwa provides the religious framework for stem cell research in the Kingdom of Saudi Arabia.

First: It is permissible to obtain, grow and use stem cells for therapeutic or permissible scientific research purposes if obtained from a permissible source, including:

- Adults, provided they give permission to do so and if no harm comes to them as a result
- Children, if their parents give permission to do so for a permissible reason and if no harm comes to them as a result
- The placenta or umbilical cord with the permission of the parents
- Embryos or fetuses that have been miscarried of their own accord or aborted for therapeutic reasons allowed by the sharia and with the permission of the parents
- Leftover fertilized embryos from in vitro fertilization that are donated by the parents. It must be remembered that these cannot be used for impermissible pregnancies

Second: It is impermissible to obtain and use stem cells if taken from impermissible sources, which include:

- Fetuses that are aborted willfully and without a medical reason permitted by sharia
- Willful fertilization of a donated ovum and sperm
- Therapeutic cloning"

Translated from the Arabic by Nadia El-Awady

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