How ethically acceptable is embryo screening, and in what situations, if any, should it be applied?

Embryo screening, or pre-implanting genetic diagnosis, involves extracting one cell from an eight-cell embryo created through in vitro fertilization. The DNA of the cell is analyzed for the presence of certain genes. If the parents choose to select against a gene, only those embryos without the gene are implanted in the mother’s uterus.

Background
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Argument
1. Choosing against embryos with fatal diseases is in the best interest of the parents, who will not have to deal with the loss of a child.
2. Selecting against diseases that kill later in life can be justified, in that this would spare the child a lifetime of suffering.
3. However, selecting against minor physical or personality afflictions implies that people with certain disabilities are unworthy of life.
4. Purposely choosing to not have a child with a cleft lip or a higher chance of having a mental illness implies that the disabled cannot have meaningful and fulfilling lives.
5. Sultton (2013) writes that practicing this “selective welcome” goes against the Hippocratic standards of medicine being a healing profession.

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6. Selecting for cosmetic traits also has a racial implication: parents may feel compelled to subscribe to Western beauty standards, i.e. pale skin, blonde hair, blue eyes.
7. According to an Evans, Kelley, and Zanjani survey (2005), people hold mixed feelings towards eliminating embryos with fatal conditions and selecting against physical and personality traits, but the majority are united against selecting for cosmetic traits.
8. In a survey by Robillard, Roskams-Edris, Kuzeljevic, and Illes (2014), around 90% accepted choosing against severe illnesses such as Alzheimer’s disease, while 79% accepted choosing against illnesses considered less severe such as ADHD.
9. The greatest concern expressed by the subjects of this survey was the potential for disparities in resource allocation, in that only the rich could access the medical technology if it became widely available.

Conclusion
- Therefore, it is most ethically acceptable for embryo screening to be restricted to fatal disease control.
- The technology of embryo selection is currently limited to elimination of fatal genetic disorders.
- However, in the event the technology advances to include selection for or against minor defects and cosmetic features, it is important to discuss the ethics of its usage.

References