

The Logic of Birth Control: A Look at the Numbers

Lydia Wong

If personhood begins at the moment of conception, the failure of an embryo to implant results in the death of a person. Therefore, many in the pro-life community worry about the ethics of using oral contraceptives, if such hormonal birth control actually interferes with implantation (a so-called “abortifacient” effect). Obviously killing is wrong, and death should be avoided. However, even if contraceptives occasionally prevent implantation, a very good case can still be made in favor of their use. This paper seeks to show how contraceptives, even if they cause implantation failure, can be used with a clear conscience.

Life is sacred, and almost all of us can agree with that. Yet even under optimal conditions, 40% of all embryos fail to implant (Diedrich et al, 2007). That is a great deal of death that is often not taken into account. In keeping with the principle of saving life, we have the duty to avoid implantation failure if possible.

There is no strong scientific evidence that contraceptives have an abortifacient effect. However, even if they do interfere with implantation in a small percentage of cases, the actual number cannot be very large. Oral contraceptives have a theoretical 99.7% success rate for yearly use (Trussell, 2008). One study found that the combined oral contraceptive pill only allows 15.5 ovulations and one pregnancy out of 13,000 cycles (as cited in Sullivan, 2006). Another way of expressing this is to say that the pill could only cause 15.5 failed implantations over a thousand years worth of cycles. However, the combined oral contraceptive also blocks sperm from reaching the egg by thickening the mucus so it would be highly unlikely that all of the eggs would be

fertilized. Keep in mind that even if these 15.5 eggs were fertilized about 40% would naturally fail to implant (Diedrich et al. 2007).

Now, without the use of contraceptives a group of women would likely have 13,000 ovulations in the same amount of time that 15.5 happened while on contraceptives. Of course, both scenarios would not have the same fertilization rate, since contraceptives also block fertilization. For simplicity's sake, assume the same rate of fertilization of 75% (this is just a number used for this example; it is not a proven rate of fertilization).

If 75% of the eggs were fertilized in the two groups, that would create 9,750 embryos and 12 embryos, respectively. It has already been noted that embryos naturally have a 40% failure rate for implantation. This would make the number of failed implantations with no birth control 3,900. Even if contraceptives led to a 100% failure of implantation rate, this would only be 12 failed implantations. In other words, 325% more embryos are destroyed when contraceptives are not used than when they are used.

Since the destruction of embryos should be avoided if possible, this is a case that may resemble immunizations or the use of penicillin. These medical interventions frequently save lives, but sometimes things go wrong. Some people do not react well to penicillin, and they may even die. Yet no one has any guilt for administering drugs that may potentially cause death, since many more lives are saved if the medicine is given.

From the data shown, it might be said that contraceptive use may prevent the loss of embryos, since it is more ethical to prevent pregnancy than to take life. However, sometimes things can go wrong, and this should not invalidate their use.

From a statistical viewpoint, it does not matter if hormonal birth control interferes with implantation or not, since it primarily prevents ovulation in the first place. Even if one assumes that contraceptives often destroy embryos, far fewer embryos are destroyed than are naturally eliminated under optimal conditions.

This simple analysis should demonstrate that the use of oral contraceptives is ethically permissible, since it is compatible with the principle of protecting life.

References:

Diedrich, K., Fauser, B.C.J.M., Devroey, P., Griesinger, G., (2007) The role of the endometrium and embryo in human implantation. *Human Reproduction Update* 13 (4).

Sullivan, D., (2006) The Oral Contraceptive as Abortifacient: An Analysis of the Evidence. *Perspectives on Science and Christian Faith* 58:3.

Trussell, J., Wynn, L.L., (2008) Reducing unintended pregnancy in the United States. *Contraception Journal*, January, 2008. Available at: <http://www.arhp.org/publications-and-resources/contraception-journal/january-2008>.