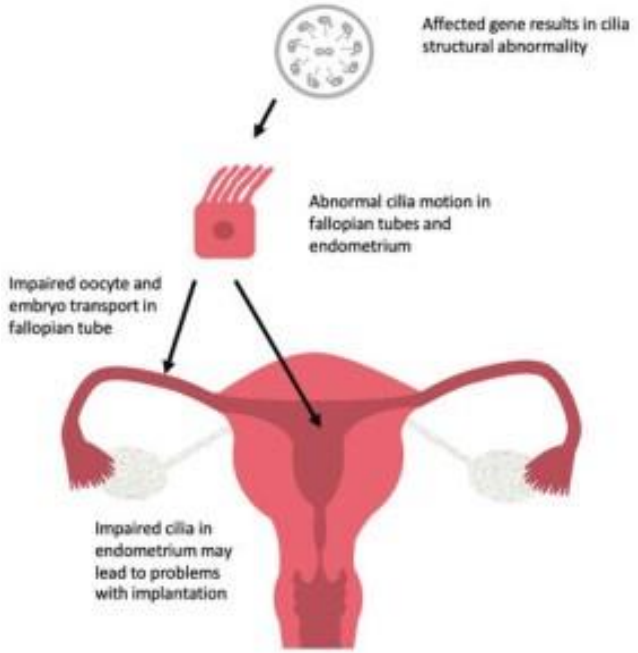
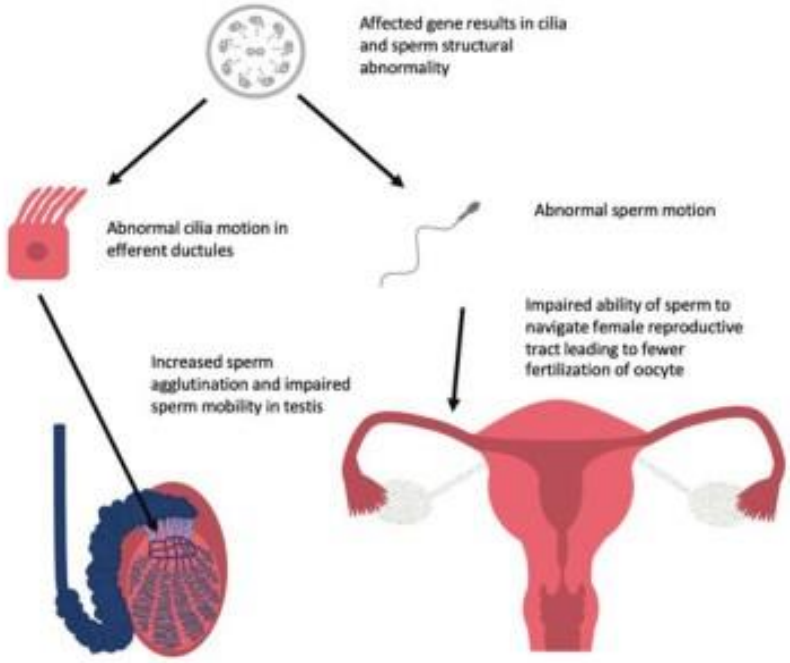
PCD and Fertility

Because creating a baby requires movement of cells (sperm and egg) by cilia, men and women with PCD can have difficulty with Fertility.

Women with Primary Ciliary Dyskinesia



Men with Primary Ciliary Dyskinesia



Women with PCD:	**Men with PCD:**
• Recent theory is that PCD in women causes impaired motion of the cilia in fallopian tubes and endometrium • If cilia motion is impaired in the fallopian tubes and the endometrium, it might make it hard for the egg cell (oocyte) and early embryo to move where they need to go • Genotype determines fertility outcomes • There is potential for pregnancy to adversely impact lung function in women with PCD so always discuss with your doctor before or soon after pregnancy	• Affects structure and function of sperm flagellum • If ciliary are impaired in testes than they sperm can become clumped together and that could lead to impaired sperm survival, impaired motility, and failure to navigate the female reproductive tract to achieve fertilization.

Newman, L., Chopra, J., Dossett, C., Shepherd, E., Bercusson, A., Carroll, M., Walker, W., Lucas, J. S., & Cheong, Y. (2023). The impact of primary ciliary dyskinesia on female and male fertility: A narrative review. *Human Reproduction Update*, *29*(3), 347–367. https://doi.org/10.1093/humupd/dmad003

What do those words mean?

Fallopian Tubes
A tube or channel that goes from ovaries to the uterus

Sperm
The male reproductive (sex cell). When combined with a women's egg, it makes a baby.

Endometrium
The tissue that lines the uterus

Alleles
One or two versions of a gene

Embryo
What an unborn baby is called while it is developing and growing in the uterus

Eggs
The women reproductive (sex cell). When combined with a man's sperm, it creates a baby.

Fertility
A person's ability to make a baby.

Genotype
A collection of genes, including the specific alleles that make up your DNA.

Testes
Glands that produce sperm and male hormones

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