

Name; JacksonAbara Emmanuella Odegwa

Department;Nursing

Matric No; 18/MHS07/027

Course code;PHS 212

Factors facilitating sperm transport in the female reproductive tract.

The following factors are responsible for the transport of sperm cells in the female reproductive tract;

- ❖ Alkaline secretions from prostate gland into the semen help to create an alkaline environment in the acidic vagina in order to protect the sperm.
- ❖ Prostaglandin which is present in the semen and the female reproductive tract cause myometrial contractions which help in the movement of the sperm towards the oviduct.
- ❖ Oestrogen and oxytocin secreted in the female assist in myometrial contractions which facilitate the upward movement of sperm cells towards the oviduct.
- ❖ Oestrogen facilitates the production of a watery mucus in the cervix during ovulation to allow for easy passage of sperm cells
- ❖ In the female reproductive tract, sperm undergoes capacitation, this occurs after the sperm becomes more fluid ensuing the removal of cholesterol and glycoproteins from the membrane in order to expose the zona pellucida binding sites
- ❖ There is a change in the sperm membrane potential that permits Ca^2 (calcium) to enter the sperm to facilitate vesicle release for acrosomal reactions.
- ❖ Also during capacitation of sperm there is phosphorylation of numerous protein needed in fertilization.