ETHICAL ASPECT OF SOME MEDICAL PRACTICE OF SPECIAL NATURE

- (1) Organ donation and transplantation.
- (2) Legal aspects of reproductive medicine
- (3) Abortion
- (4) Medical experiments on humans.
- (5)Euthanasia.



Legal aspects of Reproductive medicine

- •Infertility has been a source of great sadness for married couples since old times.
- A better understanding of reproductive physiology, combined with advances in medical technology, has led to the development of several methods of assisted reproductive technology (ART) as:
- 1- Artificial insemination (AI)
- 2- In vitro fertilization (IVF)
- 3- Intra-cytoplasmic sperm injection



Assisted reproductive technology (ART)

1- Artificial insemination (AI)

2- In vitro fertilization (IVF)

3- Intra-cytoplasmic sperm injection

1. Artificial insemination : Al

- Al is often the best choice of treatment for couples that are infertile due to sperm disorders. It involves injecting sperm through a narrow catheter into the wife's reproductive tract.
- it is of two types, (one **homologous** AIH) consisting of the injection of the seminal fluid of the husband by artificial means into the vagina of his wife to induce conception, and the other **heterologous**: from donor, AID) using the semen of someone other than the husband ie. donor.



 AlH causes almost no legal problems, since any child born of the procedure is the biologic offspring of the husband and wife.

•AID with or without the consent of the husband, is against the public policy, morals and religion. A child so conceived is the child of the mother but not belonging to the father. A legal issue also arises concerning the possibility of sperm banking for use by a wife after her husband's death.



2.In vitro fertilization :IVF

- Taken literally , IVF means fertilization in glassware .
- IVF is a procedure that involves taking eggs and sperm from the bodies of the male and female partners and placing them together in a laboratory dish to enhance fertilization. Fertilized eggs are then transferred several days later into the female partner's uterus where implantation and embryo development will hopefully occur as in a normal pregnancy.



•Because of the relatively low success rate of implanting embryos that have been conceived in vitro back into the uterus, it has become a standard practice for clinics to freeze extra embryos for possible later use.

- What happens to the embryos that are not needed; here is the question.
- Clinical IVF is permitted only between married couples .



Legal precautions are:

- 1- Consent of both partners.
- 2- The physician should be honest in using the husband's sperms & the woman's ova.
- 3- Legal procedures should be fulfilled in use not the abuse of the remaining parts of semen.
- 4- Fear of disputes of paternity.



3. Intra cytoplasmic sperm injection

- •This is the newest form of sperm micromanipulation procedure performed in the laboratory. It involves the insertion of a single sperm directly into the cytoplasm of a mature ovum, or oocyte, using a micro-injection pipette, or thin glass needle.
- The legal problem arises as regards what will be done with the number of early zygotes which remain frozen and unused after a couple has had successful ART



Abortion

 Abortion may be spontaneous or induced. Spontaneous abortion may be due to diseases in the mother or in the ovum itself.

Legal importance here about the induced abortion.



Induced abortion

May be therapeutic or criminal abortion:

Therapeutic abortion:

 It is the expulsion of the contents of a pregnant uterus done under medical supervision to save the life of the mother when the continuation of pregnancy endangers her life.



indications of therapeutic abortion: may be

- •1- General diseases like uncompensated heart disease, uncontrolled diabetes, uncontrolled hypertension or renal failure.
- 2- Local disease like cancer cervix



legal precautions before doing therapeutic abortion

- 1- A written consent should be signed by the woman and her husband.
- 2- A medical report signed by 2 specialists certifying that the woman's condition cannot tolerate the pregnancy.
- 3- The operation should be done in a general or maternity hospital.
- 4- These reports should be kept in the hospital files.

Criminal abortion

•It is that type of abortion performed without any medical indications using general or local violence or by intake of abortificiant drugs.

- This may endanger the life of the woman because it is done in secrecy and in a hurry.
- •The criminal code is accusing any physician who helps a woman for abortion. He is convicted یحاکم by prison whether with or without her will.



Rent uterus

- This is illegal technique forbidden in most countries either religious or ethical except some countries like India which considered as womb's market.
- Renting uterus help females which has health problem preventing pregnancy either general (Cancer, chemotherapy, heart failure) or local deformity in uterus or cervix lead to abortion or even after hysterectomy.
- Ova from biological mother, sperms from husband but implantation in a uterus rented from 3rd party through contract paying money infront of receiving child after labor.



- This creates problems in futures like incest زنا المحارم
- Germany refuse giving nationality for babies came through rent uterus anywhere.
- Nowdays, uterus transplantation will succeed solving such problem legally
- 3rd parent techniques which used to help controlling genetic disease e.g (glucose 6 phosphate deficiency Favism) in embryo by using gene mitochondrial from healthy person other than biological parents, had allowed legally in many countries even in U.K which didn't get approval to such technique for 10 years.



Ethical guidelines for researches involving humans



- 1. Voluntary consent of the human subject.
- 2. Fruitful results for the good of society.
- Designed and based on the results of animal experimentation.
- 4. Conducted only by scientifically qualified persons.
- 5. The subject is at liberty to **refuse continuation** at any time.

