# SUMMARY
# &
# RECOMMENDATIONS

**The results of the study showed the following:**

1. The highest incidence of cases was in the general surgery 60% followed by orthopedic 16%, urological 12%; gynecological & obstetric 12% departments respectively.

2. The distribution of cases of wound sepsis among age groups showed highest incidence 37% in patients from 45 – 60y, 35% of cases in patients > 60 y, 20% in patients from 30-45 y and the least incidence 8% in patients from 10-30 years. This indicates that old age is a true risk factor for developing wound sepsis.

3. The distribution of wound sepsis according to sex showed higher incidence 68% in males than in females 32% this variation in incidence was due to higher incidence in males operated upon in this study than in females.

4. The incidence of associated medical disorders among cases of wound sepsis was high; 42% of cases of wound sepsis had associated medical disorders. The commonest medical disorder was D.M. (15%) & the least incidence was for tuberculosis (1%).

5. The prolonged preoperative hospitalization showed higher incidence of developing wound sepsis as 63% of cases stayed preoperatively for more than 72 hours, 37% of cases stayed preoperatively for less than 72 hours.

6. Contaminated wound showed higher incidence followed by clean contaminated then dirty and clean wounds respectively.

7. Use of drains increases the incidence of wound sepsis 66% of cases used drains, 42% used opened drains, 24% used closed drains.

8. The incidence of single infections (infections that caused by single pathogen) was 75% while that of mixed infection (infection that caused by more than one pathogen) was 25%.

9. The most common organism encountered in postoperative wound sepsis was *E.coli* (28.5%) followed by Staph. (21.4%), *Klebsiella* (15%), *Pseudomonas* (11%), *Strept. faecalis* (8.9%), *Proteus* (8.7%), *Bacteroide* (7%).

10. The most common organism isolated from nasal swabs of patients of post operative wound sepsis was coagulase positive *Staph* (35.3%). Followed by coagulase positive *Staph (23.5%).* and the most common organism isolated from throat swabs was *Nisseria* (41.7%) followed by *Strept. viridans* (20.8%), *Strept. pyogenes* (12.5%) respectively.

11. Antibiotyping showed that most aerobic organisms were sensitive to amikin, norfloxacin and gentamycin respectively & resistant to penicillin, tetracyclin and ampicillin respectively.

12. *Bacteroides* were sensitive to metronidazole rifambicin and neomycin & resistant to penicillin & Erythromycin.

13. The cytopathic effect of *E.coli* strain filtrate on Vero cell line was done & its effect on Vero cells monolayer was assayed as follows:

55.5% of strains were found to have verocytotoxic toxin & 44.4 % had no effect on the Vero cells.

7- Keep operating room doors closed except as needed for passage of equipment, personnel, and patients .Limit the number of personnel entering the operating room to necessary personnel only.

8- Proper sterilization of surgical instruments & proper monitoring of the efficiency of the used autoclaves.

9- The surgical staff should wear sterile disposable gloves, masks & gowns & change them between patients.

10- Usage of drains shouldn't be done routinely as an alternative to good homeostasis but if it is necessary to use, closed drains not opened ones must be used.

11- Proper care of wound postoperatively, dressing must be done under complete aseptic conditions. Educate the patient and family regarding proper incision care, warning symptoms & signs of developing wound sepsis and the need to report such symptoms as soon as occur.

12- Medical personnel who are in close contact with patients in operating room and different surgical departments must be informed & ordered not to come in contact with patients if they have signs and symptoms of a transmissible infectious illness until complete recovery occurs. They also should be routinely examined for communicable diseases & investigated bacteriologically for the carrier state.