Background

Endomyometritis is the inflammation of both the endometrium and myometrium, usually caused by infections after a caesarean section. Queen Elizabeth Central Hospital records show that from January to July 2018, 2400 caesarean sections were conducted, of which 2.8% (n=68) developed endomyometritis. Of these, 42% (n=29) underwent total abdominal hysterectomy (refer to figure 1).

Contributing factors were a dirty environment, lack of adherence to infection prevention standards, inadequate resources (examination trolleys, linen, gowns, and Mackintosh instruments), poor traffic control in the ward, poor hygiene of mothers undergoing caesarean sections, poor hand hygiene and improper exchange between theatre and wards.

In view of this, the project was embarked on. The quality improvement project was part of the Maternal and Child Health Nurse Leadership Academy, and the Kouzes and Posner Leadership Model was used to guide the project.

Purpose

The purpose of the project was to reduce endomyometritis cases by 90% thereby reducing hysterectomies due to endomyometritis to less than 5% through strict adherence to infection prevention practices in labour ward, theatre and postnatal ward.

Methods

i. Infection prevention protocols and standard operating procedures were developed for cleaning of the environment, traffic control in the ward, vaginal examination in labour ward, hand hygiene and patient hygiene.
ii. Resources were mobilised which include: scrubbing materials, patient’s linen, a shoe rack for theatre staff’s shoes, trolleys and equipment for vaginal examinations, mopping pails and bins.
iii. Health education were provided to patients and guardians on infection prevention.
iv. Additional cleaning staff for labour ward, postnatal ward, theatre were obtained as well as a security guard for postnatal ward.
v. Training on infection prevention was conducted to labour ward, theatre and postnatal ward staff.
vi. Supportive supervision was intensified.

Results

❖ The project’s duration was from August 2018 to May 2019.
❖ During this time there was a slight increase in endomyometritis cases from 2.8% (n=68) to 3.5% (n=92) and total abdominal hysterectomy cases from 42% (n=29) to 45.7% (n=42) with fluctuation within the various months (refer to figure 1).
❖ This slight increase might be attributed partially to temporary relocation of the obstetrics and gynaecology theatre to a new environment on 7th January 2019 for renovations of the old theatre. Other reasons might be erratic water supply that affect cleaning services and prolong waiting time for caesarean sections.
❖ The interventions are ongoing with emphasis on adherence to infection prevention standards and infection prevention resources mobilisation.

Figure 1: Trend of endomyometritis cases and total abdominal hysterectomies against caesarean section cases during the implementation period

Conclusions

1. Adherence to infection prevention protocols can significantly reduce caesarean section complication and must be a commitment for all
2. Strict adherence to infection prevention measures at all times is of paramount importance to overcome circumstances that might contribute to infection risks.
3. There is need for continued management support to combat infection risks in the department.

Implications

Workplace
Following of infection prevention standards at all levels is important.
Management
Continued supply of resources and supportive supervision to the department contributes to the implementation of infection prevention measures.
Education
Continuous education is necessary to inspire a shared vision for ideal practices.
Leadership
Kouzes and Posner’s Leadership Model is valuable to guide a quality improvement initiative in maternal health, and in particular to lead an interprofessional team to prevent infections.

Questions I would like the audience to respond to

❖ What others measures should be taken that might lower risks to post caesarean section endomyometritis apart from protocols discussed in this presentation, and perhaps apart from use of preoperative antibiotics?
❖ How can post caesarean infections be reduced in resource constraint areas?

Acknowledgements

• This project is part of the Maternal and Child Health Nurse Leadership Academy (MCHNLA), presented by Sigma Theta Tau International (SIGMA), in partnership with Johnson & Johnson.
• Queen Elizabeth Central Hospital management, labour ward, theatre and postnatal staff for commitment and support.

References


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