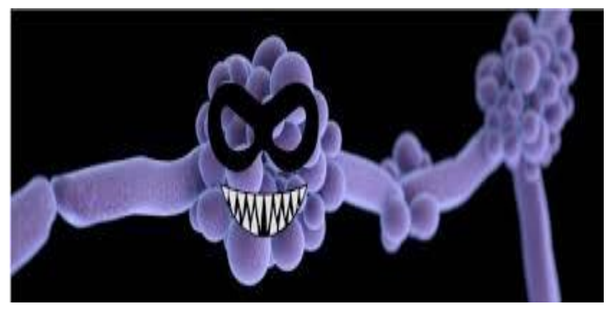
Management of MRSA Infection Outbreak In AL-MAHA-1 Rumaila Hospital March-2016 To May-2016



Background/Purpose

MRSA has emerged as one of the predominant pathogens in healthcare-associated infections

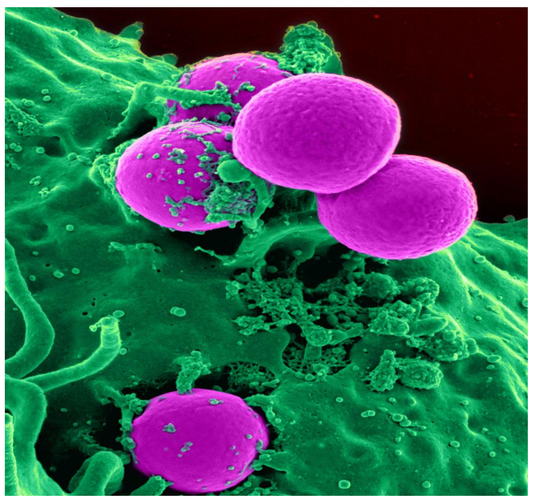
Treatment options for MRSA are limited and less effective than options available for susceptible S. aureus infections and result in higher morbidity and mortality

High prevalence influences unfavorable antibiotic prescribing, which contributes to further spread of resistance

MRSA is a marker for ability to contain transmission of important pathogens in the healthcare setting

MRSA is known to cause Higher mortality 53% Vs 18% in one study

Longer hospital stay , with Higher health care coast



AL Maha-1, is a pediatric unit with 26 Bedded chronic mechanically ventilated children on Rehabilitation program , which includes 13 room with 2 bed & one single bed room (isolation room - negative pressure).

The total patients chronic ventilated =20 +4 patients with tracystomy tube

Problem

In AL MAHA-I unit from 3rd March 2016 To 18th of April 2016 there are 5 cases new of MRSA infection were isolated by microbiology lap.

Further more we discovered 4 more new patients colonized by MRSA , the total number has increased To 9 new MRAS , the total number of MRSA at Al-Maha Unit reached 14 patients (>200%) , an out break was recognized

Aim

1. To control the out break of MRSA and prevent spared MRSA to more patient with in short period .
2. To prevent and control the complication for the infected patients .

Intervention

MRSA out break team was alerted consists from Physicians , microbiologist , Infection control team , nurses, therapists and house keeping and hospital administration .

Treatment and decolonization for all the infected and colonized cases started promptly ,

Infection control measures initiated immediately :

1-Education of all health care worker, family members and housekeeping.

2-Close observation of hand hygiene practice and validation of hand hygiene compliance by infection control team.

3- Strictly monitored the patient under contact isolation going on.

4- Increased frequency of environmental cleaning in the unit and close monitoring by housekeeping supervisor with terminal cleaning for all rooms .

5- Minimized and reduced the patient care items in the rooms

6- Strictly limited visitors , volunteers, and students.

7. Assigned a dedicated nursing staff for patient with infected or colonized with MRSA.

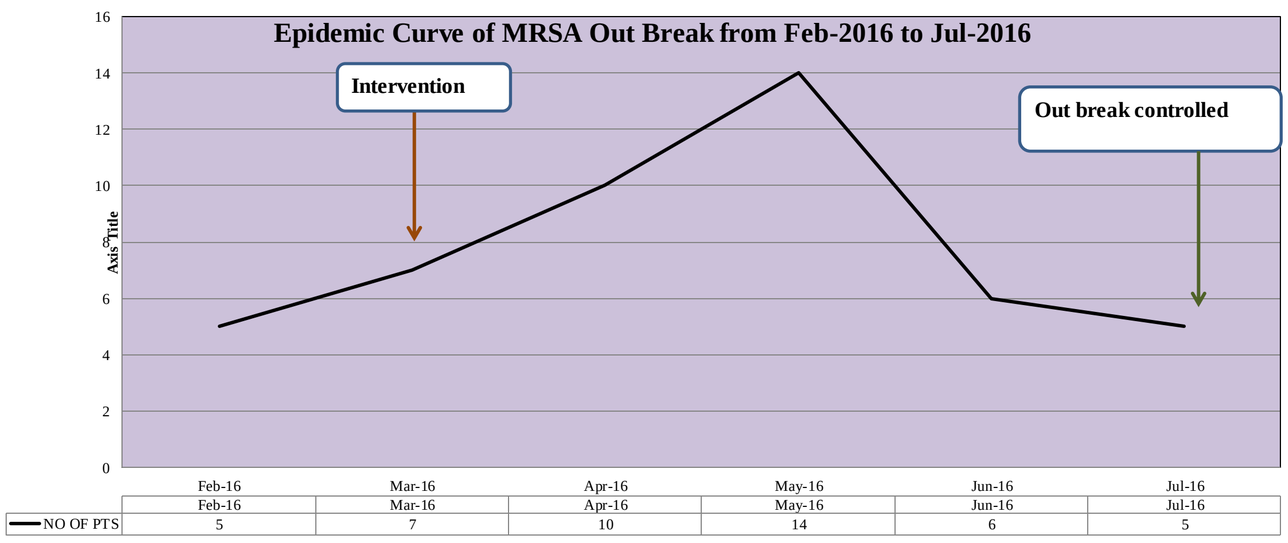
8. Dedicated patient care equipment for infected or colonized patient

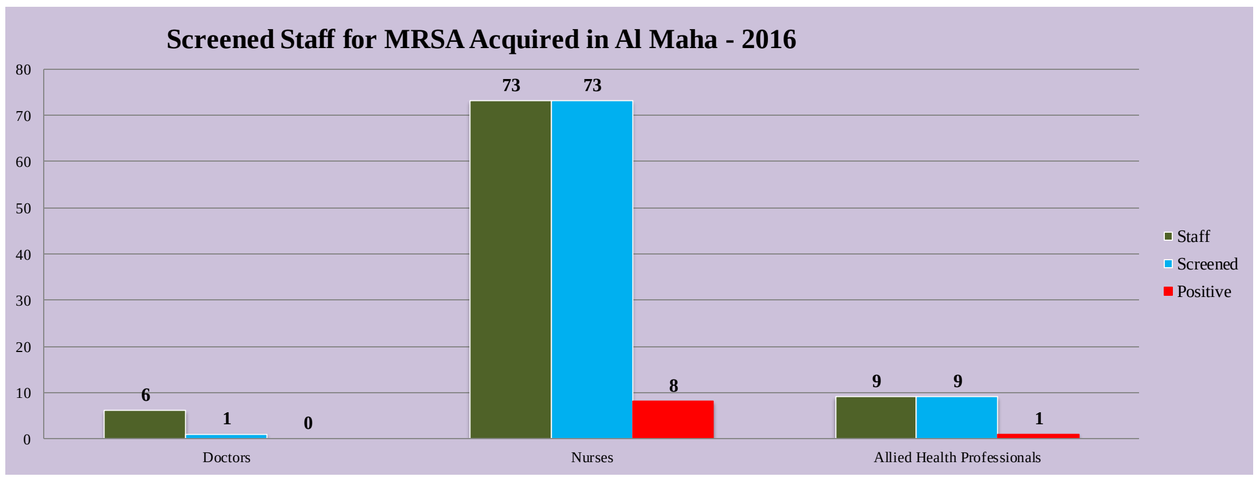
9. Limited movement of healthcare professional and patient until outbreak is controlled.

10. Screened all the rest of the patient whether they are colonized or infected with MRSA.

11. Screened selected high risk frontline healthcare worker for MRSA(the majority of nursing staff ,and allied health are screened)

Results





Conclusion

- Strict implantation of infection prevention and control strategies lead to successful stop Of the out break in appropriate time .
- With effective communication and prober infection control practice we achieve the aim
- Multidisciplinary team work was the key in controlling and improving the patients outcome .

Future Plan

Strict implementation of infection/ prevention control strategies.

To early detect and prevent similar outbreak in Almha-1 in the futures .

To improve mortality morbidity rates

To improve quality of care .

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All housekeeping staff inAmaha-1

References

- HMC outbreak investigation and control policy CL 7247
- HMC Patients placement policy CL 7255.
- CDC guideline for hospitals infectious disease out breaks .
- HMC MRSA prévention and control Policy CL 7252.
- HMC housekeeping Policy CL 7242.