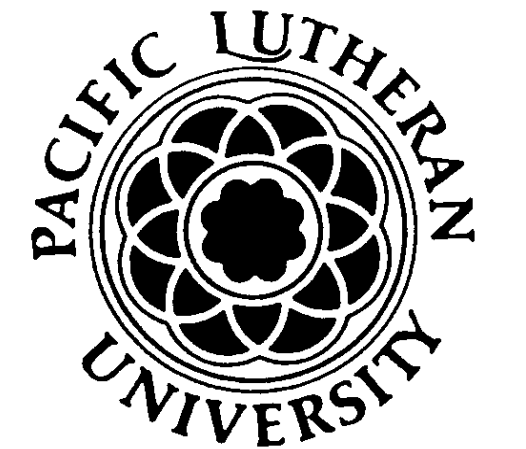




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Living with MRSA: Prevention in Families



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Introduction:

Methicillin resistant staphylococcus aureus (MRSA) is fast becoming a common community health issue. Americans visit the doctor approximately 12 million times each year to get checked for suspected Staph or MRSA skin infection (CDC, 2008).

All it takes is one family member to develop the infection and all are at risk. There are several ways to reduce a family's risk for infection. A Swedish study found that 68% of family or household members of MRSA infected individuals became colonized or infected with the same strain. (Johansson, Gustafsson, & Ringberg, 2006)

Pathophysiology:

MRSA is methicillin-resistant *Staphylococcus aureus*, a potentially dangerous type of staph bacteria that is resistant to certain antibiotics and may cause skin and other infections. You can get MRSA through direct contact with an infected person or by sharing personal items, such as towels or razors that have touched infected skin. Most staph skin infections, including MRSA, appear as a bump or infected area on the skin that may be: Red, swollen, painful, warm to the touch, full of pus or other drainage, and accompanied by a fever. (CDC, 2008)

Case Study:

A 20 month old presents to the emergency department with an abdominal abscess. When cultured it is found to be MRSA. Upon further investigation, Mom is found to have had an abscess drained, however, in a different location. Upon talking further with Mom, the patient's siblings and cousins have also had MRSA in the past 6 months.

Assessment:

- ❖ Assess knowledge of MRSA: *learning best occurs when learners are motivated and attend to the important aspects of what is to be learned.* (Ackley and Ladwig, p.765, 2006)
- ❖ Assess degree of risk of MRSA based upon family activities, participation in athletics, previous exposure: *you are at a greater risk of getting MRSA if you are recovering from surgery or burns, have tubes in your body for medical treatment, use a public locker room or if you share needles.* (WA. State Department of Health, 2006)
- ❖ Assess hand-washing regimen and technique: *You have to wash carefully to get rid of the bacteria. You can spread MRSA to people you live with by sharing towels. Have your own hand towel to dry off with.* (WA. State Department of Health, 2006)
- ❖ Assess home hygiene practices: *Dirty clothes and bedding can spread MRSA bacteria. MRSA bacteria can live on surfaces for days, weeks and months. It is important to clean regularly. For items or surfaces you touch frequently, clean them everyday with one tablespoon bleach to one quart of hot water. Make fresh each time you clean.* (WA. State Department of Health, 2006)

Nursing Diagnosis:

- Knowledge deficit related to lack of education regarding prevention strategies as evidenced by Mom's verbalization that she has not received MRSA prevention teaching.
- Risk for further contraction of MRSA related to families lack of adherence to prevention strategies.

Goals:

- Family is able to verbalize cleaning procedures to reduce MRSA infection risk.
- Family is able to demonstrate proper hand-washing technique and the importance of using it regularly.
- Family is able to identify common risk factors for transmitting MRSA, such as break in the skin, communal personal items and close activities.

Interventions:

Instruct family, especially children on proper hand-washing technique. Have them sing the "Happy birthday song" twice while washing to demonstrate the correct amount of time. (Elmore, 2008)

Use of (what's it called – orange glow. . .) to demonstrate what is missed before teaching correct methods and the use of 60% alcohol hand sanitizer (Elmore, 2008)

Teach the important of completing any antibiotic therapy (Elmore, 2008)

Instruct family on proper wound care – such as covering any breaks in the skin (Elmore, 2008)

Emphasize cleaning of common items such as towels, linens and clothes in hot water with bleach (Elmore, 2008)



Image courtesy of University of Hawaii Manoa

Evaluation:

Case Study Outcome:

Patient was given sedation medication and his abscess was drained by an emergency room physician. After thorough irrigation of the wound site, the wound was packed and a pressure dressing was applied. Mom was educated on prevention techniques and given a pamphlet called "Living with MRSA" put out by the state and county Health Department and Group Health Cooperative. Mom verbalized understanding of the discharge instructions.

Patient left the ED, alert, awake and cheerful, in Mom's arms.



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Nursing Research:

References:

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