

Testing a Way to Keep Staph Infections from Recurring

Principal investigator

Jonathan N. Tobin, PhD

Organization

Clinical Directors Network

What was the research about?

Staphylococcus aureus, or staph, is a type of bacteria found on people's skin. MRSA and MSSA are types of staph infections that are hard to treat. They can lead to serious infections or even death. These infections can come back or spread to other people.

In this study, the research team compared two ways to help patients keep MRSA and MSSA infections from coming back. In both, doctors tested the infection for staph at a health center or emergency room, or ER, and treated it. Doctors gave patients antibiotics to take at home.

All patients also had a home visit from a community health worker specially trained to teach people about getting rid of staph. In the first way, the community health worker shared a pamphlet about living with MRSA. In the second way, the community health worker shared the pamphlet and gave instructions and materials for a five-day home hygiene plan for the patient and other willing household members. The plan included

- Using antibiotic cream in the nose
- Bathing with a strong soap that kills most bacteria
- Wiping down home surfaces with bleach
- Instructions for doing laundry and washing hands

The research team looked at whether the skin infections came back and patients' pain levels,

symptoms of depression, satisfaction with social activities, and satisfaction with care.

What were the results?

After six months, the rate of infections that came back didn't differ between patients who received the home hygiene plan and those who didn't. Overall, skin infections came back in about 11 percent of patients.

Patients who received the home hygiene plan and those who didn't reported similar

- Pain levels
- Symptoms of depression
- Satisfaction with social activities
- Satisfaction with care

Who was in the study?

This study included 119 patients with MRSA or MSSA infections. Patients received care at one of three health centers or three ERs in New York City. Of the patients, 24 percent were black, 10 percent were white, and 6 percent were more than one race or ethnicity or didn't report it; also, 60 percent were Hispanic. The average age was 38, and 61 percent were men.

What did the research team do?

The research team assigned patients by chance to receive the home visit with or without the home hygiene plan.

To see if infections came back within six months, the research team looked at patients' health records. At the start of the study and again one and six months later, patients reported by phone about their pain, depression, satisfaction with activities, and satisfaction with care.

Primary care clinicians, scientists, community health workers, patients, and community members were involved in all parts of the study.

What were the limits of the study?

The hygiene plan lasted five days, which may be too short to keep skin infections from coming back. Results may have been different if the hygiene plan

was longer or was repeated to keep the original bacteria from coming back or new bacteria from coming into the home.

Future research could look at whether repeating the home hygiene plan or making it longer keeps these infections from coming back.

How can people use the results?

Health centers and ERs can use these results when considering ways to help patients keep MRSA and MSSA infections from coming back.

To learn more about this project, visit www.pcori.org/Tobin280.