

LITERATURE REVIEW:
EXPERIENCES OF MRSA PATIENTS DURING HOSPITAL
STAY

CAO LINJIE

Bachelor's thesis of the Degree Programme in nursing

Bachelor degree

KEMI 2013

ABSTRACT

KEMI-TORNIO UNIVERSITY OF APPLIED SCIENCES

Degree programme:	Nursing
Writer(s):	Cao Linjie
Thesis title:	LITERATURE REVIEW: EXPERIENCES OF MRSA PATIENTS DURING HOSPITAL STAY
Pages (of which appendices):	27 (1)
Date:	2013
Thesis instructor(s):	Eila Heikkinen, Luoma Anne
<p>MRSA (methicillin-resistant <i>Staphylococcus aureus</i>) is one of the most difficult infection diseases. Health care workers have a professional responsibility to promote MRSA patients well-being.</p> <p>Purpose of the thesis was to describe methicillin-resistant <i>Staphylococcus aureus</i> patients' experience concerning the disease and received care in the hospital. The aim is to find out the MRSA patients' experience on the disease from physical, psychological and social point of view. The aim is also to find out MRSA patients' experience in the received nursing care in the hospital. The goal is that the use of this literature review let the healthcare workers to improve nursing care for MRSA patients. The method of this thesis is a narrative review. Used papers are critical reviewed; relevant data were extracted and synthesized. Five qualitative researches had been analyzed.</p> <p>The results show that MRSA patients experience in the disease was unsatisfied from their physical, psychological and social the point of view. Experience was negative also in received care from health care workers (HCWs). A majority of MRSA patients felt 'restrictive', 'confined', 'prison', 'enclosed', 'private', 'stress', 'anxiety', 'depression', 'loneliness', 'anger', 'neglect', 'abandonment', 'boredom' and 'stigmatization' in isolation during hospital stay.</p>	
<p>Keywords: experiences, methicillin-resistant <i>Staphylococcus aureus</i>, MRSA patients, infection patient perceptions</p>	

CONTENT

ABSTRACT	2
1 INTRODUCTION.....	4
2 MRSA.....	5
2.1 Treatment of MRSA	6
2.2 Nurses role.....	7
3 LITERATURE REVIEW	8
4 PURPOSE, PROBLEMS AND GOALS OF THE THESIS	10
5 IMPLEMENTATION OF THE RESEARCH	11
5.1 Collection of the material.	11
5.2 The analysis of the material.....	11
6 RESULTS AND CONCLUSIONS.....	16
6.1 Methicillin-resistant Staphylococcus aureus patients' physical, psychological, social experience in the disease.....	16
6.1.1 Physical experience.....	17
6.1.2 Psychological and social experiences.....	18
6.2 MRSA patents experience in the received care.....	19
7 VALIDITY AND RELIABILITY.....	20
8 DISCUSSIONS.....	21
REFERENCES	23
APPENDIX1	27

1 INTRODUCTION

Methicillin-resistant *Staphylococcus aureus* (MRSA), hepatitis b and HIV infection have become the world's three most difficult infectious diseases (Ou Dianqiu 2012). Based on the Center for Disease Control (CDC) data, in the year 2005, MRSA was responsible for an estimated 94,000 invasive life-threatening infections and close to 19,000 deaths that is more than AIDS. And hospitals in England have seen a 548% increase in MRSA related deaths from 2003 to 2004. (Boyles 2005, access date 10.10.2012.) The high mortality of MRSA infections is hard to be neglected by the society.

October 2nd is the World MRSA Day. It was initiated, created and announced in January, 2009 by Jeanine Thomas, President and Founder of MRSA Survivors Network. (See Appendix 1.)

As a nursing student, the writer had a 3-month practice in the infection ward of a hospital. During the practice time, two new MRSA infection patients were found at other ward. The new MRSA patients had to be isolated and treated as MRSA carriers. Obviously this big change was really influencing on their lives. For instance, the relatives of the patients usually came to visit once a week. After they moved out to infection ward, their relatives almost substituted phone call for visit personally. The upset faces were seen every day. The negative feeling of patients pushed the writer to focus on MRSA patients' experience.

The main strategy of isolation of the source of infection is that patients are either located in single rooms or cohosted in multi-bed rooms with other MRSA patients depending on the facilities available for the duration of their admission (Barratt & Shaban & Moyle 2010,5). The working clothes called personal protective equipment (PPE) include masks, gowns and gloves. These are used when nurses entering patient's room or when attending to the patient. Previous researches have reported a range of

negative psychological and physiological effects as a consequence of MRSA isolation experience. (Denton 1986, 90-91.) It includes psychological stress, abnormal sensations and symptoms (Kennedy & Ailton 1997, 617-619), stigma (Barratt & Shaban & Moyle 2010, 53), loneliness (Knowles 1993, 55), anger neglect, abandonment (Davies & Birchall & Price 2000, 33), boredom (Ward 2000, 164). Long periods of isolation are considered to be psychologically detrimental. It may lead to some abnormal thought or perceptual occurrences. It also causes ability from perceptual and sensors, influencing patients' physical, physiological and social life.

The author of this thesis wanted to carry out a review of the current researchers on the experience of MRSA patients. The purpose is to describe the experience of patients carrying MRSA concerning the disease and received care in the hospital. The aim is to find out the MRSA patients' experience in the disease from physical, psychological and social point of view, as well as to find out MRSA patients' experience in the received care in the hospital. The goal of this literature review is to assist the healthcare workers to improve nursing care for methicillin-resistant *Staphylococcus aureus* patients.

2 MRSA

MRSA is above all related to boils and infections in wounds, skin and soft tissues, but can in principle give rise to infections in all bodily organs. MRSA is among the normal flora in the nose and throat in about 30–50% of the population. (Wertheim & Vos & Ott 2004, 25.) The mortality rate for MRSA patients was high of 13-34% (Skyman & Thunberg, & Hellström 2011,101-106). The strains were identified in 1961 after the introduction of methicillin in clinical settings. Afterwards, MRSA has emerged globally as a major cause of hospital-acquired infection. (Barber 1961, 385.)

MRSA could be separated into two types' HA-MRSA and CA-MRSA. The vast majority of MRSA infections globally is HA-MRSA and acquired in healthcare facilities. Invasive MRSA infections can be very serious and cause death. Patients

should closely follow the instructions given by their health care provider upon discharge. MRSA can cause infections and illness in people outside hospitals and healthcare facilities. It's called community-acquired MRSA (CA-MRSA). CA-MRSA presents itself as skin infections; such as pimples, boils, rash or a spider bite. People should monitor their skin condition closely and seek medical attention if the skin eruption worsens. (Stöppler 2011, access date 12.02.2013.)

When a patient has got MRSA, he will meet many symptoms at skin part, such as cellulites, boils, abscesses, sty, carbuncles, impetigo and rash. And there are two major ways people become infected with MRSA. The first is physical contact with someone who is either infected or is a carrier of MRSA, which means people who are not infected but are colonized with the bacteria on their bodies. The second way is for people to physically contact MRSA on any objects such as door handles, floors, sinks, or towels that have been touched by a MRSA-infected person or carrier. After getting this MRSA disease, almost all patients will have fear of treatment. (World MRSA Day, access date 10.3.2013.)

2.1 Treatment of MRSA

Because MRSA is resistant to a range of different antibiotics, it is harder to treat than non-resistant bacteria. MRSA is not resistant to every antibiotic and most strains of MRSA can still be treated with vancomycin, teicoplanin and mupirocin. Certain number of people is at a high risk of getting MRSA infection. Some healthy people are found to be carrying MRSA on their skin or their noses; normally they can be treated by an antibiotic cream-mupirocin. (Nordqvist 2004, access date 14.04.2013.)

The MRSA patients who stay in hospital will be isolated. It is a practice designed to prevent the spread of MRSA by isolating the source of infection. Hand hygiene, use own personal equipment, surveillance, antibiotic stewardship and appropriate contact precautions are the key elements of MRSA treatment. It is also essential in the control and prevention of MRSA. The most important in source isolation is that patients are

accommodated in single room or located in multi-bed rooms with other MRSA patients, restricting the patients' access and egress (Barratt & Shaban & Moyle 2010, 53-59). As According to M. Lindberg, adherence to hand hygiene precautions is a central action for ensuring one kind of patient safety (Lindberg 2012, 17). Hand disinfection should be done before and after patient contact complemented with gloves and aprons; it is necessary because the protective clothing becomes contaminated with organisms. (Wiener & Galuty & Rudensky & Schlesinger & Attias & Yinnon 2011, 555-559)

2.2 Nurses role

Health Care Workers (HCWs) have a professional responsibility to promote patients well-being (Flesicher & Berg & Zimmerman & Wuste & Behrens 2009, 339). It does not only address individual patient's physical needs, but also any psychological and social problems arising from their MRSA isolation (Barratt & Shaban & Moyle 2010, 53). There are 3 vital things that nurses should achieve to help patients identifying problems and finding solutions. First is to understand patients' distress, second is perceptions of patients' behavior and needs and the third is to understand or to notice thoughts and emotions in the interaction. (Lindberg 2012, 21)

The relationship between patients and HCWs can be managed by communication. This depends on patients and HCWs knowledge, culture, religion, language. But it was reported that 68% of the lay UK people they surveyed, acquired their knowledge from a combination of television and newspapers at 2006. (Rohde & Gordon 2012, Read 4.02.2013.) Nurses play a teacher role during addressing health care and providing in-depth information. Another aspect is to examine MRSA patients' life situation (Lindberg & Carlsson & Högman & Skytt 2009, 271). For instance, poor information makes patients feeling confused and anxious and affects their life both in and outside hospital (Criddle & Potter 2006, 24-28).

The MRSA patients' negative experience will help health workers recommendations

for practice to include enhanced training for health care worker on how to address sensitively the patient's information needs and reduce unnecessary confusion and distress (Criddle & Potter 2006, 24). Thus, HCWs paying special attention to patients' experience helps the patients, who had negative feelings of their isolation.

On the other hand the health care workers attitude will have also impact on patient's experience. One research from Sweden Uppsala University showed, using the patient's feeling as a measurement, that health care workers' behavior's and attitude's influence on patients experience are seen clearly at that measurement. Thus, HCWs need to have knowledge, understanding and awareness of the patients. Beliefs, action and feelings are the three-component in an attitude model, they influence on the attitude mostly (Lindberg 2012, 20-21.) However, health care workers have information to manage the problems during health care, but there still have few things disturbing patients experience.

3 LITERATURE REVIEW

Literature review is explained by Pam Moule and Margaret Goodman in "Nursing Research- an Introduction". As follows, literature review is one kind of introduction; it could be part of a research proposal. It is a review of research that has already been done on this topic. The main purposes of research literature review are to support a research proposal, to introduce a research report as part of a dissertation or thesis. (Moule & Goodman 2009, 138)

The two types of the literature review are "narrative review" and "systematic review". The difference between those two reviews has seven parts: distinctions, focus, research question, search strategy, selection of sources, assessment of sources and conclusions. The focus, the narrative review often names a broad range of problem and takes them together in an overview. Research questions are usually descriptive in nature. Search strategy is often unstated or implicit. Selection of sources can be selective awareness

and unconscious area. Sources must be published sources, they can be theoretical and empirical papers. Assessment of sources, sometimes according to specified criteria. (Moule & Goodman 2009, 139)

Before all the work, the researcher should find out which topic is wanted to be reviewed, and how far they know at presently about this topic. Also the main questions and problems that have been addressed to date, are put forward. Following Pam Moule and Margaret Goodman, they advise researcher to ask 15 questions about each section of a research paper. Those questions should target areas of the literature such as title, research(s), abstract, introduction, literature review, methodology, sample selection, data collection, ethics, results, discussion, conclusions, recommendations, references, appendices. The aim of those processes is to provide an account of the available research literature on the specified topic that will enable an evaluation and identification of the gaps in the existing research. (Moule & Goodman 2009, 137-149)

Overall, a literature review have two types "narrative review" and "systematic review ", both type aiming to increase our understanding and knowledge of the topic being researched. Not only carrying out what previous researcher did on this topic, but they also point out any area in the research that requires more study. The aim of writing a literature review is to convince the reader that the research study is necessary and represents the next step in knowledge-building for the topic. The author should critical study the research before used. First, it will comment on the methods used, and will highlight any strengths or weaknesses of the reviewed literature. A good way of developing an understanding of this conversation is to read a few critical reviews before embarking on writing your own critical literature review. (Moule & Goodman 2009, 140) After comparison there two types of literature reviews the author of this thesis felt that it is better to write a narrative review of the literature.

One task of narrative literature reviews is to provide current knowledge of subject, so need to play in continuing education of the subject. This type of review uses a qualitative approach to research and does not provide answers to specific quantitative

research questions. Also in that article carried out by Collins and Fauser, more common narrative review can cover a wide range of issues within a topic, but systematic literature review provides clear and concise quantitative information about specific questions, but they do not cover the topic. (Collins & Fauser 2004,103-104.)

4 PURPOSE, PROBLEMS AND GOALS OF THE THESIS

Research purpose is to summarize all the research goals and to present an investigation and inquiry into a question, answering it with detailed, substantiated information. In reality, a research study will usually have something quite broad called a 'statement purpose' and that kind of statement is more specific and broken down into smaller researchable chunks than research aims. (Moule & Goodman 2009, 87) This statement also guides author to read and to take notes only on what is needed in the project. The research purpose helps the author to get in-deep interest in project, it helps the author to developing the thesis statement and it helps the author to find valuable materials from multitudinous information. (Constantine 2012, access date 11.11.2012.)

A research problem is the process of thinking up and writing down a set of questions to answer about the research topic which is to be selected (Constantine 2012, access date 11.11.2012). A good research question is clearly expressed and focused on a researchable problem. It expected to be short, precise and direct. A research problem or question statement may be further amplified through an aim that serves to focus more directly on the significant and relevant issue which is to be researched. (Moule & Goodman 2009, 74)

All literature review should have purpose and aims.

The purpose of this thesis is to describe methicillin-resistant *Staphylococcus aureus* patients' experience concerning the disease and received care in the hospital.

The aim is to find out the MRSA patients' experience in the disease from physical, psychological and social point of view, as well as to find out MRSA patients'

experience in the received care in the hospital.

The goal of that literature review is to use it for healthcare workers to improve nursing care for methicillin-resistant *Staphylococcus aureus* patients.

The literature review is going to answer the following questions:

- 1 .What kind of physical psychological and social experience do MRSA patients have in the disease?
2. What kind of experience do MRSA patients have in the received nursing care in the hospital?

5 IMPLEMENTATION OF THE RESEARCH

5.1 Collection of the material.

Five researches were found regarding this topic. Keywords used for searching included: experiences, MRSA patients, infection patient perceptions and methicillin-resistant *Staphylococcus aureus*. The search found 9 articles, and they are all about the MRSA patient's experience. But in 4 of the 9 articles, the participants were either not hospitalized, or infected with other bacteria. Hence, they are not included in this literature review.

5.2 The analysis of the material

Table 1 shows the MRSA patient's experience during hospitalization from physical, psychological and social point of view as well as experiences about the received care. Both positive and negative experiences were included as results of MRSA patients' experience.

Table 1 MRSA patient's experiences in the disease and the received nursing care reviewed in five articles.

AUTHORS	PARTICIPANTS	PHYSICAL EXPERIENCES	PSYCHOLOGICAL EXPERIENCES	SOCIAL EXPERIENCES	NURSING CARE EXPERIENCES
Madeo 2001	7 patients aged between 19 and 72 were recruited, three women and four men, All had MRSA for at least two weeks and were nursed in isolation in UK	'To be honest, it scared me having this cream up your nose.'	'I can't understand how I got it in the first place because nobody has explained it to me.' 'I was then told it was thought to be MRSA and they were going to isolate me.'	'My daughter-in-law got information about MRSA from the internet, which reassured my wife. 'Everybody else is walking about and you're stuck in your room.' 'I'm pleased I have a room on my own because it's like a pantomime watching me get out of bed. So I don't mind the room because I get some privacy.'	'It makes me feel like I am a dirty, unclean person when I see the doctors and nurses coming into the room wearing aprons and touching me with gloves.'
Lindberg & Carlsson & Högman & Skytt 2009	13 participants were include in the study, four men and nine women aged 29-78 years in Sweden	How could I get it? No idea. How can you get it? Under what circumstances. I mean I meet normal people from day to day maybe through the hospital, if I met somebody there. I am there sometimes on follow-ups.	'I've felt sort of like a plague victim. I first thought about it like a modern HIV somehow. I felt guilty.'	I don't want to tell other people. That we have it. We used to be very social. But now that I know we have these bacteria. I think it's hard. So we've withdrawn. 'Because I have MRSA.it can be a kind of handicap or maybe I can't get certain jobs.do I get to work at a hospital. Or with children and youth. Would I even get an interview? I wouldn't do it. I don't think. Tell them I have MRSA. What would they say? thanks	I don't get to go to the health center. They [the staff] come here. If I call. They all know I have this thing. It's a small town. Then they come here. And put on their protective clothing on the porch.

				But no thanks.’	
Skyman & Thurberg & Hellström Mar 2010	6 patients, two women and four men with MRSA-infected wounds were interviewed at Sweden between 1997 to 2001	There was an infection in the transplant wound; they had to remove the transplant. The mental preparation before going through another operation and then having that operation postponed is the hardest pill to swallow.	It was difficult. I was isolated and locked in a room with double dividing walls and I did not get to go out, so it was boring. It was so dull, because they only came when they were going to clean or bring food. It was beautiful to look out onto the field and the greenery.	Relatives were a little scared, not being able to come to a party with small children, and they were dubious as to whether I should go there at all. There have been a couple of negative experiences; it was hard.	She put a bandage on me, believe it or not, without protective clothing; she wore a filthy long-sleeved top – I cannot tell you how I felt – I was totally shocked!
Andersson & Lindholm & Fossum 2010	15 patients with MRSA infected wounds were interviewed: 7 were male (21-90 years) and 8 were female (22-83 years) in Sweden	I was infected and I got the feeling that I didn't wash myself properly. I thought that I shall infect whoever I come in contact with, I felt dirty.	I felt like I sank through the floor. So it felt terrible and horrible. It was a shock, I became totally annihilated. I was really in a panic; I felt like a leper	I felt I was a walking focus of infection and that I was very dangerous. I got the information and the day before we had met with our little grandchild. He always hugs me very hard when we meet, and he kisses me on the mouth. I couldn't sleep at all the night after I was told that I was so dangerous.	Some nurses had a protective apron, but some didn't; they just put on the gloves. I noticed it, but I was ashamed to ask, aren't you going to wear an apron, but then I thought they must know what they are doing, who am I to tell them how to perform their job? The doctor at the accident and emergency department never used protective clothing.
Barratt & Shabam & Moyle 2010	10 adult patients with MRSA infections and under isolation precautions for	Well it eased that anxiety that I had to start with	It feels like that you are contaminated... To see them dressed in protective gear, you feel downgraded.”	But I truly don't like being in a room like this, I like being with people...I do like the company... just someone else in	When I see the inconsistencies in the procedures, I realized that they [nurses] probably don't have enough

	more than three days in new Zealand.			the room. its only common sense that if you have got something that you can pass on, which can cause say half a dozen more to get sick, ... to be on your own till its cured.	information or the confidence “...sometimes the doctors would come and open the door a crack and talk to me through the crack in the door, rather than having to put on the apron, and mask and gloves... I would have preferred them to have come in and had their discussion.
--	--------------------------------------	--	--	---	--

One study on the MRSA experience is from UK at 26th July, 2001, carried out by Maurice Madeo. Seven patients were recruited, including three females and four males, aged between 19 and 72. All selected patients had MRSA for at least two weeks. Author used understanding and the impact on visitors, hotel or prison, stigma and treatment. He got a result that health care staffs need to be made aware of how patients feel when they are isolated with MRSA, so that strategies can be implemented to make their stay in hospital as pleasant as possible. Patients stay in hospitalization can result in loneliness and depression as well in stigmatization. Long period of isolation makes patients more susceptible to altered mood states that manifest as depression and withdrawal. Sometimes HCWs cannot give all that MRSA patients need. The difference from other research is that they got the positive answer from MRSA patients which used to live alone and isolated for treatment. They tend to feel normal and feel that they received nice care. (Madeo 2001, 36.)

In a study carried out by Lindberg and Carlsson and Högman and Skytt in Sweden, the topic was about patients which were suffering from MRSA. Thirteen MRSA patients were recruited including four men and nine women aged 29-78years old. Theirs experience was described in two categories: "symptoms of MRSA" and "feelings regarding MRSA colonialization". In the first one they did not pay much attention in

having MRSA, but they found the negative effect on wound. In second one, feeling of distaste and uncertainty; someone felt that life become very difficult and unclean. It also addressed they felt guilty and shame. Some MRSA patients working in health care place were worried of losing their jobs, and the unemployed said that MRSA made it unlikely for them to get a job. The author connected the healthcare workers' (HCWs) responsibility connect with the improvement of MRSA management, ensuring that HCWs have appropriate knowledge and competence in relation to MRSA and the patients, which should be assumed at the organizational level. Patients' safety and needs should be essential in healthcare; however, this is influenced by the skills, knowledge and attitudes of HCWs. (Lindberg & Carlsson & Högman & Skytt 2009, 271.)

Another study was carried out in Sweden in 2010. They found the patients' experience about being isolated. There were six MRSA patients as participants; they are between 35 to 76 years old. All their meals were served in their room, and they did not get any spontaneous visits by the staff except a medical and nursing task had to be performed. They used seven categories: source isolation, how MRSA was contracted, information disease trauma, information about MRSA, attitudes from relatives and staff, being contagious and carrying a MRSA card meaning healthy or sick. They find out that MRSA patients couldn't get therapy and rehabilitation with same opportunity in time. They didn't get any spontaneous visits from staff. They felt boring, plague and being isolated in room. Smitten, upset, guilt and shame were also the feelings of MRSA patients. (Skyman & Sjöström & Hellström 2010, 101.)

H.Anderssom , C.Lindholm and B.Fossum carried out their research in 2010. Fifteen patients were interviewed. They were 7 males (21-90 years old) and 8 females (23-83years old). From the answers came up that some patients said that they felt like a lepers and unclean. They also felt shame and sad. Besides, they were concerning how they became infected. It was found out that MRSA patients were exposed to others' shortcomings and became a threat to others' health. The major changes by MRSA in patients' daily life are: some activities were discontinued and for a majority, fears of

rejection by friends and relatives, as well as of losing their jobs and not having access to accurate healthcare were common. Staff's behavior, knowledge and how they express themselves also affect the patients' experiences. They found that inappropriate explanation will make patients confused and anxious. They proposed that nurses should be a central role in the education of staff, patients and family members in case to improve health care for patients. (Andersson & Lindholm & Fossum 2010, 47.)

One study had been carried out by R.Barratt and R.Shaban and W.Moyle at 2010 in New Zealand. Ten adult patients with MRSA infection were isolated for more than three days. Three main themes, 'being MRSA positive' 'being with others' and 'living with four walls' were used to analysis patients' experience. Interviewees felt downgraded, when they saw HCWs dressed in protective gear came in their room. One old lady mentioned she doesn't like being in a room with four walls. If she can be with others it will be wonderful. However, some older participants were more satisfied with their situation, but they still felt fear, angry, frustrated and guilt. Authors found some positive aspects of being accommodated in a single room as a MRSA patient. Those positive experiences were influenced by patients' knowledge and their relationship with patients' health workers family and friends. But being isolated is negative experience, especially each person's care requirements and emotional needs must be recognized and opportunities provided to give emotional support should be achieved. (Barratt & Shaban & Moyle 2010, 53.)

6 RESULTS AND CONCLUSIONS

6.1 Methicillin-resistant Staphylococcus aureus patients' physical, psychological, social experience in the disease

6.1.1 Physical experience

MRSA patients have no idea about how did they got infection. Most of them lack

knowledge about MRSA diseases; this was mentioned in all selected researches. Some of them a little bit angry about got infection or blaming with HCWs.

The participants described that HCWs served information both in orally and in writing. Too much messages given at the same time or too much medical nomenclatures made MRSA patients feel confused. MRSA patients also got information from relatives and internet. Research also revealed MRSA patients have different levels of knowledge and comprehension of MRSA, which will influence patient's value information coping with their experience. (Barratt & Shaban & Moyle 2010, 56.)

Physical experience had been described as negative effects on wound healing and boils that were painful, malodorous and did not heal. The MRSA patient described that the trauma treatment is denied or therapy for their primarily illness (Skyman & Sjöström & Hellström 2010, 104).

After educated by HCWs, the MRSA patients were careful with hygiene, they always ensure that any wounds or skin lesions were bandaged when they met other people (Lindberg & Carlsson & Högman & Skytt 2009, 274).

Overall, MRSA patients' physical experience was that an unfair treatment makes them felt confused. At the same time lack of knowledge, anxiety may influence patients got negative experience being with MRSA. Feeling unclear is the common experience for MRSA isolated patients. The negative MRSA patients' physical experiences are summarized as lack of information of MRSA, as feeling unclean, confused and worried about treatment measures and also as having trauma painful.

6.1.2 Psychological and social experiences

MRSA patients common psychological experiences of being isolated were described unsatisfied. Their food delivered in each room, they were shut-in one room and saw the HCWs came into theirs room wearing aprons and using gloves during treatment. This

would make patients discompose. Therefore they are worried their life will become very difficult.

As Eva Skyman, H. Sjöström and L. Hellström mentioned in their research, when MRSA patients became isolated, they did not get any spontaneous visits from the staff and they were kept away from other patients. This phenomenon made one serious consequence; it made patients realize that they needed to be isolated and subsequently accepted the source isolation. (Skyman & Sjöström & Hellström 2010, 103.)

Not only negative experiences had been collected, but also some positive experiences had included. A small amount of MRSA patients described that they got some privacy when they isolated during the early time (Madeo 2001, 38).

In five researches there was one common experience; it was loneliness. Being isolated they felt bored, try to communicate with others became their biggest wishes. MRSA patients really felt upset and feared infect their surroundings. Thereby, MRSA harmed the natural camaraderie (Skyman & Sjöström & Hellström 2010, 104). MRSA also affects the patients themselves, their relatives and friends, because they do not make visits or let others visit them (Lindberg & Carlsson & Högman & B.Skytt 2009, 273-274). Some of MRSA patients described becoming unsocial and they would have liked to communicate with other patients, family. Most of isolation patients had some wishes for future. Such as, a window in the isolation room (Kennedy & Hamilton 1997), and adding a phone will reduce loneliness and pass the time, they can speak to friends, visitors or staff.

Thus, MRSA patients negative psychological experience are summarize as restrictive, confined, prison enclosed, stress, anxiety, depression, anger, boredom and stigmatization. But privacy space was bringing positive experience to some of MRSA isolated patients. And MRSA patients' social experience is also a negative result; they felt loneliness and feared to infection others. Anyhow, MRSA patients still hope that someday HCWs would improve that isolation environment and enhance health care

quality.

6.2 MRSA patients experience in the received care

Referring to collected researches, health care workers admitted to spend less time with patients in MRSA isolation and lack of concerns for them. The attitude of health care workers as revealed by the patients indicated an unprofessional behavior. All the interviewed MRSA patients got unsatisfied experience in received care from HCWs.

Some health care workers lack knowledge in terms of actual MRSA information (Andersson & Lindholm & Fossum 2010, 50). Some patients noticed the staff was sloppy with hand hygiene between patients, making them wondered about health care workers responsibility and knowledge. They described that they did not get access to the patient-care on the same terms as other patients. (Skyman & Sjöström & Hellström 2010, 103-104) The health care workers did not use proper working methods to provide nursing and guide patients to difficult situation. Isolated patients need emotional support from health care workers. Unprofessional behavior causes patients' bad mood. Health care workers attitude will influence on patients experience. And less medical care or ignore patients experience may increase dissatisfaction with the quality of care and grow the risk of medical error (Barratt & Shaban & moyle 2010, 58).

A clear answer came out; MRSA patients got negative experiences in HCWs' care during hospital stays. They felt HCWs lack of knowledge of MRSA, some of staffs was sloppy with hand hygiene between patients and ignore MRSA patients' privacy information. HCWs' behavior really affected MRSA patients' mood, leading to MRSA patients' negative experiences.

7 VALIDITY AND RELIABILITY

Refereeing to Moule and Goodman, the measures of validity and reliability used in quantitative research cannot be transferred into qualitative research and finding suitable measures has been a challenging process. Qualitative researchers in nursing are hoping to present the 'truth' and describe the insider or 'emic' view and therefore need to use alternative approaches to support rigor in their research. Thus, one criterion had been established for rigor and trustworthiness of qualitative research. The aim of this criteria is to allow the researcher to demonstrate how the interpretations presented in the data, and conclusions drawn, reflect participants' experience.(Moule & Goodman 2009, 188-191)

In Moule and Goodman, they describe four key elements needed to establish the trustworthiness of qualitative research, including credibility, dependability, conformability, and transferability. They explained use audit trail to measure conformability and dependability. This include the researcher presents an audit trail of the methods, presentation of data and analytical processes used which can then be audited by an external researcher. (Moule & Goodman 2009, 190)

Furthermore, the argument for the validity and reliability of this review was that all the materials was taken from reputable and researchable books, e-journals or other publications. And before using them, the writer checked the original source.

8 DISCUSSION

According to one research carried out by Deborah Smith at 2003, there are five principles for research question: discuss intellectual property frankly, be conscious of multiple roles, follow informed-consent rules, respect confidentiality and privacy. (Smith 2003, 56) This process would help researcher used in a honest manner to report data, results, and methods and procedures. (Resnik, 2011, Read 6.5.2013)

One ethical question that has been bothering the writer concerns one gentleman, almost 90 years old. He stayed in a one hospital during the author's practical studies. He had a really bad bedsore, and MRSA infection made bedsore worse. In addition to these, difficult in hearing was another problem to him. He was completely isolated, bedridden and less able to feed and move by himself. He was transferred from medicine ward at center hospital. He was always rude to healthcare workers, sometimes he couldn't sleep at night and during the daytime had a cat nap. For instance, the staff should check did he eat the given medicine. His medicine was always found in his mouth. He was forgetful and had insomnia and long term isolation changed him to nervous, anxious and caused communicative disorders. This interesting mood change was also a general phenomenon for many MRSA patients which were isolated at hospital. It was noted that this old man's mood change did not get focus form health care workers. The health care workers only checked the treatment for the MRSA patients that is not enough for nowadays nursing care.

Through the literature review, the purpose and the aims have been reached. The experience of MRSA patients in a disease from physical, psychological and social point of view was found out as well as experience in the nursing care.

The aims were reached step by step. Firstly, the relevant materials were collected and accepted except those articles which included other infection disease or no hospital stays. Secondly, analyzing all articles and classifying experiences in four groups: experiences in the disease from the physical, psychological, and social point of view

and experience in the received nursing care. Thirdly, summarizing the experiences described in five articles and make conclusions.

As the result showed MRSA patients experience is unsatisfied from their physical, psychological and social point of view. And negative experience was also in received care from health care workers (HCWs). A majority of MRSA patients felt 'restrictive', 'confined', 'prison', 'enclosed', 'private', 'stress', 'anxiety', 'depression', 'loneliness', 'anger', 'neglect', 'abandonment', 'boredom' and 'stigmatization' during isolation at hospital stays. The writer wants to use this literature review to highlight that the patients experience is very important. HCWs must improve their health care quality.

One of the major limitations of this literature review is that no hand out about the right method for health care workers could be delivered. The writer has tried to show how MRSA patients' realistic experience is and what is the feeling about health care, but not to carry out one practical way for healthcare workers. Hopefully other researches could cover it.

The writer's own study experience of this review is to having got more medical information about MRSA. That includes that a nurse should pay special attention to educate MRSA patients as his/her important responsibility. Implemented nursing care for patients is not only physical treatment, is also include psychological and social care. It is to remember that own attitude will influence on patients' feeling.

This review with four categories of MRSA patients' experience makes experiences more clearly. As previously discussed, there is no one right practical method for health care workers to work with MRSA patients. Thus, what kind of guideline will this practical method include? Should it also include how to manage on attitudes or what is a good attitude for a health care worker?

REFERENCES

Andersson,H & Lindholm,C & Fossum,B 2010. MRSA- global treat and personal disaster: patients' experiences, international council of nurses. Pages 47-53.

Barber Mary 1961. Methicillin-resistant staphylococci. Pages 385. Referred to online on 1961 at

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC480239/pdf/jclinpath00063-0051.pdf>.

Boyles Salynn 2005, Reviewed by Louise Chang, 2007 WebMD Health news. Printed out 16.10.2007 from

<http://www.webmd.com/skin-problems-and-treatments/news/20071016/more-us-deaths-from-mrsa-than-aids>.

Barratt,R & Shaban,R & Moyle,W 2010. Behind barriers: patients' perceptions of source isolation for Methicillin-resistant staphylococcus aureus (MRSA). Australian Journal of advanced nursing Vol.28.No.2. Pages 53-59.

Barratt Ruth Linda & Shaban Ramon & Moyle Wendy 2001. Patient experience of source isolation: Lessons for clinical practice. Contemporary Nurse Vol.39 (2) pages 180-193.

Collins, JA & Fauser, BCJM. Balancing the strength of systematic and narrative reviews. Hman Reproduction Update.Vol .11, No.2, pages 103-104.

"Contemporary Medicine" magazine second part of 11.11.2010.

Constantine Jim 2012. Writing a Statement of Purpose. Tip sheet 9 and Brainstorming Research Questions Tip sheet 10. Referred to online on 10.2012 at

http://www.crlsresearchguide.org/09_writing_state_of_purp.asp.

Criddle,P & Potter,J 2006. Exploring patients views on colonization with methicillin-resistant Staphylococcus aureus. British journal of Infection Control. Vol.7, pages 24-28.

Davies Rees & H, R & Birchall, C & Price, J 2000. Psychological effects of source isolation nursing (2): Patient satisfaction. Nursing Standard, Vol.14, pages32-36.

Denton.P 1986. Psychological and physiological effects of isolation. Nursing, pages 90-91.

Fleischer,S & Berg,A & Zimmerman,M & Wuste,K & Behrens,J 2009. Nurse-patient interaction and communication: A systematic literature review. J Public Health Vol.17, pages 339-353.

Kennedy & Hamilton,L1997. Psychological impact of the management of methicillin-resistant staphylococcus aureus (MRSA) in patients with spinal cord injury Spinal Cord 35, pages 617 - 619.

Knowles, H. E. 1993. The experience of infectious patients in isolation. Nursing Times, 89, pages 53-56.

Lindberg,M 2012. Methicillin-resistant Staphylococcus aureus(MRSA) an Unclear and untoward Issue, Digital Comprehensive Summaries of Uppsala dissertations from the Faculty of Medicine 741, pages 17-23.

Lindberg,M & Carlsson,M & Högman,M & Skytt,B 2009. Suffering from methicillin-resistant Staphylococcus areus: experiences and understandings of colonisation. Journal of hospital infection 73, pages 271-277.

Madeo Maurice 2001. Understanding the MRSA experience. Nursing time Vol.97,

issue 30, pages 36.

Moule, P & Goodman, M 2009. *Nursing Research, An Introduction*. Sage Publications Ltd, London

Nordqvist Christian 2004. What is MRSA? Why is MRSA a Concern? How is MRSA Treated? Carried out at 12.06.2006 on
<http://www.medicalnewstoday.com/articles/10634.php>.

Ou Dianqiu 2012. Zhong Nanshan: MRSA Infection treatment face to three challenges. Referred to online on 12.02.2012 at
<http://www.chinanews.com/jk/2012/02-12/3661636.shtml>.

Rohde Rodney & Ross-Gordon Jovita 2012. MRSA model of learning and adaptation: a qualitative study among the general public. published online in 02,04,2012 at
<http://www.biomedcentral.com/1472-6963/12/88>.

Resnik ,D.B 2011 . What si ethics in research and why is important? In National institute of environment sciences. Referred to online on 4.11.2012 at
<http://www.niehs.nih.gov/research/resources/bioethics/whatis/>

Skyman Eva & Thunberg Sjöström Harrieth & Hellström Lisbeth 2010. Patients' experiences of being infected with MRSA at a hospital and subsequently source isolated .Journal compilation Nordic college of caring science. Pages 101-106. Print out on line on 01.03.2010 at
<http://web.ebscohost.com.ez.token.fi/ehost/pdfviewer/pdfviewer?sid=9905e7cb-0bee-43a8-939e-2365613de948%40sessionmgr114&vid=4&hid=118>

Smith Deborah 2003. Five principles for research ethics. Monitor on psychological Vol.24, No.1 pages 56 printed online on 01.2003 at
<http://www.apa.org/monitor/jan03/principles.aspx>

Stöppler, M 2011. What is methicillin-resistant Staphylococcus aureus (MRSA)?

Referred online on 09.01.2011 at

http://www.medicinenet.com/mrsa_infection/page2.htm#what_is_methicillin-resistant_staphylococcus_aureus_mrsa.

Ward, D 2000. Clinical infection control: Reducing the psychological effects of isolation. *British Journal of Nursing*, Vol.9, pages 164-170.

Wertheim, HF & Vos, MC & Ott, A, et al 2004. Mupirocin prophylaxis against nosocomial Staphylococcus aureus infections in nonsurgical patients: a randomized study. *Ann Intern Med* 140, pages 25-30.

Wiener-Well, Y & Galuty, M & Rudensky, B & Schlesinger, Y & Attias, D & Yinnon, AM 2011. Nursing and physician attire as possible source of nosocomial infections. *Am J Infect Control* 39, pages 555-559.

World MRSA Day, New brochure, page 2, on

<http://worldmrsaday.org/mrsa/wp-content/uploads/2010/08/Living-with-MRSA-Brochure.pdf>.

APPENDIX 1

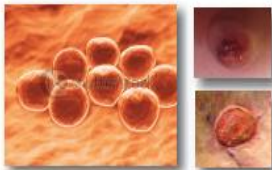


What is MRSA?

Methicillin-resistant staphylococcus aureus (MRSA) is a bacteria that is resistant to most antibiotics and a type of staph that has mutated in the past 50 years. There are two main types of MRSA.

What is healthcare-acquired MRSA (HA-MRSA)?

The vast majority of MRSA infections (84%) in the U.S. are HA-MRSA and acquired in healthcare facilities and invasive MRSA infections can be very serious and cause death. Patients should closely follow the instructions given by their healthcare provider upon discharge.



What is community-acquired MRSA (CA-MRSA)?

MRSA can cause infections and illness in people outside of hospitals and healthcare facilities and is called community-acquired MRSA (CA-MRSA). CA-MRSA presents itself as skin infections; such as pimples, boils, rash or a spider bite. People should monitor their skin condition closely and seek medical attention if the skin eruption worsens.

Colonization Versus Infection

- **Colonized** with MRSA means MRSA is present on or in the body (usually nares or skin) without causing an infection. Approximately 7% of the U.S. population are colonized with MRSA and are carriers with the vast majority being asymptomatic.
- **Infected** means there are symptoms such as redness, pus, drainage, burning sensation, pain and nausea and vary according to the location of the infection.

What Should I do if I think I have a MRSA or staph infection?

Wash hands frequently and keep your sore covered with a clean bandage and use a disinfectant wash. Contact your healthcare provider immediately and ask to have your wound cultured for MRSA.



Preventative Measures to Reduce Chances of a HA-MRSA Infection

At least ten days before having a medical procedure or surgery ask your doctor to test you to see if you are colonized (a carrier) for MRSA and have a culture done (a simple nasal swab). If you are positive, you can be decolonized by taking an antibiotic ointment in your nares for five days and washing your skin with chlorhexidine (purchased at any pharmacy) several times before the surgery or procedure. A person who is colonized with MRSA has a ten-twelve fold greater chance of acquiring an infection.



Preventative Measures to Reduce Chances of a CA-MRSA Infection

- Wash hands thoroughly and frequently and carry hand sanitizer with you when unable to wash with soap and water.
- Do not poke or squeeze sores.
- Keep cut and scrapes clean with soap and water and covered till healed.

- Do not share towels, razors, toothbrushes or other personal items.
- Cover nose and mouth when sneezing or coughing.
- Change clothes daily and wash before wearing again and wash sheets and towels in hot water and use the dryer.



MRSA and Athletes

- Do not share personal items such as towels, soap, razors, etc.
- Shower immediately after practice or a workout.
- Wash workout clothes or uniform after each use in hot water with bleach and use the dryer.
- Avoid touching your face while working out.
- Clean and cover any minor cut or scrap till it heals and if you have a MRSA infection you must be cleared by a physician before returning to practice.
- Wash hands before and after practice or workout and wipe down equipment before and after use with an alcohol-based cleaner or spray cleaner.
- Do not place your towel, water bottle or cell phone on equipment.

World MRSA Day,
October 2

World Awareness Month,
October

International MRSA Testing Week
April 1-7

www.worldMRSAday.org

