

# *Emotional touchpoints; the feelings nurses have when explaining multi-resistant organisms to colonised patients*

## **Corresponding author**

Joanna Harris<sup>1</sup>

1. Illawarra Shoalhaven Local Health District, Warrawong, NSW 2502, Australia.

[Joanna.Harris@health.nsw.gov.au](mailto:Joanna.Harris@health.nsw.gov.au)

Telephone 0061 475 943494

## **Co-authors**

Kenneth Walsh<sup>2</sup>

2. University of Tasmania, Hobart, Tasmania, Australia.

[Kenneth.walsh@utas.edu.au](mailto:Kenneth.walsh@utas.edu.au)

Hazel Maxwell<sup>2</sup>

2. University of Tasmania, Rozelle, Sydney, NSW, Australia

[Hazel.Maxwell@utas.edu.au](mailto:Hazel.Maxwell@utas.edu.au)

Susan Dodds<sup>3</sup>

3. LaTrobe University, Melbourne, Australia, UNSW Sydney, Australia and Australian Research Council, Centre of Excellence for Electromaterials Science (ACES)

[S.Dodds@LaTrobe.edu.au](mailto:S.Dodds@LaTrobe.edu.au)

## **Abstract**

### **Background**

Nurses face challenges when providing information about multi-resistant organisms (MROs), and related hospital policies, to patients found to be colonised, and may be concerned for their own safety when caring for MRO-colonised people. Resultant emotional responses may influence behaviours of staff caring for these patients.

This study aimed to identify the feelings experienced by nurses when talking about MROs with patients. Secondary objectives were to learn about staff behaviours towards MRO-colonised patients, and to explore the utility of Emotional Touchpoints methodology in this context.

### **Methods**

A qualitative study using an adapted Emotional Touchpoints method delivered as a paper survey tool for data collection. Content analysis and inductive coding of responses was used to identify key themes.

### **Results**

53 nurses took part. 'Nervous', 'Concerned' and 'Knowledgeable' were the most commonly selected adjectives chosen to describe their feelings. Reasons for these choices were themed as 'Empowerment through knowledge', 'Performance anxiety', 'Concern for the patient' and 'Concern for professional reputation'.

Social or temporal distancing, and the need for staff and other patients to be protected from contagion were key themes for the behaviours these nurses had witnessed towards patients.

### **Conclusions**

Talking about MROs with patients can elicit strong emotional responses in nurses, and MRO-colonised patients may be treated and spoken about in a discriminatory fashion. IPC teams should recognise this and focus on the person rather than the pathogen when educating and supporting nurses. Recommendations for practice are made that will improve the wellbeing of nurses as well as patients.

### **Highlights**

- Nurses often explain MRO colonisation with patients but may not find this easy
- Nurses feel positive emotions when they have confidence in their abilities
- Nurses often feel negative emotions and stress when talking about MROs with patients
- MRO-colonised patients may be spoken about and treated in a discriminatory way
- IPC policy should recognise the emotional impact of MROs on nurses and patients
- Emotional Touchpoints methodology has utility in the field of IPC

### **Keywords**

Contagion; Decision-making; Emotional Touchpoints; Empathy; feelings; isolation; moral distress; multi-resistant organisms; nursing staff;

## Introduction

This paper reports on a qualitative study undertaken within the Australian public health system to provide insight into the feelings of nurses when talking to their colonised patients and clients about multi-resistant organisms (MROs). The study also sought to identify and to describe nurses observations of any differences in the way patients are treated in hospital once they are found to be colonised with an MRO.

Contemporary infection prevention and control principles require patients identified as colonised with an MRO (for example, methicillin-resistant *Staphylococcus aureus* (MRSA), vancomycin-resistant Enterococcus (VRE) or Carbapenemase-producing Enterobacterales (CPE)), to be informed so that they fully understand the precautions that may be used when they are admitted to hospital <sup>1</sup>. In order to achieve this health professionals need a strong understanding of the MRO itself as well as the justification of, and rationale for, the precautions that are implemented to reduce MRO transmission in hospital settings <sup>2</sup>. If health professionals lack this strong understanding of MROs and cannot communicate effectively as a result, as was identified by Easton *et al* <sup>3</sup> and Pedro *et al* <sup>4</sup>, patients may not receive appropriate or considered information about the MRO and the impact that this may have on them while in hospital <sup>5</sup>. These patients may then develop a range of unnecessary strategies such as changing their bedding every second day <sup>6</sup> or 'self-stigmatisation' through self-imposed restriction on social contacts, once they are discharged from hospital <sup>7</sup>. These strategies and feelings may significantly impact on their quality of life <sup>8</sup>.

A lack of confidence amongst nurses does not only impact on patients. It is recognised that nurses experience anxiety and moral distress when they feel unable to provide information to patients <sup>9</sup>, and many researchers have reported that nurses may not be confident in having discussions about MROs <sup>3, 10, 11</sup>. In addition, it is recognised that infection prevention and control policies, and the science of microbiology, are often perceived as highly complex and sometimes confusing topics requiring a specialist knowledge base <sup>12</sup>. This can add to the challenges regularly faced by nurses.

An added dimension is that nurses may be concerned for their own safety when nursing MRO colonised patients <sup>13</sup>. Nurses working on wards experiencing outbreaks of MROs have described feelings of isolation and stigma associated with the event <sup>14</sup>. These feelings are understandable as infectious disease can be a highly emotive subject <sup>15-18</sup>. It is known that individual nurses and patients may respond very differently to the news that a person is colonised with an MRO <sup>19</sup>. This response may be founded in the person's prior understanding of infections generally, and antimicrobial resistance specifically. This understanding may have been reinforced or influenced by the experiences of that individual or of those close to them. Societal and cultural beliefs are also highly influential in determining this response <sup>5, 20, 21</sup> as is the person's psychosocial affect and resilience <sup>22</sup>. Recognising that a combination of these factors might have an emotional impact on nursing staff, the primary research question to be answered by this study was; What emotions do nurses feel when talking to MRO-colonised patients about MROs?

Knowing that a person's emotions are drivers for their attitude and beliefs, and that these attitudes and beliefs will greatly influence their behaviours related to any given situation <sup>23</sup> a

secondary question was; What do nurses notice about patient/health professional interactions in hospital when the patient is colonised with a MRO? In addition, this study presented an opportunity to explore the utility of Emotional Touchpoints methodology within the field of infection prevention and control.

### **Emotional Touchpoints Methodology and Method**

The primary purpose of the study is to elicit a contemporary understanding of the feelings experienced by nurses when discussing MROs with their patients. Although the research team, through their clinical experience, had ideas about the feelings that would be reported, it was important that participants had the freedom to reflect in a non-restrained way. For this reason, and in order to understand some of the reasons behind nurses' feelings, a qualitative approach using a framework based on Emotional Touchpoints <sup>24</sup> was selected for data collection and analysis.

Dewar *et al* <sup>24</sup> describe the Emotional Touchpoints method as a set of processes that can be used to elicit stories describing patients' healthcare experiences. This method uses Emotional Touchpoint trigger words such as scared, happy, relaxed or worried. It "focuses on emotion by asking patients and their families to think about key points in the patient journey and to select from a range of adjectives those that best describe how they felt about an experience" <sup>24</sup>. Words may be presented as a set of flash cards from which the patient chooses the most resonant. These then act as triggers to prompt discussion and further elaboration about the experience. The utility of this method is not restricted to the purpose of eliciting patient stories. Other applications have included health service evaluation and improvement <sup>25, 26</sup> and it has also been used to understand health professionals' experiences of providing care in a hospice setting <sup>27</sup>. It was therefore considered a feasibly suitable approach for this study that recruited nurses rather than patient participants. For this study however, the methodology was adapted. Rather than using the framework during individual face-to-face conversations, this study used a questionnaire. The need for participants to identify trigger emotional touchpoint words to found their further elaboration of their experience was in accordance with the principles of this methodology.

In order to identify previous studies into nurses' feelings about talking about MROs with colonised patients, a literature search was undertaken. Using the terms nurse; communication; infection; resistant; to search Pubmed, ProQuest, PsychInfo, Embase, EmCare, Medline and Google Scholar databases. For completeness the reference lists of retrieved publications were also cross checked for relevance.

No published studies specifically exploring the feelings and emotional responses experienced by nurses whilst explaining MROs to colonised patients were identified. There are however, a number of studies that examine the more generic experiences and attitudes of nurses engaged in patient care activities for patients with MRSA <sup>4, 17</sup> or VRE <sup>14</sup>. These studies describe a range of challenges including nurses having difficulty educating their patients about MROs, with the reasons cited as lack of knowledge or time <sup>4, 11, 17, 28</sup>. These studies did not set out to describe in specific detail, the emotional impact these difficulties have had on nurses. Despite this, one study of nurses' experience of caring for patients colonised with MRSA did identify three themes that connect with emotions: feeling

ignorant, afraid and insecure; feeling competent and secure; and feeling stressed and overworked <sup>17</sup>.

Another qualitative study asked 51 health professionals to reflect on their impressions and experience of MROs, from the perspective of being in the shoes of different health professions, patients and lay people, and health organisations. Deductive coding of participants' thoughts about how these other parties might experience MROs identified the presence of strong emotional elements including anxiety, anger, sadness, and disgust <sup>29</sup>. The literature search confirms the potential value of further exploration into the emotions felt by nurses speaking with patients about MRO. None of the aforementioned studies used Emotional Touchpoints methodology. In order to contextualise this methodology and identify the subject areas for which it has previously been used a further literature search was undertaken using the term Emotional Touchpoints to interrogate the same databases. Again, the reference lists of retrieved publications were cross checked for relevant publications.

This search revealed that Emotional Touchpoints methodology has been used to explore patient experiences of healthcare in a diverse range of clinical settings <sup>24, 30, 31</sup>. In addition to the previously noted studies that used Emotional Touchpoints in the evaluation of quality of care <sup>25</sup> and in the development of chronic pain services <sup>26</sup> it has also been used to explore health professionals' clinical and professional development experiences <sup>27, 32-34</sup>. It is acknowledged that other studies using Emotional Touchpoints methodology may have been published, but not retrieved due to their authors' use of different terminology, or their being published in a language other than English. However, the search indicates that this study may be the first to specifically explore the feelings that nurses experience when speaking with colonised patients about MROs. It also seems to be the first to apply Emotional Touchpoints methodology to the field of infection prevention and control and to consider its utility in this context.

#### *Researcher attributes and research setting*

The principal researcher is an experienced infection prevention and control nurse manager. The study took place within an Australian public health organisation that employs more than 7,500 staff. Healthcare is provided within eight inpatient facilities and a variety of community-based services serving a population of approaching 400,000 located south of Sydney. Data collection took place in the workplace during a seminar hosted by the principal researcher's team. Data analysis was supported by another member of this team as well as the principal researcher's PhD supervisors.

#### *Participant recruitment and ethical considerations*

Participants in this study were nurses that worked in a variety of inpatient and community-based settings and had a range of varied experiences and duration of professional practice. Participants were recruited whilst attending an infection prevention and control seminar in October 2018.

Prior to the delivery of any technical content, at the beginning of the seminar, delegates were invited to take part in this study. They were informed that the findings would be shared through publication. Participation in the study was entirely voluntary and no

identifying information was obtained during data collection. The need for ethics approval was assessed through the use of the NSW Health policy framework for quality improvement and ethics review <sup>35</sup> which determined that ethics approval was not required.

#### *Data collection*

Data collection took place during an infection prevention and control seminar using a paper survey tool. The draft questionnaire was created by the principal researcher and face validity was tested by presenting it to the infection prevention and control team for comment. Suggestions were incorporated to deliver further refinement and improvement. This ensured that questionnaire was appropriate for the study purpose before it was used in this study.

A purposive, convenience sampling recruitment method was used: all 74 attendees at the seminar were invited to take part, with 30 minutes being allocated in the timetable for the activity. Data collection was in the form of a survey of nurses' self-assessed ability to provide information about MROs to patients, exploration of their feelings about having these discussions using a framework of 'emotional touchpoint' words to prompt reflection, enabling them to provide examples of observed clinical practices in relation to patients colonised with an MRO. Participants were asked about their current role and duration of professional practice, and asked whether they had experienced explaining MROs to patients. No personal identifying information was requested, and it was made clear that there was no obligation for the form to be completed or to be handed to the researcher at the end of the session.

The survey had four parts, each taking 5 minutes, after an initial 5 minute presentation to formally invite delegates to take part and to provide instructions on completing the survey. For the first data collection phase, participants were presented with 53 adjectives describing emotions or feelings (e.g. anxious, scared, calm, empowered) printed on one side of paper. The word selection was initially derived from emoji options available on a popular social media application, and further refined for relevance by the researcher. Participants were asked to draw a circle around 5 words they might use to describe their feelings when explaining MRSA, VRE or CPE to patients in their work role. The words selected by each participant constituted their individual Emotional Touchpoint words.

For the second data collection stage of the activity, in order to further explore possible triggers for their emotional response to the most resonant 3 of their 5 words, they were asked to turn the page and provide written reflections and examples of experiences at work that had made them feel this way when explaining MRSA, VRE or CPE.

Part three of the exercise followed, where the following 4 questions were answered

1. What is your current job title?
2. How many years' experience do you have?
3. Have patients or their families asked you to explain MRSA, VRE or CPE to them?  
If no, why might this be?
4. If yes, did you feel you had the knowledge and resources you needed to have that conversation?  
If no, what else did you need?

Participants were then asked to provide some free text feedback describing things they may do differently for a patient with an MRO than with other patients, and describing things they may have seen their colleagues do, or heard them say, about patients with an MRO. The data collection protocol is summarised in Table 1 below.

At the end of the session participants were invited to pass their completed questionnaires to the front of the room prior to the start of the next timetabled item, following a reminder that there was no obligation to do so.

A copy of the questionnaire is shown at Appendix 1.

### *Analysis*

A graphical depiction of the frequency of selection of the offered Emotional Touchpoint words in phase 1 was achieved by entering the participants' selected words into an internet 'word cloud' generation tool (provided at [www.wordclouds.com](http://www.wordclouds.com)). The most frequently selected words describe the strongest feelings felt by this group of nurses.

Prior to analysis, all 53 proffered words were classified as either 'positive' or 'negative' by the principal researcher and a colleague. A deductive content analysis of participants' responses for part 2 was undertaken. In addition, the free text responses provided at part 2 and part 4 were coded inductively. Initial open coding was done by the first author, then similar codes were grouped, sorted and collapsed together to create categories. Further consideration of the connections, similarities and differences between sets of codes enabled the identification of key patterns and themes; initially proposed by the first author, and then refined and revised in collaboration with the co-authors and a second experienced infection prevention and control nurse who was present during the data collection activity. In order to further improve the trustworthiness of the reported findings, examples of responses are provided throughout this paper enabling the reader to derive their own interpretation and insights.

### **Results**

Completed survey forms were returned by 53 of the 74 delegates (72%). Participants' duration of experience were >20 years (N=24), between 10 and 20 years (N=16), between 5 and 10 years (N=10) and between 2 and 5 years (N=3).

15 staff did not complete parts 1 or 2 as they reported (in part 3) not having had discussions with patients or family members regarding MROs. For 3 of these staff this was attributed to their role working in operating theatres or mental health settings. 4 gave the reason that others had already explained the MRO to the patient and 3 felt that patients were not aware, did not want to know or just accepted previously provided information. 4 gave no response and 1 stated that MROs do not happen in their service (maternity).

#### *Parts 1 and 2. Emotional Touchpoint words*

For parts 1 of the study, thirty eight of the 53 proffered 'emotional touch point' words were selected to describe participants' feelings when discussing MROs, leaving 15 unselected. Content analysis through the use of a word cloud of the selected words is shown at figure 1, with font size correlating to the frequency of selection, and therefore the strength of that emotion being felt within the cohort.

ADD FIGURE 1 HERE

Further content analysis was done by counting the frequency of selection of all the words chosen by the 38 nurses in their 184 responses (mean = 4.8 selected words per nurse), to compare the numbers of 'positive' words with the numbers of 'negative' words. This revealed the top 5 (55/184) selected 'positive' words to be Knowledgeable, Calm, Thoughtful, Supported and Empowered. The top 5 (59/184) selected 'negative' words were Nervous, Concerned, Sorry, Anxious and Worried.

In part 2, these 38 nurses provided statements for 113 chosen words (mean = 2.97 reflections per nurse) to describe why that word had been selected. Examples include;

INSERT TABLE 2 HERE

Inductive coding and thematic analysis of all 113 rationale responses was undertaken in order to describe the key drivers for the emotional response felt by participants when discussing MRO colonisation with their patients. Four key themes of Empowerment through knowledge; Performance anxiety; Concern for the patient; and Concern for professional reputations, were derived from this data, as shown (with illustrative examples) in table 3:

INSERT TABLE 3 HERE

#### *Part 4. Reflection on workplace-observed clinical practices*

Of the 53 respondents who returned survey forms, 51 provided feedback describing the things they might do differently for a patient known to be colonised with an MRO compared to other patients. The majority of responses described the requirements for compliance with hospital policy such as the use of personal protective equipment (PPE), hand hygiene and equipment cleaning as well as single room isolation.

Only one person reflected personally treating these patients differently;

“Have empathy, try and desensitise the stigma of treating them differently to others and, ashamedly, there are times when we stand at the door and speak because we are time poor. This needs to stop.”

In contrast, 44 of the 53 participants provided examples of things they had heard their colleagues say, or seen them do, in relation to patients colonised with an MRO. Seven nurses stated that they had not noticed these patients being treated any differently, and others reflected on the importance of effective communication;

“Handover what MRO patients have and where - use of precautions”.

One nurse described a sense that the need for the additional precautions to be implemented creates extra work and is seen as a nuisance by some colleagues;

“There can be an internal eye roll (less about the patient and more about the circumstance) regarding caring for a patient with an MRO”

However, this was not a common thread. Inductive coding derived two key themes where differences were reported; Distancing, and The need to protect against contagion. A description of each key theme, and some illustrative examples taken from the responses are described in table 4.

INSERT TABLE 4 HERE

Six participants reported no differences in the way that their colleagues treat patients with MROs compared to others. One indicating recent changes:

“I haven’t noticed anything recently. Years ago there was a lot of phobia and lack of information”

Five participants made no response to this question.

## Discussion

As discussed, Emotional Touchpoints methodology has not previously been used to explore nurses’ feelings about discussing MROs with patients. The topic has however been referred to in an investigation that used semi-structured interviews to explore nurses’ attitudes about caring for patients colonised with MRSA <sup>17</sup>. These authors found that the more knowledge the nurses had about MRSA, the more positive was their attitude to caring for these patients. This study used a different methodology, and considering the specific act of communicating with colonised patients about MROs rather than generic ‘caring’. Analysis of part 2 of our study revealed similar themes to theirs as depicted in Table 5, with our ‘Empowerment through knowledge’ correlating to their “feeling competent and secure”, and our ‘Performance anxiety’ correlating to their “feeling ignorant, afraid and insecure”.

INSERT TABLE 5 HERE

However, in contrast to that study, participants here did not cite workloads or stress as impacting on their experience of talking to patients about MROs. In our study nurses’ concern for the patient and for professional reputations were key themes that were not identified by Andersson, Andreassen Gleissman <sup>17</sup>. It is possible that our questionnaire may have encouraged participants to consider the impact on patients, whereas Andersson’s interview guide indicates that the reflection on ‘differences’ may have been more focussed on the workplace experience than on their patients’ experiences; “Describe whether or not you see any differences in caring for a patient with MRSA compared to caring for patients with other diagnoses” <sup>17</sup>

In part 2 of this study, two of the themes that were identified through the inductive analysis process; Empowerment through knowledge, and Performance anxiety, relate directly to the nurse and their own attributes and abilities.

The nurses who took part in this study placed a high value on their ability to apply theoretical knowledge to their clinical practice, and reported negative feelings of anxiety and sorrow when they had felt unable to provide adequate information to their patients. Participants’ responses and free text commentary clearly identify the need for nurses to have access to appropriate and relevant resources to increase their confidence in speaking to patients about MROs. Although some of the participants stated that their security in having these discussions stemmed from having many years of nursing experience and being used to managing patients with MROs, others were grateful for the written materials and support from the infection prevention and control team. These findings resonate with those of Easton and Sarma<sup>3</sup> who caution against making assumptions that staff have adequate

knowledge and expertise in relation to MRSA, and call for attention to be given to understanding the needs of the intended audience when developing educational programmes and information materials.

Many participants relayed anxieties and concerns about feeling inadequate or insecure in delivering information and advice to patients about MROs. It is important for infection prevention and control teams, and nurse leaders to recognise that these feelings can occur. Failure to meet the needs of nurses who feel this way may lead to them losing confidence further and potentially to them providing poorer quality care to these patients<sup>17</sup>, or suffering compassion fatigue and burnout that may potentially influence their decision to remain in the profession<sup>9</sup>.

The other key themes identified in this part of the study; Concern for the patient and Concern for professional or organisational reputations, demonstrate the empathy that nurses have for their patients and for their professional colleagues. Concern for the reputation of their employing organisation was also apparent.

As shown in Table 2 participants who selected words such as sorry, concerned, angry and guilty provided explanations for their choice that demonstrated empathy and concern for the patient.

Many participants were concerned about the impact the MRO had had on patients' access to healthcare. One stating feeling annoyed, sorry and disappointed when explaining the impact that VRE colonisation had had on a patient;

“A dialysis patient of mine was so diligent in his own hand hygiene when admitted and always tested negative for VRE when screened routinely. However when he became unwell and required ventilation in ICU he lost control. He ended up with VRE that admission. He then needed to do dialysis 30km from home in the VRE unit”.

On the discovery that this patient had acquired VRE he was required to travel to a different dialysis unit (with isolation facilities) for his treatment rather than being managed in his local unit. This would likely have created financial and logistical difficulties for this patient. Such examples demonstrate how organisational policies on the management of MRO colonised patients may sometimes be centred more on the pathogen than on the holistic needs of the patient.

In addition to the concerns our participants held for individual patients, they had a shared concern for the reputation of their employing organization, and also for the professional standing of themselves and their colleagues. This was in the context of nurses witnessing poor infection prevention and control practices. Words such as ‘blame’ and ‘negligence’ were used by nurses who felt sorry or ashamed when explaining MRO colonization to their patients. Nurses felt that the MRO acquisition would damage the reputation of their employer, and also reduce their patients' confidence in the hospital and its staff. These concerns are not unfounded; a British study involving 60 members of the public found that that most people associated MRSA with dirty and poorly managed hospitals<sup>36</sup>.

In part 4 of this study, one participant's response indicated a sense of nuisance at the need to comply with the precautions in place to prevent MRO transmission. Specific reasons for this view were not captured here, but this sense is in agreement with other published reports including those described in an Australian study involving 12 healthcare workers

from a variety of professions. That study identified the impact that MRO precautions have on staff resources, especially time, and that PPE can be uncomfortable to wear. The challenges faced by staff in explaining the MRO precautions to patients and visitors were also noted<sup>13</sup>. It is possible that similar factors could have contributed to the sense of nuisance described by this one nurse in our study.

The two key themes identified in this part of the study were Distancing and the The need to protect against contagion, as shown in Table 4.

Participants gave many examples of strategies that were used by individuals to create distance between the themselves and the patient. Examples included the inappropriate use or over-use of PPE, a MRO colonised patient's care being timetabled after all other patients in the day, or staff not entering the patient's room. Similarly, Andersson et al<sup>17</sup> found that the fear and uncertainty felt by their 15 nurse participants impacted on their clinical practice in a number of ways including refusal to enter a patient's room, or even taking sick leave so as to avoid caring for patients with MRSA. Reasons were given as a fear of becoming infected, or of taking the infection home to their family.

The most concerning theme that emerged from this part of the study, was participants' reports of having witnessed colleagues' use of stigmatising language or breaching codes of conduct with regard to patient confidentiality by disclosing MRO colonisation of one patient to another. Other authors have reported similar findings<sup>37</sup>. Terminologies such as the 'dirty' patient or room, were frequently described and the behaviours noted by participants here may be explained by findings in a UK study where the concept of the 'dirty' patient resulted in nurses taking steps to protect themselves<sup>38</sup>.

These key themes combine to illustrate how the emotions felt by nurses in speaking to colonized patients about their MRO might be triggered and then further reinforced by the behaviours they observe in their colleagues and the reactions of their patients.

### **Application of Emotional Touchpoints methodology**

The Emotional Touchpoints methodology was adapted. Rather than taking the form of a one to one conversation, this study used a paper format to present a range of adjectives describing emotions or feelings to trigger further reflection and description of experiences. In this way, a large amount of information was gathered in a group setting, in a short period of time. This modified approach facilitated meaningful insight into the experiences of nurses communicating MRO colonisation or infection to patients and their families, in a way that is practical to replicate in a clinical setting.

### **Limitations**

We modified the manner in which Emotional Touchpoints was used. The usual approach for this methodology is to have a one to one conversation or semi-structured interview where the chosen adjective prompts a more in-depth discussion about the experience<sup>24</sup>. Despite this our modified approach has enabled a useful non-obtrusive snapshot of nurses' feelings, experiences, attitudes and observations of their own and their colleagues' practice within the local context.

Another limitation is that the participants had a declared interest in infection prevention and control by virtue of their attendance at the seminar. There was a risk that the seminar content could influence responses and so in mitigation, the activity was undertaken at the beginning of the day before any technical or practice-related content or discussion had taken place.

We recognise that the frequency of feedback describing the usefulness of resources and access to the infection prevention and control team may have been increased as a result of the researchers being members of that team and the activity occurring at an infection prevention and control seminar. However similar findings were also reported by Hill *et al*<sup>11</sup> in their qualitative study using focus groups to explore healthcare workers' knowledge of MRSA, where facilitators were not from the infection prevention and control team.

## Conclusion

Despite some limitations this activity has identified that nurses in this Australian public health setting report experiencing a variety of emotions and feelings when speaking with patients about MROs. A number of key themes were identified, such as nurses' fear of not being able to support their patients adequately through lack of knowledge, or concern about patients and families apportioning blame to them as individuals or the organisation more generally. On a positive note many of these nurses felt empowered when they felt they had suitable knowledge to answer questions.

Nurses had empathy and demonstrated a good understanding of the potential impact of MRO colonisation on their patients. Despite this, it is concerning to see evidence of discrimination affecting patients colonised with an MRO. Participants in this study cite numerous observations of patients colonised with an MRO being spoken about in derogatory or stigmatising terms such as 'dirty', or have their care planned around the MRO rather than their clinical need when they are scheduled at the end of theatre lists. They may also receive less clinical and social contact with hospital staff.

Previously, Emotional Touchpoint methodology has largely been used to explore patients and their families' experiences of healthcare, and for informing service improvements<sup>24-27, 30</sup>. In this study a modified Emotional Touchpoint methodology has enabled a breadth of understanding of the feelings that nurses experience when talking about MROs to colonised patients.

As a result of this study the following recommendations for practice are made:-

1. Hospital staff should have access to up to date and appropriate information to provide to patients. This must be easy to read and concisely answer common concerns as it has previously been identified that many resources are too wordy and complex to be useful<sup>11</sup>.
2. Infection prevention and control training should also be accompanied by reflection and communication skills development opportunities to support health professionals in addressing the emotions evoked when discussing MROs with their patients.
3. Infection prevention and control training should explicitly present examples of discriminatory behaviours that may be experienced by patients. Nurses will then be in a stronger position to identify and challenge individual as well as organisational behaviours that are not in the best interest of the patient.
4. The advice of the infection prevention and control team must be accessible to staff as well as patients when necessary.

This study demonstrates the importance of infection prevention and control teams having an understanding of the emotional connection that exists between clinicians and their patients and colleagues when an MRO is identified. It is the responsibility of infection prevention and control teams to ensure that clinicians are not placed in the position of feeling disadvantaged or stressed due to not having appropriate education, resources and other necessary support made freely available to them.

This activity has enabled an increased recognition of some of the difficulties encountered by nursing staff when talking about MROs. This understanding will enable infection prevention and control education and awareness strategies and support systems to be reviewed and improved in a similar manner to other authors' use of this method to develop improved home care packages and chronic pain services<sup>26, 39, 40</sup> or to understand staff experiences in dementia care<sup>27</sup>. This will in turn help clinicians to more effectively support patients and their families as well as colleagues. This should reduce the likelihood of patients being subjected to discriminatory practices and self-protective decision-making by healthcare workers, that are founded on concerns about the presence of the pathogen rather than the identified holistic needs of the patient.

### **Ethics**

The need for ethics approval was assessed through the use of the NSW Health policy framework for quality improvement and ethics review<sup>35</sup> which determined that ethics approval was not required.

### **Acknowledgements**

The authors thank members of the infection prevention and control team for their support and in particular for their assistance in the data collection and thematic analysis parts of this study.

### **Funding**

This research did not receive any specific grant from funding agencies in the public, commercial or not-for-profit sectors.

### **Conflicts of interest**

The principle researcher is Nurse Manager for the infection prevention and control service within the health service organisation in which this research took place. There are no other conflicts of interest.

### **Authorship Statement**

Joanna Harris – responsible for Conceptualization; Data curation; Formal analysis; Investigation; Methodology; Project administration; Resources; Validation; Writing – original draft; Writing – review & editing.

Prof. Kenneth Walsh – responsible for - Methodology; Supervision; Validation; Writing – review & editing.

Dr. Hazel Maxwell – responsible for - Methodology; Supervision; Validation; Writing – review & editing.

Prof. Susan Dodds – responsible for - Methodology; Supervision; Validation; Writing – review & editing.

## References

1. NHMRC. Australian Guidelines for the Prevention and Control of Infection in Healthcare. 2019.
2. Seibert DJM. Knowledge, Perceptions, and Practices of MRSA Transmission Prevention among Acute Care Setting Healthcare Workers. George Mason University, 2013.
3. Easton P, Sarma A, Williams F, Marwick C, Phillips G and Nathwani D. Infection control and management of MRSA: assessing the knowledge of staff in an acute hospital setting. *J Hosp Infect.* 2007; 66: 29-33.
4. Pedro AL, Sousa-Uva A and Pina E. Endemic methicillin-resistant *Staphylococcus aureus*: Nurses' risk perceptions and attitudes. *Am J Infect Control.* 2014; 42: 1118-20.
5. Sengupta A, Rand C, Perl TM and Milstone AM. Knowledge, awareness, and attitudes regarding methicillin-resistant *Staphylococcus aureus* among caregivers of hospitalized children. *J Pediatr.* 2011; 158: 416-21.
6. Wilson A. The Rural Research Capacity Building Program 2009 Final report for research project. 2009.
7. Raupach-Rosin H, Rübsamen N, Szkopek S, et al. Care for MRSA carriers in the outpatient sector: a survey among MRSA carriers and physicians in two regions in Germany. *BMC Infect Dis.* 2016; 16: 184.
8. Ploug T, Holm S and Gjerris M. The stigmatization dilemma in public health policy -the case of MRSA in Denmark. *BMC Public Health.* 2015; 15: 640.
9. Morley G. What is "moral distress" in nursing? How, can and should we respond to it? *J Clin Nurs.* 2018; 2018: 3443-5.
10. Burkitt KH, Sinkowitz-Cochran RL, Obrosky DS, et al. Survey of employee knowledge and attitudes before and after a multicenter Veterans' Administration quality improvement initiative to reduce nosocomial methicillin-resistant *Staphylococcus aureus* infections. *Am J Infect Control.* 2010; 38: 274-82.
11. Hill JN, Evans CT, Cameron KA, et al. Patient and provider perspectives on methicillin-resistant *Staphylococcus aureus*: A qualitative assessment of knowledge, beliefs, and behavior. *The Journal of Spinal Cord Medicine.* 2013; 36: 82-90.
12. Farr BM. Reasons for noncompliance with infection control guidelines. *Infect Control Hosp Epidemiol.* 2000; 21: 411-6.
13. Godsell MR, Shaban RZ and Gamble J. "Recognizing rapport": health professionals' lived experience of caring for patients under transmission-based precautions in an Australian health care setting. *Am J Infect Control.* 2013; 41: 971-5.
14. Mitchell A, Cummins T, Spearing N, Adams J and Gilroy L. Nurses' experience with vancomycin-resistant enterococci (VRE). *J Clin Nurs.* 2002; 11: 126-33.
15. Almutairi AF, Adlan AA, Balkhy HH, Abbas OA and Clark AM. "It feels like I'm the dirtiest person in the world.": Exploring the experiences of healthcare providers who survived MERS-CoV in Saudi Arabia. *J Infect Public Health.* 2018; 11: 187-91.
16. Tudor C, Mphahlele M, Van der Walt M and Farley JE. Health care workers' fears associated with working in multidrug- and or extensively-resistant tuberculosis wards in South Africa. *Int J Tuberc Lung Dis.* 2013; 17: 22-9.
17. Andersson H, Andreassen Gleissman S, Lindholm C and Fossum B. Experiences of nursing staff caring for patients with methicillin-resistant *Staphylococcus aureus*. *Int Nurs Rev.* 2016; 63: 233-41.
18. Wiklund S, Fagerberg I, Ortqvist A, Broliden K and Tammelin A. Staff experiences of caring for patients with extended-spectrum beta-lactamase-producing bacteria: A qualitative study. *Am J Infect Control.* 2015; 43: 1302-9.

19. Lindberg M, Carlsson M and Skytt B. MRSA-colonized persons' and healthcare personnel's experiences of patient-professional interactions in and responsibilities for infection prevention in Sweden. *J Infect Public Health*. 2014; 7: 427-35.
20. Braut GS and Holt J. Meticillin-resistant Staphylococcus aureus infection--the infectious stigma of our time? *J Hosp Infect*. 2011; 77: 148-52.
21. Mak WW, Cheung F, Woo J, et al. A comparative study of the stigma associated with infectious diseases (SARS, AIDS, TB). *Hong Kong medical journal = Xianggang yi xue za zhi / Hong Kong Academy of Medicine*. 2009; 15 Suppl 8: 34-7.
22. Steptoe A, Dockray S and Wardle J. Positive affect and psychobiological processes relevant to health. *J Pers*. 2009; 77: 1747-76.
23. Ajzen I. The theory of planned behavior. *Organ Behav Hum Decis Process*. 1991; 50: 179-211.
24. Dewar B, Mackay R, Smith S, Pullin S and Tocher R. Use of emotional touchpoints as a method of tapping into the experience of receiving compassionate care in a hospital setting. *J Res Nurs*. 2010; 15: 29-41.
25. Kuis EE and Goossensen A. Evaluating care from a care ethical perspective: A pilot study. *Nurs Ethics*. 2017; 24: 569-82.
26. Outlaw P, Tripathi S and Baldwin J. Using patient experiences to develop services for chronic pain. *Br J Pain*. 2018; 12: 122-31.
27. Waterfield K, Weiland D, Dewhurst F, et al. A qualitative study of nursing staff experiences of delirium in the hospice setting. *Int J Palliat Nurs*. 2018; 24: 524-34.
28. Seibert DJ, Speroni KG, Oh KM, DeVoe MC and Jacobsen KH. Preventing transmission of MRSA: a qualitative study of health care workers' attitudes and suggestions. *Am J Infect Control*. 2014; 42: 405-11.
29. Bushuven S., Dietz A, Bushuven S, Dettenkofer M. and Langer T. Interprofessional perceptions and emotional impact of multidrugresistant organisms: A qualitative study. *Am J Infect Control*. 2019; Published online 6th March 2019.
30. Adamson E, Pow J, Houston F and Redpath P. Exploring the experiences of patients attending day hospitals in the rural Scotland: capturing the patient's voice. *J Clin Nurs*. 2017; 26: 3044-55.
31. Bridges J and Wilkinson C. Achieving dignity for older people with dementia in hospital. *Nurs Stand*. 2011; 25: 42-9.
32. Adegoke KAA. Novice to transformational leader-a personal critical reflection. *International Practice Development Journal*. 2017; 7.
33. Donetto S, Malone M, Hughes J, Morrow E, Cowley S and Maben J. Health visiting: the voice of service users. *Learning from service users' experiences to inform the development of UK health visiting practice and services*. 2013.
34. Odell J and Warren D. Patients First: Supporting Nurse-Led Innovation in Practice. *Evaluation*. 2014; 4: 5.
35. NSW Health. Quality Improvement and Ethics review: A Practice guide for NSW GL2007\_020. Sydney, Australia: NSW Health, 2007.
36. Washer P, Joffe H and Solberg C. Audience readings of media messages about MRSA. *J Hosp Infect*. 2008; 70: 42-7.
37. B. Rump, A. Timen, M. Hulscher and M. Verweij. Ethics of Infection Control Measures for Carriers of Antimicrobial Drug-Resistant Organisms. *Emerg Infect Dis*. 2018; Vol. 24, .
38. Jackson C and Griffiths P. Dirt and disgust as key drivers in nurses' infection control behaviours: an interpretative, qualitative study. *J Hosp Infect*. 2014; 87: 71-6.
39. Day J, Taylor ACT, Summons P, et al. Home care packages: insights into the experiences of older people leading up to the introduction of consumer directed care in Australia. *Aust J Prim Health*. 2017; 23: 162-9.

40. Dewar B and Nolan M. Caring about caring: developing a model to implement compassionate relationship centred care in an older people care setting. *Int J Nurs Stud*. 2013; 50: 1247-58.