Impact of Sharps Injuries on Health Care Workers

Karen A. Daley, PhD, RN, FAAN

IT'S NOT OK

Taking a stand against Sharps Injuries.

Background – What We Know

- Exposure to bloodborne pathogens (BBP) among most familiar occupational risks for nurses
- Sharps injuries (SIs) as the most efficient mode of BBP transmission
- Potential for over 20 BBPs – major concerns include: HIV, HBV, HCV
- SI impact most often discussed in relation to financial costs
- Less focus on and concern re: personal impact of SIs on exposed workers.

ANA Health Risk Appraisal (HRA) Data

- Collected by ANA from Oct 2013 through Dec 2016
- HRA data collected as part of ANA Healthy Nurse Campaign
- Over 8400 nurses completed survey
- Included questions related to sharps injuries

ANA Health Risk Appraisal Data

Survey questions:

- *In my current work environment, I believe I am at a significant level of risk for the following health and safety hazards.* Nurses continue to perceive sharps injuries as one of their top 5 occupational risks (#4 among 21 options).
- *My facility has a sharps injury prevention program:* 75% of nurses agree (A) or strongly agree (SA)
- *I have access to sharps safety devices:* 93% A/SA
- *I use sharps safety devices all the time:* 86% A/SA; 10% strongly disagree (SD) or disagree (D)
- *I have received adequate education & training on sharps safety protocols and policies:* 85% A/SA; 11% SD/D
- *I am involved in the selection & evaluation of sharps safety devices:* 30% A/SA; 44% SD/D

The Human Toll

- Little is known about the lived experience of SIs
- Unknown potential for increased job stress, job turnover or career loss related to SIs
- Anecdotal evidence exists to suggest a significant psychological burden exists for workers exposed to BBP via SIs
- Phenomenological study conducted in 2010 to facilitate better understanding the lived experience and meanings of SI impact.

Study Findings: 3 Essential Themes

Three themes reflect *the meanings of the lived experience of sharps injuries:*

1. Being shocked: The potential of a serious or life-threatening infection
2. Needing to know it's going to be okay
3. Sensing vulnerability

Being Shocked…. & *Dimensions*

The essence and meaning of the lived experience of SI that reflects the initial response and actions taken in the moments immediately following injury.

Theme 1. Being shocked: The potential of a serious or life-threatening infection

(a) responding viscerally and emotionally to the exposure

(b) acting to reduce contamination

(c) feeling an urgent need for immediate care

Responding viscerally & emotionally….

Sarah: *"I said 'Oh shit" and I knew this patient was HIV positive. I knew that she had hep C, but I didn't really know what the status of either of them were. So basically I said "Oh shit"and then had an adrenaline rush, but I didn't think about much else."*

Cookie: "[was stuck] *by a ten blade. And since the patient was fully infected with this abscess on her buttocks, and we also knew her history of HIV and hep C, I broke scrub… Well, for a minute I didn't break scrub. I just stood there and couldn't believe it."*

IT'S NOT OK

Responding viscerally & emotionally….

Maggie: *"It was just sort of feeling your heart pounding out of your chest, not being able to squeeze your finger hard enough to clean the wound good and sort of going back and forth between: Did that really happen? Or am I just imagining this?"*

Cindy: *"I actually remember I had a sudden sinking feeling. I'm not an alarmist, but when it first happened, it was pretty frightening…. But I knew as soon as that sharp went into my thumb that I was in serious trouble, just because of the depth of it and something clicked inside me…."*

IT'S NOT OK

Acting to reduce contamination

Cookie recalled having to leave the OR abruptly to perform first aid on her finger: *"I broke scrub. Rinsed the wound as good as I could and put pressure on it with gauze."*

Hillary: *"I walked into the med room where there's a sink and running water and I kept thinking… am I supposed to be milking this? That's what I remember. Is that going to help if I keep milking it to prevent any cross contamination?"*

Feeling an urgent need for immediate care

Hillary: *"I went in and told my supervisor. So she came out and she goes: "Oh well," went through the file cabinet and said: "Here are the forms" and I said: "But I can't fill them out, I'm left handed" and she goes: "Alright, I'll fill them out for you." So she proceeded to fill them out on my behalf and she asked me questions and I answered them and then she says: "Well, you probably have to go to the hospital" and I said: "Okay."*

Feeling an urgent need for immediate care

Vanessa received support from her charge nurse when she reported her injury. Another nurse in the ICU responded much differently to Vanessa's decision to seek immediate care for her exposure.

I actually had another nurse that said: "*You're not going to go over to Occ Health to do that" and I said: "Yes, I think I will." She said: "It was just a… it's just a staple" and I told her: "Well, if I was not bleeding under my glove… I mean there was blood" and she said: "Oh, whatever." She's like, "You just want to leave your shift" and I told her: "No, not really."*

IT'S NOT OK

Feeling an urgent need for immediate care

Sarah: *"I came out to the hallway and one of my other fellow nurses was standing out there with her cart and I said: "I just stuck my finger" and she said: "Okay," and we went to the nurses' station and she directed another nurse to get the incident report, filled out the incident report, and I was basically whisked away to the emergency room, because on the night shift, the health services is closed. So they covered the rest of my patients and I just went."*

Needing to Know…. & *Dimensions*

Theme 2: Needing to know it's going to be okay

(a) assessing risk

(b) seeking post-exposure intervention and caring responses from others

The initial meaning in the aftermath of SI – includes risk assessment and seeking post-exposure care and reassurance with respect to the perceived threat.

Assessing risk

Maria explained why circumstances surrounding her second injury raised her fears regarding risk: *"I was aware that he* [the source patient] *was a drug and alcohol counselor and I was also aware that many times people in that role might have had experiences of their own with a history of drug or alcohol use and so that sort of caused me to have a higher level of concern as well."*

Assessing risk

After exposure to a high-risk source patient, Maggie articulated why, in her case – and others – risk statistics and facts really didn't matter: "*I was scared. I was pretty freaked out… I was pretty freaked out… and you could have told me the statistics until the cows came home. That wasn't going to change anything because I'm like… I can be that one person. It just didn't change anything.*"

Seeking post-exposure intervention & caring responses from others

Hillary shared a disturbing encounter in the initial moments after she was placed into a patient room in the ED on the day of her injury:

"I was there probably, maybe ten minutes. I waited there and then a doc came in and asked me what had happened, so I explained it to him, and he said: "Well, did you get a draw from the other person?" and I said: "What?" All I'm thinking about was my thumb and I said: "No." He says: "Well, don't you have policy and procedure?" I said: "I don't know. I don't know about any policy and procedure. I just know about my thumb." And he proceeded to lecture me."

Seeking post-exposure intervention & caring responses from others

Sandy shared a more reassuring encounter after a high-risk exposure at a DOC facility where she worked: "*I was sent down to to the ICU department where the doctor was, the doctor on call. They were really good. The funny thing is, these doctors, they're all kids. They're all kids and yes, they were really good…. …I felt very comfortable with the whole process and I wasn't alarmed. I guess because they were comfortable. …They took blood and instantly put me on medications because this patient is HIV positive and* [has] *hep C. Immediately I was given medication. Within two hours I was put on medication….*"

Seeking post-exposure intervention & caring responses from others

Cindy, an NP who cut herself with a scalpel while debriding a foot ulcer in a diabetic patient with HCV, described her occupational health experience as very positive: *"It was excellent. They were very supportive. They have a very good protocol for treating sharps injuries and exposures and they knew exactly what to do and say to me and they answered all my questions, gave me very good instructions and I always felt confident that they would help me through whatever was coming next. …They did offer me prophylaxis for the HIV and I opted out of it, because I just had this feeling that I was going to be okay."*

Seeking post-exposure intervention & caring responses from others

After an exposure to a high-risk patient, Maggie listened to the conversation taking place between providers outside her room: *"So they manage it, in my particular institution, on the non-acute side of the emergency department. I actually know the protocol because it's certainly something that we see there. It really stunk being on this side of the protocol, not the work-up piece of it. And it was a little disturbing, because there was old paperwork, there was new paperwork, and it's like no, I can hear them talking: "No, we don't do it that way anymore" and there was a lot of confusions and I kind of just took all that in thinking: Wow, this should not be confusing. This should be really straightforward and I was struggling because I'm like… Are they doing the right thing for me? Because clearly they've got different stuff here."*

Sensing Vulnerability & *Dimensions*

Theme 3: Sensing vulnerability

(a) facing the fragility of health

(b) distinguishing supportive vs. non-supportive relationships

(c) being vigilant into the future

Meaning of the aftermath of SI that is associated with needing to know and reflects susceptibility – both real and perceived – to disruption of health and interpersonal relationships.

Facing the fragility of health

Vanessa: *"…going through this, including waiting for test results, made me think about the fact that things can happen in nursing, even though you do everything you're supposed to. Can't say I've thought about that much before this happened to me. Maybe a little bit when I had MRSA. That was job-related, too. But I'm young and maybe I didn't feel that those risks were real before. That my health could really be affected. This episode made me think about that more and reminded me I need to keep doing everything possible to stay safe on this job, even though I know things still might happen…."*

Facing the fragility of health

Cindy: *"I was very concerned and I remember going home and going on the computer and looking up all kinds of information on hep C and that actually freaked me out more than the original sharps injury… just thinking about the implications that that would have, not only for myself and my health, but for my family and what that would mean for my children if I were to get sick and have a chronic illness like that...."*

Facing the fragility of health

Cookie: *"I worked the first week, a couple of days after I got stuck, because I didn't know any better and I was sick and I didn't realize the medicine was causing me to feel awful and I didn't want to take sick time so I'm just struggling through it and then they put me on a second drug Caletra and that's what caused me to get really sick and I didn't know it would cause such like joint pain and nausea and vomiting and diarrhea until the nighttime. …I didn't quite understand that, you know, how I would feel and then finally one of the nurse practitioners said to me: "Well, you're giving a healthy body chemotherapy. You're giving a healthy body medicine to take care of someone that isn't full blown AIDS…."*

Distinguishing supportive vs. non-supportive relationships

Hillary: *"I definitely feel like I have not received respect or compassion from my coworkers as a result of this incident. I can't say not all of the coworkers. As I say, some have been condescending and others have been caring."*

Vanessa: *"I don't think anyone took it seriously… Made me feel like I was dealing with this more on my own. And I know there were some staff, like the charge nurse, who were supportive, but I was disappointed that more of the staff I considered friends didn't say anything… It could have turned out differently for me and that's changed how I feel about some of my relationships at work."*

Distinguishing supportive vs. non-supportive relationships

Cookie: *"…Some people got it, some people didn't. The people that went into denial about what was going on and didn't ask me how I was doing, I could tell they just couldn't handle it. Because I kept thinking about why isn't anyone from the hospital calling me. …I just couldn't believe it and then when I was able to reach out and get the support I needed, I was okay."*

Being vigilant into the future

Cindy: *"I think it just made me more cautious, not to the point that I'm neurotic about things, but I am more careful about when I'm working with sharps, but being that sick when I was on the Vancomycin changed the way that I look at my life and I realize I'm working too hard, not spending enough time with my family and so I 'd have to say there's some positives that came out of it, because it made me reevaluate the way I was living my life, the way I was interacting with my family…."*

Being vigilant into the future

Cookie: *"I stand up for myself more. I've slowed down and I've taken charge of my life there. I pursue things that I really want and I just don't let them just push me around and do whatever they need to do. …I don't do half the overtime and I just live a little bit more simply. I'm happier. Yeah..."*

Being vigilant into the future

Maggie: *"I really think we have more work to do in the healthcare system around it. We've come a long way and we've done a lot of great stuff and all the safety issues have been addressed pretty well. Even though we still hear about needlesticks, at least from my perspective in the emergency room, we don't have them at anywhere the rate we used to, but our response is still not what I'd like to see. I think given everything I've learned from it, it's not just a needlestick and quite frankly that was probably the smaller part of it. The bigger part was the response, the therapy, the follow up, all that stuff could be addressed in a much better way and it shouldn't be like, these meds can just upset you. These meds can literally knock you on your butt…"*

Nursing Practice Recommendations

- *Within direct care settings*:

-- PREVENTION IS KEY!

-- Supervisors/management maintain familiarity with standards of post-exposure care; emphasis placed on need for up-to-date policies and procedures.

-- Importance of social support following SI should be communicated; explore need for accommodation for injured nurses, especially those on PEP.

-- Acknowledgment of all injuries is important.

-- Cultures of safety be created and maintained to prevent injuries and encourage reporting.

Nursing Practice Recommendations

- *Occupational health providers:*

-- Eliminate one-size fits all mentality.

-- Identify nurses at-risk for increased vulnerabilities after injuries relative to risk perception, PEP administration, social support deficits, & prolonged testing periods.

-- Institute standards for closer follow-up of nurses exposed to HIV and hepatitis positive source patients and for those taking PEP.

-- Establish minimum institutional educational standards for prescribers of PEP.

-- Facilitate quick turnaround on testing.

Thank you!

kadaley@comcast.net

IT'S NOT OK

Taking a stand against Sharps Injuries.

#IT'S NOT OK

TAKE A STAND.
SHARE YOUR EXPERIENCE.

Help us tackle the persistent issue of sharps injuries by sharing your #ITSNOTOK experience on LinkedIN, Instagram & Facebook!