

Just Research of Dating Apps and Violent Sexual Assault Cases

Introduction [00:00:05] Now this is recording, RTI International Center for Forensic Science presents Just Science.

Voiceover [00:00:19] Welcome to Just Science, a podcast for justice professionals and anyone interested in learning more about forensic science, innovative technology, current research, and actionable strategies to improve the criminal justice system. In episode two of our 2022 Sexual Assault Awareness Month mini season, Just Science sat down with Dr. Julie Valentine, a researcher, Sexual Assault Nurse Examiner, and Associate Dean of Brigham Young University's College of Nursing, to discuss sexual assault cases involving strangulation and dating apps. While working as a sexual assault nurse examiner, Dr. Valentine and colleagues noticed an increase in survivors reporting violent sexual assaults that occurred after meeting someone through a dating app. They also observed that these violent sexual assaults showed higher rates of strangulation, a trend that was supported by one of her recent research studies. Listen along as Dr. Valentine discusses her current research on sexual assault and dating apps, legislative implications, and the prevalence of strangulation in sexual assault cases. This episode is funded by the National Institute of Justice's Forensic Technology Center of Excellence. Some content in this podcast may be considered sensitive and may evoke emotional responses or may not be appropriate for younger audiences. Here's your host, Tyler Raible.

Tyler Raible [00:01:25] Hello and welcome to Just Science. I'm your host, Tyler Raible with the Forensic Technology Center of Excellence, a program of the National Institute of Justice. April is Sexual Assault Awareness Month, and in honor of this campaign, we're spending time with experts in the field to discuss emerging topics in the arena of sexual assault response reform. To help guide us in our conversation today, I'm joined by our guest, Dr. Julie Valentine, Associate Dean and Associate Professor at Brigham Young University in the College of Nursing and a Certified Sexual Assault Nurse Examiner with Wasatch Forensic Nurses. Julie, it's great to have you back on the show again. Welcome back.

Julie Valentine [00:01:57] Thank you, Tyler. It's great to be back.

Tyler Raible [00:02:00] So, Julie, you've been on the show a few times. You've done some work with the FTCoe, could you tell us a little bit about what you do? You have so many hats the you wear at any given day so let's give a little background for our listeners.

Julie Valentine [00:02:11] So I am a certified sexual assault nurse examiner. I'm a practicing forensic nurse with Wasatch Forensic Nurses. Also, I have a lot of academic responsibilities in my role as associate dean and associate professor. But really, my passion lies in research. My research focus areas are sexual assault, violence against women, and criminal justice system response to sexual assault. I've been working with research colleagues. We have built a very large database, over eight thousand sexual assault cases, where we are coding data from the sexual assault medical forensic examination charts and then following to see if the kit was submitted - which I'm happy to report, in our research, we went from 20 percent submission rate to now we're at 98 percent submission rate across the state. So that's a huge kudos to the power of research, right? And then research informing legislative policy. So we, we passed legislation on that, and then following through to the DNA analysis report. So I have an NIJ grant looking at the DNA findings and developing a machine learning model regarding sexual assault kit evidence selection for analysis. But since we have such a large amount of data, we collect

about 250 variables just from the sexual assault medical forensic examination going on about nine thousand patients. We have a number of studies that we are doing - everything from male sexual assault victims to this emerging study that we have on strangulation and sexual assault, to looking at domestic violence sexual assaults, dating app facilitated sexual assaults. So we keep generating new ideas because there is a lot of gaps in sexual assault research, and we are working to fill those gaps to inform practice and policy.

Tyler Raible [00:04:14] That's excellent, and that's why I am thrilled that you're back here to talk to us. So before we really dive into the research, I am kind of curious as both a researcher and a practicing SANE, how do these paths interact? Is there a lot of intersection between the two? Do you find one informs the other?

Julie Valentine [00:04:31] I feel very strongly, Tyler, that still practicing boots on the ground forensic nurse is necessary as a researcher. It's also necessary in my work with teaching nursing students. I'm- I was on call this last weekend. I see patients, and it's in the practice where oftentimes research questions will be generated, and it also helps me to understand better our research findings, how to apply them to practice. And I mentioned policy before. That's really where a lot of my work has gone lately is using research findings to impact legislation. So it's- it's kind of twofold. How do we improve practice, and how do we impact policy and legislation? And I feel like I need to be hands on and still caring for patients to inform both of those roles.

Tyler Raible [00:05:28] Yeah, that makes perfect sense. I mean, we're- we're big proponents of this translating research into practice. And I think, Julie, you do that in spades. I know that you mentioned so many different kind of avenues in this research. So the one that you said that immediately struck me was the- the research involving dating apps. So could you tell us a little bit more about how these, these dating apps are kind of playing into the role?

Julie Valentine [00:05:51] I'd love to talk about the dating app issues related to sexual assault. I actually just recently did a TED Talk on this. We have a manuscript that's been submitted and hopefully awaiting publication on this. As a practicing forensic nurse and working with my forensic nursing team, you know, around 2012 was really when we started to say we're seeing more of these sexual assaults that occur after people meet on a dating app. And we felt like that it was this emerging area that we continue to see grow. So my research team and I in 2017 decided to really look at, are there more cases of rape related to dating apps, meeting on a dating app? And then our primary question was, are these rapes that happen when somebody meets on a dating app different than other rapes that happen by an acquaintance, frequently termed date rapes? And so we started coding data in 2017, and we had to define our term, and we developed dating app facilitated sexual assault, or DAPPSA, and we had to define our criteria for fitting that. And we determined the victim was 14 years of age or older because our database starts at age 14, the victim met the perpetrator on a dating app, the sexual assault occurred at the first in-person meeting. We had to clarify that because we had other cases where they may have met but gone out a couple of times on a dating app and then were raped, and it was too hard to tease that out. So all of our DAPPSA cases, they were raped at the first in-person meeting and then that the victim had a sexual assault medical forensic examination, which we know is just the tip of the iceberg because many patients do not report or come in for an examination. So we looked at data from 2017 to 2020 and found that we had one thousand nine hundred sixty eight acquaintance sexual assaults. Out of those, 14 percent or two hundred and seventy-four cases met our DAPPSA criteria of meeting on a dating app and being raped at the first in-person meeting. We then looked at, are there any

differences in these? And without getting into much more detail, the difference was astounding. We found that the rapes that occurred from meeting somebody on a dating app and being raped at the in-person, first in-person meeting were much more violent sexual assaults, with a third of the victims being strangled, having more injuries, having more assaultive acts against them, really indicating that violent sexual predators in many ways use these dating apps as hunting grounds for vulnerable victims. And then we have unique findings regarding the victims as well. We- we think this is incredibly important research that we're excited to share more about.

Tyler Raible [00:08:59] Yeah, I think that the development of this is fascinating. And if it's OK, I have a couple clarifying questions. For our listeners at home and for me as well, when we say a dating app, do we mean specifically one you download onto your phone or is it any of these online dating websites? Is it a combination of all of the above?

Julie Valentine [00:09:16] Great question about how we define this. We had to really clearly decide that it was dating apps. People don't use the website as much. It's more dating apps. We also had to clearly decide to exclude those that met, there's a Facebook dating, but those that met through Snapchat or Facebook or an email introduction or Instagram. We excluded those cases. So these are specifically dating apps rather than technology facilitated sexual assault, which the dating app facilitated sexual assault is somewhat under the umbrella of technology facilitated sexual assault.

Tyler Raible [00:09:55] That makes sense. Thank you for the clarification. As you were kind of walking through the timeline of this research and you said that you kind of had this idea in 2012, correct?

Julie Valentine [00:10:04] In 2012 was when we really in practice were like, "Hey, I have this victim that said they met on a dating website or dating app" - because back then there were more websites being used - "and then they were raped. You know, are you guys seeing more of this?" So we started kind of talking about it around then. And I continued as both a practicing forensic nurse and a researcher watching that. And then it was really in 2016, we said, we've got to study this. And so started collecting data in 2017.

Tyler Raible [00:10:37] You know, this might show my approximate age, but I do remember when the internet first became a thing and my parents constantly admonishing me for, you know, never meet somebody on the internet. And then we see now that that's kind of the primary means for a lot of people in terms of making new acquaintances. So, Julie, do you think that this proliferation of new apps and different virtual avenues kind of plays a part in this? Or is it just a matter of the right population of people being predators in different jungles for lack of a better word?

Julie Valentine [00:11:11] Right. And I do kind of refer it to almost like a lion hunting gazelle in a safari, you know, lion is going to attack a gazelle who's more easily separated from the group. Same thing on a dating app. We think predators are likely able to tell those that they could sway to meet. I think that when you talk about most meet- you're absolutely right. The number one ways that people connect right now, couples is through dating apps. It's the most common way. You know, I met my husband at work, so there was no idea that there would ever be some kind of dating app - that really dates me. So we think that it's a combination of being able to really take on what persona you want to take on in a dating app and the lack of criminal background checks. You know, many dating apps don't have two-step verification processes. There's just not much security screening. And so instead, how they approach being safe is they tell potential victims well, be careful out

there - there's written safety guidelines. The huge problem with that is who does that put the whole burden of preventing the sexual assault on? The victim. So that's got to change.

Tyler Raible [00:12:23] Yeah, that does seem kind of a backwards approach to it. This is maybe a clarifying question - would these count as a stranger assault or is it fall under the category of an acquaintance assault if you've been talking to them?

Julie Valentine [00:12:36] Oh, Tyler, you hit a really key point. It's all about definitions, right? So we actually, we have a really detailed code book. We always have faculty working with our research assistants as we code, and we have about a page that describes how do you determine if a stranger, if it's an acquaintance, and we had to be very clear about this is how we are describing it. So we describe acquaintance as someone that the victim has met and knows the name and has had more than approximately two hours' worth of meaningful interaction. So I give the example if they're at a party and they see someone, they don't know his name, he's at the party, but they didn't really interact with them or at the restaurant or bar or whatever it is, they didn't really interact with them and then they go out to the car and the guy's out there and they're raped - that's a stranger. But if the person is at a party and they get introduced and they know their name and they watched a movie together or played beer pong together or whatever it is and spent some time together, and then they go out to the car and the guy follows them out and they're raped, then we would code that as acquaintance because they knew their name and they had spent more than two hours together. So on the dating app facilitated sexual assault, we code that relationship as acquaintance because they know their name and they have spent some time with them. But it's not someone they know well, right? And that's why the person is not vetted. You know, back when I met my husband, when you met people through family or friends or work or school, there was this vetting process. Well, dating apps have taken away that vetting process, and so it allows these sexual predators to really kind of roam free.

Tyler Raible [00:14:26] Julie, is any of the legislation you're working on related to some of these DAPPSA researching avenues or is that completely unrelated?

Julie Valentine [00:14:33] Oh, Tyler, it is fully related. It was a tough legislative session for us in Utah. I had two really important bills. It was our second year in a row to push for this affirmative consent legislation, which actually creates third degree felony option. We are going to be back next year, and I have data- research data that fully supports this legislation. And then we did have legislation related to DAPPSA which would require dating apps to very clearly state "we do not do criminal background checks" and have these safety guidelines, but readily apparent, but also provide very clear channels to survivors to report. And then clearly state in there, here are resources. And this is really important, have written in the dating apps, you know, if something happens, you are not to blame and here are resources. So we thought it was going to pass and the very last day of legislation, it died on the Senate floor. But we will be back. I do want to say that the mutual.com attorneys worked with us on this and were fully supportive of the legislation.

Tyler Raible [00:15:50] Which is good. I think it's important to keep fighting that fight.

Julie Valentine [00:15:53] Absolutely. Sometimes feeling like you're beating your head against a brick wall, but then you see that little crack and you're like, all right, we can do this and we have to do it. I mean, when you think why we are doing this - to decrease sexual violence and to improve care to survivors - we've got to do it.

Tyler Raible [00:16:08] Yeah, it's tough work, but it needs doing. Julie, tell me a little bit about your TED Talk.

Julie Valentine [00:16:12] Yeah, it was kind of a terrifying experience, but really a great experience. And I talked about the dating app facilitated sexual assaults. And one thing I very clearly acknowledge in the TED Talk is that a lot of people find love and happiness through the relationships that they make on dating apps. We don't want to get rid of dating apps at all. We want to preserve all that love and happiness and potential that they can find on dating apps but push dating app companies to make the sites safer. And we believe that we have the research to support that this absolutely needs to happen. So that was the gist of the TED Talk.

Tyler Raible [00:16:52] So you're doing this research on this dating app facilitated sexual assault. Is there any findings, anything that's interesting or even maybe troubling in terms of what you're discovering through the data?

Julie Valentine [00:17:04] Yes. And- and this kind of leads into another study that we're doing on strangulation that was really highlighted by our findings from the DAPPSA. We found significantly higher rates of strangulation, when I talk about the DAPPSA rapes being more violent sexual assaults. And so I actually have moved part of our research team - including a graduate student, this is her thesis - with some undergraduate research assistants and another faculty member, we're really wanting to take a deep dive looking at strangulation because as well as seeing this increasing number in the DAPPSA cases, we have been seeing increasing numbers of strangulation cases since we started data collection in 2010. So we have gone from 2010 data. We found about 10 percent. It was like 10.3 percent of sexual assault cases, the victim reported being strangled. In the current data that we're just analyzing of 2021, we're almost double that. We've seen this increasing amount in violence in the sexual assaults, particularly related to strangulation. We did a pilot study, and pilot study we still have a large N or subjects. We have over five thousand six hundred subjects in the pilot study, but we're adding more variables to really look more intently at these variables related to sexual assault with our current dataset of close to nine thousand victims.

Tyler Raible [00:18:42] From your experience, both now as a researcher and as a SANE, do you think that this is a matter of the victim just doesn't want to disclose? Is it a matter of not asking the right questions? I mean that's a- that's a huge percentage increase. So I just, I just wonder if it's a matter like, was it always there and we weren't asking the right questions? Or is there just an increase in that specific kind of act?

Julie Valentine [00:19:05] Yeah, great insight into so how do we explain this right, Tyler? So are we just getting better at asking the questions and there's always been this higher rates of strangulation? Or are we truly seeing more strangulation? Honestly, I think it's a combination of the two and this we're going to learn more about as we move through this research project. We have gotten better at asking more detailed questions about strangulation, but we've always asked about it and we've always also asked in ways that we think that victims understand. For instance, a lot of victims, you use the term choking instead of strangulation. You know, "I was choked out" or "yeah, he choked me." Really, choking is, you know, when you do the Heimlich maneuver when somebody chokes on some bolus of food or something, that's choking. Strangulation is this physical pressure on the neck that affects the carotid arteries, the jugular veins, and/or the trachea, and oftentimes it's all three structures, to really decrease blood flow to the brain, decrease oxygen, and also decrease the blood flow draining out of the brain, and that's- that's

related to which neck structures are impacted the most and what we're going to see for injury findings. So I think we have gotten better at asking more detailed questions, but we really have always asked about this question. So that's why I believe we have more knowledge about specifics related to strangulation and what to look for, but we also think we're seeing more violent sexual assaults with strangulation being used.

Tyler Raible [00:20:53] Yeah, it's kind of a scary prospect if the- just the volume is increasing. I do want to talk about the pilot study and some of the findings, but before we dive in, there's something I want- I want to clarify. When you mentioned, you know, choking versus strangulation. My mind as not a SANE or a researcher looks at those two as orders of magnitude, like strangulation seems more severe as a word. So, you know, I feel like that kind of leads into this myth of like sexual choking versus strangulation during an assault. Could you maybe elaborate a little bit on that concept and maybe the differentiation between the two?

Julie Valentine [00:21:32] Yes. So choking and strangulation actually imply two completely different things. So choking really is something like choking on food. It's something that is blocking the trachea or windpipe so you're not able to get air in. And when you think of the structures in the neck, the neck is really vulnerable, right? We don't have bones around it to protect our necks. We just have these little, tiny spinal bones at the back, but nothing in the front to protect the really important structures. So we have the trachea. If something is inside the trachea and cuts off airflow, that's choking. If something externally is pressed on the trachea to occlude the trachea or close it off, then that is strangulation. And that can be one hand, two hands, a forearm, rope, a belt. All of those are strangulation, but next to the trachea are our carotid arteries. And when those are occluded, it quickly shuts off blood to the brain. So when someone is strangled and those carotid arteries are impacted, they will immediately see lights. I mean, they can go unconscious in less than eight seconds because you're just cutting off the oxygen to the brain like that. And then next to that are jugular veins, and jugular veins drain the blood from the brain. If there's pressure on the jugular veins, then that blood in the brain gets backed up. And then we see a finding called petechiae where there's little tiny bursts of blood under the skin - can happen in the eye. It can happen in the mouth, behind the ear. It can be scattered and not too many. Or it can almost look like a rash because there is so much petechiae. But going back to what I talked about the carotid artery, when there's pressure there, and so you just stop the oxygen, the blood to the brain, somebody can pass out very quickly. Well, very often there's no signs of trauma. We found with strangulation that only about half of cases do victims have injury. Do they have signs of trauma? And that's because of these three different structures in the neck that can be affected. It somewhat depends on which structure is most effected and because somebody can pass out so quickly from strangulation without a whole lot of pressure, we oftentimes don't see trauma. In our pilot study, we only saw injury in 50 percent of the times, and that wasn't all just neck injury, it was also head from the petechiae and other things.

Tyler Raible [00:24:17] I was curious when we're talking about reporting these injuries. Do you think that other injuries to, you know, the genital area might overshadow?

Julie Valentine [00:24:27] Our big issue is those that are sexually assaulted, raped, and don't even report right, which is going to include a bunch of those that are being strangled. But when you talk about injuries, what we found in our pilot study is that in cases where there was strangulation, it was statistically significant that patients were more likely to have non-anogenital injuries, meaning physical injuries, head, extremities, you know, on their

body and a higher number of non-anogenital injuries, as well as having more anogenital injuries. We found that in cases with strangulation, that the victim was more likely to also be hit. In fact, forty five percent of the victims that reported strangulation reported being physically hit during the assault as well, compared to 13 percent that were not strangled. So we found that when patients report strangulation, they are overall more violent sexual assaults. So that also means the patients had more injuries. Eighty percent of the patients reported having pain because of these injuries. So one of our findings just from this pilot study and we're looking at in more detail in our larger study is this, we believe, truly mistaken idea that there's an increased amount of strangulation due to sexual erotic behavior using S&M or strangulation. But we believe our findings don't indicate that because we've seen they're overall more violent sexual assaults with more non-anogenital injuries and anogenital injuries. It's less likely that it's sexual assault just with the strangulation rather more violent overall.

Tyler Raible [00:26:30] Gotcha. And just to make sure I'm understanding this correctly. So it's not necessarily that the increase in strangulation and the reporting of is indicative of any kind of widespread societal taste change so more is it's a violent act. Is that what I'm understanding?

Julie Valentine [00:26:47] We believe that's what our findings indicate because of the association of finding statistically significant with someone's been strangled, they're more likely to have non-anogenital injuries, anogenital injuries, and we do a t-test where we look at comparing the numbers, and that also is significant. They have a higher number of these injuries. Some may also be wondering, well, does a relationship of the suspect have anything to do with this? And we have found absolutely with strangulation. We talked before about acquaintance and stranger sexual assault. So we found that the relationship between the victim and the perpetrator in these strangulation cases, that the relationship that has the most strangulation is actually rapes by ex-boyfriends or ex partners. Twenty five percent of rapes by ex-boyfriend or partners, the victim reported strangulation. Right close to that is if it's a current spouse or partner. So we would put both those ex-spouse or partner and current spouse or partner in the realm of domestic violence. So we see more strangulation in domestic violence sexual assaults. Right below the domestic violence cases is stranger. And then below that, we have acquaintance, and it's quite a bit below that. So it's both the stranger sexual assaults we see more strangulation and the DV sexual assaults.

Tyler Raible [00:28:20] Yeah, those numbers are staggering. And I just I'm blown away by that pattern. That's terrifying. So for our listeners who might be SANEs who might be working with survivors, what do we do with this information? How do we apply this?

Julie Valentine [00:28:34] Oh, Tyler, I love the question linking it back to practice, right? Because it's all about translating research to practice and policy both but relating it back to practice. One of the big takeaways that, that I would think people would look at this and realize the additional layers of trauma that a victim experiences when there is strangulation with sexual assault. One of the things that we are looking at is patient actions. Did they kick? Did they hit during the assault? And our preliminary findings indicate we know that in any rape victims frequently experience this, this freezing response, right, due to the fear, we see that that's even heightened when there's strangulation involved. And so less likely, and I will tell you, as a practicing SANE, I've had many patients that might say initially they're trying to push away, they're saying no, and then the strangulation happens and they're terrified that they're going to die or what's going to happen to them. And so they just say, "I just stopped moving. I just laid there, and I just waited for it to be done." So I

think understanding the heightened degree of trauma when we talk about trauma-informed care that we really, really need to encourage these survivors to reach out for mental health resources following the sexual assault. And then also with finding this increased amount of injury both anogenital and a non-anogenital injuries, when we learn that our patient has been strangled are really asking them the more detailed questions about what they experienced helps us understand what structure of the neck maybe was affected more, and then being very careful to look for petechiae in the mouth, in the eye, behind the ears. Being- doing a very, very careful head to toe examination, which all SANEs are going to be doing anyway, and also a very detailed anogenital examination understanding that it's very likely we are more likely to see injuries and the importance of documenting all of those injuries.

Tyler Raible [00:30:47] So what's next for you?

Julie Valentine [00:30:49] So we're really focused on the NIJ grant with the DNA aspect and the machine learning model. We're excited about the development and how that is looking right now, doing this deep dive in strangulation. We have a number of mental health articles that have recently come out with my colleagues, Dr. Leslie Miles here at BYU and Dr. Nancy Downing at Texas A&M. We have looked at - we don't like to consider risk factors for sexual assault, rather vulnerabilities, we think that frames that better - and we have looked at mental illness as a significant vulnerability for sexual assault and also partnered with a psychiatrist in looking at patients with mental illness that may be not offered a sexual assault medical forensic exam, and how we can make sure they do have that opportunity, that someone with mental illness still has autonomy and a right to choose and to provide more guidelines. So those are some of our recent publications that have been out. I also just finished a large study looking at prosecution of sexual assault cases, which was rather discouraging. We would love to see that, you know, we've had a lot of changes and we would like to see the prosecution rates - I mean, we've gone from sexual assault kit submission rates 20 percent to 98 percent. Prosecution rates have gone up a teensy bit. But you know, that's an area that we need to make sure that we are tracking and looking at because we don't want to be doing all of this work and then not measuring are we truly making a difference? And I think that that's an outcome variable that just nationwide and internationally, we need to explore more. And so we're excited to get that article published.

Tyler Raible [00:32:43] So, Julie, as we're closing up here, what message would you have for the community?

Julie Valentine [00:32:48] I think right now, one of the most important messages, and this is when we look at community, when we look at friends and families of survivors and survivors and criminal justice system professionals and health care professionals, potential jury members. The most important message right now is to believe victims. We do so much harm not just to survivors, but harm to our society when we approach sexual assault cases differently and question victims and do not believe them. If we don't believe victims, then they won't report. And if we don't have reporting, then the assaults continue to happen. We have to talk about this. There's been multiple research studies that have shown that false reporting in rape is about two to eight percent, which is the same in other crimes. And if we truly want to decrease sexual violence with all its shattering effects, then we need to encourage victims to come forward by creating a safe environment where we believe them and then improve the criminal justice system response.

Tyler Raible [00:34:05] What an excellent way to wrap up. Julie, thank you so much for all the work you do and for taking time out of your day to sit down with Just Science to talk about your research in the dating app facilitated sexual assault. Thank you for being on the show and spending some time with us today.

Julie Valentine [00:34:19] Well, Tyler, it's always a delight to chat with you, and I love to share this message to make some changes happen, right? So thank you very much for having me.

Tyler Raible [00:34:29] Absolutely. And it's always great to talk to you, too. If you like today's episode, be sure to like and follow Just Science on your platform of choice. For more information on today's topic and resources in the forensic field, visit ForensicCOE.org. I'm Tyler Raible, and this has been another episode of Just Science.

Voiceover [00:34:48] Next week, Just Science sits down with Kelly Taylor, a sexual assault nurse examiner, to discuss trauma-informed patient interviewing and the prevalence of strangulation in sexual assault cases. Opinions or points of views expressed in this podcast represent a consensus of the authors and do not necessarily represent the official position or policies of its funding.