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# Methamphetamine Use Among Suburban Women: Implications for Nurse Practitioners

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Methamphetamine use among suburban women: Implications for nurse practitioners.

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Institutes of Health.

## **Abstract**

**Purpose:** The purpose of this article is to provide nurse practitioners (NPs) with more effective strategies to diagnose methamphetamine (MA) use and assess healthcare needs of MA-using women.

**Data Sources:** The researchers collected data from 65 suburban women who were MA users living in the suburbs of a large southeastern city in the US. We conducted in-depth interviews and focus groups examining their life history, drug history, risk behaviors, and access to healthcare. The qualitative findings are examined here.

**Conclusions:** Three main themes emerged from the data: 1) gendered stigmatization of MA use; 2) MA related health risk behaviors; and 3) barriers to health and social services, which resulted in a domino effect that led to further life and health complications. When these factors are not effectively addressed, the result is more serious health problems for the women and their children.

**Implications for Practice:** This article offers awareness and assessment tools to provide NPs adequate knowledge about the factors associated with MA use in order to treat patients holistically. NPs are strategically positioned to effectively assess, diagnose, treat, and provide linkage to health and social services, especially for suburban females who are a hidden population of drug users.

## **Introduction**

The United Nations Office on Drugs and Crime (2011), reporting MA with amphetamine use, found that amphetamine/methamphetamine is the second most abused drug worldwide, after cannabis. The Substance Abuse and Mental Health Administration (2010) reported that the number of new users of methamphetamine (MA) increased from 95,000 in 2008 to 154,000 in 2009. In recent decades MA use was referred to as an “epidemic” (Weisheit & White, 2009). Due to public concern over the spread of MA, numerous law enforcement and other government resources have focused on stopping the production, distribution, and use of MA (Reding, 2009; Weisheit & White, 2009). Few resources address education and training of healthcare providers for awareness of MA use among their clients.

MA is a stimulant that affects the central nervous system and produces a pleasurable experience along with increased energy and attentiveness, and decreased appetite. In low doses, its effects are perceived to improve functioning (Lende, Leonard, Sterk, & Elifson, 2007), but in high doses it becomes extremely dysfunctional (Weisheit & White, 2009). Short term adverse effects may include rapid heart rate, irregular heartbeat, increased blood pressure, decreased appetite, increased respiration, hyperthermia, convulsions, and insomnia (National Institute on Drug Abuse, 2006). Long term effects include psychosis, memory loss, aggressive behavior, mood disturbances, severe dental problems, weight loss, emotional cognitive problems, and changes in brain structure (National Institute on Drug Abuse, 2006). In studies, MA users reported fatigue, anxiety, depression, and an inability to concentrate (Barr et al., 2006; Boshears, Boeri, & Harbry, 2011). Dental problems, skin abrasions, and hair loss are also attributed to extensive use of MA or could stem from ingesting products used in the production of this drug.

(Boeri, Gibson, & Harbry, 2009; Shaner, Kimmes, Edwards, & Saini, 2006). Research shows a strong relationship between MA use and increased dental disease (Shetty et al., 2010).

While all drugs may have serious health problems when misused or abused, people who abuse MA tend to have more health problems and are at higher risk for exposure to human immunodeficiency virus (HIV) infection due to the injection and sexual risk behaviors associated with using MA (Centers for Disease Control and Prevention, 2007; Halkitis & Shrem, 2006). The impact of disclosing HIV status has been shown to be highly stigmatizing (Bairan et al., 2006) Treatment studies find that MA users typically show more severe problems than other drug users entering treatment, suggesting that more effective strategies for identifying MA users early are needed in order to provide beneficial health interventions (Brecht, O'Brien, von Mayhauser, & Anglin, 2005; O'Brien, 2003; Rawson et al., 2004).

The few studies conducted on gender differences among MA users show that females generally start earlier, are affected differently, appear more dependent on MA, suffered more adverse effects, and respond more favorably to treatment than do males (Brecht et al., 2004; Dluzen & Liu, 2008; Rawson et al., 2004). Female MA users also show more indicators of depression than male users and are more likely to report they use MA for self-medication and losing weight (Hser, Evans, & Huang, 2005). Despite women reporting higher levels of stress than men due to gendered social roles, recovering female MA users show significantly better improvements in family relationships than do males (Dluzen & Liu, 2008; Hser et al., 2005). However, studies also show that drug-using females are a vulnerable population for transmission of infectious diseases, especially women who inject drugs (Bourgois, Prince, & Moss, 2004; Lorvick, Martinez, Gee, & Kral, 2006).

While many MA-related health studies focus on inner-city and low-income rural areas, the suburban setting has been viewed as a haven from the health and social problems associated with drug use. Yet, the health issues that researchers have found to be pervasive among of inner-city and rural drug users are also found among MA users who live in less studied neighborhoods and communities in suburban settings. Female suburban MA users, due to their relative isolation from harm reduction education and social services specific to drug user populations, are especially well-hidden.

Recently, the suburbs have been identified as one of the areas in the U.S. most affected by the rapid increase in MA use (Boeri et al., 2009; National Institute on Drug Abuse, 2006). Female MA users are at high risk for both personal and social disadvantages along with an increased risk for HIV and other sexually transmitted infections (Lorvick et al., 2006; Semple, Grant, & Patterson, 2005). In this paper, we focus on the health-related social issues of female MA users living in the suburbs. Our aim is to provide a better understanding of how to assess MA use and provide nurse practitioners (NPs) with more effective intervention strategies with the goal to prevent more serious health problems.

## **Methods**

### **Design**

This study draws from a mixed methods cross-sectional study of 100 male and female MA users in the suburbs of a southeastern city in the US conducted from 2007 to 2009. Methodological details on this research can be found in our previous publications (Boeri et al., 2009; Boshears et al., 2011). We used only the data from the 35 MA-using females for this analysis, to which we added the data from 30 females who participated in our longitudinal study

in the same area from 2009-2011. Sample characteristics and methods used in the longitudinal study are described in Boeri, Tyndall, and Woodall (2011).

We used a combination of targeted, snowball, and theoretical sampling methods to recruit participants (Strauss & Corbin, 1998; Watters & Biernacki, 1989). Recruiting methods included ethnographic fieldwork in public sites such as malls, coffee houses, grocery stores, bars, and clubs located in the suburbs. In addition we posted flyers in strategic areas and engaged community consultants to reach hidden drug-using networks. Potential participants called a study telephone number to be screened and to schedule an interview. Eligibility criteria included being female, 18 years of age or older and having used MA while living in the suburbs.

In the cross-sectional study, data were collected by means of face-to-face quantitative drug history surveys and audio-recorded, open-ended qualitative interviews. The same instruments were used in the longitudinal study with 30 female MA users, and data were updated in two follow-up interviews. We also collected additional data on risk behaviors related to HIV and other sexually transmitted infections (STIs), and on accessibility to and utilization of services. Some women participated in focus groups that allowed us to examine their experiences, attitudes, and knowledge about MA use more fully. Follow-up interviews were collected from 27 women, and 16 participated in a focus group.

The university's Institutional Review Board (IRB) approved the study protocol. The anonymity and confidentiality of all data were protected by a Certificate of Confidentiality, issued by the National Institutes of Health, which protects study data from court subpoena. A consent form was signed, but not linked to the data, and no identifying material was collected. Participants were requested not to use their real names or reveal any identifying information.

## **Data Analysis**

The qualitative interviews and focus groups were transcribed and entered into the computer program QSR NVivo for storing, managing, and coding qualitative data. The quantitative data from the drug histories were entered into a statistical software program for social sciences (SPSS) and used for descriptive purposes. During analysis of the data, ethnographic field notes were used to assist in understanding the social context of use. The collection of quantitative and qualitative data, and the inclusion of follow-up and focus group interviews added to the overall validity of the data (Deren et al., 2003).

The authors triangulated the results of the various data sources: the drug history data, risk-behavior inventory, in-depth interviews, focus group transcripts, and field observation notes. Coding of the qualitative data (interviews, focus groups, and observations) began by reading the transcripts and writing memos. The transcripts were quality controlled then re-read by at least two members of the research team and synthesized into codes or categories.

The transcripts of the focus groups were further coded for the analysis presented in this paper. This process began with focused coding on what the women revealed during the focus groups regarding gendered stigmatization, lack of MA-related risk awareness, and access to public health and social services. We returned to the coding of all transcripts for a better understanding of these three conceptual themes as they emerged using a “reconstructed” version of grounded theory (Charmaz, 2005). In the constructivist grounded theory approach, the researchers interpret data incorporating their own experiences and interests in the analysis while conceptual categories are de-constructed and reconstructed.

## **Results**

The sample used in this analysis consisted of 65 females who were currently using or had used MA in the suburbs. Their ages ranged from 18-51 (mean 33.5). The majority (89%) was



white, which is typical of MA users and consistent with the demographics of the suburban area. Three main themes emerged from the data: 1) gendered stigmatization of MA use; 2) MA related health risk behaviors; and 3) barriers to health and social services, which resulted in a domino effect that led to further life and health complications. Based on these themes, we provide tools to aid NPs in identifying and assessing MA use in clients. Supporting quotes illustrate these themes and inform our proposed assessment tools.

### **Gendered Stigmatization of MA Use**

In previous analysis of the cross-sectional study that included men, the authors found evidence that the suburban setting increases risk factors for female MA users. Women were as likely as men in the study to be injecting MA in the last six months. Among current female MA users, 56.3% had injected MA in the past 6 months compared to 46.9% of current male MA users in the study. Average days of MA use in past month differed significantly between genders, with females using an average of 7.3 days compared to males using an average of 5.5 days. The in-depth interview data revealed barriers to healthcare and social services that were greater for suburban women than for men. These barriers were related to gendered roles that are prevalent in the drug subculture as well as in mainstream society. The needs of the women included money, food, housing, transportation, medical/dental care, identification, and employment. Some women needed legal assistance with child custody, divorce, arrests, and domestic violence; some needed help with navigating the bureaucracy in order to obtain identification papers and other documents needed for social services. Many were fearful of seeking help because of the stigma attached to their MA use, injection practices, and potential legal repercussions. When these needs were not assessed or addressed, they led to serious health problems for the women and their children. Too often, women ended up in emergency rooms, where any discussion of their drug

use was avoided. As one woman who used MA to forget her pain and suffering said, “You don’t find much sympathy in emergency rooms.” Yet the lack of empathy for drug users generally led to more use, as one woman revealed when she explained why she used:

With meth you feel like uh you’re more normal. You’re more equal to what you should be. You have energy...uh you feel like you fit in. You feel like you’re part of the human race instead of...something that’s been thrown aside. Your self esteem goes up with it...you can kill your emotions with it.

Similar stigmatization reported by the women resulted in low self-esteem and further drug use.

### **MA Related Health Risks**

One of the main health related risks of MA use is unsafe sexual behaviors with the possible result of contracting STIs. The women generally exhibited a lack of concern and/or knowledge of the importance of protecting themselves against STIs with condom use. Many cited the belief that their partners were monogamous when that may have been questionable or they lacked understanding of how certain diseases were transmitted. For example, when women in our focus groups were asked if they used condoms during sex, their answers were varied: “Never use them,” “I only have one partner,” or “He’s faithful to me.” One woman candidly revealed that “the person that I would be with at the time would always have drugs, and I wanted the drugs more than I worried about catching anything,” inferring that she did not use condoms in those situations. Another woman agreed with her, even though she had just asserted that she always used condoms. When asked if they had been tested for HIV and hepatitis C (HCV), most had not. One young woman had contracted HCV, but had not been able to obtain medical care.

Another MA related health risk is sharing syringes when injecting the drug. The women used the terms syringes or needles interchangeably in their interviews; we use the word syringe.

When asked where they obtained syringes, one woman said that she got them at the drugstore:

You can walk in and ask for them and nine times out of ten you'll get them if you know how to say it. If you know what to say. But then there are times that you're gonna run out (of syringes), and you are going to have a shot of dope here. And you've got a dirty needle here. What are you going to do? You're going to use it. You don't have time to run to the drugstore or no way to run to the drugstore.

A younger and less experienced woman reported that buying syringes at suburban drugstores did not work for her. She added: "I think that is so wrong to me because they can refuse you. It's not gonna stop you from doing drugs. They make you share needles with somebody. It does not make any sense to me."

Another woman elucidated: "But a lot of times the drug dealer will have some, so he'll make some extra money off you. He'll have condoms, too. And you can buy them, too." Others indicated they shared with friends or boyfriends they trusted, although this also presented risk, as one young woman revealed:

We'd be at somebody's house and I only like to shoot up with him. I don't like to shoot up with other people out when I'm walking around doing shit, but he did, and if he could not find a needle he would get one of his homeboys needles and rinse it out with bleach, and I don't trust that.

Some metropolitan areas support a syringe exchange program (SEP), but they are usually located in urban areas, limiting the ability of suburban women to access these facilities due to a lack of transportation. SEPs were illegal in the state in which the study was conducted. Most of the

women had never heard of a syringe exchange program, such as one young woman who already had contracted HCV: “I didn’t know this service existed, but I could have used it in the past year. I didn’t know there was a syringe distribution whatever.”

Our study also found a substantial risk of interpersonal violence (IPV) among female MA users. Reliance on men for either financial support or support of their drug habit kept the women in a dependent status. The combination of stigmatization from both drug use and IPV worked to diminish the women’s self-esteem and thus the ability to improve their circumstances. For example, one woman explained that she was ashamed to report her husband who abused her for years: “It’s not an option, no...I guess it’s cultural. You don’t call the police...Nope. You keep your dirty laundry to yourself.” Other women found it difficult to obtain legal help to leave or collect child support from abusive husbands. One woman who had teeth knocked out due to abuse said she tried to file her own papers for a divorce, but the judge told her to get a lawyer, which she could not afford.

Other drug related health risks may include mental health disorders, malnutrition, hypertension, and a reduction in overall health status. There is always the potential for a MA user to progress in use patterns by expanding into larger drug doses, different routes of administration, or polydrug use. For example, many of the women in our study illegally obtained pain pills because they had little access to legitimate medical treatment for their pain. This led to opiate dependence and eventual heroin use when pills could not be found.

### **Barriers to Health and Social Services**

Study participants consistently related difficulties in obtaining healthcare, dental care, and social services due to cost, availability and accessibility. Many participants did not have vehicles, and public transportation options were limited in their area. Telephone and internet

service were either inconsistent or non-existent among women in this sample due to cost. One recurring issue facing a number of the women was a lack of identification. The ability to receive social or health services was blocked when the appropriate identification could not be produced. This proved to be a frustrating barrier caused by bureaucratic red tape and the expense involved. One woman illuminated how hard it was to obtain legal identification with only her birth certificate: “I still don’t have an ID. It was more aggravating ‘cause they give you a run around, they want you to have two forms of ID [identification].”

Lack of access to dental care proved to be a barrier to employment. One woman reported that it was difficult for her to get a job due to the condition of her teeth:

Nobody ain’t going to hire me with no teeth. I mean, I already tried applying at one place. And they said they weren’t hiring. And then I go back in there like a week later, and there’s a new girl. And two weeks later, I go back in and then there’s another new cashier. So, it’s like they hired two cashiers after telling me they’re not hiring. So I know it had to be about my [pause] it had to be my looks. That’s the only reason that--because I got, experience in cashier work and I got plenty of references.

Previous incarceration presented further challenges for women’s health because they could not obtain public assistance or insurance due to felony drug charges. As one participant related when asked what she was going to do to obtain needed dentures: “Well, I’m trying to get some partials once I can get some insurance. Insurance is a big, big issue because of my felony drug charges. I’ve been denied Medicaid, denied food stamps, I don’t qualify for anything.”

### **Domino Effect**

The domino effect of a lack of appropriate healthcare, dental attention, and the inability to gain employment that often followed, frequently led to further risk behaviors for participants. The women felt marginalized, limited in life choices, and thus had to do what was necessary to live, in spite of potentially serious health and safety risks. A number of women felt they had no choice but to turn to sex work and drug dealing when they could not find employment. One woman reported: “I’m not going to lie. I do drugs, you know what I’m saying. I can’t find a legal job, so if I can’t sell drugs then I do whatever, you know, is necessary to keep myself going.”

For many of the women, the combined and continued effect of stigma, and risks and barriers to needed services led to homelessness or near-homelessness, which greatly increased their vulnerability to health perils. In addition, some of the women were custodial parents and their children faced hardships as a result of the uncertain housing and employment situations endured by their mothers. This was revealed by a homeless mother of an eleven-year-old son who was struggling to maintain custody:

I have him sometimes and we have joint custody and I want to be off of this stuff, but it’s not as easy as it sounds, you know...Yes and I need...help to get off this stuff [MA]--get away from his dad, get him out of my mind. I’ve gotta get a job, I’ve gotta get a home. My sister’s kicking me out on May 15th and I don’t know where I’m gonna go...Because my temporary job, we did all the orders that we was supposed to do. So now that they don’t have any more orders that needs to be filled right away, so they had to let us—lot of us go. And my rent, you know, it’s due at \$200 a week and I just didn’t have it so...But then I got evicted.

A lack of stable housing and employment further exposed the women to the increased hazards of interpersonal violence, involvement with the criminal justice system, and often a rapid

decline in mental health accompanied by a further retreat into drug use. The depth of emotional despair due to their abject surroundings is summed up by the quote from the following woman who aptly revealed what many other women indicated as well:

There's been many times that I've laid in bed, like crying, wishing I could just call somebody and get outta there. Like just many nights like contemplating suicide, thinking that at least if I could go to the insane asylum, it'd be better than staying there.

Our aim in this qualitative illustration of MA-using women is to sensitize NPs to the problems due to MA use and to broaden their knowledge base of their MA clients' health—physical, social, and emotional. The women's narratives provided information on how empathetic identification of MA use, holistic assessment of the health status of the women, and effective treatment or referral could be accomplished by NPs during the client visit.

### **Identification and Assessment**

We present these cases to provide a vivid illustration of why a thorough assessment is so important. Yet, while MA outwardly devastated the lives of some women in the study, others clearly did not fit the typical picture of a drug user. These are the ones that NPs may miss in assessment. They were well dressed, with nice hairstyles, and healthy-looking skin and teeth, such as the woman who said she “was good at hiding it.” This woman was an injection user with injection track marks between her knuckles to hide her habit. Our study showed that women are capable of juggling multiple social roles, in spite of what may be a debilitating addiction.

MA use is not always easily identifiable, even to the trained eye. Winslow, Voorhees, and Pehl (2007) explain that there are currently no explicit assessment protocols for MA use available. Venios and Kelly (2010) note that nurses may be best trained in treating female MA

users, as they employ methods to find biopsychosocial indicators common among women who use MA. Our study shows that women are adept at hiding their use. Therefore, it is critical for NPs to be aware of characteristics specific to MA use.

Perhaps most recognizable are the visual cues that some MA users display. Caution should be used during evaluation, as many of the physical signs and symptoms may be associated with either other diagnoses or lifestyle. Thus, open-ended questions, asked in a non-judgmental manner and with a sense of empathy, should be used when probing for MA use. One of the most frequently mentioned and obvious signs of meth use is dental decay and loss. Dental issues have been shown to be caused by dry mouth that frequently accompanies MA use (Shaner et al., 2006). Observation of a patient's mouth to determine the extent of decay, inflammation or signs of excessive wear from bruxism may assist in the assessment of MA abuse (Shaner et al., 2006). Severe dental decay in the anterior maxillary teeth is common in those that smoke MA, with wearing more often seen in the crowns and mandibular teeth due to bruxism. However, more general diffused decay may just be due to poor dental habits (Hendrickson, Cloutier, & McConnell, 2008).

Another distinguishable physical effect of MA use is skin infections and scabs due to chronic skin picking. Delusional thinking can make users believe there are bugs under their skin, which results in skin picking in an attempt to be rid of the pests (National Institute on Drug Abuse, 2010). Other research found women were more likely than men to mention skin problems as a side effect of MA use (Brecht et al., 2004). One participant explained her skin issues: "Well what happens is you get—speed spots. We used to call them speed spots. And they're—there's just spots all over my back."



NPs should look for more than one indicator. For example, skin picking may resemble scabies, therefore chronic skin irritations and infections should cause practitioners to be attentive to other signs of MA use and ask questions accordingly (Frieden, 2006). Injection users may develop skin abscesses that can be due to infections caused by needle sharing and non-sterile use of equipment (Frieden, 2006). In addition, MA use produces an overall aging effect, often due to malnutrition, so inconsistency between chronological age and appearance may be an indicator of MA use (Winslow et al., 2007). As a stimulant, MA has an appetite suppressant effect and extreme weight loss leading to emaciation may result (Brecht et al., 2004; Joe, 1996; National Institute on Drug Abuse, 2010). Therefore, any extreme weight loss, especially recent, should be cause for concern on behalf of healthcare providers.

Overt signs of MA use may mimic other physical conditions and can be related to lower socio-economic status or other illness instead of drug use, so care should be taken to consider all factors in a patient's observable qualities. A participant illustrated how the combination of socio-economic status, lifestyle, and MA use could lead to health problems with this example: "I lost a lot of weight when I did crank, but um...yeah, because when you do eat, you're eating the bad thing—the wrong things and...Because you want sweets...and I haven't been to the dentist in probably 11 years." Physical signs of MA use that can be identified include track marks from injection use, poor hygiene, hypertension, tachycardia, memory impairment, and hyperthermia. Butler, Wheeler, and Sheridan (2010) found that anxiety and fear frequently accompany the physical and psychological effects of MA; so it is important to consider physical observations in context with socio-economic status to obtain a complete assessment.

### **Discussion and Implications for Practice**

Nurse practitioners (NPs) need to be cognizant of possible MA use/abuse among their patients in order to provide high quality healthcare. To do so requires knowledge of how best to elicit a history of a stigmatized condition such as MA use or abuse. Specific signs and symptoms range from no obvious ones to horrific ones in women who have used meth for a long period of time, as shown on Table 1.

[Insert Table 1 about here]

In their systematic review of 47 studies, Marshall and Werb (2010) also found depression, suicidal ideation, and psychosis to be health issues for MA users. Women, largely due to protecting their social roles, may need to have a basis of trust established with a healthcare provider that will allow for the revelation of MA use. Women may not be forthcoming on their own and providers should be aware of the gender biases that often exist in relation to MA use.

Although the consequences of risk behaviors associated with HIV transmission increases fear of disclosure, research shows that healthcare providers can influence patient disclosure decisions (Bairan et al., 2006). Well-informed NPs can provide a safe environment for disclosure of MA-risk behaviors. When one or more of the signs or symptoms of MA use are present, NPs should attempt to validate the possible cause with the patient and through other assessments, since there could be various etiologies. NPs should be aware there may be a combination of physical and psychological symptoms and be willing to probe further for associated social and environmental factors. For patients who have no overt signs or express no symptoms, NPs need to rely on their interviewing skills in assessing patients for MA use—such as being open and friendly, establishing rapport and trust, demonstrating empathy, and actively listening.

NPs might benefit from an understanding of Motivational Interviewing (MI), a successful focused and patient-centered interview model developed by Miller and Rollnick (1991). MI is

designed to elicit motivation to change based on five core principles: (1) express empathy; (2) develop discrepancy between goals and behavior; (3) avoid argumentation; (4) roll with the punches; and (5) support self-efficacy. The interview is conducted by allowing the patient to do most of the talking, affirming the patient when possible, using reflective listening (do not disagree, judge, excuse, console, or change the subject), and eliciting self-motivational statement of change. MI has been shown to be helpful for addiction issues as a cost-effective intervention for non-treatment seeking individuals, and provides an “opportunistic brief intervention” as part of a public health approach (Heather, 2005). (For more information on MI please see the Substance Abuse and Mental Health Services Administration website <http://www.samhsa.gov/co-occurring/topics/training/skills.aspx>.) Although MI training workshops are helpful, many of the principles and strategies involved in MI can be learned and practiced by NPs without formal training. Here we offer a brief description of best practices for interviewing with the goal to assess hidden and stigmatized behaviors such as illegal drug use.

When working with a patient that has a potential substance abuse problem, it is important to frame questions in the appropriate manner to reach the correct diagnosis. Substance abusers are likely to be defensive, and questions that are confrontational in nature should be avoided at all costs as this will only cause the patient to withdraw further. Begin the visit with mild questions and attempt to build rapport. Imply that your patient is deserving of your time and respect, irrespective of their risk behaviors. This will go further to evoke responses than perhaps any other gesture. Make questions brief, concise, and above all, nonjudgmental and non-confrontational. NPs should not presume to pass moral judgment, but to provide healthcare and knowledge. Ask open-ended questions that will not allow for a yes/no answer. Wait patiently for a response and ask probing questions such as: “Can you give an example?” Table 2 provides a

few sample questions that illustrate how to probe for responses that elicit rich, in-depth information. MA users may have trouble with memory impairment, so good note taking is critical during assessment and can be used for triangulating responses. Finally, look for nonverbal cues that may provide clues to the patient's state of mind or feelings about the topic.

[Insert Table 2 about here]

NPs need to gauge the client's readiness and willingness to move forward with the interview and offer direct but empathic responses to the patient's disclosures. NPs should self-assess their own interviewing style over time, and consider feedback in order to maintain superb interviewing skills.

Once a patient discloses MA use, the NP can intervene to offer linkages to health and social services that can provide needed healthcare, food, shelter, job training, childcare, transportation, and other critical needs. NPs need to have knowledge of the availability and eligibility requirements of these services in their area of practice in order to link patients Appropriately with needed care. Knowing one's community resources is mandatory for best practice. Research shows that not all providers advertising specific services are forthright or timely, and a patient with physical or social difficulties and multiple disappointments can be further traumatized by the bureaucratic red tape involved in accessing public health and social services (Boeri et al. 2011). It is imperative to attempt to make follow up visits with patients in order to review the outcome of their health and service linkages and make changes if needed.

This study is limited by a small sample size and cannot be generalized to the population of female MA users. Additionally, participants in the study were living in the same geographic area at the time of the interviews, which might indicate a local medical issue. Finally the data analyzed for this paper were qualitative and findings are not generalizable. However, these

limitations do not discount the finding that when assessment of MA use and barriers to needed healthcare are not addressed, more serious and potentially death-threatening health problems are likely to occur. We presented in-depth knowledge of MA-using indicators and proposed how NPs can use their advantaged position to more holistically assess the health needs of MA-using females and link them with care.

## References

- Bairan, A., Taylor, G. J., Blake, B. J., Akers, T., Sowell, R., & Mendiola, R. (2007). A model of HIV disclosure: Disclosure and types of social relationships. *Journal of the American Academy of Nurse Practitioners, 19*(5), 242-250. doi:10.1111/j.1745-7599.2007.00221.x
- Barr, A. M., Panenka, W. J., Thornton, A. E., Lang, D. J., Honer, W. G., & Lecomte, T. (2006). The need for speed: An update on methamphetamine addiction. *Journal of Psychiatry and Neuroscience, 31*(5), 301-313.
- Boeri, M., Harbry, L., & Gibson, D. (2009). A qualitative exploration of trajectories among suburban users of methamphetamine. *Journal of Ethnographic & Qualitative Research, 3*(3), 139-151.
- Boeri, M. W., Tyndall, B. D., & Woodall, D. R. (2011). Suburban poverty: Barriers to services and injury prevention among marginalized women who use methamphetamine. *Western Journal of Emergency Medicine, 12*(3).
- Boshears, P., Boeri, M. W., & Harbry, L. (2011). Addiction and sociality: Perspectives from methamphetamine users in suburban USA. *Addiction Research and Theory, 19*(4), 289-301. doi:10.3109/16066359.2011.566654
- Bourgois, P., Prince, B., & Moss, A. (2004). The everyday violence of hepatitis C among young women who inject drugs in San Francisco. *Human Organization, 63*(3), 253-264.
- Brecht, M., O'Brien, A., von Mayrhauser, C., & Anglin, M. D. (2004). Methamphetamine use behaviors and gender differences. *Addictive Behaviors, 29*(1), 89-106.  
doi:10.1016/S0306-4603(03)00082-0

- Butler, R., Wheeler, A., & Sheridan, J. (2010). Physical and psychological harms and health consequences of methamphetamine use amongst a group of New Zealand users. *International Journal of Mental Health and Addiction*, 8(3), 432-443. doi:10.1007/s11469-009-9213-5
- Centers for Disease Control and Prevention (CDC). (2007). *Methamphetamine use and risk for HIV/AIDS* (CDC HIV/AIDS Fact Sheet). Atlanta, Ga.
- Charmaz, K. (2005). Grounded Theory in the 21st Century. In N. K. Denzin & Y. S. Lincoln (Eds.), *The SAGE Handbook of Qualitative Research* (pp. 507-535). Thousand Oaks, CA: SAGE Publications.
- Deren, S., Oliver-Velez, D., Finlinson, A., Robles, R., Andia, J., Colón, H. M., ... Shedlin, M. (2003). Integrating qualitative and quantitative methods: Comparing HIV-related risk behaviors among Puerto Rican drug users in Puerto Rico and New York. *Substance Use & Misuse*, 38(1), 1-24. doi:10.1081/JA-120016563
- Dluzen, D., & Liu, B. (2008). Gender differences in methamphetamine use and responses: A review. *Gender Medicine*, 5(1), 24-35. doi:10.1016/S1550-8579(08)80005-8
- Frieden, J. (2006, January 15). Skin Manifestations May Signal Crystal Meth Use: Think 'meth mites' when patients are picking at their skin and think they have insects crawling on them. *Family Practice News*. Retrieved July 13, 2011, from [www.familypracticenews.com](http://www.familypracticenews.com)
- Halkitis, P. N., & Shrem, M. T. (2006). Psychological differences between binge and chronic methamphetamine using gay and bisexual men. *Addictive Behaviors*, 31(3), 549-552. doi:10.1016/j.addbeh.2005.05.040

- Heather, N. (2005). Motivational interviewing: Is it all our clients need?\*. *Addiction Research & Theory, 13*(1), 1-18. doi:10.1080/16066350412331318377
- Hendrickson, R. G., Cloutier, R., & McConnell, K. J. (2008). Methamphetamine-related Emergency Department Utilization and Cost. *Academic Emergency Medicine, 15*(1), 23-31. doi:10.1111/j.1553-2712.2007.00006.x
- Hser, Y., Evans, E., & Huang, Y. (2005). Treatment outcomes among women and men methamphetamine abusers in California. *Journal of Substance Abuse Treatment, 28*(1), 77-85. doi: 10.1016/j.jsat.2004.10.009
- Joe, K. A. (1996). The lives and times of Asian-Pacific American women drug users:an ethnographic study of their methamphetamine use. *Journal of Drug Issues, 26*(1), 199-218.
- Lende, D. H., Leonard, T., Sterk, C., & Elifson, K. (2007). Functional methamphetamine use: The insider's perspective. *Addiction Research and Theory, 15*(5), 465-477.
- Lorvick, J., Martinez, A., Gee, L., & Kral, A. H. (2006). Sexual and Injection Risk among Women who Inject Methamphetamine in San Francisco. *Journal of Urban Health, 83*(3), 497-505. doi:10.1007/s11524-006-9039-4
- Marshall, B. L., & Werb, D. (2010). Health outcomes associated with methamphetamine use among young people: A systematic review. *Addiction, 105*(6), 991-1002. doi:10.1111/j.1360-0443.2010.02932.x
- Miller, W. R., & Rollnick, S. (1991). *Motivational interviewing: Preparing people to change addictive behavior*. New York: Guilford Press.



- National Institute on Drug Abuse. (2006) *NIDA research report series: Methamphetamine abuse and addiction*. NIH Publication Number 98-4210. Retrieved July 12, 2011, from <http://www.drugabuse.gov/ResearchReports/methamph/methamph.html>
- National Institute on Drug Abuse. (2010). *NIDA InfoFacts: Methamphetamine*. Retrieved July 12, 2011, from [www.nida.nih.gov/Infofacts/methamphetamine.html](http://www.nida.nih.gov/Infofacts/methamphetamine.html)
- O'Brien, C. P. (2003). Research advances in the understanding and treatment of addiction. *The American Journal on Addictions, 12*(2), s2, S36-S47.
- Rawson, R. A., Marinelli-Casey, P., Anglin, M. D., Dickow, A., Frazier, Y., Gallagher, C., ... Zweben, J. (2004). A multi-site comparison of psychosocial approaches for the treatment of methamphetamine dependence. *Addiction, 99*(6), 708-717. doi:10.1111/j.1360-0443.2004.00707.x
- Reding, N. (2009). *Methland: The death and life of an American small town*. New York: Bloomsbury.
- Semple, S. J., Grant, I., & Patterson, T. L. (2005). Female methamphetamine users: Social characteristics and sexual risk behavior. *Women & Health, 40*(3), 35-50. doi:10.1300/J013v40n03\_03
- Shaner, J. W., Kimmes, N., Saini, T., & Edwards, P. (2006). "Meth Mouth": Rampant caries in methamphetamine abusers. *AIDS Patient Care and STDs, 20*(3), 146-150. doi:10.1089/apc.2006.20.146
- Shetty, V., Mooney, L. J., Zigler, C. M., Belin, T. R., Murphy, D., & Rawson, R. (2010). The relationship between methamphetamine use and increased dental disease. *The Journal of The American Dental Association, 141*(3), 307-318.

- Strauss, A. L., & Corbin, J. M. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Thousand Oaks: Sage Publications.
- Substance Abuse and Mental Health Services Administration (SAMHSA). (2010). Results from the 2009 National Survey on Drug Use and Health: Volume I. Summary of National Findings (Office of Applied Studies, NSDUH Series H-38A, HHS Publication No. SMA 10-4586). Rockville, MD.
- United Nations Office on Drugs and Crime. (2011). *Amphetamines and Ecstasy 2011 Global ATS Assessment*. Vienna, Austria: United Nations Office on Drugs and Crime.
- Venios, K., & Kelly, J. F. (2010). The Rise, Risks, and Realities of Methamphetamine use among Women: Implications for Research, Prevention and Treatment. *Journal of Addictions Nursing, 21*(1), 14-21. doi:10.3109/10884601003628120
- Watters, J. K., & Biernacki, P. (1989). Targeted sampling: Options for the study of hidden populations. *Social Problems, 36*(4), 416-430. doi:10.1525/sp.1989.36.4.03a00070
- Weisheit, R. A., & White, W. L. (2009). *Methamphetamine: Its history, pharmacology, and treatment*. Center City, MN: Hazelden.
- Winslow, B. T., Voorhees, K. I., & Pehl, K. A. (2007). Methamphetamine Abuse. *American Family Physician, 76*(8), 1169-1174.

**Table 1.** Possible Short Term and Long Term Effects in MA Users

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*Possible Short Term Effects in MA Users*

Increased attention  
Decreased fatigue  
Increased wakefulness  
Decreased appetite  
Increased activity  
Euphoria  
Increased respiration  
Rapid/irregular heartbeat  
Hyperthermia

*Possible Long Term Effects in MA Users*

Anxiety  
Confusion  
Insomnia  
Addiction  
Severe dental problems  
Memory loss  
Mood disturbances  
Weight loss  
Changes in brain structure and function  
Psychosis  
Violent behavior

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Source: National Institute on Drug Abuse Research Report Series 2006

**Table 2.** Sample Interview Guide for Sensitive Topics

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*Interviewer Demeanor*

1. Establish rapport with clients.
2. Be nonjudgmental and non-confrontational— both verbally and nonverbally.
3. Ask direct (but open-ended) questions about drug use. Reinforce positive behaviors.
4. Provide advisory feedback based on responses.
5. Offer continuing support to client regardless of answers given. Clients may not be ready, willing, or able to discontinue drug use immediately.
6. Be patient; wait for responses; allow for long pauses.
7. Ask probing questions.

*Example Questions for Assessing Drug Use*

1. Some people use recreational drugs for various reasons. Have you ever used any? (If positive response, probe for kinds of drugs used, for example, cocaine, heroin, marijuana, methamphetamine.)
2. It is important for your health to know more about the way you use drugs. Can you tell me about your usage behaviors? (Probing questions: How do you use? When do you use?)
3. Describe what you do when you use this drug. (Probe for description of injecting use. Probe for sexual behaviors while on drugs or to obtain drugs.)
4. If injecting use is occurring: Please describe what you do if you do not have a new syringe? (Probe for what occurs when the patient is alone, when with someone else who is injecting, when with a partner...).
5. Describe the last time you used.
6. Tell me your thoughts on quitting use. (Probe for when patient wanted to quit, how patient tried to quit). \*
7. When was the last time you were tested for HIV? HCV? (Other STI tests).
8. How often do you use a condom when engaging in sexual activities?
9. Describe a time you did not use a condom and why. (Probe for when patient does not use condoms and why. For example, when with a steady partner? When engaged in oral, anal, or vaginal sex? Does the patient have multiple partners over time?)
10. What are the barriers to using a condom? \*
11. What are the barriers to using a clean new syringe? \*
12. What are the barriers to drug treatment? \*
13. What are the barriers to health care? \*

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\*Be prepared to offer help, preventive materials, and/or effective referrals.