

# SBIRTCOLORADO

## Annotated Bibliography

### SBIRT ANNOTATED BIBLIOGRAPHY UPDATE

Fall 2009

#### SUMMARY

These latest additions to the SBIRT Colorado literature review represent newer articles that profile the Screening and Brief Intervention (SBI) model that has been implemented in recent years, as well as content-specific articles that help round out the perspectives of our current body of knowledge. SBI, as a practice, is widely accepted as a cost-effective and efficacious approach to preventative healthcare. As this practice continues to expand and mature, more sub-populations and service-delivery models are being examined.

One prominent theme in these articles was needing more integrated and comprehensive care, across a variety of populations including youth/young adults and veterans. We are starting to see an increase in the diversity of healthcare settings that are incorporating SBI—beyond trauma centers and primary care—from healthcare clinics on college campuses to pediatric offices to virtual arenas that include web and phone-based screening procedures. Several of the articles described more comprehensive screening processes that strive to link co-occurring behavioral health issues in order to more effectively diagnose and treat the patient. With so many articles describing similar but unique forms of Screening and Intervention, it may be reasonable to conclude that there is no one panacea formula for SBI implementation.

Another theme that emerged was the emphasis on moving away from “does SBI work?” to “what happens once the patient is screened?” This is an important step in the evolution of this practice because it directs policy makers and practitioners alike to begin linking healthcare systems as practitioners identify and assist patients, they can begin to refer patients to the next appropriate level of care. As SBI gains more prominence and acceptance, providers are encouraged to keep speaking with their patients about sensitive health topics as a way to de-stigmatize harmful behaviors and identify appropriate courses of action.

Despite the progress that SBI, as a practice, has seen, barriers to implementation continued to be identified; not enough clinic resources to implement, not enough education for healthcare providers; and too many policy/legal barriers to support universal adoption of screening. In addition, still more research is needed to determine the effectiveness of SBI with illicit substances, including prescription drug abuse, and more outcome data is needed to link efficacy to these different SBI models. There are, however, some newer suggested solutions such as consumer marketing to help cultivate demand for SBI outside the healthcare profession and exploring other options for service delivery, including the use of paraprofessionals and technological tools to aid the screening process.

*Anderson, P., Aromaa, S., Rosenbloom, D. and Enos, G. (2008). Screening and Brief Intervention: Making a public health difference. Join Together, 1-23.* This review of the nationwide implementation of SBIRT offer barriers and recommendations that are similar to previous reviews. Primary barriers identified were: physicians are not trained and lack time; some emergency rooms continue to experience denial of payment by insurance companies for injuries related to substance use, as well as issues around privacy regulations and financials. Recommendations included: physicians should not bear the sole responsibility for implementing SBI; utilizing professional associates to conduct SBI activities may be advantageous; states should repeal laws that discourage screening; SBI should be made a part of medical school curricula; SBI should expand beyond traditional healthcare settings, such as online screening, EAPs or other private sector settings; consumer marketing may be useful to increase patient and provider demand for SBI services.

*Brown, J. D. and Wissow, L. S. (2009). Discussion of sensitive health topics with youth during primary care visits: Relationship to youth perceptions of care. Journal of Adolescent Health, 44, 48-54.* Brown and Wissow reviewed the relationship between youth and their primary care physicians (PCPs) and how PCPs could positively influence youths’ willingness to engage in conversation around sensitive topics. Historically, PCPs rarely engage these sensitive topics, yet this research found that youth are willing to discuss them when they are engaged by the PCP. The youth in this study were surveyed to see whether sensitive topics (e.g., mood, behavior, getting along with others, drugs, tobacco, alcohol, sexuality) were discussed and what their perceptions regarding interaction with the PCP were. Thirty percent of 358 youth reported that not a single sensitive topic was raised. Those who did have discussion around sensitive areas reported they were more likely to take an active role in treatment. Youth were also more likely to report positive interaction with female PCPs. Because youth populations do not readily receive appropriate counseling or screening regarding sensitive health topics, these findings suggested that PCPs should be encouraged to incorporate these practices. The authors recommended more in-depth research on this relationship, and focused on such factors as ethnicity, race, parents being/not being involved, and youth-perception of confidentiality. Furthermore, it was suggested that perceptions of efficacy should be linked with health outcome data.

# Annotated Bibliography P2

*Goler, N. C., Armstrong, M. A., Taillac, C. J., and Osejo, V. M. (2008).* **Substance abuse treatment linked with prenatal visits improves perinatal outcomes: A new standard.** *Journal of Perinatology*, 1-7. Goler and colleagues demonstrate that prenatal substance abuse screening and counseling had a significantly positive effect on the health of the baby, once born, in the form of lower rates of neonatal-assisted ventilation and preterm delivery, as well as higher birth weights. The Head Start program in Kaiser Permanente's Northern California branch showed a significant reduction in costly outcomes and a 30% return on investment. A total of 49,985 females were screened and four groups were compared: 'Screened, assessed, treated' (SAT; n =2073); 'Screened and assessed' (SA; n =1203); 'Screened only' (S; n =156) and a control group of women who screened negative (n =46,553). Compared to the S group, the SAT group had significantly lower rates of neonatal-assisted ventilation, preterm delivery, and low birth weights. The SA group had significantly lower rates of infant re-hospitalization within 30 days from discharge compared to the control group. The SAT groups rates of placental abruption and intrauterine fetal demises were similar with the control group, whereas rates were significantly higher in the S group. The Head Start program was recommended by these authors as a national standard of healthcare.

*Kuehn, B. M. (2008).* **Despite benefit, physicians slow to offer brief advice on harmful alcohol use.** *Medical News and Perspectives*, 299 (7), 751-752. This article discuss different viewpoints on the relevance of current research regarding the emerging practice of "brief advice." While some have criticized that findings may not extend to actual healthcare settings because many of the studies have implemented randomized, controlled designs, others have indicated that the available information was useful and relevant. Although much research has found screening and brief intervention to be a beneficial and cost effective method, these services have not been widely implemented. Obstacles that continue to impede physicians' widespread adoption of brief advice are: limited time, possible personal and cultural trepidations (e.g., if the physician uses alcohol, he or she might not be as willing to bring it up in a discussion with a patient). There is also a fear that starting a conversation might uncover a more severe patient need than the physician feels qualified to address. Some physicians believed that widespread implementation could be possible if primary care would become more team oriented, with clinicians at all levels working together and technology would need to be more readily used (e.g., administering screening, brief intervention and counseling via phone or computer).

*Lennox, R., Dennis, M. L., Scott, C. K., Funk, R. (2006).* **Combining psychometric and biometric measures of substance use.** *Drug and Alcohol Dependence*, 83, 95-103. Because of the inconsistencies between biometric and psychometric measures of substance use, this article looks at whether multiple measures were more effective at representing a person's actual usage patterns. While biometric measures have identified users who do not report use on self-reported measures, psychometric measures were found to be more sensitive to the severity and type of use. Multiple composites (using a variety of measures) appeared to be more effective than a single measure because a measure tends to look at one dimension or facet of the reported use. Ultimately, it was found that screening for substance use was more complex than one standardized screening process. The authors suggested that more research is needed to discover more effective ways to pair the various measures available with the specific substance problem at hand.

*Madras, B. K., Compton, W. M., Avula, D., Stegbauer, T., Stein, J. B., and Clark, H. W. (2008).* **Screening, Brief Interventions, Referral to Treatment (SBIRT) for illicit drug and alcohol use at multiple healthcare sites: Comparison at intake and 6 months later.** *Drug and Alcohol Dependence*, in press. A more recent analysis of the national SBIRT-grant model, this SAMHSA study looks at six-month outcome data on patients who screened positive for substance use at baseline. Madras et al. found that the SBIRT screening process was feasible in a variety of healthcare settings; that overall alcohol and illicit drug use decreased significantly (down 67.7% and 38.6% respectively); this pattern was observed among subgroups of age, gender, and race/ethnicity; across the majority of sites, self reports indicated that patients who received brief treatment or referral to specialty services had improvements in general health, mental health and other important social measures including employment, housing status, and criminal behavior. These results were consistent with the majority of past small sampled research regarding the positive effects of screening and brief interventions. While it was established that SBI is cost-effective for alcohol users, more research is still needed to determine the cost-effectiveness for illicit drug users. Additionally, it was recommended that additional screening questions regarding prescription drug abuse be incorporated into the screening process.

# SBIRTCOLORADO

## Annotated Bibliography P3

*McCabe, S. E., and Teter, C. J. (2007). Drug-use related problems among non-medical users of prescription stimulants: A web-based survey of college students from a Midwestern University. Drug and Alcohol Dependence, 91, 69-76.* McCabe and Teter look at how non-medical users of prescription stimulants (NMUPS) compared to other types of drug users and how the route of administration of non-medical prescription stimulants (NMPS) may relate with other types of drug use. There has been a rise in the prevalence of NMPS-use among college students. Motives for use of NMPS included: improved concentration/attention, increased alertness, assistance in studying, and recreational purposes. Previous research has shown that there is a link between use of NMPS and the risk of using of other drugs, particularly if the NMPS was consumed in some other manner than oral (e.g. nasal). Findings of the 3,639 undergraduate students surveyed indicate that NMUPS were more likely than other drug users to report using multiple drugs and simultaneously using these drugs and NMUPS were more likely to report drug use related problems. Considering that NMUPS have a greater tendency towards poly drug use (90% of those surveyed), it may be that this population is at increased odds of drug abuse and related problems and more focus should be placed on screening them. This may be especially true for those that use non-oral routes of administration. The authors note that many college students who have substance abuse issues rarely seek appropriate treatment. The authors suggest that future research should consider the impact of other factors, such as age of exposure, dose administered, replicating findings in other non-Midwestern collegiate and non-collegiate young adults, and using a more comprehensive assessment and diagnostic measure than the DAST-10 (used in this study).

*McCabe, S. E., Cranford, J. A., and Boyd, Carol J. (2006). The relationship between past-year drinking and nonmedical use of prescription drugs: Prevalence of co-occurrence in a national sample. Drug and Alcohol Dependence, 84, 281-288.* McCabe et al. look at the prevalence of co-occurrence with alcohol use and non-medical prescription drugs (NMPD) among young adults (ages 18-24) and those over the age of 25. Results from a national sample of 43,093 adults revealed: Those aged 18-24 years were more likely to report a higher amount of binge drinking, alcohol use disorders (AUDs), and NMPD-use compared to adults 25 years and older; those aged 18-24 also had a higher rate of co-occurring use of alcohol and NMPDs; and there was an increased risk for NMPD-use among Native American populations, a finding which the authors suggest warrants future research. While co-occurring use was evaluated, simultaneous use was not. The authors also suggested that future research should consider focusing on preventative measures like educating individuals about the risks of using multiple substances.

*Oslin, D.W., Ross, J., Sayers, S. Murphy, J. Kane, V., and Katz, I. R. (2006). Screening, assessment, and management of depression in VA primary care clinics. The Behavioral Health Laboratory. Journal of General Internal Medicine, 21, 46-50.* Oslin et al. profile the Behavioral Health Laboratory (BHL) model in Veterans Affairs (VA) clinics. The purpose of implementing BHL is to offer assistance to primary care clinics by: conducting assessments (via phone, in person, interactive voice recordings); helping monitor patients; interpreting the results; and reporting the results along with a recommendation as a means to provide support for the physicians in decision-making capacities. While past research has demonstrated that screening for depressive disorders in primary care can be influential in decreasing morbidity and mortality rates, assessment, treatment and monitoring must also be readily available for patients in order to reap the benefits of this screening. The findings from this study include: A significant increase in screenings, identification, and referral of patients in need of mental health and substance abuse services in primary care; BHL can be easily implemented into care management programs and can increase the number of patients assessed; among those who were assessed, there were a considerable amount of co-occurring behavioral health issues, which may not have been identified without the use of BHL; BHL offers a practical and cost-effective model for providing assessments and monitoring all mental health/substance abuse issues; since assessments and follow-ups can be conducted over the phone, this reduces the cost of services and demand of patients. While long-term effectiveness was not studied in this profile, the authors suggest that future research should look in this direction to determine whether this particular model is widely applicable for the general population.

*Rootman, D. B., Mustard, R., Kalia, V., and Ahmed, N. (2007). Increased incidence of complications in trauma patients cointoxicated with alcohol and other drugs. The Journal of Trauma Injury, Infection, and Critical Care, 62(2), 755-758.* This article examines whether there was an increase in physiological complications and more severe, long-term outcomes for trauma patients who enter a trauma medical setting while they are cointoxicated. This study found no significant relationship between medical outcomes and alcohol/drug positive patients versus non-intoxicated patients including length of hospital stay (LOS), intensive care unit (ICU) visits, ventilator use, mortality, or other complications. In addition, when controlling for age and injury severity, no significant differences were found. The only significant relationship found between cointoxication and physical complications was in trauma patients who tested positive for alcohol and other drugs. These patients were more likely than their non-intoxicated counterparts to experience complications and use the ventilation system during their stay. Neither LOS, ICU utilization, or mortality was associated with cointoxication. This study did not focus on reporting different patient circumstances such as chronic alcoholism and polysubstance use; therefore, the authors suggested that future research should determine if there is a relationship between these different states and outcomes.

# Annotated Bibliography P4

*Stotts, A. L., Schmitz, J. M., Rhoades, H. M., and Grabowski, J. (2001).*

**Motivational interviewing with cocaine-dependent patients: A pilot study.** *Journal of Consulting and Clinical Psychology*, **69**(5), 858-862. This older article specifically profiles the use of MI with cocaine-dependent patients to see whether MI influenced the successful completion of treatment and whether the patients' initial motivations to change influenced their response to the MI technique. While there was no difference in the completion rates between the MI group and control group, during the detox program; users that received the MI were more likely to use behavioral processes or coping strategies from pre to post assessments. The results suggested a positive trend with MI and increased retention and completion of additional treatment modalities if the patient's initial motivation was low. The authors suggested that future MI research should be conducted on cocaine dependent patients and include additional factors, such as treatment fidelity and an attention control group. In addition, findings should be replicated using a larger sample size (105 participants were in this study).

*Suris, J. C., Michaud, P. A., Akre, C., and Sawyer, S. M. (2008).*

**Health risk behaviors in adolescents with chronic conditions.** *Pediatrics*, **122** (5), e1113-e1118. Risky behaviors among chronically ill adolescents can have negative consequences, such as adverse interactions with medications, increased disease complications, and poor treatment adherence and illness control. After controlling for depression, the results of this study indicated that, compared to healthy counterparts, chronically ill adolescents reported higher rates of risk behaviors (e.g., cannabis use) and had significantly higher rates of violent and antisocial acts. Some possible explanations for these results were offered such as chronically ill adolescents have had trouble fitting in with popular groups, leading them to socialize with risk-taking adolescents in order to be accepted or seen as "normal"; they may be living "life to the fullest" by engaging risky behaviors if they do not expect to live a long time. The authors' recommend that more preventative screening and counseling should be offered to adolescents, particularly those with chronic conditions. A few limitations of the research include: The type, nature, and severity of the adolescents chronic condition was not indicated, and it is not known whether conditions were managed in primary or specialty care; the data may represent adolescents with milder chronic conditions; and the study did not employ experimental design methodology.

*Wilson, C. R., Harris, S. K., Sherritt, L., Lawrence, N., Glotzer, D.,*

*Shaw, J. S., and Knight, J. R. (2008).* **Parental alcohol screening in pediatric practices.** *Pediatrics*, **122**, e1022-e1029. This article examines parents (n = 879) screened by their child's pediatrician for substance use. Findings revealed: One in nine parents screened positive for alcohol; while the majority of parents thought it was acceptable to screen for their use, alcohol-positive parents were 75% in favor of screening; alcohol-positive mothers were less comfortable being screened than alcohol-negative mothers, compared to fathers; alcohol positive parents favored interventions made by the pediatrician; although alcohol positive parents would accept intervention, they did not want the information to be communicated to their own doctor, family members, or social workers. Historically, pediatricians have been hesitant to confront parents about alcohol use, thinking the parents would react negatively. This study demonstrated a favorable response, however, and the authors suggest these findings should give confidence to pediatricians to routinely screen parents in the future. Results of this study are not yet generalizable as the population was mostly white, English-speaking, and well-educated.