ED Visits Involving Drug-Related Suicide Attempts in the United States, 2004–2009

Victoria A. Albright
Margaret Mattson
Victoria Scott

September 16, 2011
Drug Abuse Warning Network (DAWN)
- United States Public Health Service (US PHS), Department of Health & Human Services (DHHS), Center for Behavioral Health Statistics and Quality (CBHSQ), Substance Abuse and Mental Health Services Administration (SAMHSA)
- Active public health surveillance system
  - Screen sample of emergency department (ED) visit records
  - Collect data on ED visits related to drugs
- Criteria for selection
  - Drugs may be direct cause or contributing factor
  - All motives (not just abuse)
  - 4 million+ drug-related visits in 2009
Figure 1. Rate of Drug-Related ED Visits Involving Suicide Attempts, by Age and Sex: Annual Averages 2004-2009

Estimates reported are annual averages over the period 2004-2009 available from the Drug Abuse Warning Network, Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.
Figure 2. Drugs and Drug Groups Involved in Drug-Related ED Visits for Suicide Attempts: Annual Averages 2004-2009

Estimates reported are annual averages over the period 2004-2009 available from the Drug Abuse Warning Network, Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.
Figure 3. ED Visits Involving Drug-Related Suicide Attempts, by Drug Group and Sex: Annual Averages 2004-2009

Estimates reported are annual averages over the period 2004-2009 available from the Drug Abuse Warning Network, Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.
Figure 4. Rate of ED Visits Involving Drug-Related Suicide Attempts for Females, by Drug Group and Age: Annual Averages 2004-2009

Estimates reported are annual averages over the period 2004-2009 available from the Drug Abuse Warning Network, Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.
Figure 5. % of ED Visits for Suicide Attempts That Involve Drugs Plus Alcohol, by Age & Drug Group: Annual Averages 2004-2009

Estimates reported are annual averages over the period 2004-2009 available from the Drug Abuse Warning Network, Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.
Figure 6. % of ED Visits for Drug-Related Suicide Attempts That Involve (a) Alcohol and (b) Multiple Drugs: Annual Averages 2004-2009

Estimates reported are annual averages over the period 2004-2009 available from the Drug Abuse Warning Network, Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.
Figure 7. ED Visits Due to Suicide Attempts as % of All Visits Due to Drug Abuse/Misuse for Females, by Age: Annual Averages 2004-2009

Estimates reported are annual averages over the period 2004-2009 available from the Drug Abuse Warning Network, Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.
Figure 8. ED Visits Due to Suicide Attempts Compared to All Visits for Drug Abuse/Misuse for Females, by Drug: Annual Averages 2004-2009

Estimates reported are annual averages over the period 2004-2009 available from the Drug Abuse Warning Network, Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.
Findings and Conclusions

- The highest rates of ED visits
  - Highest for <29, females
  - Lowest 55+, and near equal males & females (Figure 1)
- Drugs
  - Anxiolytics, OTC products, Illicits, Antidepressants (Figure 2)
- Drugs by sex
  - Females – anxiolytics, OTC products
  - Males – narcotics (Figure 3)
- Drugs by age (Figure 4),
  - Younger - OTC products, then drop to almost zero by 55.
  - Older – Anxiolytics
  - Other drug groups show a steady level of involvement for patients of all ages
Findings and Conclusions (cont.)

- **Alcohol**
  - At low levels for teens and then rises steadily (Figure 5)

- **Multiple drugs**
  - ½ to ¾ of ED visits; much more common than alcohol (Figure 6).

- **As part of all misuse/abuse (females)**
  - Consistent portion of drug-related visits across all age groups (6%-16%) (Figure 7)
  - For visits involving OTC products, 36% are suicide attempts compared to visits that involve illicit where only 5% are suicide attempts (Figure 8)
Implication for suicide prevention in Asian countries

- Surveillance = information
- Early intervention = efficient
- Nonmedical services inside a medical facility = avenue
- Expand surveillance net to cover other types of suicide and other types of drug misuse/abuse
For further information

DAWN website: http://dawninfo.samhsa.gov/

SAMHSA website: http://oas.samhsa.gov/

Presenting Author:

Victoria A. Albright
RTI, International
919 541 6805
valbright@RTI.org