Opioid Overdose Prevention Programs with Take-Home Naloxone in WV

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WV Senate Bill 335:
Creating Access to Opioid Antagonists Act

“The Legislature finds that permitting licensed health care providers to prescribe opioid antagonists to initial responders as well as individuals at risk of experiencing an overdose, their relatives, friends or caregivers may prevent accidental deaths as a result of opiate-related overdoses.”
WV Senate Bill 335: 
Creating Access to Opioid Antagonists Act

“The Legislature finds that permitting licensed health care providers to prescribe opioid antagonists to initial responders as well as individuals at risk of experiencing an overdose, their relatives, friends or caregivers may prevent accidental deaths as a result of opiate-related overdoses.”
State Naloxone and Good Samaritan Legislation
as of July 15, 2014
(Please check the individual statute as the language is nuanced and varies from state to state.)

* Only if person has received training.
† Only applies to 1st responders.
‡ In Utah and Indiana, evidence of providing assistance to someone experiencing an overdose can be presented as a mitigating factor or compelling the court to a conviction for possession of a controlled substance and/or paraphernalia. The evidence of providing assistance to someone experiencing an overdose can be used as an affirmative defense to an allegation of possession of a controlled substance and/or paraphernalia.

Source: Office of National Drug Control Policy (ONDCP) searches of state legislative information from the following online databases yielded the information on the chart, and were current as of July 15, 2014:
https://advance.laws.com
http://www.openelections.com/
http://openevents.org/

Created by ONDCP, August 25, 2014
In the early 1990s, a sharp rise in heroin overdoses, largely concentrated in U.S. urban centers, reached epidemic proportions.
Overdose Prevention Programs

Opioid overdose prevention programs with take-home naloxone emerged in many U.S. cities, first in Chicago, then New York, San Francisco, Los Angeles, and others...
Overdose Prevention Programs: Training

These programs required a 20 – 40 minute training session to teach participants:

- How to recognize an overdose
- How to respond to an overdose
  - Call 911
  - Perform rescue breathing
  - Place victim in rescue position
  - Administer the opioid antagonist naloxone
  - Stay with victim until medical help arrived
Participating physicians wrote prescriptions for users, and they were given naloxone kits.

Overdose Prevention Programs: “Take-home” naloxone
“Take-home” naloxone use

Participants returning to refill their kits, were asked to report on whether naloxone was administered in an overdose situation, and the results. *(almost always voluntary)*
Because opioid overdose is life-threatening, anyone who uses opioids (with or without a prescription) or anyone who comes in contact with people who use opioids (like friends, family members, or caregivers) can benefit from overdose prevention training and access to naloxone.
Opioid overdose prevention programs with take-home naloxone helped to turn the tide...

These programs were instrumental in reversing fatal heroin overdose trends, and as a result have been replicated in other cities, states and counties across the U.S.
Beginning in the late 1990s...

Overdose deaths from prescription opioid analgesics (painkillers) began to rise...

Called an “epidemic” by the Centers for Disease Control and Prevention (CDC), prescription painkiller overdose deaths have continued to rise for a decade and a half.
Prescription painkiller overdose epidemic...

- Though heroin overdose deaths were traditionally concentrated in urban areas, death due to Rx drug overdose has rapidly increased in rural areas.
- Drug OD is a leading cause of mortality in Appalachia.
- WV still had the highest rate of resident overdose deaths in the nation in 2013.
Age-adjusted unintentional drug-related poisoning (overdose) rates, US & WV, 1999-2013
Age-adjusted unintentional drug-related poisoning (overdose) rates, 2013

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<tr>
<th>State</th>
<th>2013 Rate</th>
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<td>West Virginia</td>
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UNINTENTIONAL DRUG-RELATED POISONING DEATH RATES IN THE US, 2013

Source: CDC’s WISQARS
Overdose deaths are the tip of the iceberg

For every 1 opioid overdose death in 2010 there were...

15 abuse treatment admissions
26 emergency department visits
115 who abuse/are dependent
733 nonmedical users

$4,350,000 in healthcare-related costs
WVU ICRC Outreach Activities

- Review of the literature on prescription drug overdose prevention
- Participation in the inaugural Prescription Drug Abuse Summit in Orlando in April 2012
- Invitation from Tim White to participate in strategic planning in Region 5
Substance Abuse Prevention Region 5 Counties:
- Boone
- Cabell
- Clay
- Kanawha
- Lincoln
- Logan
- Mason
- Mingo
- Putnam
- Wayne
Search and assess:

Research literature on prescription opioid overdose prevention

Prevention Options:

• Prescription Drug Monitoring Programs (PDMPs)
• Prescription Opioid Dosage Guidance/Limits
• Pain Management Protocols
• Regulation of Pain Management Clinics
• Prosecution of “Rogue” Prescribers & Dispensers
• Tamper-resistant/Abuse-deterrent formulations
• Vaccines
• Patient Review & Restriction (PRR) Programs
Search and assess:

Prevention Options:

Research literature on prescription opioid overdose prevention

Opioid Overdose Prevention Programs with Take-Home Naloxone (Narcan)
First WVU-ICRC Injury Topic Synthesis (April 2013)

- Summarized the evidence for opioid overdose prevention programs with take-home naloxone
- e-disseminated to all Appalachian states
In 2010, CDC surveyed known overdose prevention programs that featured take-home naloxone:

- 48 organizations with 188 local programs surveyed
- Over 10,000 documented OD reversals *(an undercount)*
- There were no such programs in West Virginia, and only 2 in Appalachia (1 in Pittsburgh; and 1 in North Carolina—Project Lazarus)
In 2012, CDC published the results of a survey...
A Research Question...

Could opioid overdose prevention programs with take-home naloxone reverse prescription opioid overdoses in rural settings, including WV?

Issues:
- Could a “hidden” population be identified and recruited?
- What are the patterns of opioid use (witness overdoses?)
- Would take-home naloxone programs be accepted by users?
Partnership Development

- **Joshua Murphy** (Mingo County)
  - STOP Coalition

- **Tim White**, Prestera Center (Cabell County)
  - Citizen member of the Governor’s Advisory Council on Substance Abuse
  - Prevention Coordinator for WV Region 5 (10 counties in southwestern WV)

- **Jeremy Farley** (Logan County)
  - PIECES Coalition/ WVU Extension Agent
Funding Announcement

- Community Engagement and Outreach Program
- Required collaborative development between academic researchers and communities
A research proposal was collaboratively developed:

Acceptability & feasibility of fatal overdose prevention with peer-administered naloxone in rural WV: Partnership & Proposal Development
The Initial Collaborators:

Joshua Murphy
Mingo County

Jeremy Farley
Logan County

Kelly Gurka
WVU-ICRC

Herb Linn
WVU-ICRC

Tim White
Cabell County
Full Team Members

- **Kelly Gurka**, Principal Investigator
  - Assistant Professor, WVU School of Public Health
- **Herb Linn**
  - Director of Outreach, WVU ICRC
- **Tim White**, Prestera Center
  - Citizen member of the Governor’s Advisory Council on Substance Abuse
  - Coordinator for Region 5 of the six regional Substance Abuse Task Forces
- **Joshua Murphy**
  - STOP Coalition of Mingo County
- **Jeremy Farley**
  - PIECES Coalition of Logan County / WVU Extension Agent
- **Lisa Murphy**
- **Alexandria Macmadu**
- **Danielle Davidov**
  - Assistant Professor, WVU Departments of Emergency Medicine and Social & Behavioral Sciences
- **Jeffrey Coben**
  - Director, WVU ICRC
- **Leann Long**
  - Assistant Professor, WVU Department of Biostatistics
The Proposal

*Long-term Research Goal*
- To develop, evaluate, and disseminate effective opioid overdose prevention programs with take-home naloxone throughout Appalachia

*Research Objective*
- To assess the feasibility and acceptability of an opioid overdose prevention program with take-home naloxone among communities in southern WV

*Rationale*
- By assessing the feasibility of and acceptability to key constituencies of such a program, barriers can be identified and avoided, and the intervention can be tailored to the specific community in which the program will be piloted.
Feasibility Study Aims

**Specific Aim #1:** Assess the feasibility of an opioid overdose prevention program with take-home naloxone and its acceptability to members of the community who misuse or abuse opioids and are at high risk of witnessing or experiencing an overdose.

**Specific Aim #2:** Assess the acceptability of an opioid overdose prevention program with take-home naloxone to prescribers and dispensers of naloxone in the community.
Opioid User Surveys Completed

Boone County:  n = 50
Logan County:  n = 16
Mingo County:  n = 12
Wyoming County:  n = 48

Total:  n = 126
Preliminary Findings

Data entered for n = 67
Overdose experience

- 31 (46%) of the 67 respondents for whom we have entered data reported witnessing an overdose

- 15 (22%) of the 67 respondents for whom we have entered data reported experiencing an overdose
Knowledge of Naloxone

- 30 (46%) of the 67 respondents for whom we have entered data reported **hearing of Narcan®**
- 23 (35%) of the 67 respondents for whom we have entered data reported **hearing of naloxone**
- 12 (18%) of the 67 respondents for whom we have entered data reported **hearing of overdose prevention programs**
Participation in OOPP

- After being informed of the components of an overdose prevention program with peer-distributed naloxone, 60 (90%) of the 67 respondents for whom we have entered data reported that they would participate in an opioid overdose prevention program with take-home naloxone.
Criticisms of, objections to, overdose prevention programs with take-home naloxone

- **major objection:** that distributing a highly effective antidote to users themselves could prompt greater risk-taking—i.e., increased use and higher doses per use—by users
- Distributing naloxone seems to implicitly condone illicit drug use
- Non-medical persons, particularly drug users, can not effectively recognize and appropriately respond to overdoses (including naloxone administration)
- Misuse of naloxone in non-overdose situations would, at the very least, translate to wasted resources
Criticisms of, objections to, overdose prevention programs with take-home naloxone (continued)

- Program participants could assume liability or face prosecution in the event of an adverse event, or in the event law enforcement responded to a 911 call.
- Legality issues surrounding naloxone administration to overdose victims for whom it was not prescribed.
- The potential for the return of respiratory depression after naloxone wears off.
Contrary to some of the widely held assumptions:

- The availability of naloxone does not apparently encourage increased use of opioids nor result in increased overdoses.
- Laypersons with training, including drug users and their peers, are comparable to medically trained personnel in recognizing overdoses and knowing when naloxone should be administered.
- Naloxone has been administered in emergency situations by laypersons with no adverse effects.
Where do we go from here?
Does the evidence suggest that overdose prevention programs with take-home naloxone in West Virginia communities would save lives?

Wilkes County, North Carolina

Scioto County, Ohio
Project Lazarus – Wilkes County, NC
Comprehensive, community based program that features:
Take-home naloxone component:
Project Lazarus results...

Wilkes County prescriptions associated with overdoses in the County: 2008 – 82%, 2011 – 0%

- Substance Abuse ED visits down 15.3%
- Diversion Tips increased – for prescription medication and methamphetamine
- Narcotic substance abuse treatment admissions
  2010 - 0, 2014 - 500+
- Churches supporting individuals in treatment
- School Substance Use Incidence Rates
  2011-2012 – 7.4 per 1000
  2012-2013 – 4.9 per 1000
  2013-2014 – 3.4 per 1000
- Project Lazarus is now a state-wide program.
Project DAWN – Scioto County OH
Project DAWN – Scioto County OH

- Expanded to 11 counties
- 190 documented OD reversals
Project Dawn

Map of Ohio with counties color-coded to represent death rates per 100,000 and labeled with different symbols for community-based Project DAWN sites, treatment or hospital-based PD sites, and potential/developing locations.
So, Based upon:

- Success of programs addressing heroin users in U.S. cities
- Preliminary results of the WVU ICRC feasibility study
- Success of two naloxone initiatives in Appalachia
- Lack of any programs in WV, the highest-risk state
- An almost universal acknowledgement of need
- Growing interest among multiple individuals/orgs in WV
- Potential availability of funds (Federal and state)
- The potential that supporting policies will be adopted in WV
- A new collaboration with Project Lazarus CEO Fred Brason...
The evidence does suggest that overdose prevention programs with take-home naloxone in West Virginia communities could save lives.
Who is interested?

- The WVU Injury Control Research Center
- The West Virginia Violence and Injury Prevention Program in the Bureau of Public Health (DHHR)
- The WV Bureau of Behavioral Health and Health Facilities (DHHR)
- The Governor’s Substance Abuse Prevention Region 5 *(10 counties in southwestern WV)*
- The WVU Schools of Public Health and Pharmacy
- The U.S. Attorney’s Office
- The WV Division of Justice and Community Services
- Key WV Legislators
- The WV Behavioral Health Planning Council
- and others...
First steps...

- An “exploratory” meeting to discuss such community-level programs (*February 12 in Charleston*)

- Explore funding mechanisms that might support implementation and evaluation of such programs

- Collaborate with Fred Brason to take advantage of his experience and expertise with Project Lazarus in North Carolina
Two potential scenarios...

- Community-based opioid overdose prevention programs based upon the Project Lazarus model

- Take-home naloxone programs administered through the WV Day Report Centers (concept being developed as a grant proposal) and/or program addressing incarcerated offenders (e.g., upon release from incarceration)

Potential funding available through state and federal agencies
Acknowledgment

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Thank You!

Questions?

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