Opioid Overdose Prevention Programs with Take-Home Naloxone in WV

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WVU ICRC Outreach Activities

- Attend the national Prescription Drug Abuse Summit in Orlando in April 2012
- Review the research literature on prescription drug overdose prevention
Southern WV contacts made at Summit

Joshua Murphy
Mingo County

Tim White
Cabell County
West Virginia 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:

Research literature on prescription opioid overdose prevention

Prevention Options:

Opioid Overdose Prevention Programs with Take-Home Naloxone (Narcan)
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.”
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: Recruitment and Training

These programs recruited voluntary participants from active heroin users who used the services of clinics and syringe exchange programs in large cities. The 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
Overdose Prevention Programs: “Take-home” naloxone

Participating physicians wrote prescriptions for users, and they were given naloxone kits.
“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)*
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 were (and are still being) replicated in other cities, states and counties across the U.S.
Overdose deaths from prescription opioid analgesics (painkillers) began to rise...

Prescription painkiller overdose deaths have continued to rise for a decade and a half.

Though heroin overdose deaths were traditionally concentrated in urban areas, deaths due to Rx drug overdose rapidly increased in rural areas, including West Virginia.
Age-adjusted unintentional drug-related poisoning (overdose) rates, 2013

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

Source: CDC’s WISQARS
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...
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
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?
Funding Announcement

- Community Engagement and Outreach Program
- Required collaborative development between academic researchers and communities
The Initial Collaborators:

Joshua Murphy
Mingo County

Jeremy Farley
Logan County

Kelly Gurka
WVU-ICRC

Herb Linn
WVU-ICRC

Tim White
Cabell County
A research proposal was collaboratively developed:

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

*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.

*Long-term Research Goal*

- To develop, evaluate, and disseminate effective opioid overdose prevention programs with take-home naloxone throughout Appalachia
Preliminary Findings

Data entered for n = 67 (of 170 user surveys completed)

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
After being informed of the components of an overdose prevention program with take-home 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.
Rural opioid overdose prevention programs with take-home naloxone

Wilkes County, North Carolina

Scioto County, Ohio
Project Lazarus – Wilkes County, NC
Comprehensive, community based program that features:

- **Community Education**
- **Provider Education**
- **Harm Reduction**
- **Coalition Action**
- **Data & Evaluation**
- **Hospital ED Policies**
- **Pain Patient Support**
- **Diversion Control**
Take-home naloxone component:
Project Lazarus results...

- 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.

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

- Expanded to 11 counties
- 190 documented OD reversals
Does the evidence suggest that overdose prevention programs with take-home naloxone in West Virginia communities could save lives?
Based upon:

- Success of programs addressing heroin users in U.S. cities
- Success of two naloxone initiatives in Appalachia
- Preliminary results of the WVU ICRC feasibility study
- Findings from the CDC survey of 188 local programs

Plus, there is:

- 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.
Where do we go from here?
First steps...

- Schedule 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
  - a committed coalition in a community
  - a champion
  - some start-up funds

- Take-home naloxone programs administered through the WV Day Report Centers
  - concept being considered for development as a grant proposal
Research reported in this presentation was supported by the National Institute Of General Medical Sciences of the National Institutes of Health under Award Number U54GM104942. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.
Thank You!

Questions?
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The following are optional slides (or if asked)
WV Drug Overdose Fatalities by Year
2001-2012 Occurrences

Note: Manner of suicide excluded. 2011 is preliminary and unpublished data; 2012 is cumulative. WV Bureau for Public Health – Health Statistics Center (closed data sets from 2001-2010; entry data sets 2011-2012.)
Age-adjusted unintentional drug-related poisoning (overdose) rates, US & WV, 1999-2013
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
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
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**
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  - Assistant Professor, WVU Department of Biostatistics