Interpreting the Oklahoma Prevention Needs Assessment (OPNA) Data

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Our Mission: To promote healthy communities and provide the highest quality care to enhance the well-being of all Oklahomans.
Data interpretation: Meaning making sense of the information presented in the OPNA profile report. It answers the question: “What does this information tell me about the participant/participant’s behaviors in my community”?

For data to be useful, they need to be processed and summarized to become meaningful as they relate to your program. We are not going to go over the definition of every indicator, but rather focus on the concept of interpreting the presented data.

After today, we want you to be able to take the data provided and look at them in the context of the questions that you need to answer that is relevant to your community.
First, I would like to hear how OPNA data is being used in your program or your community. Besides using it as a grant reporting requirement, what are some examples where OPNA data is being used?

(e.g. Drug Free Communities program)
To make use of the data we collect, first we must know the purpose of doing the survey. Can someone tell me what is the purpose of the OPNA survey?

- Assess students' involvement in a specific set of problem behaviors
- Assess their exposure to a set of risk and protective factors That influence the likelihood of school dropout, substance abuse, violence and delinquency, academic success, and positive mental health.

- Using high quality information is important to make informed decisions. The information can be used as input for resource and policy decisions, such as targeting interventions or prevention services within the state and to assist communities and schools in developing strategic prevention planning based on local needs. The data can be used by schools to establish school and district-level prevention plans and complete proposal for discretionary and federal funds.
Show of hands, how many read all sections of the report? Be honest!

It is important to read all sections because they provide a better understanding of the definition and purpose of data presented in the report.
There are couple of things to keep in mind as you are looking through the information presented in the profile report.

- What are the participant’s demographics?
- Is the data weighted in the table/chart? What does it mean when data is weighted? Meaning data were adjusted so that it is representative of the population where data was collected.
- What information presented is high and what is low?
- Is it going up or down?
- How does your data compare to previous years?
- Are there any patterns?
- How does your data compare to data from similar communities? And to State data?
- What is so interesting about this data and who will find it interesting?

This last question will help you in identifying your audience and translating your data for distributing, which we will have a separate session for in the near future.
A Closer Look at Data

- Objectively review the current data
Let’s examine Table 1 from County A:

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Begin with the current’s year data.
Before diving into the numbers, just from looking at this table, what information is this table telling us?

- Participant demographics: grade level, gender, race/ethnicity. For race/ethnicity, the sum of students of individual categories may exceed the total number of students surveyed since students are able to select more than one race or ethnicity. It is important to pay close attention to the footnote.

- Results at County level from different years and current State level data.

Is the data on this table weighted?

Only the state level data; the county level data is not. Only 2014 and 2016 final State and Regional level data were weighted by grade levels.

What can you say about the 2016 data?

How does the data compare to previous year?

How would you summarize this data in a couple of sentences?

Does this data reflect the participants in your community?
What information is presented on Table 2?
Does the data reflect your community?
What is considered as high or low participation rates?
What can you say about the participation rates for County B? What is the rate that we want to aim for and why?
 If 60% or more students participated, it’s a good indicator of the levels of substance use, risk, protection, and antisocial behavior. Note that 60% is what Bach Harrison recommends; However, SAMHSA wants State to strive for a 70% response rate.

Since participation rates were less than 60%, what would be your next approach?
 You should look at the number of schools and students participated and what they represent. If participation was from only a few schools, then data represent the students surveyed and most likely not a good representation of youth in the community. However, if multiple schools are surveyed, demographics comparable with your community, then data
obtained can be used to represent the community.
Charts and tables presented in the Profile report includes:
1. Substance use
2. Problem substance use, treatment needs, and antisocial behavior (ASB)
3. Sources of alcohol
4. Sources of prescription drugs
5. Risk factors
6. Protective factors
7. Drug Free Community indicators
8. Additional data or program planning

We will be going over several charts and tables
When reviewing the report, how many prefer chart over table? Why do you use charts vs. tables or vice versa? Which is better?

It depends on how the data will be used. A data chart or graph is used when you want to quickly tell a story, showing how different variables relate to each other, and highlights the point needed to be made quickly and more effectively (if done correctly).

However, a data table usually contains more information. A table can display many different variables, different units of measures, and data values. This is good when you have to report the values and useful when you need to compare data values across multiple years and multiple variables. It can all be displayed in one table.
So when you are presented with a chart like this, how do you approach this or what should be the first thing you do?

First, make sure you understand what data is being presented and what different symbols and colors represent in the chart.

Here the title indicates it is lifetime and 30-day ATOD use among 12th grader in County A. Y-axis indicates percentage meaning the bars represent percentage of students in that grade who reported a given behavior which is indicated on the X-axis. The legend indicates different colors represent data from different years, dot represents state data and diamond represents national data from Monitoring the Future study (similar purpose to OPNA but at national level with additional follow-up questionnaires mailed to a sample of each graduating class for a number of years).

Now let’s focus in on the lifetime use.
What is another way to say lifetime use? ‘ever tried use’.
What do you see on this chart that stands out?
Alcohol, cigarette, chewing tobacco, and marijuana use are higher in relation to other substances.
Relative differences of these substances used in different years, for State, and at nationally level.

Pick a focus topic, depending on your interest or program’s interest.
Now let’s look at the same information presented in a table format in the report. As you can see, it will take longer for you to process. However, you can see the actual value for each indicator and information for multiple years and all grade levels are in one table, so you can compare values for each grade level without having to flip through many pages.
After objectively examining the current year data, look for a pattern in
the variable of your interest.
Look to see if there is a trend for specific findings. When spotting for
a trend, make sure to check for the number of schools participated,
the participation rates, and the defined indicators. Why?
Inconsistency or low participation rates can contribute to skewness
of trend.

Highlight what is most pertinent to your community, whether the
problem worsens, improves, or is being addressed.
Comparisons

- How does your data compare to others?
  - Find a pattern
- Compare your data to other similar communities, State and national data
  - Visual data connection
  - Emphasize the relevance in the comparison

Your community data can be compared to other similar communities, State, and national data. A general rule for local level data is that a 5% difference when making comparisons is considered meaningful. Again, check the participation rates.
What data is this chart presenting?
Problem substance use, treatment needs, and antisocial behavior among 8th grade students in No Name County.
For each category, the measured indicators are listed on the X-axis. Please refer to your report for more details.
From this chart you can easily tell what is most prevalent and least prevalent.
Let’s focus on problem substance use and antisocial behavior.
What are some ways to interpret this?

Example #1. The highest problem substance use rates for 2016 was binge drinking (which defined as having five or more drinks in the past 2 weeks).

Example #2: The highest antisocial behavior rates for 2016 were suspended from school and attacking someone with the intention of harming them in the past year.
Sources/Places of Alcohol Use

- The percentage of students who obtained alcohol from 12 specific sources and used it in 9 different places during the past year
  - Chart represent subgroup of users, not the entire survey population
    - Indicators are not mutually exclusive, selecting more than one indicators is allowed

Sources of alcohol use were reported among students who indicated at least one means of obtaining alcohol and at least one place of consuming alcohol in the last 12 months. Please note: the categories are not mutually exclusive, meaning students were allowed to select more than one option for sources/location.
How will you interpret this?

e.g. The most common sources of obtaining alcohol for alcohol-using 8th grade students was from an adult they know, from home with parent’s permission, and from home without permission.

e.g. Among alcohol-using 8th grade students, the predominate location for drinking was either at home, at a friend’s house, or at a party.

Note: small sample size.
Sources of prescription drugs were reported among students who indicated of ever used prescription drugs to get high in their lifetime. Similar to sources of alcohol use, the categories are not mutually exclusive.
How will you interpret this?

e.g. in 2016 among 8th grade students who indicated they used prescription drugs to get high, approximately 50% indicated they obtained them from friends.
Now we are going to focus on the Risk and Protective Factor Model. This model is based on Dr. David Hawkins and his colleagues’ extensive studies. They identified risk factors in the four areas of daily life, which includes: the community, family, school, and within the individuals and their peer interactions. In addition, they have defined a set of risk factors that place young people at risk for the following problem behaviors: substance abuse, delinquency, violence, teen pregnancy, and school dropout. A set of protective factors were identified to help buffer the harmful effects of risk.

Studies identified a cut-point score or a scale value was determined to separate students into ‘high risk’ and ‘low risk’ groups. The scales are based on a number of questions.
Here the checkmarks indicate the shared common risk factors of the problem behaviors faced by youth across the four domains.

We will look at each domain individually later.
High risk youth are defined as the percentage of students who have more than a specified number of risk factors in their lives. Students are considered at high risk if experienced 7 or more risk factors for 6th graders, 8 or more risk factors for 8th graders, and 9 or more risk factors for 10th and 12th graders.

Students are considered having high protection factors if they have 4 or more protective factors for 6th graders, and 5 or more protective factors for 8th, 10th, and 12th graders.
The table on your left shows the link between the community risk factors and the 5 problem behaviors. Checkmarks indicate the shared common risk factors of the problem behaviors faced by youth in the community domain.

The table on your right indicate associated risk and protective factors for scaled scores for the Community Domain. The two protective factor scales for community are opportunity and rewards for prosocial involvement. Please see table in the profile report for risk and protective scale definitions.
How would you interpret the data presented?

e.g. In 2016, low neighborhood attachment was the highest risk scaled score (40% at risk) for students in County A. Or 40% of students (6th, 8th, 10th, 12th grader) are at risk for engaging in problem behaviors such as substance abuse, delinquency, and violence due to low neighborhood attachment experiences in their community.
Again, on your left shows the link between the family risk factors and the 5 problem behaviors. On your right shows the 5 risk factor scores and 3 protective factor scores for family domain.
Let's look at the table version focusing on 2016 data. How would you interpret this?

e.g. 53.4% of 6\textsuperscript{th} grade students in county A are at risk for having problem behaviors due to poor family management experiences in their lives.

Or poor family management was the highest risk scaled score (53.4% at risk) for 6\textsuperscript{th} grader in County A.
In the School domain, there are only two risk factors that have been shown to be associated with all 5 problem behavior in youths. There are 2 protective factor scales which include school opportunities and rewards for prosocial involvement.
How would you interpret this?

-8th grade students in county A have higher protective factor scaled score (69.5%) in school opportunities for prosocial involvement compared to the state.
Lastly, there are 9 peer/individual risk factors associated with problem behaviors in the peer and individual domain. There are 10 risk factor scales and 5 protective factor scales domain.
How would you interpret data presented on peer-individual section for 10\textsuperscript{th} graders?

-10\textsuperscript{th} grade students in County Y have a highest protective factor scaled score (62.6%) for rewards for prosocial involvement in the peer-individual domain in 2016.

How would you interpret the total protection data for the 12\textsuperscript{th} graders?

-Based on the protective factor scales, it is predicted that 45.9% of 12\textsuperscript{th} grade students have high protection from engaging in problem behaviors due to the multiple protective factors in their lives. Students in this county have a lower percentage of high protection compared to the state. There was a large decrease from 2012 to 2014 and a more modest decrease from 2014 to 2016. Again, you should check response rates, which schools took the survey, etc. to see if this could account for fluctuations.
How would you interpret this?

Based on the risk factors scales, it is predicted that approximately 42% of students (6th, 8th, 10th, and 12th grade) in County A are at high risk for engaging in problem behaviors due to multiple risk factors experienced in their lives.
We will end this session with a couple of quotes. We hope this session is a good start for you to think about data. Enjoy your lunch.
Questions??

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