

MODULE 3 – UNDERSTANDING DATA

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Take these statistics. Each of these statements is based on prevalence data. Each is a compelling statistic. And each statement is frequently reported, but is often interpreted incorrectly. Technically speaking, these are abbreviated or shorthand data that can be easily understood by the layperson.

For behavioral health professionals, we understand that these are greatly simplified. The correct way to interpret these are estimates of possible prevalence of a disorder in a child or adolescent. There is no way to actually know the incidence of a specific disease, because we know there are many children and adolescents who do not receive a behavioral disorder diagnosis until they are in school, or in other service delivery systems such as child welfare or juvenile justice. Hence, the statement, one in five children in the United States have a behavioral disorder should actually be written as-- one in five children in the United States, over a 12 month period, may experience the occurrence of a diagnosable behavioral disorder.

Using incidence data is even more difficult because there are different rules for reporting health event visits to a state reporting agency. Private sector behavioral health professionals are not required to report incidence data to the state, unless they are providing services to children and adolescents covered under one of the federal funding streams. So often, the best data we have is based on public sector service provision. So it is not all-inclusive data on the number of children with behavioral disorders who are receiving services. The parameter of interest in epidemiological studies may be a disease rate, the prevalence of an exposure-- or more often, some measure of the association between an exposure and a disease.

Because studies are carried out on people and have practical and ethical constraints, studies almost invariably are subject to some sort of bias. This becomes problematic when trying to take research studies with a variety of methodologies and make them sensible for a policy maker or other stakeholders. Many times a meta-analysis is conducted. Meta-analysis is an analytical technique designed to summarize the results of multiple studies.

By combining studies, a meta-analysis increases the sample size, and thus, the power to study effects of interest. However, there are many caveats in performing a meta-analysis. And in some cases, a meta-analysis is not appropriate, and the results can be misleading.

Other times, large samples of a population may be studied, such as in the National Co-morbidity Survey Adolescent, NCSA, which examined the 12-month rates of service use for mental, emotional, and behavioral disorders among adolescents. This national study attempted to address the paucity of data on the prevalence of disorders, as well as services utilization of a nationally representative sample of children and adolescents. If we look at the Merikangas and colleagues article, they used a modified version of the World Health Organization Composite International Diagnostic Interview in a nationally representative sample of 6,483 adolescents and their parents. Merikangas and colleagues conducted face-to-face interviews with the adolescents and their parents.

They found that approximately one third of adolescents in the sample who had behavioral disorders received treatment for a particular lifetime disorder. The study also found that fewer [? in ?] [? one ?] [? five ?] affected adolescents received services for three specific disorders-- anxiety disorders, eating disorders, or substance use disorders. They also concluded, extrapolating from the sample, that a substantial proportion of adolescents with severe behavioral disorders had never received specialty behavioral health care.

Now, if you were given the studies by Merikangas et al., complementing [INAUDIBLE] et al. from last week's lecture to create a policy report on services needs of adolescents-- how might you consider going about creating an effective policy report? Could you pull together how services were provided and where? Could you describe Medicaid services utilization at a state level?

Could you address how services may need to be redefined to allow states to continue to receive federal monies? And most importantly, what information is most important to you? And how would you convey that from a policy perspective?