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Trauma Exposure and Posttraumatic Stress Symptoms in the 2008-2012 Mental Health Surveillance Study (MHSS)

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Outline

- Describe the clinical assessment of trauma exposure and posttraumatic stress in the MHSS clinical interview study
- Summarize the symptoms of posttraumatic stress disorder (PTSD) based on the DSM-IV-TR and DSM-5
- Present the kinds of estimates that can be computed using the MHSS clinical interview study

DSM-IV-TR = *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition, text revision.
DSM-5 = *Diagnostic and Statistical Manual of Mental Disorders*, 5th edition.

METHODS: MHSS CLINICAL INTERVIEW STUDY (2008-2012)

Methods: MHSS Clinical Interview Study (2008-2012)

- The MHSS clinical interview study includes disorders across a wide spectrum of diagnostic categories, including mood disorders, anxiety disorders, eating disorders, substance use disorders, intermittent explosive disorder, and adjustment disorder, as well as psychotic symptoms.
- The MHSS assessed several specific mental disorders, including posttraumatic stress disorder (PTSD).

Structured Clinical Interview for the DSM (SCID)

- The SCID was used in the MHSS and differs in several ways from other diagnostic interviews:
  - Semistructured (vs. structured) diagnostic interview, which allows for flexibility
  - Requires clinical judgment, which is necessary for making diagnostic decisions
  - Used by several studies as the “gold standard” in determining the accuracy of clinical diagnoses

SCID (continued)

- Each SCID symptom is rated as “1” (absent), “2” (subclinical), “3” (present), or “?” (need more information):
  - A minimum number of symptoms must be present (“3”) to meet diagnostic criteria.
    - The number of symptoms needed for a diagnosis differ from one disorder to another.
- SCID diagnoses are rated as “?,” “1,” or “3.”
  - For some analyses in the MHSS clinical interview study, “?” and “2” were recoded as “1” (absent).

SCID (continued)

Now I'd like to ask a few questions about specific ways that it may have affected you in the past year.

For example, in the past year . . .

. . . did you think about (TRAUMA) when you didn't want to or did thoughts about (TRAUMA) come to you suddenly when you didn't want them to?

B. The traumatic event is persistently re-experienced in one (or more) of the following ways:

(1)	recurrent and intrusive distressing recollections of the event, including images, thoughts or perceptions	?	1	2	3

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SCID (continued)

- The SCID includes screening items for certain disorders at the end of the overview (e.g., eating disorders) or at the beginning of the module (e.g., PTSD):
  - The screening items typically assessed the first criterion for the respective disorder.
  - These items help to prevent respondents from “faking good” if they later realize that answering “No” makes the interview shorter.
  - They also help the clinical interviewer estimate how long the interview will be.

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SCID Assessment of PTSD According to DSM-IV-TR PTSD Diagnostic Criteria

- Screening: Lifetime trauma exposure coupled with the respondent having re-experienced the traumatic event or became very distressed when recalling the traumatic event.
  - If positive for the screening, administer the SCID for past year DSM-IV Criteria A to F until the criteria are no longer met.
    - Standard protocol for the SCID is to end the assessment (i.e., “skip out” of the remaining criterion assessment[s]) when criteria stop being met.

DSM-IV-TR PTSD Diagnostic Criteria

- **Criterion A.** Exposure to one or more traumatic events:
  - A.1: The person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others.
  - A.2: The person's response involved intense fear, helplessness, or horror.

DSM-IV-TR PTSD Diagnostic Criteria (continued)

- **Criterion B.** One or more re-experiencing symptoms:
  - Recurrent and intrusive distressing recollections
  - Recurrent distressing dreams of the event
  - Reliving traumatic event (e.g., “flashbacks”)
  - Intense psychological distressed and/or physiological reactivity when reminded of traumatic event

DSM-IV-TR PTSD Diagnostic Criteria (continued)

- **Criterion C.** Three or more avoidance symptoms:
  - Avoiding thoughts, feelings, or conversations about the trauma
  - Avoiding reminders of the trauma
  - Inability to recall important aspects of the trauma
  - Diminished interest in significant activities
  - Feeling detached/estranged from others
  - Restricted range of affect
  - Sense of foreshortened future

DSM-IV-TR PTSD Diagnostic Criteria (continued)

- **Criterion D.** Two or more hyperarousal symptoms:
  - Difficulty falling or staying asleep
  - Irritability or angry outbursts
  - Difficulty concentrating
  - Hypervigilance
  - Exaggerated startle response

DSM-IV-TR PTSD Diagnostic Criteria (continued)

- **Criterion E.** Duration of the disturbance (symptoms in Criteria B, C, and D) is more than 1 month.
- **Criterion F.** The disturbance (symptoms in Criteria B, C, and D) causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

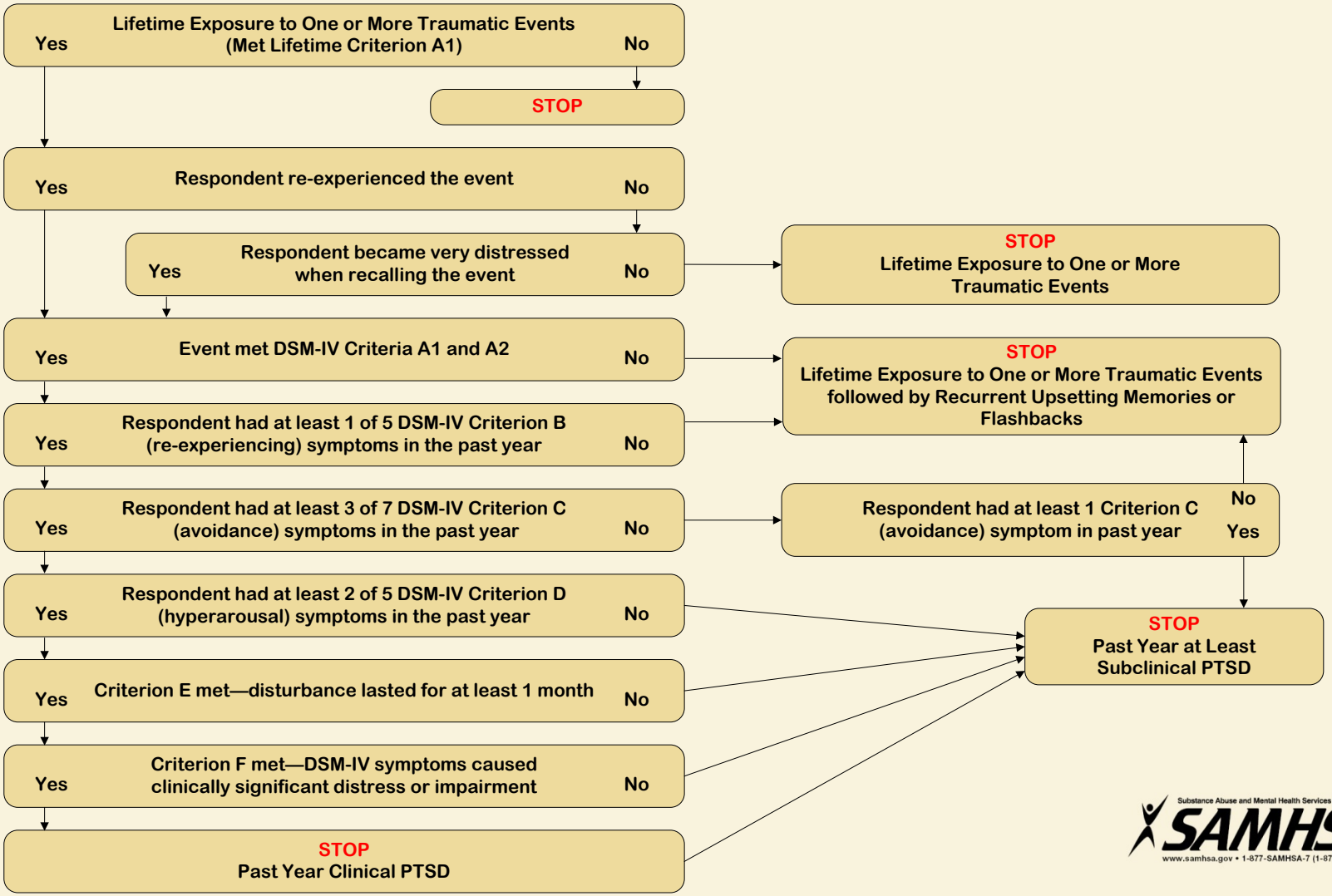
MHSS Version of the SCID Assessment of PTSD

- The MHSS SCID was adapted from the original SCID-Research Version in order to make the time frame past year—that is, the PTSD assessment refers to the past year (vs. lifetime and/or past month).
  - However, the screening questions for PTSD were about lifetime exposure to trauma and lifetime symptoms of re-experiencing or getting very upset by reminders of the traumatic event.

Defining Subclinical PTSD

- Subclinical PTSD: A category for respondents who met Criterion A (lifetime exposure and a reaction of intense fear, helplessness, or horror), Criterion B (at least 1 re-experiencing symptom in the past year), and at least one Criterion C symptom (avoidance in the past year)
- "Past year at least subclinical PTSD": Those respondents who, in the past year, met the criteria for subclinical PTSD to include those respondents who also met the full criteria for PTSD.

Assessment of Traumatic Event Exposure and Posttraumatic Stress Symptoms (MHSS Clinical Study)



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EXAMPLES OF ESTIMATING TRAUMA FROM EXISTING DATA SOURCES

Estimates of Trauma Exposure and Posttraumatic Stress: MHSS Clinical Interview Study

- SAMHSA's MHSS clinical interview data were used to estimate the percentages of adults aged 18 or older who had
  - Exposure to one or more traumatic events in their lifetime
  - Past year subclinical PTSD (including clinical PTSD) among adults with lifetime trauma exposure
  - Past year clinical PTSD among adults with lifetime trauma exposure

Estimates of Trauma Exposure and Posttraumatic Stress: MHSS Clinical Interview Study (continued)

- Prevalence estimates of lifetime trauma exposure and past year subclinical/clinical PTSD by social demographic characteristics
- Mental health indicators and substance use/substance use disorder by lifetime trauma exposure and past year subclinical/clinical PTSD
- Chronic health conditions by lifetime trauma exposure and past year subclinical/clinical PTSD

MHSS Clinical Interview Study Limitations

- The MHSS was conducted in English only.
- The study did not include some populations at higher risk for trauma exposure (e.g., people living in institutions, homeless people not living in shelters, and active-duty military personnel).
- No temporality can be established and no causal influences can be suggested using these data.
- The MHSS was based on the DSM-IV, not the DSM-5.

MHSS Clinical Study Limitations (continued)

- The longer the delay between the initial and follow-up assessment, the greater the risk of false positives and false negatives on the follow-up assessment.
- SCID is useful for estimating serious mental illness, but may have limitations for this kind of study.
  - This may be partly due to skip patterns in the SCID:
    - Unlike the Composite International Diagnostic Interview or CIDI (NCS-R) and the Alcohol Use Disorder and Associated Disabilities Interview Schedule version 4 or AUDADIS-IV (NESARC), the standard protocol for the SCID is to stop administering the disorder's module once the criteria are no longer met.
    - Definition of at least subclinical PTSD: Respondent met Criteria A and B and at least one symptom of Criterion C (vs. NESARC, which required meeting Criterion A and one symptom each from Criteria B, C, and D).

Published Estimates from Other Nationally Representative Data Sources

- The National Epidemiologic Survey on Alcohol and Related Conditions (NESARC Wave 2, 2004-2005) (which, like the MHSS, also only required PTSD Criterion A1) estimated approximately 68% to 84% of adults had lifetime exposure to one or more traumatic events.
- The Collaborative Psychiatric Epidemiology Surveys (CPES), the National Survey of American Life (NSAL), and the National Comorbidity Survey-Replication (NCS-R, 2001-2003) (which required both PTSD Criteria A1 and A2) estimated approximately 82% to 90% of adults had lifetime exposure to one or more traumatic events.

Differences Between Nationally Representative Data Sources

- Differences in prevalence estimates of trauma exposure and subclinical/clinical PTSD between data sources may be due to the use of screening questions:
  - Unlike other surveys, the MHSS included a set of screening questions in order to advance into the PTSD module. The MHSS respondents had to affirm lifetime PTSD Criterion A1 and either of the lifetime Criteria B questions asked (i.e., that trauma exposure was followed by recurrent upsetting memories or flashbacks) to enter the SCID module to assess past year PTSD.
  - The NCS-R did not include a skip pattern based on screener questions.

Differences Between Nationally Representative Data Sources (continued)

- Differences in estimates may be due to differences in traumatic event examples:
  - The instruments used to assess traumatic event exposure differed with respect to the number and type of traumatic event examples provided in the first question.
  - For example, the MHSS gave examples of traumatic events in a single statement that began "…things like…," whereas NESARC provided a much more inclusive series of questions about specific traumatic events.
  - These types of differences may affect how an individual responds to questions about traumatic events across each survey.

Differences Between Nationally Representative Data Sources (continued)

- Differences in these estimates may be due to variation in the definition of traumatic event exposure:
  - The MHSS and NESARC used DSM-IV PTSD Criterion A1 (the person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others) to define lifetime trauma exposure.
  - The NCS-R, the CPES, and the NSAL required both DSM-IV PTSD Criteria A1 and A2 (the person's response to the traumatic event involved intense fear, helplessness, or horror).

Differences Between Nationally Representative Data Sources (continued)

- Differences in these estimates may be due to variation in the assessment of PTSD:
  - Both the NESARC and NCS-R used fully structured (scripted) interviews to assess and define traumatic events and posttraumatic stress symptoms.
  - The MHSS used a semistructured (partially scripted) diagnostic interview that relies on clinical judgment in coding exposure to a traumatic event and the presence of posttraumatic stress symptoms.

Differences Between Nationally Representative Data Sources (continued)

- Differences in these estimates may also be due to interviewer qualifications:
  - Both the NESARC and NCS-R used lay interviewers who did not have input into the determination of whether or not an event was sufficiently traumatic to meet DSM-IV criteria.
  - The MHSS used clinical interviewers who were trained to differentiate very stressful events from actual Criterion A traumatic events, thereby reducing the possibility of false-positive reporting of symptoms.

Future Considerations: DSM-5 Changes

- DSM-5 changes in defining PTSD (APA, 2013):
  - Criterion A2 (requiring fear, helplessness, or horror after traumatic event) was removed.
  - The three clusters of DSM-IV symptoms are divided into four clusters in DSM-5: intrusion, avoidance, negative alterations in cognition and mood, and alterations in arousal and reactivity.
  - DSM-IV Criterion C, avoidance and numbing, was separated into two criteria: Criterion C (avoidance) and Criterion D (negative alterations in cognitions and mood).
  - Three new symptoms were added: persistent and distorted blame of self or others, persistent negative emotional states, and reckless or destructive behavior.
  - Other symptoms were revised to clarify expression.

NOTE: American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

Summary

- The NRC is charged with determining how to measure, collect, and estimate trauma, which could include
  - changing the NSDUH
  - conducting a follow-up similar to the MHSS
  - using an existing data source or
  - starting a new data collection
- We have presented examples of ways to measure trauma using a clinical follow-up to NSDUH and a description of existing data sources that also provide estimates.

Questions?

Thank you!