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## TWEAK

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TWEAK is a five-item scale developed originally to screen for risk drinking during pregnancy. It is an acronym for the questions below:

T—Tolerance: "How many drinks can you hold?"

W—Worried: "Have close friends or relatives Worried or Complained about your drinking in the past year?"

E—Eye-openers: "Do you sometimes take a drink in the morning when you first get up?"

A—Amnesia (blackouts): "Has a friend or family member ever told you about things you said or did while you were drinking that you could not remember?"

K(C)—Cut Down: "Do you sometimes feel the need to Cut Down on your drinking?"

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### Target Population

#### Adults

TWEAK is one of the few alcohol screening tests that has been developed and validated among women. The utility of items included in the TWEAK was demonstrated in studies of obstetric and gynecologic outpatients (Russell and Bigler 1979; Russell and Skinner 1988; Sokol et al. 1989). It has been validated among disadvantaged African-American women attending an inner-city prenatal care clinic, using periconceptional risk drinking as a standard, i.e., self-report of alcohol consumption averaging one or more ounces of absolute alcohol per day, or 14 or more drinks per week (Russell et al. 1994).

TWEAK has also been adapted to screen for heavy drinking (4 or more drinks per day for women and 6 or more per day for men) and alcohol dependence in the past year (DSM-III-R criteria) in male and female samples of the general household population and hospital clinic outpatients (Chan et al. 1993).

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### Administrative Issues

5 items, 0 subscales

Pencil and paper self-administered, interview, or computer self-administered

Time required: less than 2 minutes

Administered by self, health care worker, or computer

No training required for administration

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The TWEAK is very brief, and no special training is necessary to administer the test. In a prenatal clinic where literacy was low, items were administered by an interviewer. In health care settings, it could be administered as part of the medical history, following logically after questions about smoking (Sokol et al. 1985).

Prior to administering the TWEAK, current drinkers are identified by asking: Do you ever drink beer, wine, wine coolers, or drinks containing liquor (such as whiskey, rum, vodka, or gin)? If lifetime drinkers are to be screened, this question can be phrased, "Have you ever drunk beer, wine, wine coolers, or drinks containing liquor (such as whiskey, rum, vodka, or gin)?"

A self-administered version of the TWEAK was developed and tested in samples of the general household population, hospital clinic outpatients, and alcohol inpatients (Chan et al. 1993). The questions were slightly modified as given below:

1. How many drinks does it take before you begin to feel the first effects of the alcohol?

1A. How many drinks does it take before the alcohol makes you fall asleep or pass out?

OR

(If you never drink until you pass out, please record the largest number of drinks you have.)

2. Have your friends or relatives worried or complained about your drinking in the past year?

3. Do you sometimes take a drink in the morning when you first get up?

4. Are there times when you drink and afterwards you can't remember what you said or did?

5. Do you sometimes feel the need to cut down on your drinking?

For clinical use, choose either question 1, "high," or 1A, "hold," to assess tolerance.

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**Scoring**

Time required: about 1 minute

Scored by health care worker

No computerized scoring or interpretation available

Norms available

Normed on Black gravidas seen in an inner-city clinic in Detroit; male and female general population samples, male and female alcoholic inpatients, and male and female outpatients from the

primary health and family care centers of a county medical center in western New York State.

To score the test, a 7-point scale is used. The Tolerance and Worry questions each contribute 2 points, and the other three items contribute 1 point each. As indicated above, only one of the two Tolerance questions is asked. The Tolerance-high question scores 2 points if it is reported that three or more drinks are needed to feel high. The Tolerance-hold question scores 2 points if a respondent reports being able to hold six or more drinks.

A total score of 2 or more indicates that obstetric patients were likely to be risk drinkers (Russell et al. 1994). However, preliminary studies suggest that cut-points of 3 or 4 are better than 2 for identifying harmful drinking or alcoholism (Chan et al. 1993).

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#### **Psychometrics**

No reliability studies done

Measures of validity derived:

Criterion (predictive, concurrent, "postdictive")

The TWEAK was originally developed to screen for risk drinking during pregnancy. Three of the TWEAK questions—Amnesia, Worried, and K/Cut down—identified over 70 percent of obstetric patients reporting two or more indications of problem drinking (Russell and Skinner 1988). Having two or more indications of problem drinking was associated with significantly lower birthweight, lower Apgar scores, and smaller head circumference at birth (Russell and Skinner 1988) and cognitive deficits at age 6 (Russell et al. 1991).

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#### **Clinical Utility of Instrument**

The TWEAK has been used to screen for periconceptional risk drinking among obstetric outpatients (Russell et al. 1994). Screening for periconceptional risk drinking has the potential to improve pregnancy outcome among risk drinkers by targeting them for intervention to reduce their alcohol intake during pregnancy. Postpartum followup to prevent resumption of harmful drinking patterns will enhance women's ability to care for their newborns and prevent alcohol-related fetal damage in subsequent pregnancies.

TWEAK has also been used to screen for harmful drinking and a DSM-III-R diagnosis of alcohol abuse or dependence in samples of the general household population, outpatient samples, and hospital inpatients (Chan et al. 1993). It provides a quick and easy method of targeting outpatients and inpatients in need of more thorough assessments of their drinking patterns and alcohol-related problems to determine whether treatment for

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alcoholism is needed. Information on alcohol use may also be important in planning treatment for patients' other health needs. Feedback on harm revealed by the assessment has the potential to motivate patients to reduce their alcohol intake, either on their own or by accepting treatment (Miller et al. 1988).

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**Research Applicability** It would be appropriate to conduct further work on the psychometric properties of the instrument and its sensitivity and specificity with respect to various alcohol outcomes (risk drinking during pregnancy, harmful drinking, and alcohol abuse or dependence) in a wide range of populations, particularly those seen in community agencies with the capability to conduct followup assessments of individuals who score positively on the TWEAK, to conduct brief motivational counseling, and/or to refer individuals judged appropriate for alcohol treatment (Institute of Medicine 1990). Eventually, the funding of research projects with long-term followup to evaluate the costs and benefits associated with such a program would be appropriate.

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**Copyright, Cost, and Source Issues** No copyright  
No cost  
Copies of the TWEAK and scoring instructions are available from:  
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**Source Reference** Russell, M.; Martier, S.S.; Sokol, R.J.; Jacobson, S.; Jacobson, J.; and Bottoms, S. Screening for pregnancy risk drinking: TWEAKING the tests. *Alcoholism Clin Exp Res* 15(2):638, 1991.

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**Supporting References** Russell, M., and Bigler, Screening for alcohol-related problems in an outpatient obstetric-gynecologic clinic. *Am J Obstet Gynec* 134:4-12, 1979.  
Russell, M., and Skinner, J.B. Early measures of maternal alcohol misuse as predictors of adverse pregnancy outcomes. *Alcoholism Clin Exp Res* 12(6):824-830, 1988.  
Miller, W.R.; Sovereign, R.G.; and Krege, B. Motivational interviewing with problem drinkers: II. The drinkers check-up as a preventive intervention. *Behav Psychother* 16(4):251-268, 1988.  
Sokol, R.J.; Martier, S.S.; and Ager, J.W. T-ACE questions: Practical prenatal detection of risk-drinking. *Am J Obstet Gynec* 160(4):863-870, 1989.

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- Russell, M.; Czarnecki, D.M.; Cowan, R.; McPherson, E.; and Mudar, P. Measures of maternal alcohol use as predictors of development in early childhood. *Alcoholism Clin Exp Res* 15(6):991-1000, 1991.
- Chan, A.W.K.; Pristach, E.A.; Welte, J.W.; and Russell, M. Use of the TWEAK test in screening for alcoholism/heavy drinking in three populations. *Alcoholism Clin Exp Res* 17(6):1188-1192, 1993.
- Institute of Medicine. *Broadening the Base of Treatment for Alcohol Problems*. Washington, DC: National Academy of Sciences, 1990.
- Russell, M.; Martier, S.S.; Sokol, R.J.; Mudar, P.; Bottoms, S.; Jacobson, S.; and Jacobson, J. Screening for pregnancy risk-drinking. *Alcoholism Clin Exp Res* 18(5):1156-1161, 1994.
- Russell, M. New assessment tools for drinking in pregnancy: T-ACE, TWEAK, and others. *Alcohol Health Res World* 18(1):55-61, 1994.