Tuberculosis and Alcohol Use disorders

Tri State TB Intensive Workshop

September 27th, 2018

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Beaumont

Objectives

1. Review the role of alcohol use disorders (AUD) on TB
2. Discuss screening tools for AUD
3. Explore the barriers to care of AUD in TB (and HIV programs)
4. Explore collaborative partnerships for integrated care of TB and AUD

CDC - RVCT Reporting

33. Excess Alcohol Use Within Past Year

33. Excess Alcohol Use Within Past Year
(select one)
☐ No ☐ Yes ☐ Unknown

Primary Purpose: Surveillance. Data are used to determine the extent to which excess alcohol use is associated with TB.

Option (select one)	Description
No	Patient has **not** used alcohol to excess within the past 12 months.
Yes	Patient has used alcohol to excess within the past 12 months.
Unknown	It is **not** known whether the patient used alcohol to excess within the past 12 months.

https://www.cdc.gov/tb/programs/rvct/default.htm **Last Accessed September 17th, 2018**

CDC - RVCT Reporting

Comment:
This information is collected because the patient is in a high risk group for TB. The patient's response to this question is sought as an indicator of recent excess alcohol use. Because many patients respond negatively during the interview, it may be necessary to ask the patient, at multiple visits, about excess use.

Note: Update this item if additional information is obtained during the course of treatment.

https://www.cdc.gov/tb/programs/rvct/default.htm **Last Accessed September 17th, 2018**

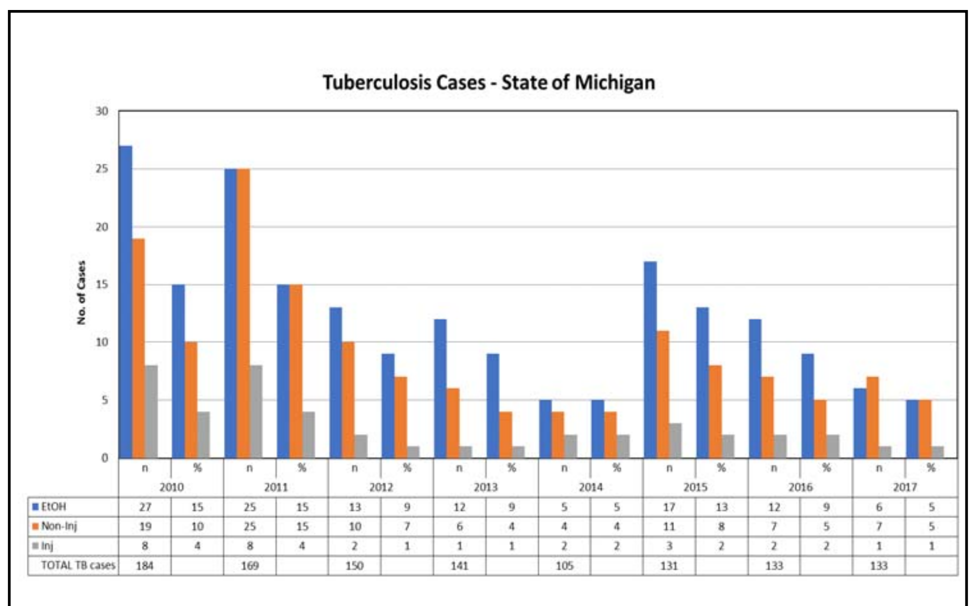
CDC 2016 Data

Table 46. Tuberculosis Cases and Percentages, by Excess Alcohol Use,[1] Ages ≥15 Years: Reporting Areas, 2016

Reporting area	Total cases	Cases with information on excess alcohol use No.	Cases with information on excess alcohol use (%)	Cases reporting excess alcohol use No.	Cases reporting excess alcohol use (%)
Indiana	102	102	(100.0)	13	(12.7)
Iowa	48	45	(93.8)	4	(8.9)
Kansas	39	39	(100.0)	5	(12.8)
Kentucky	90	90	(100.0)	9	(10.0)
Louisiana	122	116	(95.1)	16	(13.8)
Maine	23	23	(100.0)	1	(4.3)
Maryland	214	207	(96.7)	9	(4.3)
Massachusetts	182	181	(99.5)	6	(3.3)
Michigan	125	124	(99.2)	12	(9.7)
Minnesota	149	149	(100.0)	7	(4.7)
Mississippi	57	56	(98.2)	7	(12.5)
Missouri	99	97	(98.0)	7	(7.2)
North Dakota	21	21	(100.0)	3	(14.3)
Ohio	135	132	(97.8)	15	(11.4)
Oklahoma	72	70	(97.2)	13	(18.6)

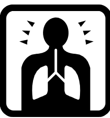
https://www.cdc.gov/tb/statistics/reports/2016/pdfs/P_2016_Surveillance_Report_table46.pdf

Last accessed September17th, 2018



	2010 n	2010 %	2011 n	2011 %	2012 n	2012 %	2013 n	2013 %	2014 n	2014 %	2015 n	2015 %	2016 n	2016 %	2017 n	2017 %
EtOH	27	15	25	15	13	9	12	9	5	5	17	13	12	9	6	5
Non-Inj	19	10	25	15	10	7	6	4	4	4	11	8	7	5	7	5
Inj	8	4	8	4	2	1	1	1	2	2	3	2	2	2	1	1
TOTAL TB cases	184		169		150		141		105		131		133		133	

Courtesy Dr. Peter Davidson, TB Control Program Manager email communications Sept 14-18, 2018

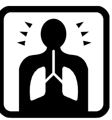


TB and AUD

- MDR TB patients had higher 1 month prevalence of alcohol dependence symptoms[1]
- Alcohol use * associated with diagnosis of MDR TB compared to non-MDR TB[1]

* Alcohol use measured using the AUDIT tool

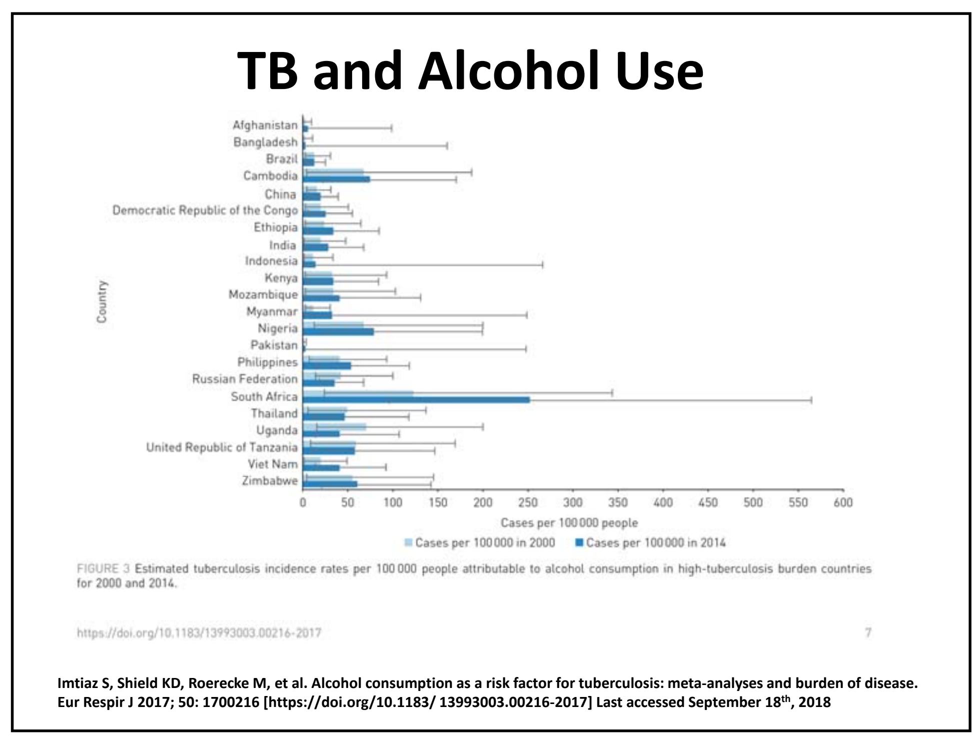
1. Zetola NM et al *Alcohol use and abuse among patients with multidrug –resistant TB in Botswana.* IJTLD e-pub Sept.7th, 2012

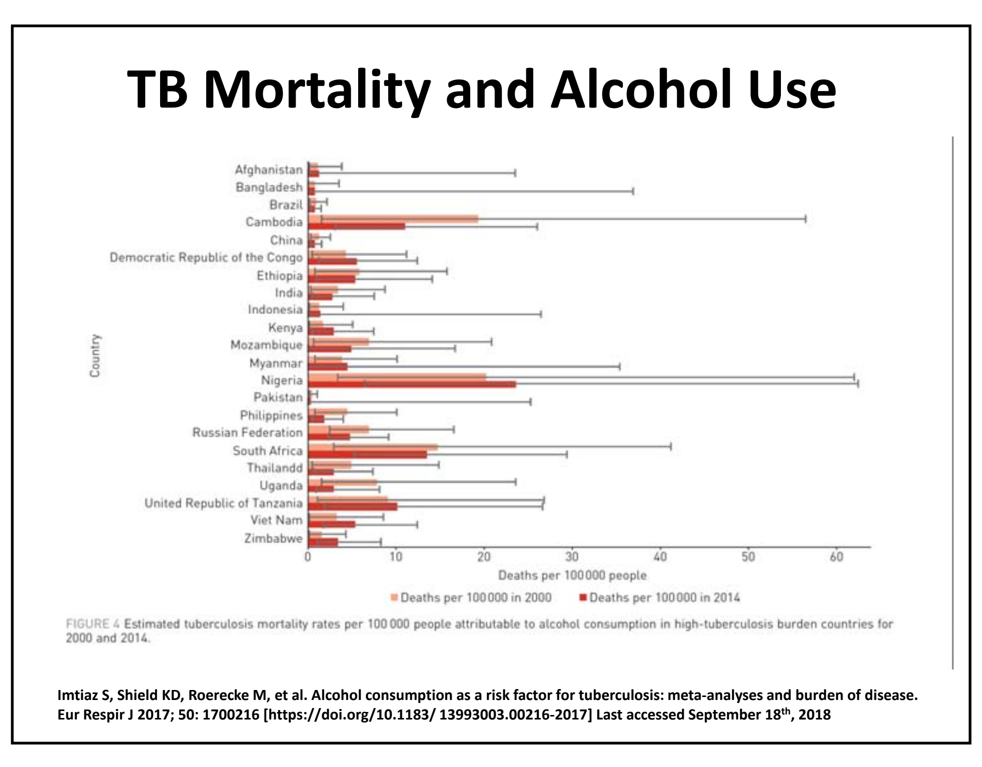


TB and AUD

- Alcohol abuse was an independent predictor of TB treatment default
  - Odds Ratio 3.22 , 95% CI 1.93- 5.38 [1]
- Excess alcohol use associated with TB deaths
  - Risk Ratio 4.4, (95% CI 1.8-11.0) [2]

1. Kliiman K, Altreja A. *Predictors and mortality associated with treatment default in pulmonary tuberculosis.* IJTLD (2010). 14 (4): 454-463
2. Kattan JA et al *Tuberculosis mortality: death from a curable diseases, Connecticut, 2007-2009.* IJTLD (2012). 16 (12):1657-1662

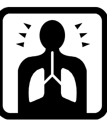

TB and Alcohol Use
Afghanistan
Bangladesh
Brazil
Cambodia
China
Democratic Republic of the Congo
Ethiopia
India
Indonesia
Kenya
Mozambique
Myanmar
Nigeria
Pakistan
Philippines
Russian Federation
South Africa
Thailand
Uganda
United Republic of Tanzania
Viet Nam
Zimbabwe
Country
0 50 100 150 200 250 300 350 400 450 500 550 600
Cases per 100 000 people
Cases per 100 000 in 2000
Cases per 100 000 in 2014
FIGURE 3 Estimated tuberculosis incidence rates per 100 000 people attributable to alcohol consumption in high-tuberculosis burden countries for 2000 and 2014.
https://doi.org/10.1183/13993003.00216-2017
7
Imtiaz S, Shield KD, Roerecke M, et al. Alcohol consumption as a risk factor for tuberculosis: meta-analyses and burden of disease.
Eur Respir J 2017; 50: 1700216 [https://doi.org/10.1183/ 13993003.00216-2017] Last accessed September 18th, 2018


TB Mortality and Alcohol Use
Afghanistan
Bangladesh
Brazil
Cambodia
China
Democratic Republic of the Congo
Ethiopia
India
Indonesia
Kenya
Mozambique
Myanmar
Nigeria
Pakistan
Philippines
Russian Federation
South Africa
Thailandd
Uganda
United Republic of Tanzania
Viet Nam
Zimbabwe
Country
0 10 20 30 40 50 60
Deaths per 100 000 people
Deaths per 100 000 in 2000
Deaths per 100 000 in 2014
FIGURE 4 Estimated tuberculosis mortality rates per 100 000 people attributable to alcohol consumption in high-tuberculosis burden countries for 2000 and 2014.
Imtiaz S, Shield KD, Roerecke M, et al. Alcohol consumption as a risk factor for tuberculosis: meta-analyses and burden of disease.
Eur Respir J 2017; 50: 1700216 [https://doi.org/10.1183/ 13993003.00216-2017] Last accessed September 18th, 2018

Defining AUD

(audience response- please choose all applicable)

1. AUD is when a person drinks daily more than one bottle of vodka
2. AUD is when a person drinks daily more than two glasses of wine
3. AUD is when a patient drinks more than the doctor



Defining a Standard Drink (SD)

- **Each milliliter of ethanol contains 0.79 grams of pure ethanol**
- **1 can of beer with 330 ml= 1 (330 ml) x 5% (strength) x 0.79 (conversion factor)**
- **1 can of beer = 13 grams of ethanol**
- **1 can of beer = 1.3 SD, if consider 10 gms as 1 SD**

Babor T et al. (2001) ***The Alcohol Use Disorders Identification Test. Guidelines for use in Primary care.*** **World Health Organization**

RVCT guidelines

Definition of Excess Alcohol Use: There is no standard definition. Excess alcohol use can be assessed by various methods. Examples of reliable indicators of excess alcohol use include:

- Participation in self-help programs (e.g., Alcoholics Anonymous) or alcohol treatment programs
- Medical record documentation of excess alcohol use or hospitalization for alcohol-related medical conditions (e.g., delirium tremens [DTs], pancreatitis, cirrhosis)
- More than one arrest for intoxication or drunk and disorderly behavior. This can be found by asking the patient, or contacting the local correctional facility regarding charges.

The National Household Survey on Drug Abuse defines heavy alcohol use as “five or more drinks on the same occasion on each of 5 or more days in the past 30 days.” Numerous screening instruments (e.g., CAGE, AUDIT, MAST) can be helpful in identifying persons who may use alcohol to excess.

A standard drink in the United States is equal to 13.7 grams (0.6 ounces) of pure alcohol or

- 12 ounces of beer
- 8 ounces of malt liquor
- 5 ounces of wine
- 1.5 ounces or a “shot” of 80-proof distilled spirits or liquor (e.g., gin, rum, vodka, or whiskey)

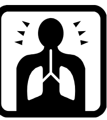
https://www.cdc.gov/tb/programs/rvct/default.htm **Last Accessed September 17th, 2018**

Defining AUD

- **WHO definitions**
  - **<u>Hazardous Alcohol Use</u> - pattern of alcohol consumption that increases the risk of harmful consequences for the user or others**
  - **<u>Symptoms of Dependence</u> - cluster of behavioral, cognitive, and physiological phenomena that may develop after repeated alcohol use**
  - **<u>Harmful Alcohol Use</u> - refers to alcohol consumption that results in consequences to physical and mental health**

Babor T et al, 2001. *The Alcohol Use Disorders Identification Test. Guidelines for use in Primary care.* World Health Organization

“A **m”**



Defining a Standard Drink (SD)

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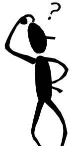
- 1 can of beer with 330 ml= 1 (330 ml) x 5% (strength) x 0.79 (conversion factor)
- 1 can of beer= 13 grams of ethanol
- 1 can of beer= 1.3 SD if consider 10 gms as 1 SD

- AUDIT - takes 5- 10 mins to administer
- Internationally validated - use in primary care

Babor T et al. *The Alcohol Use Disorders Identification Test. Guidelines for use in Primary care.* (2001). World Health Organization



What is a standard drink?

- 1 standard drink[1] in Canada has 13.6 g of pure alcohol ; 1 s drink in the UK: 8 g
  1 s drink in Australia or New Zealand: 10 g
  1 s drink in Japan: 19.75 g[1]
- In US- contains about 14 grams of pure alcohol (about 0.6 fluid ounces or 1.2 tablespoons)[2]

1. http://whqlibdoc.who.int/hq/2001/who_msd_msb_01.6a.pdf page 32 . Accessed Nov 3rd,2010
2. http://pubs.niaaa.nih.gov/publications/practitioner/pocketguide/pocket_guide2.htmAccessed Nov 3rd,2010

Presented at 41st Union World Conference, Berlin, Germany on November 13th, 2010

What is too much?

Drinking limits:

- **For women and healthy men age >65=**
  no more than 3 drinks in a day AND no more than 7 drinks in a week

- **For healthy men up to age 65=**
  no more than 4 drinks in a day AND no more than 14 drinks in a week

http://pubs.niaaa.nih.gov/publications/practitioner/cliniciansguide2005/clinicians_guide5_help_p.htm
Accessed Nov10,2010

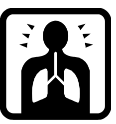
Presented at 41st Union World Conference, Berlin, Germany on November 13th, 2010

Screening for AUDs

CAGE

- C Have you ever felt you should cut down on your drinking?
- A Have people annoyed you by criticizing your drinking?
- G Have you ever felt bad or guilty about your drinking?
- E Eyeopener Have you ever had a drink first thing in the morning to steady your nerves or to get rid of a hangover?

Presented at 41st Union World Conference, Berlin, Germany on November 13th, 2010

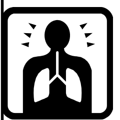


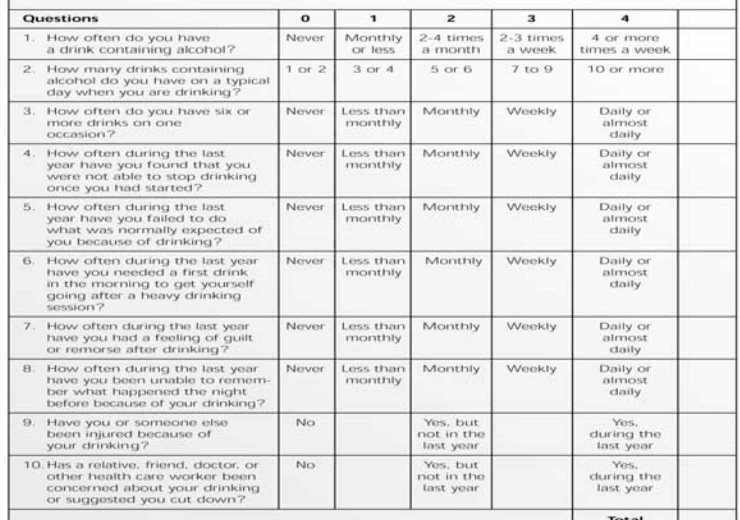
AUD Screening Options for TB Programs

- AUD screening tool with Alcohol Use Disorders Identification Test (AUDIT)
- Comprises of 10 questions on 3 domains

- **Hazardous Alcohol use** pattern of alcohol consumption that increases the risk of harmful consequences for the user or others
- **Symptoms of Dependence** cluster of behavioral, cognitive, and physiological phenomena that may develop after repeated alcohol use
- **Harmful Alcohol Use** refers to alcohol consumption that results in consequences to physical and mental health

Babor T et al. *The Alcohol Use Disorders Identification Test. Guidelines for use in Primary care.* (2001). World Health Organization





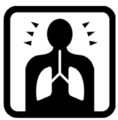
Box 10

The Alcohol Use Disorders Identification Test: Self-Report Version

PATIENT: Because alcohol use can affect your health and can interfere with certain medications and treatments, it is important that we ask some questions about your use of alcohol. Your answers will remain confidential so please be honest.
Place an X in one box that best describes your answer to each question.

Questions	0	1	2	3	4	
1. How often do you have a drink containing alcohol?	Never	Monthly or less	2-4 times a month	2-3 times a week	4 or more times a week	
2. How many drinks containing alcohol do you have on a typical day when you are drinking?	1 or 2	3 or 4	5 or 6	7 to 9	10 or more	
3. How often do you have six or more drinks on one occasion?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
4. How often during the last year have you found that you were not able to stop drinking once you had started?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
5. How often during the last year have you failed to do what was normally expected of you because of drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
7. How often during the last year have you had a feeling of guilt or remorse after drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
8. How often during the last year have you been unable to remember what happened the night before because of your drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
9. Have you or someone else been injured because of your drinking?	No		Yes, but not in the last year		Yes, during the last year	
10. Has a relative, friend, doctor, or other health care worker been concerned about your drinking or suggested you cut down?	No		Yes, but not in the last year		Yes, during the last year	
					Total	

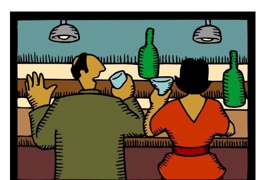
Babor T et al. *The Alcohol Use Disorders Identification Test. Guidelines for use in Primary care.* (2001). World Health Organization

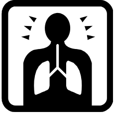


AUD Screening Options for TB Programs

- AUDIT incorporated in TB program
- Tomsk Oblast TB Program, Western Siberia
- Started in November 2005 as a "prikaz"/ mandate
- Increased screening and referral

Mathew TA et al. *Integration of alcohol use disorders identification and management in the tuberculosis programme in Tomsk Oblast Russia.* Eur J Public Health. 2009 19(1):16-8. Epub 2008 Dec 26.



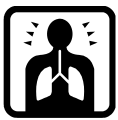


AUD Screening Options for TB Programs

- Positive screen AUDIT ≥ 8 for men or ≥ 4 for women

	Score	Intervention
Zone 1	0-7	Alcohol Education
Zone 2	8-15	Simple Advice
Zone 3	16-19	Simple Advice + Brief Counseling/ monitoring
Zone 4	20-40	Referral to specialist

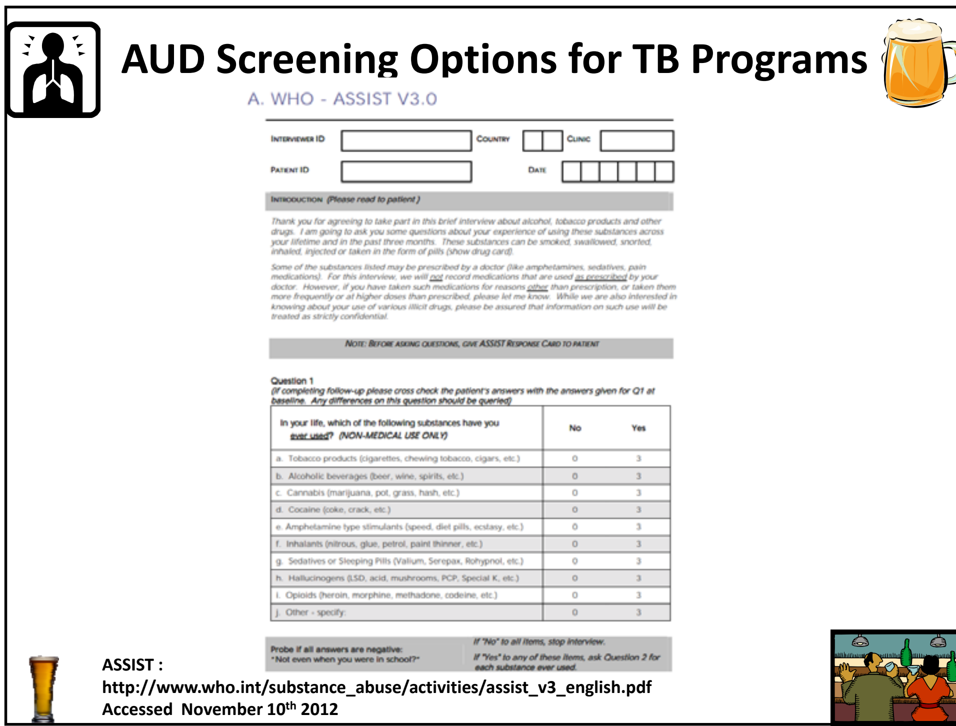
Babor T et al. *The Alcohol Use Disorders Identification Test. Guidelines for use in Primary care.* (2001). World Health Organization



AUD Screening Options for TB Programs

- The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) – developed by WHO
- Available in English, Chinese, Arabic, Farsi, French, German, Hindi, Portuguese and Spanish

ASSIST :
http://www.who.int/substance_abuse/activities/assist_test/en/index.html
Accessed November 10th, ,2012



AUD Screening Options for TB Programs

A. WHO - ASSIST V3.0

INTERVIEWER ID | COUNTRY | CLINIC

PATIENT ID | DATE

INTRODUCTION *(Please read to patient)*

Thank you for agreeing to take part in this brief interview about alcohol, tobacco products and other drugs. I am going to ask you some questions about your experience of using these substances across your lifetime and in the past three months. These substances can be smoked, swallowed, snorted, inhaled, injected or taken in the form of pills (show drug card).

Some of the substances listed may be prescribed by a doctor (like amphetamines, sedatives, pain medications). For this interview, we will not record medications that are used as prescribed by your doctor. However, if you have taken such medications for reasons other than prescription, or taken them more frequently or at higher doses than prescribed, please let me know. While we are also interested in knowing about your use of various illicit drugs, please be assured that information on such use will be treated as strictly confidential.

NOTE: BEFORE ASKING QUESTIONS, GIVE ASSIST RESPONSE CARD TO PATIENT

Question 1
(If completing follow-up please cross check the patient's answers with the answers given for Q1 at baseline. Any differences on this question should be queried)

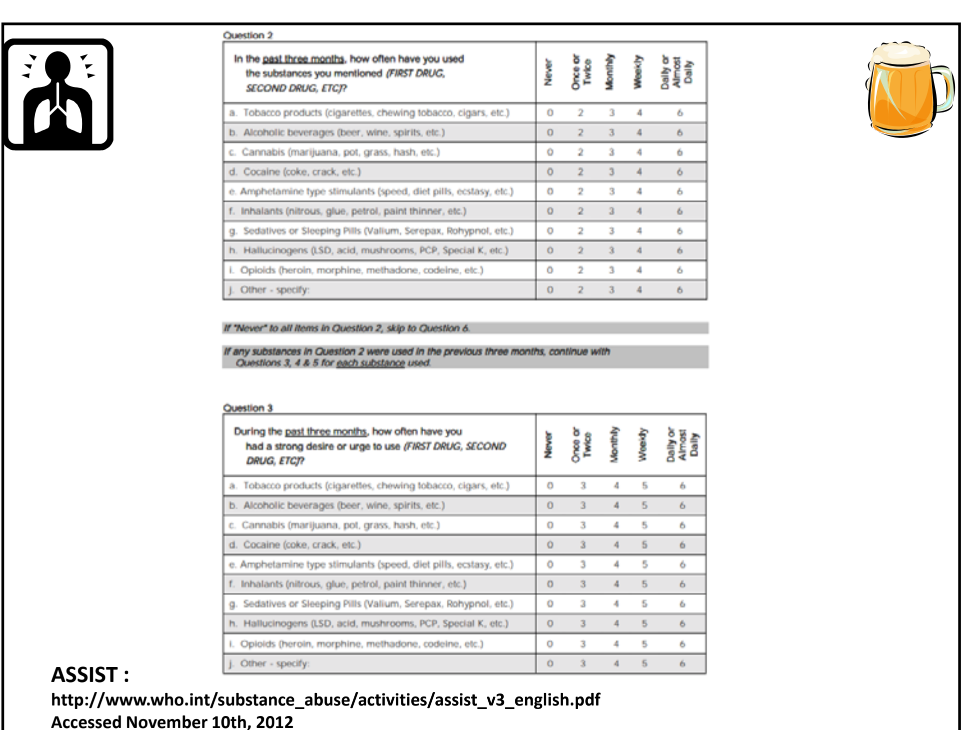
In your life, which of the following substances have you ever used? *(NON-MEDICAL USE ONLY)*	No	Yes
a. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)	0	3
b. Alcoholic beverages (beer, wine, spirits, etc.)	0	3
c. Cannabis (marijuana, pot, grass, hash, etc.)	0	3
d. Cocaine (coke, crack, etc.)	0	3
e. Amphetamine type stimulants (speed, diet pills, ecstasy, etc.)	0	3
f. Inhalants (nitrous, glue, petrol, paint thinner, etc.)	0	3
g. Sedatives or Sleeping Pills (Valium, Serepax, Rohypnol, etc.)	0	3
h. Hallucinogens (LSD, acid, mushrooms, PCP, Special K, etc.)	0	3
i. Opioids (heroin, morphine, methadone, codeine, etc.)	0	3
j. Other - specify:	0	3

Probe if all answers are negative:
"Not even when you were in school?"

If "No" to all items, stop interview.

If "Yes" to any of these items, ask Question 2 for each substance ever used.

ASSIST :
http://www.who.int/substance_abuse/activities/assist_v3_english.pdf
Accessed November 10th 2012



Question 2

In the past three months, how often have you used the substances you mentioned *(FIRST DRUG, SECOND DRUG, ETC)?*	Never	Once or Twice	Monthly	Weekly	Daily or Almost Daily
a. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)	0	2	3	4	6
b. Alcoholic beverages (beer, wine, spirits, etc.)	0	2	3	4	6
c. Cannabis (marijuana, pot, grass, hash, etc.)	0	2	3	4	6
d. Cocaine (coke, crack, etc.)	0	2	3	4	6
e. Amphetamine type stimulants (speed, diet pills, ecstasy, etc.)	0	2	3	4	6
f. Inhalants (nitrous, glue, petrol, paint thinner, etc.)	0	2	3	4	6
g. Sedatives or Sleeping Pills (Valium, Serepax, Rohypnol, etc.)	0	2	3	4	6
h. Hallucinogens (LSD, acid, mushrooms, PCP, Special K, etc.)	0	2	3	4	6
i. Opioids (heroin, morphine, methadone, codeine, etc.)	0	2	3	4	6
j. Other - specify:	0	2	3	4	6

If "Never" to all items in Question 2, skip to Question 6.

If any substances in Question 2 were used in the previous three months, continue with Questions 3, 4 & 5 for each substance used.

Question 3

During the past three months, how often have you had a strong desire or urge to use *(FIRST DRUG, SECOND DRUG, ETC)?*	Never	Once or Twice	Monthly	Weekly	Daily or Almost Daily
a. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)	0	3	4	5	6
b. Alcoholic beverages (beer, wine, spirits, etc.)	0	3	4	5	6
c. Cannabis (marijuana, pot, grass, hash, etc.)	0	3	4	5	6
d. Cocaine (coke, crack, etc.)	0	3	4	5	6
e. Amphetamine type stimulants (speed, diet pills, ecstasy, etc.)	0	3	4	5	6
f. Inhalants (nitrous, glue, petrol, paint thinner, etc.)	0	3	4	5	6
g. Sedatives or Sleeping Pills (Valium, Serepax, Rohypnol, etc.)	0	3	4	5	6
h. Hallucinogens (LSD, acid, mushrooms, PCP, Special K, etc.)	0	3	4	5	6
i. Opioids (heroin, morphine, methadone, codeine, etc.)	0	3	4	5	6
j. Other - specify:	0	3	4	5	6

ASSIST :
http://www.who.int/substance_abuse/activities/assist_v3_english.pdf
Accessed November 10th, 2012

THE TYPE OF INTERVENTION IS DETERMINED BY THE PATIENT'S SPECIFIC SUBSTANCE INVOLVEMENT SCORE

	Record specific substance score	no intervention	receive brief intervention	more intensive treatment *
a. tobacco		0 - 3	4 - 26	27+
b. alcohol		0 - 10	11 - 26	27+
c. cannabis		0 - 3	4 - 26	27+
d. cocaine		0 - 3	4 - 26	27+
e. amphetamine		0 - 3	4 - 26	27+
f. inhalants		0 - 3	4 - 26	27+
g. sedatives		0 - 3	4 - 26	27+
h. hallucinogens		0 - 3	4 - 26	27+
i. opioids		0 - 3	4 - 26	27+
j. other drugs		0 - 3	4 - 26	27+

NOTE: *FURTHER ASSESSMENT AND MORE INTENSIVE TREATMENT may be provided by the health professional(s) within your primary care setting, or, by a specialist drug and alcohol treatment service when available.

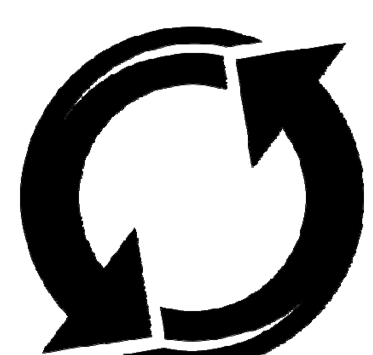
http://www.who.int/substance_abuse/activities/assist_v3_english.pdf Accessed November 10th, 2012

Now we have defined and screened for AUD…

- **What next?**

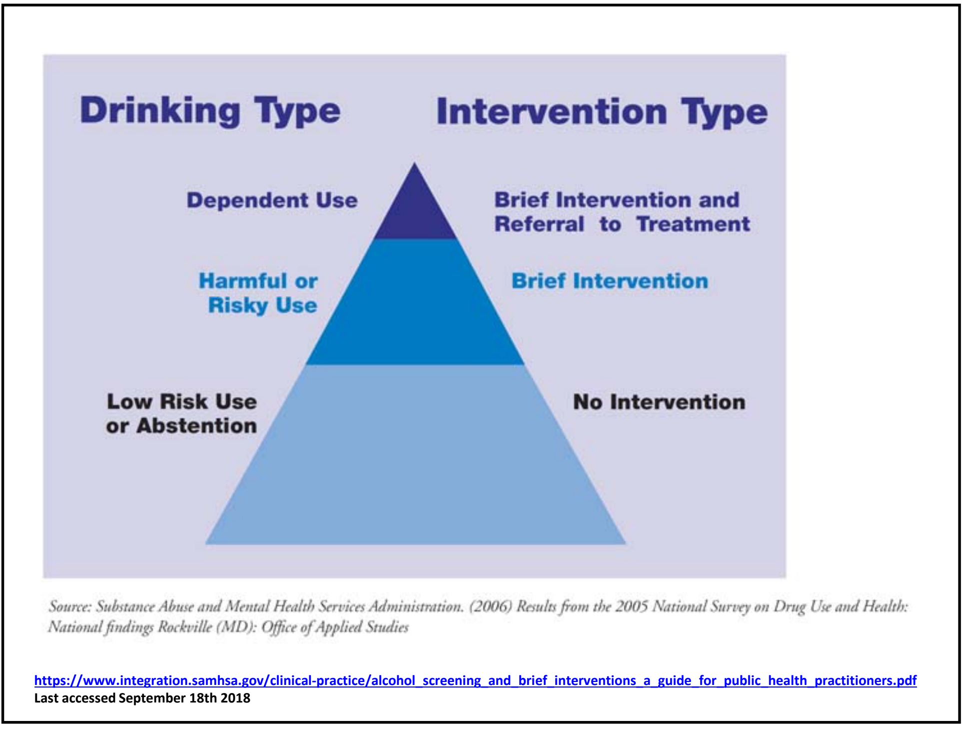
Stages of Change
Prochaska and Diclemente

1. Pre-contemplation
2. Contemplation
3. Preparation
4. Action
5. Maintenance
6. Relapse



Stages of Change
Prochaska and DiClemente, 1984

1. **Pre-contemplation** : Not acknowledging there is a problem (behavior)
2. **Contemplation:** Acknowledging there is a problem… but not ready
3. **Preparation:** making plans for change
4. **Action:** Doing what is required
5. **Maintenance:** maintaining the change
6. **Relapse:** back to prior behavior



https://www.integration.samhsa.gov/clinical-practice/alcohol_screening_and_brief_interventions_a_guide_for_public_health_practitioners.pdf
Last accessed September 18th 2018

Screening and Brief Intervention

- Screening and brief interventions effective:
  - Helping at risk drinking
  - Both men and women
  - In community setting and emergency department (ED) settings

https://www.integration.samhsa.gov/clinical-practice/alcohol_screening_and_brief_interventions_a_guide_for_public_health_practitioners.pdf
Last accessed September 18th 2018

AUDIT: Alcohol Use Disorders Identification Test

Audience	# Questions	Time *Take*	 *Score*	Who Gives *Staff*	 *Self*	Cost	Languages *Spanish*	 *Other*
Adults Adolescents	10	2 min.	1 min	x	x	No	x	x

Populations	Notes
General and: Blacks, Hispanics, incarcerated, college students, women	Shorter versions such as the AUDIT-C available Training manual and video available

Developed for WHO in 1992 **http://www.projectcork.org/clinical_tools/html/AUDIT.html**

ASSIST: Alcohol, Smoking, and Substance Involvement Screening Test

	# Questions	Time *Take*	 *Score*	Who Gives *Staff*	 *Self*	Cost	Languages *Spanish*	 *Other*
Adults	8 (multiple items each)	10 min.	< 2 min.	x		No	x	x

Populations	Notes
Cross-cultural, tested in 7 countries	Manual and guide available

Developed for WHO in 2000 **http://www.who.int/substance_abuse/activities/assist/en/index.html**

https://www.integration.samhsa.gov/clinical-practice/alcohol_screening_and_brief_interventions_a_guide_for_public_health_practitioners.pdf
Last accessed September 18th 2018

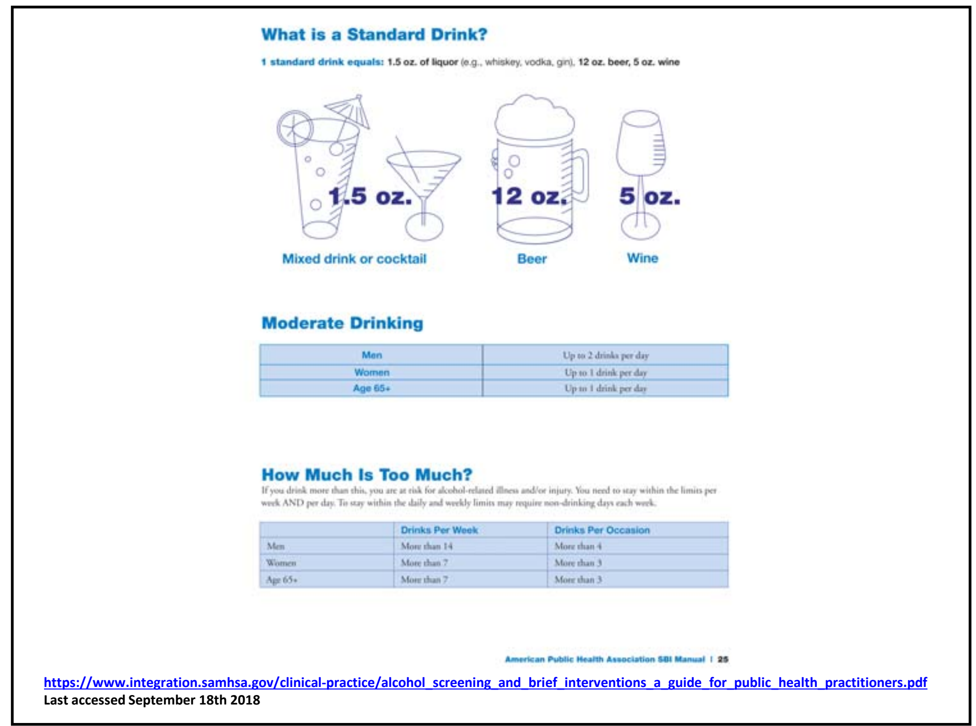
CAGE: Cut down, Annoyed, Guilty, Eye-Opener

	# Questions	Time *Take*	 *Score*	Who Gives *Staff*	 *Self*		Languages *Spanish*	 *Other*
Adults Adolescents (ages 16+)	4	<1 min.	<1min.	x	x	No	x	x

Populations	Notes
General and Latinos	Focuses on symptoms of dependence. Can be combined with a question about binge drinking for more effective use in SBI.

Developed in 1984 **http://www.projectcork.org/clinical_tools/html/CAGE.html**

https://www.integration.samhsa.gov/clinical-practice/alcohol_screening_and_brief_interventions_a_guide_for_public_health_practitioners.pdf
Last accessed September 18th 2018



What is a Standard Drink?

1 standard drink equals: **1.5 oz. of liquor** (e.g., whiskey, vodka, gin), **12 oz. beer, 5 oz. wine**

Moderate Drinking

Men	Up to 2 drinks per day
Women	Up to 1 drink per day
Age 65+	Up to 1 drink per day

How Much Is Too Much?

If you drink more than this, you are at risk for alcohol-related illness and/or injury. You need to stay within the limits per week AND per day. To stay within the daily and weekly limits may require non-drinking days each week.

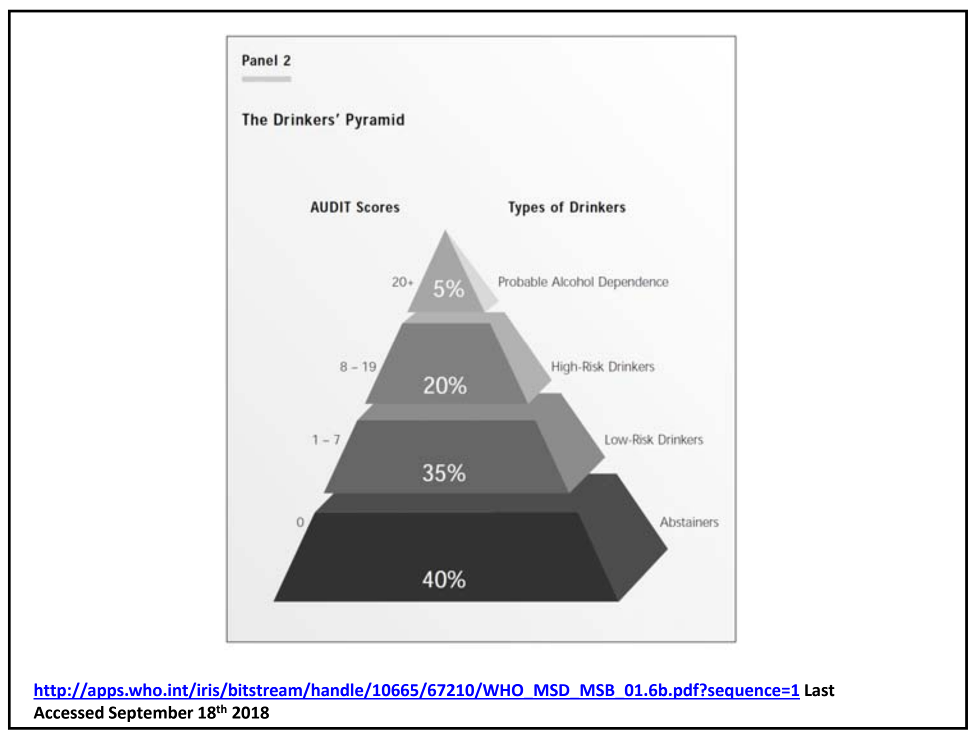
	Drinks Per Week	Drinks Per Occasion
Men	More than 14	More than 4
Women	More than 7	More than 3
Age 65+	More than 7	More than 3

American Public Health Association SBI Manual | 25

https://www.integration.samhsa.gov/clinical-practice/alcohol_screening_and_brief_interventions_a_guide_for_public_health_practitioners.pdf
Last accessed September 18th 2018

Brief Interventions

- Step 1: Preparation – get permission to discuss formally
- Step 2: Provide feedback from screening tool, connect between alcohol and TB (or other med conditions)
- Step 3: Enhance motivation – assess readiness for change, use readiness ruler (1-10)
- Step 4: Negotiate and advise, explore options for change



http://apps.who.int/iris/bitstream/handle/10665/67210/WHO_MSD_MSB_01.6b.pdf?sequence=1 **Last Accessed September 18th 2018**

Box 5

The Stages of Change and Associated Brief Intervention Elements[20]

Stage	Definition	Brief Intervention Elements to be Emphasized
Precontemplation	The hazardous or harmful drinker is not considering change in the near future, and may not be aware of the actual or potential health consequences of continued drinking at this level	**Feedback** about the results of the screening, and **Information** about the hazards of drinking
Contemplation	The drinker may be aware of alcohol-related consequences but is ambivalent about changing	Emphasize the benefits of changing, give **Information** about alcohol problems, the risks of delaying, and discuss how to choose a **Goal**
Preparation	The drinker has already decided to change and plans to take action	Discuss how to choose a **Goal**, and give **Advice** and **Encouragement**
Action	The drinker has begun to cut down or stop drinking, but change has not become a permanent feature	Review **Advice**, give **Encouragement**
Maintenance	The drinker has achieved moderate drinking or abstinence on a relatively permanent basis	Give **Encouragement**

http://apps.who.int/iris/bitstream/handle/10665/67210/WHO_MSD_MSB_01.6b.pdf?sequence=1 **Last Accessed September 18th 2018**

Motivational Interviewing

Motivational interviewing is a way of being with a client, not just a set of techniques for doing counseling.

Miller and Rollnick, 1991

Center for Substance Abuse Treatment. Enhancing Motivation for Change in Substance Abuse Treatment. Treatment Improvement Protocol (TIP) Series, No. 35. HHS Publication No. (SMA) 13-4212. Rockville, MD: Substance Abuse and Mental Health Services Administration, 1999. https://store.samhsa.gov/shin/content//SMA13-4212/SMA13-4212.pdf
Last accessed September18th, 2018

Figure 3-1
Stage-Specific Motivational Conflicts

Stage of Change	Client Conflict
Precontemplation	I don't see how my cocaine use warrants concern, but I hope that by agreeing to talk about it, my wife will feel reassured.
Contemplation	I can picture how quitting heroin would improve my self-esteem, but I can't imagine never shooting up again.
Preparation	I'm feeling good about setting a quit date, but I'm wondering if I have the courage to follow through.
Action	Staying clean for the past 3 weeks really makes me feel good, but part of me wants to celebrate by getting loaded.
Maintenance	These recent months of abstinence have made me feel that I'm progressing toward recovery, but I'm still wondering whether abstinence is really necessary.

Page 40 Center for Substance Abuse Treatment. Enhancing Motivation for Change in Substance Abuse Treatment. Treatment Improvement Protocol (TIP) Series, No. 35. HHS Publication No. (SMA) 13-4212. Rockville, MD: Substance Abuse and Mental Health Services Administration, 1999. https://store.samhsa.gov/shin/content//SMA13-4212/SMA13-4212.pdf
Last accessed September18th, 2018

Motivational Interviewing 5 principles

1. Express empathy - reflective listening
2. Develop discrepancy b/w goals and current behavior
3. Avoid argument and direct confrontation
4. Adjust to resistance
5. Support self efficacy and optimism

Page 41 Center for Substance Abuse Treatment. Enhancing Motivation for Change in Substance Abuse Treatment. Treatment Improvement Protocol (TIP) Series, No. 35. HHS Publication No. (SMA) 13-4212. Rockville, MD: Substance Abuse and Mental Health Services Administration, 1999. https://store.samhsa.gov/shin/content//SMA13-4212/SMA13-4212.pdf
Last accessed September18th, 2018

Motivational Interviewing

Rolling With Resistance

- Momentum can be used to good advantage.
- Perceptions can be shifted.
- New perspectives are invited but not imposed.
- The client is a valuable resource in finding solutions to problems.

Source: Miller and Rollnick, 1991. Reprinted with permission.

Page 48 Center for Substance Abuse Treatment. Enhancing Motivation for Change in Substance Abuse Treatment. Treatment Improvement Protocol (TIP) Series, No. 35. HHS Publication No. (SMA) 13-4212. Rockville, MD: Substance Abuse and Mental Health Services Administration, 1999. https://store.samhsa.gov/shin/content//SMA13-4212/SMA13-4212.pdf
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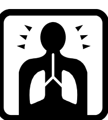
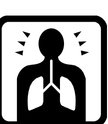


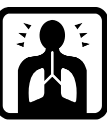
Patient Barriers

- Precontemplation - alcohol use is not detrimental to health and TB/HIV care
- Stigma - societal attitudes
- Lack of support by health care personnel/programs
- Barrier to health care access and retention in TB/ HIV programs



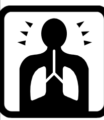
Patient Barriers/Challenges

- People (peer/friends/family) - enabling the current issue
- Places (location, location, location!) - walking past the bar, street where friends hang out
- Things (associations with certain objects/ smoking)



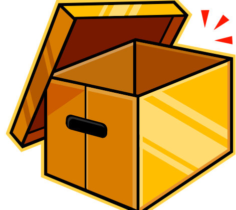
Provider Barriers

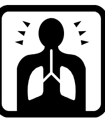
- Managing AUD as a disease concomitantly with TB
  - Lack of knowledge and expertise
  - Lack of systematic screening tool
  - Lack of programmatic support
  - Lack of financial support



Addressing TB/ HIV and AUD

- Building collaborations within and beyond the existing TB/HIV programmatic infrastructure

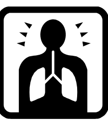




Addressing TB and AUD

- Establishment of Tomsk TB alcohol working group, in Tomsk, Western Siberia, Russia
- AUDIT integrated with in the TB program
- Integrated Management of Physician Delivered Alcohol Care for TB patients (IMPACT) - use of BCI vs. Naltrexone

Shin SS et. al *Implementing evidence based alcohol interventions in a resource limited settings: Novel Delivery Strategies in Tomsk, Russia.* Harvard Review Psychiatry (2012) Jan-Feb;20(1):58-67.

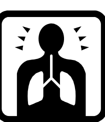


Addressing TB and AUD

- Engage all program personnel (nurses, social workers)
- “Sputnik” model: 2 nurses with car & driver
- Dec. 2006 - Nov. 2008 n=53 patients [1]

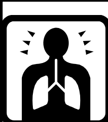
  - 44/53 with “chronic alcoholism”
  - 36/53 (67.9%) were cured

Gelmanova I.Y. et al. *‘Sputnik’: a programmatic approach to improve tuberculosis treatment adherence and outcome among defaulters.* IJTLD 2011 , 15 (10): 1373 - 1379



Summary (1)

- AUD impacts TB
- Systematic screening tools needs to be integrated, to assess AUD in TB
- Need to address both provider and patient barriers to care



Summary (2)

- Develop partnerships with key "stakeholders", including community and patient support groups, NGOs
- May need to work with unconventional outside - the - box models of care