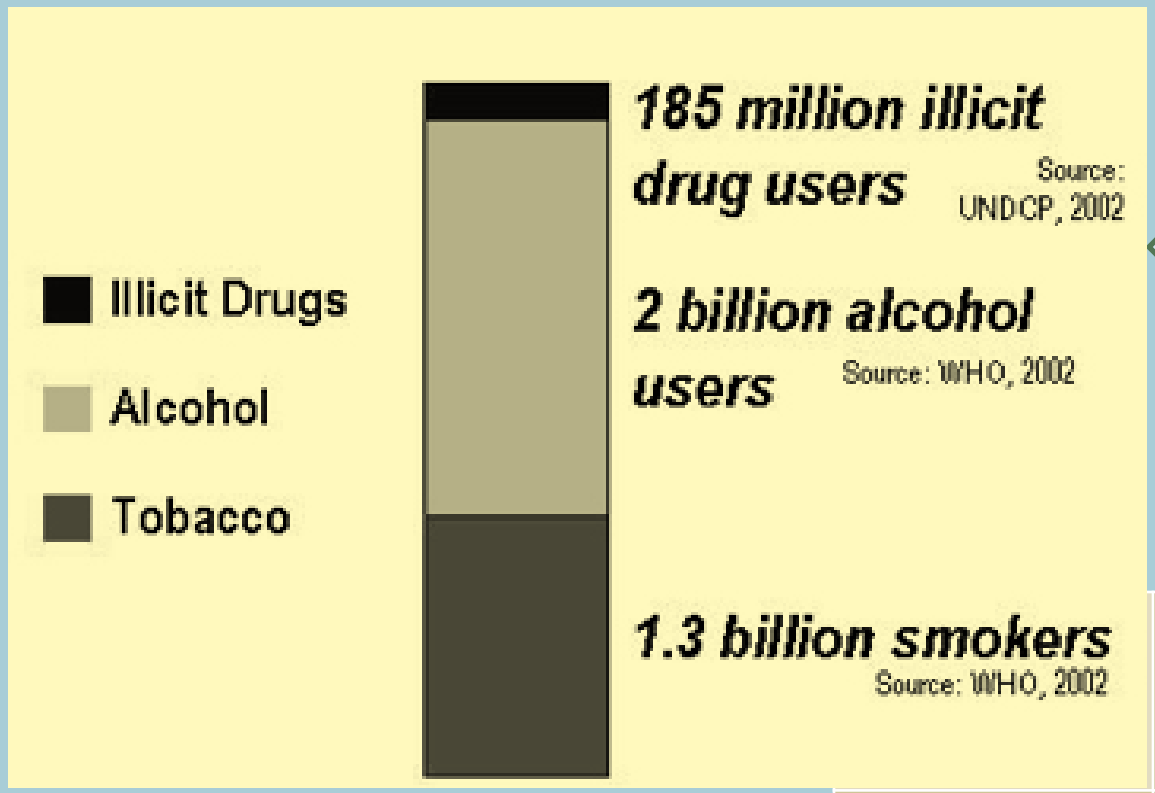
Effectiveness of Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) linked Brief Intervention

Sonali Meena, Robert Ali

Presenter: Dr. Sonali Meena
MBBS, MD (Community Medicine)
International Coordinator, ASSIST
WHO Collaborating Centre for Research In the Treatment of Drug and Alcohol Problems
University of Adelaide
Australia
sonali.meena@adelaide.edu.au

Global Burden



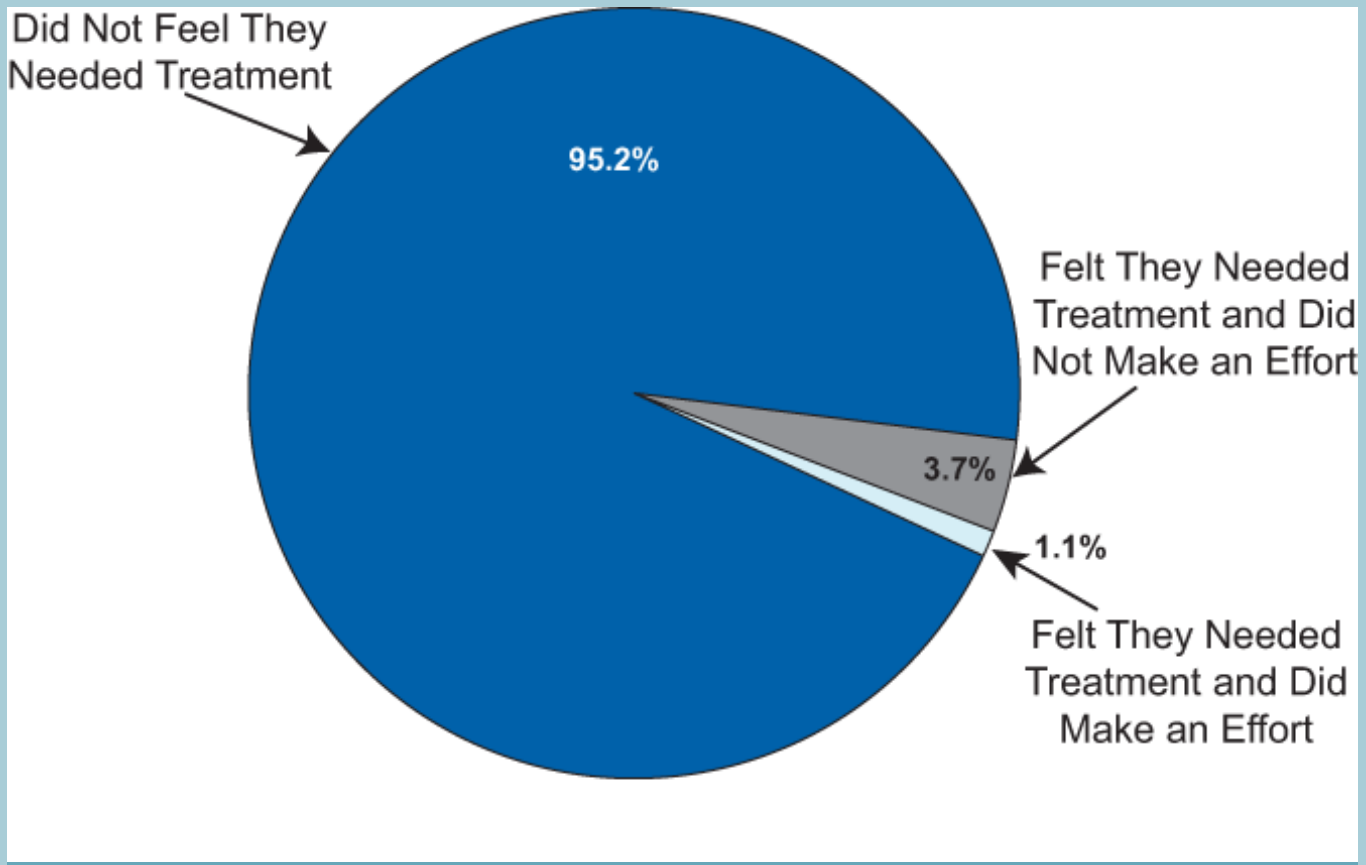
World extent of psychoactive substance use

Attributable Mortality and Morbidity

	All Deaths	All DALYs*
Tobacco	**8.8%**	**4.1%**
Alcohol	**3.2%**	**4.0%**
Illicits**	**0.4%**	**0.8%**

Source: WHO, 2002

Public Health Challenge



A vast majority of individuals with substance use disorders are unaware of the problem or do not feel they need help.

Source: SAMSHA National Survey on Drug Use and Health (2008)

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WHO-ASSIST Study Group

R. Ali [1, 2#, 3#] (Australia)
E. Awwad [1] (Palestine)
T. Babor [1#, 2, 3] (USA)
F. Bradley [1] (Ireland)
T. Butau [1] (Zimbabwe)
M. Farrell [1, 2] (UK)
M. Formigoni [1, 2, 3] (Brazil)
R. Humeniuk [1, 2#, 3#] (Australia)
R. Isralowitz [1] (Israel)
J. Jittiwutikarn [1, 2, 3] (Thailand)
R. de Lacerda [1, 2, 3] (Brazil)
W. Ling [1, 2, 3] (USA)
J. Marsden [1, 2] (UK)
J. Martinez [3] (Spain)
B. McRee [1#, 3] (USA)
M. Monteiro [1#, 2#, 3#] (WHO)
D. Newcombe [3] (Australia)
S. Nhiwatiwa [2] (Zimbabwe)
H. Pal [1, 2, 3] (India)
V. Poznyak [1#, 2#, 3#] (WHO)
M. Rubio-Stipec [1] (Puerto Rico)
S. Simon [2, 3] (USA)
J. Vendetti [1#, 3] (USA)

[1] - Phase I [2] - Phase II [3] - Phase III [#] - Coordination

What is ASSIST?

- **A**lcohol, **S**moking & **S**ubstance **I**nvolvement **S**creening **T**est
- 8 item interviewer-administered questionnaire
- Administration time approx. 10 minutes
- Developed for health care workers in primary health care and welfare settings
    - Have the potential to be used in other areas
- Useful in a variety of cultures
- Designed to be linked to a Brief Intervention

What does the ASSIST do?

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- Screens for risky substance use
    - tobacco, alcohol, cannabis, cocaine, amphetamine-type stimulants, sedatives, hallucinogens, inhalants, opioids, 'other drugs'
- Determines risk score for each substance
    - Low, moderate or high risk
- Provides an opportunity to start discussion (Brief Intervention) with client about their substance use

OVERVIEW OF THE ASSIST

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- Questions asked for all substance groups
  - Lifetime use
    - Q1 Ever used
  - Last 3 months
    - Q2 Frequency of use
    - Q3 Desire to use
    - Q4 Health, social, legal, financial problems
    - Q5 Failure to fulfil role obligations
  - Lifetime use
    - Q6 Concern by others
    - Q7 Failed attempts to control use
    - Q8 Injecting behaviour

HO6A **WHO - ASSIST V3.1**

CLINICIAN NAME | CLINIC

CLIENT ID OR NAME | DATE

INTRODUCTION (*Please read to client. Can be adapted for local circumstances*)

The following questions ask about your experience of using alcohol, tobacco products and other drugs across your lifetime and in the past three months. These substances can be smoked, swallowed, snorted, inhaled or injected (show response 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, at higher doses than prescribed or in ways in which it wasn't intended, 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 CLIENT

Question 1 (please mark the response for each category of substance)

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.)	☐	☐
b. Alcoholic beverages (beer, wine, spirits, etc.)	☐	☐
c. Cannabis (marijuana, pot, grass, hash, etc.)	☐	☐
d. Cocaine (coke, crack, etc.)	☐	☐
e. Amphetamine type stimulants (speed, meth, ecstasy, etc.)	☐	☐
f. Inhalants (nitrous, glue, petrol, paint thinner, etc.)	☐	☐
g. Sedatives or Sleeping Pills (Diazepam, Alprazolam, Flunitrazepam, Midazolam etc.)	☐	☐
h. Hallucinogens (LSD, acid, mushrooms, trips, Ketamine, etc.)	☐	☐
i. Opioids (heroin, morphine, methadone, Buprenorphine, codeine, etc.)	☐	☐
j. Other - specify:	☐	☐

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.

Phases of the WHO-ASSIST Project

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- Phase I (1997-1999)
  - Planning and ASSIST development
  - International feasibility and reliability study of the ASSIST (12 items)
- Phase II (2000-2002)
  - International validity study of the ASSIST
  - Feasibility pilot study of Brief Interventions linked to the ASSIST
- Phase III (2003-2007)
  - International study of efficacy of Brief Interventions linked to the ASSIST (RCT)

Components of Phase III

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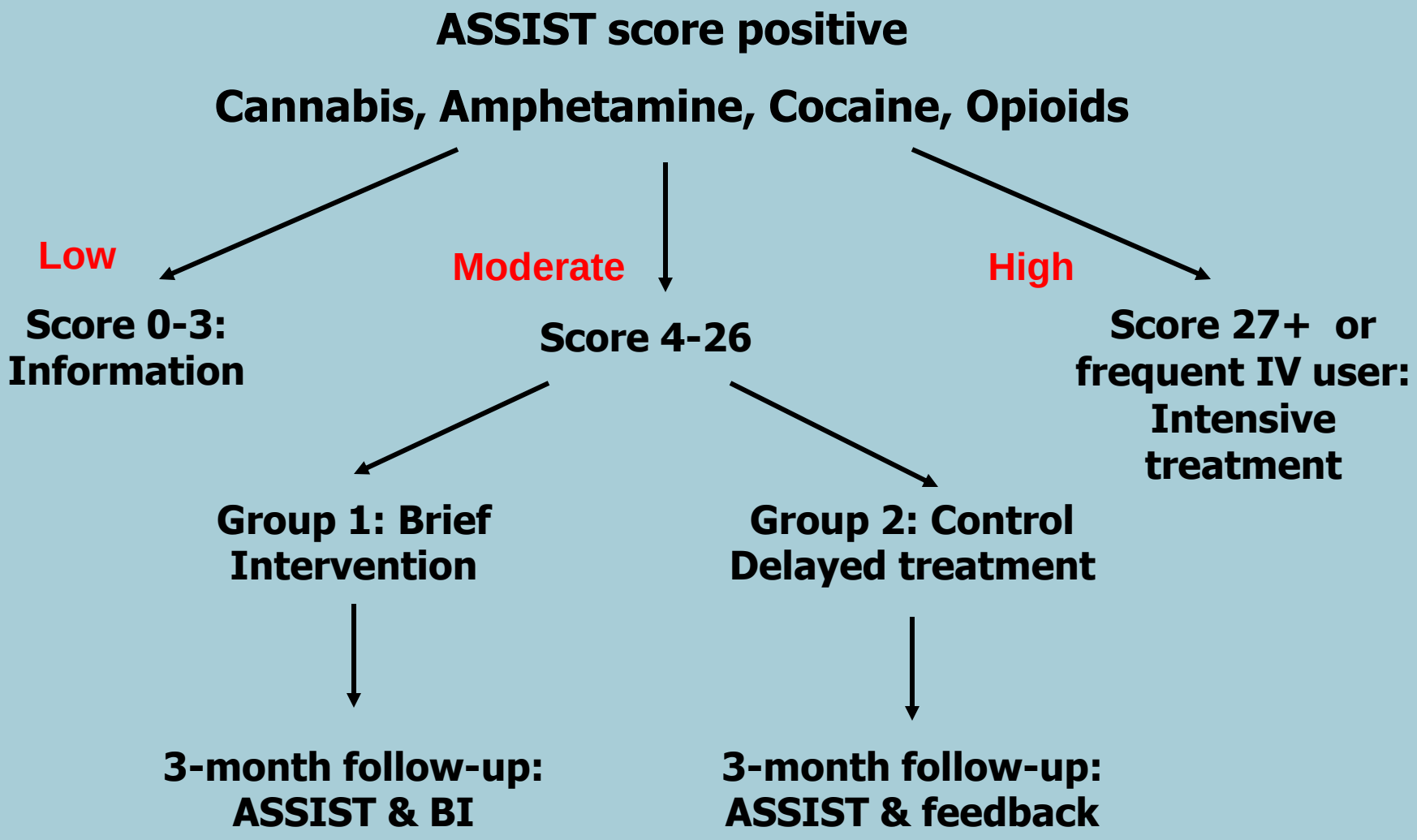

9 Steps of ASSIST BI

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1. Feedback – use card
2. Advice
3. Responsibility
4. Concern about ASSIST score
5. Good things about using
6. Less good things about using
7. Summarise
8. Concern about less good things
9. Take home information & booklet

Aims of Phase III

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- **To Assess effectiveness of ASSIST linked to Brief Intervention in reducing *ASSIST scores***

  -Total Illicit Substance Involvement

  -Specific Substance Involvement (cannabis, stimulants, opioids)

Results

Demographic Profile

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- Recruited from a variety of PHC setting
- 50% randomised to BI group (vs. Control group)
- Demographic profile *n*=731
  - 72% male
  - Age 31.4 years (16-62)
  - 55.5% never been married
  - 72% employed
  - 93.7% own home or rented accommodation
  - 9.5 years education
  - Ethnicity

Substance group by country

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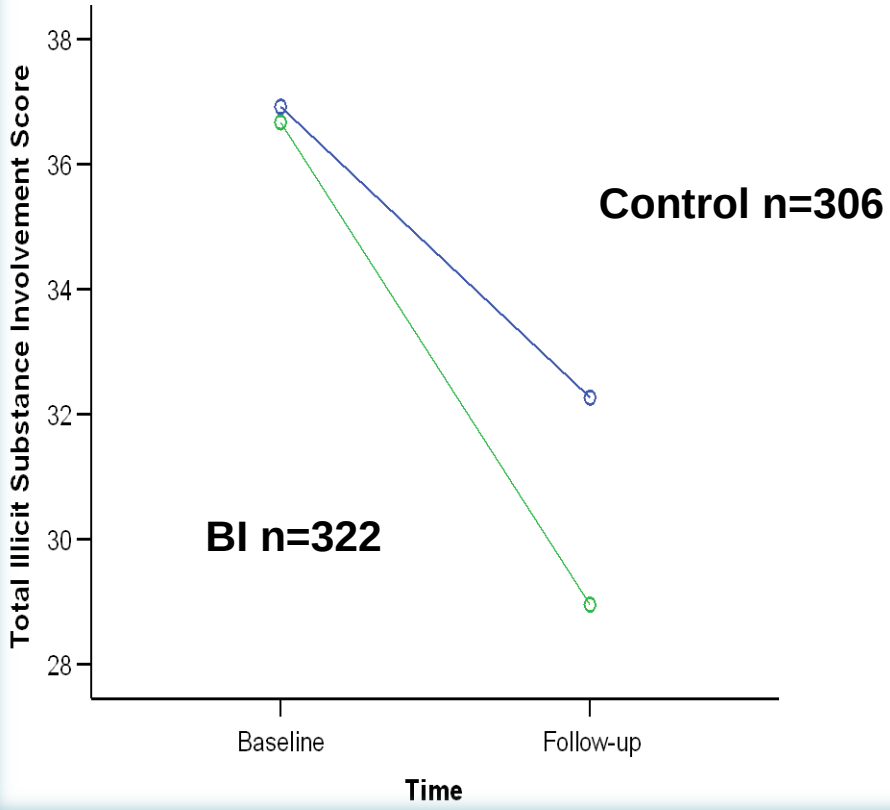
	Australia	Brazil	India	USA	Total
Cannabis	31	112	106	146	395
Cocaine	9	45	0	38	92
ATS	129	8	0	18	155
Opioids	2	0	71	16	89
Total	**171**	**165**	**177**	**218**	**731**

Total Illicit Substance Involvement Control vs. Brief Intervention



Significant reduction over time regardless of group

BI significantly lower at follow-up compared with the Control group $F(1,626) = 7.2$, $p<0.01$

Cannabis Substance Involvement Control vs. Brief Intervention

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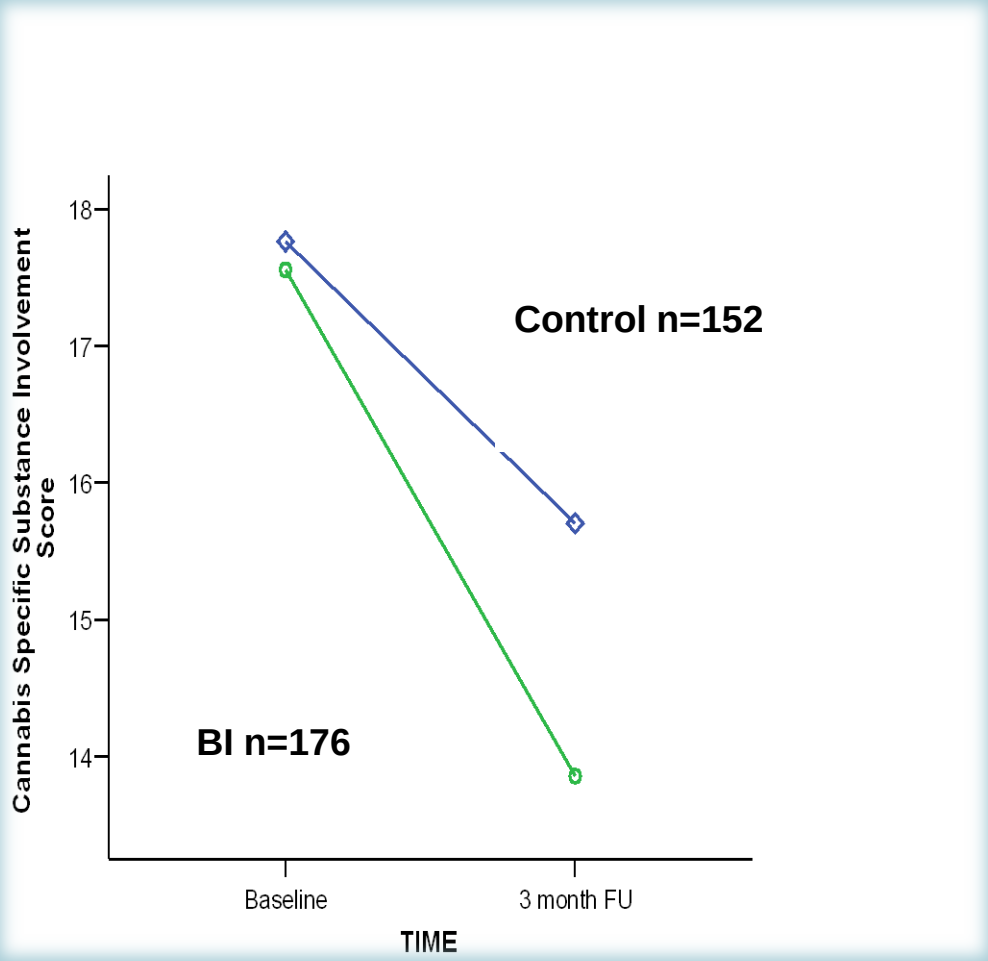
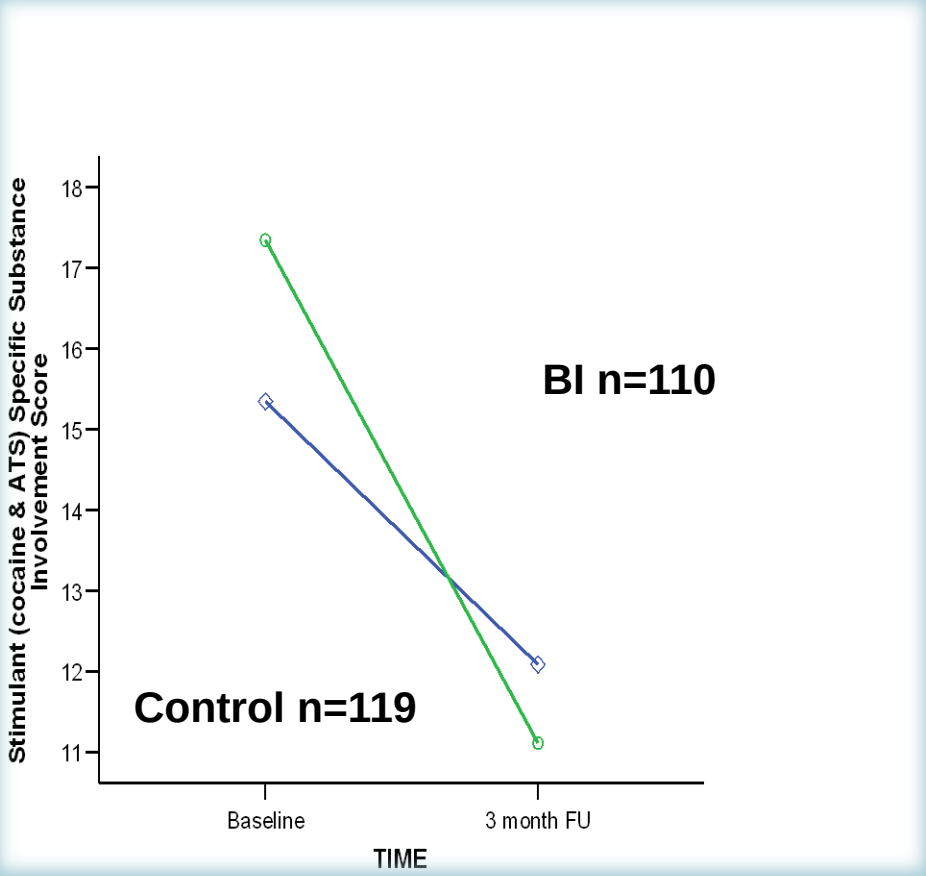


Significant reduction over time regardless of group

BI significantly lower at follow-up compared with the Control group $F(1,326) = 4.2$, $p<0.05$

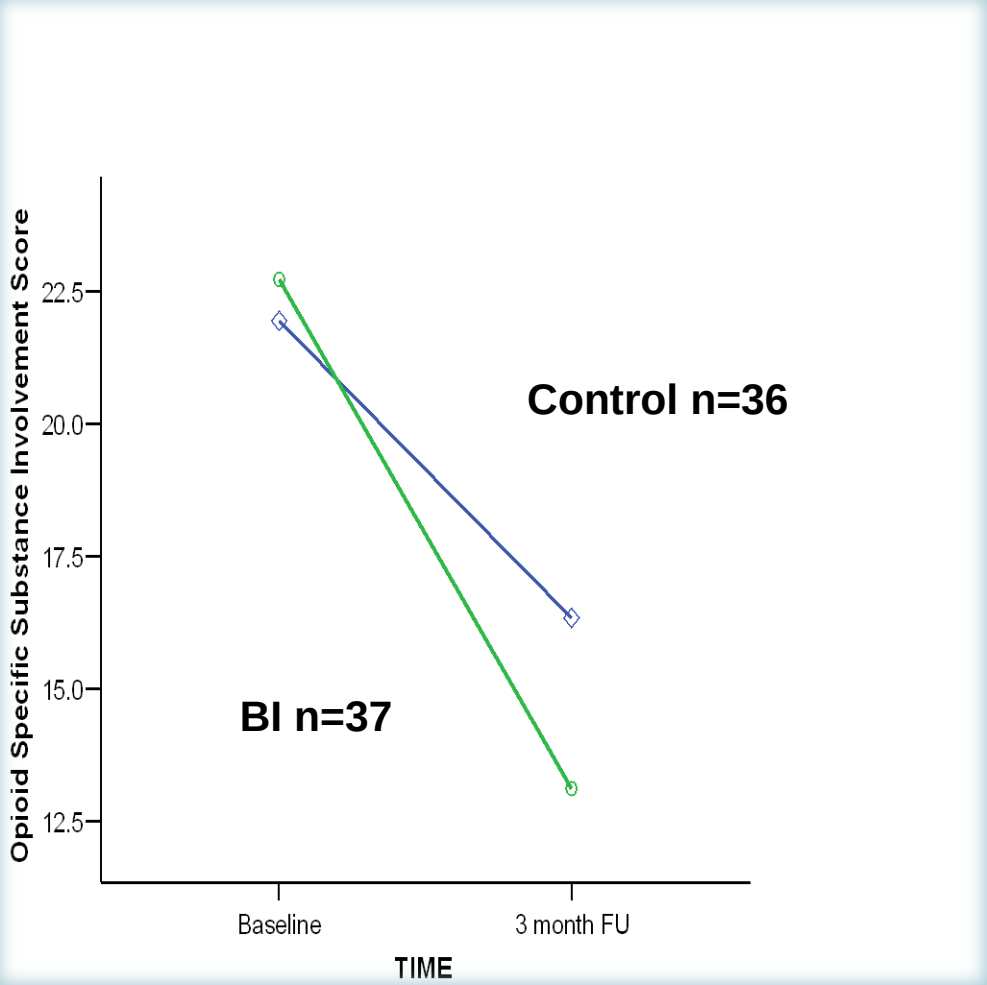
Stimulant Substance Involvement BI vs. Control



Significant reduction over time regardless of group

BI had significantly lower Stimulant Substance Involvement score at follow-up $F(1,227) = 9.4$, $p<0.005$

Opioid Substance Involvement BI vs. Control



Significant reduction over time regardless of group

BI <u>not</u> significantly lower Opioid Substance Involvement scores at follow-up F(1,71) = 3.4, p=0.07 (BUT was significant for India group who had largest number)

Alcohol Substance Involvement Control vs. Brief Intervention

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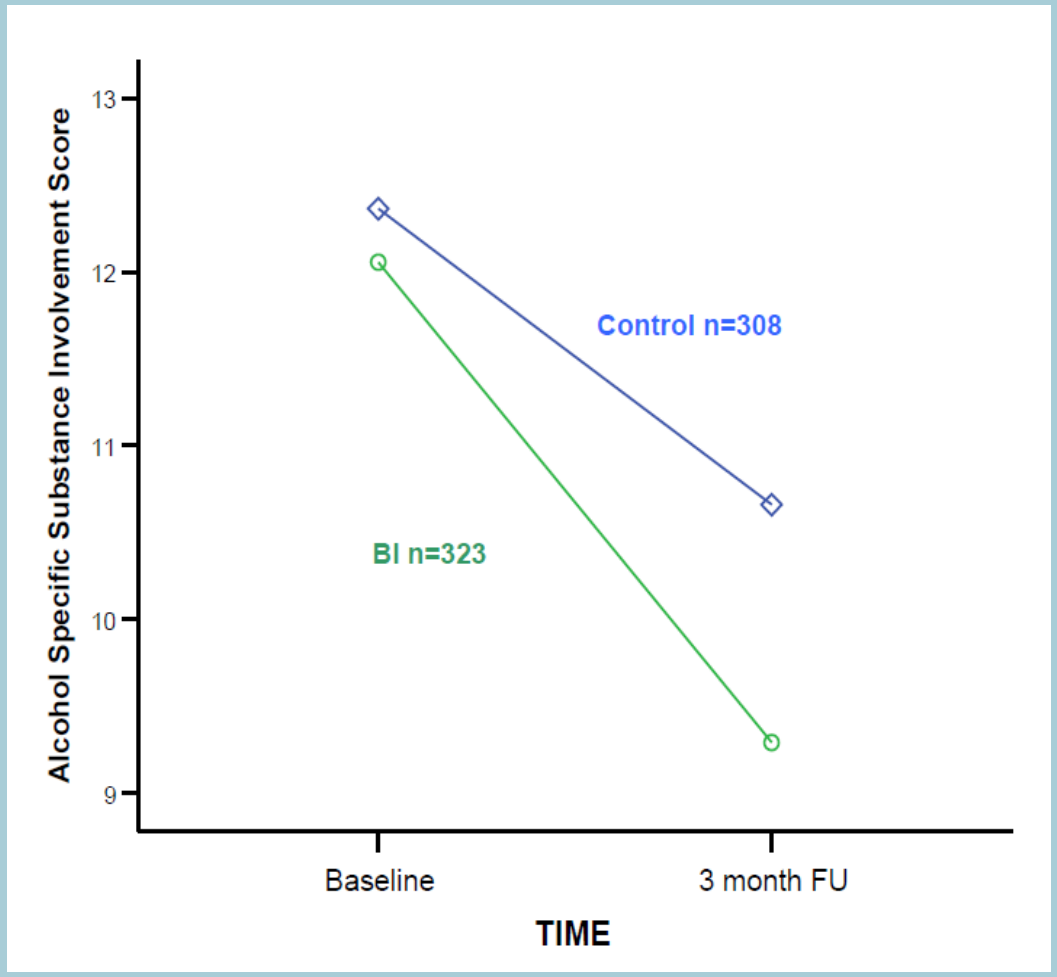
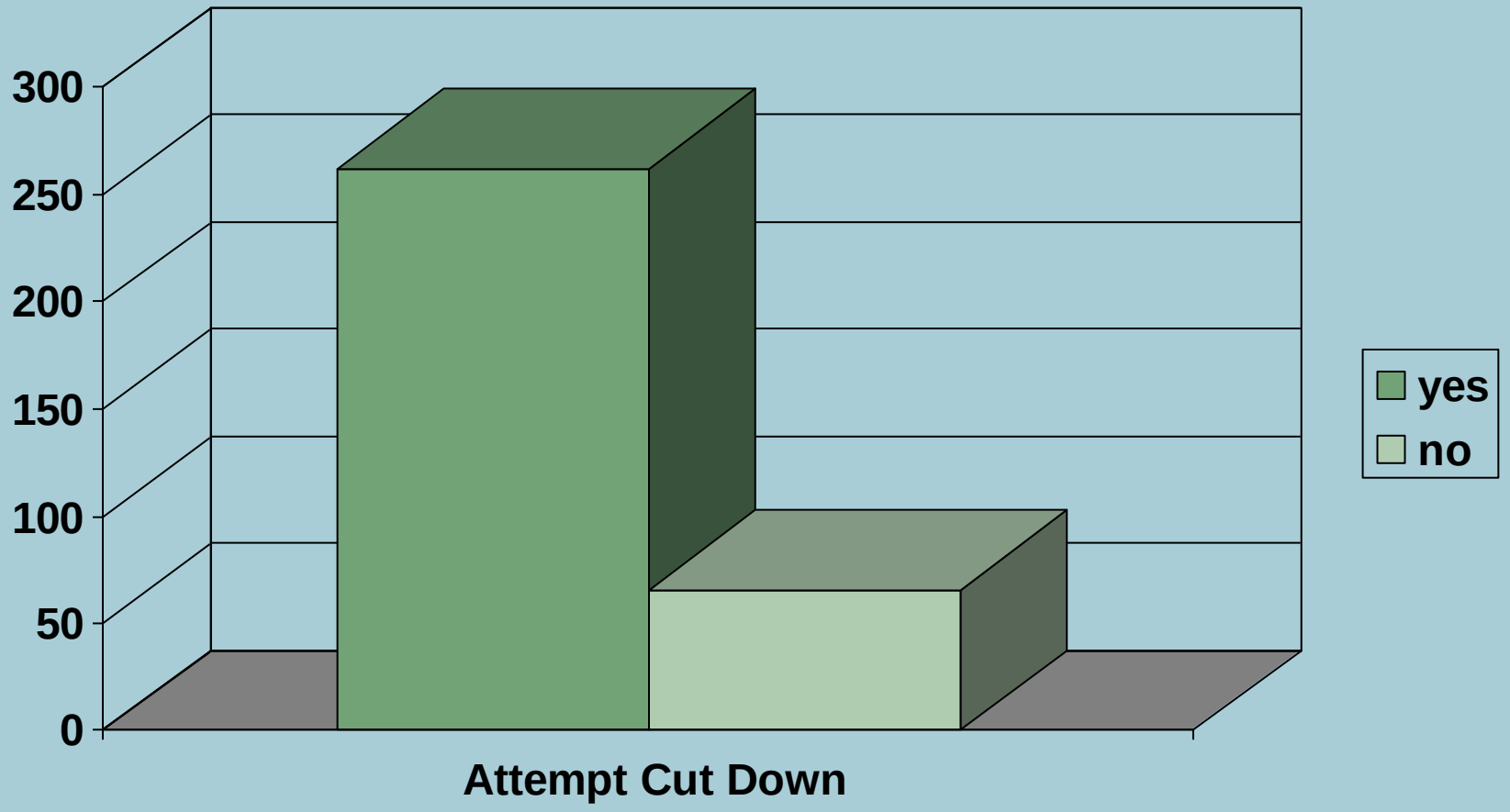


Significant reduction over time regardless of group
BI did not have significantly higher or lower at follow-up compared with the Control group $F(1,628) = 3.4$, $p=0.07$

Did you attempt to cut down after getting the feedback? *n*=317



How did the feedback influence you?

"It made me realise my drug use was probably linked to my depression and that I should reduce (my use)…"

"Made me realise that long term use has effected me….I have reduced my use to one bong a day and it has assisted my work output…"

"Clarified what I already knew….(and provided) an impetus for changing my behaviour"

Summary (1)

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- **ASSIST developed in response to overwhelming burden of disease related to substance use**
- **Valid & reliable**
- **Designed for use in PHC settings**
- **Cross culturally relevant**
- **Risk score provided for each substance – easily links into brief intervention**

Summary (2)

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- Takes ~ 15 minutes to administer
- Data of Phase III:
  - ASSIST BI acceptable
  - Effective
  - Feedback is strongly supportive of findings

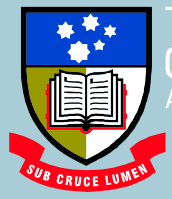
- **WHO ASSIST v3.1**
- **Available in more languages**
- **ASSIST Train the Trainer online course**

http://andy.services.adelaide.edu.au/ASSIST/

http://www.who.int/substance_abuse/activities/assist/en/index.html

Google – WHO ASSIST

sonali.meena@adelaide.edu.au



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Thank You