



HEALTH SCIENCES  
RESEARCH UNIT  
NURSING  
UNIDADE DE INVESTIGAÇÃO  
EM CIÊNCIAS DA SAÚDE  
ENFERMAGEM



e s c o l a superior de  
e n f e r m a g e m  
d e c o i m b r a

# **Effect of Screening and Brief Interventions (SBI) in reducing the risk drinking by individuals with HIV**

Teresa Barroso, CMHRN, Ph.D

tbarroso@esenfc.pt

Susana Patricio, CMHRN

Nursing School of Coimbra

Portugal

**Presented at the 12<sup>th</sup> Annual International Network on  
Brief Interventions for Alcohol and Other Drugs Conference,  
Atlanta, USA,  
September 25, 2015**

# BACKGROUND

- ▶ With the advances in the pharmaceutical industry, namely in relation to antiretroviral drugs, it is currently possible for individuals with HIV to live longer
- ▶ However, factors such as alcohol consumption appear to impact disease progression due to its influence both on adherence and on biological mechanisms

(Bonacinni, 2011; Hahn & Samet, 2010)

# BACKGROUND

- ▶ It is essential to develop efforts to assess and treat alcohol consumption problems in individuals with HIV

(Tran et al., 2014)

- ▶ Nurses play a key role in the identification and development of interventions for individuals with unhealthy alcohol use

# PURPOSE OF THE STUDY



To assess the effect of screening and brief interventions developed by the Clinical Nurse Specialist in reducing the risk of alcohol consumption in outpatients with HIV

# METHODOLOGY

## Study

Quasi- experimental design, pretest-  
posttest design, with a control group;

Follow-up after 4 or 6 months

# METHODOLOGY

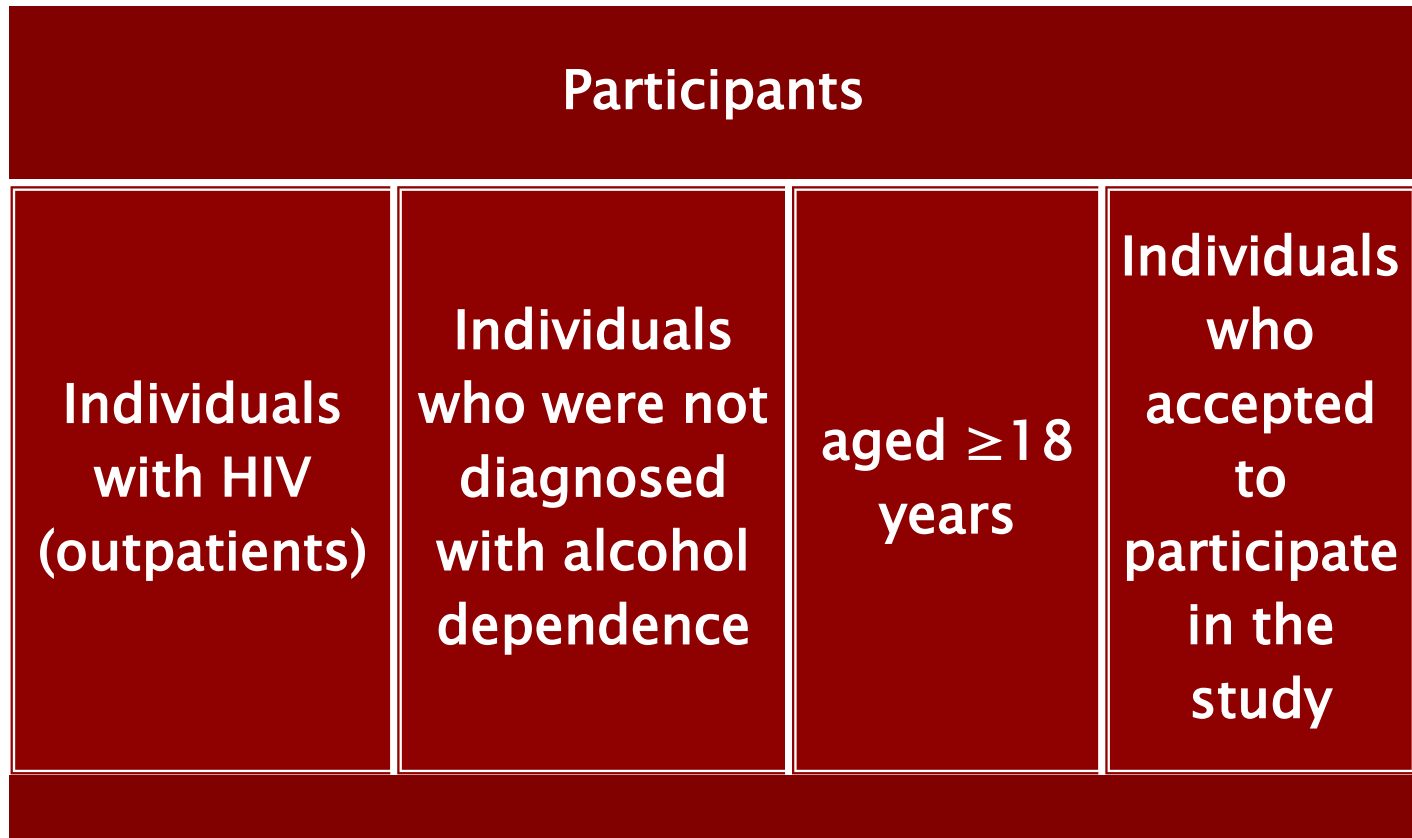
## Method for data collection

Data were collected using a structured interview with the AUDIT

SBIs were developed by a Clinical Nurse Specialist (**experimental group**)

Usual care/ educational intervention developed by untrained nurse (**control group**)

# METHODOLOGY



# METHODOLOGY

## Intervention

Guidelines adapted from the manual Brief  
Intervention for Hazardous and Harmful  
Drinking

(Babor & Higgins-Biddle, 2001)



## Give Advice on Limits

Homem: Não mais de duas bebidas padrão por dia

Não beber pelo menos em dois dias da semana

Mulher: Não mais de uma bebida padrão por dia

Não esquecer que há alturas em que até mesmo uma ou duas bebidas podem ser demais



Por exemplo:

- Quando conduzir ou utilizar máquinas;
- Durante a gravidez ou amamentação;
- Quando toma certos medicamentos;
- Se apresentar determinados problemas clínicos;
- Se não conseguir controlar o consumo.

## What's a Standard Drink



1 copo de cerveja normal (ex. 200ml a 6%) tem  $\approx$  10g de álcool puro

1 copo de vinho (ex. 100ml a 12%) tem  $\approx$  10g de álcool puro

1 copo de bebida destilada (whisky, gin, vodka) (ex. 30ml a 40%) tem  $\approx$  10g de álcool puro

1 shot de bebidas destiladas tem sempre mais quantidade de álcool, pois mistura várias bebidas de alto teor alcoólico, num copo que habitualmente tem 30ml (ex. 30ml a 40%) tem  $\approx$  10g de álcool puro



Copyright:

Guia do projeto "Sem Reservas - Estratégias de Diagnóstico e Intervenções Breves para a Redução do Consumo de Alcool Noivo (Risco/Noivo)", da UICIGA; E, adaptado de Barbara Higgins Riddle (2003).

## GUIA PARA UM CONSUMO DE BAIXO RISCO

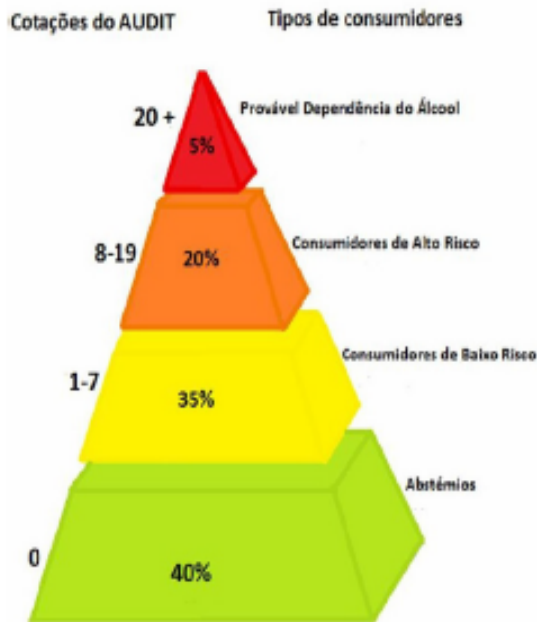


UNIDADE DE INVESTIGAÇÃO EM CIÊNCIAS DA SAÚDE INTERDISCIPLINAR



Escola Superior de Enfermagem de Coimbra

## Painel 2 - Pirâmide do Consumidor



Use the section  
“Effects of High-Risk  
Drinking” to point out the specific  
risks of  
continued drinking above  
recommended  
guidelines

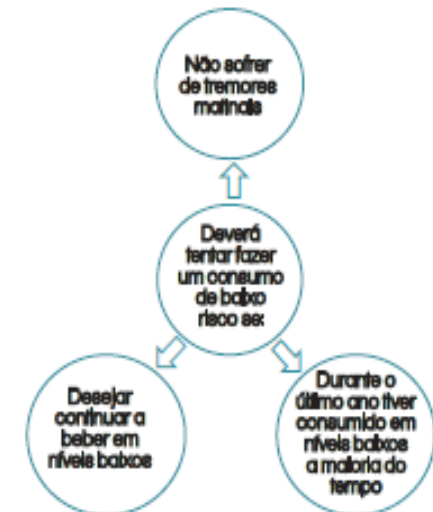


### Legenda:

- 1 Comportamento agressivo e irritável. Discussões, Violência, Depressão, Nervosismo, Dependência do álcool, Perda de memória.
- 2 Envelhecimento precoce, Entumescimento do nariz "nariz vermelho"
3. Canoro da boca e orofaringe.
4. Constipações frequentes, Reduzida resistência a infecções, Risco acrescido de pneumonia.
5. Enfraquecimento do músculo cardíaco, Insuficiência cardíaca, Anemia, Dificuldades de coagulação, Canoro da mama.
6. Lesões do fígado.
7. Deficiência vitamínica, Hemorragia, Inflamação grave do estômago, Vômitos, Diarreia, Desnutrição.
8. Inflamação do pâncreas.
9. Sensação de fraqueza, Quedas.
10. Têmulas das mãos, Formiguelo nos dedos, dedos adormecidos, Neuralgias.
11. Homem: Desempenho sexual reduzido. Mulher: Risco de dar à Luz crianças com malformações, atrasos ou de baixo peso.
12. Úlcera.
13. Dedos dos pés dormentes e com formiguelo, Neuralgias.

O consumo de alto risco pode conduzir a problemas sociais, legais, físicos, familiares, profissionais e financeiros. Pode reduzir a esperança de vida, levar a acidentes e à morte devido a condução sob o efeito do álcool.

Establish a Goal  
The most important part of the  
simple  
advice procedure is for the patient  
to  
establish a goal to change drinking  
behaviour



Só deverá adotar um consumo reduzido de álcool se estes três pontos de aplicarem.

# METHODOLOGY

Brief Interventions developed according to the risk level

Risk level	Intervention	AUDIT Score
Zone I	Alcohol Education	0-7
Zone II	Simple Advice	8-15
Zone III	Simple Advice + Brief Counselling + Continued Monitoring	16-19
Zone IV	Referral to Specialist for Diagnostic Evaluation and Treatment	20-40

# METHODOLOGY

## Consecutive sample

Control group



Individuals with HIV  
with an appointment on  
Mondays and  
Wednesdays



**usual care  
(untrained nurse)**

Experimental group



Individuals with HIV  
with an appointment on  
Tuesdays and Thursdays



**Brief Intervention  
(trained nurse)**



# METHODOLOGY

Quasi experimental design  
experimental and control group  
pretest–posttest design

Previous  
assessment

Experimental Group  
(31 individuals, mean age =  
46.52; SD = 10.414)  
80.6% were males

• Brief Interventions  
(according to the level of  
risk identified by an  
trained nurse)

Control Group  
(27 individuals; mean age =  
42.52 years; SD = 6.980)  
85.2% were males

• usual intervention by an  
untrained nurse

Follow-up  
after 4 and  
6 months

# RESULTS

- ▶ No significant difference was found in baseline demographic or risk drinking among the two groups (experimental and control)

# RESULTS

## Brief Interventions according to the risk level (experimental group)

Risk level	AUDIT Score	Intervention	
Zone I - Low Risk-	0-7	Education	<u>29</u> education interventions based on a previous protocol
Zone II - Hazardous risk-	8-15	Simple Advice	<u>2</u> simple advice interventions
Zone III - Harmful risk-	16-19	Brief Counseling + Continued Monitoring	<u>0</u> interventions

All individuals in the control group attended a traditional appointment with the untrained nurse

# RESULTS

## Characteristics of the levels of consumption

Characteristics of the levels of consumption				Experimental group n=31		Control group n=27	
				n	%	n	%
ZONE I (0-7)	Low Risk	Before	29	93.5	23	85.2	
		After	31	100	24	88.9	
ZONE II (8-15)	Hazardous Risk	Before	2	6.5	3	11.1	
		After	0	0	2	7.4	
ZONE III (16-19)	Harmful Risk	Before	0	0	1	3.7	
		After	0	0	1	3.7	

In both groups, most individuals had a low risk of consumption  
EG: 2 participants who had a hazardous risk level at baseline moved to a low risk level in the final assessment (after the BIs)  
CG: 1 participant dropped from a hazardous risk level to a low risk level; 1 participant remained in the harmful risk level in both assessments (after usual intervention by an untrained nurse)



# RESULTS

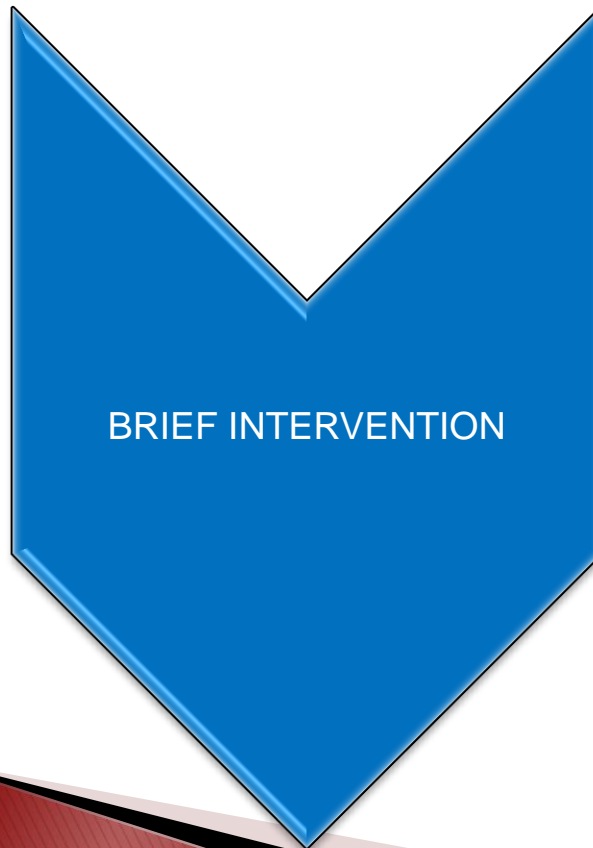
	Experimental group n=31	Control group n=27	Experimental group n=31	Control group n=27
	Baseline -Initial sum	Baseline -Initial sum	Final Assessment -Final Sum	Final Assessment -Final Sum
Mean ranks	26.94	32.44	25.06	34.59
	Mann-Whitney U-test= 339 Z= -1.263 p= 0.207		Mann-Whitney U-test = 281 Z= -2.195 p= 0.028	

The experimental and control groups differed in the final assessment

The mean ranks **decreased in the experimental group** and **increased in the control group** (statistically significant differences)

After follow up the **experimental group** showed a lower rates of risk drinking, with significant differences when compared with control group (Mann Whitney U= 281; Z= -2,195; p= 0,028)

# CONCLUSIONS



BRIEF INTERVENTION

- Brief interventions decreased and stabilized the risk levels of alcohol consumption in outpatients with HIV
- This finding suggest the importance of integrating Brief Interventions in other health care settings

Not a RCT study

Short follow-up

**LIMITATIONS**

Only one assessment  
was conducted

Small sample size

[tbarroso@esenfc.pt](mailto:tbarroso@esenfc.pt)

Coimbra

Portugal

[www.esenfc.pt](http://www.esenfc.pt)