



# PARIS

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## Knowledge regarding HIV among individuals with opioid dependence syndrome: A comparison of treatment naïve and buprenorphine-maintained individuals

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- Conflicts of Interest: None
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# Introduction

- Substance use is often associated with **risky sexual behavior**
- Risky sexual behavior defined variably in literature
- Risky sexual behavior can have a variety of consequences:
  - Unwanted/ unplanned pregnancy
  - Abortions
  - **Sexually transmitted infections including HIV/ AIDS**

*Chawla et al., 2020; Chawla & Sarkar, 2019*

# Introduction

- People who inject drugs (**PWID**) are highly **vulnerable** to HIV transmission
- A cross-sectional study from Vietnam on individuals (n=300) of Opioid Dependence Syndrome (on methadone maintenance treatment):
  - 99% knew of HIV
  - **60.6%** were identified as having **good knowledge**

*Nguyen et al., 2019*

- **HIV education/ counselling** and serosorting has been seen to reduce HIV-related risk behaviours in at-risk population

*Ekbuli et al., 2019*

## Aims

- To assess **HIV-related knowledge** amongst individuals diagnosed with **opioid dependence syndrome** (ODS) seeking treatment for the first time (**treatment-naïve**) in a tertiary care drug dependence treatment center and compare it to those who were abstinent on **buprenorphine maintenance treatment** (BMT)

# Methodology

- Study site: National Drug Dependence Treatment Center (**NDDTC**), AIIMS, New Delhi (WHO collaborating center for substance use)
- Study type: Cross-sectional observational study
- Sampling: Purposive
- N = **112 male** individuals diagnosed with ODS
  - 63 treatment-naïve (Group I)
  - 49 on buprenorphine-maintenance (Group II)
- Assessment:
  - Semi-structured proforma
  - 18-item HIV knowledge questionnaire (HIV-KQ).

# Methodology

## Inclusion Criteria

1. Adult males diagnosed with ODS (as per **ICD-10**)
2. Currently (last one month) sexually active
3. Married and living with their partner
4. Using heroin as the predominant substance of use
5. Treatment-naïve (**Group I**) or under treatment from the center and abstinent (as per self-report) from heroin with BMT for at least the past 3 months (**Group II**)

*Those who had ever injected drugs in their lifetime were categorized as people who inject drugs (PWID)*

## Exclusion Criteria

1. History of dependence on any other psychoactive substance as per ICD-10 (except tobacco)
2. Significant psychiatric/cognitive/medical comorbidity (as per history and clinical examination)
3. Unwilling to participate were excluded from the study

# Methodology

## Procedure

- Ethical Clearance obtained from Institutional Ethics Committee before initiation
- After screening the patients for the eligibility criteria, the patients were recruited after taking informed consent
- It was ensured that the patients are not in active withdrawal during clinical assessment by clinical examination
- All assessments were carried out in a single session lasting around 30-40 minutes
- Analysis done using SPSS version 20.0



# Results

- Average age of the subjects was  $34.1 \pm 8.1$  years

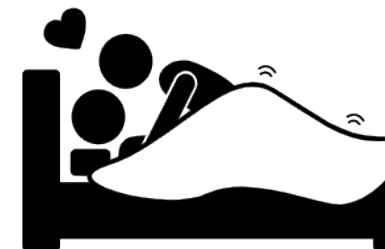
Characteristics	Mean (SD); Frequency (%) Group I (n=63)	Mean (SD); Frequency (%) Group II (n=49)	$\chi^2$ / t-test value; p-value
Age (years)	31.7 (7.8)	37.1 (7.3)	<b>-3.7; &lt;0.001***</b>
Educated beyond 10 <sup>th</sup>	19 (30.2)	9 (18.4)	2.04; 0.15
Employed	44 (69.8)	46 (93.9)	<b>10.09; &lt;0.001***</b>
Urban habitation	55 (87.3)	43 (87.8)	0.005; 0.94
Monthly family income (INR)	29,365 (39,921)	17,163 (11,694)	<b>2.1; 0.02*</b>

# Results



Characteristics	Mean (SD); Frequency (%) Group I (n=63)	Mean (SD); Frequency (%) Group II (n=49)	$\chi^2$ / t-test value; p-value
Duration of tobacco use (years)	14.2 (8)	20.5 (7.4)	<b>-4.2; &lt;0.001***</b>
Alcohol use (ever)	34 (54)	26 (53.1)	0.009; 0.92
Cannabis use (ever)	44 (69.8)	20 (40.8)	<b>9.48; &lt;0.001***</b>
Age at heroin initiation (years)	23.2 (7)	22.9 (5.3)	0.3; 0.76
Duration of heroin use (years)	8.3 (5.7)	11.4 (6.3)	<b>-2.7; 0.008**</b>
PWID	23 (36.5)	17 (34.7)	0.040; 0.84

# Results



Characteristics	Mean (SD); Frequency (%) Group I (n=63)	Mean (SD); Frequency (%) Group II (n=49)	$\chi^2$ / t-test value; p-value
Treatment duration (months)	--	36.8 (27.2)	--
Age at first sexual intercourse	18.2 (3.1)	19.1 (3.9)	-1.4; 0.16
Sex with casual partner/ FSW	9 (14.3)	1 (2)	<b>5.08; 0.041*</b>
Unprotected premarital sex	38 (60.3)	18 (36.7)	<b>6.13; 0.013*</b>
Ever got HIV testing done	17 (27)	25 (51)	<b>6.79; 0.009**</b>
Mean HIV-KQ scores	5.35 (3.04)	6.10 (3.28)	-1.26; 0.212

## Discussion

- Knowledge regarding HIV remains poor amongst individuals with opioid dependence syndrome despite:
  - Despite longer duration of treatment
  - Engagement with treatment services
  - More frequent HIV-testing
- A **brief, easy-to-administer educational intervention** is associated with substantial gains in HIV and HCV knowledge among opioid abusers

*Dunn et al., 2013*

## Discussion

- Education represents the necessary first step toward the dissemination of a structured prevention HIV and HCV intervention for opioid abusers

*Dunn et al., 2013*

- While engaging into treatment, we need to **focus on the knowledge gaps regarding the risks** associated with substance use and aim at holistic care of the patients.

## Discussion

- Limitations of the current study
  - Cross-sectional study, purposive sampling → causal attributions must not be drawn
  - The sample is from a tertiary care addiction treatment facility limits the generalizability
  - Since those who were taking the treatment had been abstinent for a significantly longer duration, there may be issues of recall bias
  - The scales translated into Hindi were not validated and power analysis was not carried out

## Discussion

- Future studies should assess individuals longitudinally, and within community
- Head-to-head comparison with the general population is also important

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