Vattenpipa, samband med mental ohälsa och drogbruk hos unga

Ramji, R., Arnetz, J., Nilsson, M., Wiklund, Y., Arnetz, B
Waterpipe smoking?

- Originated about 400 years ago in India, culture in Middle East
- Concerning new smoking trends among the adolescents globally
- Lack of studies about waterpipe smoking and health effects
- CAN assessed waterpipe smoking for the first time in 2009
- Need for research to understand and develop specific interventions
- Waterpipe smoking is as dangerous as smoking cigarettes
Pilot study
- When: 2013
- Where: Umeå
- Participants: 106 high school students
- Type: Survey

Main Study
- Where: Umeå and Vannas
- Participants: 1006 adolescents (Åk 9, Gy1-3)
- Type: Survey

Focus Group study
- When: May 2015
- Where: Umeå
- Participants: 37 high school students
- Type: Focusgroup interviews

Pilot Intervention
- When: 2016
- Where: Umeå
- Target group: Adolescents

FUTURE PLAN
Application and further evaluation

BMC Research Notes 2015
Scandinavian Journal of Public Health 2017
Under Review
To explore:

The association between mental health and waterpipe smoking

The association between use of other drugs among waterpipe smokers compared to non-smokers
Preliminary results

- 22% Tested Waterpipe smoking
- 15% Smoked more than once
- 7% Smoked in last 30 days
- Waterpipe use increased with increasing age
Mental Health and Waterpipe smoking

- **Lack of studies** on mental health and waterpipe use in adolescents

- **Known association** between mental health and other forms of tobacco use

- Nicotine intake – a **self medication** for alleviation of mental health symptoms.

- Three main mental health indicators including **stress**, **mental energy (fatigue)** and **sleep quality** and its association to waterpipe smoking were assessed in our study.
# Waterpipe use and mental health

<table>
<thead>
<tr>
<th>Variable</th>
<th>OR</th>
<th>95%CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stress</td>
<td>1.09</td>
<td>1.01-1.19**</td>
</tr>
<tr>
<td>Mental energy</td>
<td>0.89</td>
<td>0.81-0.99**</td>
</tr>
<tr>
<td>Sleep quality</td>
<td>0.98</td>
<td>0.90-1.08</td>
</tr>
</tbody>
</table>

Note in this analysis we also controlled for other health behaviors but those are not presented here.

- High stress was associated with waterpipe use
- Lower mental energy was associated with waterpipe use
## Waterpipe use and use of other drugs

<table>
<thead>
<tr>
<th>Variable</th>
<th>OR</th>
<th>95%CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>1.39</td>
<td>0.96-0.03</td>
</tr>
<tr>
<td>School Grade</td>
<td>1.59</td>
<td>1.29-1.97 ***</td>
</tr>
<tr>
<td>School</td>
<td>1.07</td>
<td>0.83-1.38</td>
</tr>
<tr>
<td>Cigarette ever-use</td>
<td>3.99</td>
<td>2.50-6.39 ***</td>
</tr>
<tr>
<td>Snus ever-use</td>
<td>2.25</td>
<td>1.46-3.46 ***</td>
</tr>
<tr>
<td>E-cigarette ever-use</td>
<td>3.35</td>
<td>2.21-5.09 ***</td>
</tr>
<tr>
<td>Engaging in gambling</td>
<td>1.20</td>
<td>0.81-1.77</td>
</tr>
<tr>
<td>Alcohol ever-use</td>
<td>1.97</td>
<td>1.11-3.51 *</td>
</tr>
<tr>
<td>Narcotics ever-use</td>
<td>4.09</td>
<td>1.99-8.44 ***</td>
</tr>
<tr>
<td>Engaging in sports/exercise</td>
<td>0.87</td>
<td>0.54-1.41</td>
</tr>
</tbody>
</table>
Concluding comments

• Co-use of waterpipe together with known problem areas - cigarette, snus, alcohol
• Addressing the knowledge gaps will help restraining waterpipe use
• Access to waterpipe products- policy and control
• Our study was cross-sectional – caution in interpreting results
• More research and attention to waterpipe smoking warranted
THANK YOU!

TACK!!!

rathiramji@gmail.com/ rathi.ramji@pubcare.uu.se