Tuberculosis (TB) and Tobacco Control in Armenia

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Armenian Heritage Cruise
Burden of Tuberculosis (TB) WHO 2015 Estimates

- TB incidence: 41 per 100,000
- TB mortality: 3 per 100,000
- Estimated proportion of MDR-TB cases:
  - 11% - new
  - 47% - retreated (developed MDR-TB)
- 8 cases of XDR-TB
- Treatment success rate

| New and relapse cases registered in 2014 | 78% |
| Previously treated cases, excluding relapse, registered in 2014 | 50% |
| HIV-positive TB cases, all types, registered in 2014 | 60% |
| MDR/RR-TB cases started on second-line treatment in 2013 | 43% |
| XDR-TB cases started on second-line treatment in 2013 | 20% |
TB Incidence & Mortality per 100,000
National TB Control Center

TB MORBIDITY AND MORTALITY IN ARMENIA
(2004-2014)

New treatments and approaches to tuberculosis
Tuberculosis Symposium – Eastern Europe and Central Asia
RA Ministry of Health and Médecins Sans Frontières
NTCC organizes and coordinates both inpatient and outpatient TB services through TB prevention and treatment at 3 levels

- **Central level** – responsible for direct coordination and professional assistance to all services
- **Hospital level** – responsible for diagnosis and inpatient care during intensive phase of TB treatment for sputum smear positive (SS+) patients
  - Republican TB Dispensary in Abovian city with 300 TB hospital beds serving about 90% of all TB patients from Armenia: around 3,000 TB patients annually
  - TB Dispensary in Yerevan with 48 TB hospital beds
  - 4 regional departments in Gyumri, Vanadzor, Kapan, and Goris with 110 TB hospital beds
- **Primary health care level** – 60 outpatient TB centers in polyclinics providing outpatient services
Counseling for TB Patients and Their Family Members: a Pilot Project

• Supported by Armenian Medical Fund
• Literature review
• Pre-intervention qualitative research

**Intervention**

– Training of Trainers (TOT)
– Counseling of TB patients and family
  • Regular TB patients from Shirak, Kotayk and Aragatsotn marzes who at the time of the counseling were receiving outpatient phase of TB treatment
  • All family members or some family members of TB patients
  • Friends, relatives, and neighbors if invited by the TB patient

• Evaluation of intervention
• Recommendations
Main Findings

- The overall mean cumulative knowledge score for TB patients and family members significantly improved from baseline to follow-up.
- Family members showed greater overall improvement in knowledge than TB patients.
- Stigmatizing social practices within the families reduced.
- Rates of TB treatment success significantly increased and lost to follow-up and failure and death rates significantly decreased among TB patients who participated in the household counseling sessions (Pilot Project) compared to those TB patients who were not involved.
• Self-administered drug intake by empowered TB patients – supervised by a trained family member and supported by medical counseling and daily SMS reminders – to improve treatment success rates

• Similar clinical effectiveness as the WHO standard treatment, improved knowledge about TB, patients’ depression status, stigma within family, and self-reported adherence to TB treatment

• Close collaboration with Ministry of Health, National TB Control Center, national strategy and scale-up
Study Rationale

• No evidence that Directly Observed Therapy (DOT) compared to self-administered treatment leads to better treatment outcomes

• Involving family members in TB treatment can improve patient adherence

• DOT has been problematic in Armenia during the continuation treatment phase
  – Existing studies suggest: up to 1/3 of TB patients reported adhering to DOT during the continuation treatment phase
To evaluate a multi-stage multi-component innovative strategy for recommending nationwide policy change

Cluster randomized controlled trial

- Clusters – 52 TB outpatient centers
  - 26 outpatient TB centers assigned to **intervention** arm
  - 26 outpatient TB centers assigned to **control** arm
Target population

Inclusion criteria

- Having a diagnosis of drug sensitive pulmonary TB
- Starting the continuation phase of TB treatment between March and December 2014
- Being at least 18 years old at the time of enrolment
- Ability to communicate in Armenian

Exclusion criteria

- TB patients in the Home Based TB Treatment Program
(SS+) and (SS-) drug sensitive TB patients in the intensive phase of treatment

New and retreated (SS-) TB patients in continuation phase of treatment

**Intervention N=195**

- Baseline survey of TB patients and family members
- Education and counseling for drug-sensitive TB patients and family (FM)
- Self-administered drug intake supervised by a trained FM (visiting TB center once a week)
- Daily SMS-reminders to TB patients
- Daily phone-calls to family member
- Follow-up survey of TB patients & FM

**Control N=200**

- Baseline survey of TB patients and family members
- Follow-up survey of TB patients & FM
Data Analyses

- Analyzes based on intention to treat approach
- Those TB patients who did not meet the eligibility criteria excluded

**Intervention** \(N=194\)

**Control** \(N=198\)

TB Patients Excluded from the analyses:

- **n=1**
  - The diagnosis of drug sensitive pulmonary TB was rejected after enrollment in the study

- **n=2**
  - The diagnosis of drug resistant TB was confirmed after enrollment in the study
  - The diagnosis of extra-pulmonary TB was confirmed after enrollment in the study
Generalized Estimating Equation model (with TB outpatient clinics as clusters) did not find association found between being in the intervention or control group and the treatment outcome after adjusting for confounding (knowledge, SS).

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Success 92.7% (n=176)</td>
<td>Success 92.9% (n=184)</td>
</tr>
<tr>
<td>Lost to follow-up 6.7% (n=13)</td>
<td>Lost to follow-up 5.1% (n=10)</td>
</tr>
<tr>
<td>Failure 0.5% (n=1)</td>
<td>Failure 0% (n=0)</td>
</tr>
<tr>
<td>Died 1.5% (n=3)</td>
<td>Died 1.5% (n=3)</td>
</tr>
<tr>
<td>Not evaluated 0.5% (n=1)</td>
<td>Not evaluated 0.5%(n=1)</td>
</tr>
</tbody>
</table>
Self-reported Adherence to Treatment

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Control / DOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients 100%</td>
<td>Patients 86.7%</td>
</tr>
<tr>
<td>FM 100%</td>
<td>FM 80%</td>
</tr>
</tbody>
</table>

Frequency of visits among those non-adherent to DOT

- 2-3 times a week 50%
- 1-time a week 36%
- 1-2 times a month 14%

About 1/5\textsuperscript{th} of TB patients from the control arm did not follow the national DOTS strategy.
• Study design
• Cluster sampling to minimize contamination between groups
• Intention to treat approach during the analysis

- However, compensatory rivalry between intervention and control groups – physician behavior
- Initial resistance by TB physicians
Conclusions & Recommendations

- Comparable clinical effectiveness: reducing the number of visits to TB outpatient centers from 6 to 1 time per week can
  - substantially reduce the workload of healthcare providers
  - save financial resources spent to cover transportation expenses
  - save time to TB patients making it more feasible for TB patients to adhere to the prescribed schedule
- Selectively implement the new strategy as part of the standard TB care in Armenia for those patients who have a family member to support self-administered drug intake
- Conduct the educational/counselling component of the new strategy for TB patients and their family supporters during the intensive phase of TB treatment to prevent lost-to-follow up (defaulting)
In-patient TB treatment in Armenia: Establishment of Continuous Quality Improvement System

*Needs Assessment*

- Review of literature on quality assessment of inpatient TB services
- Qualitatively explore practices of healthcare professionals of NTCC’s diagnostic and inpatient facilities and inpatient treatment experience of TB patients and their family members
- Assess documentation, staff practices, and environmental conditions of the NTCC using standardized checklists
- Assess compliance level of TB diagnostic and treatment practices with internal & national policies and procedures, and international guidelines and standards (WHO and Joint Commission International-JCI)
- Make recommendations for establishing a Continuous Quality Improvement system at the NTCC
Methods

- **Document review**
  - Internal policies and regulations
  - National guidelines and regulations
  - WHO and JCI standards and guidelines

- **Staff qualification document review**
  - 20 personnel files from all departments
  - Staffing plan of the organization

- **Medical records review**
  - 34 medical records (medical history, TB treatment card, DR-TB treatment files) of TB patients admitted for inpatient treatment in March-April 2016
- **In-depth interviews with 40 participants**
  - NTCC managers
  - Heads of departments
  - TB physicians and nurses
  - Laboratory staff
  - Pharmacists
  - Infection prevention and control
  - Radiology
  - Monitoring and evaluation
  - Continuing education
  - Human resource management
  - TB patients and their family members

- **21 Observations**
  - Environmental conditions
  - Daily practices
Study Instruments

JCI Accreditation Standards for Hospitals
International Standards for TB Care
WHO framework for conducting TB program reviews

- 3 types of document review checklists for
  - Policy review
  - Staff qualification review
  - Medical records review

- 24 in-depth interview guides for 11 groups of key informants

- 5 types of observation checklists for
  - TB patients admission, access and continuity of care
  - Laboratory
  - Medication storage management and use
  - Infection prevention and control
  - Kitchen and food storage
<table>
<thead>
<tr>
<th>Patient Centered Functions (8)</th>
<th>Standards (73)</th>
<th>Measurable Element (303)</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Patient Safety Goals (IPSG)</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>Access and Continuity of Care (ACC)</td>
<td>8</td>
<td>33</td>
</tr>
<tr>
<td>Patient and Family Rights (PFR)</td>
<td>9</td>
<td>27</td>
</tr>
<tr>
<td>Assessment of Patients (AOP)</td>
<td>25</td>
<td>114</td>
</tr>
<tr>
<td>Care of Patients (COP)</td>
<td>6</td>
<td>29</td>
</tr>
<tr>
<td>Medication Management and Use (MMU)</td>
<td>13</td>
<td>48</td>
</tr>
<tr>
<td>Patient and Family Education (PFE)</td>
<td>6</td>
<td>21</td>
</tr>
<tr>
<td>TB-Tobacco Control (TBTC)</td>
<td>3</td>
<td>19</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Healthcare Organization Management Functions (5)</th>
<th>Standards (49)</th>
<th>Measurable Element (171)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality Improvement and Patient Safety (QPS)</td>
<td>8</td>
<td>29</td>
</tr>
<tr>
<td>Prevention and Control of Infection (PCI)</td>
<td>13</td>
<td>44</td>
</tr>
<tr>
<td>Governance, Leadership and Direction (GLD)</td>
<td>11</td>
<td>35</td>
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<tr>
<td>Staff Qualifications and Education (SQE)</td>
<td>6</td>
<td>26</td>
</tr>
<tr>
<td>Management of Communication and Information (MCI)</td>
<td>11</td>
<td>37</td>
</tr>
</tbody>
</table>
Analytic Framework

- Data from different sources/methods scored and transferred into checklist for each Measurable Element
- The maximum score for each standard set to be 10 or 100%
- For each of the standards findings include:
  - Scoring table
  - SWOT analysis, supported by direct quotes from respondents
## Results

<table>
<thead>
<tr>
<th>Patient Centered Functions</th>
<th>Performance score</th>
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</thead>
<tbody>
<tr>
<td>International Patient Safety Goals (IPSG)</td>
<td>67%</td>
</tr>
<tr>
<td>Access and Continuity of Care (ACC)</td>
<td>87%</td>
</tr>
<tr>
<td>Patient and Family Rights (PFR)</td>
<td>39%</td>
</tr>
<tr>
<td>Assessment of Patients (AOP)</td>
<td>61%</td>
</tr>
<tr>
<td>Care of Patients (COP)</td>
<td>71%</td>
</tr>
<tr>
<td>Medication Management and Use (MMU)</td>
<td>62%</td>
</tr>
<tr>
<td>Patient and Family Education (PFE)</td>
<td>26%</td>
</tr>
<tr>
<td>TB-Tobacco Control (TBTC)</td>
<td>35%</td>
</tr>
</tbody>
</table>
## Healthcare Organization Management Functions

<table>
<thead>
<tr>
<th>Function</th>
<th>Performance score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality Improvement and Patient Safety (QPS)</td>
<td>25%</td>
</tr>
<tr>
<td>Prevention and Control of Infection (PCI)</td>
<td>75%</td>
</tr>
<tr>
<td>Governance, Leadership and Direction (GLD)</td>
<td>53%</td>
</tr>
<tr>
<td>Staff Qualifications and Education (SQE)</td>
<td>42%</td>
</tr>
<tr>
<td>Management of Communication and Information (MCI)</td>
<td>79%</td>
</tr>
</tbody>
</table>
Concluding Remarks Regarding the Establishment of Continuous Quality Improvement System

• Several groups of recommendations developed
• 5 year plan developed
• Priority recommendations
  – Establish an education department to meet local and regional needs (Center of Excellence)
    • Education/counseling for patients
    • Continuous professional development for health providers
  – Implementation of patient centered strategies
  – Monitoring and evaluation of new policies and interventions
  – Continuous collaboration with AUA
## Burden of Smoking in Armenia

### Smoking prevalence (≥ 16 years)
- 63.0% men
- 2.0% women

### At least one smoker in the home
- 82.2% households
- 70.0% no smoking restrictions in their households in 2007

### Exposure to SHS at public places (13-15 yrs)
- 78.3% of never smokers

### Physicians’ smoking rate
- Physicians (48.5%-male, 12.8%-female)
- Medical students (50.0%-male, 7.7%-female)

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1. DHS, 2010, Armenia
2. Knowledge, attitudes, and practices on tobacco control policies in adult population in Armenia. American University of Armenia, 2007
3. GYTS 2009, Armenia
Armenia acceded to the WHO FCTC on November 2004, thus becoming the first former Soviet Union country to become a party of the FCTC.


- Banned smoking in healthcare, education, culture facilities and public transport
- Introduced larger health warnings on cigarette packs.

RA Law “On Advertising”

- Banned advertising on TV and radio (2002) and on billboards (2006)

One area where Armenia’s progress was less than satisfactory is the implementation of the FCTC Article 14.
National Tobacco Control Law

- Total ban on smoking:
  - Healthcare facilities
  - Educational facilities
  - Cultural facilities
  - Public transportation

- Smoking restriction:
  - All other types of facilities

- No restriction:
  - Bars and restaurants
AUA School of Public Health Receives Global Recognition for Tobacco Dependence Treatment

- American University of Armenia (AUA) Gerald and Patricia Turpanjian School of Public Health (TSPH) was one of 19 organizations worldwide selected to receive a financial award to expand the work in the field of tobacco dependence treatment.
- Project title: “Implementing the FCTC Article 14 in Armenia through Building National Capacity in Smoking Cessation Training”
- With support from the Pfizer Independent Grants for Learning & Change (IGLC) presented by Global Bridges Healthcare Alliance for Tobacco Dependence Treatment at Mayo Clinic.
Goal and Objectives

- **Project aims**

  The project aims to develop national capacity in implementing the FCTC Article 14 in Armenia through:

  a) building smoking cessation training capacity on evidence-based methods and tools for teaching health providers the basic skills for working with smokers and counselling them on smoking cessation;

  b) training primary healthcare physicians to provide them with knowledge and skills to provide smoking cessation counselling to smokers;

  c) developing a White Paper: “Mapping the FCTC Article 14 Implementation in Armenia” and discussing it with the health policymakers and other stakeholders;

  d) strengthening the support from the key stakeholders, including the policy and decision making community and the institutions of medical education to sustain the project outcomes and advocate for a system-wide change.
Aims

• Clarify primary healthcare physicians’ baseline knowledge, attitude and practices regarding smoking cessation, as well as to identify the perceived need for smoking cessation training to enable them to advise and assist smoking patients to quit
• Determine availability, affordability, and prices of the smoking cessation drugs in Armenian pharmaceutical market

Formative Research

– Qualitative study among primary health care physicians
  • Focus group discussions (FGDs)
– Pharmaceutical market research
  • Document review/Desk Review
  • Survey in pharmacies
  • In-depth interview among representatives of pharmaceutical companies
– Comparison of affordability of smoking cessation healthcare interventions
Results from the qualitative study among primary health care physicians (FGDs)

- Primary healthcare physicians acknowledged their role in advising patients to quit smoking but they did not accept assistance in smoking cessation as their responsibility.

- There was no formal and regulated way for identifying and reporting the smoking status of patients
  - physicians were not always aware of the smoking status of their patients.

- Primary healthcare physicians did not have appropriate skills and knowledge in smoking cessation (particularly in pharmacotherapy).

- No formal training in smoking cessation, high price and low access to smoking cessation drugs, unreasonable paper work, and lack of time were the main obstacles for providing comprehensive counseling in smoking cessation mentioned by the participants.

- Physicians were interested and willing to participate in training/courses on smoking cessation counseling to help their patients to quit.
  - interested in gaining skills and knowledge on different smoking cessation methods, particularly in pharmacotherapy.
Results from Formative Research

Results from the pharmaceutical market research

- Varenicline (Champix)
- Nicotine gum (Nicorette gum) registered and recommended smoking cessation products in Armenia
- Cytisine (Tabex)

• Among the pharmacies surveyed (n=42):
  - 71.43% had at least one smoking cessation product
  - 28.57% had no smoking cessation product.

• Available smoking cessation product in pharmacies:
  - Cytisine (Tabex): found in 42 pharmacies (69.05%).
  - Varenicline (Champix): not available in any of the visited pharmacies.
  - Nicotine gum (Nicorette gum): found only in 3 pharmacies (7.14%).

• The mean prices for smoking cessation products in Armenia:
  - Cytisine (Tabex) (100 tabs 1.5mg) 4,511 AMD (9.44 USD),
  - Nicotine (Nicorette) gum (30 gums 2mg) 4,500 AMD (9.42 USD).
Results from the In-depth interview among representatives of pharmaceutical companies

- Representatives of pharmaceutical companies in Armenia explained the limited availability of smoking cessation products in the market by low demand.
- Despite low demand for smoking cessation products in Armenia, pharmaceutical companies do not take any specific actions to actively promote smoking cessation products in Armenia.
- Representatives of pharmaceutical companies emphasized the important role of primary healthcare physicians and public awareness campaigns for increasing the demand for smoking cessation products in Armenia.
### Results from the affordability of smoking cessation healthcare interventions

<table>
<thead>
<tr>
<th>Intervention name</th>
<th>Affordability estimates</th>
<th>Ranking (1=most affordable)</th>
<th>Updated</th>
<th>Ranking (1=most affordable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brief Advice</td>
<td>2.30</td>
<td>4.00</td>
<td>45.15</td>
<td>1.00</td>
</tr>
<tr>
<td>Behavioral support: in person</td>
<td>1.49</td>
<td>6.00</td>
<td>18.06</td>
<td>4.00</td>
</tr>
<tr>
<td>Behavioral support: in telephone</td>
<td>1.68</td>
<td>5.00</td>
<td>44.70</td>
<td>2.00</td>
</tr>
<tr>
<td>Text messaging</td>
<td>10.78</td>
<td>1.00</td>
<td>21.57</td>
<td>3.00</td>
</tr>
<tr>
<td>Printed materials</td>
<td>3.64</td>
<td>3.00</td>
<td>9.99</td>
<td>6.00</td>
</tr>
<tr>
<td>Single form NRT</td>
<td>0.93</td>
<td>11.00</td>
<td>0.61</td>
<td>11.00</td>
</tr>
<tr>
<td>Bupropion</td>
<td>1.36</td>
<td>7.00</td>
<td>2.64</td>
<td>7.00</td>
</tr>
<tr>
<td>Varenicline</td>
<td>1.19</td>
<td>9.00</td>
<td>1.28</td>
<td>8.00</td>
</tr>
<tr>
<td>Cytisine</td>
<td>3.72</td>
<td>2.00</td>
<td>15.23</td>
<td>5.00</td>
</tr>
<tr>
<td>In person support and single NRT</td>
<td>1.00</td>
<td>10.00</td>
<td>0.99</td>
<td>10.00</td>
</tr>
<tr>
<td>Dual NRT</td>
<td>0.92</td>
<td>12.00</td>
<td>0.56</td>
<td>12.00</td>
</tr>
<tr>
<td>In person support and dual NRT</td>
<td>1.35</td>
<td>8.00</td>
<td>1.06</td>
<td>9.00</td>
</tr>
</tbody>
</table>
Recommendations

• Develop, implement and evaluate smoking cessation trainings for primary healthcare physicians in accordance with the existing scientific evidence and best practices.
• Make appropriate changes in medical charts to ensure accurate and adequate documentation of patients’ smoking status.
• Ensure availability and affordability of smoking cessation medications. Include the most affordable smoking cessation medications into the list of essential medications in Armenia.
• Implement and monitor the most affordable smoking cessation interventions.
• Regularly update the National Smoking Cessation Guideline and implement it into the primary healthcare physicians’ practice.
• Develop performance-based reimbursement mechanism to motivate primary healthcare physicians to provide smoking cessation counseling.
“Tobacco Dependence Treatment Trainings for Primary Healthcare Physicians”

- **Aim**
  - to arm physicians with the evidence-based smoking cessation counseling and treatment knowledge and skills to motivate and assist patients to quit.

- **Training participants**
  - 58 primary healthcare physicians (family physicians and general therapists)
  - 18 polyclinics in Yerevan (n=40) and Gyumri (n=18)
  - 2-day training curriculum was developed by the research team
  - the Ministry of Health (MoH) of RA accredited the training and granted five continuing medical education (CEM) credits to all participants.
Evaluation of the intervention/trainings

Feedback

Pre-training vs post-training assessment

Pre-post-training KAP survey

Training expectation measurement
Training evaluation survey

Training improvement measurement
Pre-post training survey

Training effectiveness measurement
KAP survey (before and 4 months after training)
“Tobacco Dependence Treatment Seminars for Primary Healthcare Physicians”

- 51 primary healthcare physicians (control group)

- 8 polyclinics in Yerevan (n=36) and Gyumri (n=15)

- 37 primary healthcare physicians (Yerevan and Gyumri) participated in the seminars and received all the materials

- 12 (Yerevan (n=9) and Gyumri (n=3)) control groups participants who didn’t attend the seminars only received the training materials.
### Preliminary Results

Performance of primary healthcare physicians’ in terms of 5“A”s, in intervention

<table>
<thead>
<tr>
<th>5 A’s</th>
<th>Intervention 54.29% (n=57)</th>
<th>Control 45.71% (n=48)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline % (n)</td>
<td>Follow-up % (n)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asking patients about current smoking status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>0.00 (0)</td>
<td>1.75 (1)</td>
</tr>
<tr>
<td>Sometimes</td>
<td>21.05 (12)</td>
<td>19.30 (11)</td>
</tr>
<tr>
<td>Always</td>
<td>78.95 (45)</td>
<td>77.19 (44)</td>
</tr>
<tr>
<td></td>
<td>0.00 (0)</td>
<td>27.08 (13)</td>
</tr>
<tr>
<td></td>
<td>20.83 (10)</td>
<td>77.08 (37)</td>
</tr>
<tr>
<td></td>
<td>0.828</td>
<td></td>
</tr>
<tr>
<td>Advising patients to quit smoking</td>
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<td></td>
</tr>
<tr>
<td>Never</td>
<td>1.75 (1)</td>
<td>0.00 (0)</td>
</tr>
<tr>
<td>Sometimes</td>
<td>7.02 (4)</td>
<td>0.00 (0)</td>
</tr>
<tr>
<td>Always</td>
<td>91.23 (52)</td>
<td>100.00 (57)</td>
</tr>
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<td></td>
<td>0.00 (0)</td>
<td>6.25 (3)</td>
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<td></td>
<td>20.83 (10)</td>
<td>89.58 (43)</td>
</tr>
<tr>
<td></td>
<td>0.404</td>
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<tr>
<td>Assessing patients’ willingness to quit</td>
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</tr>
<tr>
<td>Never</td>
<td>15.79 (9)</td>
<td>0.00 (0)</td>
</tr>
<tr>
<td>Sometimes</td>
<td>33.33 (19)</td>
<td>33.33 (19)</td>
</tr>
<tr>
<td>Always</td>
<td>49.12 (28)</td>
<td>66.67 (38)</td>
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<td></td>
<td>8.33 (4)</td>
<td>43.75 (21)</td>
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<td></td>
<td>29.17 (14)</td>
<td>60.42 (29)</td>
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<td>Assisting patients with quitting smoking</td>
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</tr>
<tr>
<td>Never</td>
<td>17.54 (10)</td>
<td>3.51 (2)</td>
</tr>
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<td>Sometimes</td>
<td>36.84 (21)</td>
<td>10.53 (6)</td>
</tr>
<tr>
<td>Always</td>
<td>45.61 (26)</td>
<td>85.96 (49)</td>
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<td></td>
<td>16.67 (8)</td>
<td>45.83 (22)</td>
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<td></td>
<td>47.92 (23)</td>
<td>39.58 (19)</td>
</tr>
<tr>
<td></td>
<td>0.362</td>
<td></td>
</tr>
<tr>
<td>Arranging appropriate follow up.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>38.60 (22)</td>
<td>7.02 (4)</td>
</tr>
<tr>
<td>Sometimes</td>
<td>40.35 (23)</td>
<td>42.11 (24)</td>
</tr>
<tr>
<td>Always</td>
<td>21.05 (12)</td>
<td>50.88 (29)</td>
</tr>
<tr>
<td></td>
<td>41.67 (20)</td>
<td>47.92 (23)</td>
</tr>
<tr>
<td></td>
<td>31.25 (15)</td>
<td>18.75 (9)</td>
</tr>
<tr>
<td></td>
<td>0.251</td>
<td></td>
</tr>
<tr>
<td>5A score</td>
<td>Mean 2.86</td>
<td>3.81</td>
</tr>
<tr>
<td></td>
<td>SD 1.43</td>
<td>1.27</td>
</tr>
<tr>
<td></td>
<td>Mean 2.67</td>
<td>2.77</td>
</tr>
<tr>
<td></td>
<td>SD 1.29</td>
<td>1.22</td>
</tr>
</tbody>
</table>

*Wilcoxon signed-rank test*
Availability, Affordability, and Prices of Smoking Cessation Drugs in 10 Countries

• **Research aim**
  – Determine availability, affordability, and prices of smoking cessation drugs in countries that are Global Bridges grantees and make comparisons across them.

• **Methodology**
  – Online survey among Global Bridges grantees
    • On the availability and affordability of smoking cessation pharmacotherapy in collaboration with Katie Kemper, Executive Director of Global Bridges and Dr. Martin Raw, Director of International Center for Tobacco Cessation
  – Structured survey instrument (8 items)
    • Availability of products
    • Price of products/cigarettes
    • Country profile
  – Data entry (SPSS), preliminary data analysis (STATA)
• Reports


• Abstracts


• Abrahamyan A, Harutyunyan A, Petrosyan V. Primary Healthcare Physicians’ Knowledge, Attitude and Practice towards Smoking Cessation in Armenia. 9th European Public Health Conference 2016, Vienna Austria, November 9 -12, 2016 [oral presentation].

• Harutyunyan A, Abrahamyan A, Petrosyan V. Smoking Cessation Pharmacotherapy Products in Armenia. 9th European Public Health Conference 2016, Vienna Austria, November 9 -12, 2016 [poster presentation].

• Harutyunyan A, Abrahamyan A, Hayrumyan V, Danielyan A, Petrosyan V. Effectiveness of smoking cessation training in Armenia. 7th European Conference Tobacco or Health 2017, Porto, Portugal, March 22-25, 2017 [under review].

• Harutyunyan A, Abrahamyan A, Petrosyan, Primary healthcare physicians’ practice and confidence in smoking cessation: a cross-sectional study in Armenia. 7th European Conference Tobacco or Health 2017, Porto, Portugal, March 22-25, 2017 [under review].
Global Tobacco Dependence Treatment Summit 2016, Mayo Clinic, Rochester


- The CONNECT Global Bridges-Grantee Meeting that brought together Global Bridges and Smoking Cessation Leadership Center grantees to discuss challenges, strategies and lessons learned in championing tobacco dependence treatment.
Dissemination (4)

- Global Tobacco Dependence Treatment Summit 2016, Mayo Clinic, Rochester
• **Calls and Webinar**

  • Availability, Affordability, and Prices of Smoking Cessation Drugs in Armenia: Evidence from 9 countries. Global Bridges Grantee Call. November 17, 2015


• **Press-releases: Available at AUA website**

• **Blog posts: Available at Global Bridges website**
• **Goal:** to develop a curriculum and training opportunities for clinicians in Eastern Europe and thus enhance the creation of a network of health care professionals trained as champions in tobacco control and treatment

**European Smoking Cessation Guideline (ESCG)**

**Treating Tobacco Dependence Training course**
- to train and certify professionals in treating tobacco dependence within Eastern Europe (Armenia, Georgia, Romania, Russia, and Ukraine).
- Nine participants from Yerevan and Gyumri
- Participants received 11 continuous medical education (CME) credits

**European Network of Smoking and Tobacco Prevention (ENSP) Conference on Tobacco Control: Research, Prevention and Treatment in Brussels, Belgium, 5-7 April, 2016**
- Two presentations
The goal of the project is to design, implement and evaluate an advocacy and training program for integrating tobacco control measures into tuberculosis (TB) care in Armenia, a country in transition with high smoking and tuberculosis burden.

Project Objectives

1. Establish a nationwide healthcare professional partnership between the National TB Control Center and the National Tobacco Control Program.

2. Develop capacity for enforcing a policy of smoke-free environments for all facilities where outpatient and inpatient services are delivered to TB suspects and TB patients.

3. Build smoking cessation capacity among TB healthcare providers in Armenia through:
   - Adaptation of the existing evidence based guidelines for tobacco dependence treatment among TB patients;
   - Development and implementation of smoking cessation training on patient counseling and treatment of tobacco dependence for healthcare providers (physicians and nurses) dealing with TB patients.

4. Dissemination of results of the project and integration into the European and global smoking cessation networks.
THANK YOU