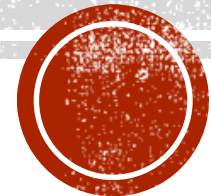


ECONOMIC AND SOCIAL IMPACT STUDY OF SMOKING IN SERBIA - PROCESS AND CHALLENGES-

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Office for Smoking Prevention

Institute of Public Health of Serbia

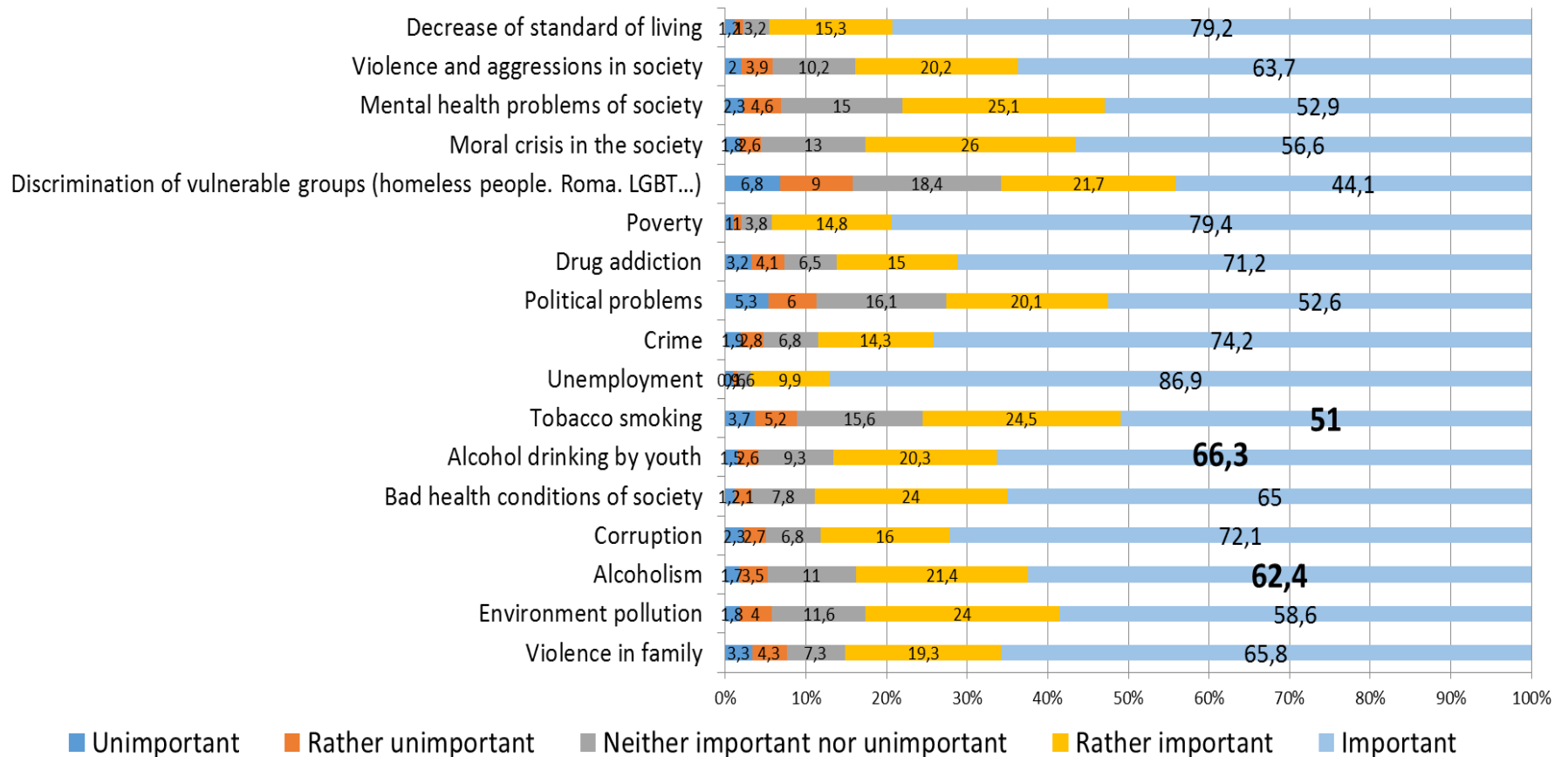


BACKGROUND

- High and stable smoking prevalence in adults and youth in Serbia
- Burden on health and health system – not documented
- No new and adequate legislation
- Where is tobacco on the DMs agenda?
- Smoking is not recognized as important problem in society (*more than 90% know that tobacco use and exposure to SHS cause malignant diseases*)



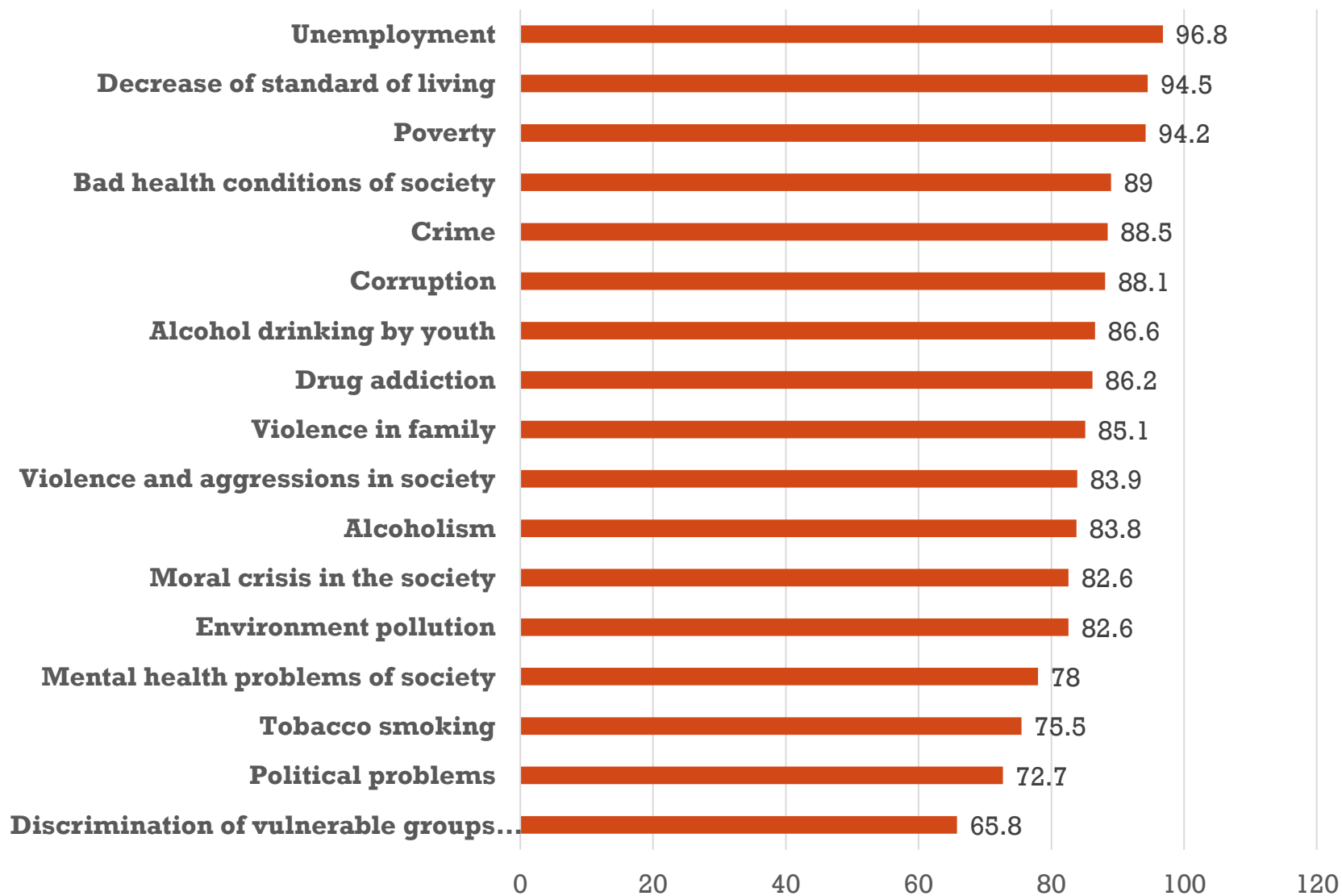
TOBACCO USE RANKED 15TH OF 17 LISTED PROBLEMS IN SERBIA BY ITS PERCEIVED IMPORTANCE*



*Institute of Public health of Serbia (2014). National Survey on lifestyles of citizens of Serbia



Percentage of citizens that perceive specific problem as rather important or important for society



- **White Book 2017 by Foreign Investments Council:**
 - **Fiscal revenues from the sale of tobacco products contributed more than *14%* of total budget revenues in Serbia in the previous year (more than EUR 1.15 billion).**
- **Published yearly since 2003, White Book is a proclamation of the private sector on the business climate in Serbia, transparent FIC platform for dialogue with the authorities and a practical set of recommendations to the authorities**
- **Its launch is among most prestigious events in business community and every year gathers highest Government officials, important stakeholders and more than 600 guests.**



Četvrtinu budžeta pune nameti na gorivo, duvan, alkohol i kafu

Država uzima 160 milijardi više za akcize nego 2011.

U FOKUSU

Beograd - Samo zahvaljujući akcizama, najviše na gorivo i duvan, u državni budžet će se ove godine sliti više od 271 milijarde dinara, za 17 milijardi više nego prošle godine, a čak 160 milijardi više nego što je država inkasirala na račun akciza pre šest godina. Te 2011. akcize su punile peti deo budžeta, ove godine gotovo četvrtina od ukupnih prihoda (1,1 milijarda dinara) rezervisana je za prihod od ove vrste nameta. Najviše novca na akcize i ove godine, kao i uvek, daće naftna industrija - 144 milijarde, potom i duvanska koja će izdvojiti 97 milijardi dinara. Prema podacima iz izveštaja Ministarstva finansija o tekućim makroekonomskim kre-

dvajaju procentualno manje novca za ovaj namet. U ostalim državama oni su veći, a najveći je u BiH, gde na 2,09 evra za jednu paklicu cigareta ide čak 1,9 evra ili 89 odsto novca državi.

Prema rečima Gorana Pekeza, direktora korporativnih po-

- **Pekez:** Doprinos duvanske industrije budžetskim prihodima iznosi 11 odsto
- **Bele:** Prošle godine 10 miliona evra bila izdvajanja samo po osnovu akciza



janja samo po osnovu akciza koje su za 2016. iznosile 84,4 dinara po kilogramu sirove kafe, odnosno 105,5 za gotov proizvod. U januaru ove godine akcizna davanja su povećana na osnovu usklađivanja akciza sa troškovima života, što je praksa koja je uvedena 2014. godine, pa je aktuelna akciza na sirovu kafu za 2017. godinu 85,75 din po kilogramu - kaže za Danas Andrej Bele, direktor Strateškog poslovnog područja kafa Atlantik grupe.

Za Grand kafu, napominje



- **Study supported by the WHO**
- **Experts from Hungary**
- **MoH and IPHS**



METHODOLOGY

- **Components of smoking-attributable burden**

1. Cost of burden of mortality
2. Economic costs

- **Calculation of burden**

Smoking-attributable burden = Smoking-attributable fraction * Type of burden

- **Calculating smoking-attributable fraction**

$$\text{SAF} = 1 - 1 / (P_n + P_s * \text{RR}_s + P_q * \text{RR}_q)$$

RR_s: relative risk of dying for smokers compared to non-smokers

RR_q: relative risk of dying for quitted compared to non-smokers



SMOKING ATTRIBUTABLE BURDEN

- Smoking-attributable mortality indicators:

- Smoking-attributable number of death

$$SAND = \sum_D \text{Mortality}_D * SAF, \text{ where}$$

D: diseases considered

- Smoking-attributable life years lost

$$SALYL = EY * SAND, \text{ where}$$

EY: expected life years at certain age

- Smoking-attributable working years lost

$$SAWYL = WY * SAND$$

WY: expected working years at certain age

- 15 ICD classes, Age of 0 and 35+

Additional **grouping by education and/or employment status** can be used if mortality database contain these information



ECONOMIC COST OF SMOKING

- COI (Cost of Illness) approach
- Direct and indirect cost
- **Direct costs** (healthcare expenditures, and non-healthcare expenditures such as Disability pensions
Property loss from fires caused by cigarettes)

$$\text{SAHE} = \text{SAF} \times \text{THE}$$

SAHE: smoking attributable health expenditure (by expenditure line/service)

SAF: smoking attributable fraction

THE: total health expenditure (by person and expenditure line/service)



- **Indirect Costs**
- **Loss of income due to premature death**
 - Present value of the future incomes for those who lost their lives before the retirement age due to smoking
 - Average number of working years lost by those who died between
the age of 35-64
 - Gross monthly national economy average earnings (gross values, 12 months)
 - Average annual increase rate
 - 3% discount rate
- **Loss of income due to illness (similar to SAHE)**
 - Sick pay
 - Tax and contributions loss due to illnesses



State revenues

- Excise tax
- VAT
- Other payments (income tax, corporations tax, etc.)



PROCESS (1)

- September 2017, WG established
- Members of the WG - representatives of different ministries/institutions
- MoH, IPHS, National Health Insurance Fund
- MoF (Customs Administration, Tobacco administration, Sector for fiscal system),
- Statistical Office of the Republic of Serbia,
- National Pension and disability Insurance Fund
- Ministry of Trade and telecommunication.



PROCESS (2)

- **WG meeting - October 18th at the Ministry of Health.**
- **Informing members of the WG on the aim, needed data, methodology.**
- **Based on the inputs from the working group meeting and additional experts from the IPHS requests for data prepared and sent out by the MoH**



PROCESS (3)

Data sources

Republic Health Insurance Fund

- No. of patients treated in primary and secondary/tertiary healthcare institutions by ICD -10 group of Dg, by gender and age groups (0-1; 34-65, 65+)
- No. of services in primary and secondary/tertiary healthcare institutions by ICD -10 group of Dg, by gender and age groups (0-1; 34-65, 65+)
- Cost of inpatient and outpatient treatment by ICD -10 group of Dg, by gender and age groups (0-1; 34-65, 65+) including co-payment
- Cost of drugs and medical devices issued in health care institution or on prescription in public pharmacies, including co-payment



Data sources

Statistical Office of the Republic of Serbia

- Number of deaths for 15 selected diagnosis by education, sex and age groups
- Life expectancy by age and sex
- Number of employed persons in trafficking and manufacturing of tobacco products
- Estimated population size by age groups and gender

National pension and disability insurance Fund

- Number of persons receiving disability pensions by selected ICD groups.

Institute of Public Health of Serbia

Smoking prevalence data:

- current smokers
- quit at least one year before
- never smokers
- In addition, data on hospitalization and contacts in primary health care were obtained for 15 selected ICD groups.

Ministry of Finance

- Excise tax and VAT



PROCESS (4)

- **Workshop December 2017, IPHS**
- Two days training on methodology and interpretation of the available data with participation of national experts and relevant stakeholders, together with international experts
- Participants: IPHS, TC experts, MoH, HIF, Pension and disability fund, Ministry of Finance - Tobacco administration and Customs administration).

Topics covered

- The overview of tobacco control situation and current challenges
- aims of the study
- Information on collected data
- Discussion on on quality of obtained data, gaps and missing information



PROCESS (5)

Based on the discussion from the workshop, the **additional requests for data** were prepared and sent out.

Added value of the workshop – raising importance of other issues in tobacco control, networking



CHALLENGES AND LESSONS LEARNED (1)

- Capacity building – how and when?
- Learning by doing
- Data mapping
- Importance of proper request for data
- WG vs Team
- Open communication is must



CHALLENGES AND LESSONS LEARNED(2)

- Tobacco not recognized as important problem
- WHO support of great importance
- Ownership
- Allocation of time
- Workload of the employees in the governmental institutions
- Importance of fully understanding of methodology and process for successful dissemination of the findings

