

IMPRESA WP2: Evidence on methamphetamine use prevention

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What was our objective?

- to **synthesize the latest scientific evidence on methamphetamine use prevention**
- **determine** the most adequate **evidence-based** selective and indicated prevention **strategies** as well as harm reduction measures for different target groups of (potential) **methamphetamine users**
- the results of the synthesis and expert evaluation provided the **evidence for tailoring preventive measures**

How did we accomplish our objective to synthesize the latest evidence?

- Review of the literature (systematic review and mapping of national prevention activities)
- List of identified prevention activities
- International delphi expert consensus finding process

Systematic review of the literature

International review in English and review in national language

International review in English

- **Interventions of interest included** those related to the efficacy of prevention interventions who aim to **prevent methamphetamine use of members of risk groups** (selective prevention) and **interventions which address methamphetamine users who already show risky consumption patterns** (indicative prevention and harm reduction).
- **Protocol** was set up (for example some further criteria were established, language: english; location: worldwide; publication date: from year 2000 onwards)
- **search: seven established scientific databases** (Medline (PubMed) (Ovid), PsycInfo (Ovid), PSYINDEX (Ovid), Cochrane Drugs and Alcohol Group's Trials Register, Web of Science Core Collection, CINAHL (EBSCO), and SocIndex (EBSCO))
- **selection: de-duplicated and** screened by title and abstract and non-eligible results were removed, **full texts** of the remaining references were **checked in-depth for eligibility** and a final selection of publications to be included in the review

Review in national languages

- To include studies published only in the **respective national languages** of each IMPRESA partner country
- To search in the national databases with the search **strategy adapted from the international review**
- 27 hits (CZ: 4, PL: 10, SK: 8, LT: 4, DE: 1)
- **none of them turned out to be eligible**

Mapping of the national prevention activities

Methods

Mapping of the national prevention activities

- **Country specific mapping protocols** were created
- **Grey literature search** (thesis, reports etc.)
- Only **evaluated prevention programs were included**
- Each prevention measure was assessed by two independent reviewers regarding quality rating/level of evidence with the **EDDRA quality grid**

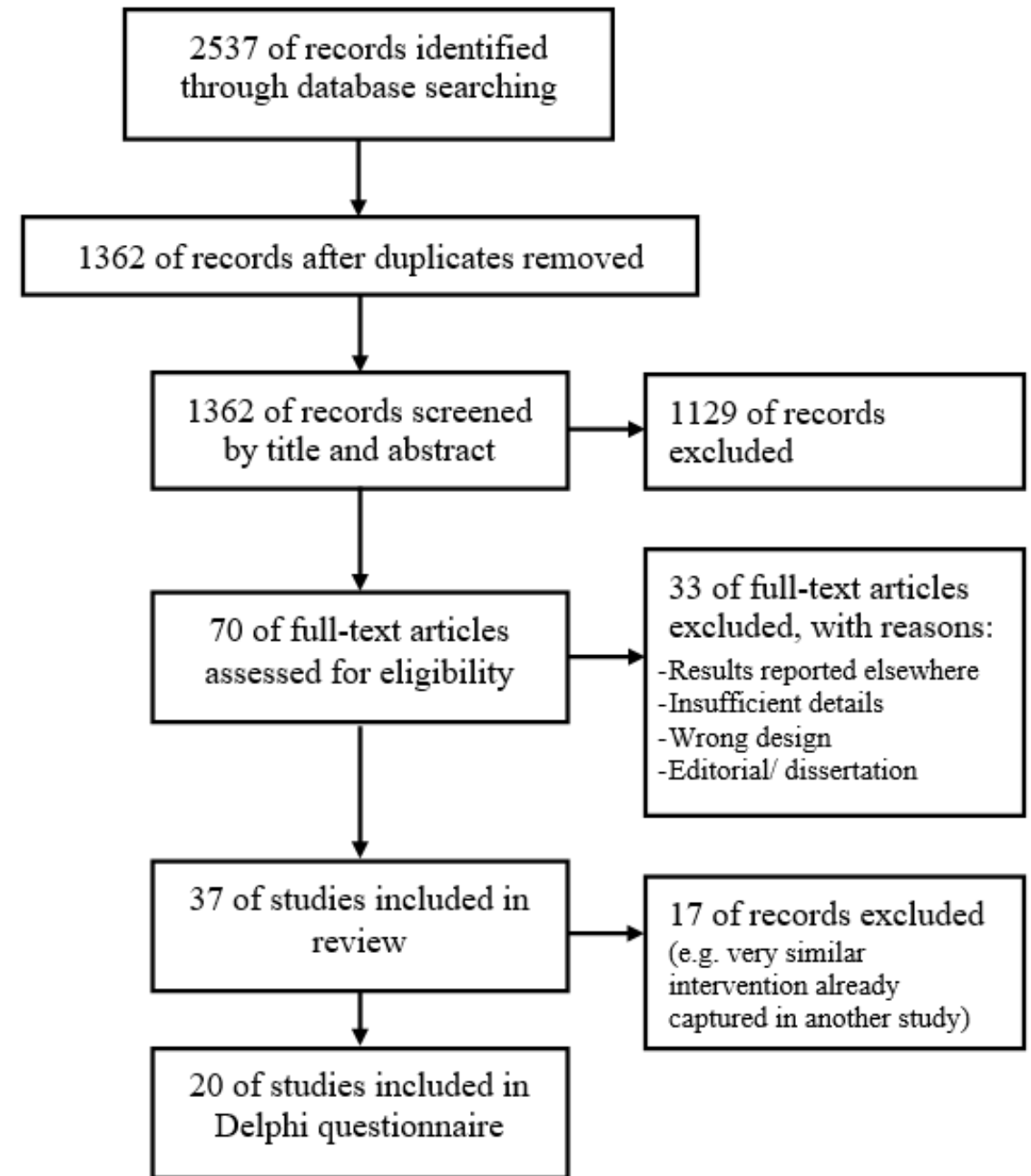
Results of the literature review and mapping

Results of the literature review

- **20 out of 37** studies were selected for the delphi survey.
- The reduction was due to the fact that some interventions did not fit the purpose of the project and that some studies examined the effectiveness of very similar interventions.

Identification
Screening
Eligibility
Included

Figure 1: Flow chart



Results of the literature review and mapping: Overview of the numbers of measures/ interventions

- The **majority of measures** are **indicated prevention** measures (N=18)
- **Selective prevention measures** (N=6) form the **smallest group** of interventions.

Country (mapping)	SEL	IND	IND + SEL	SEL, IND, HR	HR	TOTAL
CZ	3	1	0	2	3	9
SK	1	1	0	0	0	2
PL	0	1	1	0	2	4
LIT	0	0	0	0	5	5
DEU	1	3	0	2	1	7
Total mapping	5	6	1	4	11	27
Literature review	1	12	0	5	2	20
TOTAL	6	18	1	9	13	47

Delfi expert consensus finding
process

Delfi expert consensus finding process

- Experts were asked about the **effectiveness of identified interventions** and our aim was to reach a **consensus on effectivity of given interventions**
- the interventions (as a list of statements) were administered to the expert's panel via online questionnaire in two rounds.
- After first round the responses were analyzed and sent to the experts for the second round (if there was no consensus reached) while the experts were provided with the results of evaluation

Characteristics of expert panel

- In **both rounds of the delfi**, a total of **36 experts** completed the questionnaire
- most experts had an education status higher than a master degree
- Experts had average of more than 11 years of work experience
- experts had **adequate education and work experience**
- More than half of the experts specific expertise in methamphetamine prevention
- specific expertise in methamphetamine prevention might be rare in the European context (except for Czech Republic and Slovakia)
- **reasonable coverage of experts with specific expertise**

		N	%
Gender	Female	20	56
	Male	16	44
Age	21 to 30	5	14
	31 to 40	5	14
	41 to 50	14	39
	51 to 60	7	19
	61 or older	5	14
Educational	Bachelor	3	8
	Master	18	50
	Doctoral	15	42
Expertise in methamphetamine	Yes	22	61
	No	14	39
Years of work experience in substance use and addiction	5 to 10	12	33
	11 to 20	14	39
	21 to 30	9	25
	31 and more	1	3
Field of expertise	Prevention	23	64
	Harm reduction	20	56
	Research	16	44
	Treatment/counselling	15	42
Country	SK	9	25
	PL	7	19
	DE	7	19
	CZ	5	14
	LT	3	8
	International	5	14

Analysis of delfi process

- A separate **analysis was conducted after the first and second round of delfi** (in the second round, we used a slightly different algorithm because the “neither agree, nor disagree” option was not provided anymore)
- the **rate of (dis)agreement** (percentage of experts)

$$\text{Rate of disagreement} = \frac{N_{\text{strongly disagree}} + N_{\text{disagree}}}{N_{\text{strongly disagree}} + N_{\text{disagree}} + N_{\text{neither agree, nor disagree}} + N_{\text{agree}} + N_{\text{strongly agree}}} \times 100$$

- a **consensus** existed if the rate of agreement was **$\geq 80\%$ of informants**
- Based on the rate of agreement, we allocated the interventions to the following groups:
 1. **positive consensus,**
 2. **negative consensus,**
 3. **no consensus.**

Results of the consensus

- In the **first round** the experts did **not reach consensus on 45 %** of interventions and **consensus was positive in all cases**.
- The 21 interventions with no consensus in the first round were presented to the experts in the second round.
- In this **second round** the experts did reach **consensus on 15 of the remaining interventions**
- **In total** (combined results from both rounds), a **consensus was not reached on 6 out of 47 interventions (13 %)**.

	First round		Second round		Total	
	N	%	N	%	N	%
Positive consensus	26	55	15	71	41	87
Negative consensus	0	0	0	0	0	0
No consensus	21	45	6	29	6	13
Total	47	100	21	100	47	100

Results of the consensus

- There was no consensus on:
 - a) one intervention in selective prevention (16 %),
 - b) four in indicated prevention (22 %),
 - c) and one in harm reduction (7 %).
- There was agreement on all mixed interventions.

Selected results

- SEL: **A positive consensus of 97%** was achieved for three interventions, namely **Motivational interviewing focused on reducing club drug use**, **SKOLL** (Early intervention focused on risky users (methamphetamine included) or those who want to prevent relapse) and **Brief intervention** consisting of motivational interviewing and cognitive behavior therapy.
- SEL: The lowest agreement among the experts was on the **Conditional cash transfer and microenterprise opportunity** for amphetamine-type stimulants using female entertainment workers and the **School based preventive brief intervention program** focused on drug use.
- IND: The lowest rate of agreement (76%) was on a **prevention program in schools based on a screening questionnaire** (Substance Use Risk Profile Scale). There was **no consensus on this one intervention**.
- IND: The **lowest level of agreement was found for a periodical booklet** providing information for methamphetamine users, which there was also no consensus on.
- MIXED: Three interventions were **on-line based**: on-line counselling, on-line forum and automated web-based intervention. There was positive consensus on these interventions.

Conclusion

Conclusion

- **The evidence base especially in the field of selective and indicated prevention should be extended** – selective prevention measures (N=6) form the smallest group of interventions.
- The systematic literature review as well as the mapping of national measures yielded a **set of evidence based interventions**.
- The additional experts' opinion allowed for further selecting and ranking effective measures and for setting up a ranked list
- **The list of interventions was provided to members of the local multi stakeholder partnership (MSP) board.**
- This allowed the MSP members to discuss different possible measures to be implemented and in the end served as a basis for choosing measures which fit the local needs.