

IMPLEMENTATION BARRIERS IN THE CZECH MENTAL HEALTH CARE SECTOR – WHAT ARE THE OBSTACLES TO OVERCOME TO BRIDGE THE EVIDENCE-PRACTICE GAP? DISSERTATION PROJECT

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ABSTRACT

Introduction

Presented dissertation project is focused on implementation barriers and implementation facilitators relevant to the mental health care sector with an emphasis on suicide prevention policies and interventions. Previous knowledge of barriers allows easier implementation of evidence-based policies and interventions, thereby contributing to a reduction of the so-called evidence-practice gap. These topics are relevant to the field of public policy as well as to practice. The dissertation is theoretically anchored in the field of implementation science and draws on the theoretical frameworks working with the determinants of successful implementation.

Objectives

The primary objective of the project is to identify implementation barriers (and factors facilitating implementation) and to establish relationships between them. This objective is relevant not only for the possibility of informing local practice and practice of other Central and Eastern European countries but also for an international audience interested in the topic of implementation of health care policies and innovations.

Methods

The author will conduct a systematic review of relevant scientific as well as grey literature on the topic of implementation barriers in the selected field of mental health care – suicide prevention. Results of the review will provide him with the background for the field work.

In the next step, the author will conduct a series of semi-structured interviews with relevant actors in the field of mental health care and other sectors relevant to suicide prevention. Also, international experts will be interviewed. The topics of the interviews will be a) the current state of the art of suicide prevention in the Czech Republic in different sectors and b) existing barriers to implementation of the new approaches to the prevention. Interviews will be analysed in the Atlas.ti software.

Interviewees will be then invited to discuss the results of the qualitative analysis in the focus group.

The whole dissertation will be supported by the quantitative data from the Czech Statistical Office and the Czech Health Registers.

Findings

So far, more than twenty interviews with relevant stakeholders mainly from mental-health care sector were conducted. In interviews, strengths and weaknesses and readiness for implementation were discussed. Interviews were not analysed yet. The author provides a protocol of the intended systematic review of the literature on implementation barriers and facilitators.

Conclusion

The dissertation is in its initial phase, but the theoretical base of the topic seems to be solid, and at the same time the very topic is unexplored, which is a rationale for undertaking the systematic review.

POINTS FOR PRACTITIONERS

Despite the fact, that the research project is in its initial phase without solid results, some points for practitioners may be pinpointed.

As the formulation of policies and interventions based on sound evidence is on the rise in the Central and Eastern Europe region, it is essential to be cautious of related problems and possible complications of this phenomenon. When implementing evidence-based policy/intervention, it is necessary to compare original and target implementation context, which may reveal some significant differences, which may affect the intended implementation.

Factors, which make the implementation difficult or even impossible are referred to as implementation barriers, factors which make the implementation easier are called implementation facilitators. At a general level, human and financial resources and ambiguity of the policy/intervention may be potential implementation barriers, to name a few. On the other hand, the consensus among important stakeholders may serve as implementation facilitator.

It is useful to always (at least briefly) review the available literature on the policy/intervention, to see, whether some implementation issues were reported in the evaluation reports. This may prevent some serious delays in the implementation schedule and thus save resources and help to achieve the intended impacts of the policy/intervention.

KEYWORDS

Evidence-based policy-making; suicide prevention policy; mental health care; implementation barriers; implementation facilitators

1. INTRODUCTION

In recent years, there were many papers published on the topic of the existing gap between the current level of evidence and the ongoing practice in many sectors, so-called evidence-practice gap (Lang et al., 2007). This lagging behind current knowledge is generally perceived as negative. The evidence-practice gap can be narrowed down by implementing evidence-based policies and interventions. (Winkler, Weissová, Ehler, 2015).

The problem is sometimes framed in the way, that it seems, that the solution is straightforward. And that evidence on effective treatments, therapies, and prevention interventions may be simply put in the practice.

However, in closer observation, it is not easy in any way. What works in trials does not necessarily works in practice in different settings. Familiarity with the context in which the new policy or intervention is implemented is crucial. Target context analysis allows identification of implementation barriers and in that sense helps facilitate the implementation process. (Haines et al., 2004) Related to the previously mentioned concepts, knowledge of the context can facilitate the transfer of scientific evidence into practice in the form of evidence-based practice/policy and thus reduce the evidence-practice gap. (Nilsen, 2015) Prior knowledge of implementation barriers can also ensure more efficient use of economic, human and other resources.

The dissertation will utilise the evidence-based practice/policy optics combined with selected theories of the implementation process. These will provide a theoretical framework for the dissertation.

The present topic is highly relevant, as in the recent years the reform of the mental health care has started in the Czech Republic with the intention to shift the care from institutions to the community and to implement some good practices/policies including some evidence-based practices/policies. Also, a new initiative focusing on suicide prevention has started.

The dissertation will analyse the topic of implementation barriers and facilitators on the case of suicide prevention. From the public policy research point of view, suicide prevention is a compelling field, because of its multi-sectoral character (prevention may be applied not only in the field of mental health care but also in the sector of education or regulation and many others).

1.1. The prior conceptualisation of the implementation barriers and facilitators

There are several theoretical frameworks that focus in more detail on the determinants of successful implementation of evidence-based practices. These include, for example, CFIR (Damschorder et al., 2009), PARIHS (Promoting action on research implementation in health services) (Rycroft-Maalone, 2010), ecological framework (Durlak, Dupre, 2008) and other. These frameworks can be characterised on the basis of six general categories, as stated in Nilsen (2015). These are:

- a) Characteristics of the implementation object (e. g. policy, innovation, intervention, evidence);
- b) Characteristics of the users/adopters (e.g. policy makers, health care practitioners);
- c) Characteristics of the target groups (e.g. patients, general public, health care practitioners);
- d) Characteristics of the context (e. g. culture of policy making, properties of the institution);
- e) Characteristics of the strategy or other means of facilitating implementation (e.g. procedures applied to increase the use of scientific evidence in practice, the chosen implementation process);
- f) Outcomes (e.g. successful implementation of the innovation, implementation of the effective intervention).

Implementation barriers can appear anywhere in the implementation process. Literature provides several examples, of which the author has chosen three of the most common: ambiguity, human and financial resources. Selected implementation barriers

must be understood as general illustrative cases. In the real world, it is reasonable to assume higher specificity concerning the target implementation context.

1.1.1 Ambiguity

The degree of ambiguity of intervention or policy can have a major impact on the success of implementation, as reported by Veronesi and Keasey (2015). The ambiguity can be of two types: a) ambiguity of objectives and b) ambiguity of the means (Matland, 1995). Pressman and Wildavsky (1984) see the ambiguity of politics as problematic because it is shifting the burden of interpreting policy content to implementers, which may lead to a deflection from the intended content.

1.1.2. Human resources

Meyers and Nielsen (2012) report that human resources, specifically the so-called street-level bureaucrats as a factor that can have a significant impact on implementation results. The authors talk about the lack of time resources that street-level bureaucrats can face, which may lead, for example, to the preference of providing services to clients who are more willing to cooperate, although non-cooperating clients may be the main target group. This deflects the intended impact of the intervention/policy.

1.1.3. Financial resources

Financial resources, or their shortcomings, represent logical implementation barrier. As Durlak and Dupre (2008) point out, stable funding is essential for successful implementation. Prioritisation of the various areas, expressed by the allocation of financial resources, changes over time for multiple reasons (grant granted for a specific period without the possibility of extension, political cycle). However, they can also be estimated in a pre-implementation phase (in a limited way), and in some cases, they can be prevented.

2. METHODOLOGY

2.1. Systematic review

In the first phase, the method of systematic literature review (SR) will be used to identify implementation barriers in the area of suicide prevention. Key advantages of the SR are a systematic procedure, transparency and replicability (Pawson, 2006). The author will follow the recognised PRISMA guidelines for SR (Moher et al., 2009). Besides of the articles indexed in Web of Science, grey literature will also be included in the SR (e.g. process evaluation reports of implementation of policies in the field of prevention of mental illness and suicidal behaviour).

2.2. Semi-structured expert interviews

The method of the semi-structured interview fits the best for the interviews, where the finite number of pre-formulated questions may be a drawback. In the semi-structured interview, only specifies key issues or areas that need to be addressed during the interview are specified prior to the interview, which does not restrict the development of the interview. This is particularly useful for expert interviews where the interviewer must be able to respond flexibly to topics as they come and be able to get as much relevant data as possible (Bogner et al., 2009).

Suicide prevention is an issue which overlaps several areas, from healthcare through education to firearm laws (WHO, 2014). For this reason, it will be necessary to pay sufficient attention to the choice of experts so that different points of view are represented and the project is feasible at the same time.

The topics will be based on evidence of existing effective interventions in the area (Kasal, 2018) and on the basis of previously identified implementation barriers and relevant conceptual frameworks (see subchapter 1.1.). The interviews will be recorded, transcribed and then analysed in Atlas.ti software. All informants will receive informed consent with the description of the research project.

2.3. Focus group

The focus group (Hendl, 2005) will be following the final results of the SR, which will be the main discussion topic. The objective of the focus group will be verification of the implementation barriers and facilitators identified in the SR and also the topic of promotion of facilitators and overcoming the barriers. Focus group will be recorded, and the transcript will be subsequently analysed in Atlas.ti. As in the case of interviews, respondents will receive informed consent and information on the research project.

2.4. Health registry data

Author has access to the data from the Czech medical registers, allowing him to verify some of the identified barriers based on representative quantitative data. This data will also be analysed as a basis for interviews and group discussions. The health registers include anonymous information about the services used and the reason for admission to the services (e.g. suicide attempt) and are linked to the death register. The Stata statistical software will be used to analyse the data.

3. PRELIMINARY RESULTS

3.1. Preliminary results of semi-structured interviews

So far, about 20 semi-structured interviews have been conducted on the topic of prevention of suicidal behaviour. The aim was to identify strengths, weaknesses, opportunities and threats and other relevant topics related to the local context.

The objective of the interviews was a detailed mapping of the local conditions. Sufficient knowledge of the local context will allow the author to formulate a search strategy for the SR better. At the same time, the data obtained from the interviews will serve to triangulate the results of the SR, and the results of the quantitative analyses will be interpreted in the light of these data. Finally, the data from the interviews will be used in the focus group to set the frame of the discussions.

Stakeholders and experts from the following areas were interviewed (or will be):

Interviewed

- Ministry of Health;
- Drug control agency (Súkl);

- Crisis lines (children and senior populations);
- A person with experience with mental illness and obsessive suicidal thoughts;
- Association of psychiatric care users;
- National Institute for Education (department of prevention);
- A representative of a psychiatric hospital;
- Psychiatrist and Child psychiatrist from Prague, Psychiatrist from the region;
- Community services representative;
- Centre for mental health care development;
- Institute of Health information and Statistics;
- University psychiatry professor;
- Director of crisis psychiatric ward in Prague;
- Directors of crisis centres in Prague;
- NGO focused on borderline personality disorder patients;
- An expert on drug misuse, drug policies and services for drug users;
- Railway security agency;
- National Institute of Mental Health;
- Czech association of urgent medicine;
- Luctus – NGO organizing courses on suicidal behaviour for social care workers;
- Police psychologist.

To be involved

- Prison service;
- Ministry of Transportation.

Interviews have not been analysed yet. However, authors experience from conduction of the interviews suggests that they will provide a sufficient data basis for thorough mapping of the strengths and weaknesses of the current state of suicide prevention in the Czech Republic. The respondents mentioned few implementation barriers and facilitators although they were not the primary focus of the interviews.

3.2. Systematic review protocol

SR is in its initial phase, but the protocol of the review is in the final process of drafting. Only the specific search queries for the Web of Science database and for the grey literature databases are not formulated yet. Formulation of the protocol was guided by PRISMA-P guidelines (Moher et al., 2015). The PRISMA protocol guidelines set 16 topics with subsequent checklist items (in italics) in four sections (Administrative information, Introduction, Methods, Data), which are presented below (numbering of specific items respect the guidelines).

3.2.1 Administrative information

1a) Title identification

Description:	Identify the report as a protocol of a systematic review
Current review:	Implementation barriers in mental health and suicide prevention interventions

1b) Title update

Description:	If the protocol is for an update of a previous systematic review, identify as such
Current review:	Not relevant (NR)

2) Registration

Description:	If registered, provide the name of the registry (e.g., PROSPERO) and registration number
Current review:	Systematic review protocol will be registered on the figshare.com - figshare is an online repository for researchers. Unlike PROSPERO (mostly used platform for registering systematic reviews), on figshare it is not compulsory to review studies and articles with health-related outcome, which is not a primary outcome for present review. „GAUK 552119/2019“ will be used as protocol identifier.

3a) Authors – contact

Description:	Provide name, institutional affiliation, and e-mail address of all protocol authors; provide physical mailing address of corresponding author
Current review:	Alexandr Kasal, Faculty of Social Science, Charles University, Prague, Czech Republic & National Institute of Mental Health, Klecany, Czechia. Email: alexandr.kasal@gmail.com; Adress: Krizkovskeho 2732/1, Prague 3, 13000, Czech Republic

3b) Author – contributions

Description:	Describe contributions of protocol authors and identify the guarantor of the review
Current review:	Alexandr Kasal is the author of the protocol and guarantor of the quality of the review

4) Amendments

Description: If the protocol represents an amendment of a previously completed or published protocol, identify as such and list changes; otherwise, state plan for documenting important protocol amendments

Current review: NR

5a) Support – sources

Description: Indicate sources of financial or other support for the review

Current review: The review is supported by Grant Agency of the Charles University in Prague under the project number 552119/2019 and by the SVV project of the Charles University in Prague under the project number 260 462

5b) Support – sponsor

Description: Provide name for the review funder and/or sponsor

Current review: NR

5c) Support – role of sponsor/funder

Description: Describe roles of funder(s), sponsor(s), and/or institution(s), if any, in developing the protocol

Current review: Charles University has no role in developing a protocol, research design of the review nor in analysing the results

3.2.2. Introduction

6) Rationale

Description: Describe the rationale for the review in the context of what is already known

Current review: In relation to the evidence-based policy making, there is an effort to narrow the "evidence-practice gap" in general and also in the mental health care and specifically in suicide prevention. When considering implementation of the effective intervention (proven to be effective in the sense of being published in article in journal indexed on the web of science or in some grey area report with positive results of the intervention), local context must be analysed in order of identification of possible implementation barriers (or implementation facilitators). These factors are not sufficiently mapped. Also, suicide prevention policies are emerging around the world in past years and may not be aware of such factors, which may lead to implementation fails. Proposed review will identify these factors, which may be later used in suicide prevention efforts around the world.

7) Objectives

Description: Provide an explicit statement of the question(s) the review will address with reference to participants, interventions, comparators, and outcomes (PICO)

Current review: What are the implementation barriers and/or facilitators in suicide prevention interventions regardless of the target population and comparator?

3.2.3 Methods

8) Eligibility criteria

Description: Specify the study characteristics (e.g., PICO, study design, setting, time frame) and report characteristics (e.g., years considered, language, publication status) to be used as criteria for eligibility for the review

Current review: Population = any; Intervention = any suicide prevention intervention; Comparators = any; Outcomes = implementation barriers and/or facilitators. Time frame – from inception until the day of the search; publications in English will be eligible for the review; articles indexed in Web of Science (WoS) and grey literature will be included

9) Information sources

Description: Describe all intended information sources (e.g., electronic databases, contact with study authors, trial registers, or other grey literature sources) with planned dates of coverage

Current review: WoS, national implementation reports, International Association for Suicide Prevention will be consulted as well as the WHO experts on suicide prevention

10) Search strategy

Description: Present draft of search strategy to be used for at least one electronic database, including planned limits, such that it could be repeated

Current review: Not yet processed

11a) Study records – data management

Description: Describe the mechanism(s) that will be used to manage records and data throughout the review

Current review: End Note software will be deployed for management of the data

11b) Study records – selection process

Description: State the process that will be used for selecting studies (e.g., two independent reviewers) through each phase of the review (i.e., screening, eligibility, and inclusion in meta-analysis)

Current review: In all phases of the review process (screening and eligibility), there will be at least two independent reviewers

11c) Study records – data collection process

Description: Describe planned method of extracting data from reports (e.g., piloting forms, done independently, in duplicate), any processes for obtaining and confirming data from investigators

Current review: Extraction forms will be used. Random reports will be chosen for duplicated data extraction to assure inter-rater reliability

12) Data items

Description: List and define all variables for which data will be sought (e.g., PICO items, funding sources), any pre-planned data assumptions and simplifications

Current review: All eligible reports will be screened for the nature of the intervention, target group, implementation context

13) Outcomes and prioritization

Description: List and define all outcomes for which data will be sought, including prioritization of main and additional outcomes, with rationale

Current review: Implementation barriers, implementation facilitators.

14) Risk of bias in individual studies

Description: Describe anticipated methods for assessing risk of bias of individual studies, including whether this will be done at the outcome or study level, or both; state how this information will be used in data synthesis

Current review: No bias risk assessment is anticipated

3.2.4. Data

15a) Synthesis 1

Description: Describe criteria under which study data will be quantitatively synthesized

Current review: NR

15b) Synthesis 2

Description: If data are appropriate for quantitative synthesis, describe planned summary measures, methods of handling data, and methods of combining data from studies, including any planned exploration of consistency (e.g., I², Kendall's tau)

Current review: NR

15c) Synthesis 3

Description: Describe any proposed additional analyses (e.g., sensitivity or subgroup analyses, meta-regression)

Current review: NR

15d) Synthesis 4

Description: If quantitative synthesis is not appropriate, describe the type of summary planned

Current review: Narrative summary will be provided

16) Meta-bias(es)

Description: Specify any planned assessment of meta-bias(es) (e.g., publication bias across studies, selective reporting within studies)

Current review: No meta-bias risk assessment is anticipated

17) Confidence in cumulative evidence

Description: Describe how the strength of the body of evidence will be assessed (e.g., GRADE)

Current review: No strength assessment is anticipated

CONCLUSION

To the author's knowledge, specific implementation barriers and facilitators are only rarely the topics of public policy research. At the same time, it may be crucial for public policy practice to be acquaintance with these phenomenons. To some extent, these barriers are specific to the target context, but it is realistic to expect, that some of them are general. Identification of these may contribute specifically to a better understanding of the implementation processes and to the public policy research.

So far, the author has conducted more than 20 interviews with relevant actors that have not yet been analysed. The analysis of the interviews will serve to precise the SR protocol, which will be published online prior to the start of the very literature search and will be discussed with the scientific community on figshare and researchgate.

Research on implementation barriers and facilitators is rather unusual, but highly relevant, in the broader context of public policy research. It provides a wider insight into the factors that impact implementation and ultimately contributes to more straightforward implementation of evidence-based policies on mental health and suicide prevention, where implemented interventions and policies will be as close to the original policy/intervention design and thus have a positive impact on public health.

The next steps in the dissertation will be the processing of the SR and linking its results to the implementation science concept and theoretical frameworks working with the determinants of successful implementation and to the results of the interviews. A focus group will be then organized, where local stakeholders will be invited to discuss the relevance of identified barriers or facilitators in relation to the identified strengths and weaknesses of the current state of suicide prevention in the Czech Republic.

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