RTKW 9 - #EIE2023

Ride the Knowledge Wave 9

#79- Perceptions of Organizational Readiness to Implement mHealth to Support Healthy Lifestyle Behaviors within Child and School Healthcare in Sweden

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Research aim

The aim of this research was to explore perceptions among various stakeholders (nurses, managers, and policymakers) regarding organizational readiness to implement mHealth to support healthy lifestyle behaviors in child and school healthcare.

Setting

The study was conducted in child and school healthcare in Sweden. Child and school health care are key arenas for public health issues, through health promotion and disease prevention work towards children and adolescents.

Method(s)

Individual semi-structured interviews with nurses (n=10), managers (n=10), and policymakers (n=8) within child and school healthcare in Sweden. Informants were purposfully recruited in regard of location, organization size, socioecononomic area (child healthcare) and educational orientation (school healthcare). Nurses and managers were employed at child or school healthcare centers that had participated in randomized control trials (RCT) evaluating the effectiveness of two different mHealth interventions. This ensured that they had experience of using mHealth. Policymakers were responsible for the eHealth strategy of the organizations, and thereby had experience of implementing mHealth. Inductive content analysis was used for data analysis.

Key finding(s)

Data showed that organizational readiness to implement mHealth can be described through different aspects of trusting conditions within an organization. Several factors were perceived to contribute to trusting conditions (i) conditions for data storage of health data (ii) how mHealth harmonized with organizational visions, values, and norms, (iii) mHealth governance, and (iv) camaraderie within healthcare teams. Conditions for data storage as well as mHealth governance were described as dealbreakers for readiness to implement mHealth. Our findings cannot fully be explained by existing theory of organizational readiness to change but highlights a need to also include innovation-specific components in theory development.

Discussion

- What does the construct of organizational readiness encompass?
- How does organizational readiness differ from determinants for implementation?

Challenges

To study organizational readiness required perspectives from multiple stakeholders. This resulted in a large and heterogenous amount of data, challenging to handle during one study. Furthermore, data analysis required the balancing between differences and commonalities between the different stakeholders´ perspectives in order to gain a vaulable essence.

Key highlights

- Organizational readiness for mHealth implementation can be understood as trusting conditions within an organization.
- The findings propose factors that promote organizational readiness in child and school healthcare. Considering these factors prior mHealth implementation most likely means that more children and adolescents are reached by mHealth to support healthy lifestyle habits.

#96- Understanding implementation of self-management support in cancer services: a practical application of theory.

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Research aim

National policy in Ireland recommends that cancer services implement survivorship programs which includes self-management with support. However, implementation is not uniform across cancer services. We aimed to identify the contextual factors contributing to this variation to guide the subsequent tailoring of strategies to improve implementation.

Setting

Healthcare sector, cancer care

Method(s)

A convergent mixed-methods study using administrative data on reach and semi-structured interviews with key stakeholders. The Consolidated Framework for Implementation Research (CFIR) and Proctor's implementation outcome framework informed the data collection tools and analysis. Organisations were categorised into high, medium and low implementing sites based on analysis of administrative data on reach and qualitative reporting of adoption, penetration and sustainment. Transcripts were first analysed inductively by the interview guide and the research questions. Categories were then coded deductively to the CFIR constructs. Through constant comparison, findings were compared within and across organisations to look for similarities and differences.

Key finding(s)

Interviews were conducted with 39 stakeholders (nurses, physiotherapists, occupational therapists, oncologists, psychologists and program deliverers living with and beyond cancer) from 19 organisations. Level of implementation varied across organisations with variation in interventions implemented and reach and sustainment. Findings contribute to understanding why and how self-management support is implemented. Enablers included: prioritisation of self-management support; strong relationships and communication processes between staff; performance feedback and incentivisation, and a culture of deliverer-centeredness. Barriers included: lack of regulatory and professional guidelines; lack of financing, and limited work infrastructure whereby the arrangement of responsibilities and tasks between teams does not support implementation.

Discussion

- CFIR does not explain the causal mechanisms or moderators of implementation. Coding of narrative excerpts on how and why factors influence implementation under each CFIR construct helped highlight these processes. I will discuss this process with the audience. Questions will be probed to gain feedback on experiences of conducting assessments of

determinants alongside understanding mechanisms and process of change to subsequently tailor implementation strategies.

- Participants self-reported implementation outcomes. These limitations (potential inaccurate insight, recall or disclosure) will be discussed. One question will gain insights into measuring implementation outcomes qualitatively when working with stakeholders.

Challenges

We proposed a cross case analysis with numerical ratings assigned to each CFIR factor to reflect its strength and valence on implementation. This limited exploration of how and why self-management support is implemented. To inform subsequent strategy-mechanism-determinant matching when tailoring implementation strategies the above approach to analysis was conducted.

Key highlights

This study responds to the need for cross-setting and cross-evidence based practice inquiry which may maximise generalisability of research findings.
In developing this study, we worked with policy stakeholders and public and patient representatives. This partnership highlighted the relevance and value of implementation science in addressing a policy recommendation.

#111- How are implementation theories, models or frameworks used in implementation studies in Asia? Findings from a scoping review

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Research aim

The objective of this scoping study is to identify theories, models or frameworks (TMF) that have been used in implementation science research in Asia, and how they have been used.

Setting

Implementation research conducted in Asian settings.

Method(s)

Scoping review methodology using a systematic search strategy was applied. Four databases (PubMed, Embase, CINAHL, PsycINFO) were searched for English language primary research, which included any TMFs in relation to implementation science and behavioural change research conducted in Asian settings, published from 2012 onwards. Two reviewers independently screened titles/abstracts, and full texts to determine eligibility.

Key finding(s)

Of the 1158 publications identified, 69 publications reporting 60 studies met inclusion criteria. The majority of the studies (90%, n=54/60) used a single TMF. The most commonly used TMFs were CFIR (31.7%,n=19/60), RE-AIM (11.7%, n=7/60), and the Caroll's Implementation Fidelity framework (6.7%,n=4/60). The majority of the studies used the TMFs as a framework for data analysis (40%, n=24/60) followed by to develop study questionnaires and interview guided (25%,n=15/60), to provide the scope to plan and guide implementation (15%, n=9/60), and for evaluation (15%,n=9/60). None of the reviewed studies reported any adaptation to the TMFs specific to the Asian context.

Discussion

- How can we increase the use of TMFs for implementation research in Asian settings?
- What can be done to improve on how TMFs are used for effective implementation, and the reporting of its use in Asian settings?

Challenges

It was difficult to develop the search strategy to identify all relevant papers given the diversity and inconsistencies of terminologies in implementation. This challenge was addressed by the use of MESH terms, expert suggestions, handsearching, and reference mining. Some studies did not provide detail descriptions on how TMFs were used.

Key highlights

Our findings highlight that there is a need for more focus on the use of TMFs to design implementation, and to develop strategies in Asian settings. There is also a need for greater reporting clarity on how precisely TMFs are applied. Future research should examine whether contextual adaptations are required.

#236- A clinical implementation trial to inform successful genomic medicine strategies in practice: improving tumour testing and genetic services referral for Lynch syndrome at 7 major hospitals in Australia

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Research aim

To inform implementation of effective genomic medicine, approaches to support the implementation of well-established applications provide important insights. This trial compared the effectiveness of two structured implementation approaches (theory-based/non-theory-based) to improve risk-appropriate lynch syndrome tumour testing and referral to genetics services.

Setting

Seven major Australian hospital networks were involved in the trial, including surgical and oncology wards, pathology, and genetics services.

Method(s)

Hospital and genetics services data for 01/01/2017-31/12/2018 were used to identify hospital-specific practice gaps (total n=1,624CRC patients). At each hospital, a health service professional was trained and provided with ongoing coaching in evidence-based implementation to form stakeholder teams to identify target behaviours for change and associated barriers (using process mapping, questionnaires, focus groups), then co-design and implement targeted strategies. Trial arms differed only in the use of theory to identify barriers and design implementation strategies. A process evaluation (including separate training evaluation) and a cost-effectiveness study were undertaken alongside the trial.

Key finding(s)

Pre-trial, risk-appropriate LS tumour testing and referral was complete ~2 months post-resection for 76.5% and 74.9% of patients in theory-based and non-theory-based arms, respectively (aRR=1.02, 95%CI 0.74-1.41). Clinical practice differed in six key areas, including multidisciplinary input and

application of testing guidelines. With implementation of site-specific strategies, risk-appropriate tumour testing and referral ~2 months post-resection increased to 89.1% of patients in the theory-based arm but decreased to 65.9% in the non-theory arm (aRR 1.31, 95%CI 1.16-1.47). Hospital-level changes were variable and likely affected by COVID-19. Findings suggest theory-based implementation science approaches might support successful integration of genomics into clinical care.

Discussion

Has anyone in the audience attempted similar approaches to implementation (either trial design or implementation practice) in the past and if so what comparisons can be made?
We have taken various elements of this work forward in new projects. What would your next steps be if you had found these results?

Challenges

We had funds to recruit implementation leads in each hospital for 0.2FTE over a 2-year period so they could be trained in evidence-based implementation practice and drive the implementation phases forward from within the system. There were a range of challenges, benefits, and learnings associated with this approach to discuss.

Key highlights

We explicitly differentiated approaches to implementation using either theory or clinician intuition to identify and address barriers to practice change. Novel co-design methods emerged from this experience.
Working with health service professionals to build capacity for evidence-based implementation practice and research was a meaningful and worthwhile experience for all involved.