

Informed Health Choices

Newsletter

March 2022



Front page drawing: Super IHC Hero by Anna and Eva, Barcelona, Spain



The IHC Network is carrying on

The IHC website3

The IHC primary school resources are spreading..... 3

Guides.....4

The IHC secondary school resources are progressing 4

Randomised trials and process evaluations 7

Adverse effects of teaching critical thinking7

“Transfer” of critical thinking skills.....7

Our last update of the IHC Key Concepts..... 8

A new website for the Key Concepts8

IHC around the world

Australia9

A round table discussion 9

Brazil10

Primary school resources and a podcast for teachers.....10

China10

Developing an evidence base for an intervention to improve residents' health information literacy.....10

Croatia11

A randomised trial of primary school resources11

Ethiopia12

Translating and contextualising the primary school resources.....12

Ireland13

Contextualising the IHC programme for an Irish Primary School setting.....13

IHC Cancer16

Italy16

Translating and piloting the IHC primary school resources.....16

Norway17

Centre for Epidemic Interventions Research17

Quality of health news18

To persuade or to inform..... 19

Informed participatory democracy 19

Poland.....21

Diagnosing and developing health capital 21

Rwanda.....21

Teaching critical thinking about health to out-of-school youth 21

Spain22

IHC@Barcelona..... 22

United Kingdom.....24

The trial of the lucky tattie..... 24

Key concepts translated into the world of veterinary medicine..... 25

The People’s Trial – results published.....26

Contributors.....27



The IHC Network is carrying on



The Covid-19 pandemic has affected schools around the world and created new challenges for teaching children and young people to think critically about health actions. But, as evidenced by the reports in this newsletter, efforts are continuing around the world to create, evaluate, and disseminate resources that enable people to recognise reliable claims about effects and make informed health choices.

The network is informal and anyone is welcome to join. Members of the network are involved in a range of activities, building on a shared set of methods, including:

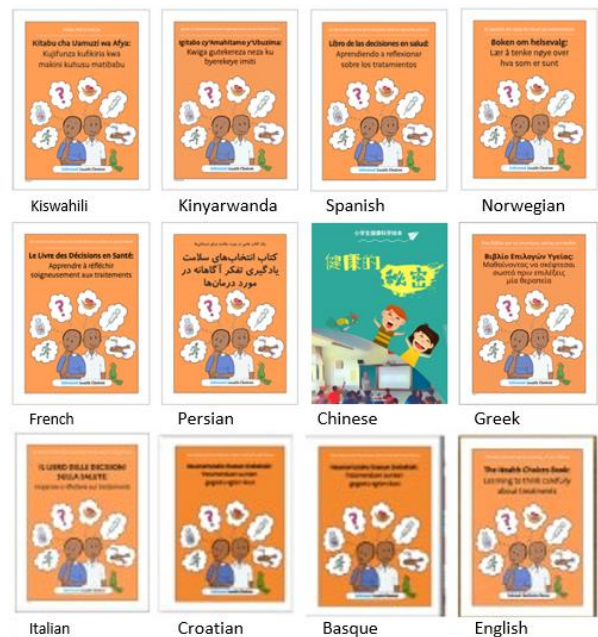
- Undertaking [context analyses](#) to explore factors that can impact on the use and implementation of learning resources
- [Translating](#) and [contextualising](#) learning resources
- [Creating new learning resources](#)
- Evaluating the effects of using resources designed to enable people to recognise reliable claims about effects and make informed choices
- Further developing the [IHC Key Concepts](#), translating the concepts, [prioritising concepts](#) for inclusion in learning resources, and adapting the concepts to [other fields](#)
- Translating, contextualising, and validating multiple-choice questions from the [Claim Evaluation Tools](#) item bank
- [Assessing the ability of populations](#) to assess claims about effects and make informed choices
- Undertaking relevant [systematic reviews](#)

The IHC website

More information about the IHC Network can be found on the [Informed Health Choices website](#), including an up-to-date list of [publications](#) and [news](#). All the IHC resources are open access and can be found on the website.

Contact: Sarah Rosenbaum

The IHC primary school resources are spreading



A report of the development and evaluation of the IHC primary school resources can be found [here](#). Translations of the resources are available on the [IHC website](#) in the following languages, in addition to English: Chinese, Persian, Croatian, French, Greek, Italian, Kinyarwanda, Kiswahili, Norwegian, Basque, and Spanish. Portuguese resources will soon be available and other translations and pilot testing of the primary school resources are underway.



Guides

The following guides are for translating and contextualising the IHC primary school resources:

- [Guide for translating the IHC school resources](#)
- [Guide for piloting the IHC school resources](#)
- [Resource production guide](#)

All resources are open access. If you are interested in translating or contextualising the IHC primary school resources, please contact us.

Contact: Sarah Rosenbaum

The IHC secondary school resources are progressing

The Enabling sustainable public engagement in improving health and health equity

(CHOICE) project is a four-year research project funded by the Research Council of Norway. It started in September 2019. The aim of the project is to develop and evaluate digital resources for lower secondary schools in Kenya, Rwanda, and Uganda that are adaptable to use in other countries and languages.

We conducted context analyses in all three countries to help ensure that the resources suit the contexts in which they will be used. We prioritised nine IHC Key Concepts to be included in the resources, conducted cognitive interviews and a Rasch analysis to validate the primary outcome measure, and piloted a complete set of resources with 10 lessons. The research teams in East Africa have done an amazing job, despite school closures and other restrictions due to the Covid-19 pandemic.

Thinking critically about health actions



When we user-tested prototypes of some lessons we found that “treatments” was a difficult term for many students and was

frequently misunderstood. This has been a problem in other contexts as well. We have defined [treatments](#) broadly to include “any preventive, therapeutic, rehabilitative, or palliative action intended to improve the health or wellbeing of individuals or communities.” However, people often understand treatments more narrowly, such as medical care given to a patient for an illness or injury.

We found that the term “health actions” was less likely to be misunderstood and helps to clarify the focus on things that people can do. Our definition of “health action” is: *something that someone does to care for their health or the health of others.*

Pilot study



We pilot tested the “Be smart about your health” resources in all three countries between September and December 2021. The [pilot version of the resources](#) included 10 lessons that focus on nine IHC Key Concepts (principles):

5 Informed Health Choices

- Health actions can have helpful effects, but they can also have harmful effects and be expensive.
- The effects of most health actions are not obvious, especially changes that do not occur right after the health action.
- Usually, personal experience (something that happened to someone after taking a health action) is a weak basis for claims about the effects of health actions.
- Health actions that are widely used or have been used for a long time might not work and might be harmful or wasteful.
- Health actions that are new or expensive might not work and might be harmful or wasteful.
- Knowledge about the effects of health actions depends on comparisons.
- In a comparison between health actions, important differences between comparison groups can be misleading.
- If a comparison between health actions is too small, we cannot be sure that the results reflect a true difference (or lack of difference) between the effects of the different health actions.
- People making a choice about whether to take a health action should consider the potential benefits and potential harms, costs, and other advantages and disadvantages.

For each lesson, there were three versions for classrooms with different equipment:

- **Blackboard version** for classrooms with only a blackboard, whiteboard, or flipchart
- **Projector version** for classrooms with a projector
- **Computer-based version** for classrooms with computers for students



We collected data from the pilot both through non-participant observation of lessons being taught in classrooms, and through interviews and focus groups with teachers, students, and curriculum developers in all three countries.

The most important positive finding was that teachers and students appeared to appreciate the learning in these lessons. They experienced the overall content as relevant to them and useful in their daily lives. Many students actively participated in the lessons and enjoyed them.

There were both positive and negative findings regarding the time allotted to the

lessons, correct understanding, suitable language, the examples used in the lessons, and usability of the website.

Teachers reported that the projector lessons worked best, as it provided visual support and structure to the lesson that helped focus class attention. But the blackboard version worked satisfactorily for those without projectors, or as a backup alternative when losing electricity, once they became familiar with the solution.

Problems and solutions

- The computer-based version did not work well.

There were several reasons for this, including the time it took to prepare the computers, connectivity problems, and students being distracted and not focusing on the lessons. Since teachers preferred the projector version of the lessons, we decided to drop the computer-based versions of the lessons that we will evaluate in East Africa. But we plan on updating and improving this version after the evaluation.

- Lessons took longer than 40 minutes
To fit the lessons into the curriculum and find time for them, they were designed to be delivered in a single 40-minute school period. However, teachers had difficulties completing the lessons in 40 minutes for several reasons: too many activities in each lesson, including many activities designed as, small group work

6 Informed Health Choices

that took a lot of time to organise, quizzes and reviews of the previous lesson that were too long, and note-taking that took time. To address these problems, we shortened the review of the previous lesson and redesigned lessons 5 and 10 as quiz lessons. We kept one assessment question at the end of the wrap-up so that teachers could get a sense of how well the class had understood the lesson.



We consolidated the activities and introduced alternatives to small-group work, including buzz groups and classroom discussion. We also introduced alternatives for note-taking, including using printouts for students with key terms and key messages from the wrap-up.

- Structure and organisation of the lessons To help address other problems that we found in the pilot study, we simplified the structure of the individual lessons and reorganised them. Each lesson now has three parts: introduction, activity, and wrap-up. The introduction reminds students of the key messages from the previous lesson and leads them into the new lesson with a discussion

question. The activities are simpler and more flexible than in the pilot version. The wrap-up includes the assessment and the key messages for the lesson. We combined two lessons and reorganised another to make room for the quizzes in lesson 5 and 10, where the focus is review of the previous four lessons and transfer of that knowledge to students' daily lives.

The new set of lessons are grouped into three parts:

Part 1. Claims about effects of health actions that are not supported by reliable comparisons are not necessarily wrong, but there is a weak basis for believing them.

1. Health actions
2. Health claims
3. Unreliable claims
4. Reliable claims
5. Using what we learned (1)

Part 2. Comparisons between health actions should be reliable.

6. Randomly-created groups
7. Large-enough groups

Part 3. Smart choices about health actions depend on judgements about the available evidence from comparisons between health actions, and the balance between the possible advantages and disadvantages.

8. Personal choices
9. Community choices

10. Using what we learned (2)

- Teachers did not have time to prepare for the lessons and were sometimes not adequately prepared.

Because many schools do not have computers for students or the capacity to print materials for students, these lessons are heavily dependent on the teachers being well prepared. Teachers in the pilot study noted that, unlike other subjects that they teach, they had no previous experience or preparation to teach students to think critically about health actions.

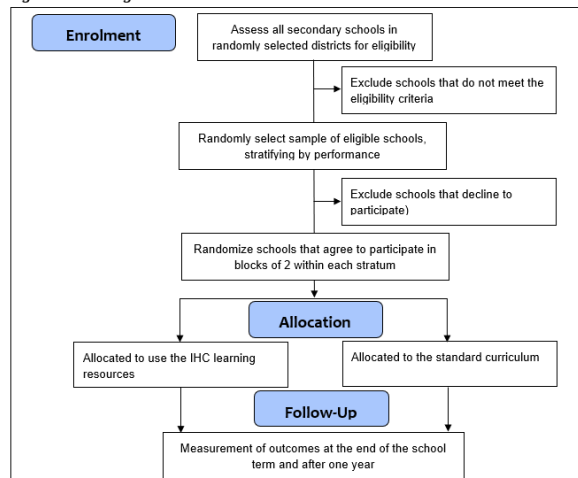
To address this problem, we have incorporated a teachers' guide into the resources and developed materials for teacher training workshops. (For the trials, the training workshops are defined as a part of the intervention and will be taught by the teachers who participated in the pilot.)



Contacts: Sarah Rosenbaum, Jenny Moberg

Randomised trials and process evaluations

Figure 1. Flow diagram



We plan on evaluating the effects of using the resources – including training workshops for teachers – in all three countries. Faith Chesire (Kenya), Michael Mugisha (Rwanda), and Ronald Ssenyonga (Uganda) have prepared protocols for cluster-randomised trials and process evaluations. The trials will each include about 80 secondary schools that will be randomised to use the resources or to the normal curriculum without changes. The trials will start in April in Kenya and Rwanda, and in June in Uganda. The 10 lessons will be taught over one school term, which lasts about 10-12 weeks. We will measure outcomes at the end of the school term and again after one year.

The protocols are currently being reviewed and revised. Once that is done, they will be published on the [IHC Zenodo](#) site together

with protocols for a prospective meta-analysis and a qualitative evidence synthesis of the process evaluations.

Contacts: Faith Chesire, Michael Mugisha, Ronald Ssenyonga

Adverse effects of teaching critical thinking

Researchers and others often overlook potential harms of public health and educational interventions. We are developing a framework to help us prevent and evaluate potential adverse effects of using the IHC secondary school resources.

More than 40 experts in education and health have provided feedback on an initial version.

The framework can be a starting point for preventing and evaluating adverse effects of other interventions intended to improve critical thinking.

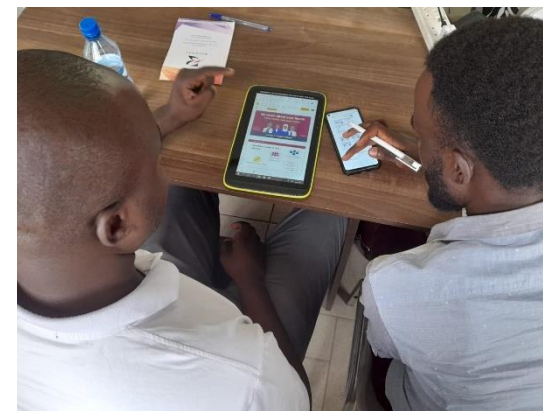
Contact: Matt Oxman

“Transfer” of critical thinking skills

Formal education assumes that children and young people “transfer” what they learn in school to other contexts, including their daily lives. However, it is unclear how we can achieve and evaluate transfer of learning.

We are developing a model for achieving and evaluating transfer of learning from use of the IHC secondary school resources. The model can be a starting point for achieving and evaluating transfer from other interventions intended to improve critical thinking.

Contact: Matt Oxman



Lesson 10: Using what we learned **WRAP UP**

Congratulations!!

- This was the last lesson. Hopefully you learned a lot and enjoyed doing so.
- There will be an exam to find out what you have learned and your ability to use it.

Our last update of the IHC Key Concepts

We have decided that the 2022 version of the Informed Health Choices (IHC) Key Concepts will be the last revision made by us. This does not mean that this list of concepts cannot be further improved, but we will leave any further development of the IHC Key Concepts to others.

In the 2022 update, we started with the explanations and implications from the [2019 version](#) of the IHC Key Concepts. We did not add to or remove any of the 49 concepts from the 2019 version, but we reorganised some of them and revised some of the explanations. More importantly, we have added the basis for each concept, drawing on relevant research that informed the development of the IHC Key Concepts. Whenever possible, we have referenced systematic reviews that provide a basis for a concept. In total, the 2022 version includes **over 600 references, over half of which are systematic reviews**. We have also provided one or more examples to illustrate each explanation.

As soon as we have finished editing the 2022 version, we will publish it on the [IHC Zenodo](#) site together with the previous versions.

We started to develop this list of concepts in 2013. The [first version](#) included 32 concepts

in six groups. We [revised the Key Concepts](#) yearly between 2015 and 2019.

The [Key Concepts](#) are principles for evaluating the trustworthiness of treatment claims and making informed choices. They can help people to:

- Recognise when a claim about the effects of treatments has an untrustworthy basis
- Recognise when evidence from comparisons of treatments is trustworthy and when it is not
- Make well-informed choices about treatments

The concepts serve as the basis for developing learning resources to help people understand and apply the concepts when claims about the effects of treatments (and other interventions) are made, and when they make health choices. They are also the basis for an item bank of multiple-choice questions (the [Claim Evaluation Tools item bank](#)) that can be used for assessing people's ability to apply the IHC Key Concepts.



Contact: Andy Oxman, Astrid Dahlgren, Iain Chalmers

A new website for the Key Concepts



We developed the [That's a claim](#) website following a meeting in 2018 with people from 14 different fields, including agriculture, economics, education, environmental management, international development, healthcare, informal learning, management, nutrition, planetary health, policing, social welfare, speech and language therapy, and veterinary medicine.

Participants in that meeting found that there were more similarities than differences in the principles that apply to assessing the effect of interventions and making informed choices. We created the website to support further development and facilitate adaptation of the Key Concepts to different fields and target users, translation into other languages, and linkage to learning resources.

The Key Concepts for health have continued to develop, but the website has not been widely used or kept up to date. We are currently exploring ways of updating and improving the website so that it is more useful and more widely used. Initially, we are focusing on the Key Concepts for health and will develop a site for those concepts, before considering how the website can best support adaptation and use of the concepts in other fields.



We have identified a specific target audience and are learning about their needs to guide the development of the new site: [infodemic managers](#), like [WHO](#) and [iHealthFacts](#), and fact-checking organisations that promote media literacy as intermediaries for reaching a broader audience. We have been in contact with several organisations and hope to partner with some of them. The aim of the new website is to help “fact checkers” to check claims about the effects of health actions, and to strengthen their audiences’ inclination and ability to check those claims themselves.

We plan on using a layered approach with a gradual entry to the Key Concepts, instead of

showing all the Key Concepts on the home page. We also plan on including tools that can help people to assess claims about effects and make informed choices. We are exploring including animations and interactive learning resources on the website.

We are still in the early stages of designing the new website. Any ideas you have are most welcome!

Contact: *Andy Oxman, Steven Woloshin, Sarah Rosenbaum*

IHC around the world



Australia

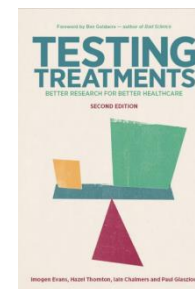
A round table discussion

We are planning a round table discussion with some of the authors of four books (and other resources) with overlapping aims. All four aim to help people make informed health choices. The purpose of the roundtable is to discuss

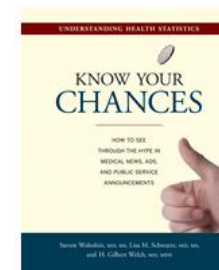
what’s been learned from these efforts and what next.

These are the four books:

- The 1st edition of [Testing Treatments](#) was published in 2006 and a 2nd edition was published in 2011. The book points the way to wider understanding of how treatments can and should be tested fairly and how everyone can play a part in making this happen.

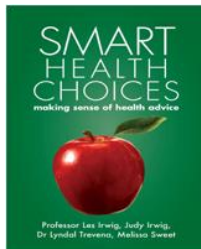


- [Know Your Chances](#) was published in 2008. The goal of this book is to help you better understand health information by teaching you about the numbers behind the messages—the medical statistics on which the claims are based.

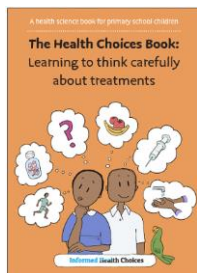


10 Informed Health Choices

- [Smart Health Choices](#) was also published in 2008. Its aim is to help consumers and practitioners develop the skills to assess health advice – and hopefully to make decisions that will improve the quality of their care.



- The [Health Choices Book](#) (and its [Teachers' Guide](#)) were published in 2016. They were developed to help primary school children learn to assess the reliability of treatment claims and make informed health choices.



Once we have sorted out how to organise the discussion across nine time zones and involving the next generation, we will let you know when and where the discussion will be.

Contact: Paul Glasziou

Brazil

Primary school resources and a podcast for teachers

We are happy to announce that the translation process of the IHC primary school resources into Brazilian Portuguese is finished. The materials are being uploaded to the [IHC website](#).

Our plans to implement pilots of these resources in schools across the country was postponed to 2022, given that 2020 and 2021 academic years were heavily disrupted due to the Covid-19 pandemic.

We have also finished the production and recording of the e-learning podcast for teachers (*PenSaúde*), supported by the Bahia Research Foundation grant. The podcast aims to be a resource for teacher training on the IHC primary school resources. The production of the eight-episode series was informed by teachers' feedback and context analysis. Next steps include the evaluation of the resources in a pilot that is planned to start in April 2022, in collaboration with the Vitoria da Conquista Municipal Education Secretariat, in Bahia.

*Current members of our working group are: Joana Balardin, Edson Amaro, Marina Damin and Jade Nascimento from Hospital Israelita Albert Einstein in São Paulo; Márcio Galvão

Oliveira, Daniela Arruda Soares and Herbert Gomes da Silva from Universidade Federal da Bahia in Vitória da Conquista; Ana Paula Pires dos Santos from Universidade do Estado do Rio de Janeiro; Paulo Nadanovsky from Fundação Oswaldo Cruz in Rio de Janeiro and Universidade do Estado do Rio de Janeiro; Fernando Kenji Nampo from Universidade Federal da Integração LatinoAmericana.



Contact: Joana Balardin

China

Developing an evidence base for an intervention to improve residents' health information literacy

Based on the background of public health emergencies in 2021, the IHC China team assessed that it is a good time to evaluate and

11 Informed Health Choices

monitor residents' health information literacy in relation to the Covid-19 pandemic.

The Evidence-based Medicine Center of Lanzhou University collaborated with the Health Commission of Gansu Province to develop the "*Health Information Literacy during the COVID-19 in Gansu, China*" questionnaire, which is based on the 2019 IHC Key Concepts. We hope to better understand residents' health information literacy and to provide an evidence base for an intervention to improve residents' health information literacy.



What we have done in 2021:

- Translated the 2019 IHC Key Concepts to Chinese

- Established a multidisciplinary expert panel with the participation of 28 experts (research areas include health education, health communication, behavioral science, public health policy, health promotion, public policy, disease prevention and control, economics, health management, epidemiology, basic medical education and research, nutrition and health, etc.)
- Based on 11 Key Concepts, designed the *Health Information Literacy during the COVID-19 in Gansu, China* questionnaire
- Verified the reliability and validity of the questionnaire, which has 14 questions
- From September to December 2021, completed a field investigation, which included more than 3,000 residents aged 15 to 69 in Gansu Province

What we will be doing in 2022:

- Analyse the survey results to clarify the health information literacy of residents in Gansu Province
- Develop, disseminate, and implement an intervention suitable for Chinese residents, informed by the survey results

The IHC China team welcomes all interested people and teams to participate and share their experiences with us.

Contact: Xuan Yu and Yaolong Chen

Croatia

A randomised trial of primary school resources

Last spring we started a randomised trial involving primary school children to test the effects of the Informed Health Choices (IHC) programme on their ability to assess treatment claims and make decisions about health.



We approached school principals from the urban agglomeration of the city of Split and invited them to take part in our project. From the 13 primary schools that agreed to participate, we randomly selected six schools, three of which received the IHC-based educational intervention, while the remaining three schools acted as controls.

Overall, 32 classes including 3rd and 6th-grade primary school children were enrolled, with more than 300 children in the intervention, and almost 350 children in the control group. Teaching started in March and included the nine lessons from the IHC learning resources that were delivered once a week. The teachers involved in training attended workshops that had been organised in schools before the trial started, during which detailed guidance about the teaching materials and the IHC project aims were explained.



At the end of the programme, children from both groups completed the test to assess the short-term effects and possible differences between the two groups. This was repeated after six months, in November and December, to test the retention of knowledge and the longer-term effects.

The test consisted of a set of multiple-choice questions from the Claim Evaluation Tools item bank. With help from Astrid Dahlgren, we carried out the Rasch analysis for reliability

and validity of the test, and we are now working on the manuscript that is to be submitted for publication, hopefully soon. At all times, Diana and Tina were responsible for ensuring proper implementation of the lessons, observed classes and completion of the tests, and kept regular contact with the teachers.

Also, as part of our IHC activities, we used the 2021 World Evidence-Based Healthcare Day to highlight the importance of encouraging children's ability to think critically about health information in an era of information overload. Therefore, we shared the IHC materials, like posters and the Key Concepts (which we translated into Croatian) with the primary schools in Split. Promotion of the World Evidence-Based Healthcare Day and the IHC activities in our community attracted the attention of local TV and radio stations, where we talked about the IHC project and the Key Concepts and agreed to talk more about the key concepts for the general audience in future broadcasts.

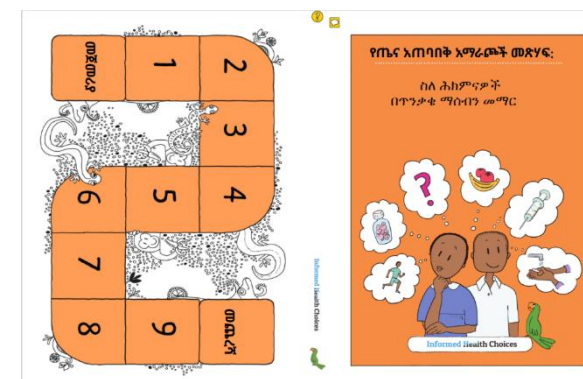


Finally, we recently initiated a study among university students from medicine-related fields, like Health Studies, Dental Medicine, and the Medical School in Split, to assess how they appraise health claims and what decisions they make about health. We will be happy to share our findings with the IHC network. Meanwhile, we are sending you all warm wishes of peace and love from Croatia!

Contact: Tina Poklepovic

Ethiopia

Translating and contextualising the primary school resources



Our team at Jimma University in Ethiopia is working to translate the primary school resources of the IHC project into the two main languages in the country: Amharic and Affan Oromo. We did not progress as we wished the

past year because of the Covid-19 pandemic and the difficult situation in our country.

Currently, we are recruiting people to students' and teachers' networks to provide feedback on the translation. We are also establishing an advisory board to support us in the process. We anticipate making the translated resources digitally available shortly!

Contact: Bezawit Temesgen Sima

Ireland

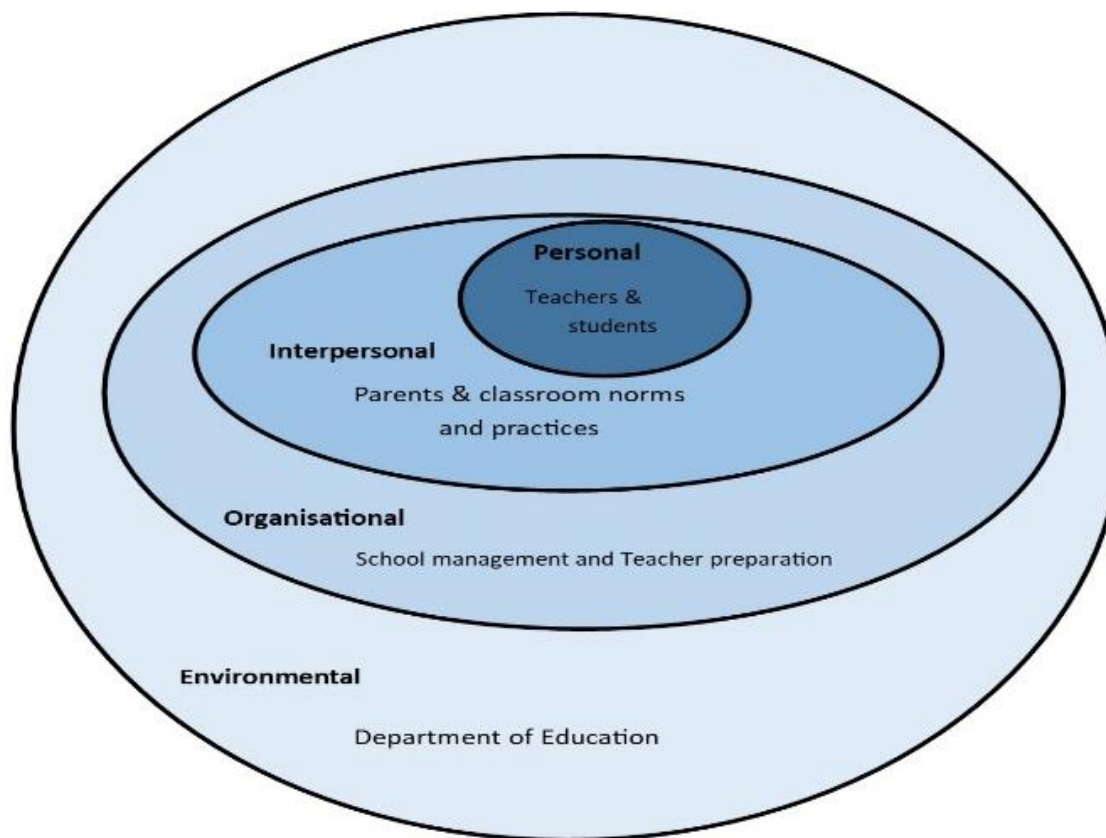
Contextualising the IHC programme for an Irish Primary School setting

The lack of health literacy and critical thinking skills in the population is a disease of ignorance and IHC is a proven treatment. If adopted into a school system, it could become a powerful weapon in the fight against uninformed decision-making at individual, group, local, and national levels.

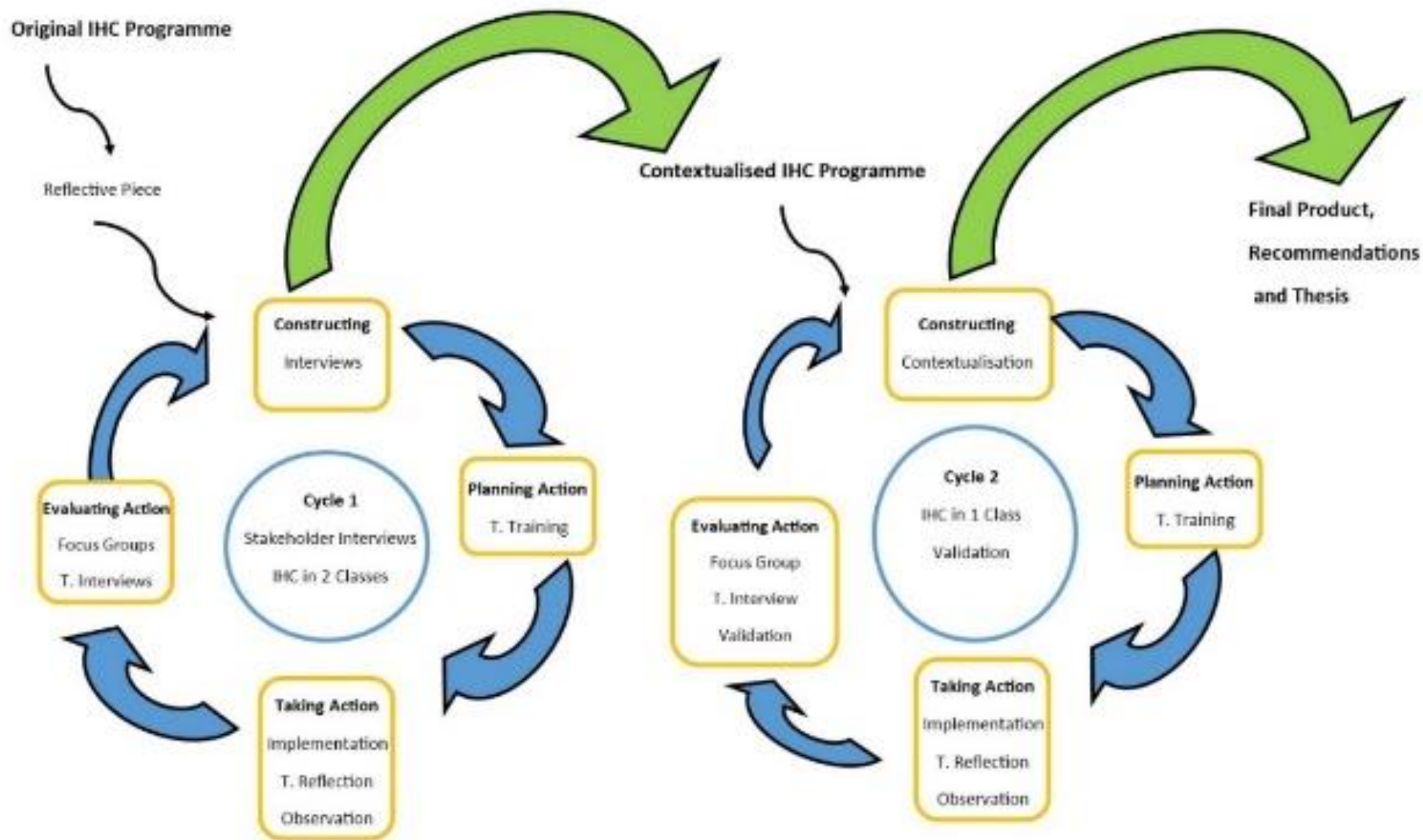
However, that same irrationality of thought that this programme seeks to immunise against may already be prevalent in the educators we rely on to make the decision to use it. Decision-making is influenced by affective response too. Herein lies a problem

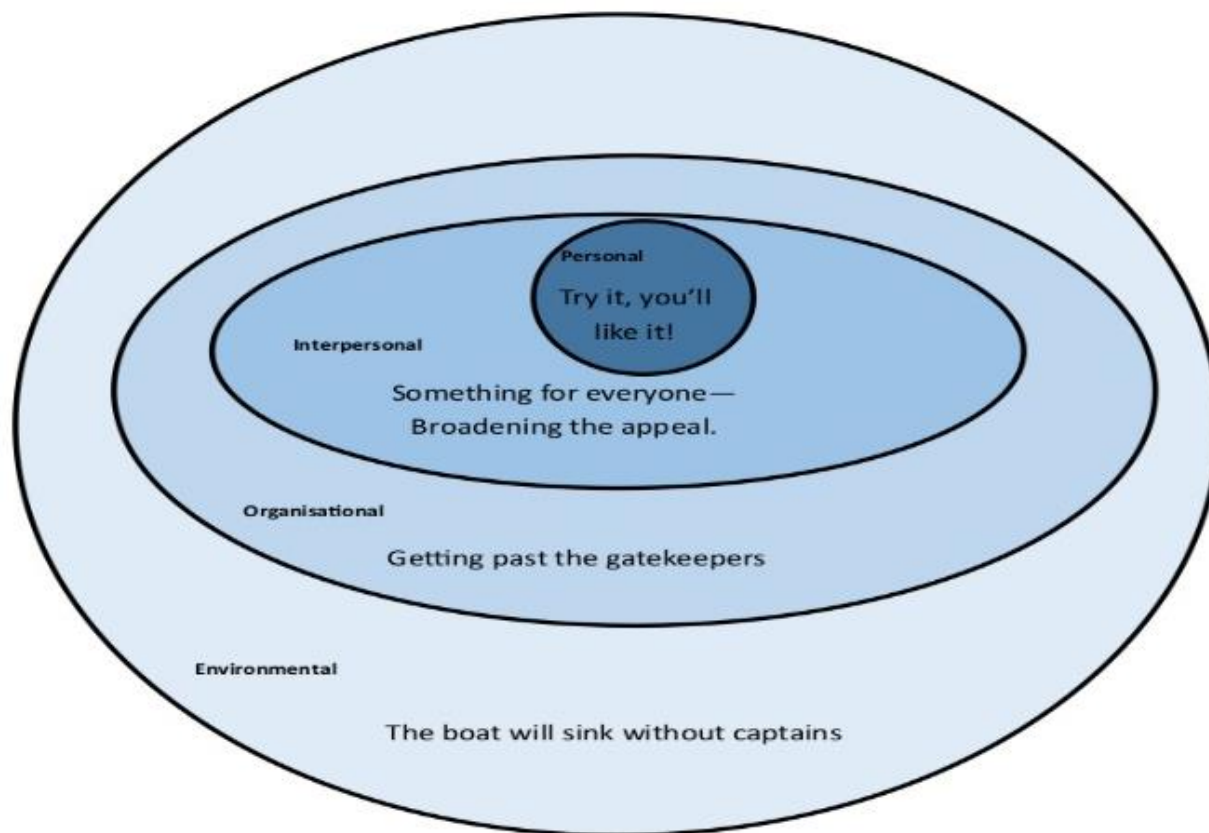
for the IHC programme: evidence-based utility alone will not convince everybody to use this programme if individual, local, organisational and national biases are not acknowledged and addressed.

A Socio-Ecological Model of Irish Primary School Education



We chose to explore if inhibitors to implementation exist and whether anything in the programme should/could be altered to address them while keeping the core content unchanged. Through a two-cycle participative action research approach, we sought and responded to the views of practitioners and consumers in each sphere of influence.



Summary of Findings

Try it, You'll like it – We found that participants were generally less positive about the IHC programme before their engagement with it. The reservations centred around relevance of the narrative, content and setting to the Irish context and its workability in an Irish classroom. However, participants universally became more positive after engagement.

Something for Everyone, Broadening the Appeal – A standard practice in Irish schools is to draw in the involvement of parents and IHC was considered to be falling short in this regard. It also became clear that IHC does not really fit neatly into any current subject area and is better described as a thematic programme.

Getting Past the Gatekeepers – A principal may decide to introduce this programme but its sustainability is dependent on teacher engagement and a champion (e.g., a middle manager with this as a duty of their post). Given that perception of the programme improves after engagement, a positive first impression/introduction is important.

The Boat will Sink Without Captains – The IHC programme may have some success spreading through schools as a programme but it will be competing against other niche organisations (e.g., Eco-Schools) and commercial interests (e.g., there are three main publishers of educational content in Ireland). Given the importance of the content and its copyright-free nature, it could be considered for top-down implementation via the Department of Education.

The resulting contextualisation measures taken in response to the findings included:

- Changing the book format to A4.
- Significantly shortening the teacher training process.
- Changing the names of some of the characters.
- Replacing the translation boxes with a series of Home-School Link exercises.
- Creation of additional environmental text resources (posters and flashcards).

- A collection of Irish narrative examples of claims was compiled for use in the classroom.
- A curricular map of where IHC fits into the Irish system was developed.

Further upscaling of the study would be useful in establishing its credibility in the Irish context. With the Irish curriculum beginning to transition into a thematic-based model, a transition that will take a number of years yet, there is a real opportunity to have IHC considered for inclusion as a nationally-recommended programme.

Contact: Dara Glynn

IHC Cancer

This project aims to develop an intervention to provide those affected by a cancer diagnosis with the skills and knowledge to think critically about the reliability of a treatment claim, and make informed choices.

Few areas of health have been as insidiously affected by misinformation as cancer. Patients with cancer who delayed or declined conventional cancer therapy in favour of alternative medicine have been shown to have worse outcomes, including survival. As a result, interventions are necessary to help those impacted by cancer to reduce the extent to which they are victims of misleading claims.

With the support of the Irish Cancer Society, a team at NUI Galway is leading a project to develop an online education programme called Informed Health Choices-Cancer (IHC-C). The project will be conducted in two work packages (WPs).

In WP1, a steering group and a patient and public (PPI) panel of people impacted by cancer will be formed to prioritise the IHC Key Concepts for inclusion in the education programme.

In WP2, using a human-centred design approach, the prioritised concepts will be utilised in the development and piloting of an online programme designed to provide those affected by cancer with the skills and knowledge to think critically about the reliability of a treatment claim, and make informed choices. This online programme will be designed in a series of iterative cycles and will be tailored specifically to the cancer population.

Contacts: Declan Devane, Marie Tierney, Mengqi Li



Italy

Translating and piloting the IHC primary school resources

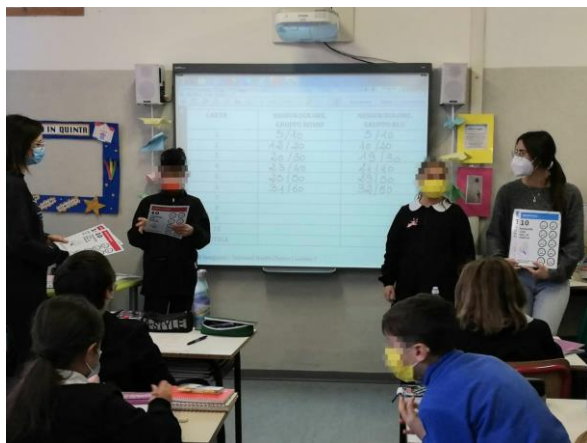
What we've done so far

In 2019 we translated the *Informed Health Choices Book* and the *Exercise Book*. A limited edition of these resources – to be used in a pilot project – was printed, free of charge, by the Italian Publisher “Il Pensiero Scientifico”.

In 2020 we obtained support for the IHC project from the Associazione Alessandro Liberati – Cochrane Affiliate Centre, and we piloted these resources in two 5th grade classes of a public primary school in Florence. We collected qualitative and quantitative feedback from students and school teachers, with the following objectives: to verify the feasibility of using the IHC resources in the Italian school context; to evaluate students' ability to think critically about health treatments; to evaluate teachers' and children's experiences using the IHC resources, and to identify facilitators and barriers to contextualisation. We are preparing a report of the results which we will submit for publication in a peer-reviewed journal.

In 2021 we started a second pilot project with more participating primary schools, which are representatives of various Italian geographic

areas (two schools in Lombardy, two schools in Tuscany, and one school in Campania). The IHC lesson cycle has been completed in one school and is going to start in three primary school classes and in three lower secondary school classes (from 5th to 7th grades). A difference from the 2020 pilot is that, in the current pilot, the schoolteachers – and not us – will teach the lessons. To train these teachers, we organised online training courses that we held in September 2021 and December 2021. We will collect qualitative and quantitative feedback from teachers and students.



We also completed the Italian translation of the *Teachers' Guide* and we started translation of the thatsclaim.org website. The Italian IHC experience received national media coverage (1,2,3) in 2021.

What's next?

The pandemic reinforced people's interest in health research, but, at the same time, highlighted the need to develop and master the skills to understand it. One of the best ways to build a good base of health literacy in the population is to put it into school curricula. However, one of the main obstacles we have encountered so far is the difficulty finding “official channels” of communication between the school sector and the health sector.

Most teachers who are participating in the second pilot project were selected because they showed interest in the IHC experience and contacted us after reading about the project (1,2,3).

If – as we expect – the contextualisation experience with the second pilot study is positive, our next steps will be to focus on approaches to open stable and large communication channels with Italian school authorities at a regional and national level.

1. https://www.corriere.it/cronache/21_luglio_31/informed-health-choices-corso-pensiero-scientifico-alderighi-rasoini-09e5cb8c-f1fc-11eb-9a1b-3cb32826c186.shtml
2. <https://sentichiparla.it/politica-ed-economia/scienza-salute-scuola/>
3. <https://www.scienzainrete.it/articolo/ins-egnare-pensiero-critico-possibile-fin->

dalla-scuola-primaria/camilla-alderighi-raffaele

Contact: Camilla Alderighi and Raffaele Rasoini

Norway

Centre for Epidemic Interventions Research

The lack of evidence to support policy decisions during the pandemic led the Norwegian Institute of Public Health to establish CEIR – the [Centre for Epidemic Interventions Research](https://www.ceir.no). CEIR has three aims: a) prepare for the conduct of studies of non-pharmaceutical infection control measures, b) carry out such effectiveness studies, and c) develop and evaluate tools to support the use of research in decisionmaking in health crises. The latter point includes interventions to improve critical health literacy in the population, such as the Informed Health Choices projects.



The activities in the former *Centre for Informed Health Choices* are fully integrated in CEIR, and continue as before, although there will be an increased emphasis on supporting informed health choices during crises. One example is the use of the Evidence-to-Decision framework, developed by centre staff, in the preparation of recommendations concerning the use of face masks in the community (1). The Informed Health Choices network will be managed from CEIR, as will related projects such as the ongoing [secondary school resources](#) project.

A key challenge for CEIR is to carry out randomised trials of infection control measures. Globally, very few such evaluations have been conducted during the pandemic (2), and CEIR has also had limited success so far.

On the other hand, CEIR is probably a world leader in terms of *attempts* at carrying out randomised trials in this field. The current CEIR score card shows more than dozen planned trials, of which three or four have been implemented – and one published (3).

Among the barriers to carrying out these studies are insufficient public and political will, logistical challenges (partly due to the need of very large sample sizes), and strict Norwegian legal requirements for written consent from all who participate in cluster trials of health interventions. We are working to overcome these barriers, including working

with policymakers to make it easier to carry out randomised trials of infection control measures.



References

1. Vestrheim DF, et al. [Covid-19: Should individuals in the community without respiratory symptoms wear facemasks to reduce the spread of Covid-19? – Update 1](#). NIPH 2020.
2. Hirt J, et al. [Randomized trials on non-pharmaceutical interventions for COVID-19: a scoping review](#). *BMJ Evid Based Med* 2022.

3. Fretheim A, et al. [The effectiveness of free face mask distribution on use of face masks. a cluster randomised trial in Stovner District of Oslo, Norway](#). *Int J Environ Res Public Health* 2021.

Contact: Atle Fretheim

Quality of health news

The “infodemic” started long before the Covid-19 pandemic, as shown in a large study led by members of the IHC network.

In January 2022, F1000Research published the revised and final version of our [systematic review and meta-analyses of the quality of information in news media reports about the effects of health interventions](#). We included more than 40 studies in the structured synthesis, and results from 18 of those studies in the meta-analyses.

The studies included diverse samples of news reports assessed using a variety of tools and criteria. Overall, we found the information is often unbalanced or oversimplified. For example, only around half of reports mention, discuss or explain potential harms of the intervention.

Contact: Matt Oxman

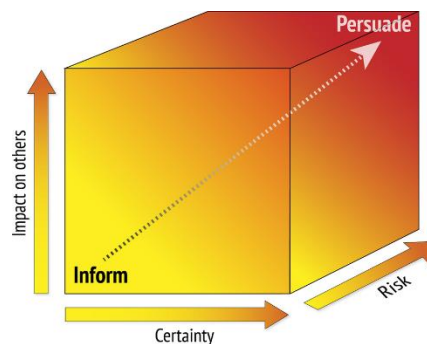
To persuade or to inform



Much health communication during the Covid-19 pandemic has been designed to persuade people more than to inform them. For example, messages like the above are intended to compel people to wear facemasks, not to enable them to make an informed decision about whether to wear a facemask or to understand the justification for a mask mandate. Both persuading people and informing them are reasonable goals for health communication.

However, those goals can sometimes be in conflict. Decisions to persuade people rather than enable them to make an informed choice may be justified, but the basis for those decisions should be transparent and the evidence should not be distorted. In an article published in [Health Research Policy and Systems](#), we suggest nine principles to guide decisions by health authorities about whether to try to persuade people:

- **Participation:** Does the message reflect the values of those affected?
- **Fairness:** Are the potential impacts of the message on different populations fair?
- **Transparency:** What is the justification for the message?
- **Precaution:** Is there a credible threat of serious harm that warrants an urgent message?
- **Proportionality:** Is the message appropriate for the level of risk?
- **Flexibility:** Is the message tailored to key target audiences and their contexts and can it be modified as new information becomes available?
- **Testing:** Has the message and how it is communicated been tested?
- **Uncertainty:** Are there important uncertainties about the impacts of the message?



Factors underlying the justification for persuading people to change their behaviour

Contact: Andy Oxman

Informed participatory democracy

Governments and health authorities have had to make many hard decisions during the Covid-19 pandemic about infection prevention and control measures. Many measures that have been used have important trade-offs, including travel restrictions, self-isolation, quarantines, school closures and lockdowns. There have also been important uncertainties about those measures and evolving evidence. Governments have not always been transparent about the justification for their decisions. Changing messages and a lack of transparency may cause confusion and erode trust in authorities, which in turn can negatively impact compliance. In addition, not acknowledging important uncertainties can make it difficult to conduct research to reduce those uncertainties (1).

Decisionmaking that is open and inclusive could contribute to more trustworthy decisions (2). Those who are affected should be involved in deciding. In other words, decisions should be made democratically. Beyond elected individuals making decisions on behalf of their constituents, citizens should participate in making decisions.

Participedia

Search: covid

1 - 20 entries of 130 for "covid"

CASE
COVID 19, Citizen's pulse (A National Survey on COVID 19- Nepal)
Updated October 7, 2020

CASE
COVID-19: Rethinking Emergency Preparedness and Response in Cameroon
Updated July 30, 2020

CASE
Finding Youth-Led Solutions to COVID-19: Lockdown Live Webinars
Updated November 11, 2020

CASE
Scottish Parliament Citizens' Panel on COVID-19
Updated April 15, 2021

CASE
Online Public Dialogues on COVID-19 Winter Preparedness
Updated November 25, 2020

CASE
Connecting to Congress Online Town Halls on the COVID-19 emergency
Updated February 16, 2021

CASE
Dialogue and Deliberative Workshops on COVID-19 and the NHS (National Health Service)
Updated November 24, 2020

CASE
Advocating for Women's Inclusion in Ghana's COVID-19 Response
Updated May 19, 2020

FEEDBACK

[Participedia](#) is the largest and most systematic description of instances (successful and unsuccessful) of democratic participation in many fields of development, including health. It includes over 100 cases of participation in decisions about Covid-19 policies in a variety of ways.

We want to learn from and build on that experience by:

- Critically reviewing those cases and randomised trials of participatory democracy in other contexts
- Exploring the potential role of evidence-to-decision frameworks (3) in supporting participation in decisions about infection prevention and control measure

- Exploring ways of supporting critical thinking about those measures
- Designing and evaluating strategies for participatory democracy that incorporate systematic and transparent use of the best available evidence and support for understanding and applying key concepts for making informed choices (4)

References

1. Oxman, AD, et al. Health communication in and out of public health emergencies: to persuade or to inform? Health Res Policy Syst 2022, in press.
2. Norheim OF, et al. [Difficult trade-offs in response to COVID-19: the case for open and inclusive decision making](#). Nat Med 2021.
3. Moberg J, et al. [The GRADE Evidence to Decision \(EtD\) framework for health system and public health decisions](#). Health Res Policy Syst 2018.
4. Aronson JK, et al. [Key concepts for making informed choices](#). Nature 2019.

Contacts: Siri Gloppen, Andy Oxman, Bettina von Lieres

Poland

Diagnosing and developing health capital

Jagiellonian University Institute of Sociology together with the Medical College Chair of Epidemiology and Preventive Medicine last year initiated a project entitled Diagnosing and developing health capital – Health literacy of primary school students, with the acronym LIGHT. The project aims to theoretically develop the notion of health capital and to empirically test the level of health literacy (HL) and critical thinking about health and health choices of primary school students in Poland. The activities within the project will include policy analysis, quantitative assessment of the level of HL and critical thinking among pupils in a national survey and 14 case studies of schools.

Policy analysis will include mapping school core curricula, textbooks, inquiring about main actors, ideas, values, and goals. We will try to clarify who communicates about health issues, what is the context, whether the messages are positive or negative, what is missed. School curricula and textbooks will be analysed from the perspective of Sociological Discourse Analysis and Situational Analysis.

Quantitative measurement of individual competences of pupils' aims to verify the extent to which the policies and schools'

efforts really work. We plan to validate and use a questionnaire with questions from the Claim Evaluation Tools item bank [[Austvoll-Dahlgren 2015](#)] as one of the survey instruments.

Case studies will involve schools conceptualised as microstructures. We will focus on collecting teachers', school counsellors' and hygienists' experiences with educating for HL and critical thinking about health in selected schools as well as pupils' perspectives on learning about health issues. This material will be enriched with a participatory observation devoted to learning about pupils' health behaviours, i.e. their practices during breaks and hygiene habits, and the school's environment (i.e., school menu and range of products in school shops and vending machines). Several methods will be used, including qualitative and quantitative methodologies.

We hope that this research will prepare us well for further steps, including dissemination of Informed Health Choices Key Concepts in Polish schools.

Contact: *Maria Swiatkiewicz-Mosny, Małgorzata Bała*

Rwanda

Teaching critical thinking about health to out-of-school youth

The rapid evolution of information and communication technology, media, and social media has exposed young people to tremendous amounts of both reliable and unreliable health information. This has its advantages and disadvantages. It provides young people the opportunity to triangulate and verify information, but it can also lead to risky treatment choices. Based on the idea that good decisions about health depend on people's critical thinking skills and their ability to obtain, process, and understand information, this project aims to work with out-of-school youth to find a way of enabling them to select, process, and interpret health information and make informed health decisions. To achieve this aim, we will build on the [Informed Health Choices secondary-school resources](#). Together with members of Youth Friendly Centres and the National Youth Council, and in collaboration with the HLT Technology Research Centre to translate and adapt the resources and pilot the adapted resources.

Contact: *Michael Mugisha*

Spain

IHC@Barcelona

In 2017 we started collaborating with the Centre for Informed Health Choices (Oslo, Norway). Our main goal is to explore and evaluate how IHC resources can be optimally implemented in the Spanish context.

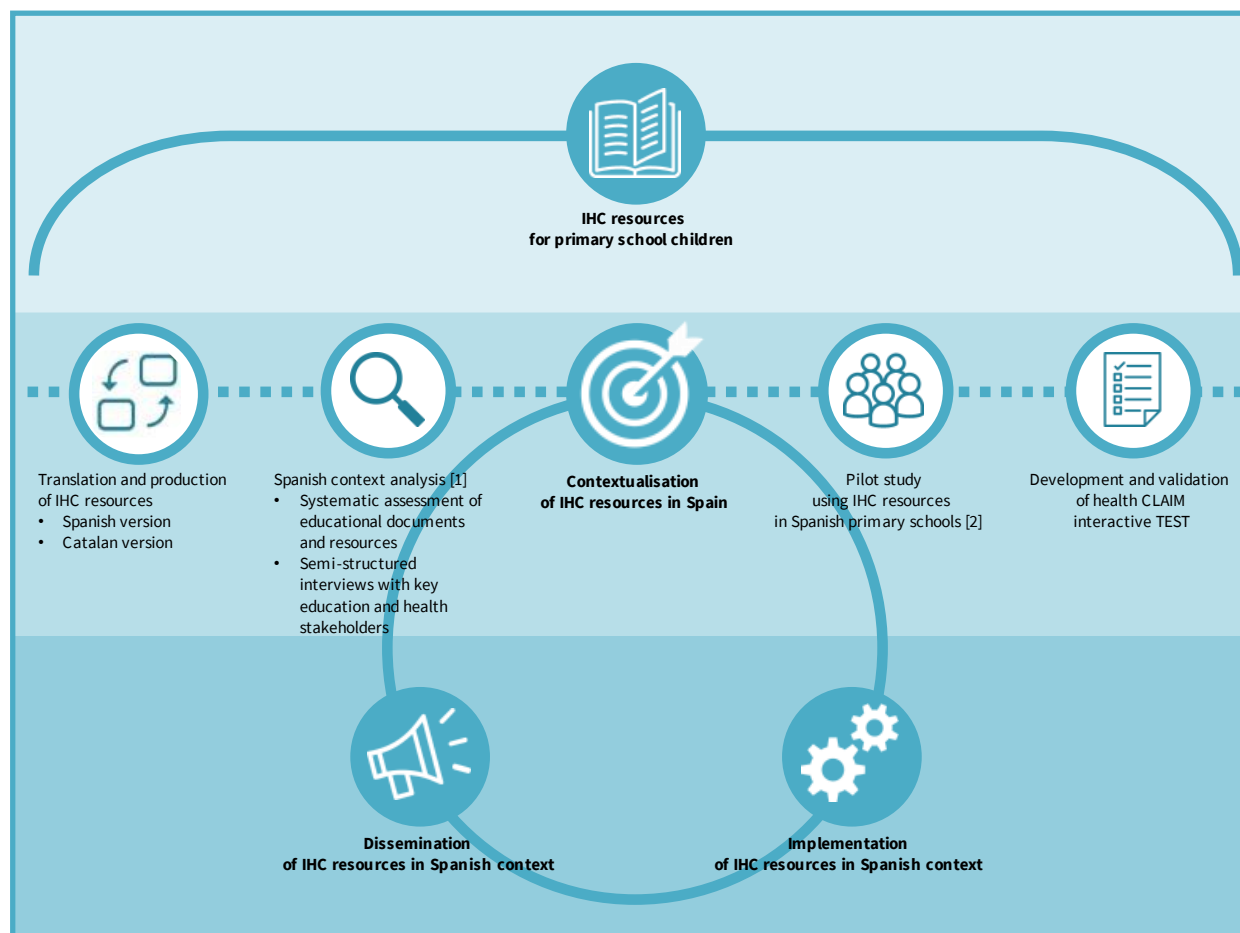
1. What has been the progress during 2021?

- We published the research protocol titled [“Teaching and learning how to make informed health choices: Protocol for a context analysis in Spanish primary schools”](#) in F1000Research.
- We conducted different dissemination activities as an oral presentation titled [“How to teach critical thinking about health at school: the experience of the “Informed Health Choices” project in Spain”](#) at the Iberoamerican Cochrane Network session (video recording available in Spanish).

2. What are we up to right now?

- **Translation and production of IHC resources: the Catalan version**

We aim to translate and produce the IHC resources into Catalan. We plan to publish the Catalan version in 2022.



- **Spanish context analysis: Systematic assessment of educational documents and resources**

We aim to identify and describe educational documents and resources which support the teaching and learning of critical thinking about health available in the Spanish context.

Currently, we are systematically assessing 1) state and autonomous communities' curricula (18 documents), 2) school educational projects (18 documents), and 3) education materials (12 textbooks and 10 education digital resources). We designed and piloted a data extraction form to collect the data. We will perform a quantitative and qualitative analysis of the data to explore how critical thinking about health is being included in Spanish educational documents and resources. We plan to publish the results of the systematic assessment in 2022.

- **Spanish context analysis: Semi-structured interviews with key education and health stakeholders**

We aim to 1) explore the experience and perspective of key education and health stakeholders regarding teaching and learning critical thinking about health in Spanish primary schools, and 2) identify factors that can potentially impact the implementation of the IHC resources in Spanish primary schools. We will involve education and health policymakers, developers of learning

resources, developers of health promotion and educational interventions, head teachers, teachers, families, and paediatric primary care providers. We will design and pilot a semi-structured interview guide to collect the data. We will perform a quantitative and qualitative analysis of the data to explore how critical thinking about health is being taught and learned in Spanish primary schools. We plan to publish the results of the systematic assessment in 2023.

- **Pilot study in Spanish primary schools**

We aim to explore the experience of the Spanish primary school students and teachers when using the learning resources of the IHC project. During the 2019-2020 and 2020-2021 school years, we conducted a pilot study with 143 primary school students (9- to 11-year-olds) from two schools in Barcelona (Catalonia, Spain). The intervention in the schools included: 1) a workshop with the teachers, and 2) lessons to the students. The data collection included: 1) assessment of the IHC resources by the teachers before the lessons, 2) non-participatory observations during the lessons, 3) semi-structured interviews with the students after a lesson, 4) assessment of the lessons by the teachers after a lesson, 5) treatment claim assessment by the students at the end of the lessons, and 6) assessment of the IHC resources by the teachers at the end of the lessons. We used ad

hoc questionnaires and guides to register the data. Currently, we are performing a quantitative and qualitative analysis of the data. The most relevant results will be discussed with the working group and recommendations on how to use, how to adapt (if needed), and how to implement the IHC resources to Spanish context will be agreed. We plan to publish the results of the pilot study in 2022.



- **Development and validation of the health CLAIM interactive TEST**

We aim to develop and validate an interactive test for Spanish primary school students to assess claims about treatments effects. We will use a multistep process that includes: 1) design of the test based on the Claim Evaluation Tools (selection of the IHC key concepts and questions), 2) direct translation, reconciliation, reverse translation, and review of the test, 3) cognitive interviews about the test, 4) design of the interactive test, 5)

cognitive interviews about the interactive test, 6) validation survey, and 7) review of the interactive test. We will use a Rasch analysis to explore the validity of the test. We plan to publish the results of the pilot study in 2023.

3. What are our future plans?

- Our priority is to finalise and publish the studies in progress!
- We hope to expand the dissemination strategy of the IHC project in the Spanish context. We will focus on educational settings, promoting activities addressed to teachers (e.g., talks for teachers or student teachers) and families (e.g., talks for school family associations). In parallel, we will plan to establish a network of Spanish primary schools interested in the IHC project, to facilitate communication and share experiences.

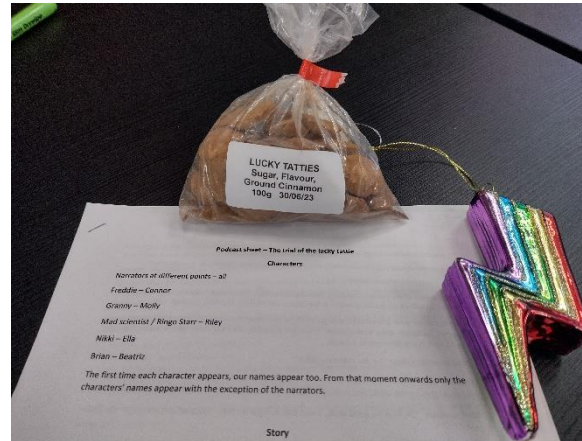
Contacts: Laura Martínez García, Laura Samsó Jofra, Esther Cánovas Martínez, Pablo Alonso Coello

United Kingdom

The trial of the lucky tattie

Freddie always gets a lucky tattie from his Scottish granny. A lucky tattie is a traditional wee Scottish biscuit, more precisely described as an “insanely unhealthy piece of sugar and fat covered in an insane amount of cinnamon”.

Lucky tatties used to have plastic charms inside, hence the title “lucky”. But imagine if, one day, one of those lucky charms gave Freddie special powers. Powers that could help save the world...



This is the motto for a podcast developed at shmuFM, Aberdeen’s local community radio. Freddie goes on to meet the First Minister Nicola Sturgeon, and realises “*you can’t just say look, I want to do something and then they give it to you*”. You need to develop a fair test. This involves recruiting multiple and diverse volunteers to two groups receiving identical lucky tatties (a superpower tattie, or a not-so-lucky dummy tattie). Then you need to select important outcomes, measure them accurately, and finally compare the two groups’ results.

The podcast was co-developed with the youth media group at SHMU and University of Aberdeen’s statistician and trialist, Dr Beatriz Goulao. The youth media group includes young people from underprivileged backgrounds in Aberdeen with an interest in developing their media skills. The aim of developing the podcast was to educate young people about clinical trials and critical thinking in a fun, interactive way. The whole story was developed by the young people who also recorded and edited the podcast, with Beatriz helping to fill in the scientific dots. The final podcast is available in SHMU’s and the University of Aberdeen’s websites.



The podcast covered key critical thinking concepts including: “Personal experiences or anecdotes alone are an unreliable basis for most claims”; “Identifying effects of treatments depends on making comparisons”, “If possible, people should not know which of

the treatments being compared they are receiving”, “Attention should focus on all important effects of treatments, and not surrogate outcomes”, and “Small studies may be misleading”.

There were up to nine young people involved in the podcast at different points. Two young people joined Beatriz and other researchers to discuss their experiences at a conference. Four young people recorded Freddie and his adventures. Participants found the experience fun: “*It is pretty fun listening to it and realising that we wrote it*” and learnt about working in a group and about how trials work.

“This is the way trials work: you can't just say look, I want to do something and then they give it to you. You need to (...) prove the fact that it is real and test it multiple times and (...) create an average.”

They found it easy to learn about trials in an informal, storytelling way “*Doing it in this way was easier for me to understand. Instead of like, numbers and other stuff being thrown at me*”. Beatriz developed better and more creative ways to discuss trials with the public. And Freddie is now ready to save the world...

Contact: Beatriz Goulao

Key concepts translated into the world of veterinary medicine

As in human medicine, making evidence-based veterinary decisions requires discussion involving both the clinician and the client (animal owner). The best outcomes with regards to animal health and welfare occur when these two stakeholders work together, but each group faces their own hurdles and barriers.

We are now moving into the analysis phase of our project where a thematic analysis process is being utilised to delve into the discussions which arose during data collection. This process will generate a detailed picture of the participants’ views which will guide improvements. The focus groups also discussed participants’ views on the ideal formats for interaction with the framework. The responses to this will help to inform future work and dissemination strategies.

The veterinary professional version of the framework will be displayed as part of the interdisciplinary website ‘[That’s a claim](#)’ and both documents will be published in a peer-reviewed journal. Press releases and other lay summaries will be produced along with conference presentations to disseminate the information more widely.

Our aim is not only to provide guidance which helps individuals navigate the plethora of

information they are faced with but also to facilitate open discussion and knowledge exchange between veterinary professionals and their clients, improving the care provided to our patients.



Contact: Natasha Basham, Marnie Brennan

The People's Trial – results published

In the March 2021 newsletter we spoke about The People's Trial, an online trial designed by the public and coordinated by the Health Research Board Trial Methodology Research Network (HRB-TMRN) in Ireland. The People's Trial aimed to help the public better understand randomised trials by inviting them to design and run a trial. The question chosen by the public for The People's Trial was:

'Does reading a book in bed make a difference to sleep, in comparison to not reading a book in bed?'

The trial is complete and, to cut to the chase, the answer to the above question is yes, reading a book in bed improves sleep. Of those reading a book, 156/369 (42%) felt their sleep improved, compared to 112/405 (28%) of those who did not read a book.

The [full results have now been published](#) in the open access journal *Trials*. The trial was also discussed on 25 January 2022 in the BBC Radio 4 ['Inside Health' programme](#) (starts at 23.30 mins).

In keeping with the aim of The People's Trial, the journal article is written so that an interested member of the public should be

able to understand both the trial design and the results. The trial report is, however, fully compliant with standard trial reporting guidelines, showing that trials can be reported completely and in a way that makes them more easily accessible to the public.



Contact: Elaine Finucane, Shaun Treweek

Contributors

Andy Oxman oxman@online.no

Astrid Dahlgren astridad@oslomet.no

Atle Fretheim Atle.Fretheim@fhi.no

Beatriz Goulao beatriz.goulao@abdn.ac.uk

Bettina von Lieres bettina.vonlieres@utoronto.ca

Bezawit Temesgen Sima abemnow@gmail.com

Camilla Alderighi camilla.alderighi@gmail.com

Dara Glynn priomhoide@gmail.com

Declan Devane declan.devane@nuigalway.ie

Elaine Finucane elainemay.finucane@nuigalway.ie

Esther Cánovas Martínez ecanovasm@gmail.com

Faith Chesire faithchelagat@gmail.com

Iain Chalmers ichalmers@jameslindlibrary.org

Jenny Moberg jmoberg@doctors.org.uk

Joana Balardin jbbalardin@gmail.com

Laura Martínez García laura.martinez.garcia@cochrane.es

Laura Samsó Jofra LSamso@santpau.cat

Małgorzata Bała malgorzata.1.bala@uj.edu.pl

Marie Tierney marie.m.tierney@nuigalway.ie

Marnie Brennan Marnie.Brennan@nottingham.ac.uk

Matt Oxman matt@mattoxman.com

Mengqi Li M.Li10@nuigalway.ie

Michael Mugisha michaelmgsh@gmail.com

Natasha Basham svynb3@nottingham.ac.uk

Pablo Alonso Coello alonsocoello@gmail.com

Paul Glasziou pglaszio@bond.edu.au

Raffaele Rasoini raffaele.rasoini@tiscali.it

Ronald Ssenyonga rssenyonga@musph.ac.ug

Sarah Rosenbaum sarah@rosenbaum.no

Shaun Treweek stweek@mac.com

Siri Gloppen Siri.Gloppen@uib.no

Steven Woloshin Steven.Woloshin@dartmouth.edu

Tina Poklepovic tinapoklepovic@gmail.com

Xuan Yu: yux20@lzu.edu.cn

Yaolong Chen chenyaolong21@163.com

