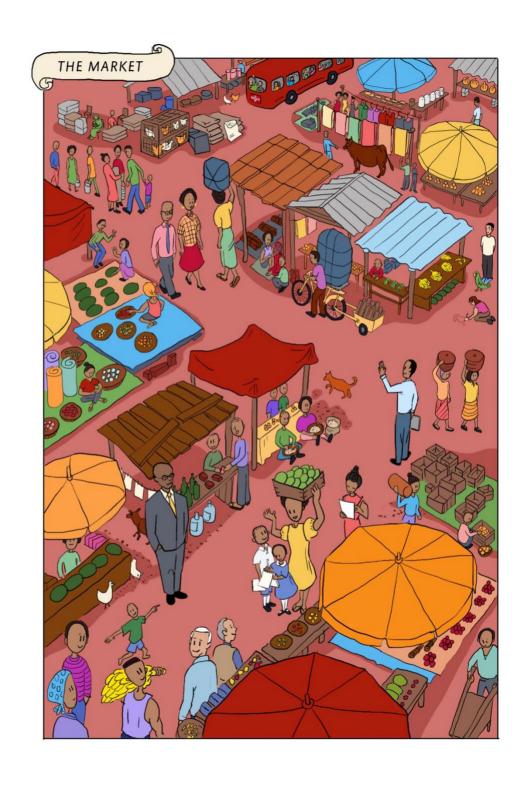
# Newsletter

March 2021



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# The IHC Network

The IHC Network now includes over 120 people from over 30 countries, including Australia, Austria, Basque Country, Brazil, China, Croatia, Ethiopia, France, Gaza, Germany, Greece, India, Iran, Ireland, Israel, Italy, Kenya, Kurdistan, Mexico, New Zealand, Nigeria, Norway, Poland, Portugal, Rwanda, South Africa, Spain, Switzerland, Syria, Uganda, the United Kingdom, and the United States.

It is an informal network, which anyone is welcome to join. The aim of the Network is to create, evaluate, and disseminate resources that enable people to recognise reliable claims about effects and make informed health choices. Members of the Network are involved in a range of activities, building on a shared set of methods, including:

- <u>Translating</u> and <u>contextualising</u> learning resources
- Undertaking <u>context analyses</u> to explore factors that can impact on the use and implementation of learning resources
- <u>Creating new learning resources</u>
- Evaluating the effects of using resources designed to enable people to recognise reliable claims about effects and make informed choices

- Further developing the <u>IHC Key</u>
   <u>Concepts</u>, translating the concepts,
   <u>prioritising concepts</u> for inclusion in
   learning resources, and adapting the
   concepts to <u>other fields</u>
- Translating, contextualising, and validating multiple-choice questions from the <u>Claim Evaluation Tools</u> item bank
- Assessing the ability of populations to assess claims about effects and make informed choices
- Undertaking relevant systematic reviews

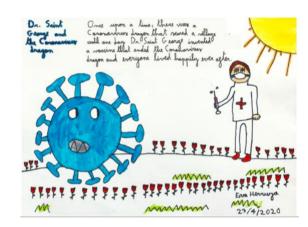
#### The IHC website

More information about the IHC Network can be found on the <u>Informed Health</u>
<u>Choices website</u>, including an up-to-date list of <u>publications</u> and <u>news</u>. All the IHC resources are open access and can be found on the website.

Contact: Sarah Rosenbaum

# Informed COVID-19 Choices

Resources to help empower people to make well-informed choices about COVID-19



Saint George must make a fair comparison to test the vaccine. Adaption of the Saint George legend, by Eva (7 years-old) from Barcelona, Spain.

# Primary school resources

Translations of the IHC primary school resources are now available on the IHC website in the following languages, in addition to English: Chinese, Croatian, French, Greek, Italian, Kinyarwanda, Kiswahili, Norwegian and Spanish. In addition, translations to Euskara, Kurdish, Persian, Portuguese are expected to be available later this year.

Additionally, pilot testing of the primary school resources has been conducted or is underway in the Basque Country, Brazil, China, Croatia, Ireland, Italy, Kenya, Rwanda, and Spain; and several teams are applying for funding for randomised trials to evaluate the effects of using the primary school resources in other contexts, besides Uganda, where they were found to have a large effect on the ability of 10- to 12-year-old students to think critically about claims and choices.

#### Guides

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

- <u>Guide for translating the IHC school</u> 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



# Secondary school resources



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.

#### **Context analyses**

At the start of the project, we conducted context analyses in all three countries. When we evaluated the IHC primary school resources we found two major impediments to scaling up their use, despite having shown that the resources were effective and valued by students, teachers, and parents. Printing the resources is prohibitively

expensive in Uganda and other low-income countries and it is essential that the resources fit into the curriculum for them to be widely used anywhere. The aim of the context analyses was to ensure that the resources we are developing now are well suited to the context in each of the countries, including the curricula and information and communication technology (ICT) conditions.



We found important similarities and differences across the three countries. All three countries have recently or soon will transition from knowledge-based curricula to competence-based curricula. All three countries include critical thinking as a key competence, but they are at different stages of implementing the new curricula and there is little experience teaching critical thinking in all the countries. This presents both an opportunity and challenges for introducing IHC learning resources. Both

critical thinking and health are taught across subjects, making it necessary to develop resources that can be used across subjects.

Although all three countries aim to make digital learning resources widely available, ICT conditions vary widely across and within countries. More than half of the public secondary schools in Rwanda have well-functioning smart classrooms – computer laboratories with laptops and Internet connections. This makes it possible to use computer-based learning resources. On the other hand, few schools in Kenya have a well-functioning computer laboratory with a good Internet connection and many schools do not have a projector.



Consequently, we will need to develop resources that can be used across quite different conditions. We are working with the curriculum development committee in each of the countries, networks of teachers and students, and national advisory groups to help ensure that the resources are fit to the current and evolving contexts. We will be assessing the extent to which we are successful in engaging stakeholders. At the same time, we are designing the resources so that they can easily be adapted to other contexts, if we find that they are effective.

#### **Prioritising Key Concepts**

We prioritised which of the IHC Key Concepts to include in the secondary school resources together with members of the curriculum committees and teachers in the three countries. This has been done in three stages. We first reached an initial consensus. prioritising 29 of the 49 Key Concepts. We then sought feedback from teachers, which informed a second consensus by members of the curriculum committees and members of the research teams from the three countries. Seventeen of the 29 concepts were prioritised. The third stage has been informed by feedback on prototypes of the learning resources and the context analyses. The biggest problem that we identified was the need to shorten the lessons and limit the number of lessons. This was compounded by the need to only develop and evaluate resources for a single school term, because of the pandemic, school closures, and delays. Consequently, we anticipate focusing on just nine Key Concepts. Before finalising

this decision, we will consult again with the members of the group that reached the second consensus.

Although we will focus on a small number of Key Concepts in the set of lessons we are developing and evaluating in this project, it will be possible to use the digital platform that we are developing to create additional lessons for other Key Concepts.



### **Teaching strategies**

We undertook an overview of systematic reviews of the effects of teaching strategies to inform decisions about which teaching strategies to use in the lessons. We first conducted a mapping review that includes 238 systematic reviews published between 2000 and 2019. We then prepared summaries of 37 teaching strategies that we judged to be most relevant. Based on the findings of those systematic reviews together with findings from feedback on the

initial prototypes we tested, we are now deciding which teaching strategies to use in the lessons.

#### **Learning resources**



We have tested prototypes for six lessons. For these prototypes we quickly collected feedback and, for some of the lessons, made changes before collecting additional feedback. Due to the pandemic, most of the feedback had to be collected outside of schools (because of school closures). This meant that the prototypes were being used differently than they are likely to be used when schools are open.

We collected feedback from 45 students and 18 teachers, based on 30 interviews, 12 focus groups, and three pilots. There were over 600 findings, including 176 problems, 220 positive comments, and 224 suggestions. The overall response to the content was positive, but we found some major changes were needed, in addition to shortening the length of the lessons and limiting the number of lessons.

We plan to have a set of 10 lessons ready to pilot test by July and a final version of the resources ready to evaluate in randomised trials by April 2022.

**Contacts**: Sarah Rosenbaum and Andy Oxman

# Podcasts for parents



#### Translations and contextualisation

The original podcast of eight episodes introducing nine IHC Key Concepts, developed for Ugandan parents of primary school children, is available here in <a href="English">English</a> and <a href="Luganda">Luganda</a>.

A USA-based researcher created and evaluated a series of seven <u>podcasts for</u> <u>parents in the USA</u>, also based on IHC Key Concepts. See description of the USA podcasts on page 26.

**Contacts:** Daniel Semakula and Vanesa Ringle

# Key Concepts & Claim evaluation tools



The Informed Health Choices (IHC) <u>Key</u> <u>Concepts</u> are principles for evaluating the trustworthiness of treatment claims, comparisons, and choices. The most recent update of the IHC Key Concepts was in 2019 and can be found here: <u>Key Concepts 2019</u>. If you have suggestions for improvements, please send them to <u>Andy Oxman</u>.



The <u>Claim Evaluation Tools</u> item bank now includes four multiple-choice questions for each of the 49 Key Concepts in the 2019 update. The multiple-choice questions can be used to produce tests or questionnaires for use in schools, randomised trials, or surveys.

Questions have been translated to Chinese, English, German, Luganda, Norwegian, and Spanish. More information about translating questions and preparing a test or questionnaire can be found in the Manual for preparing a test or questionnaire based on the Claim Evaluation Tools item bank.

#### Claim Evaluation Tools- what is new?

#### Name change

Some of you may have noticed the small name change of the Claim Evaluations tools from "database" to "item bank". The reason for this change was the realization that although it was our original ambition to create an electronic database of the multiple-choice questions (MCQs), we never found a practical or useful way to do it. Therefore, we decided to change the name to the more precise description "item bank". An item bank is a repository of test items that can form the base of creating paperand-pencil test or computer assisted testing.

# What is the Claim Evaluation Tools item bank?



The Claim Evaluation Tools item bank includes a battery of multiplechoice items, each addressing one Key Concept specifically



Each question begins with a scenario which is intended to be relevant across contexts, and which can be used for children (from age 10 and above), adult members of the public and health professionals



It is a flexible resource from which researchers, teachers and others can design measurement instruments to meet their own requirements

Evolving with the Key Concepts list

In 2020, the item bank underwent a massive update. The ordering of the MCQs was revised mirroring the last changes to the Key Concepts list. We also added 72 new MCQs (corresponding to 18 new Key Concepts). MCQs corresponding to other existing Key Concepts was not changed. The 2020-version of the item bank replaces all other versions. Translations to other languages should be reordered so that the each MCQs unique identity matches with the English 2020-version.

#### New projects for 2021

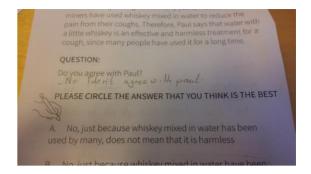
The Claim Evaluation Tools item bank continue to attract educators and researchers who are interested in assessing peoples' ability to evaluate treatment claims. Of the more exciting projects for 2021 is a study of nutrition students in Latin American countries led by Mexico-based Nancy Guadalupe Valenzuela Rubio.

In the CHOICE-project, the PhD- candidates are planning for a new outcome measure for use in the randomized trial. The development of this outcome measure will follow the same steps as was done in the original Uganda study. The first step has already taken place and included an initial prioritization of Key Concepts to be targeted in the educational intervention informed by

stakeholders in Rwanda, Uganda and Kenya. Addressing these Key Concepts, a selection of MCQs will be made to create a first draft questionnaire. The PhD-candidates will then conduct cognitive interviews, pilot testing and Rasch analysis evaluating this questionnaire.

Cognitive interviewing is a qualitative data collection method where members of the target group are invited to give feedback on the questions. Cognitive interviews can provide important information about potential barriers to responding to a test, such as comprehension and acceptability of terminology, instructions and format. Addressing these problems may prevent measurement bias.

In the pilot test, the first draft of the outcome measure is administrated to a small sample similar to those who will take part in the randomized study, for example a class of children. Through observation and by going through each test afterwards, we look for how the respondents have understood the format, but also an indication of missing responses and estimated time of completion. Based on these findings, revisions of the outcome measure may be necessary. When the Claim Evaluation Tools was first developed as part of the first randomized studies in Uganda, Allen Nsangi and Daniel Semakula identified important information that led to redesign of the format of the questions.



In the final step of the development of the outcome measure we test for the validity and reliability of the questionnaire as intended used in the randomized study. For this purpose, a large sample is needed, and the PhD-candidates will be recruiting children in each of their context. The results will be analyzed using Rasch-analysis providing information about each individual MCQ as well as the robustness of the entire questionnaire.

Contacts: Astrid Dahlgren and Andy Oxman

# Establishing a foundation for improved public judgement of treatment claims

Over the fifty years since I started to learn how to become a health services researcher, no work has given me greater satisfaction than my involvement in the Informed Health Choices Project. I am very grateful to have been invited to contribute to IHC. mainly by working with Andy Oxman and Astrid Dahlgren to identify the Key Concepts needed to inform the development of teaching/learning materials for primary school children. The Key Concepts seem likely to be just as relevant in developing learning materials for secondary school students as they were for primary school children. Indeed, based on conclusions reached by contributors to a multidisciplinary meeting in Oxford in 2018, the IHC Key Concepts are probably relevant to assessing the trustworthiness of claims about the effects of interventions used in many different fields (1).

The need to establish a foundation for improved public judgements of treatment claims has been highlighted by the covid-19 pandemic. Treatment claims have often been made by professional researchers, clinicians and commentators who appear to be less able to make trustworthy assessments than Ugandan primary school children.

Most of the claims that have been made about purported treatments for covid-19 have suggested that they are either effective or useless. Only a few have been declared dangerous. My work during 2020 has focused on claims that 'under-treatment' of cytological (cell) abnormalities of the cervix (neck of the womb) during the 1960s and 1970s led to avoidable cancers and deaths. Is this true? During the 1960s. gynaecologists working at the National Women's Hospital in Auckland, New Zealand, became concerned about 'overdiagnosis' and 'overtreatment' of cytological abnormalities of the cervix. These abnormalities were often managed at that time using hysterectomy (removal of the womb), a choice of management that abolished the prospects of the women tested being able to have children. This was particularly tragic for those who had no family. Recognition of this harmful 'overtreatment' led to greater use of less radical management - targeted local sampling (biopsy) of the cervix with regular follow-up checks.



A couple of decades later, some researchers at the National Women's Hospital reviewed the case notes of women who had had cytological abnormalities of the cervix diagnosed during the 1960s and 1970s. In some, the abnormalities did not recur after treatment; in others they recurred despite treatment. Four years after these findings were published, two investigative journalists alleged in a widely read magazine (Metro) that the fertilityconserving management introduced at the National Women's Hospital during the 1960s and early 1970s had been an 'unfortunate experiment', which had resulted in unspecified numbers of avoidable cancers and deaths. These allegations ignited a national scandal. Within two weeks the government had established an Inquiry chaired by judge Cynthia Cartwright, and this Inquiry reported after six months.

The Inquiry used sloppy review methods and failed to provide evidence to justify its very damning conclusions. Opinions about the quality of the Inquiry remain divided, and those who have challenged the Inquiry's methods and conclusions have been vilified and associated with Nazis by the principal epidemiological advisor to the Inquiry. Because all the debate about the validity of the Cartwright Inquiry has occurred within New Zealand, I was delighted when the coeditors-in-chief of the Journal of Clinical Epidemiology agreed to publish papers exposing the deficiencies and damaging effects of the Inquiry. Much of my time during 2020 was taken up responding to this welcome invitation (2, 3). If only Judge Cartwright and her epidemiological adviser had been introduced to the IHC Key Concepts as schoolgirls the Inquiry might have served the public interest more effectively.

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(2) Chalmers I. The 'unfortunate experiment' that was not, and the indebtedness of women and children to Herbert ('Herb') Green (1916-2001). Journal of Clinical Epidemiology 2020; 122:A13-A19.

https://doi.org/10.1016/j.jclinepi.2020.04.007

(3) Chalmers I. Response to comments by defenders of the inquiry into the management of cervical carcinoma in situ in National Women's Hospital, New Zealand, in the 1960s and early 1970s. Journal of Clinical Epidemiology 2020; 127:241-243.

https://doi.org/10.1016/j.jclinepi.2020.09.011

**Contact**: Iain Chalmers



# Reflecting on our experiences of working across fields to develop a common framework for informed choices

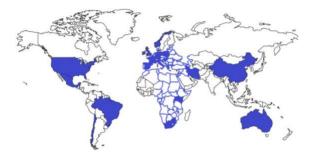
In late 2018 the Informed Health Choices team convened a cross-field forum of 24 people from 14 fields to develop a generic framework of key concepts for thinking critically about claims, research, and choices about interventions. The resulting framework and its publication in Nature have already been shared in previous newsletters. Over the last year, we have been looking back at the process of that cross-field engagement and reflecting on how consensus was reached on the generic framework.

We identified three key lessons about cross-field working: 1) There was much agreement, despite diversity of views and experiences. 2) The applications of our work were broader than we could have imagined. 3) We identified a wide range of problems that we have in common when making informed choices.

Our experiences of working together to develop the framework and lessons for others who may be involved in similar cross-field initiatives have been pulled together into a paper and submitted for publication – we will update you once published.

Contact: Ruth Steward

# IHC around the world



## **Australia**

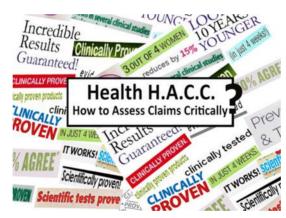
# A randomised trial in Australian high schools – continued

Under the guidance of Professors Tammy Hoffmann and Chris Del Mar, from the Institute for Evidence-Based Healthcare, we are working on an IHC project in Australia.

Our project involves a cluster-randomised trial within Australian high schools (grades 7 – 9) to assess the effects of an educational intervention designed to improve students' ability to identify and critically assess health claims in the media.

We were planning to begin our recruitment at the start of 2020, however, like many research projects around the globe, the commencement of our trial was delayed due COVID-19 lockdowns and school closures. Despite these challenges, we managed to recruit around half of our target sample size towards the end of last year. We are currently in the process of reaching out to more schools, and advertising the study via relevant platforms, attempting to reach our full target sample size. We have every intention to finish recruitment and begin reviewing the data this year, however, this will be dependent on what happens locally with COVID-19. We will keep our fingers crossed!

#### Contact: Leila Cusack



## Can we empower parents and nonresearch staff to be well-informed partners in perinatal trials?

The Neonatal and Perinatal Trials Group at the NHMRC Clinical Trials Centre, Sydney, and our partners at Miracle Babies Foundation – a national support and advocacy group for parents of babies in neonatal units - want to explore whether an effective online teaching module can be developed to teach parents and nonresearch staff key concepts needed to evaluate the trustworthiness of treatment claims, comparisons and choices, and to test their understanding of those concepts using multiple choice questions from the Claim Evaluation Tools database, in collaboration with the IHC Network. We plan to contact Leila Cusack and her colleagues at Bond University to discuss this further, as the proposal has been largely inspired by their exciting project in schools in Queensland.

We hope to seek funds for a PhD student to adapt such a teaching module from existing resources and then design a digital trial to answer the question: Among 1,000 volunteer parents and non-research staff in neonatal units and antenatal clinics in Australia and overseas (Participants) can access for ~4 hours over 4 weeks to an online, self-administered teaching module (Intervention) versus no access

(*Comparator*) increase the between-group difference in change from pre-to post-intervention in the mean test score (*Outcome*)?

Why do all this? We think there is a hunger among parents, former neonatal patients, and non-academic clinical staff to understand more about trials so that they can help raise awareness of their benefits and take an active role at every stage.

Melinda Cruz, co-founder of Miracle Babies Foundation, says she looks forward to the day when one of the first questions parents in antenatal clinics and neonatal units ask their doctors and nurses is "Are there any trials that we and our baby can join?"

Thinking further – a major achievement of WHO and UNICEF has been to promote the concept of "Baby Friendly Hospitals", which has substantially improved support for breastfeeding mothers throughout the world. Maybe people could have their success in passing the online test that came out of this work recognised with a "Research Friendly Certificate" and maybe parent groups, neonatal units, antenatal clinics, and even classes or schools, could be given bronze, silver, or gold "Research Friendly Awards" if say 20%, 40%, or 60% of their members pass the test.

By the way, the term "Research Friendly Hospitals" was first coined in an article

which Dominic Wilkinson, Iain Chalmers, Melinda, and William published in 2015, called "Dealing with the unknown: reducing the proportion of unvalidated treatments offered to children" by Wilkinson D, et al. Arch Dis Child Fetal Neonatal Ed 2015; 100: F189-F189.

https://doi.org/10.1136/archdischild-2015-308668

By empowering parents and non-academic staff in these and other ways, we hope to help build an active, global constituency of (adapting Iain Chalmers' words) "well-informed lay people to press for the resources needed to resolve the many uncertainties which remain in protecting the health of all newborns".



**Contacts**: William Tarnow-Mordi, Angella Liu, Melinda Cruz.

# **Basque Country**



With almost a year's delay due to Covid-19 pandemic restrictions and lockdown, the Basque group has officially started the project presented last year's IHC Newsletter. We will run the project in two schools with different population sizes. One of them is in San Sebastian, a city of almost 200,000 inhabitants, and the other is Urretxu-Zumarraga, with 20,000 inhabitants about 60 km away from the capital. Our aim is to evaluate the impact and validity of this project, as well as its learning resources among our primary school children. The project started in January, and it will be underway for nine weeks in one of the schools with a total of 150 children involved. However, our second school with 250 children is still in pandemic quarantine, and we hope to have them on

board shortly. We have decided to repeat the teacher training this year, since the one-year break could create insecurity among teachers, and there might be new ones. We have already begun to receive the first evaluations from the teachers, and we see a strong acceptance of the material. The main ideas, concepts and procedures of this project have already been disseminated through the mass media.



URRETXU - The Gainzuri school in Urretxu and Zumarraga is participating in the Informed Health Choices project. It is an international initiative, the main objective of which is to teach children to assess claims about treatments and to make informed deci

Contact: Marimar Ubeda

### **Brazil**

Our agenda for 2020 was tremendously impacted by the COVID-19 pandemic. We finished the translation of the IHC primary school resources for Brazilian Portuguese and obtained feedback from a panel of specialists from the educational and evidence-based medicine fields. However, in the face of the school closures at the beginning of the educational year (and successive openings and closings over the year), we were unable to carry out the pilot as originally planned or the context analysis in Rio de Janeiro schools.



During the past year, we have also finished a context analysis to assess potential implementation issues in three cities across

the country (in the states of Bahia, Parana, and Sao Paulo). The results revealed three primary challenges, the need to:

- Adapt our original pilot protocol for a condition of blended learning in scenarios of no Internet connection (or restricted access),
- Build teacher capability to promote the topic of the project,
- Contemplate a national crisis of misinformation in the context of unreliable claims about COVID-19 treatments spread by the Brazilian government.

To address these challenges, we have been awarded a 2-year grant from the Bahia Research Foundation (EFP\_00020436) at the end of 2020. The project will record an e-learning podcast to share the IHC Key Concepts with teachers. We will assess the impact of the podcast on the teachers' critical thinking skills, as well as their perception of using podcasts for educational purposes. The podcast teaser can be found here.

As part of the podcast project, we have already engaged a panel of teachers, professors, and educational managers in the design and implementation of the episodes. Inspired by the Norwegian initiative *Bak overskriftene*, we asked participants to search news stories and social media posts

published during the pandemic to illustrate the IHC concepts. The figure bellow depicts some of the examples provided by the panel.



In 2021 we will produce and record the educational podcast for teachers. We will also implement the pilot of the IHC primary school resources using a blended learning approach in three partner schools across the country. We also plan to conduct a context analysis in the Rio de Janeiro schools, conditional on the dynamics of the pandemic and school activities during the year.

\*Current members of our working group are: Joana Balardin, Edson Amaro and Marina Damin from Hospital Israelita Albert Einstein in São Paulo; Márcio Galvão Oliveira and Daniela Arruda Soares 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, Margine Illeana Toledo Perez and Suzana de Souza from Universidade Federal da Integração Latino-Americana

Contact: Joana Balardin

## Chile

# That's a Claim! website soon to launch Spanish version

That's a Claim! is a web platform created by the Informed Health Choices (IHC) project to promote informed decisions, based on Key Concepts. Starting with a framework from healthcare, a consensus was reached on a common framework for thinking critically about claims, comparisons (evidence), and choices, to help people make better decisions across 14 fields, including agricultural, education, environment, management, social welfare, policing, and international welfare.



The Key Concepts are the main content of this web platform, which aims to help users think critically about claims and choices about health and other types of interventions. Epistemonikos Foundation, an IHC partner and an organisation dedicated to promoting evidence-based decisions in health, joined forces with the Iberoamerican Cochrane Centre to translate the Key Concepts and the *That's a Claim* website into Spanish to make the platform available for the Spanish speaking populations around the world.

Epistemonikos' Founder and CEO, Dr Gabriel Rada, explained that "We hope to be able to launch the Spanish version of *That's a Claim* in March and thus reach the Iberoamerican audiences with this useful tool. We aim to help them assess their options more safely and accurately when it comes to making decisions about their health and lifestyle. This initiative is especially urgent for us, in these times of the pandemic, where fake news and misinformation have grown exponentially."

Rada also expressed that "The great amount of evidence production due to the pandemic also poses a challenge in the way we are able to process and use it, so it is particularly important for us to make these kinds of tools available for everyone who needs to make decisions to do so the safest way possible."

If anyone would like to be notified when the platform is launched, would like to help spread the word, or has a question or comment about this, please contact Epistemonikos' CCO <u>Javiera Sepúlveda</u>. All help and enquiries will be quite welcome!

Contact: Javiera Sepúlveda

## China

#### **Translations**

Information about Chinese translations of IHC resources can be found <a href="here">here</a>.

Contact: Jingyi Zhang



#### **Update**

In 2020, due to the outbreak of COVID-19, the progress of the IHC project has been greatly affected. However, we are still full of hope and encouragement. On the one hand, we have changed our thinking and methods of research and continued to progress this project. On the other hand, we have invited researchers and volunteers from different fields (including non-health fields) to participate in this meaningful project.



Last year, we optimized the Chinese version of primary school learning resources, including the Health Choices Book (Chinese Version), the exercise book, and the Claim questionnaires. We summarized and analyzed feedback obtained in the pilot project in 2019, improved the contextualization of primary school resources, and modified the drama script. The first phase of the IHC pilot course has been completed, but due to the COVID-19 pandemic, we are discussing how to continue teaching through online courses. and whether to add some examples and stories related to COVID-19 or other public health emergencies. When face-to-face teaching is allowed, we try to explore different teaching contexts through various activities, such as drama performance, painting, and crafts. We have shared and exchanged with other countries the challenges and experiences faced by the

project during the pandemic. We also had a poster presentation at the What Works Global Summit () 2020 to share our IHC work.

In 2021, when COVID-19 is under control, we plan to publish the electronic Chinese version of *The Health Choices Book* and publish related articles. We will continue to disseminate and implement more key concepts to help policymakers, stakeholders, and the public use evidence to inform decisions. It is not limited to health, but also social systems such as management and education.

Contacts: Xuan Yu, Jingyi Zhang, Qi Wang, Yaolong Chen

## **Croatia**



The Health Choices Book has been translated to Croatian, and is now available in both, the <u>PDF version</u> and as hard copy.



The printing of the Book matched perfectly with the timing that was planned for conducting workshops with primary school teachers. During workshops we guided

teachers through the lessons presented in the book, so they familiarised themselves with the content before enrolling in the education. The education is planned as part of a randomised trial to examine the effects of training on the ability of primary school children to assess health claims. Besides the book, other translated IHC learning resources, including posters, activity cards and the list of Key Concepts, have been printed and shared with teachers to help them while teaching in the trial.

The Croatian Ministry of Science and Education, and the Agency for Education gave their consent for the implementation of the educational activities based on the IHC resources in primary schools in Croatia, with each school involved in the randomised trial implemented the education in their curricula for the 2020/21 and the 2021/22 academic years.

The trial was approved by the Ethical Committee from the University of Split School of Medicine, with education planned to take place from March to May 2021. At the end of the education, we will test the short-term effects, and after six months longer-term effects of the education using a validated test consisting of a set of multiple-choice questions from the Claim Evaluation Tools database. Upon completion of the trial, the schools serving as controls will



also be given books, as well as all other accompanying IHC training materials.

Printing of the book has been financed by an institutional project from the University of Split Department for Health Studies. The picture above was taken during a workshop with primary school teachers in the primary school Brda in Split, where we were warmly welcomed. The idea behind the project, the education, the book, and other training materials were very well received. Teachers found it interesting and highly important for children.

Contacts: Tina Poklepovic

# French speaking countries

#### **Translations**



The following IHC resources have been translated to French and can be found here:

- The Health Choices Book
- Teachers' Guide
- Exercise Book
- Activity Cards
- Checklist Poster

Contact: Martin Vuillème

## Greece

#### **Translations**



The following IHC resources have been translated to Greek and can be found here:

- The Health Choices Book
- Exercise Book
- Activity Cards
- Checklist Poster

**Contact**: Apostolos Tsapas

## **Ireland**

#### **iHealthFacts**



# **i**Health**Facts**

In March 2020, in direct response to the COVID 19 pandemic, the Health Research Board-Trials Methodology Research Network (HRB-TMRN), Evidence Synthesis Ireland and Cochrane Ireland based at the National University of Ireland (NUI) Galway, in collaboration with Partners and Evidence Advisors, developed <a href="https://www.iHealthFacts.ie">www.iHealthFacts.ie</a>.

iHealthFacts is a resource where the public can quickly and easily check the reliability of a health claim circulated by social media.

We hope that the transparency of the methods we use to fact check claims will also help people to think critically about health claims in the future, supporting them

in making well-informed choices about their own health.

While iHealthFacts is primarily aimed at the Irish public, social media has no borders and so we find that many of the claims we address have global relevance.

So what's the process?

iHealthFacts answers health claim questions that are submitted by the public. Newly submitted health claim questions are prioritised based on:

- Their importance to the public
- Their potential for adverse harm to the public

Within each claim 'answer', we include hyperlinks to highlight the systematic reviews (preferably), individual studies and other sources we have used to inform our answers. To encourage people to think critically about health claims, we highlight key concepts that support the evaluation of the trustworthiness of claims and provide hyperlinks to the *That's a Claim* website for further learning.... that site is a fabulous resource!

The claims we have answered have been as varied as the claims that circulate on social media and while claims focusing on COVID-19 have been at the forefront this year, we also 'fact check' non COVID-19 claims.

We think iHealthFacts has an important role to play. Since our launch in April 2020, the website has had over 12,000 unique users, from 127 countries. There have been 45,000 page views, 11,000 Individual searches, with members of the public submitting almost 500 claims to be fact checked. We have answered 36 claims to date with more on going.

Going forward, we hope to interface more strongly with our health service and continue our work in supporting the public in making informed decisions about their health.

Contacts: Elaine May, Declan Devane

### The People's Trial



In the 2020 IHC Newsletter, we spoke about *The People's Trial*, an online randomised trial, created by the Health Research Board-

Trials Methodology Research Network (HRB-TMRN) and funded by the Health Research Board (Ireland).

The aim of *The People's Trial* was to help the public learn about randomised trials, to understand why they matter, and to be better equipped to think critically about health claims. We did this by inviting members of the public to get involved in the trial research process from beginning to end.

You may remember *The People's Trial* had seven phases, which paralleled the steps of a randomised trial. We asked members of the public to get involved in all phases from choosing the question the trial would answer, to conducting the trial, and finally telling us how they would like the results disseminated.

Due to the pandemic, the publication of *The People's Trial* results were delayed, but it did not stop *The People's Trial*!

The question chosen by the public for *The People's Trial* to tackle was:

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

We called this trial 'The Reading Trial'.

The Reading Trial was an online, randomised trial with two groups. We invited members of the public to take part in this trial through broad social media campaigns on Facebook, Twitter, Instagram, and YouTube. People were asked to either read a book in bed before going to sleep (the intervention group) or not read a book in bed before going to sleep (the control group). We asked everyone to do this for seven days, after which they measured their sleep quality.

Between 4th December 2019 and 30th December 2019, a total of 991 people took part in The Reading Trial. Half (496) were randomised to the intervention group and half (495) to the control group. The characteristics of people in the two groups were, on average, similar at the start of the trial.

So what did the data tell us?

After completing The Reading Trial, 156/369 (42%) people in the intervention group felt their sleep improved, compared to 112/405 (28%) of those in the control group, a difference of 14%. When we consider how certain we are of this finding, we estimate that, in The Reading Trial, sleep improved for between 8% and 22% more people in the intervention group compared to the control group.

Overall, we found that reading a book in bed before sleeping, in the manner done in this trial, improves the quality of sleep compared to not reading a book in bed before sleeping. The Reading trial adheres to CONSORT Guidelines and its success demonstrates that public involvement in the design of clinical trials does not compromise rigour, but may in fact improve public understanding and trial processes.

**Contacts**: Elaine May, Declan Devane

# Italy



#### **Translations**

The following IHC resources have been translated to Italian and can be found here:

- The Health Choices Book
- Teachers' Guide
- Exercise Book
- Activity Cards
- Checklist Poster

Contacts: Camilla Aderighi and Raffaele Rasoini

### **Update**

Most of the time, primary school children have not been reached yet by those prejudices and misconceptions that, as adults, constitute a filter through which new information is often received and



interpreted. Research has found that primary school children are able to learn the basics of critical thinking, and that adults often find it difficult to assess critically the reliability of new information.

This also applies to claims about health treatments. A survey on European health literacy found that 47% of people have insufficient or problematic literacy. If we consider Italy, this percentage rises to 54%.

People's poor ability to critically assess health claims is a well-documented source of physical, psychological, and economic harms, and the consequences of this deficiency hit harder on the most vulnerable population groups.

The current pandemic has made it even clearer how health choices based on unreliable claims can lead to harm.

In February 2019, we started the Italian translation of the IHC learning resources, with the aim of contextualizing the resources for Italian primary schools. In December 2020, an Italian publisher, "Il Pensiero Scientifico" printed without charge a limited edition of our translations of *The Health Choices Book* and of the *Exercise Book*.

From January to June 2020, we led a pilot project in two 5<sup>th</sup>-grade classes of a public primary school in Florence, Tuscany. We taught 10 lessons using the ICH learning resources to 44 children. Because of the national lockdown due to the pandemic, and the subsequent school closure, we performed the last three lessons remotely.

The aim of this pilot project was to assess the feasibility of the IHC learning resources in the Italian school curriculum.

In our opinion, this starting project was a positive experience for children and teachers (who didn't lead the lessons but gave us a lot of feedback). Results of the pilot will be reported in a paper.

In November 2020, together with the Associazione Alessandro Liberati, Cochrane affiliate centre (AssociALI-NIC), of which we

are members, we organized a webinar about the IHC experience in Italy and about future developments. School teachers and principals from all over Italy were the target of the webinar.

The link to the webinar (in Italian) is: <a href="https://associali.it/wp-content/uploads/2021/01/programma-con-link-webinar-IHC.pdf">https://associali.it/wp-content/uploads/2021/01/programma-con-link-webinar-IHC.pdf</a>.

In collaboration with AssociALI-NIC, we are now setting up an online course for primary school teachers, to train them to use the ICH learning resources. The course will be held at the beginning of the summer. So far, we have recruited teachers from three schools in different Italian regions to attend the course and to start teaching the IHC lessons during the next school year.

Our objectives are to pursue the dissemination of the IHC project in Italy and to gather data from a larger pilot study, in which trained teachers are responsible for teaching the lessons.

Another ongoing activity of our group is the Italian translation of the <u>That's a Claim</u> website.

Contacts: Camilla Aderighi and Raffaele Rasoini

## Kenya



#### **Translations**

The following IHC resources have been translated to Kiswahili and can be found here:

- The Health Choices Book
- Teachers' Guide
- Exercise Book
- Activity Cards
- Checklist Poster

#### Work in progress

Together with teams from Rwanda, Uganda and the IHC working group in Norway, we are currently developing and evaluating digital resources for lower secondary schools. See more on pages 4-6.

Contact: Margaret Kaseje

## **Mexico**



Cochrane Mexico and the Mexican Association for Nutrition and Health Research have been working under the guidance

of Dr. Astrid Dahlgren and contributions of Dr. Andy Oxman, from the Informed Health Choices. Our research project involves freshman and senior students of Nutrition from Mexico, Argentina, Chile, Colombia, Costa Rica, Ecuador, Panama, Paraguay, Peru and Venezuela.

Undergraduate health related programs represent an opportunity to integrate a number of educational resources as part of the bachelor's curricula for improving student's critical thinking about treatments.

The purpose of this study is to evaluate the ability of undergraduate students in Nutrition to assess treatment claims, using multiple-choice questions (MCQs) from the Claim Evaluation Tools item bank. In addition to providing an overview of the abilities that students develop during undergraduate school, the findings of this study can be used to inform the development of learning resources.

To our knowledge, this will be the first study to analyze strengths and opportunities to implement strategies at universities to ensure better professional practices, which translated into better nutrition outcomes that could contribute to the achievement of Sustainable Development Goals. Also, the international participation would strengthen the promotion of evidence-based practice in dietitians of Latin America.



#### What have we done in the past months?

We have translated the MCQs from the Claim Evaluation Tools item bank to Spanish and created a test including 29 MCQs covering 11 Key Concepts. The Key Concepts that we included were selected by an international consensus between dietitians from Mexico, Canada, Chile, Puerto Rico, Panama and Paraguay.

We developed a protocol for the research project "Mapping the ability to assess treatment claims of undergraduate students of Nutrition in countries of Latin America". We invited countries of Latin-America to collaborate in this research project, ten countries accepted to participate, we will be working together in this project.

We designed a questionnaire online and we invited Mexican schools to participate in the project and more than 90 schools have accepted to participate.

Contact: Nancy Guadalupe Valenzuela Rubio

# **Norway**

#### **Translations**

The following IHC resources have been translated to Norwegian and can be found here:

- The Health Choices Book
- That's a Claim! poster



Contact: Sarah Rosenbaum

# Bak overskriftene ("Behind the Headlines")

Since the last newsletter, there have been several developments in the *Bak overskriftene* project at Oslo Metropolitan University (OsloMet), wherein we use health claims in the media to help higher-education students master IHC Key Concepts. First, in November 2020, we wrote about the project in BMJ Evidence-Based Medicine.



In the article, we describe the development of the intervention, initial pilots, and implementation in an introductory course on evidence-based practice, mandatory for all health sciences bachelor students at the university—about 1600 per year!

As of writing this, the first 500 or so students have completed the course, coming from three programmes: bioengineering, physiotherapy, and social education ("vernepleie"). We have conducted focus group discussions with students from each programme. Feedback about the *Bak overskriftene* component of the course has been overwhelmingly positive.

"I really like that it brings the [course] down to earth" (Social education student)

"[Bak overskriftene] made it easier to tie the whole course to daily life [...] and we are going to get questions from patients who have read this or that news report."

(Physiotherapy student)

"[The course] would have been worse with a very long research paper right away."

(Physiotherapy student)

Also, in 2020 we received funding for two *Bak overskriftene*-related projects at OsloMet. The first is to develop a quiz module as part of a "serious game" offered all first-year students, not just those in the health sciences. The second is a PhD project that aims to explore the health claims that Norwegian health science students are exposed to via social media and to assess their ability to appraise such claims and to map their health literacy.

Finally, in 2021 the leadership at the Faculty of Health Sciences at OsloMet picked *Bak overskriftene* as a flagship project to be promoted in a physical space on the Pilestredet Campus. We have established a working group to answer this exciting challenge.

For more information about *Bak* overskriftene, in English, visit our website or contact the project leader, Marianne Molin.

Contact: Marianne Molin

## **Rwanda**



The following IHC resources have been translated to Kinyarwanda and can be found here:

- The Health Choices Book
- Teachers' Guide
- Exercise Book
- Activity Cards
- <u>Checklist Poster</u>

### Work in progress

Together with teams from Kenya, Uganda and the IHC working group in Norway, we are currently developing and evaluating digital resources for lower secondary schools. See more on pages 4-6.

**Contact**: Michael Mugisha

## **Spain**

#### **Translations**

The following IHC resources have been translated to Spanish and can be found <a href="here">here</a>:

- The Health Choices Book
- Teachers' Guide
- Exercise Book
- Activity Cards
- Checklist Poster
- IHC Key Concepts (2018)



Contact: Laura Martínez García

#### **Update**

In 2017 we started our collaboration with the IHC Team. 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 2020?

- We published the research protocol titled "Learning to make informed health choices: Protocol for a pilot study in schools in Barcelona" in F1000Research.
- We contributed to the systematic review
   "Comparison of the Informed Health
   Choices Key Concepts Framework to
   other frameworks relevant to teaching
   and learning how to think critically about
   health claims and choices: a systematic
   review", published in F1000Research.
- We submitted the research protocol "Teaching and learning how to make informed health choices: Protocol for a context analysis in Spanish primary schools" to PLOS One.
- We conducted several dissemination activities:
  - We translated, with the help of the Epistemonikos team, the <u>That's a Claim</u> website - <u>Health</u> into Spanish.
  - We presented a poster titled "<u>Learning</u> to make informed health choices:
     <u>Protocol for a pilot study in schools in Barcelona</u>" at the Spanish Society of

Family and Community Medicine Conference.

- We were interviewed in the in the Spanish Organisation of Consumers and Users journal (Figure 1).

Figure 1. Interview in Spanish Organisation of Consumers and Users journal



#### 2. What are we up to right now?

Our work (and lives) has been disrupted and impacted by the COVID-19 pandemic. However, we continue working to achieve our IHC goals.

- We are conducting the pilot study with 4th and 5th-year primary school students from two schools in Barcelona:
  - During the school year 2019-2020, we finished the intervention in one school (Escola Sant Martí, Barcelona).
     Fifty-one students (10 to 11-yearsold) and two teachers participated (Figure 2).

Figure 2. Students and teachers from Escola Sant Martí (Barcelona)



- During the school year 2020-2021, we will implement the intervention in another school (Escola Virolai, Barcelona). We estimate that approximately fifty students (9 to 11-years- old) and two teachers will participate.
- We plan to publish the results of the pilot study at the end of 2021.

- We are conducting a context analysis in Spanish primary schools.
  - Currently we are identifying and assessing Spanish educational resources (state and autonomous communities' curricula, school educational projects, textbooks, and other relevant documents) to describe the content related to critical thinking about health.
  - We will also conduct semi-structured interviews with key education and health stakeholders (education and health policy makers, developers of learning resources, developers of health promotion and educational interventions, head teachers, teachers, families, and paediatric primary care providers) to explore their experiences and perspectives regarding teaching and learning critical thinking about health in Spanish primary schools.
  - We plan to publish the results of the context analysis at the end of 2021.
- We are collaborating with the IHC CHOICE team on "The effects of teaching strategies on learning to think critically in primary and secondary schools: overview of systematic reviews".

#### 3. What are our plans?

- Right now, our focus is to finalise the pilot study and the context analysis.
   Based on the results, we will formulate recommendations—for both practice and research purposes—on how to use, adapt (if needed), and implement the IHC resources in Spanish primary schools.
- We also plan to validate the Claim Evaluation Tools in the Spanish context and evaluate our students' ability to assess claims about treatments.



**Contacts**: Laura Martínez García, Laura Samsó Jofra, Pablo Alonso Coello

# Uganda

#### **Translations**

The IHC podcast for parents "The Health Choices program" has been produced in Luganda. See podcast playlist on Youtube.

#### Two PhD degrees

In December 2020, Allen Nsangi and Daniel Semakula held trial lectures and defended their doctoral theses at the University of Oslo, Norway. Both were awarded the degree of PhD (Philosophiae Doctor).

Semakula thesis title: "Improving critical thinking about treatment claims, evidence and choices. Development and evaluation of an intervention to improve the ability of parents of primary school children in Uganda to critically appraise the trustworthiness of claims about treatment effects and make informed health choices".

Nsangi thesis title: "An educational intervention to enable children to assess claims about the benefits and harms of treatments".

#### Work in progress

Together with teams from Kenya, Rwanda and the IHC working group in Norway, We are currently developing and evaluating digital resources for lower secondary schools. See more on pages 4-6.

Contact: Nelson Sewankambo

## **USA**

# Developing and testing the effects of an educational podcast to improve critical appraisal of healthcare claims

In this project, I conducted two studies. In study 1, I assessed current levels of critical appraisal in U.S. parents and undergraduates to determine need for a critical appraisal intervention. Parents and undergraduate students demonstrated poor critical appraisal abilities, but parents struggled more, thus establishing a need for educational strategies targeting those abilities. In study 2, I developed and user-tested an educational podcast to meet that need and tested its efficacy in an online randomized trial, where 250 parents were randomly assigned to listen to an experimental critical appraisal podcast (n=128) or a control podcast (n=122). The experimental podcast, called the *Parents* Making Informed Health Choices Podcast, covered nine evidence-based practice (EBP) principles, and included physical

and mental healthcare claims. I found that, relative to the control podcast, listening to the *Parents Making Informed Health Choices Podcast* improved parent critical appraisal of healthcare claims and had a positive effect on intended behaviors, EBP attitudes, and treatment preferences. I also found several correlates of critical appraisal, including behavioral intention, attitudes, and treatment preferences. Findings provide initial support for the efficacy of a brief podcast intervention to improve U.S. parents' critical appraisal of healthcare claims. I am currently working on the manuscripts for these studies.

The *Parents Making Informed Health Choices Podcast* can be found here:
<a href="https://soundcloud.com/pmihcpodcast">https://soundcloud.com/pmihcpodcast</a>



Contact: Vanesa Mora Ringle

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# Drs Connie Compare and Francis Fair

Connie and Francis are general practitioners and professors. They teach and research informed health decision-making. They are main characters in The Health Choices Book.

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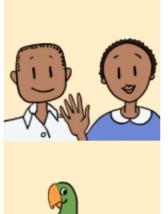
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John and Julie

John and Julie are primary school pupils and siblings. They are main characters in The Health Choices Book.

#### Kasuku (FKA Prattle)

Kasuku is a troublemaker! Kasuku repeats claims about treatment effects without thinking carefully.

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