# Newsletter

May 2024



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#### Front page drawing: Melkeveien.

The image is from the new Key Concepts section of the IHC website where we have published one page for each Key Concept. Each page includes a plain language presentation of the concept, links to an in-depth description, references, and relevant educational resources.

# The IHC Network



Increasingly, we are exposed to too much information – including a lot of misinformation - about the effects of things we can do to maintain or improve our health (health actions). The aim of the IHC Network is to help people decide what to believe and what to do by learning to think critically.

We want to help people, especially children and young people, learn to think critically about health actions – and other types of actions (e.g., to conserve or improve our environment). The network is developing, evaluating, and contextualising educational resources to enable people to think critically about health actions – and other types of actions – and to make informed choices. We are an informal, international, multidisciplinary group, and anyone can join. This newsletter is published annually and includes updates of activities around the world. Activities of the network include:

- Undertaking <u>context analyses</u> to explore factors that can impact on the use and implementation of learning resources
- <u>Translating</u> and <u>contextualising</u> 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 Concepts</u>, translating the concepts, <u>prioritising</u> <u>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
- <u>Assessing the ability of populations</u> to assess claims about effects and make informed choices
- Undertaking relevant systematic reviews

See our website for more information, including:

- Educational resources
- <u>Research publications</u>

### A meeting in Prague

### Are you attending the <u>Global Evidence</u> <u>Summit</u> 2024?

The Summit will be in Prague, Czech Republic 10-13 September. We plan to organize a faceto-face meeting there with people in the IHC Network. If you are interested in joining us, please send us an email: <u>heather.munthekaas@fhi.no</u>.

Contact: Heather Munthe-Kaas

# Launch of the new IHC website

The new website (informedhealthchoices.org) went live in November. In addition to having a new look, it is better organised, and we have updated the content. Links to pages in languages other than English or for different countries can be found above the top ribbon with drop down menus for quick access to the content.



Douglas Badenoch and his team at Minervation implemented the new design and they have done a great job.

The <u>Key Concepts pages</u> on the new website include a page for each concept with a brief explanation and an example in plain language (written by Jenny Moberg), illustrations (by Melkeveien), definitions of terms that might be new to people, and links to the basis for the concept (from the 2022 version of the IHC Key Concepts) and educational resources for the concept.

#### Messages that ignore harms



### Webinar 17 June 2024

A webinar is planned for 17 June 2024 at 14:00 CEST to introduce and discuss the new website and the Be Smart about your Health secondary school resources (<u>besmarthealth.org</u>) + interest in translating and adapting the resources. Please <u>register</u> before 14 June.

Contact: Sarah Rosenbaum

# Secondary school resources

In 2018 we began the IHC secondary school project to develop and evaluate learning resources for young people in East Africa. Funding from the Research Council of Norway for the IHC secondary school project ended in January 2024. The one-year follow-up data have been collected and analysed and we are preparing reports of those results.

As reported in last year's newsletter, the IHC secondary school intervention had a large effect on students' and teachers' ability to think critically about treatment claims. The intervention consisted of a teacher training workshop and 10 lessons using the <u>Be Smart</u> <u>about your Health resources</u>. The primary outcome was a passing score on the Critical Thinking about Health (CTH) test. A total of 11,325 students participated in the three trials in Kenya, Rwanda, and Uganda. Overall, 33% more students in the intervention schools had a passing score (95% CI: 29–38%) compared to students in control schools. However, 42% of students in the intervention schools did not achieve a passing score.



### **One-year follow-up**

We measured the same outcomes measured at the end of the school term when the lessons were delivered one year later, using the CTH test. Follow-up data were collected for 8298 (73%) of the students. After one year, 26% more students in the intervention schools had a passing score (95% CI: 21-30%), and 53% of students in the intervention schools had a passing score. Retention of what was learned (the proportion of students in intervention schools with a passing score after one year relative to the proportion just after the

intervention) was 97%. This suggests that the effect of the intervention persisted for at least one year for most of the students with a passing score. However, based on the point estimates, the effect appears to have diminished, and we are less certain about the effects after one due to missing data (27% loss to follow-up).

### **Process evaluations**

We conducted a process evaluation alongside the trial in each country. We found factors that may have facilitated implementing the intervention and could facilitate scaling it up included the teacher training workshop, completing all the lessons, the design of the

> "I heard that drinking lots of water helps you lose weight."



resources, the perceived value of the lessons, and administrative support. Three major factors impeded implementation of the intervention and are potential barriers to scaling it up: inadequate time, the lessons not being in the curriculum or national examinations, and a lack of printed materials for students. Perceived benefits of the intervention included students and teachers. understanding the concepts and using them in their daily lives. Other potential benefits included students being more confident, thoughtful, open minded, and interested in STEM subjects and health professions. Potential adverse effects included conflicts with parents and other students. misunderstanding the lessons, and misapplying what was learned.

### **Adverse effects**

As noted in previous IHC Newsletters, researchers rarely evaluate potential adverse effects of educational interventions. In our overview of systematic reviews of teaching strategies, we found that only 3 of the 326 included reviews mentioned adverse effects. In a meta-epidemiologic study of evaluations of interventions intended to improve laypeople's critical thinking about health choices, we found that 1 of 29 reports included a quantitative evaluation of an adverse effect (an increase in unnecessary pressure). Four reports referenced a qualitative evaluation of potential adverse effects and some participants said they had experienced adverse effects in those reports.

A potential adverse effect of educational interventions is causing or increasing inequity. The results of the trials suggest that the IHC secondary school intervention did this to some extent. As noted above, 42% of students in the intervention schools did not achieve a passing score. Low-performing students did not benefit as much from the intervention as high performing students, and girls did not benefit as much as boys.

Other potential adverse effects reported by students and teachers in the intervention schools, include wasted time, conflict due to students challenging the beliefs of others, decision-making harms due to misunderstandings, and stress caused by the lessons.

### **Pending results**

The results of a qualitative evidence synthesis of findings from the three process evaluations regarding potential adverse effects are pending. In the one-year follow-up, we asked students in both intervention and control schools to recall a claim about the effects of a health action. For each claim we asked eight questions to assess their ability to identify and assess the claims and decide what to do. We have not yet analysed these data. Finally, the

three East African PhD fellows (Faith Chesire, Michael Mugisha, and Ronald Ssenyonga have submitted their theses to the University of Oslo. Michael's thesis defence is scheduled for June 3<sup>rd</sup> and Faith's is scheduled for August 22<sup>nd</sup>. By this time next year, we anticipate (or at least we hope) all the research from this project will be published and all four PhD theses will have been successfully defended!

### What have we learned?

There are substantial barriers to adult education generally and to fostering critical thinking in adults. Teaching children and young people to think critically about interventions may be more promising than teaching adults. We have shown that it is possible to teach adolescents to think critically about health in settings with minimal access to ICT and printed materials. However, there also are barriers to teaching children and young people. Most importantly, school curricula tend to be overpacked and it is difficult to introduce anything new. In addition, the benefits of a one-off intervention (in a single school term) are limited. Ideally, children should start learning to think critically as young as possible (in daycare, as suggested elsewhere in this newsletter) and lessons should progress throughout their education, reinforcing concepts, skills, and

dispositions that were learned and introducing new ones.

# Translation and adaptation of the Be Smart about your Health resources

If you are potentially interested in translating or adapting the Be Smart about your Health resources, please send a message to Sarah Rosenbaum. We are currently exploring ways to facilitate publishing translations/ adaptations. We are also exploring expanding the functionality of the Be Smart digital platform so that it can be used by the whole network for developing and publishing IHCrelated interactive resources in any language. Knowing how much potential interest there is will help us decide what to do. Please let Sarah Rosenbaum know if this is of potential interest - and if possible, register for the webinar where we will discuss this and the new IHC webiste. (See Webinar 17 June 2024).

Links to Be Smart about your Health and to publications of this research can be found on the IHC website:

https://www.informedhealthchoices.org/reso urce/secondary-school-resources/.

**Contacts**: Andy Oxman, Faith Chesire, Matt Oxman, Michael Mugisha, Ronald Ssenyonga, and Sarah Rosenbaum

## The primary school resources – translating and piloting



A report of the development and evaluation of the IHC primary school resources can be found <u>here</u>. Translations of the resources are available on the <u>IHC website</u> in the following languages, in addition to English: Brazilian Portuguese, Catalan, Croatian, French, Greek, Italian, Kinyarwanda, Kiswahili, Norwegian, Persian, and Spanish.

In 2023 and 2024 researchers in Spain and Norway have translated and piloted the primary school resources. Also, a publication of an Italian pilot from 2021-22 is underway. If you are interested in translating and adapting the resources to your context, contact us at <u>sarah@rosenbaum@fhi.no</u> for support and guidance.

spañol Norsk Ikinyarwanda 简体中文 Kiswahili Français Italiano Е᠕ӆѵıкά Hrvatski Euskara



#### Guides

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

- <u>Guide for translating the IHC school</u> resources
- <u>Guide for piloting the IHC school resources</u>
- <u>Resource production guide</u>

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

Contact: Sarah Rosenbaum

Teaching critical thinking about health: impacts and implications

On 25 April, 3ie hosted a webinar on Teaching critical thinking about health: impacts and implications. A recording of the webinar can be found here:

https://3ieimpact.org/events/conferences/te aching-critical-thinking-about-health-impactsand-implications.

Critical thinking is clear, reasonable, reflective thinking focused on deciding what to believe or do. Misinformed choices can be harmful and wasteful for everyone, including patients, health professionals, citizens, and policymakers. There is an overwhelming amount of information about what is good or bad for our health, and it is difficult for people to know what to believe.

In this 3ie Evidence Dialogues webinar, panelists discussed the results of impact evaluations of an educational intervention to improve secondary students' ability to think critically about health in Kenya, Rwanda, and Uganda. We presented the results of the randomized trials and process evaluations, a panel of policymakers discussed implications and lessons learned from this research, and we discussed the importance of critical thinking for international development in and beyond healthcare.



### Fostering critical thinking in daycare children

Critical thinking skills can be developed early in life, and daycare can potentially help to foster those skills. We have started exploring possibilities of developing books that can be used to help daycare children to think critically about claims and choices. Robert Munch is a model for us.

Munch is a Canadian author who wrote some of our favourite children's books. Some key elements of his approach include childcentred themes, humour and playfulness, inclusivity and diversity, simple and direct language, illustrations that bring his stories to



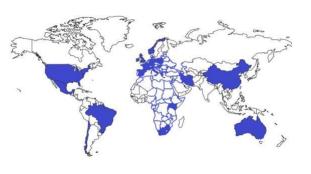
life, and interaction with children. He often tested his stories on children, gathered feedback, and observed their reactions to refine his stories – a lot like a human-centred design approach.

We also are getting help from AI to generate and refine text and to create illustrations (with mixed results). So far, we have gotten feedback on three iterations of our first attempt at storytelling that fosters critical thinking (also with mixed results). We have managed to engage our audience, but we also have lost them before getting to the end of the story. Some of what we have learned so far is that we need to simplify more, we need to use more humour, and the illustrations are important. Unlike Munch, we are incorporating questions in the stories to make them interactive.

We're just getting started and we have a long way to go, but it is a lot of fun.

Contact: Heather Munthe-Kaas, Andy Oxman

# IHC network activity around the world



### 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. With this purpose, the IHC-Barcelona team is leading the following initiatives:

### Pilot study in primary schools

Recently we have published the study "Piloting the Informed Health Choices resources in Barcelona primary schools: A mixed methods study" in PLOS One (https://doi.org/10.1371/journal.pone.02880 82).

# Systematic assessment of educational documents and resources

We continue to work on a systematic assessment of educational documents and resources to explore how critical thinking about health is taught in Spanish primary schools.

# Development and validation of the interactive CLAIM Test

We continue to work on the interactive CLAIM Test, an <u>online interactive test in Spanish</u> with questions from the Claim Evaluation Tools item bank.

# Translation and production of IHC resources: the Catalan version

The IHC resources are now available in <u>Catalan</u>.

### Promoting critical Thinking and informed decision-making on Sexual and Reproductive Health among adolescents: the ThinkSaRH Project

We have recently applied for a grant to promote critical thinking about Sexual and Reproductive Health (SaRH) information for making well-informed health decisions among adolescents (between 12 and 18 years old) within the IHC framework. If granted, the project will: 1) explore the interests and needs of adolescents when assessing SaRH information and making health decisions, 2) determine which key concepts are most relevant for adolescents to understand and apply when assessing SaRH information and making health decisions, and 3) develop a digital learning-resource for adolescents to support critical thinking and decision-making on SaRH

Contact; Laura Samsó Jofra, Pablo Alonso-Coello

## Brazil

Mapping the Brazilian National Secondary School Curriculum to the Informed Health Choices (IHC) Key Concepts for evaluating the trustworthiness of claims about treatment effects. In 2023, we finished our project on the contextualization of IHC primary school resources for Brazilian Portuguese. Results from our context analysis, the translation and adaptation report as well as the findings of a pilot study, carried out in a 6th-grade class at a public school in Vitoria da Conquista, Bahia, were published as part of a Master's dissertation. The pilot study was partially supported by the Bahia Research Foundation.

In Brazil, 92% of individuals aged 15 to 17 attend secondary school. Among them, approximately 88% attend state schools rather than private ones. Currently, we are working on mapping the Brazilian National Secondary School Curriculum to assess whether and to what extent the IHC key concepts are incorporated into any form of teaching material. This involves reviewing textbooks freely distributed by the Brazilian National Program for Textbooks and Educational Materials, focusing on Natural Sciences and their Technologies (Biology, Physics, and Chemistry). Additionally, we are translating existing IHC secondary school resources into Brazilian Portuguese, while also conducting contextual analysis of the resources used in these state schools and mapping relevant content to the IHC key concepts.

Next steps may include the design of a feasibility trial to assess the effects of the IHC resources on the ability of Brazilian secondary school students to think critically about health claims and choices.

\*Current members of our working group are: Ana Paula Pires dos Santos and Jéssica Vieira from Universidade do Estado do Rio de Janeiro; Paulo Nadanovsky from Fundação Oswaldo Cruz and Universidade do Estado do Rio de Janeiro; 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; Fernando Kenji Nampo from Universidade Federal da Integração Latino-Americana; David Nunan from University of Oxford.

#### Contact: Ana Paula Pires dos Santos



# Italy

The Informed Health Choices (IHC) learning resources have been included among the content proposals of a call initiative from the Italian Medicines Agency (AIFA), aimed at providing citizens and pharmacists with unbiased drug information. The goal is to educate primary and lower secondary school students on how to assess health claims about treatments and make informed health choices. So far, three Italian regions (Emilia-Romagna, Umbria, and Liguria) are interested in this project, and we are awaiting further operational developments.

We have analysed the results of the second IHC resources contextualization in Italian schools, which took place in 2021-2022, and we're writing a research article. Study protocol can be read <u>here</u>. Unlike our first pilot experience (2019-2020), which focused on a single primary school in Florence, this second experience (2021-2022) involved both primary and lower secondary schools, including multiple schools located in the North, Central, and South of Italy.

Data analysis indicates that school restrictions such as distancing measures, intermittent closures, and shifts to remote learning due to Covid-19 have posed limitations in implementing the project. For instance, teachers were unable to conduct part of practical group activities, students and teachers' absences disrupted teaching continuity, and in one case, prevented the completion of the IHC curriculum. As a context element, the WHO European Union Report "Navigating uncharted territory: school closures and adolescent experiences during the Covid-19 pandemic in the WHO European Region" showed that Italy had the highest number of days of school closure during the pandemic: 341 days compared to a European average of 138 days.

Despite these challenges, it's worth noting that IHC resources have received overwhelmingly positive feedback from both students and teachers regarding their understandability, appeal, suitability, and usefulness.

The growing willingness of individuals to take a participatory rather than passive role in health choices contrasts with the inadequate health literacy of the European population. The international survey on health literacy (HLS19) conducted during the Covid19 pandemic has underscored that 23% of the Italian population over 18 years old possess insufficient skills, and 35% have problematic skills in acquiring health information, comprehending it, evaluating its reliability, and utilizing it to make informed choices. The IHC project aims to bridge the gap between citizens' participatory attitudes towards health choices and their limited health education. From the contextualization of IHC learning resources in Italy, we observed that introducing the IHC Key Concepts of critical thinking into schools' curriculum not only helped students to understand scientific principles, but also enabled them to apply these principles early on to make informed choices. This approach directly responds to the needs highlighted by health literacy data.

The Italian educator, sociologist, and poet Danilo Dolci wrote: "We are able to overcome what we are only if someone is willing to invest their time in imagining what we are not yet." The international IHC project has done it and continues to do so.



A fifth-grade class engaged in a Health Choices Book activity in 2021.

Contact: Camilla Alderighi and Raffaele Rasoini

### **Ireland**

START to Discover: Fuelling curiosity with trials and scientist interaction.



Science Foundation Ireland funding (€296, 064.75) has been awarded to support expansion and development of The START Competition and The Meet the Scientist Webinar Series. The 'START Competition' gives children the chance to become scientists themselves. They work together to create, carry out, and report on their own randomised trials in the classroom. By involving children in the design and execution of their own clinical trial, the START Competition promotes an understanding of this important scientific method, nurturing curiosity and critical thinking. The Meet the Scientist Webinar Series provides opportunities for dialogue with STEM professionals and researchers, stimulating debate on STEM topics of societal

importance in the classroom. The series offers a unique opportunity to learn about a diverse range of careers but also gives the children the opportunity to engage through the live Q&A element of these talks directly.

For more information <u>https://startcompetition.com/</u> or follow on X @STARTSchools

#### **Applicant Team:**

Dr Sandra Galvin – University of Galway (Principal Investigator) Dr Tom Conway – University of Galway Dr Linda Biesty – University of Galway Prof Declan Devane – University of Galway Iseult Mangan – teenturn (West) Fiona Wall – Scoil Mobhí, Glasnevin, Dublin Ray McInerney – Ennis National School, Co. Clare

Dara Glynn – CBS Primary School Ennis, Co. Clare

Dr Catherine Doolan – Education Support Centres Ireland

Daniel Hayes – Scoil Íosagáin Primary School, Ballybunion, Co.



Contact: Sandra Galvin

### **Informed Health Choices – Cancer**

The rise in cancer-related misinformation significantly compromises the ability of those impacted by cancer to make evidence-based, informed health decisions. Thus, interventions that can help reduce the number of victims of misinformation are necessary. The Informed Health Choices (IHC) Key Concepts have inspired the development of our online education programme, Informed Health Choice-Cancer (IHC-C). This programme aims to provide people impacted by cancer with the skills and knowledge necessary to think critically about the reliability of health information and claims and make informed health choices.

The programme is being conducted in two work packages. In work package 1, the Key Concepts were prioritised for inclusion in the programme, while work package 2 focuses on

using the prioritised Key Concepts to develop the content of a learning resource through a human-centred design approach that emphasises iterative refinement cycles tailored specifically for those impacted by cancer.

We have worked on work package 2 of this programme in the past year.

The development of this learning resource, grounded in the initially prioritised Key Concepts, involves conducting two rounds of pilot testing to refine the resource.

Initially, based on the stakeholders' suggestions, we orientated the language for of the Key Concepts for our audience, including both the titles and the content with a focus on accessibility of language. For example, the term 'Key Concepts' were rephrased to 'Guiding Principles'.

Subsequently, templates for individual lessons and the entire educational programme were developed. A prototype lesson, tailored to a specific cancer-related topic and populated with relevant information, was populated to an open-source learning management system platform called Moodle. This platform was selected to ensure the programme is accessible and user-friendly for those impacted by cancer. The prototype lesson on Moodle was tested with people impacted by cancer and other stakeholders, leading to revision based on the feedback received. Both this and the lesson template were revised.

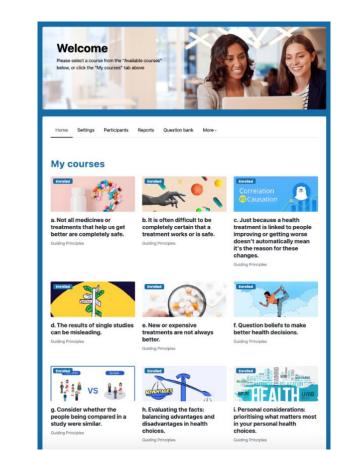
After this initial pilot, the lesson template was updated, and all remaining lessons were populated to achieve the specified learning outcomes of each Guiding Principle. A second round of pilot testing for the full suite of lessons will be conducted and ensure an effective refinement process, enhancing the quality of the learning resource.

After completing the two work packages, an intervention ready for a randomised trial will have been developed.

This development and pilot process has involved stakeholders at every step, including people impacted by cancer, healthcare professionals and researchers, to ensure the inclusion of diverse perspectives and stakeholder-driven refinement.

The Informed Health Choices-Cancer programme is based at the College of Medicine, Nursing, and Health Sciences, University of Galway, and is funded by the Irish Cancer Society.

Contacts: Mengqi Li, Marie Tierney, Declan Devane



Learning resource on the online learning platform.

### Norway

### Public participation in decision making

We recently completed a systematic review that is pending publication in BMJ Global Health entitled "Public participation in decisions about measures to manage the Covid-19 pandemic: a systematic review." This review is the first to systematically search for and assess reports of public participation in decision-making about Covid-19 prevention and control. Although decisions about how to manage the pandemic affected everyone, there was limited involvement of the public in decision-making.

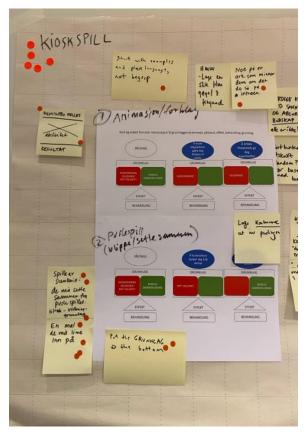
The objective of this systematic review was to identify case reports and evaluations of initiatives to involve the public in decisions about how to manage the Covid-19 pandemic. We explored the extent to which there was inclusive representation, the degree of participation, the methods that were used, the extent to which there was systematic and transparent decision-making using explicit criteria, and the extent to which there was support for critical thinking about prevention and control measures; and we summarized the findings of formal and informal evaluations of the initiatives.

We found few formal evaluations of public participation initiatives and only 24 reports.

The review documents how little evidence there is of public participation in decisions about how to manage the pandemic. Moreover, evidence of impacts of the documented initiatives on government decisions is limited. In addition to flagging the need for effective public participation and evaluation, we summarise important lessons from the initiatives that have been reported. We also identified important ways in which public participation could be strengthened. For example, while many of the initiatives sought to have representative panels, only five aimed specifically to have diverse representation, including representatives from marginalised groups. Most initiatives included expert presentations or question and answer sessions with experts. However, only two initiatives explicitly provided support for thinking critically about prevention and control measures or critical appraisal of the evidence. None of the initiatives used explicit criteria and made judgements regarding each criterion when making recommendations or decisions.

### **Resources for school health nurses**

In Norway, the school health service aims to promote good health among children and adolescents and to improve their life skills and well-being. It is a free service offered to all pupils in primary, lower, and upper secondary



schools. The service is provided mainly by public health nurses.

The project team explored, through a context analysis, whether public health nurses could use an adapted IHC resource for lecturing pupils about health claims and choices.

The context analysis included these elements for data collection in 2023:

- Interviews with individuals involved in, and around, the service
- Focus groups with school nurses and children
- Document analysis of relevant regulations, guidelines, and curriculum plans

We found that there was a need for the school health service to address the topic of health claims, especially as many young people are exposed to them on a daily basis through social media.

Recently, the project team has been working on developing a teaching resource for school nurses to use in educating students about health claims; what they are, and how to think critically about them.

The design phase in 2024 has included:

- Workshops with designers to develop an idea for the teaching resource
- Presentations to stakeholders for feedback

We anticipate having a ready-to-use educational resource for school health nurses to be used in education for young people by the end of 2024.

### Digital resources for young people

Researchers at the Norwegian Institute of Public Health, at the Centre for Epidemic Interventions Research, received funding from the DigiUng collaboration in Norway. DigiUng is a partnership that brings together various organizations from government, non-profit, private companies, and universities.

This funding will be used to develop digital resources for <u>ung.no</u>, a website for young Norwegians aged 13-20. These resources will help young people think critically about health information they encounter online. They will learn to identify health claims and assess the trustworthiness of the source. The researchers will use participatory design methods, involving young people in the development process. They will also collaborate with <u>InfoDesignLab</u> and <u>Melkeveien</u>, experts in information design and communication.

Contact: Heather Munthe-Kaas

## Palestine

# Lethal targeting of the humble health care system in the Gaza Strip

Since the beginning of Israel's genocidal assault on the residents of the Gaza strip, more than 34000 Palestinians have been killed and around 80000 were injured. Among those victims, 480 health professionals have been killed; 28 hospitals were attacked and become out of service, 150 primary and private clinics were targeted , among them 53 became unable to deliver any healthcare. more than 128 ambulances have been targeted; and all drug stores have been destroyed.

More than 10,000 cancer patients face death and need urgent treatment. More than 60,000 pregnant women are at risk due to lack of access to health care

To add to the appalling consequences of this assault, Israeli forces have deliberately rendered major streets and alternative access roads to health care facilities impassable so that patients would die while trying to reach out for hospitals.

It's a know fact that adopting an Evidence Based Medicine approach will increase the chances of recovery and minimize the chances of medical errors or side effects of different medical interventions, this is even more imperative and more cost effective when working in poor resource settings like our in Palestine particularly in the besieged enclave of Gaza strip. Hence, exploiting any residue of effective health care in these circumstances poses unprecedented challenges. This means that the small amount of health care is especially valuable in a resource-poor setting such as ours. Prior to this ongoing onslaught on Gaza strip, we were learning how to use our meagre resources conservatively, and by avoiding relatively ineffective treatments.

Unfortunately during this war, all basic emergency and specialized drugs were

banned by Israel, so wound care and simple surgery and tissue removal could still be performed without anaesthesia and other forms of symptom control.

While acknowledging the widespread support for our cause among many health professionals in some countries, our experience leads us to wonder how physicians and surgeons and how many first world politicians in many powerful countries can acquiesce in the ongoing slaughter in Palestine.

NB. All numbers are based on the official report of the MOH, Gaza released after 190 days since the beginning of this War past year because of the Covid-19 pandemic and the difficult situation in our country.

Contact: Khamis Essi

### **Contributors and contact emails**

Ana Paula Pires dos Santos ap.piresdossantos@gmail.com Andy Oxman <u>AndrewDavid.Oxman@fhi.no</u> Beatriz Goulao <u>beatriz.goulao@abdn.ac.uk</u> Camilla Alderighi camilla.alderighi@gmail.com Declan Devane <u>declan.devane@nuigalway.ie</u> Heather Munthe-Kaas heather.munthe-kaas@fhi.no Khamis Essi khamis essi@vahoo.com> Laura Samsó Jofra LSamso@santpau.cat Mengqi Li M.Li10@nuigalway.ie Marie Tierney <u>marie.m.tierney@nuigalway.ie</u> Pablo Alonso Coello alonsocoello@gmail.com Raffaele Rasoini raffaele.rasoini@tiscali.it Sandra Galvin sandra.galvin@universitvofgalway.ie Sarah Rosenbaum sarah@rosenbaum.no

