

# Keeping up the momentum: Promoting health equity through culturally sensitive innovation and health literacy

Keynote presentation:  
30<sup>th</sup> International Conference on Health Promoting Hospitals  
and Health Services  
Hiroshima, 2024



Prof. Diane Levin-Zamir, PhD, MPH, MCHES

Director, National Dept of Health Promotion, Clalit Health Services, Israel

University of Haifa – School of Public Health, Israel

Chair, National Council on Health Promotion, Israel Ministry of Health

Chair, WHO Technical Advisory Group on Behavioral and Cultural Insights

IUHPE – Global Working Group Health Literacy Leadership



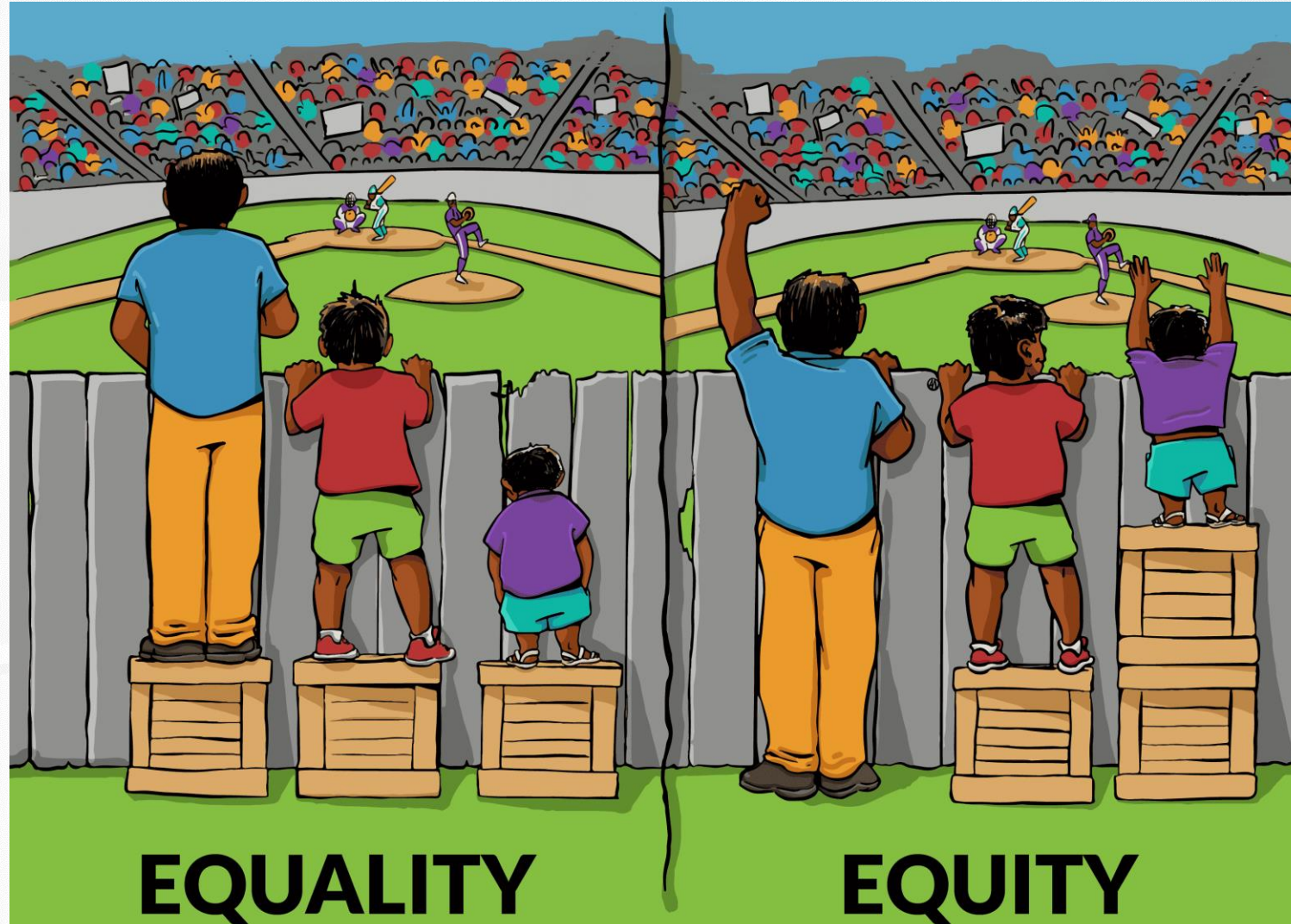
# Presentation Overview

- ❖ **Defining and distinguishing equity**
- ❖ **The role of HPHs in achieving equity**
- ❖ **HPH standards related to equity**
- ❖ **Innovation and equity in HPH**
- ❖ **Selected examples of innovative interventions**
- ❖ **Digital Health literacy - the evolving definition**
- ❖ **Why is it important?**
- ❖ **How and why can we measure**
- ❖ **The results of the M-POHL study on DHL**
- ❖ **Conclusions**



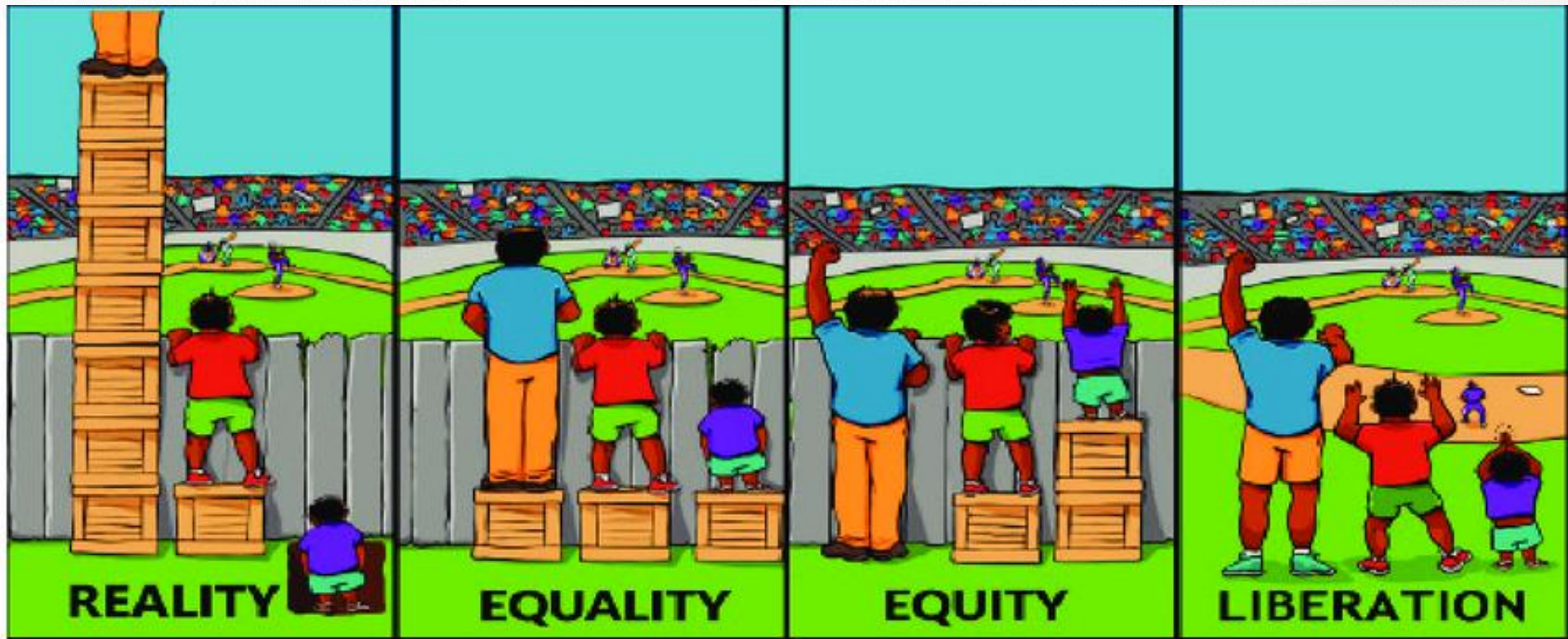


# Defining equity





# Defining equity





# HPH Standards and Equity

- 2.3.3 Our organization makes every effort to adapt its procedures to the special needs of vulnerable persons.**
- 3.2.5 Our organization offers all patients the right to individualized, culturally and age-appropriate prevention, promotion, treatment, rehabilitation, and palliative care.**
- 3.5 Our organization has developed procedures to identify vulnerable patients in order to determine needs and reduce inequalities in our health services**



**2020 Standards  
for Health Promoting  
Hospitals and Health  
Services**





# Innovation and Health Promotion

**Innovation is key to achieving and sustaining equity in HPH, allowing health systems- both hospitals and primary care - to develop novel solutions for overcoming barriers.**

- **Distance**
- **Language**
- **Navigation**
- **Affordability**

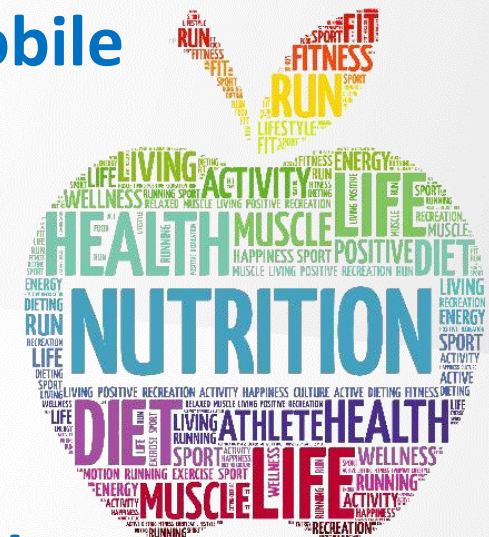




# Digital Health



- the use of technology, such as mobile devices, wearable sensors, and electronic health records, to improve health and healthcare.
- includes a wide range of applications, including telemedicine, digital therapeutics, health information technology, and mobile health.
- can be used to monitor health, provide health information and education, diagnose/treat diseases, and manage chronic conditions.
- The goal: to improve patient outcomes, increase quality and access to care, and reduce healthcare costs. WHO 2016/2020





# Maximizing the benefits of health technologies





# TYTO – video exam & consult with family physician

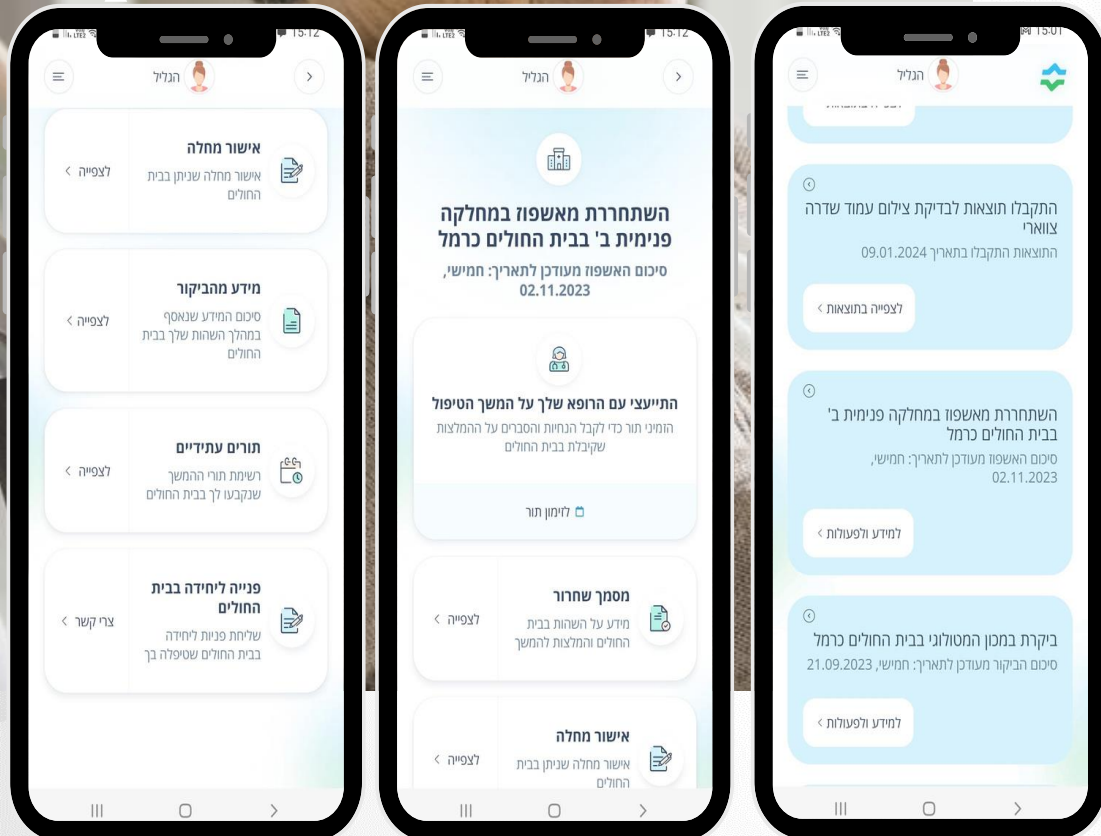


**Ears**  
**Throat**  
**Heart**  
**Lungs**  
**Temp.**  
**Skin**  
**Stomach**





# Digital release from the hospital – Co-production with patients



**מה עליך לעשות לאחר השחרור מבית החולים**

#עליך לתאם תור לרופא המשפחה שלך בהקדם ולגשת אליו עם מכתב סיכום אשפוז זה.

**#בדיקות מעבדה שעליך לבצע:**

סוג הבדיקה: COMPLETE BLOOD COUNT בעוד כ 1 שבועות

סוג הבדיקה: כימיה מלאה בעוד כ 2 שבועות

סוג הבדיקה: סקר סרטן עם CBK בעוד כ 2 שבועות

7 Michal St, Haifa 3436212 רח'י מיכל 7, חיפה 3436212 טל: 04-8250211 פקס: 04-8242414

מקומת נלווית The Lady Davis CARMEL MEDICAL CENTER HAIFA - ISRAEL

**שם המחלקה: אורולוגיה**  
**מנהלת המחלקה: דר' דקל יורם מר.18026**  
**מנהלת סיוע: נטלי קוגן**  
**טלפון: 04-8250843**  
**פקס: 04-8250122**  
**depcarmel@calitf.org.il**

הודפס ע"ד: ר'בן זכרי ישראל 09:48 30/12/2023

**סיכום אשפוז**

**בדיקות מעבדה מומלצות בשחרור**

סוג הבדיקה: כימיה מלאה בעוד כ 2 שבועות  
 סוג הבדיקה: COMPLETE BLOOD COUNT בעוד כ 2 שבועות

**המלצות לייעוץ ובדיקות שירות**

המלצות	ממלץ לביצוע תוך 3 שבועות	נקבע תור לתאריך	הערות
בדיקת רופא אורולוג	06/03/2024	ד"ר אילן קליין אורולוגיה ליו קומה 13, 6/3/24 בשעה 10:00	
אשפוז יום כירורגי	04/01/2024	הוצאת תומכן שופכני אורולוגיה כרמל קומה 5 בשעה 10 בבוקר	

**המלצות**

יש לתאם תור לרופא המשפחה שלך בהקדם ולגשת אליו עם מכתב סיכום אשפוז זה. ככל החמרה במצב כיון: חום גבוה, כאבים עזים, שתן דמי שאינו מצטלל לאחר שתיה מרובה או אצירת שתן, יש לפנות לרופא.

יש לשתות שתייה זבובית 1.5 ליטרים ביממה קודמת יציאתכם על מנת לשמור על הידרטציה. ראה מרשם מצורף.

# רפואה שלמה

הפרעת ראייה חדשה - יש לפנות למיין!



# Virtual Reality - Utilization in Healthcare



**PAIN  
MANAGEMENT**



**VIRTUAL REALITY  
FOR CHILDREN**



**MENTAL &  
PHYSICAL  
REHABILITATION**



**MEDICAL  
TRAINING**



**MENTAL HEALTH &  
PSYCHOLOGICAL  
THERAPY**



**DENTISTRY**



# “Active” An AI based platform for healthy lifestyles and well-being: launched 2020

- An app that promotes physical activity, nutrition, sleep habits, drinking fluids, accessing health information – **personalized goals**;
- **Participants incentivized** for sustaining health promoting habits with “coins” and health promoting gifts;
- Recently added points for **quality health indicators**: early detection for breast and colon cancer;
- Adapted to Arab and ultra-religious Jewish population









# “Active” – health promoting app: results

- **Over 1 million users – free of charge**
- **37% are frequent users (several times a month)**
- **Meet personalized weekly goals – average 2x/month**
- **Applied research: 6 mo. follow-up**
- **354,533 users - average age 46**
- **Median number of steps increased 55.7% among users with low intensity fitness**
- **Improvement of health indicators vs. comparison group**





## Health promotion preparedness for health crises – a ‘must’ or ‘nice to have’? Case studies and global lessons learned from the COVID-19 pandemic

Diane Levin-Zamir<sup>1,2</sup>, Kristine Sorensen<sup>3</sup>, Tin Tin Su<sup>4</sup>, Tetine Sentell<sup>5</sup>, Gillian Rowlands<sup>6</sup>, Melanie Messer<sup>7</sup>, Andrew Pleasant<sup>8</sup>, Luis Saboga Nunes<sup>9</sup>, Shahar Lev-Ari<sup>10</sup> and Orkan Okan<sup>11</sup>

**Abstract:** The current COVID-19 pandemic has exposed missing links between health promotion and national/global health emergency policies. In response, health promotion initiatives were urgently developed and applied around the world. A selection of case studies from five countries, based on the Socio-Ecological Model of Health Promotion, exemplify ‘real-world’ action and challenges for health promotion intervention, research, and policy during the COVID-19 pandemic. Interventions range from a focus on individuals/families, organizations, communities and in healthcare, public health, education and media systems, health-promoting settings, and policy. Lessons learned highlight the need for emphasizing equity, trust, systems approach, and sustained action in future health promotion preparedness strategies. Challenges and opportunities are highlighted regarding the need for rapid response, clear communication based on health literacy, and collaboration across countries, disciplines, and health and education systems for meaningful solutions to global health crises.

**Keywords:** health literacy, health-promoting schools, equity/social justice, health-promoting healthcare, vulnerable groups, migrant health, mental health literacy



# Health promotion in times of crisis through social media

October 2024

6 videos were immediately produced and released to promote coping with emergency through healthy lifestyle



Physical activity for young families



Maintaining smoking cessation



Family nutrition



Physical activity for older adults



Mindfulness



Healthy sleeping

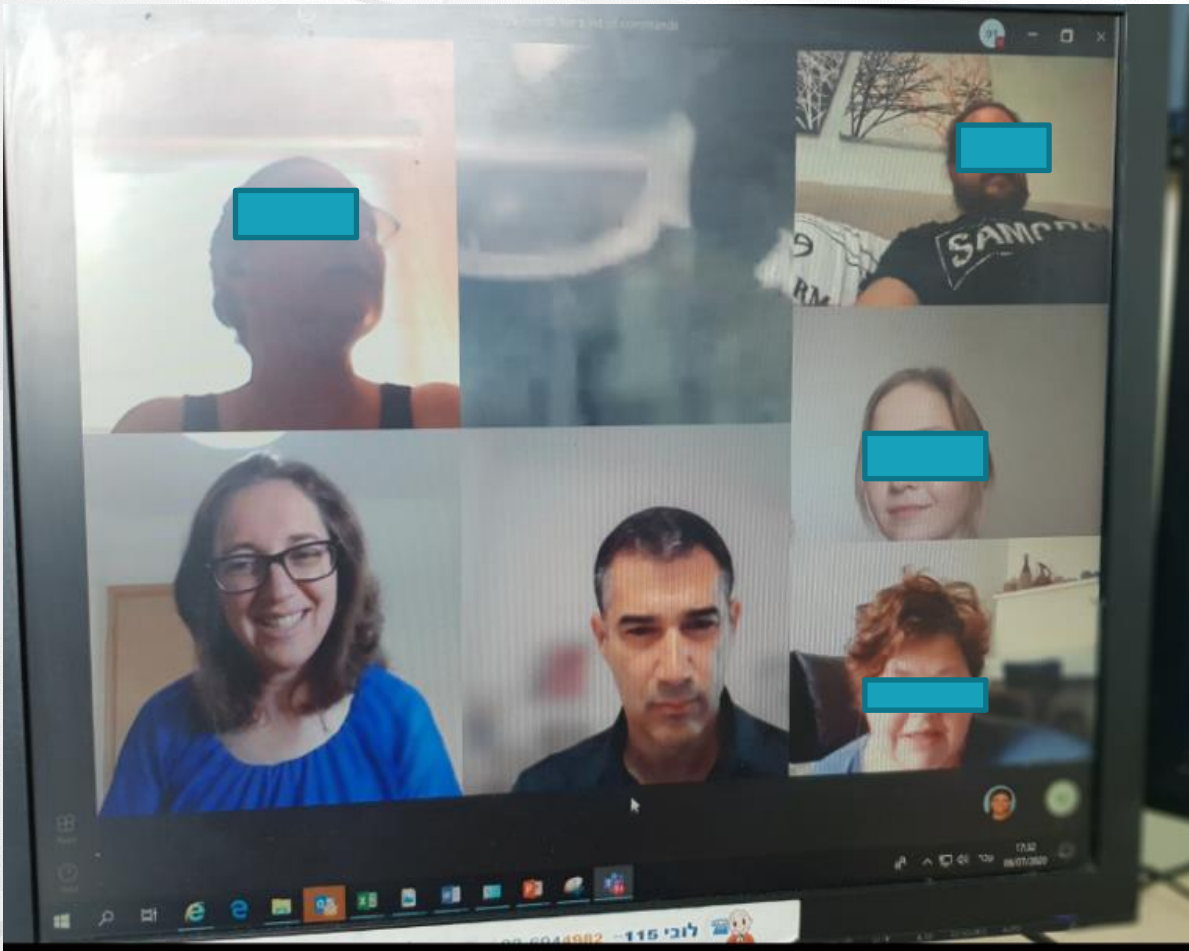
Response: Over 620,000 hits







# Online Health Promotion Workshops -



- **Healthy lifestyle & weight loss**
- **Smoking cessation**
- **Preparation for birth and parenting**
- **Breastfeeding**
- **Mindfulness**
- **Self-care and healthy lifestyle for people with diabetes**
- **Surrogate parenting**

**Providing a secure space for promoting health in times of conflict**



# Emerging issues for intervention/health care



Received: 9 June 2024 | Revised: 20 June 2024 | Accepted: 3 July 2024  
DOI: 10.1111/apa.17355

ACTA PÆDIATRICA  
PEDIATRIC JOURNAL OF SWEDEN  
WILEY

## ORIGINAL ARTICLE

### Medical perspectives on Israeli children after their release from captivity – A retrospective study

Noa Ziv<sup>1,2</sup> | Yael Mozer-Glassberg<sup>2,3</sup> | Efrat Bron-Harlev<sup>2,4</sup> | Lotem Goldberg<sup>2,5</sup> | Omer Niv<sup>2,4</sup> | Shirley Saar<sup>2,4</sup> | Shlomit Yaron<sup>2,6</sup> | Dana Singer-Harel<sup>2,7</sup> | Noa Eliakim-Raz<sup>2,8</sup> | Silvana Fennig<sup>2,9</sup> | Gilat Livni<sup>2,10</sup> | Havatzelet Yarden-Bilavsky<sup>2,10</sup>

<sup>1</sup>Department of Pediatrics C, Schneider Children's Medical Center of Israel, Petah Tiqva, Israel

<sup>2</sup>Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel

<sup>3</sup>Institute of Pediatric Gastroenterology, Nutrition and Liver Diseases, Schneider Children's Medical Center of Israel, Petah Tiqva, Israel

<sup>4</sup>Schneider Children's Medical Center of Israel, Petah Tiqva, Israel

<sup>5</sup>Department of Pediatrics B, Schneider Children's Medical Center of Israel, Petah Tiqva, Israel

<sup>6</sup>Sisal Research Center for Family Medicine and Primary care, Department of Family Medicine, Faculty of Health Sciences, Ben-Gurion University of the Negev, Beer-Sheva, Israel

<sup>7</sup>Pediatric Emergency Department, Schneider Children's Medical Center of Israel, Petah Tiqva, Israel

<sup>8</sup>Department of Internal Medicine E, Rabin Medical Center, Beilinson Hospital, Petah Tiqva, Israel

#### Abstract

**Aim:** Following the Hamas terror attack on Israeli towns on October 2023, 250 individuals were taken into captivity. On November–December 2023, during the cease-fire deal, 26 women and children were released. This study is the first to describe the physical and behavioural findings in children and their mothers in the immediate phase of returning home from captivity.

**Methods:** This is a retrospective study describing the clinical characteristics of the returnees after 49–53 days in captivity. Patients were admitted to a designated unit in the Schneider Children's Medical Center of Israel on November–December 2023. The hospitalisation duration was 1–9 days. All patients were evaluated according to a detailed protocol and were treated respectively.

**Results:** Patient population included 19 children (ranged 2–18 years old) and 7 women (ranged 34–78 years old). The most common clinical findings upon return included significant weight loss, psychological trauma, complications of poor hygiene and complications of recent shrapnel injuries. Microbiology tests were positive for multiple gastrointestinal pathogens. Serologic screening tests were positive for various infectious diseases.



# *Info-demics - The case for critical Digital Health Literacy*

- Spreading of misinformation
- May be as harmful as the disease itself, impeding public health responses.
- Fabrication may be intentional or unintentional.
- **Reflects the public's thirst for knowledge and solutions**





# *Digital Divide or Digital Development throughout the life course?*



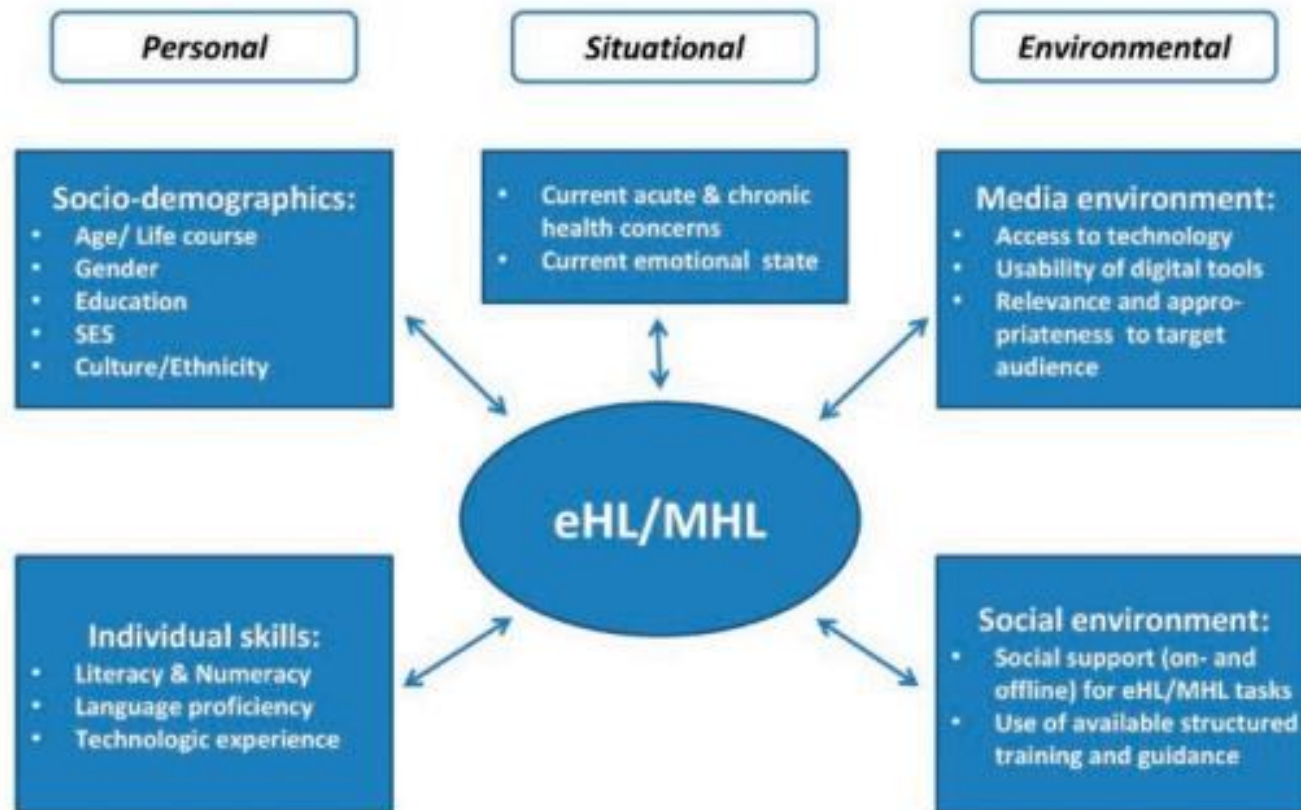
## *Digital Health Literacy as an Asset*

Digital health literacy allows individuals to effectively use digital platforms (mobile apps, telehealth, wearables and



# The complexity of Digital Health Literacy

*Int. J. Environ. Res. Public Health* **2018**, *15*, 1643



**Figure 1.** The complexity of eHealth Literacy (eHL) and Media Health Literacy (MHL) in context.



# *Barriers to Digital Health*



- *Privacy and confidentiality*
- *Credibility and trust*
- *Usability*
- *Accessibility – Broadband, etc*
- *Common language*



# The challenge

The increasing access of health-related digital resources, places a growing demand for population **Digital Health Literacy (DHL)** to adequately use these resources.

- Public health researchers, practitioners, and policy makers need to be aware of DHL for understanding and improving people's proficiency in using digital resources.





# Measuring Digital Health Literacy for general adult population in the Health Literacy Survey (HLS<sub>19</sub>) of the WHO Action Network M-POHL

Diane Levin-Zamir, Stephan Van den Broucke, Jürgen M. Pelikan, Thomas Link, Christa  
Straßmayr for the Working Group on Digital HL in HLS<sub>19</sub>

**M-POHL**

Action Network on Measuring Population  
and Organizational Health Literacy  
of WHO-Europe

**HLS<sub>19</sub>**

Health Literacy Survey 2019  
a project of M-POHL



# Digital Health Literacy- Developing and applying a measure

- The WHO M-POHL HLS19 consortium defined DHL as: *“the ability to search for, access, understand, appraise, validate, and apply online health information, and to formulate/express questions, opinions, thoughts, or feelings when using digital resources”*.
- The objective of the study: to construct and validate a DHL measure across countries in Europe, and to identify determinants and consequences



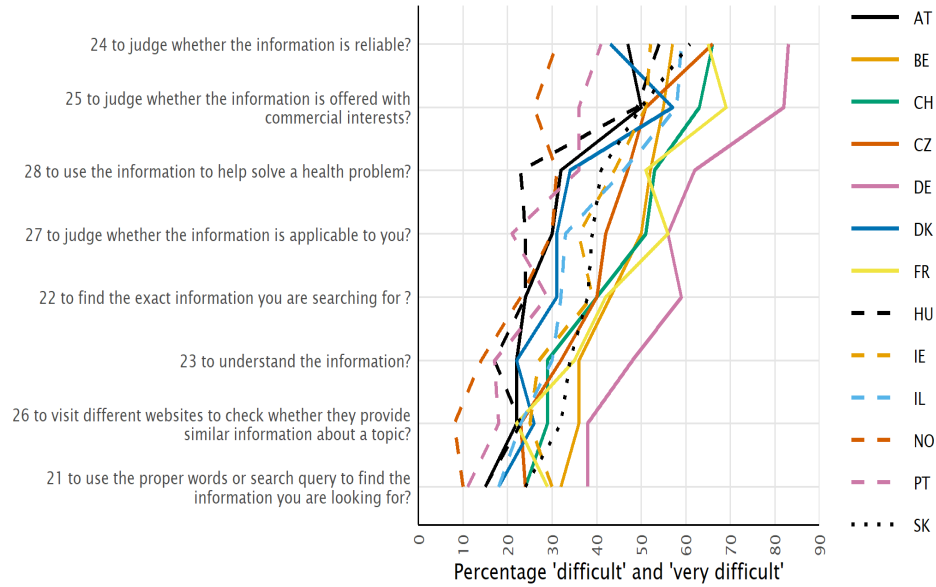
# Methods

- DHL measures were constructed with 8 items regarding skills for dealing with digital health resources (DIGI-HI) and 2 items (DIGI-INT) for interactive use of these resources and applied in 13 countries: Austria, Belgium, Czech Republic, Denmark, France, Germany, Hungary, Ireland, Israel, Norway, Portugal, Slovakia, and Switzerland
- Data collection included CAPI, CATI, CAWI, PAPI methods, and mixed formats
- Analyses were based on 29,060 respondents from representative samples of 1,000- 3,602/country.
- A standardized score was calculated for DHL by combined “very easy” and “easy” responses, range: 0-100.
- Multi-variable linear regression models were applied for estimating determinants and outcomes of DHL

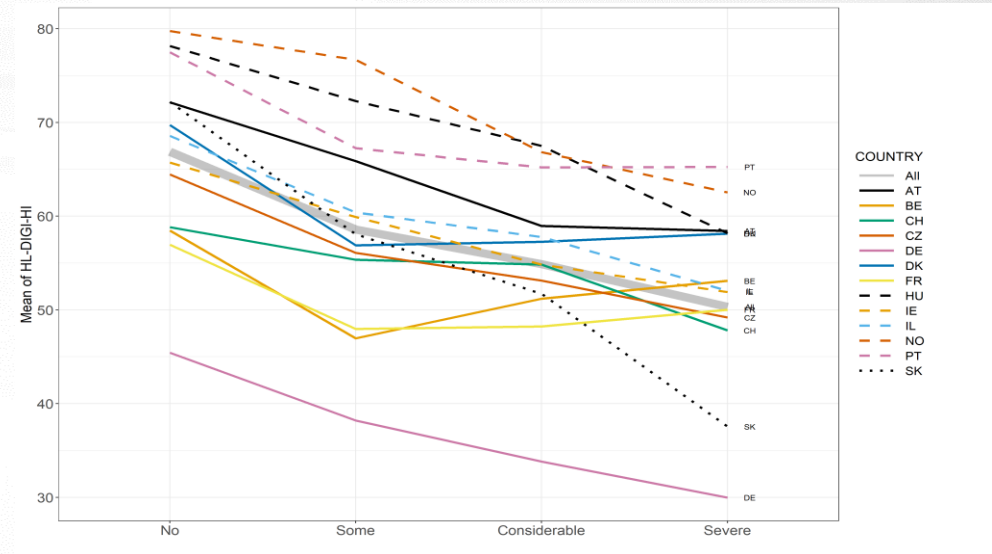


# Results

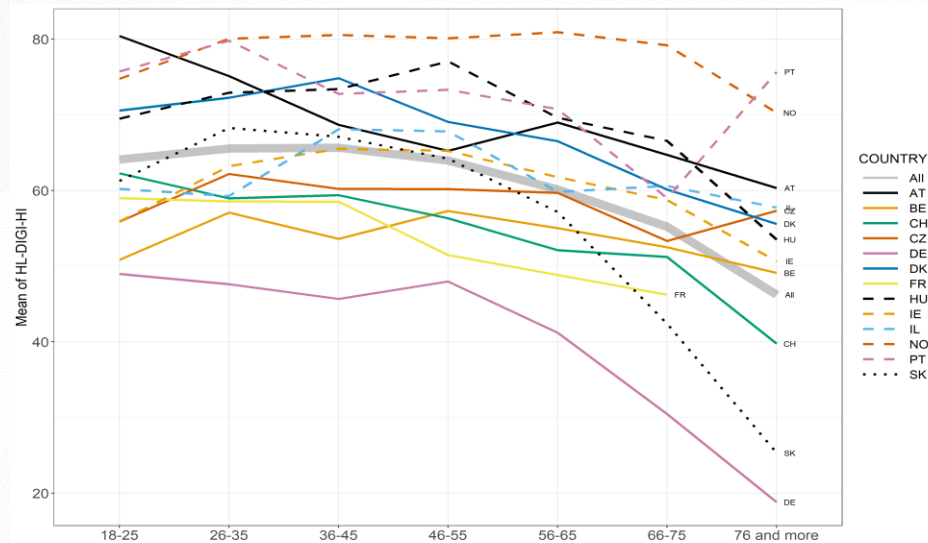
## Challenges in Critical DHL



## Financial deprivation



## Age





# In conclusion

- Achieving equity through the work of HPHs requires **commitment and resources**
- **Appropriate and innovative interventions** can positively influence DHL, and contribute to health and well-being.
- By prioritizing **equitable access** to health-promoting services and innovative strategies, HPH can:
  - enhance public health and health care
  - reduce disparities
  - improve health outcomes for diverse populations
  - ensuring a healthier and more inclusive society





# Questions/comments?





# Thank you for your attention!

*For more information: [dianele@clalit.org.il](mailto:dianele@clalit.org.il)  
[diamos@zahav.net.il](mailto:diamos@zahav.net.il)*

