

Y-Check comprehensive health and well-being check-up visit programme: Implementation and short-term effectiveness among adolescents in Zimbabwe

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Novel Adolescent Check-up Programme

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Are you in Grade 6 or Form 4?

Are you a student at Shingai Primary, St Mary's Primary, Farai Primary, Chaminuka Primary, Seke 3 High and Zengeza 2 High?

Get a **FREE** health check-up at your school with Y-Check from **October 2022 - February 2023**

We will screen and treat or refer for:

- Anaemia
- Vision
- Hearing
- Epilepsy
- Mental Health
- Oral Health
- Growth and Nutrition
- Menstrual health and hygiene
- Substance Use

HUTANO BHO! ZVESE MAHARA!

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Logos at the bottom: UK Research and Innovation, BOTNAR, and other partners.

Aim: To develop and evaluate the effectiveness and cost-effectiveness of a novel adolescent health check-up visit strategy to **provide access to adolescent-friendly promotive, preventive and curative health care**

Y-Check visit format and content



Self-completed
screening
questionnaire

Physical
examination &
laboratory tests

Nurse
review

Health promotion,
counselling,
treatment and/or
referral



Evaluation design: Hybrid implementation-effectiveness study

(Banati et al, BMJ Open 2024)

Primary outcome: Proportion of those screening positive for at least one condition who receive appropriate on-the-spot care and/or completed referral for all identified conditions within 6 months.

Secondary outcomes: Implementation processes and adolescent outcomes measured at screening and at 6-month follow-up visit

Process evaluation and cost-effectiveness analysis



Recruitment and check-up visit

- **2097 participants recruited** , 57% female
- Primary schools (n=4): **1071/1664 (64%)**, mean age 11.1 years
- Secondary schools (n=2) : **387/1056 (37%)**, mean age 16.2 years
- Community hubs (n=2) : **639**, mean age 16.6 years, 76% students

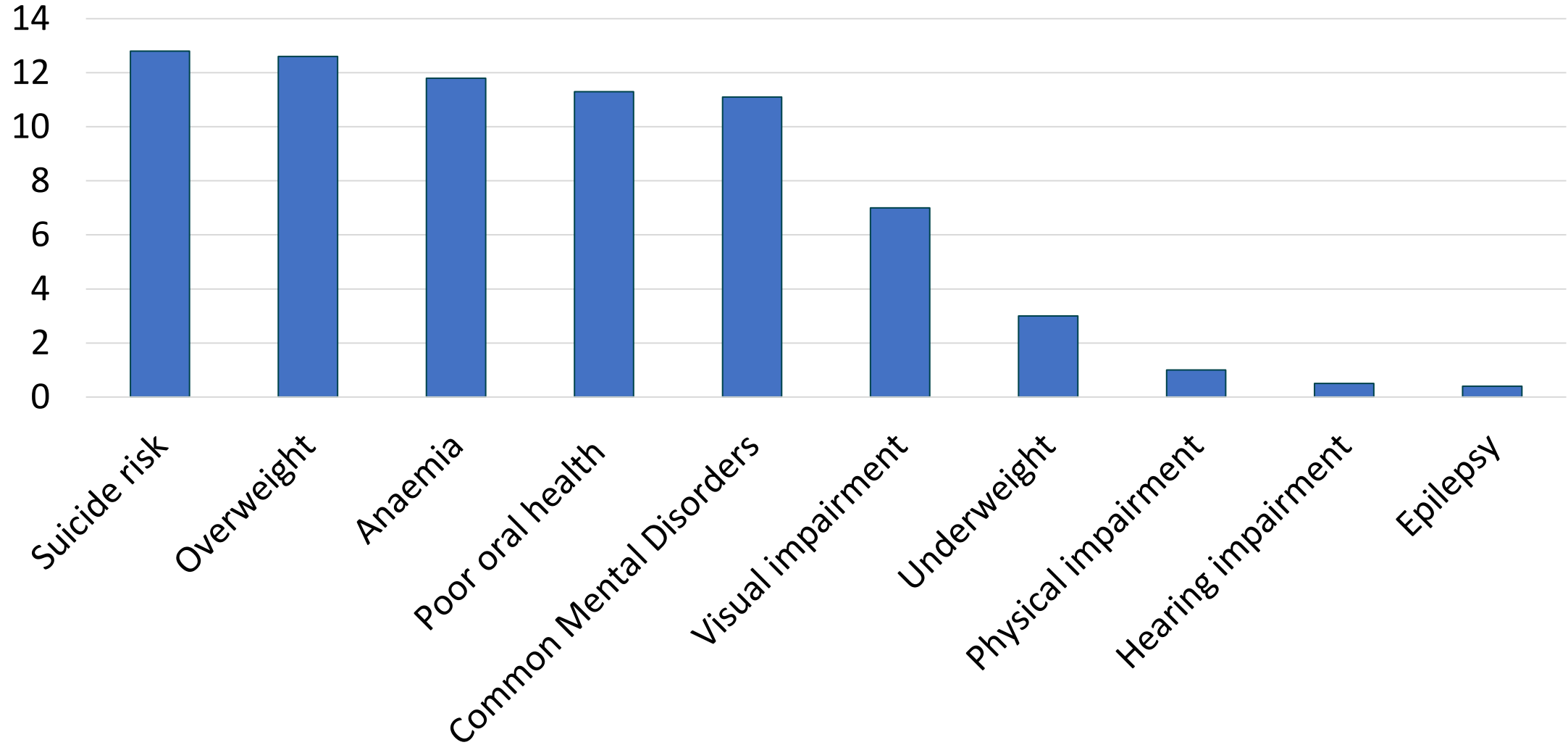


Follow-up

1843 participants (88%) followed-up at mean 5.9 months post check-up

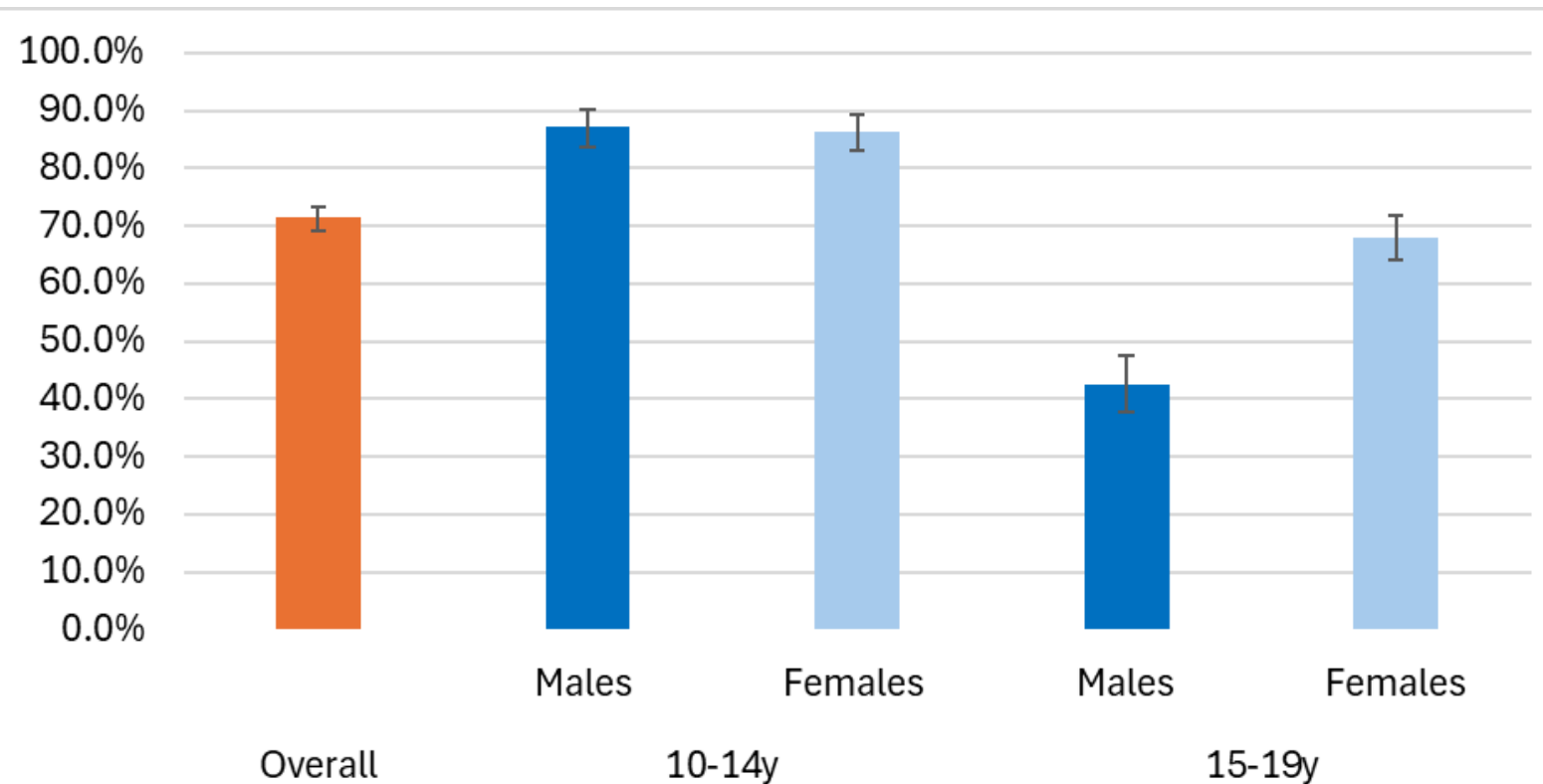
- Over 90% of adolescents in schools followed-up compared to 73% of community participants
- At community hubs follow-up lower among males and those out of school

% with newly diagnosed conditions



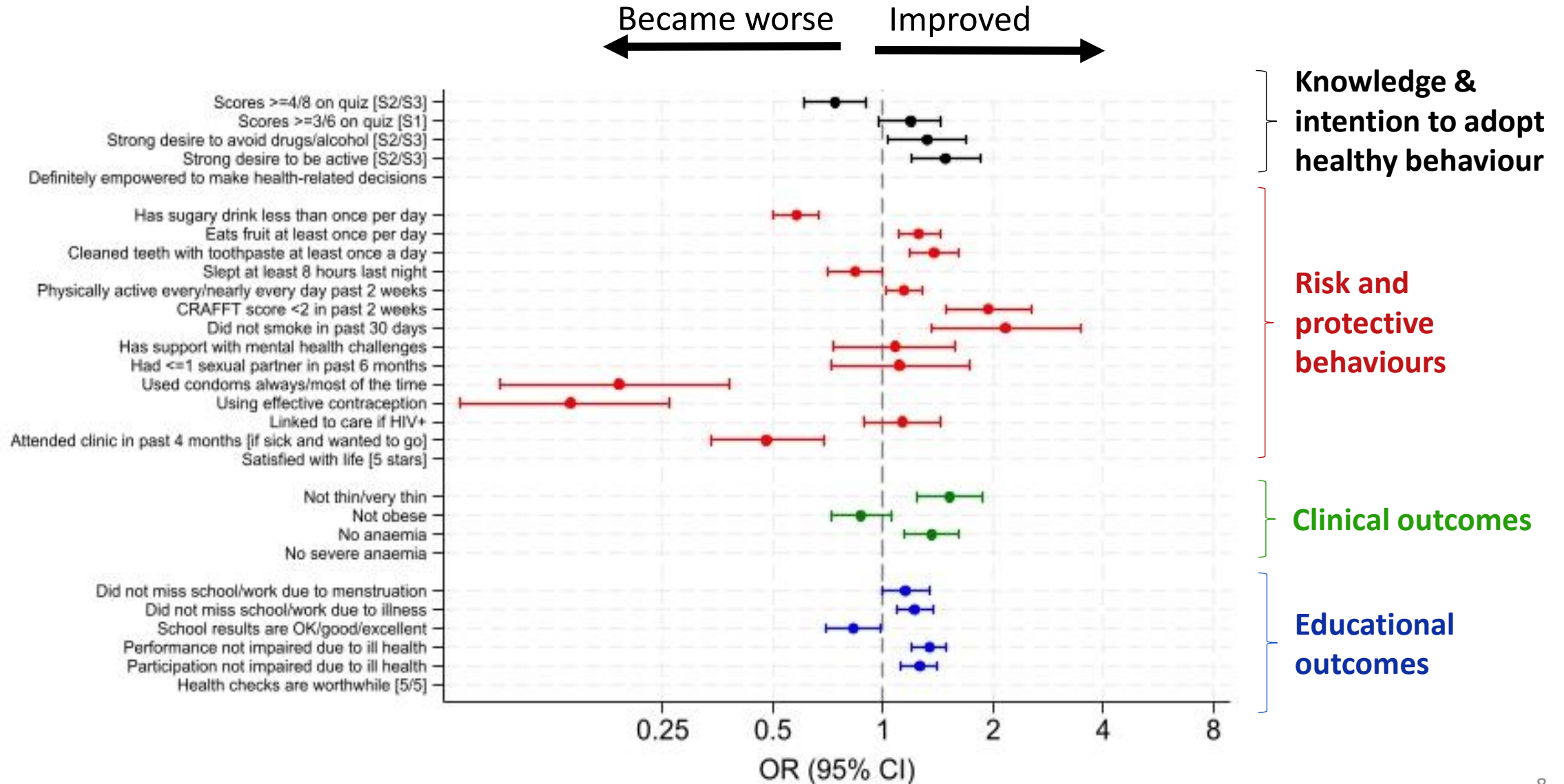
Primary outcome

- 89% screened positive for at least one condition/ behaviour
- 723 referrals to external service providers
- Uptake of referrals varied according to condition and age group



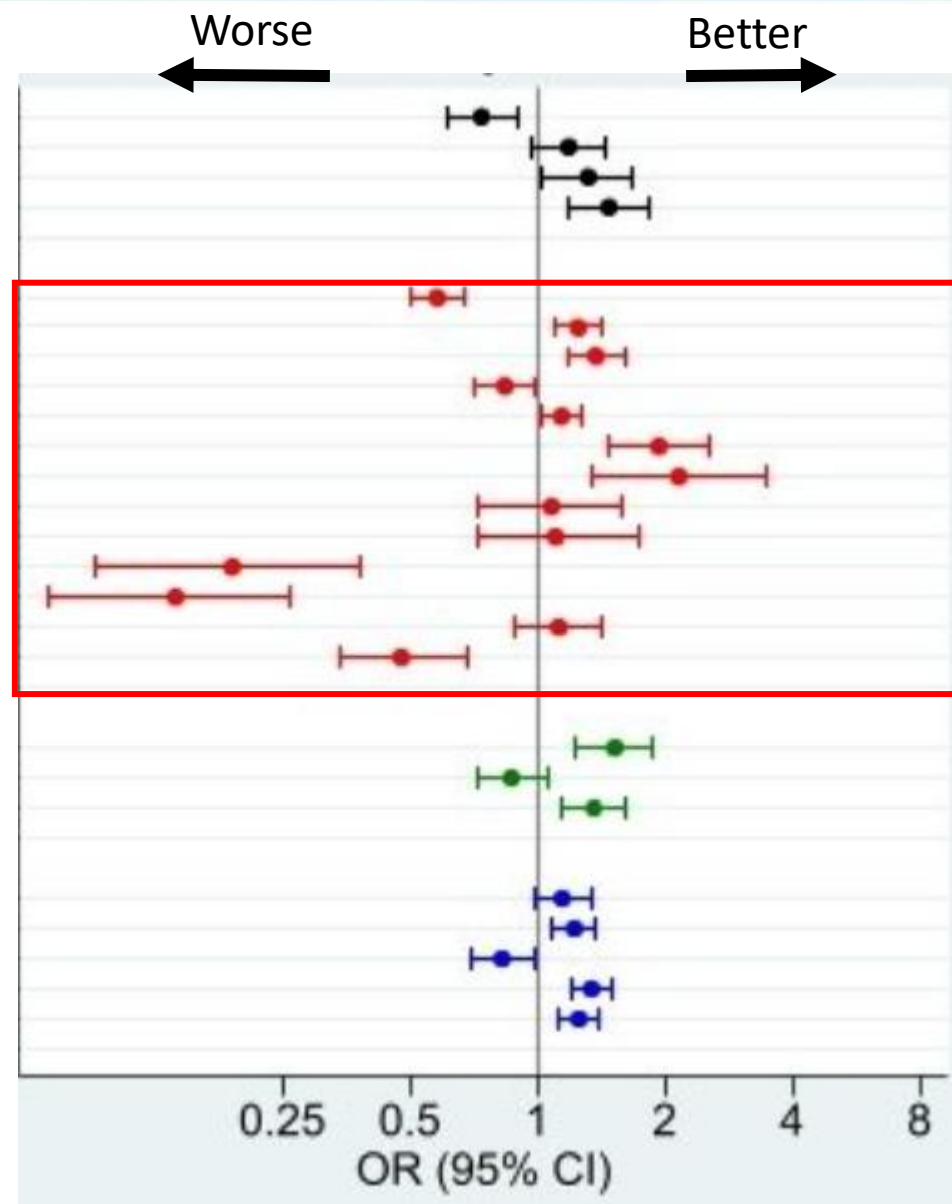
71% (95%CI 69-73%)
of participants received
appropriate on-the-spot care
and/or completed referral for
all the conditions identified
during the Y-Check visit

Pre-Post intervention changes in conditions and behaviours



Pre-Post intervention changes in conditions and behaviours

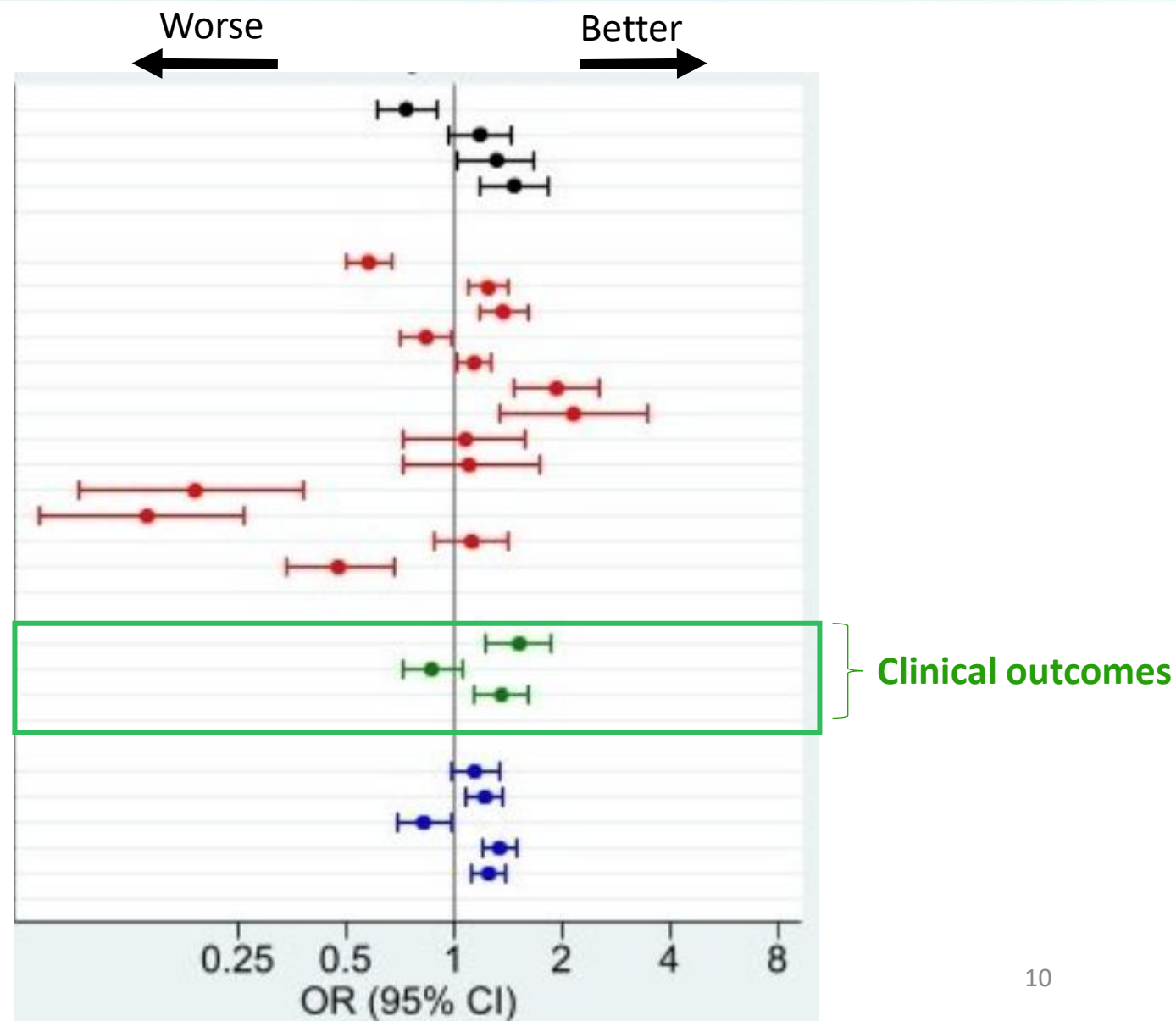
- Increase in sugary drink consumption
- Increase in fruit consumption
- Increase in toothbrushing
- Decrease in sleep
- Increase in physical activity
- Decrease in smoking and substance use



Risk and protective behaviours

Pre-Post intervention changes in conditions and behaviours

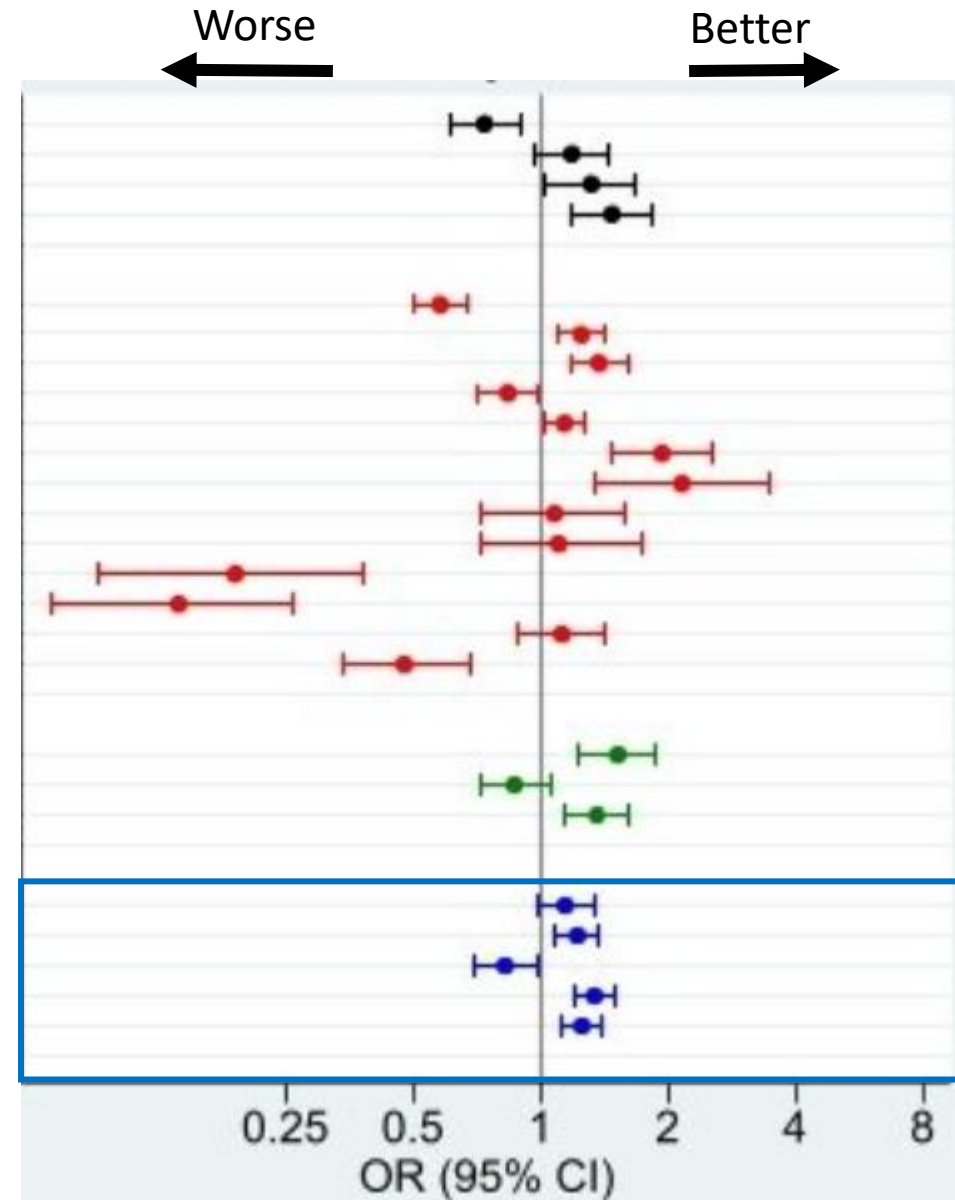
- Decrease in thinness
- No change in obesity
- Decrease in anaemia



Pre-Post intervention changes in conditions and behaviours

Reduced impact of ill health on:

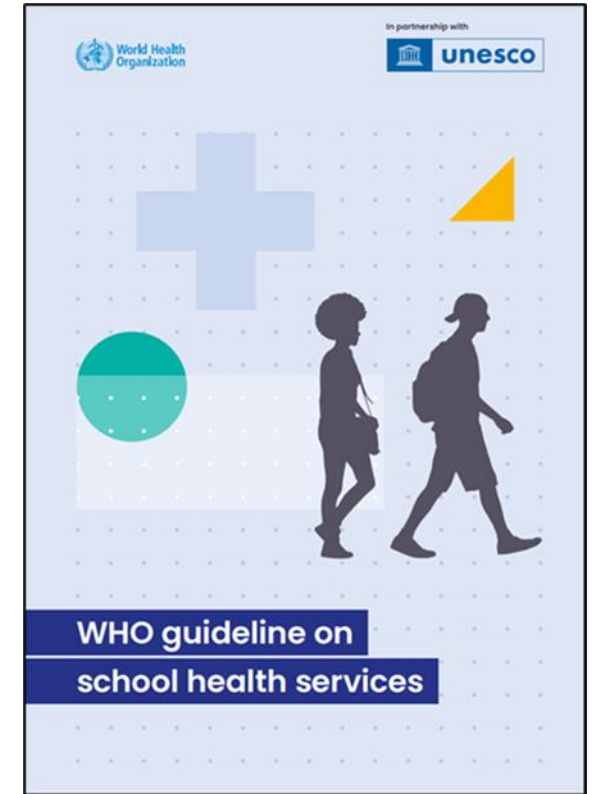
- School participation
- School performance
- School attendance



Educational
outcomes

- **Innovative Y-Check visits identified unknown and untreated conditions, and successfully treated and/or linked many adolescents to existing services**
- **Evidence of positive impact of Y-Check on many secondary individual-level outcomes**
- **Next steps research:** WHO-led multi-country study with ongoing Y-Check evaluations in Tanzania and Ghana (*Banati et al, BMJ Open 2024*)

- **Large unmet need for health promotive and preventative care and healthcare services**
 - Mental health symptoms, poor oral health, anaemia, malnutrition, and visual impairment were most prevalent
- **Next steps policy and programming:** (1) Enhance education and support for health and well-being in schools (2) Strengthen primary healthcare services for adolescents



Acknowledgements



Y-Check team



Youth Advisory Committee

Teachers & Service providers



Scientific Advisory Committee

Ms Patience Manhivi (MoPSE), Mr Aveneni Mangombe (MoHCC)



University of Ghana
Mwanza Intervention Trials Unit
Fondation Botnar



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