Adolescent Mental Health in Indonesia & Vietnam

The what, why, where, when, and how of

the National Adolescent Mental Health Surveys (NAMHS)

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What is NAMHS?

Overview

- Nationally-representative household surveys of the prevalence of mental disorders in adolescents aged 10-17 years in Kenya, Indonesia, and Vietnam.
- Multi-country study conducted in parallel across three countries (Kenya, Indonesia, and Vietnam).
- Involves five organizations from five different countries, with further collaboration by Ministries of Health and other institutions.

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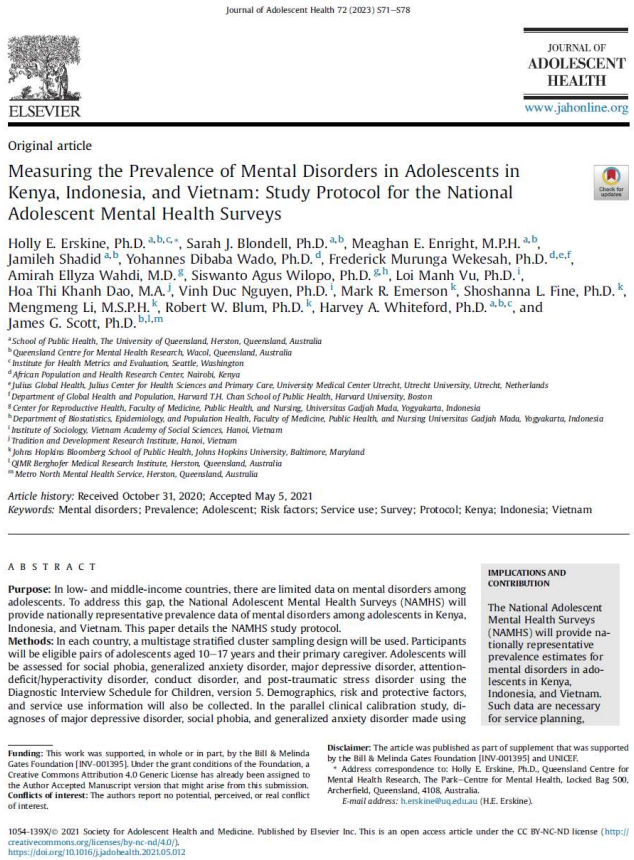
What is NAMHS?

Aims

- Determine the prevalence of mental disorders in adolescents aged 10-17 years.
- Measure risk and protective factors associated with mental disorders in adolescents.
- Assess patterns of service use among adolescents, including utilization, barriers to care, and perceived need.

Purpose

- Provide vital information for governments, international health organizations, & global research efforts.
- Improve the mental health and wellbeing of adolescents in these countries and regions.



Journal of Adolescent Health 72 (2023) 571–578

ELSEVIER

JOURNAL OF ADOLESCENT HEALTH
www.jahonline.org

Original article

Measuring the Prevalence of Mental Disorders in Adolescents in Kenya, Indonesia, and Vietnam: Study Protocol for the National Adolescent Mental Health Surveys

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Article history: Received October 31, 2020; Accepted May 5, 2021
Keywords: Mental disorders; Prevalence; Adolescent; Risk factors; Service use; Survey; Protocol; Kenya; Indonesia; Vietnam

ABSTRACT

Purpose: In low- and middle-income countries, there are limited data on mental disorders among adolescents. To address this gap, the National Adolescent Mental Health Surveys (NAMHS) will provide nationally representative prevalence data of mental disorders among adolescents in Kenya, Indonesia, and Vietnam. This paper details the NAMHS study protocol.
Methods: In each country, a multistage stratified cluster sampling design will be used. Participants will be eligible pairs of adolescents aged 10–17 years and their primary caregiver. Adolescents will be assessed for social phobia, generalized anxiety disorder, major depressive disorder, attention-deficit/hyperactivity disorder, conduct disorder, and post-traumatic stress disorder using the Diagnostic Interview Schedule for Children, version 5. Demographics, risk and protective factors, and service use information will also be collected. In the parallel clinical calibration study, diagnoses of major depressive disorder, social phobia, and generalized anxiety disorder made using

IMPLICATIONS AND CONTRIBUTION

The National Adolescent Mental Health Surveys (NAMHS) will provide nationally representative prevalence estimates for mental disorders in adolescents in Kenya, Indonesia, and Vietnam. Such data are necessary for service planning,

Funding: This work was supported, in whole or in part, by the Bill & Melinda Gates Foundation [INV-001395]. Under the grant conditions of the Foundation, a Creative Commons Attribution 4.0 Generic License has already been assigned to the Author Accepted Manuscript version that might arise from this submission.
Conflicts of interest: The authors report no potential, perceived, or real conflict of interest.

Disclaimer: The article was published as part of supplement that was supported by the Bill & Melinda Gates Foundation [INV-001395] and UNICEF.
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https://doi.org/10.1016/j.jadohealth.2021.05.012

https://www.sciencedirect.com/science/article/pii/S1054139X21002676

Why was NAMHS needed?

Symptom measures

Existing studies tend to use short/broad symptom measures, rather than diagnostic instruments which are designed to assess mental disorders.

Restricted/limited samples

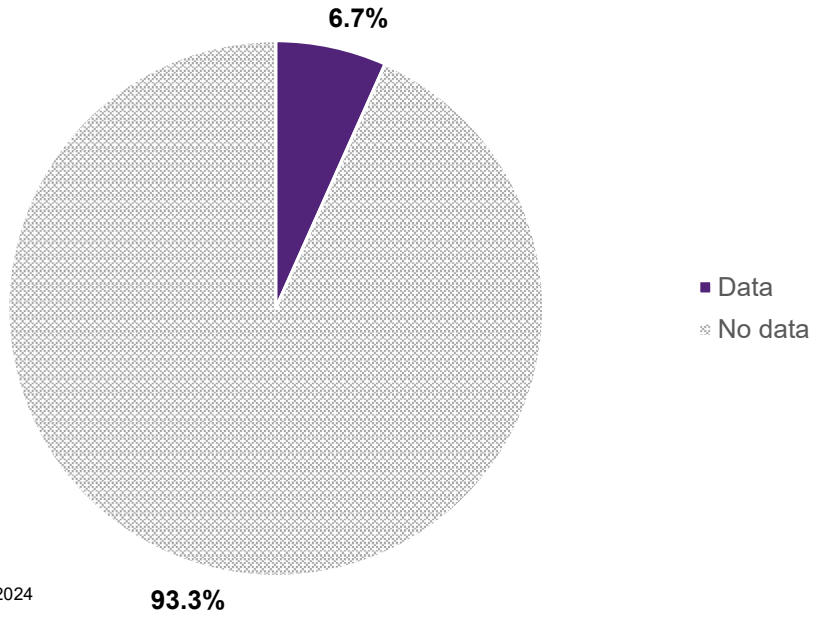
Existing studies have used restricted or limited samples, e.g. Hanoi, ages 15-17 years, etc.

Clinical samples/hospital data

Studies of clinics or data from hospitals only tells us about young people who have accessed services, who are able to access services, or who have services available.

Why NAMHS was needed?

- A 2016 study analysed the representativeness of the available prevalence data for mental disorders in children and adolescents (ages 5-17 years)
- Globally, only 6.7% of children and adolescents were represented by the available data for mental disorder prevalence.



Where was NAMHS conducted?

Data availability

1. No or limited diagnostic prevalence data for mental disorders in adolescents, including no nationally representative household surveys.
2. Sits within a broader region with limited prevalence data coverage, with the potential to inform surrounding countries in that region.

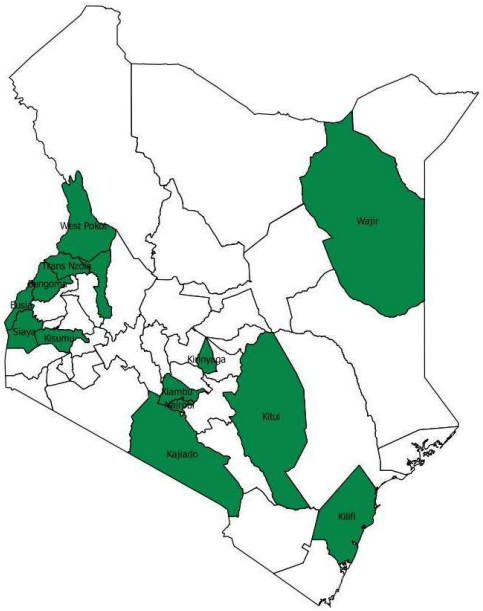
Internal and external country factors

5. Identified as a priority by global health organisations and funders.
6. Particular significance in the Global Burden of Disease Study (GBD).
7. Unique challenges that could inform gold-standard methodology.
8. Government and other stakeholders have demonstrated a clear and genuine interest in adolescent mental health.

In-country organisation

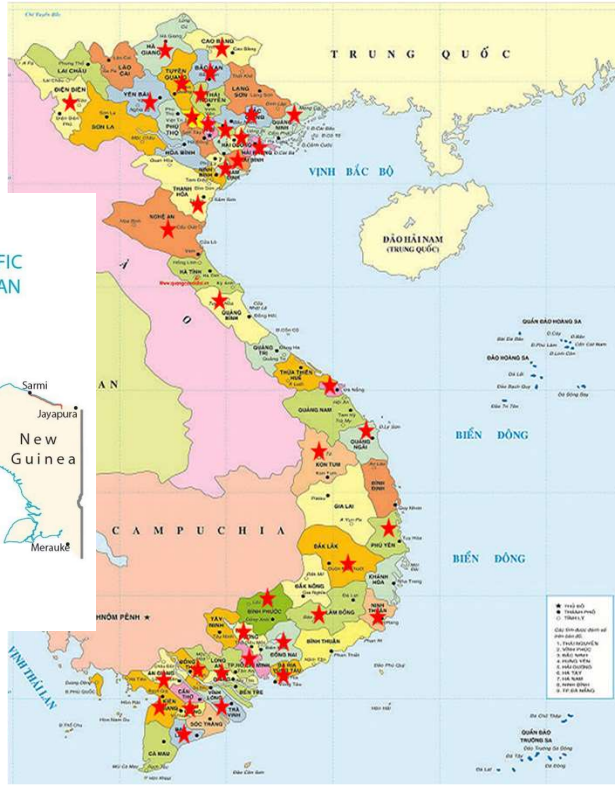
7. Willing and able to participate in NAMHS.
8. Has experience in successfully completing surveys of adolescent health.
9. Clear ability and proven track record of engaging key stakeholders to maximise the uptake of data.
10. Clear potential to build capacity in adolescent mental health and continue work on adolescent mental health (and mental health more broadly) as part of their ongoing research agenda.

Where and when was NAMHS conducted?



Kenya (K-NAMHS)
22nd March – 28th July 2021

Indonesia (I-NAMHS)
8th March – 30th November 2021



Vietnam (V-NAMHS)
21st September – 16th December 2021

NAMHS timeline

Jun 2018:	Project commencement	
Jul 2018 to Nov 2019:	Project development	
Nov 2019 to Dec 2019:	Interviewer training	
Nov 2019 to Feb 2020:	Pilot study	
~~**March 2020 to Dec 2020:**~~	~~**National survey data collection**~~ **– delay due to COVID-19**	
Mar 2020 to Feb 2021:	Additional development and revision	
Mar 2021 to Dec 2021:	National survey data collection	
	Mar 2021 to July 2021:	K-NAMHS
	Mar 2021 to Nov 2021:	I-NAMHS
	Sept 2021 to Dec 2021	V-NAMHS
Sep 2021 to Apr 2022:	Data cleaning (post-data collection)	
Apr 2022 to Nov 2022:	Initial data analysis and drafting of NAMHS country reports	
Sep 2022 to May 2023:	NAMHS country reports in-country launches and dissemination	
June 2023 to now:	Ongoing data analysis and results dissemination	

Mental disorders: Measure used in NAMHS

Diagnostic Interview Schedule for Children, Version 5 (DISC-5)

- Fully-structured diagnostic instrument that assesses mental disorders in children and adolescents.
- Designed for interviewer administration - either by lay interviewers (people with no formal clinical training) or by clinicians.
- Determines the presence or absence of symptoms which are required for diagnosis of a mental disorder as per DSM-5.
- Collects detailed information on individual symptoms to determine diagnosis according to DSM-5, including duration, frequency, severity, and expression of these symptoms, while also determining the impairment caused by these symptoms.

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How was NAMHS conducted?

PRIMARY CAREGIVER
Demographics
Chronic illness
Paediatric Symptom Checklist – 17 (PSC-17)
Patient Health Questionnaire – 9 (PHQ-9)
Generalised Anxiety Disorder – 7 (GAD-7)
DISC-5 ADHD
Service use
COVID-19

DISC-5 diagnostic modules

Other modules

SA Self-administered

ADOLESCENT
DISC-5 social phobia
DISC-5 generalised anxiety disorder
DISC-5 major depressive disorder
Suicidal behaviours
Self-harm
DISC-5 conduct disorder
DISC-5 PTSD
Informal support and coping strategies
Health
Self-esteem
Bullying
School and education
Peer relationships and loneliness
Relationship with primary caregiver
Safety and security
Sexual behaviour SA
Adverse Childhood Experiences (ACEs) SA
Substance use SA
COVID-19

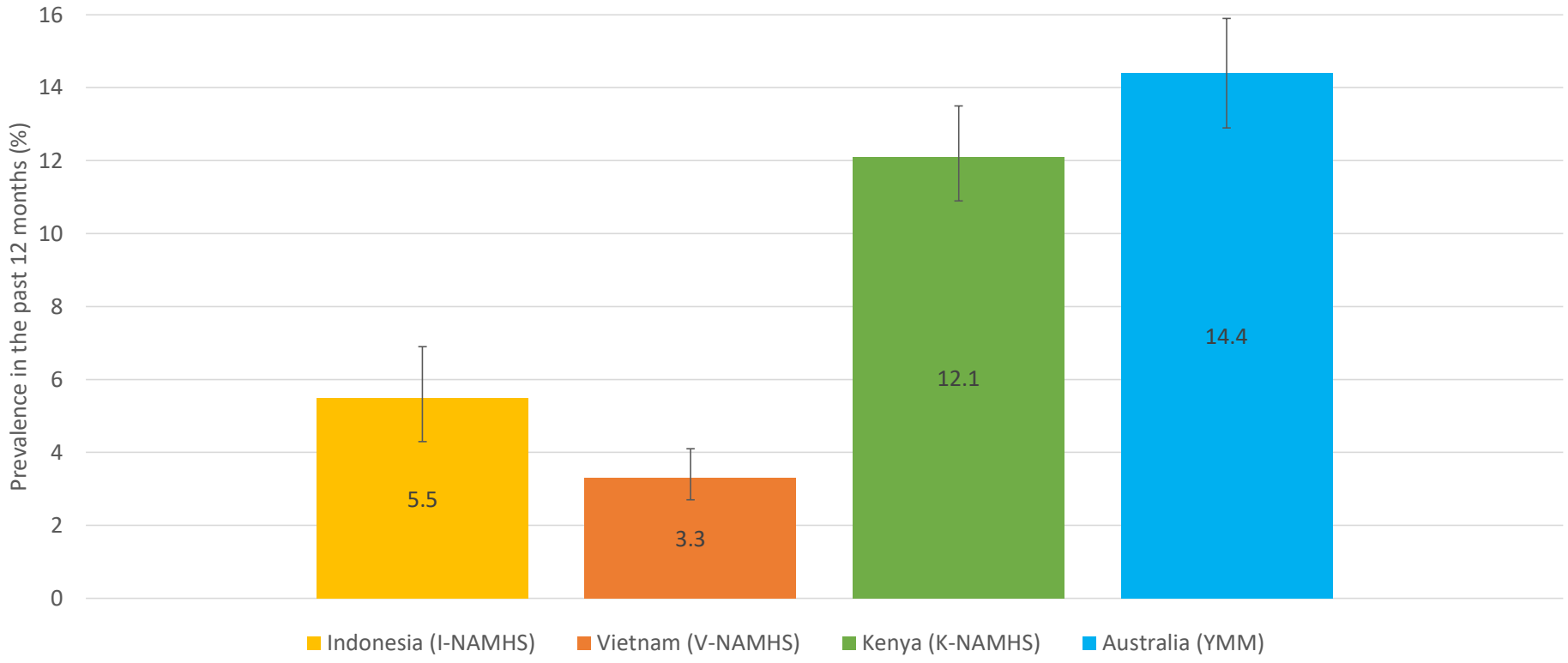
Who participated in I-NAMHS and V-NAMHS?

	Indonesia	Vietnam
Total sample (N) and response rate (%)	5,664 (92.2%)	5,996 (81.1%)
Adolescent		
Sex		
Male	50.9%	52.0%
Female	49.1%	48.0%
Age		
Average (years)	13.4 years	13.3 years
10-14 years	65.5%	65.2%
15-17 years	34.5%	34.8%
Education and employment		
Currently attending school	95.9%	91.4%
Currently employed	3.6%	4.1%
Primary caregiver		
Average age (years)	42.7 years	43.8 years
Mother	74.5%	62.6%
Household		
Urbanicity		
Urban	69.1%	32.6%
Rural	30.9%	67.4%

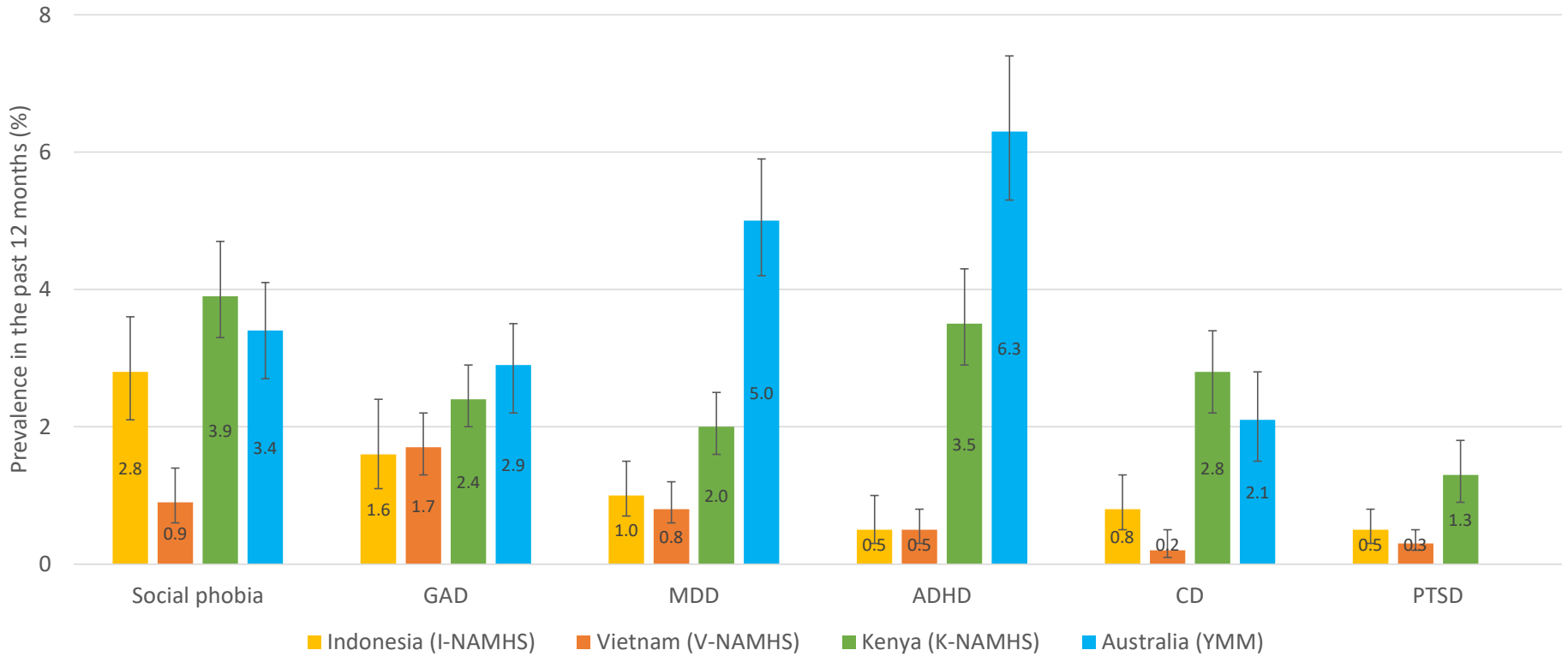
Prevalence of any mental disorder in the past 12 months

	Indonesia, % (95% CI)	Vietnam, % (95% CI)
Any mental disorder	5.5 (4.3 - 6.9)	3.3 (2.7 - 4.1)
Anxiety disorders	3.7 (2.8 - 4.9)	2.3 (1.8 - 2.9)
Social phobia	2.8 (2.1 - 3.6)	0.9 (0.6 - 1.4)
Generalised anxiety disorder	1.6 (1.1 - 2.4)	1.7 (1.3 - 2.2)
Major depressive disorder	1.0 (0.7 - 1.5)	0.8 (0.6 - 1.2)
PTSD	0.5 (0.3 - 0.8)	0.3 (0.2 - 0.5)
ADHD	0.5 (0.3 - 1.0)	0.5 (0.3 - 0.8)
Conduct disorder	0.8 (0.5 - 1.3)	0.2 (0.1 - 0.5)
Comorbidity	1.0 (0.6 - 1.4)	0.6 (0.4 - 0.9)
Sex		
Male	5.8 (4.4 - 7.6)	3.3 (2.4 - 4.6)
Female	5.1 (3.7 - 7.1)	3.3 (2.6 - 4.3)
Age		
10-14 years	4.9 (3.7 - 6.4)	3.2 (2.5 - 4.0)
15-17 years	6.6 (5.0 - 8.5)	3.6 (2.6 - 5.0)

Prevalence of any mental disorder (12m)



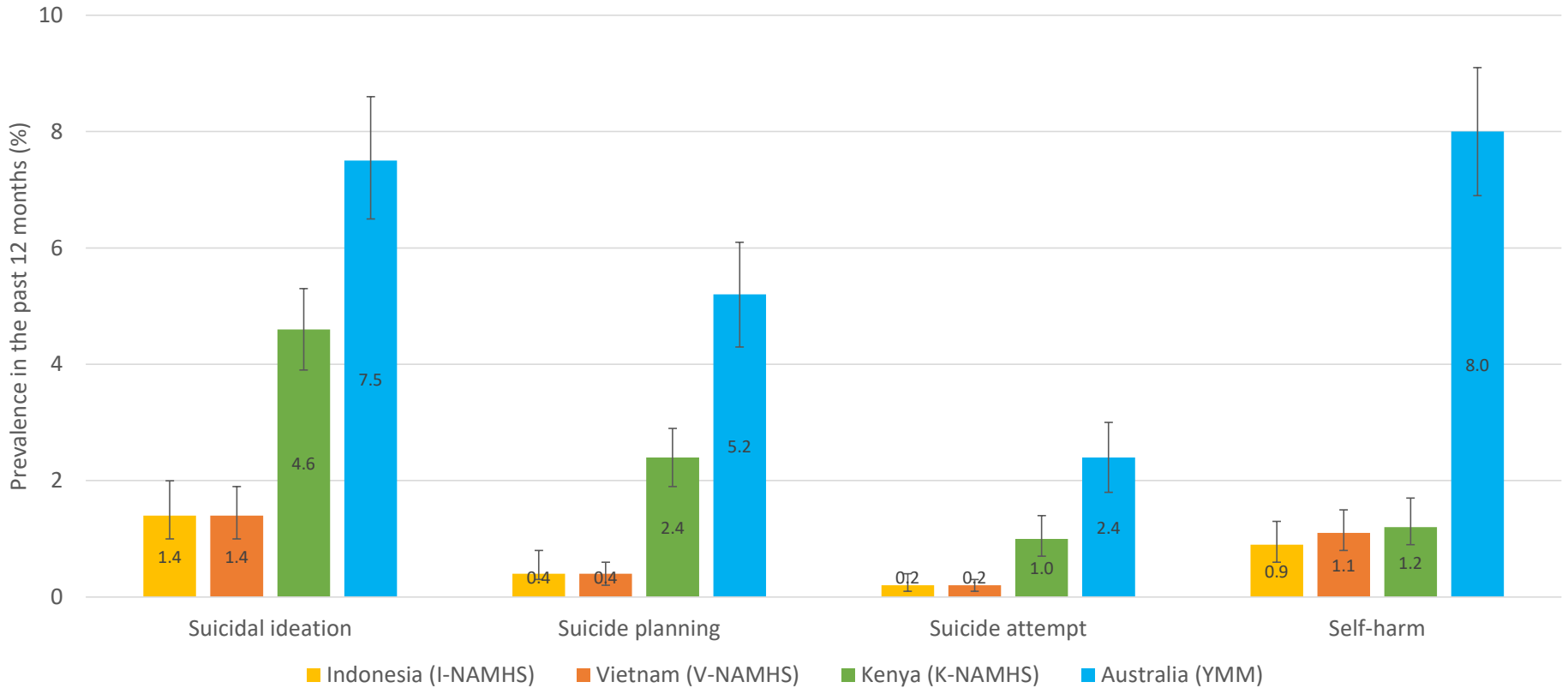
Prevalence of individual mental disorders (12m)



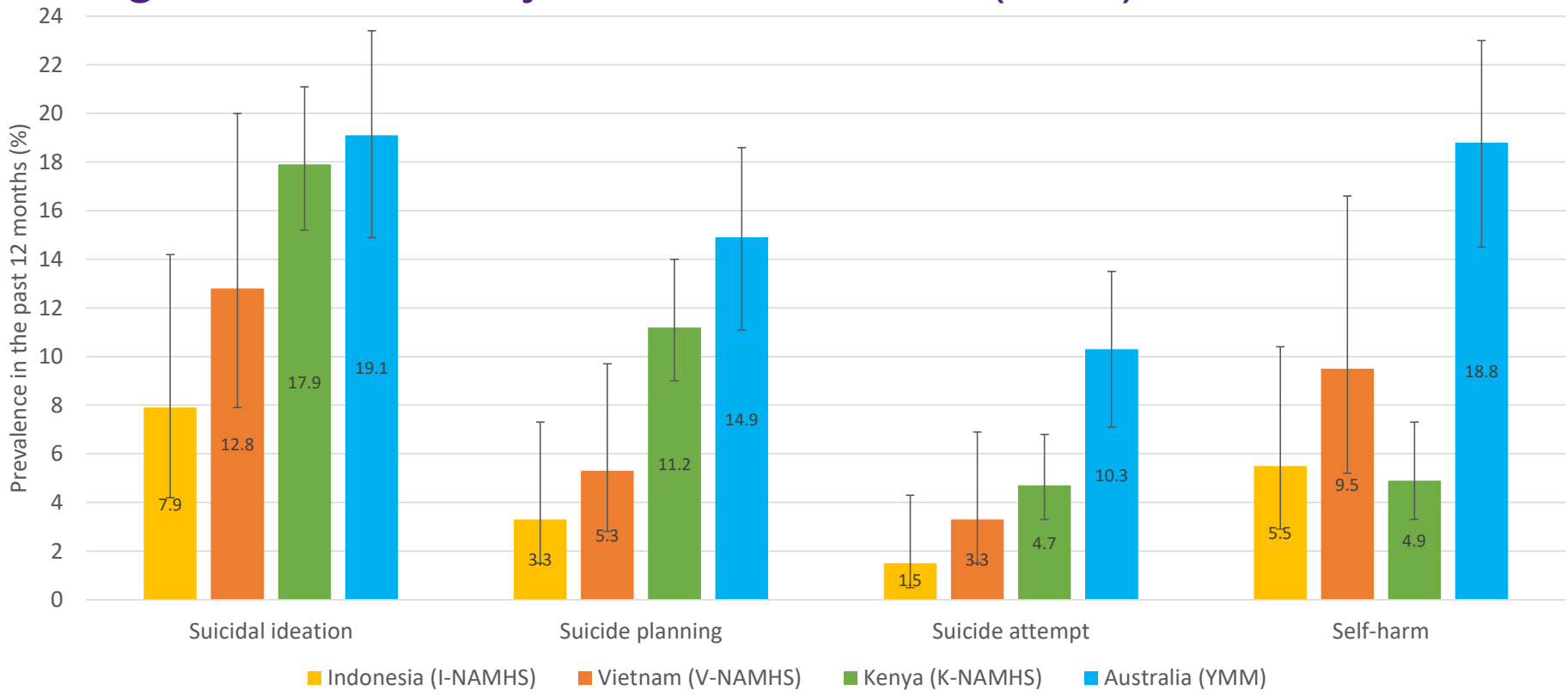
Suicidal behaviours and self-harm in the past 12 months

Prevalence	Indonesia, % (95% CI)	Vietnam, % (95% CI)
Suicidal behaviour		
Ideation	1.4 (1.0 - 2.0)	1.4 (1.0 - 1.9)
Planning	0.4 (0.3 - 0.8)	0.4 (0.2 - 0.6)
Attempt	0.2 (0.1 - 0.4)	0.2 (0.1 - 0.3)
Self-harm	0.9 (0.6 - 1.3)	1.1 (0.8 - 1.5)

Prevalence of suicidal behaviours and self-harm (12m)



Prevalence of suicidal behaviours and self-harm (12m) among those with any mental disorder (12m)



Suicidal behaviours and self-harm

Prevalence	Indonesia, % (95% CI)	Vietnam, % (95% CI)	Kenya, % (95% CI)
Suicidal behaviour			
Ideation	1.4 (1.0 - 2.0)	1.4 (1.0 - 1.9)	4.6 (3.9 - 5.3)
Planning	0.4 (0.3 - 0.8)	0.4 (0.2 - 0.6)	2.4 (1.9 - 2.9)
Attempt	0.2 (0.1 - 0.4)	0.2 (0.1 - 0.3)	1.0 (0.7 - 1.4)
Self-harm	0.9 (0.6 - 1.3)	1.1 (0.8 - 1.5)	1.2 (0.9 - 1.7)

Adjusted odds ratios	Indonesia, % (95% CI)	Vietnam, % (95% CI)	Kenya, % (95% CI)
Suicidal behaviour			
Ideation	7.1 (3.1 - 15.9)	14.7 (7.5 - 28.6)	8.0 (6.1 - 10.6)
Planning	10.4 (3.8 - 28.9)	26.9 (10.8 - 66.9)	10.9 (7.4 - 15.9)
Attempt	14.4 (2.2 - 95.3)	53.7 (18.1 - 158.8)	9.7 (5.8 - 16.3)
Self-harm	10.8 (4.5 - 26.2)	13.3 (6.0 - 29.5)	7.2 (3.6 - 14.4)

Key messages

- Mental disorders are present among adolescents aged 10-17 years in Indonesia and Vietnam.
- Prevalence varies by disorder, with externalising disorders (ADHD and CD) being especially low in Indonesia and Vietnam as compared to other countries.
- While suicidal behaviours and self-harm were low, the association with mental disorders was strong.
- NAMHS demonstrates that high-quality large-scale data collection for adolescent mental health is very possible in the Asia Pacific and beyond!
- This is just the beginning….

For information about the launch of the NAMHS public use datasets and other exciting news, please sign up to our mailing list:

Coming soon…

- Erskine, H., et al. (2024). Prevalence of adolescent mental disorders in Kenya, Indonesia, and Viet Nam measured by the National Adolescent Mental Health Surveys (NAMHS): a multi-national cross-sectional study. *The Lancet*, in press.
- Dedicated NAMHS supplement in *Child and Adolescent Psychiatry and Mental Health*, including papers across several topics on:
  - Sexual and gender diverse adolescents
  - ACEs
  - Bullying
  - Social support
  - Service use
- Peer-reviewed publications and other results dissemination.
- Public use datasets and associated meta-data launching by the end of 2024.

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And now to Amirah…

For information about the launch of the NAMHS public use datasets and other exciting news, please sign up to our mailing list:

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