



THE IMPACT OF NICOTINE ADDICTION ON THE HEALTH AND WELL-BEING OF YOUNG PEOPLE

Lesego Mateme

South African Tobacco-Free Youth Forum
(SATFYF)

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THE CRISIS IS ALREADY HERE

A Generation is Being Hooked

A recent study from the University of Cape Town, including **25 149** learners from **52** South African high schools revealed the following:

- **36.71%** of them reported ever using a vape
- **16.83%** reported current vape use
- **47%** of them reported vaping within the first hour of waking up, suggesting high nicotine addiction

Electronic cigarette usage amongst high school students in South Africa: a mixed methods approach

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Summary

Background The WHO has highlighted that: "promotion of e-cigarettes has led to marked increases in e-cigarette use by children and adolescents." The long-term neuropsychiatric and psychological consequences of substance abuse in adolescence is well recognised. Limited data exists on the adolescent burden of vaping-related nicotine addiction and behavioural and/or psychological dependence to guide pharmacological or behavioural interventions to stop electronic cigarette usage.

Methods A self-administered brief electronic survey was provided to a large, sample of high school students from January to October 2023 in South Africa. Questions on vaping usage, initiation, reasons for continuation and indicators of physical and psychological dependence were asked. A mixed methods approach was used to obtain and analyse quantitative and qualitative responses.

Findings 25,149 students from 52 South Africa schools completed the survey. 45.8% identify as female, 51.7% male, 0.3% transgender, 2.1% do not identify with a gender. Current vaping was reported by 16.83% (95% CI: 16.47–17.30), with 36.71% reporting ever using a vaping product (95% CI: 26.06–37.36). The odds of vaping increased by grade but not with increasing school affluence. 47% vaped within the first hour of waking suggesting high nicotine addiction. Vaping initiation reasons of 'social influences' and 'curiosity', changed significantly to ongoing motivations of: 'enjoyment', 'managing mental distress' and 'addiction' to nicotine. Paired quantitative/qualitative responses regarding stress and dependence showed inconsistencies at the individual student level.

Interpretation Vaping in the schools surveyed was high and increased by grade but was not associated with school level affluence. Drivers for vaping initiation change significantly to persistence drivers with significant nicotine addiction. Adolescent perceptions (qualitative/quantitative) are frequently incongruent suggesting that mixed methods evaluations are required to understand individual level drivers of vaping. Urgent interventions tailored to this population are required. Nicotine addiction may require "off-label" pharmacotherapies alongside tailored behavioural interventions utilising the expressed concerns, psychological and dependence measures elicited from adolescents.

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Keywords: Adolescent; Vaping addiction; Nicotine addiction; Mental health

Introduction

A recent 2023 World Health Organisation call to action has highlighted the concern that the promotion of e-cigarettes has led to a substantial rise in e-cigarette use by children and adolescents. In the USA, e-cigarette use

amongst students in grades 6–12 has been declared 'an epidemic'.^{1,2} Surveys from the UK indicate that 20.5% of children (aged 11–17) have tried vaping, and that 7.6% of children currently vape.³ Limited data from Asia and Africa exist but report similar figures of ranging from

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DESIGNED AND MARKETED FOR THE YOUTH

Colours | Flavours | Influencers



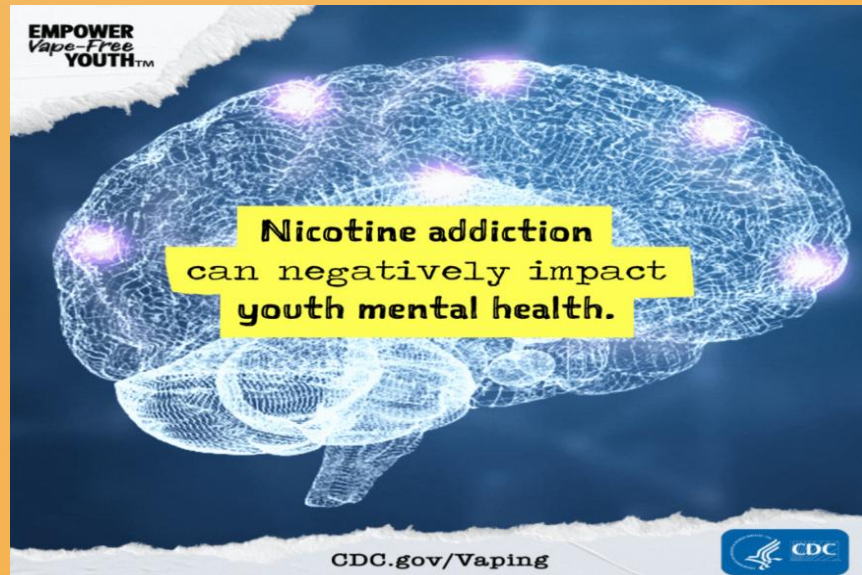
NICOTINE AND HEALTH

WHAT NICOTINE DOES TO THE YOUNG BRAIN

Brain development continues until around age 25 ([CDC](#))

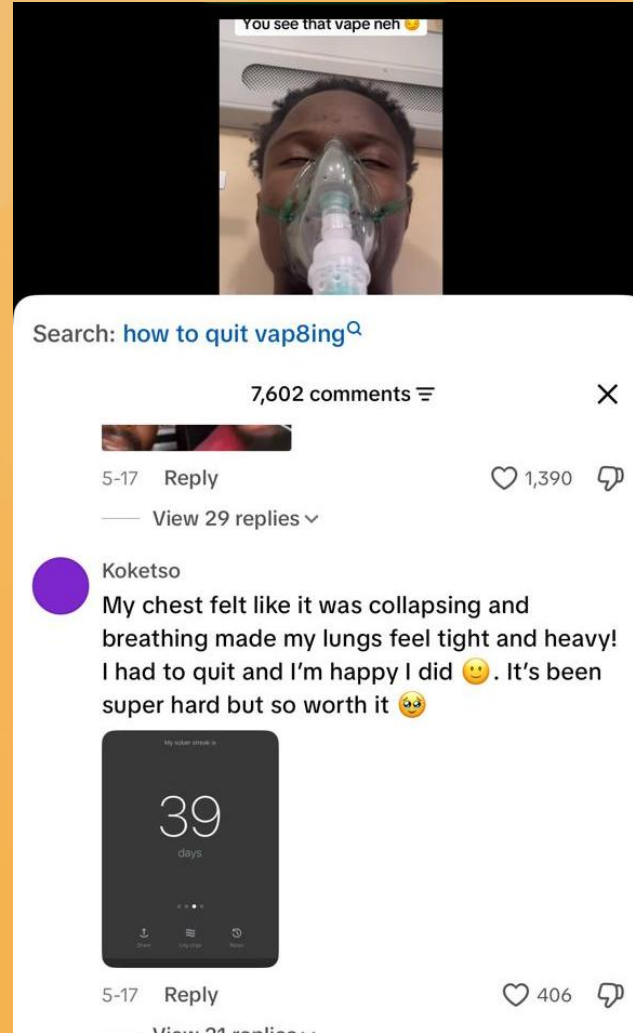
Nicotine affects:

- attention
- learning
- memory
- mood
- impulse control ([Truth Initiative](#))



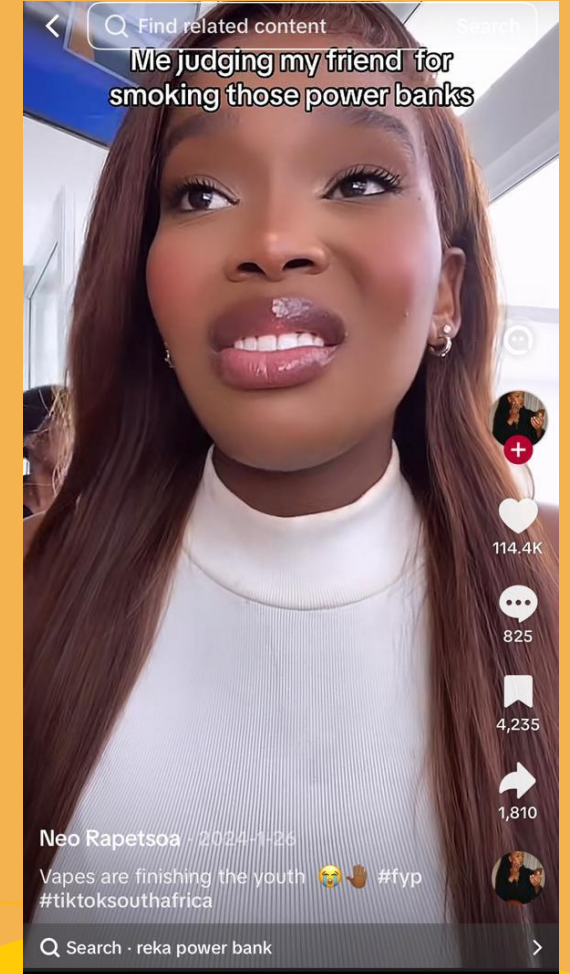
THE SOUTH AFRICAN CONTEXT

A Generation getting Hooked



The South African Context

A Generation is Fighting Back



THE IMPACT ON WELL-BEING

More Than a Physical Health Issue

Mental Health	<ul style="list-style-type: none">• Anxiety• Dependency• Mood changes• Stress coping through nicotine
Social Impact	<ul style="list-style-type: none">• Peer pressure• Normalization• Financial burden
Academic Impact	<ul style="list-style-type: none">• Concentration issues• Reduced productivity• Addiction disrupting routines

THE GATEWAY EFFECT

Where Does This Lead?

- There has been growing studies that highlight e-cigarette use as a gateway to:
 1. Traditional cigarette use (Khouja, and colleagues, 2019; van der Zee & Van Walbeek, 2023;)
 2. Marijuana/dagga use (Chadi, et al., 2019; Bentivegna, et al., 2019)
 3. Cocaine use (Silva and colleagues, 2023)



POLICY FAILURES

While Policy Delays, Addiction Expands

- Tobacco Products and Electronic Delivery (TC Bill) Systems Control Bill still delayed
- Emerging products remain weakly regulated
- Industry marketing continues aggressively



“Every month of delay introduces more young people to nicotine addiction.”

WHAT NEEDS TO HAPPEN

Protect Young People Before Profits

- Pass the TC Bill
- Regulate emerging products
- Restrict youth-focused marketing
- Protect schools and campuses
- Prioritize prevention



“Every month of delay introduces more young people to nicotine addiction.”



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THANK YOU!