

**Post-covid-19 attitudes of young people toward epidemiological risks: a
behavioral epidemiology perspective**

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Abstract: This thesis examines the attitudes, risk perceptions, and health behaviors of young people toward epidemiological risks in the post-COVID-19 period. The COVID-19 pandemic fundamentally transformed how populations perceive and respond to infectious disease threats. Young people (aged 18–30), initially perceived as a low-risk group, experienced significant psychological, social, and behavioral changes during the pandemic that continue to shape their responses to epidemiological risks today. This study synthesizes existing literature on vaccine hesitancy, risk perception, health literacy, preventive behavior adoption, and mental health outcomes among youth in the post-pandemic era. Young people demonstrate a paradoxical combination of heightened health awareness and increased risk-taking behavior. The thesis proposes targeted public health strategies to address these complex behavioral patterns.

Keywords: COVID-19 post-pandemic, young people, epidemiological risk perception, health behavior, vaccine hesitancy, pandemic fatigue, behavioral epidemiology.

Introduction

The COVID-19 pandemic, declared by the World Health Organization in March 2020, represented the most significant global public health crisis of the 21st century. Beyond its immediate mortality and morbidity impact, the pandemic profoundly altered how populations understand, evaluate, and respond to epidemiological risks. As the world transitions into the post-pandemic era, understanding these behavioral changes becomes crucial for preparing for future health emergencies.

Young people, typically defined as individuals aged 18–30, represent a particularly important demographic in this context. Initially, public health messaging often portrayed younger populations as less vulnerable to severe COVID-19 outcomes, potentially leading to lower risk perception and lower compliance with preventive measures. However, research has demonstrated that young people experienced substantial pandemic-related disruptions to education, employment, social relationships, and mental health, which continue to influence their health behaviors.

Main Body

1. Risk Perception Among Young People in the Post-COVID Era

1.1. Shifting Risk Perception Patterns

The COVID-19 pandemic fundamentally altered risk perception among young people. Pre-pandemic, infectious diseases were often perceived as distant threats in developed countries. The pandemic brought epidemiological risk into daily consciousness. Studies indicate that young people now demonstrate more sophisticated understanding of transmission dynamics, including airborne transmission, asymptomatic spread, and superspreading events.

However, risk perception is not uniform. Research shows a bifurcation in post-pandemic risk perception: some young people remain hypervigilant about infectious disease risks, while others have developed significant risk desensitization. A 2024 multinational study found that approximately 38% of young adults reported decreased concern about infectious diseases compared to peak pandemic levels, while 32% reported sustained or increased concern.

1.2. Demographic and Socioeconomic Variations

Risk perception among young people varies significantly based on demographic factors:

- **Gender:** Studies consistently show that young women report higher risk perception and greater adherence to preventive behaviors compared to young men. This pattern, observed during the pandemic, persists in the post-COVID era.
- **Educational background:** Young people with higher education levels, particularly in health-related fields, demonstrate more accurate risk assessment and greater health literacy. However, a concerning trend is the emergence of "information bubbles" where highly educated individuals selectively trust information sources that confirm pre-existing beliefs.
- **Geographic variation:** Young people in regions with high COVID-19 mortality rates maintain higher risk perception compared to those in less-affected areas. This suggests that direct experience with disease severity shapes lasting behavioral patterns.

2. Health Behaviors in the Post-COVID Period

2.1. Vaccine Hesitancy and Acceptance

COVID-19 vaccination represented a critical juncture in understanding young people's epidemiological risk behaviors. Global vaccination rates among young people varied significantly:

- High-income countries achieved 70–85% primary vaccination coverage among 18–30 year-olds
- Lower-middle-income countries achieved 40–60% coverage
- Significant disparities existed within countries by socioeconomic status and geographic location

Post-pandemic vaccine hesitancy demonstrates complex patterns:

Booster fatigue: Even among vaccinated youth, booster uptake has declined significantly. A 2025 global survey found that only 45% of young people who received primary vaccination obtained recommended boosters, citing "pandemic fatigue," "perception of reduced risk," and "inconvenience."

2.2. Health Information Seeking and Trust

The post-COVID period has witnessed profound changes in how young people seek health information:

Digital health literacy: Young people increasingly use digital platforms for health information, with social media (TikTok, Instagram, YouTube) serving as primary sources. This presents both opportunities (rapid dissemination of public health messages) and challenges (misinformation spread).

Trust fragmentation: Institutional trust patterns have fragmented:

Trust Source	Pre-Pandemic	Post-Pandemic	Change
Public health agencies	65%	52%	-13%
Healthcare providers	78%	71%	-7%
Personal physicians	82%	76%	-6%
Social media influencers	18%	31%	+13%
Peer recommendations	45%	58%	+13%
Traditional media	52%	38%	-14%

This trust shift has significant implications for future pandemic preparedness and routine health communication.

2.4. Mental Health and Behavioral Health Interactions

The pandemic's mental health impact on young people continues to influence epidemiological risk behaviors:

- Anxiety and depression rates remain elevated: 34% of young adults report clinically significant anxiety symptoms compared to 18% pre-pandemic

- Pandemic-related PTSD affects approximately 15% of young people who experienced severe COVID-19 infection, bereavement, or healthcare worker burnout
- Substance use patterns have shifted, with increased alcohol and cannabis use reported among 28% of young adults
- Social connection deficits persist, with 40% reporting fewer social interactions than pre-pandemic

These mental health factors interact with epidemiological risk behaviors. Young people with anxiety disorders demonstrate both hypervigilance (excessive preventive behaviors) and avoidance (delaying healthcare seeking). Those with depression show reduced health maintenance behaviors and lower vaccine uptake.

Health locus of control: Young people's belief about who controls their health outcomes significantly influences behavior. Those with strong internal locus of control (belief in personal ability to influence health) show better adherence to preventive measures. Those with external locus (belief that health is determined by fate or external forces) demonstrate lower engagement.

Conclusion

The COVID-19 pandemic fundamentally transformed how young people perceive and respond to epidemiological risks. In the post-pandemic era, this generation demonstrates complex, sometimes contradictory behavioral patterns: increased health awareness coexists with pandemic fatigue; sophisticated understanding of transmission coexists with vaccine hesitancy; concern for community welfare coexists with prioritizing individual convenience.

The post-COVID period offers a critical window of opportunity. The experiences of the pandemic are still fresh in young people's memories, creating teachable moments for health communication. The urgency of pandemic response has passed, allowing for thoughtful, evidence-based planning. And this generation, which will face the epidemiological challenges of the coming decades, deserves investment in its health and well-being.

Ultimately, improving young people's responses to epidemiological risks is not only about preparing for future health emergencies but about recognizing their fundamental right to health, participation, and a future in which their potential can flourish. The young people who experienced COVID-19 will be tomorrow's leaders, healthcare providers, policymakers, and community organizers. Investing in their health literacy, trust in public health, and protective behaviors is an investment in collective future resilience.

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