

# Analysis of Health Attitudes Among Poles in the Context of Selected Epidemiological Threats

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## Abstract

Infectious diseases remain one of the most pressing challenges to public health in Poland, as illustrated by the crises of the HIV/AIDS epidemic and the COVID-19 pandemic. Considering cultural, social, and political influences, this study investigates the health attitudes of Poles toward these epidemiological threats. While research confirms that health has become the highest priority for Poles, apprehensions about cancer continue to overshadow fears of infectious diseases such as HIV and COVID-19. Paradoxically, despite relatively low levels of anxiety about infections, there is a troubling gap in voluntary HIV testing and a tepid response to COVID-19 and other vaccination campaigns. An examination of these health attitudes exposes barriers to persuading the public to embrace preventive behaviors and reconsider their health-related choices. In the aftermath of the COVID-19 pandemic, which has illuminated systemic vulnerabilities in public health infrastructure, there is a growing need for intensified educational campaigns aimed at enhancing health awareness and rebuilding trust in immunization. These findings reinforce the key importance of multifaceted health strategies that address not only medical, but also psychological and educational angles to effectively confront future health crises.

**Keywords:** health attitudes, infectious diseases, COVID-19, HIV, health education

## Introduction

Infectious diseases represent a pervasive and multifaceted threat to individuals and society as a whole. Recent studies underscore notable issues such as fear, social support mechanisms, and the efficacy of preventive measures in mitigating the impacts of these diseases. Epidemics like the HIV/AIDS crisis and the COVID-19 pandemic—experienced within just one generation—have not only placed immense pressure on healthcare systems, but have also reshaped psychosocial patterns within communities. Over time, these outbreaks have profoundly influenced various facets of social life and altered medical standards. To fully grasp the ramifications of these phenomena, we must consider non-health-related contexts, including cultural norms, beliefs, and political circumstances, as these factors shape health attitudes and behaviors, especially in response to future infectious disease threats.

The COVID-19 pandemic is a stark reminder of the enduring danger posed by infectious diseases to both public health and social stability. Not long ago, many believed that infectious diseases had been largely relegated to history and that dangerous viruses were under control. This misplaced optimism redirected focus toward lifestyle diseases, prompting concentrated efforts to reverse alarming trends in cancer, cardiovascular conditions, and diabetes. However, infectious diseases remain a leading cause of morbidity and mortality on a global scale and continue to rank among the most intractable and formidable public health threats worldwide.

The recognition that infectious diseases pose not only a significant threat to individual health but also to global economies and security is widely shared among business leaders, policymakers, and scientists. The “Global Risks Report 2023,” unveiled during the World Economic Forum in Davos, identified infectious diseases as one of the paramount global challenges, alongside threats such as terrorism, economic downturns, and the deployment of weapons of mass destruction (World Economic Forum, 2023). The report further emphasizes that the economic fallout from pandemics—exacerbated by disparities in vaccination rates and access to healthcare, as well as widening educational gaps, continue to present substantial obstacles, potentially steering the world onto increasingly divergent developmental paths.

In light of mounting global concerns, particularly amid the COVID-19 pandemic, analyzing public health attitudes has become a vital area of research. Studies on public awareness and health behaviors in specific populations provide valuable insights into the health status of societies and serve as a guide for healthcare policymakers, institutions, media outlets, and NGOs conducting educational outreach and awareness campaigns. In times of severe health crises, the challenge often lies not only in persuading individuals to adopt specific health-positive behaviors, but also in understanding patients’ attitudes and motivations, which is key to crafting credible messaging and coherent communication strategies. This issue is particularly pressing in an era of declining trust

in scientific paradigms, when comprehending the determinants of health behaviors is indispensable for safeguarding the well-being of millions worldwide.

This study examines the evolving health attitudes and anxieties of individuals and sheds light on the complex psychosocial dynamics that have unfolded during two of the most significant recent epidemics: HIV/AIDS and COVID-19. It synthesizes findings from selected socio-medical studies that analyze health attitudes, knowledge, and health-promoting behaviors in response to infectious diseases.

## Socio-Historical Context

The recurring waves of infectious diseases, often manifesting as epidemics, have profoundly shaped human civilization. Poland, much like other nations, has endured cycles of devastating epidemics throughout its history, leaving an indelible mark on society. Over the centuries, Poles have faced major outbreaks of diseases such as the Black Death, cholera, influenza, and tuberculosis. The pervasive fear of these diseases was so deeply rooted that its echoes are still found in language, rituals, and religious hymns meant to ward off illness.

The earliest documented accounts of infectious diseases in Poland date back to the 11th century. As chronicler Jan Długosz vividly described the era: “Hunger, pestilence, and plague reigned terribly at that time not only in Poland but throughout nearly the entire world” (Mecherzyński, 1869). Despite these accounts, historians and virologists remain divided on whether the initial wave of the plague definitively reached Polish territories. Nonetheless, it is certain that the regular outbreaks of the plague began in 1348, when the so-called *mortal plague* reportedly decimated around one quarter of the population, according to contemporary records. Subsequent waves of plague continued to ravage Polish lands over the ensuing centuries, with the last documented cases appearing in the 18th century (Chylińska et al., 2008).

Frequent wars on Polish soil undoubtedly facilitated the spread of infectious diseases, but another major factor was Poland’s position as a crossroads for major trade routes, which enabled wide-ranging contact with people from diverse regions, thus inadvertently catalyzing the transmission of diseases. One example is syphilis, which appeared in Poland as early as 1495, merely two years after it was “brought” to Europe from the Americas by Christopher Columbus (Koleta-Koronowska, 2010). In the 19th century, Poland also experienced high morbidity rates due to cholera, and its epidemics posing a persistent threat until the mid-20th century, when advances in medicine gradually introduced more effective diagnostic tools, immunization techniques, and treatment options for various infectious diseases. The last major epidemic in Poland—and one of Europe’s final outbreaks of smallpox—occurred locally in Wrocław in 1963. Thanks to the swift response of medical

professionals and the collaboration of multiple institutions, the epidemic was quickly contained. Poland's response exemplified one of the crowning achievements of modern medicine: the eradication of smallpox through vaccination campaigns.

In contrast, a more contemporary yet paradoxically overlooked issue is the ongoing HIV epidemic, which has persisted in Poland for over three decades since the virus first appeared in the country in 1985. Political events of the era, including martial law and communist rule, markedly impacted social attitudes toward this infectious disease. While Poland's relative isolation from global transmission sources spared it from the catastrophic first wave of the HIV/AIDS epidemic, political agendas often led to misinformation and ineffective prevention strategies, which often targeted random individuals rather than at-risk populations.

The history of infectious diseases in Poland offers valuable lessons on the complex interplay between society and public health, which are crucial for understanding how societies adapt to shifting epidemiological conditions and for developing effective health strategies to deal with contemporary healthcare issues. Epidemics of infectious diseases have consistently posed formidable obstacles for Polish society, bringing not only physical suffering but also social and economic losses.

## **Public Health Attitudes and Concerns About Infectious Diseases**

In Polish society, health consistently occupies the apex of life priorities. According to a 2019 CBOS survey, more than 55% of respondents identified maintaining good health as a paramount life value, second only to family happiness, which was prioritized by 80% of participants (CBOS, 2019). This valuation of health was reinforced during the COVID-19 pandemic, with 47% of respondents in 2020 identifying health as their most important value, surpassing family, which ranked second (CBOS, 2020).

However, not all illnesses elicit the same level of concern within the population. For years, cancer and strokes have been the most feared conditions among Poles. This trend is corroborated by the 2021 *Polish Risk Map* study conducted by Deloitte and the Polish Insurance Chamber (PIU), in which an overwhelming 81% of respondents identified cancer as their greatest fear (PIU, 2021). Ironically, this widespread anxiety sometimes hinders preventive behaviors, such as routine screening, which leads to delayed diagnoses and diminished prospects for successful treatment. The same study also illuminated pervasive fears about long-term impairments, including brain damage resulting in a vegetative state (76%) and loss of physical independence (80%), which ranked sixth among the most apprehended health issues.

A comparative study carried out in February 2020, before the COVID-19 pandemic, and repeated in February 2021, amidst the pandemic, sheds light on how the pandemic

and its socioeconomic repercussions—such as lockdowns and widespread job or income losses—intensified certain fears among Poles. The findings show that three key fears remained unchanged across age, gender, and location: the death of a loved one, insufficient financial resources to treat a serious illness, and the severe illness of a close family member. Out of 40 fears analyzed, concerns related to health and access to medical care dominated the top ten risks most frequently cited by respondents. Interestingly, in the second wave of the study, respondents spontaneously mentioned the pandemic itself as an independent risk factor, albeit only 13% of respondents considered it their greatest fear. Concerns about serious illnesses affecting loved ones grew by 4 percentage points, while worries over limited access to healthcare increased by 5 percentage points (PIU, 2021).

However, these health-related fears have not translated into more proactive healthcare practices. According to research conducted by the IQS Institute (IQS Institute, 2023), nearly 40% of Poles visit a doctor only once every six months or less, and the pandemic did not lead to any significant increase in the frequency of medical consultations. Additionally, Eurostat data show that 40% of Poles forego preventive health screenings, a figure that places Poland among the countries with the highest rates of missed screenings in Europe (EU Report, 2021).

### **Poles Exhibit the Lowest Levels of Concern About Infectious Diseases**

For years, infectious diseases have consistently been regarded as low-priority health concerns by Polish society, as evidenced by the limited participation in preventive vaccination programs. This lack of concern extends to diseases labeled as “taboo,” such as sexually transmitted infections (STIs), which not only carry a heavy social stigma but also trigger psychological denial mechanisms, often associated with public reluctance to acknowledge their risks.

This trend is further substantiated by the study *Poles and Health: Perceptions and Practices*, conducted on a representative sample of the Polish population (Sobierajski, 2023). The study compiled contemporary data on health-related fears, attitudes toward healthcare, vaccination, and preventive screening. Results show that apprehensions about infectious diseases remain relatively low: only 13% of respondents expressed significant fear of contracting HIV or developing AIDS, 7% of COVID-19, and 6% of the flu.

This lack of concern may partly reflect the success of public health campaigns and preventive measures implemented by Polish healthcare authorities. However, it is also likely influenced by the unexpected impact of the COVID-19 pandemic, which, instead of reinforcing pro-vaccination attitudes, fueled the growth of anti-vaccination movements. The widespread debate over vaccine safety and efficacy has amplified public skepticism, forming a substantial barrier to the effectiveness of ongoing vaccination programs.

Concurrent research also points to a deeper issue: a lack of health awareness regarding infectious diseases, particularly in terms of preventive care. Alarmingly, a significant proportion of the population fails to undergo regular health screenings, which underscores a broader gap in health literacy. These findings emphasize the need for improved health education, more accessible public awareness campaigns, and enhanced online resources. Investments in these areas are vital to elevating health literacy and building a proactive approach to healthcare in Polish society.

## **Polish Attitudes Toward HIV**

The HIV epidemic presents an intriguing sociological phenomenon in contemporary Poland. A new generation—those born in the 1990s and 2000s—has emerged among populations at risk of infection. This group has not experienced the fear and uncertainty that characterized the early years of the epidemic. By the time they came of age, antiretroviral therapies had rendered HIV a manageable condition, and the topic had largely disappeared from headlines, surfacing only in occasional reports around World AIDS Day on December 1.

However, recent data reveals a troubling trend: Poland experienced a nearly 90% surge in HIV infections last year, recording an unprecedented 2,380 new cases (National AIDS Center Bulletin, 2023). Despite this alarming increase, only 13% of respondents in a recent study expressed concern about contracting HIV. This lack of awareness mirrors the general lack of awareness about sexually transmitted infections (STIs), as evidenced by the extremely low testing rate—only 10% of Polish adults have ever been tested for HIV (Sobierajski, 2023).

Further data is provided by a 2020 study conducted by ARC Rynek i Opinia for the National AIDS Center. Although over two thirds of respondents reported taking conscious steps to reduce their risk of HIV infection, many demonstrated insufficient knowledge of transmission routes. Misconceptions were widespread: around 40% of participants incorrectly identified childbirth, breastfeeding, or pregnancy as potential sources of HIV transmission. Additionally, uncertainty surrounded other modes of transmission, such as medical procedures in hospitals. Alarmingly, 10% of respondents believed that casual contact, such as handshakes or cheek kisses, posed a risk. Although one in three respondents acknowledged that HIV could affect anyone, many dismissed the relevance of the issue to their own lives, citing a perceived lack of personal exposure.

Only 20% of respondents had ever been tested for HIV, and awareness of testing procedures and protocols varied widely. For example, while 82% knew that blood tests are required to detect the virus, many were unsure about the appropriate age for testing, the timing after potential exposure for accurate results, or where such tests could be accessed. Only half of the respondents stated that they knew where someone seeking an HIV test could go (ARC Rynek i Opinia, 2020).

## Changing Health Attitudes and Concerns Amid the COVID-19 Pandemic

As it presented numerous challenges for healthcare systems and policymakers, the COVID-19 pandemic has profoundly reshaped health attitudes and perceptions of health risks in contemporary Polish society. The socioeconomic repercussions of the pandemic caused by the SARS-CoV-2 virus are anticipated to persist for years, affecting not only public health but also social and economic stability. These experiences have become a part of the cultural legacy and created a new collective awareness.

The first year of the pandemic saw notable changes in health attitudes among Poles. The 2020 study *The Impact of the COVID-19 Pandemic on the Emotions, Behaviors, and Attitudes of Poles* (Hamer et al., 2020), conducted by psychologists from SWPS University, the Institute of Psychology of the Polish Academy of Sciences, and Indiana University of Pennsylvania, provides an insightful analysis. Researchers surveyed participants at four intervals, asking about their fears related to various aspects of the pandemic, and tracked fluctuations in responses across these periods.

The study revealed that fears related to the pandemic were most intense during its early stages, peaking in April, and declining through May and June.

- Healthcare system capacity: In March, 74% of respondents expressed fears about hospital overcrowding and the inability of the healthcare system to manage the crisis. This concern peaked at 79% in April, dropped to 56% by May and June, and climbed again to 64% in December.
- Illness of loved ones: Fears regarding a loved one falling ill stood at 72% in March, rose to 75% in April, decreased to 60% in May and June, and slightly increased to 61% in December.
- Access to medical care: By May and June, 65% of respondents expressed concerns about difficulties accessing non-pandemic-related medical care. This figure increased to 69% in December.
- Neglected health issues: Fear of other health problems being overlooked due to the focus on COVID-19 was first reported in May and June, with 64% of respondents expressing such fears. By December, this figure had risen to 68%.
- Ventilator availability: Notably, December marked the first time when concerns about the potential unavailability of ventilators for loved ones were surveyed, with 54% of respondents expressing fears regarding this possibility.

Demographic analysis revealed key differences in pandemic-related health attitudes and fears based on gender and age. Women consistently reported higher levels of concern than men across all survey periods. Older respondents (aged 55 and above) also exhibited greater levels of worry compared to younger participants, possibly due to pre-existing

health conditions. This suggests that life experiences and heightened vulnerability may influence respondents' perception of epidemiological threats.

The researchers attribute the declining fears surrounding the pandemic to the so-called "adaptation phase," a process in which individuals acclimate to a persistent stressful situation that remains unchanged despite their efforts to mitigate it. Additionally, the authors suggest that the decrease in concerns may stem from the use of denial as a coping mechanism, wherein individuals downplay the perceived threat to manage their stress.

While the COVID-19 pandemic has caused global shifts and heightened public health awareness, and infectious diseases have emerged as a major global concern over the past three years, viruses like COVID-19 and influenza remain relatively low on the list of health concerns for Poles. Only 7% of respondents reported significant fear of contracting SARS-CoV-2, and even fewer (6%) expressed concern about the flu (Sobierajski, 2023). This low level of fear aligns with existing observations about Polish attitudes toward vaccinations and the growing resistance to immunization (Raciborski et al., 2022). Poland remains one of the European countries with the lowest vaccination rates for COVID-19 and influenza (Raciborski et al., 2022; European Centre for Disease Prevention and Control).

## Conclusions

The findings on health attitudes and the diminishing concerns about the pandemic closely mirror the vaccination decisions of Poles and the rising prevalence of vaccine hesitancy (Raciborski et al., 2022). Poland ranks among the European countries with the lowest COVID-19 and influenza vaccination rates (European Centre for Disease Prevention and Control). According to the European Centre for Disease Prevention and Control, 60% of the Polish population has completed the primary vaccination series, compared to 73.1% in EU/EFTA countries. However, as time has passed since the onset of the pandemic, interest in vaccination has markedly declined. For instance, only 33.1% of Poles have received the first booster dose, in contrast to 54.8% of the EU/EFTA population. The numbers are even lower for the second booster dose, with just 7.7% of Poles vaccinated, compared to 14.3% across EU/EFTA countries.

The relatively low level of concern about COVID-19 in Poland may partly be attributed to public health campaigns and preventative efforts undertaken by healthcare authorities. However, another significant factor is the unintended consequence of the pandemic itself. Initially expected to strengthen pro-vaccination attitudes, the pandemic instead contributed to the growing popularity of anti-vaccination movements. Moreover, the widespread debate surrounding the safety and efficacy of COVID-19 vaccines has amplified skepticism and uncertainty, posing substantial challenges to the success of vaccination programs.



This growing mistrust is further compounded by the evolving narrative surrounding the pandemic. Early hopes that COVID-19 vaccination campaigns would promote collective health awareness have given way to a landscape dominated by doubt and misinformation. Discussions about vaccine risks and benefits have often been polarizing, thus eroding confidence in healthcare initiatives and potentially undermining the effectiveness of current and future vaccination efforts.

## Conclusions and Recommendations for the Healthcare System

The analysis of survey data on health concerns among Poles reveals a clear connection between limited awareness of the health consequences of certain diseases—particularly infectious diseases—and corresponding health behaviors and attitudes. The low percentage of individuals who recognize the health risks associated with infectious diseases underscores the urgent need for a comprehensive approach to health education and the promotion of preventive measures. Addressing these gaps is crucial to tailoring healthcare services and prevention programs to the actual needs of the population.

Health education is a cornerstone for mitigating disease-related fears and promoting proactive health behaviors. Providing knowledge about prevention, early detection, and available support resources can significantly reduce societal stress and anxiety. More importantly, such education can lead to higher rates of regular preventive screenings, which are essential for improving overall public health outcomes.

The findings also underscore the pressing need for strategic educational and informational campaigns to rebuild trust in vaccinations and to raise public awareness about their health benefits. Strengthening confidence in vaccines is pivotal for improving immunization rates and achieving the population immunity necessary to effectively combat infectious diseases.

In light of these findings, the healthcare system should strive to adopt a holistic approach that considers not only medical factors, but also the social and economic dimensions of health.

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