

A foggy, rainy street scene in New York City. Tall brick buildings line the street, and the ground is wet and reflective. Yellow taxis and a bus are visible in the traffic. A person with a black umbrella is walking across the street. A blue semi-transparent banner is overlaid in the upper middle section of the image.

NHSMUN

National High School Model United Nations

Table of Contents

A Note on the NHSMUN Difference.....	3
Position Paper Requirements.....	4
Committee History.....	5

Topic A: Child Parentification and Parental Absence.....

Introduction.....	7
History and Description of the Issue.....	8
Current Status.....	14
Bloc Analysis.....	18
Committee Mission.....	20

Topic B: Preventing Unnecessary Medical Procedures in Children.....

Introduction.....	23
History and Description of the Issue.....	24
Current Status.....	33
Bloc Analysis.....	38
Committee Mission.....	41

Research and Preparation Questions.....	43
Important Documents.....	44

A Note on the NHSMUN Difference

Esteemed Faculty and Delegates,

Welcome to NHSMUN 2027! We are Armen Bagdassarian and Sabeeh Mirza, and we are elated to serve as this year's Secretaries-General. Thank you for choosing to attend NHSMUN, the world's largest and most diverse high school Model United Nations conference. As a space for collaboration, consensus, and compromise, NHSMUN strives to transform today's brightest thinkers, speakers, and collaborators into tomorrow's leaders. We believe that an emphasis on education through simulation is paramount to the Model UN experience.

Realism and Accuracy: Although a perfect simulation of the UN is never possible, we believe that one of the core educational responsibilities of MUN conferences is to educate students about how the UN System works. We strive to invite real UN, NGO, and field experts into each committee through our committee speakers program. Moreover, we arrange meetings between students and the actual UN Permanent Mission of the country they are representing. These exclusive resources are only available due to IMUNA's formal association with the United Nations Department of Global Communications and consultative status with the Economic and Social Council. No other conference goes so far to deeply immerse students into the UN System.

Educational Emphasis: At the heart of NHSMUN lies education and compromise. Part of what makes NHSMUN special is its diverse delegate base. As such, when NHSMUN distributes awards, we strongly de-emphasize their importance in comparison to the educational value of Model UN. In particular, our daises look for and promote constructive leadership and diplomacy that strive toward consensus, as real ambassadors do in the United Nations.

Research and a Dedicated Staff: Our staffers care deeply about delegates' experiences and what they take away from their time at NHSMUN. Our Directors spend over six months preparing Background Guides, in addition to Update Briefs written to reflect the rapidly changing nature of the topics to be discussed. Our staffers are trained rigorously to provide the best conference experience possible. Our daises provide thoughtful comments on submitted position papers. Our staff aims to tailor the committee experience to delegates' reflections and research, but also to facilitate an environment where all delegates' thoughts can be heard.

Empowering Participation: The UN relies on the voices of all of its member states to create resolutions. This is our philosophy at NHSMUN too. Our Rules of Procedure and our staff focus on making every voice in the committee heard, regardless of country assignment or skill level. Additionally, unlike many other conferences, we also emphasize delegate participation after the conference. Delegates spend countless hours researching topics critical to the UN and broader international sphere.

Delegates, it is our sincerest hope that your time at NHSMUN will be thought-provoking and stimulating. NHSMUN is an incredible time to learn, grow, and embrace new opportunities. We look forward to seeing you work both as students and global citizens at the conference.

Best,

Armen Bagdassarian
Secretary-General

Sabeeh Mirza
Secretary-General

Position Paper Requirements

Delegate research and preparation is a critical element of attending NHSMUN and enjoying the debate experience. We have provided this Background Guide to introduce the topics that will be discussed in your committee. We encourage and expect each of you to critically explore the selected topics and be able to identify and analyze their intricacies upon arrival to the conference.

The task of preparing for the conference can be challenging. To assist delegates, we have updated our [Beginner Delegate Guide](#) and [Advanced Delegate Guide](#). These guides contain more detailed instructions on how to prepare a position paper and excellent sources that delegates can use for research. Use these resources to your advantage. They can help transform a sometimes overwhelming task into what it should be: an engaging, interesting, and rewarding experience.

To accurately represent a country, delegates must be able to articulate its policies. Accordingly, NHSMUN requires each delegation (the one or two delegates representing a country in a committee) to write a position paper for each topic on the committee's agenda. More information about how to write and format position papers can be found in the [Research Guide](#). To summarize, position papers should be structured into three sections.

I: Topic Background – This section should describe the history of the topic as it would be described by the delegate's country. Delegates do not need to give an exhaustive account of the topic, but rather focus on the details that are most important to the delegation's policy and proposed solutions.

II: Country Policy – This section should discuss the delegation's policy regarding the topic. Each paper should state the policy in plain terms and include the relevant statements, statistics, and research that support the effectiveness of the policy. Comparisons with other global issues are also appropriate here.

III. Proposed Solutions – This section should detail the delegation's proposed solutions to address the topic. Descriptions of each solution should be thorough. Each idea should clearly connect to the specific problem it aims to solve and identify potential obstacles to implementation and how they can be avoided. The solution should be a natural extension of the country's policy.

Each topic's position paper should be **no more than 10 pages long** double-spaced with standard margins and 12 point font size. This is a maximum; **3–5 pages per topic is often a suitable length**. The paper must be written from the perspective of your assigned country and should articulate the policies you will espouse at the conference.

Each delegation is responsible for submitting position papers on or before **February 26, 2027**. If a delegate wishes to receive detailed feedback from the committee's dais, their position paper must be submitted on or before **February 5, 2027**. The papers received by this earlier deadline will be reviewed by the committee dais and returned before February 26. Instructions on how to submit position papers will be shared directly with faculty advisors.

Submission instructions for position papers will be sent to faculty advisers via email. If delegations are unable to submit their position papers on time, please contact us at nhsmun@imuna.org.

Delegations that do not submit position papers will be ineligible for awards.

Committee History

The United Nations Children's Emergency Fund (UNICEF) was founded in 1946 in the aftermath of World War II. Its original purpose was to provide emergency food, healthcare, and other assistance to children in conflict zones. In 1950 UNICEF's mandate was expanded to address long-term needs and safety of women and children. UNICEF's mandate covers areas that focus on the development of children, by providing emergency relief, education, and health services. The Fund's mission is to ensure children's rights are respected and their basic needs met. UNICEF's mission can cover women's rights, discrimination, and human rights violations like those faced by marginalized communities post-conflict.¹

In 1953, it became a permanent part of the United Nations General Assembly and adopted the name of United Nations Children's Fund. It has become the world's largest buyer of vaccines and, in 2024, delivered approximately 2.8 billion vaccine doses to 99 countries. It aimed to vaccinate 45 percent of the world's children under five.² UNICEF is still working to strengthen prioritization of crises and logistical organization to ensure every child receives the help they need. Nevertheless, UNICEF has provided necessary emergency relief services, while simultaneously giving post-conflict resources for the protection of children's development. It is related to the UN by focusing on vulnerable groups protection, and any subsequent social issues that need to be addressed, and under New York law, UNICEF is categorized as a not-for-profit organization.

UNICEF's role was strengthened in 1989 when the United Nations General Assembly adopted the Convention on the Rights of the Child (CRC). Throughout its history, the committee has worked to vaccinate more children, fight malnutrition, provide clean drinking water, and protect refugees and migrants. In recent history, they've also worked to end child marriage and have introduced a plan to fight climate change. UNICEF operates under the Convention on the Rights of Children and is guided by the strategic plans formed in response to issues. These are formed by assessing a country's needs every five years before regional offices guide and assist after this assessment.³

The UNICEF headquarters are located in New York. However, since UNICEF is a worldwide organization, there are eight regional offices, a research center, and supply operations throughout the world. There are also many other locations worldwide as they mainly operate in the field. By having this wide reach, the committee can better react to active humanitarian crises and help the children impacted by them.

1 UNICEF, (n.d), Frequently Asked Questions, *UNICEF*, Accessed August 25, 2026 https://www.unicef.org/about/frequently-asked-questions?utm_source

2 UNICEF, (2024), UNICEF Supply Annual Report 2024, *UNICEF*, Accessed August 25, 2025, https://www.unicef.org/supply/reports/unicef-supply-annual-report-2024?utm_source=chatgpt.com

3 UNICEF, Convention on the Rights of the Child, *UNICEF*, Accessed August 25, 2026, https://www.unicef.org/child-rights-convention?utm_source

TOPIC A

UNICEF | NHSMUN 2027

Child Parentification and Parental Absence



Photo Credit: Mona Hassan Abo-Abda

Introduction

Many people grow up assuming that childhood is a time for play, for school, for friendship, and for figuring out who you want to become as an adult. But for millions of children around the world, these formative years are marked by intense responsibility and stress. In some families, children wake up early to make breakfast for the family, bathe and clothe their siblings, or to work to make money for food or rent. Some children translate documents and conversations for parents who don't speak the local language. Still others provide emotional support normally expected from another adult to parents who are in crisis or struggling with mental health issues, disasters, or grief.

This role reversal in which the child takes on adult responsibilities or acts as the parent in a family system is called parentification. Researchers generally divide parentification into two types or categories:¹

Instrumental parentification is when a child takes on physical or logistical tasks for the family like cooking, cleaning, providing childcare, translating, or working paid jobs to contribute to household finances. In these instances, children are often expected to perform tasks that are typically reserved for adults, such as paying bills, administering medication and managing medical crises, and filling out important paperwork. For various reasons, instead of adults providing safety and care, kids step up and take on those roles for themselves (and often their siblings). Instrumental parentification often means that children feel the heavy weight of responsibility to keep the family afloat.

The second type is emotional parentification, which is less visible but no less burdensome. Emotionally parentified children support their parent (or parents) emotionally beyond what is appropriate for a child. Sometimes kids become a parent's confidant or emotional anchor, like a therapist or a stand-in for a spouse. Emotionally parentified children learn to intuit the adult's mood and often suppress their own needs and feelings to keep the household stable.

The line between healthy responsibility and

harmful role reversal is not always obvious, because parentification exists on a spectrum. At one end, a teenager occasionally grocery shopping and cooking dinner or comforting a parent after a hard day might be a normal expression of family love and support. But at the other end, a nine-year-old who has become the sole caregiver for a parent with chronic illness, a toddler who learns never to cry because it might upset her mother, or a twelve-year-old who manages the family rent payments is experiencing something that research consistently links to serious harm.

The scale of the problem is global. Parentification exists all over the world, affecting millions of children across different cultures and socioeconomic groups. It has different root causes. It can be situational and short-lived, or it can persist for years. Depending on the context, parentification can lead to short-term and long-term challenges, not only for the affected families, but for communities, cultures, and governments. For this reason, parentification is truly a global issue with ripple effects that deserve attention.

Policy responses to parentification need to be contextually sensitive while also protecting children from genuine harm. Across borders and cultures, families look and behave differently, and those differences are not inherently wrong. The challenge is in identifying the boundaries of what is healthy and what is not, and where

interventions and policies might be needed to protect the most vulnerable.

This guide explores parentification as an international human rights and public health issue. It explores the conditions that lead to parentification, the potential impacts, and the ongoing points of division about how communities, systems, and international bodies should respond.

History and Description of the Issue

HISTORICAL CONTEXT

The idea of shielding children from adult responsibilities is fairly new. For much of history, hard work was a normal part of growing up. In pre-industrial societies around the world, children labored alongside their parents on farms, in workshops, and inside the home tending to chores and caregiving duties. It wasn't until the late 19th and early 20th centuries that many industrialized states began enacting compulsory education laws and child labor restrictions. In theory, this offered children some protection from being overburdened by adult responsibility. But in reality, in much of the world, children's labor remained economically necessary.

The concept of parentification did not emerge until the late 1960s and early 1970s, when psychologists, including pioneering family therapist Salvador Minuchin, studied family structures in inner city communities.² Other psychologists and child development experts described role reversals in some family systems that were leading to issues like anxiety, depression, and disruptions in normal development. These experts noted that in certain families, children were functioning as authority figures and emotional support to adults in their lives, and this dynamic seemed to disrupt the typical generational hierarchy of a healthy

family. Over the following decades, researchers in developmental psychology, social work, and public health expanded and refined the definition of parentification and began documenting its effects on children's development.

In the later part of the 20th century, international attention to children's rights grew, largely as part of global attention to human rights. In 1989, this culminated in the United Nations Convention on the Rights of the Child (UNCRC).³ The UNCRC established children's rights to education, health, protection from economic exploitation, and freedom from work that interferes with their physical and emotional development. As of 2026, 196 states are parties to the UNCRC, making it the most widely ratified human rights treaty in history. But ratification and implementation are different things, and for the children in parentified roles, the gap between international commitments to protection and their lived experience remains wide.

Even before the UNCRC was established, the United Nations was working to protect children, and that work continues diligently today. The United Nations International Children's Emergency Fund (UNICEF), established in the aftermath of World War II, focuses on reaching every vulnerable child, protecting their rights to not only survive, but to reach their fullest potential.⁴ The UN Refugee Agency (UNHCR) helps children who are displaced from their home country or forced to flee their homes due to conflict or persecution.⁵ And, the International Labor Organization (ILO) works to protect more than 130 million children worldwide who are affected by child labor.⁶

Individual families are the immediate context in which parentification occurs, and they are also its primary victims. Parents who rely on their children for instrumental or emotional support are often doing so because they have no other options. Understanding the individual family circumstances, the external factors, and the many effects of parentification is critical to addressing this topic.

INDIVIDUAL FAMILY CIRCUMSTANCES

Some families face pressures and circumstances that increase the likelihood that children in the family will be parentified. A few examples include single-parent households, families facing poverty or economic hardship, families with one or more members having disabilities or high medical needs, and migrant families and families displaced from their homes.

When a parent or sibling has a disability, chronic illness, mental health issue or addiction, the care needs are sometimes so high that they cannot be met by the parents alone.⁷ As a result, children often step up and become the de facto caregivers.⁸ Imagine a seven-year-old carefully measuring and administering their father's daily mental health medications. Imagine a ten-year-old helping their mother bathe or use the toilet because of a physical disability. Imagine as a teenager being in charge of grocery shopping, meal preparation, calling doctors to make medical appointments, or advocating for public assistance on your parents' behalf. This level of responsibility is a reality for many children and teens. Caregiving consumes enormous amounts of time and physical and mental energy that would otherwise go toward school, friendships, and childhood development.

It is hard to quantify how many children act as caregivers because different systems define and measure caregiving differently. However, surveys and census reports in England suggest that there are as many as 820,000 young carers in the United Kingdom alone.⁹ In the US, that number may be closer to 1.6 million, according to a 2024

report published by Johns Hopkins Department of Health Policy and Management.¹⁰

In the UK, growing awareness of young carers and the lack of support they received from the government led to policy changes, including The Care Act and the Children and Families Act of 2014.¹¹ These policies made special provisions and provided additional support for families with disabilities and high medical needs, adoptive families, children with special educational needs, and other needs like parental leave and childcare. Similarly, in Australia, organizations like the Centre for Social Impact researched young carers and enacted programs to provide respite care and additional support to reduce parentification.¹² Australia's Young Carer Programs allow government agencies, universities, and community organizations to partner and share in raising awareness, assessing families who might be in need, and offering resources and activities to meet those needs. In Korea, daily care service programs provide support like in-home care, housekeeping, meal planning, and psychological support to vulnerable adults, which reduces the burden on child carers.¹³ As a result of these policies and programs, other countries like Sweden and Italy have also been looking at how to fill in the gaps in their social safety nets so that children do not have to stay home to care for their parents or grandparents.

A variation of the family caregiving dynamic is when a sibling has high medical or developmental needs. Approximately one in five families in the US have at least one child with a disability, and the childhood disability rate is increasing,

One of the most well-documented pathways into parentification is family caregiving.

according to reports by the US Census Bureau.¹⁴ The presence of a disability, visible or invisible, affects everyone in a family system. Yet, the impacts are often overlooked or minimized for siblings without disabilities. Older children and/or non-disabled children are frequently expected to provide supervision and care for their siblings. The non-disabled or medically healthy children in these family systems are often called “glass children,” because adults are so consumed with the demands of caring for the child who has a disability that the siblings become invisible.¹⁵ Metaphorically, these children are looked through, rather than looked at.

Siblings often feel genuine love and protectiveness of one another, so many children welcome the opportunity to help and volunteer to ease the stress on the family system. However, when siblings are enlisted to help too frequently or without formal support, they often become hypervigilant and anxious. Consciously or subconsciously, the sibling caregiver learns to bypass their own needs because they may come to believe that their sibling’s needs must always take priority.

Poverty is another family circumstance that is both a cause and a consequence of parentification. Financial insecurity is one of the primary drivers of instrumental role reversals. When households cannot afford childcare, older children can become caregivers for younger siblings. When parents work long hours at multiple jobs, the kids in the household can often manage domestic labor like cooking and cleaning. And, when a parent’s income is not enough to pay the bills, older children and adolescents may enter the workforce to help close the gap. In some contexts, especially in single-parent households, the children’s financial contributions are critical to the family’s survival.

One way governments could address poverty and the resulting parentification is through Conditional Cash Transfer Programs (CCTs), which provide monetary support to families if they meet certain conditions, such as keeping

children enrolled in school and ensuring they receive medical care, including any recommended childhood immunizations.¹⁶ Countries including Brazil and Argentina, as well as the Philippines and Jamaica have shown success with CCTs, with research supporting that funds are used to meet families’ most urgent needs. Other countries offer monetary support indirectly, through childcare benefits, subsidized or free healthcare, tax credits, and food assistance programs.

Another circumstance that affects families globally and triggers parentification is geographic displacement. Immigration and migration are both an individual family circumstance and also a collective pressure that impacts millions of children each year. And the problem is unfortunately growing. According to UNICEF, “by the end of 2024, an estimated 48.7 million children were displaced by conflict and violence, and other human rights violations – a massive surge from 16.3 million in 2010.”¹⁷ As more families are displaced, children may be forced to care for siblings, translate for adults, earn income, or manage household responsibilities.

Cultural displacement and parentification often go hand-in-hand. Take, for example, one woman named Cecelia who immigrated as a child from Taiwan to Canada. Cecelia wrote about her childhood experience and described some of the challenges: “Like many immigrant families, we encountered various hurdles, including communication barriers, job difficulties, and cultural shock. Even as the youngest member of the family, I was instilled with a sense of responsibility to help ease the burden...”¹⁸ Cecelia recounts how she quickly learned to speak English and became a sort of cultural broker for her family. She translated forms, interpreted conversations at the bank, and prioritized her parents’ mental health over her own. “Sometimes I was nervous because an erroneous translation could lead to loss of a government-issued ID or extra cost on the bill,” she writes.¹⁹ As an adult, Cecelia expressed gratitude for some of the positive aspects of parentification, like the

resilience, maturity, and empathy she gained. But she also writes about the burnout, the pressures, and the sense of loss she felt over not having a carefree childhood.

Canada is addressing the growing issue of immigration and cultural displacement by offering Migrant Integration Services.²⁰ Funded by the government and implemented at the local level through community programs and private partnerships across the country, these integration programs provide newcomers to Canada with education, job placements, and other skills to set them up for economic success. The idea is that investing in support early on will reduce the chances that immigrants will require additional government support or be required to leave Canada later on.

UNICEF offers recommendations and support for organizations and governments that want to better protect immigrant and displaced children. This might include expanding community-based support, offering more vigilant case management, legal assistance, and interpreters to reduce the burden on children.

EXTERNAL FACTORS LEADING TO PARENTIFICATION

Sometimes the factors leading to parentification are outside a family's control. Families may have stable and supportive relationships before an external crisis occurs: They support and nurture their children. They work and provide for all their physical needs. They enroll their children in school and sports and facilitate healthy friendships and creativity. They make sure their children have access to doctors and preventive medical care. Then, something unexpected and unimaginable happens: An earthquake, wildfire, or storm destroys the family's home or community. A war or other conflict breaks out. A deadly disease spreads and becomes a pandemic. Or an economic recession leads to widespread job losses, housing scarcity, or food insecurity.

External factors like these can happen in any country and affect families across every income level. In times of crisis (war, pandemics, natural disasters), children are sometimes expected to carry more responsibility and deal with trauma beyond their years. This was documented during the early stages of the COVID-19 pandemic when many children had to supervise younger siblings'

Finnish war children in Sweden

Credit: Åhlen & Åkerlund



remote learning while parents worked remotely.²¹ If parents contracted COVID-19, children often took over household duties like cooking, cleaning, and administering medicine.

In some areas of the world, children are orphaned by war and widespread disease. For example, in countries or cultural groups that are mired in conflict, parents may volunteer or be drafted to fight, leaving children alone or under the care of older siblings. In other cases, diseases like AIDS claim the lives of parents and leave children to raise themselves. Researchers have documented these child-headed households and how the phenomenon impacts children's wellbeing.²² They found that youth-headed households experience more isolation and economic hardship, which reduces quality of life. In some countries, informal work and limited social support make it common for children to lead households or help support their families financially.

South Africa is one country where child advocates and government leaders realized that a collection of individual policies might not be enough to protect every child who is vulnerable to poverty, parental absence, health pandemics, and other threats. So, they enacted a National Plan of Action for Children (NPAC) and incorporated

provisions on the rights of children directly into their constitution.²³ In partnership with UNICEF and the Department of Women, Children, and People with Disabilities, NPAC provides a holistic framework to shift the dynamics that lead to parentification and childhood harm. The framework includes nationwide access to equitable, high-quality education, prevention of mother-to-child transmission of HIV, psychosocial support, child abuse prevention, and support for child-led households, among other things.

Similar caregiving pressures can also affect children in wealthier countries. In the US, research on low-income and single-parent families shows significant rates of adolescent employment, and those rates are climbing in the face of external factors like widespread job losses and recession. Compared to wealthier families, where adolescents work for extra spending money or for the experience, in low-income households, employment is undertaken to contribute to a household's survival. One study looking at teen employment and burnout found that students working more than 20 hours per week tend to lose sleep, reduce their academic performance, and risk health problems from exhaustion.²⁴



Playing for Life, South Africa

Credit: USAID in Africa

All of these situations put structural pressure on families, which can upset the typical balance and roles that each family member assumes. However, it is important to remember that these circumstances do not mean that families have failed. In many cases, parents and children are finding creative ways to adapt in order to endure hardship. And yet, those adaptations, including role-reversals, can have unintended consequences and long-term impacts for children.

LONG-TERM EFFECTS OF PARENTIFICATION ON CHILDREN

The impacts of parentification can be immediate, and they don't magically disappear when a child turns 18. The effects are also far-reaching; they impact the parentified youth, their family, and sometimes the generations that follow.

To understand this fully, it helps to consider how a child's brain develops. Psychologists talk a lot about something called individuation, which is the process of figuring out who you are separate from your parents. For that developmental stage to happen in a healthy way, children need space and time to focus on their own needs and their own interests. They need a stable parent who acts as a home base that they return to as they explore the world and incrementally gain more independence. They need hierarchical boundaries, where the roles of adults and children are clearly defined.²⁵

Many parentified children and adolescents do not get enough of the developmental, social, and financial support needed for individuation. These developmental deficits can make it harder for youth to get their needs met later on, leading to long-tail effects like under- and un-employment as well as mental and physical health disparities.²⁶ Many studies report that parentified children struggle with psychological stress, drops in school achievement, and relationship problems.²⁷

There is also the opportunity cost of

parentification. Children who spend their formative years in adult roles accumulate less education, skills, and peer relationships than they otherwise would. In extreme cases, they also miss out on the felt sense of safety and protection that allows for healthy development and attachments to adulthood. These opportunities, especially in education, can lead to lower lifetime earnings and reduced economic stability. The emotional cost can lead to interpersonal conflict and depression that interferes with their ability to lead a meaningful, fulfilling life. One 2025 study asked ten South Asian adults to reflect back on their parentified childhoods and found that many reported a sense of grief or loss over not having had a typical childhood.²⁸ They reported missing out on unstructured play time, social events, peer relationships, a sense of felt safety and trust, and the freedom to pursue their personal goals.

Yet not all of these effects hit every kid in the same way. Across many cultures, caregiving and housework tend to fall on daughters more than sons.²⁹ Research from sub-Saharan Africa, South Asia, and Latin America consistently shows that domestic work cuts into girls' school attendance more often than boys. Combine that with the educational gaps that girls already face in a lot of these regions, and the disadvantage stacks even higher. Boys, meanwhile, are more likely to take on outside jobs to bring in money, especially in households led by single mothers.³⁰

For all parentified children, the consequences accumulate over time. Children who carry significant caregiving or household responsibilities have less time for education and may miss critical learning or drop out. Even if they do attend school, they may be exhausted, having spent the night managing responsibilities or problem-solving a crisis. They may be cognitively and emotionally unavailable for learning even when they are physically present. Children who fall behind academically or drop out have narrower options for higher education and employment. They might never learn the self-advocacy skills that are necessary in many

societies to access social services, healthcare, and educational support.

These impacts matter on a global level. When millions of families are impacted by role-reversals and children are not afforded the education, healthcare, and social support needed to thrive, the effects begin to shape entire communities and cultures. Harmful cycles are often passed down through generations. Public health outcomes can spread far and wide. The educational ramifications can lower an entire country's performance on the world stage.

It is important to note that not all impacts of parentification are negative. In some small studies, researchers have found that mild levels of parentification or short-term role-reversals can lead to higher self-esteem, stronger sibling relationships, greater maturity, and resilience among adolescents and young adults.³¹ This is often the difference between a family banding together during a short-term crisis versus a years-long dependence on children to survive.

Most experts agree that a child's ability to endure the effects of role-reversals depends, in part, on social determinants like emotional support and financial resources accessed outside the home.³² Even when children are parentified at home, they may still receive necessary care and support from safe adults in other settings. School counselors, mentorship programs, free health clinics, and other community resources can help protect children, demonstrating the importance of community and government intervention.

Current Status

INCREASING ECONOMIC STRAIN AND FEWER SUPPORT SYSTEMS

Rent, groceries, and other everyday costs have climbed faster than paychecks for many families in recent years, and the problem is not just in the US.³³ In the UK, families are seeing energy bills that are 52 percent higher than they were before 2020. And in many countries, including Haiti, Pakistan, and Nigeria, food prices have doubled since 2020.

Add to that another current reality: In many countries, families have to confront rising housing, childcare, and living costs alongside other challenges like changing family structures. Older generations are aging quickly, and in many countries there is limited geriatric care available outside the family. Retirement and family benefits, affordable childcare, disability services, and other supports often remain insufficient. In some places, recent fiscal reforms have also reduced certain benefits. As more families are dispersed than in previous generations, extended family members may not be close by to help. When formal and informal safety nets disappear, families do not stop needing support. Often, children just start providing it instead.

The Annie E. Casey Foundation, which tracks child wellbeing across the US, found that housing costs are straining families nationwide, even if other economic indicators are improving.³⁴ For middle-income families, the issue is more noticeable. Rising caregiving costs strain

Economic strain is happening across nearly all income levels, making the issue more prevalent than ever.

household budgets and cause many parents to drop out of the workforce or enlist the help of their other children.³⁵

Research shows that it is adolescents who become most aware of their parents' financial difficulties and attempt to ease the burden by taking on part-time jobs or childcare duties.³⁶ Social workers note that this is a form of instrumental parentification and that it can also become emotional parentification when those adolescents start to neglect their own needs to avoid further burdening their parents.

This all means that parentification is not a private family matter. It is connected to larger economic patterns and policies like minimum wage laws, rising housing costs, income inequality, and shrinking social support. Poverty makes parentification more likely, and parentification can make it that much harder for kids to escape poverty later, since any time spent on working and caregiving is time not spent on school, job training, relationships, and healthy development (all important pathways out of poverty).

DISPLACEMENT, CONFLICT, AND CLIMATE-RELATED DISASTERS

Sometimes, displacement from a family's home country is forced by conflict, not personal choice. Additionally, many countries are enacting stricter immigration policies, making it harder for families to seek legal residency or asylum. Displacement and immigration policy push parentification into much higher stakes territory. Instead of translating a bank document or street sign, some kids end up representing themselves in court, deciding where to sleep that night, or keeping younger siblings fed with no adults around at all. Whether they are seeking a better life or fleeing violence, far too many children encounter danger, detention, and discrimination during their journeys, at their destinations, or upon a return home.³⁷

New data from the Internal Displacement Monitoring Centre (IDMC) shows that internal displacements increased by 60 percent, from 20 million in 2024 to 32 million people (adults and children) in 2025.³⁸ If we extrapolate that data and look at the percentage of children per country, the estimated number of children displaced worldwide is about 13 million, or over

Displaced child in Gaza

Credit: Ashraf Amra



35,000 per day. While some displaced children travel with family, many end up separated from trusted adults and have to make decisions about where to find shelter and food or advocate for themselves at refugee camps or border crossings.

Examples of places impacted by this displacement include the Democratic Republic of Congo, Sudan, Iran, and the occupied Palestinian territory, where ethnic tensions, struggles between military factions, and other armed power struggles have forced many from their homes.³⁹ The IDMC reports that those geographies were among the worst in terms of violence and conflict that led to the most displacements of children in 2025, and many of those conflicts are ongoing.

Nearly every student is connected to some version of this story, through one's own family history, a classmates, or the possibility of international travel and the need for more documentation and visas to cross borders. Many countries are facing this issue in new ways, whether it is guardianship policies for unaccompanied minors in the European Union, South American countries dealing with Venezuelan displacements, or Uganda's funding and policy challenges as it tries to host and integrate nearly two million refugees.⁴⁰

But right now, US policy is adding a new layer as the government takes a harsher position on immigration and deportation. In early 2025, the US federal government issued a stop-work order for a contract that funds legal services for unaccompanied children. This meant that very young children whose parents had been deported would have to advocate for themselves in immigration cases. Though the order was reversed, key sections of the contract remained canceled, leading many legal service nonprofits to slow or halt their programs helping unaccompanied children in court proceedings. More than 100 nonprofit and non-government legal organizations denounced the funding cuts and expressed concerns about violations of children's rights.⁴¹ To support

organizations worldwide, UNICEF created a guide for staff and volunteers who want to work with unaccompanied children in humanitarian contexts.⁴²

Without an attorney assigned to them, a child can end up sitting in front of a judge alone, trying to understand words like "asylum" and "deportation" well enough to argue their own case. Some legal aid organizations report that children as young as eighteen months as well as children with developmental disabilities have been in court facing deportation proceedings without representation.⁴³ These situations, putting young kids in situations that would traumatize even most adults, are extreme examples of parentification where serious harm is likely. It can leave children feeling psychologically and physically abandoned, unprotected, and stripped of any agency or control.

Conflict and immigration policy are not the only forces displacing families. Climate-related disasters can also destroy homes, separate children from caregivers, and overwhelm the support systems on which families depend. Scientists have been tracking the frequency and severity of natural disasters for decades. Climate change is increasing the frequency or severity of several hazards, including extreme heat, heavy precipitation, drought, and conditions that contribute to wildfires.⁴⁴ A 2026 report published by UNICEF says that more than one billion children are now exposed to at least three overlapping climate hazards like floods, droughts, extreme heat, and storms like hurricanes and cyclones.⁴⁵ More than four million children could face as many as six climate threats at once.

Children are especially vulnerable to natural disaster-related stress because of their reliance on adults for safety, shelter, and food. If the trauma of a disaster overwhelms an adult's ability to cope, roles can reverse quickly. A parent dealing with their own fear, grief, or injuries may not have anything left to offer their child, and so the child ends up managing their own emotions and physical needs alone, or in some cases,

taking care of the household.⁴⁶

Some communities are looking at how to provide families with more resources before a storm strikes. Organizations like the United Nations Educational, Scientific and Cultural Organization (UNESCO) offer education and best practice guidance for communities, schools, and families wanting to build more resilient homes, institutions, and prediction systems ahead of disasters.⁴⁷ As part of larger disaster-preparedness programs, experts are also factoring in different parenting styles and considering how families might become more resilient to crises and reduce the future burden on children.⁴⁸ The idea is that by offering families more resources in advance of disasters, communities could prevent long-term stress in children. These programs might offer education on what kids need emotionally during a crisis, mental health support for parents, and practical tools for keeping a household running under pressure – all with the goal of reducing the odds that a child will have to fend for themselves when things fall apart. Proponents of these programs argue that governments could save money in the long-term because children impacted by natural disasters who have better support in place are more resilient and less likely to require long-term social services and mental health care in the years that follow.

CULTURAL ATTITUDES TOWARD YOUNG CARERS

In many communities around the world, children's participation in household labor and caregiving is not understood as harmful.

Instead, it's considered a normal, appropriate, and even beneficial aspect of community life. This is especially true in cultures that emphasize extended family systems or collective responsibility versus strict individualism and independence.

Many young carers are never formally identified, especially when some children view caregiving as an ordinary family responsibility, a cultural expectation, or a consistent part of their daily lives. Estimates may overlook children who care for siblings, grandparents, or other relatives. Identification can also be complicated by child-welfare laws that may treat a parent's disability as evidence of family risk rather than first offering the family additional support.⁴⁹ As a result, schools, healthcare providers, and governments may not recognize that a child needs support until caregiving begins to affect their education, health, or wellbeing. This has led some governments to focus on identifying young carers earlier and supporting them without stigmatizing families or removing them from caregiving roles.

Japan provides a recent example of growing government recognition. In June 2024, Japan revised the Law on Promotion of Development and Support for Children and Young People, making young carers eligible for public support.⁵⁰ Still, many carers remain difficult to identify. In response, the Children and Families Agency began subsidizing municipal surveys designed to locate young carers and determine whether their responsibilities are becoming burdensome. This remains an emerging effort: as of June 2025, only 20 percent of municipalities conducted such surveys. The initiative also emphasizes

Any serious discussion about parentification at the international level has to include the question of culture.

cooperation with schools, which may be able to recognize when caregiving limits a child's study time, rest, or other opportunities.

Japan's experience illustrates that identifying harmful caregiving requires examining its effects on the child, rather than treating all household responsibilities as inherently harmful. Research from Ghana demonstrates why this distinction matters across different cultural contexts. A 2025 study of children in Ghana called "Household Chores and Their Effects on Children" looked at data from more than 5,000 children between the ages of 8 and 17 and found that roughly 90 percent of them regularly took part in household chores, ranging from childcare and cleaning to herding animals, shopping at markets, fetching water and wood, and home maintenance.⁵¹ When surveyed, some of the children said they found these chores empowering, while others found them burdensome, depending on how much support they received from adults and whether the chores interfered with their education and quality of life. Researchers concluded that chore performance has both beneficial and adverse effects on children (depending on individual experiences and support structures), and that policies may need to address cultural norms while ensuring fair distribution of labor in communities where children may be exploited.

Another place researchers have studied is Haiti, where a longstanding practice called *Restavek* sends children from impoverished rural homes to live with wealthier relatives or strangers in more urban areas. In theory, the child receives food, shelter, and education in exchange for doing housework for the host family. But in reality, *Restavek* can be much darker. A study published in 2026 found that girls who participated in *Restavek* faced significantly greater poverty and violence compared to other girls their age and had access to fewer protective resources.⁵² In some instances, children reported being forced to work up to 14 hours each day and were only offered table scraps for food. Both boys and girls participated in this practice, but girls in the system had a higher reported incidence of feeling

worthless and having suicidal thoughts as a result of how they were treated.

The contrast between the Ghana and Haiti research points to a useful way of thinking about the line between healthy and harmful parentification. It is not always about how many chores a kid does or how young they start. It is about whether children are protected from abuse and whether they still have a childhood underneath responsibility. Do they still go to school? Do they still get to rest, play, and feel safe? Do they feel alone in their responsibilities, or are there supportive adults in their lives sharing the burden? Culture shapes what family looks like, but everywhere in the world, kids need protection.

Bloc Analysis

POINTS OF DIVISION

The points of division around parentification tend to be more philosophical than geographical or political. Member States generally recognize that children can experience harmful caregiving burdens or parental absence, although they may define these problems differently. Most will agree that some impacts are harmful and far-reaching, especially when parentification is severe. The question to consider is how the international community should address parentification while also respecting family autonomy, cultural diversity, and children's rights.⁵³

Because points of division are philosophical, the blocs below are not mutually exclusive. Some countries might fall into more than one bloc, depending on the issue or specific context of parentification. Or, they might shift from one bloc to another based on current government leadership or policies that are in place.

ADVOCATES FOR FAMILY AND SOCIAL SUPPORT

This bloc includes countries with robust social welfare systems, including many European countries, and states that emphasize preventative public policy. There is a general belief among these states that parentification is a symptom of a bigger problem: Families do not have enough support, even before a crisis ever hits. This bloc's top priority is preventing children from ending up in adult roles in the first place, rather than stepping in after the fact. That means pushing for stronger social safety nets to catch families before they fall. The policies this bloc might emphasize include access to subsidized childcare, paid family leave, direct financial support for low-income families, universal healthcare, and additional support for caregivers of sick or disabled family members.⁵⁴

This bloc argues that supporting families is a shared social responsibility that benefits society as a whole. If a country invests in preventing poverty and giving parents more support, fewer children will grow up needing additional resources. They will be in a better position to contribute to the greater good of the state, economically and socially.

Countries associated with this approach include Nordic states, the Netherlands, Germany, France, Canada, Australia, and others that have built extensive welfare systems around families. International organizations like UNICEF echo similar priorities in their recommendations to governments.⁵⁵

This bloc might argue that job loss, unexpected illness, natural disaster, or other crisis should not automatically translate to a child becoming a caregiver or breadwinner, sacrificing their own education and wellbeing. It would support expanded government spending on family programs and would push back against budget cuts to social services, arguing that saving money in the short term can cost more later with long-term social and economic problems.

ADVOCATES FOR CHILD PROTECTION AND EARLY INTERVENTION

Rather than broad, sweeping social support, this bloc emphasizes protecting children's rights through safeguards and institutional support instead. The focus here is making sure the legal and institutional systems around a child are able to intervene and protect them when things go wrong. These states might prioritize building strong, well-funded structures, courts, schools, healthcare systems, child welfare agencies, and early intervention programs.

Policies in this bloc may include legal representation for children in court, mandatory reporting systems that flag when a child is at risk, school-based mental health services, better training for child welfare caseworkers, and early screenings that catch potential problems in a family system before they escalate.⁵⁶ States in this bloc might advocate for reforming or expanding existing protection and intervention systems instead of adding new ones.

The reasoning here is that building large, universal welfare systems is expensive, and it is harder to gain political support for wide safety nets. So, this bloc argues that it makes more sense to target resources at children who are already showing signs of being at risk, rather than trying to prevent every possible case of parentification in advance.

Countries associated with this approach include the United States, the United Kingdom, and other countries that lean on child protective services, court systems, and public schools as primary intervention points.⁵⁷ They want to make sure children don't fall through the cracks without someone noticing, but they also emphasize efficiency, making sure limited resources go toward the children and families who need help most urgently. This bloc likely favors targeted assistance over universal benefits that it perceives as too broad but may support funding increases for child welfare agencies and legal aid programs. While recognizing the importance

of family assistance, these states place greater emphasis on identifying and protecting children already experiencing harm and using existing institutions to address that harm.

ADVOCATES FOR FAMILY AUTONOMY AND CONTEXT-SENSITIVE POLICY

This bloc starts from a different position. Before declaring parentification a problem and deciding how to fix it, they might first want to define the issue more clearly. They will want to recognize cultural differences and make sure that state policies do not accidentally punish families for practices that might be considered a normal and healthy part of their own culture.

Countries in this bloc are concerned about cultural imperialism and international standards that overreach without taking into account local or cultural context. They worry that international policies are built around the Western, individualist idea of a “normal” childhood, and that other models of parenting, like collectivist caregiving, might be stigmatized.⁵⁸ This bloc prefers supporting locally designed programs that meet the needs of its citizens. They oppose blanket international mandates or sweeping policies that don’t leave room for cultural nuance.

This perspective may receive support from states that emphasize extended family caregiving, community-designed policy, parental authority, or caution toward internationally imposed standards. Countries like Ghana, Japan, Mexico, and the Philippines are likely to be in this bloc. Research from Ghana, for example, finds that household responsibilities can produce both benefits and harms depending on their distribution, intensity, and effects on children.⁵⁹ They might advocate for limiting unnecessary government intrusion and embracing cultural diversity, family autonomy, and proportional interventions. They believe in protecting children from abuse but would want policies that differentiate between appropriate family responsibilities and genuinely harmful parentification.

Committee Mission

In this committee, the policy responses to parentification should be contextually sensitive while also protecting children from genuine harm. Different cultures and different families may operate counter to one’s personal experience of childhood, but that doesn’t make it inherently wrong. On the other hand, sometimes in those contexts, real harm is perpetuated and the rights of the child are violated under the United Nations Convention on the Rights of the Child (UNCRC).⁶⁰

The United Nations Children’s Fund (UNICEF) protects the rights of every child. It is a fund rather than a treaty body, so UNICEF does not have legal authority over states.⁶¹ Through partnerships, technical assistance, and advocacy, UNICEF can influence child welfare policy and support the survival, development, and safety of children around the world.⁶² These efforts are especially important in crisis zones, where children face higher risks of abuse, neglect, displacement, and separation from their caregivers.

UNICEF can work with governments, communities, and humanitarian organizations to strengthen social services and support families worldwide.⁶³ These programs focus on protecting children while addressing the pressures affecting the entire family. Delegates should consider how international frameworks can identify when family role reversals become harmful, while respecting cultural differences. Consider the current challenges and impacts, such as increasing economic insecurity and wage gaps, the loss or reduction of social supports like subsidized childcare and food benefits, the rising frequency and severity of natural disasters, displacements due to conflict, and changing immigration policies.

Delegates should also consider how UNICEF can help families before parentification becomes harmful. Many children face less visible burdens but also benefit from specific interventions. Currently, UNICEF collects data on caregiving

conditions and the status of children worldwide. It also encourages governments to expand evidence-based parenting programs, strengthen child-protection policies, and protect children's opportunities for learning and play.⁶⁴ These early family supports can improve caregiving for all children and thus prevent harm within the home. Strong policies should protect children's rights, respect cultural and family differences, and address harmful social norms and the underlying conditions that force children to assume adult roles.

TOPIC B

UNICEF | NHSMUN 2027

Preventing Unnecessary Medical Procedures in Children



Introduction

Modern medicine has transformed pediatric health care. Advances in diagnostic tools, surgical procedures, and technological innovations have improved children's health.⁶⁵ Guided by the Convention on the Rights of the Child (UNCRC), UNICEF recognizes that every child has the right to access equitable and high-quality medical services.⁶⁶ However, one emerging concern is whether every medical procedure is truly necessary.

Medical procedures are essential in pediatric care.⁶⁷ Laboratory tests, imaging, medications, and surgical procedures save lives every day. However, not every medical intervention benefits the patient. Around the world, many children undergo medical procedures that cause physical and psychological harm.⁶⁸ In some cases, this harm may be avoidable, and the procedures may be unnecessary. These interventions are classified as low-value care, since they provide no benefit to the child's health.⁶⁹

This challenge affects countries differently. In many high-income countries, medical overuse is more common due to modern diagnostic technologies and availability of resources.⁷⁰ In the United States alone, around USD 12.8 to 28.6 billion are spent every year in unnecessary testing and treatment.⁷¹ In contrast, many low-income countries do not have access to adequate health care. This is caused by lack of infrastructure as well as financial and resource shortages. Some countries may face both unnecessary medical procedures and limited access to healthcare services. This demonstrates the need to ensure that every child receives the right care at the right time.

Advances in technology have also influenced pediatric health care. Artificial intelligence, robotic-assisted surgery, and telemedicine help doctors identify and treat diseases. While these technologies have improved pediatric healthcare, they also create new challenges. Without appropriate guidelines and evidence, they can contribute to overdiagnosis and overtreatment. As healthcare systems continue to grow, it is

important that technology supports medical decisions instead of replacing them.

Children are especially vulnerable because their ability to make independent medical decisions is often limited by their age and national law.⁷² Parents or guardians usually provide consent, and children are involved in decisions according to their age and maturity. Additionally, healthcare workers and caretakers advocate for their wellbeing. UNICEF's work also recognizes a continuum of care beginning during pregnancy and continuing through childbirth, the newborn period, and childhood. Therefore, medical decisions made during pregnancy may affect both the pregnant patient and the developing fetus or newborn. However, pregnant patients retain the right to make informed decisions about their own medical care.⁷³ Parents, guardians, and healthcare professionals are responsible for protecting children's well-being and considering their best interests.⁷⁴ Differences in beliefs, financial budgets, and parental requests may influence these decisions. It is important to ensure balance between children's rights, parental authority and ethical guidelines.

Despite international plans to prevent unnecessary medical procedures, this challenge remains. Preventing unnecessary medical procedures is not only a matter of improving healthcare quality but also protecting children's rights. Medical procedures can benefit a child's health. However, when performed without medical evidence, the consequences may last a lifetime.

History and Description of the Issue

THE RISE OF OVERDIAGNOSIS AND OVERTREATMENT IN PEDIATRIC HEALTHCARE

Recent advances in medicine have greatly improved children's healthcare. New technologies, such as medical imaging, laboratory testing, and disease screening allow doctors to find health problems more easily. These innovations have led to earlier diagnoses, higher child survival rates, and better health outcomes around the world.⁷⁵ However, medical tests can also lead to medical overuse. This means that doctors may perform tests or treatments that are not necessary. Sometimes, these tests find harmless conditions that do not need treatment.⁷⁶ Parents may expect doctors to run tests out of concern for their children. Doctors may agree to the tests to be careful or quickly find an answer, but this can lead to testing even when it is unclear whether the test will actually help.⁷⁷

Medical overuse includes two main concepts: overdiagnosis and overtreatment. Overdiagnosis occurs when a real condition is discovered, but the discovery does not benefit the patient.⁷⁸ The term is also sometimes used more broadly when patients are labeled with a condition without enough evidence that they have it. For example, a study of children treated for asthma in the Netherlands found that only 16.1 percent had their diagnosis confirmed through lung-function testing. More than half were classified by the researchers as most likely overdiagnosed because their symptoms and medical histories made asthma unlikely. An unsupported asthma diagnosis may expose a child to unnecessary medication, anxiety, and an inaccurate medical label.⁷⁹

One of the most studied examples of overdiagnosis is attention-deficit/hyperactivity disorder (ADHD). This is a condition that can negatively impact a child's academic

performance and daily life.⁸⁰ However, because ADHD is diagnosed with behavioral observations rather than with scans or laboratory tests, deciding the difference between ADHD and normal childhood behavior can be challenging. Studies have shown that children who are the youngest in their school are up to twice as likely to be diagnosed with ADHD than other classmates.⁸¹ This could mean that normal age-related developmental differences could be confused with symptoms of ADHD.⁸² Other conditions, including sleep disorders, anxiety, depression, trauma, and learning disabilities, can also cause inattention, restlessness, or other behaviors that resemble ADHD.⁸³

Overdiagnosis may expose children to medication they do not need. For example, a child incorrectly diagnosed with ADHD or depression may experience side effects from medication without receiving a meaningful benefit. Prescription stimulants used for ADHD also carry risks of misuse, sharing, and addiction, especially when taken differently than prescribed.⁸⁴ The Convention on the Rights of the Child recognizes the importance of periodically reviewing treatment provided for a child's physical or mental health, in Article 25.⁸⁵ This supports careful diagnosis, regular monitoring, and reviewing whether medication remains appropriate.

Modern technologies, such as magnetic resonance imaging (MRI), computed tomography (CT) scans, ultrasound, and advanced laboratory testing also contribute to overdiagnosis.⁸⁶ These tools can pick up small abnormalities in the body. For example, a study of brain MRIs from 225 healthy children found unexpected abnormalities in 21 percent of them.⁸⁷ Some of these incidental findings included cysts and other differences in the brain which, though abnormal, did not need medical attention. However, even harmless findings can lead to additional appointments and tests that may not benefit the child. Because of this, healthcare providers must evaluate whether diagnostic technology will improve health outcomes or lead to unnecessary medical

intervention.⁸⁸

Overtreatment occurs when a child receives medical procedures that do not provide a meaningful health benefit.⁸⁹ Overtreatment often happens as a consequence of overdiagnosis. Once a condition is identified, health providers and families feel the need to take action.⁹⁰ Actions can include unnecessary medication, follow-up testing, or invasive procedures. These treatments can carry risks that outweigh their benefits.

Unnecessary medication is one form of overtreatment in children. A 2016 study of 4.4 million commercially insured children in the United States found that 9.6 percent received at least one of the 20 low-value services examined, including unnecessary tests, imaging, or medications.⁹¹ Six percent received at least one low-value prescription drug. Examples included antibiotics for certain respiratory infections, cough and cold medications, and acid-reducing drugs for otherwise healthy infants. These medications were unlikely to benefit the children and could cause side effects or other harm.⁹²

Particular attention has been given to the overprescription of antibiotics, which are

medications used to treat bacterial infections. Antibiotics are not always necessary and taking them when not needed can harm the body's microbiome.⁹³ This is the community of microorganisms that plays an important role in digestion and the immune system. This damage has been associated with a higher risk of developing severe allergies, celiac disease, obesity, and other long-term health problems.⁹⁴ In addition, overusing antibiotics can lead to antimicrobial resistance (AMR), which is when bacteria, viruses, fungi, and parasites change over time and stop responding to antimicrobial medicines.⁹⁵ These “superbugs” make infections more difficult to treat and can lead to diseases spreading farther and more rapidly. In 2021, bacterial antimicrobial resistance was associated with approximately 4.7 million deaths worldwide, including about 1.1 million deaths directly attributable to resistance.⁹⁶

Another class of medications that are commonly overprescribed is psychotropic drugs. Psychotropic drugs treat the brain and nervous system to manage conditions such as anxiety and ADHD. Because ADHD is diagnosed based on behaviors rather than objective tests, the condition may be diagnosed more or less

MRI

Credit: Jan Ainali



frequently based on different regions, clinics, or demographics. This is referred to as ADHD diagnosis variance. As a result, the amount of medication prescribed to treat ADHD, or whether a person receives ADHD medication at all, can depend on where they live.⁹⁷ This highlights how medical treatments differ based on region and increase the risk of overtreatment. This is especially concerning for children because ADHD medications can affect sleep, appetite, weight, and growth.⁹⁸ When medication is unnecessary, children face these risks without receiving a health benefit.

Another area requiring careful oversight is the off-label use of medications. The use of off-label medications is growing, even though there is limited evidence about how safe they are for children.⁹⁹ An off-label medication is given when an age group, dosage, or condition is not included in the medicine's original regulatory approval. Off-label use does not automatically mean that treatment is unnecessary or unsafe. It may be supported by clinical evidence or even necessary when approved pediatric options are limited.¹⁰⁰ Around 56 percent of medications worldwide are prescribed off label to children.¹⁰¹ However, children remain underrepresented in clinical trials, making it harder to evaluate the risks and benefits of some medicines. Because children's bodies change as they grow, they may respond to medicines differently than adults.¹⁰²

One study found that 31.6 percent of hospitalized children experienced at least one medication-related problem.¹⁰³ This illustrates the risks associated with medication-related problems in pediatric care. Children also cannot make their

own choices, and rely on parents, caregivers, and healthcare professionals to make medical decisions for them. This puts them at greater risk of unnecessary testing and treatment.¹⁰⁴ As medical technology continues to improve, doctors are relying more on medical testing and imaging to diagnose and treat children. However, overdiagnosis and overtreatment remain global challenges. Reducing avoidable harm and improving the quality of pediatric care are therefore relevant to UNICEF's broader work strengthening child-health systems.

OVERUSE OF DIAGNOSTIC TESTING, SURGERY, AND INVASIVE PROCEDURES IN PEDIATRICS

Medical technology has transformed children's healthcare. Improvements in medical testing help doctors identify diseases faster and with better accuracy.¹⁰⁵ Advancements in surgery save lives every day. Overall, this has helped to improve health outcomes around the world.¹⁰⁶ However, not every test or operation is beneficial for the patient.¹⁰⁷

Diagnostic tests are used to identify health issues. Tests include blood draws, x-rays, ultrasounds, computed tomography scans (CT), and magnetic resonance imaging (MRI).¹⁰⁸ These tools are beneficial when used correctly. However, these procedures put children at risk of radiation exposure, invasive procedures, increased healthcare costs, and emotional distress.¹⁰⁹ Therefore, avoiding tests when they are not needed helps protect children both physically and emotionally.

Unnecessary procedures expose children to avoidable risks that may threaten their health, instead of improving it.

Two main reasons for overuse of diagnostic testing among children are clinical uncertainty and parental anxiety.¹¹⁰ Many children go to the doctor with vague or unclear symptoms. When doctors have an incomplete understanding of a patient's health situation, it is known as clinical uncertainty. This uncertainty may lead doctors to order additional tests to avoid missing a serious condition. Parents may also request further testing for reassurance, even when a child is unlikely to have the condition in question. In these cases, testing may provide little benefit and cause more harm than good, contributing to medical overuse.

Further, fear of malpractice and the need to assess patients quickly can cause doctors to over-test.¹¹¹ This is especially common in emergency departments because doctors make decisions quickly while caring for multiple patients at the same time.¹¹² As a result, many tests are ordered that are not beneficial to the patient.

Diagnostic overuse is not limited to laboratory testing. Computed Tomography (CT) scans are X-ray scans combined with computers to create different views of the inside of the body.¹¹³ Because CT scans use radiation to take the image, unnecessary imaging exposes children to risks of cell mutation. Repeated exposure can elevate cancer risks over time. Because children's bodies and cells are still developing, they are even more vulnerable to radiation than adults.¹¹⁴

Studies show that CT scans are most commonly overused for minor head trauma and to rule out appendicitis.¹¹⁵ In these cases, using other tools, such as ultrasound or MRI, may provide enough information to assess the situation without exposing patients to unnecessary radiation. Unlike CT, MRI does not use radiation. For this reason, MRI is often considered a safer option. However, these tests are expensive and require patients to remain completely still to protect the image quality. Some patients need sedation during the procedure. Sedation is most

commonly used for patients between three months and six years of age. While this practice is considered to be safe, there are still some risks. Some research suggests that sedation in young children may affect brain development.¹¹⁶ Additionally, in rare cases, sedation can cause breathing complications and adverse reactions. As a result, experts have emphasized that imaging studies should only be ordered when the benefits are greater than the risks.¹¹⁷

Although blood tests are often considered low-risk, repeated and unnecessary labs can also have consequences. Excessive blood draws can result in hospital-acquired anemia, which is a drop in red blood cells and the proteins inside them.¹¹⁸ In critical patients, this can lead to longer hospital stays, organ failure, and even death.¹¹⁹ Similarly, biopsies, which are procedures used to remove small samples of tissue, can result in bleeding or infections. In extreme cases it can cause organ perforation, which is a tear in the organ.¹²⁰ Additionally, excessive testing can cause emotional harm to children and their families. Waiting for results, managing abnormal findings, and undergoing repeated follow-up tests can cause anxiety and make children fearful of hospitals or medical procedures.¹²¹

Similar questions can arise during prenatal testing for pregnancy. Prenatal ultrasounds and screening tests can provide essential information about gestational age, fetal development, multiple pregnancies, and possible health concerns. However, these tests can contribute to anxiety, financial strain, and further medical intervention after uncertain or abnormal findings. Invasive diagnostic procedures, such as amniocentesis and chorionic villus sampling, also carry a small risk of miscarriage.¹²² Therefore, testing can be extremely harmful when it is conducted without a clear medical purpose. WHO recommends that pregnant women receive one ultrasound scan before 24 weeks of pregnancy, while emphasizing that the scan is a choice rather than a compulsory procedure.¹²³ This illustrates the need to preserve access to beneficial prenatal testing without encouraging testing that is

unsupported by evidence.

Medical overuse also includes unnecessary surgical or invasive procedures.¹²⁴ Unnecessary procedures can cause permanent physical and psychological damage, complications from anesthesia, and organ injuries.¹²⁵ For example, unnecessary appendectomies can occur when doctors wrongly diagnose appendicitis, leading to surgeons removing a healthy appendix.¹²⁶

Decisions during childbirth show the need to balance access with preventing medical overuse. Cesarean sections can save pregnant patients and newborns when medically necessary. However, WHO has found that once cesarean rates exceed a certain level, further increases do not necessarily reduce maternal or newborn deaths.¹²⁷ Because a cesarean section is major surgery, an unnecessary procedure can expose the pregnant patient to infection, bleeding, and complications in future pregnancies. It may also increase certain risks for the newborn, including breathing problems.¹²⁸ At the same time, some low-resource regions still lack access to medically necessary cesarean delivery. Therefore, governments must address both unnecessary use and inadequate access rather than simply seeking a universally low cesarean

rate.

Medical overuse affects countries at all income levels, although its causes and forms may differ. High-income countries may experience overuse because advanced tests, medications, and surgical technologies are widely available.¹²⁹ However, medical overuse is not limited to wealthy countries. Low-income countries often face limited access to health technologies.¹³⁰ In these settings, diagnosing conditions such as appendicitis, abdominal pain, or infections, can become more difficult. When appropriate testing is unavailable, providers may have to make treatment decisions with incomplete information. This increases the risk of both delayed treatment and possible overtreatment, like prescribing antibiotics as a precaution when a bacterial infection has not been confirmed.

Overuse may also occur alongside underuse within the same country. Urban or private hospitals may provide unnecessary tests and procedures, while rural or low-income communities lack essential care. In middle-income countries such as India and Brazil, both challenges are present, and diagnostic uncertainty is common.¹³¹ These countries' healthcare systems face a double challenge.



Medical procedure to child

Credit: Rajab8

While some areas suffer from limited access to basic care, others may experience unnecessary testing, medication, or surgery. Both situations highlight the importance of providing the right diagnostic testing and treatment for every child.

THE ROLE OF PARENTS AND HEALTHCARE PROVIDERS IN PEDIATRIC DECISION-MAKING

Children are often unable to make decisions on their own. Their age, mental development, and limited life experience prevent them from fully understanding medical risks and benefits for interventions.¹³² For this reason, medical decisions are often made by legal guardians and doctors. This is known as pediatric decision-making and can include choices about blood tests, imaging studies, surgeries, and organ transplants.¹³³

Young children generally cannot provide informed consent.¹³⁴ The age to independently consent to medical treatment varies based on country; it typically ranges from 14-18 years old.¹³⁵ In some countries such as Austria, Belgium, and Germany, there is no fixed age for medical consent. Instead, medical professionals evaluate each case based on the maturity of the child and determine whether they are able to own medical decisions.¹³⁶ When children cannot give consent, parents or guardians provide consent on their behalf. Parents are expected to advocate for their children by choosing the option that best protects the children's health and also considers lifestyle, values, culture, and beliefs. At the same time, healthcare providers also advocate for the child by recommending the best treatment based

on evidence.¹³⁷ This means listening to the child's opinion and answering questions to reduce anxiety.

Children's participation in medical decision-making is recognized in the United Nations Convention on the Rights of the Child (CRC). This Convention established that every child has the right to express their opinions based on their age and maturity.¹³⁸ As children grow older, they should be given greater opportunities to participate in decisions that affect their health. It also prioritizes the best interests of the child during a medical decision.¹³⁹

Disagreements between parents and medical providers can happen when parents request unnecessary care or reject a treatment that doctors consider essential.¹⁴⁰ In these cases, many hospitals rely on ethics committees to help families and doctors find a solution.¹⁴¹ For example, some families may not want certain medical procedures because they go against their beliefs. A blood transfusion is a medical procedure where donated blood is transferred to a patient's body to replace blood lost after surgery or injury. Some religions, such as Jehovah's Witnesses, believe that receiving blood from another person violates divine law and therefore refuse the treatment. However, if refusing a blood transfusion would threaten the child's life, healthcare providers have the ethical responsibility to advocate for the child's best interests.¹⁴²

To help guide these situations, the American Academy of Pediatrics developed the Pediatric Decision-Making Consensus Recommendations.

Even if parents or caregivers provide formal consent, it is important that children understand what is going on with their bodies.

This is an ethical framework to support medical decisions involving children.¹⁴³ These recommendations state that parents should have broad, but not unlimited, authority. Parents know their child's needs, values, and daily lives. However, doctors contribute medical experience and knowledge. Therefore, both sides should work together to advocate for the child. Health providers should protect the child's interest and may seek support from authorities to make a decision based on evidence. As a result, the Consensus Recommendations help protect children's rights, while balancing parental responsibilities and doctors' obligations.

Healthcare systems aim to promote shared decision-making where healthcare providers explain available options, and parents then choose the most appropriate one.¹⁴⁴ Parents feel more confident and satisfied when they are involved in the decision-making process. However, making healthcare decisions for a child can be emotionally challenging.¹⁴⁵ Parents often make medical decisions while experiencing stress, uncertainty, and a strong sense of responsibility for their child's health. These pressures may lead them to request additional tests or treatments because they believe that more medical care will better protect their child.¹⁴⁶ For this reason, communication and collaboration between doctors and parents is essential to ensure that medical decisions are based on clinical evidence and contribute to health improvement.

Furthermore, medical decisions can become much harder when surgery is involved. Most surgical procedures are irreversible and involve risks that should be heavily considered.¹⁴⁷ Because of this, parents need detailed information before they give consent.¹⁴⁸ Some medical conditions can be treated either with surgery or with physical therapy, depending on the severity. In these situations, parents and doctors must compare the risks and benefits of both options before deciding on the treatment.

This question is especially important for

irreversible, non-emergency procedures, including some interventions performed on intersex children.¹⁴⁹ Intersex children are born with variations in sex characteristics. Their chromosomes, hormones, reproductive organs, or anatomy may not fit typical definitions of male or female bodies, but this is part of the natural variability that occurs in nature.¹⁵⁰ Being intersex does not represent a health problem in and of itself, but it is frequently treated with surgical or hormonal medical interventions. When there is no urgent medical need, activists have argued that these procedures should be delayed until a child can decide for themselves. Supporters of early treatment may argue that it reduces uncertainty or future stigma, while critics argue that it can cause permanent physical and psychological harm and violate the child's bodily autonomy.¹⁵¹

In some cases, other motives can drive decision-making. For example, Factitious Disorder Imposed on Another (FDIA), once known as Munchausen Syndrome by Proxy, compromises a child's health. This is a mental condition in which a caregiver intentionally lies about or causes illnesses in a child to receive extra, unneeded medical attention.¹⁵² As a result, children who are perfectly healthy may experience multiple hospitalizations, medical procedures, or medications. This condition is not common, but it demonstrates the important role of both parents and healthcare professionals in protecting the child's best interests.

Healthcare decisions have long-term consequences on children. It is essential that parents make decisions when they fully understand their child's condition and available treatment options. Communication is one of the most important pillars of pediatric decision-making.¹⁵³ Effective and informed collaboration between parents and medical professionals can help ensure a child's well-being.

COSTS OF UNNECESSARY MEDICAL PROCEDURES

In addition to putting children at risk of emotional and physical harm, unnecessary medical procedures can create significant financial costs for families and healthcare systems. Medical expenses vary greatly among countries and even among families within the same country.¹⁵⁴ Several countries, including the United Kingdom, Canada, the Republic of Korea, Australia, and Iceland, have systems intended to provide universal health coverage.¹⁵⁵ Universal health coverage means that people can access the health services they need without experiencing serious financial hardship. However, it does not mean that every medical service is free.¹⁵⁶ Countries also finance universal coverage in different ways.

The United Kingdom and Iceland primarily fund public healthcare through taxes, while Canada provides publicly funded insurance through its provinces and territories. The Republic of Korea uses a national health insurance system supported largely by required contributions, and Australia combines its publicly funded Medicare program with private insurance. Patients in

all of these countries may still pay for certain medications, dental services, private treatment, or other services that are not fully covered.¹⁵⁷

Unlike the countries described above, the United States combines employer-sponsored and individually purchased private insurance with public programs such as Medicare, Medicaid, and the Children's Health Insurance Program, but some people remain uninsured. Even insured families may face substantial deductibles, copayments, and other out-of-pocket expenses.¹⁵⁸ Therefore, the financial effects of unnecessary medical care depend on which services are covered and how costs are divided among governments, insurers, healthcare facilities, and families.¹⁵⁹

Overall, the financial impact of medical care on families depends on how healthcare is funded. In countries that rely heavily on private insurance and patient payments, families may have to pay more for unnecessary medical care. This is because privatized healthcare systems bill at the individual level.¹⁶⁰ This can result in severe financial burdens. In 2022, 41 percent of Americans reported having medical or dental debt. Even for people with insurance, 38 percent of families still worry about out-of-pocket costs

*Royal Children's Hospital,
Melbourne*

Credit: Atrium



to get medical attention.¹⁶¹ In the United States, healthcare costs are approaching USD 4.3 trillion USD per year.¹⁶² Of this, USD 27.9 billion are wasted on low-value screening tests. In total, up to USD 935 billion is wasted every year on unnecessary healthcare.¹⁶³ Because individuals pay for medical treatment themselves, these costs are placed directly on families.

When a service is not covered, the financial impact of a medical unnecessary test, procedure, or medication can affect the child and their family directly. This may reduce resources available for a child's food, housing, education, and future healthcare.¹⁶⁴ Parents may feel as if they have little choice but to accept a healthcare bill, especially if they believe they have to pay to protect their child's health.

Parents may find it difficult to question a recommended intervention, as they often rely on medical professionals to determine what their child needs. However, financial incentives can impact what is recommended. Some healthcare systems pay providers for each test, appointment, or procedure they perform. This is known as fee-for-service payment.¹⁶⁵ Most healthcare professionals aim to help their patients, but systems that reward more interventions can make it financially difficult to reduce unnecessary services. These payment systems, as well as pharmaceutical and medical-device companies, can encourage low-value care. For example, providers were resistant to reducing unnecessary x-rays in the Netherlands, because doing so could threaten radiology jobs and revenue, even if it is not what is best for the patient.¹⁶⁶ Some hospitals may also adopt technologies before their value has been fully evaluated. Other companies incentivize greater use of medications, tests, and devices, which cost individual families more financially.

Medical debt can upend lives. In the United States, around 550,000 people file for bankruptcy annually because of healthcare costs.¹⁶⁷ Additionally, 63 percent of households with medical debt report cutting back on food,

clothing, and basic necessities. Further, people with medical debt are more likely to delay medical treatment when needed.¹⁶⁸ Therefore, unnecessary procedures can place additional financial burdens on families, especially when the medical bills are for care that provides no benefit to the child. Families may then have fewer resources for the child's basic needs or necessary future treatment.

A study comparing the United States and Canada found that Americans were 1.5 to 4 times more likely to have medical expenses that consumed a large share of their income.¹⁶⁹ In the US, patients generally pay a larger share of healthcare costs but in Canada, public insurance covers many essential services. On the other hand, countries with universal healthcare coverage see these costs reflected in national budget stains.

The United Kingdom reportedly wastes over USD three billion on unnecessary tests and treatments every year.¹⁷⁰ But, because of the UK's National Health Service, these costs are absorbed by the fixed yearly budget of public insurance instead of individual families. As a result, unnecessary procedures waste resources that could be used for other patients, restrict access to services, or dilute the quality of services.¹⁷¹ Although the financial costs to individuals vary between countries with private and public insurance, unnecessary medical procedures waste money and resources in both systems that detrimentally impacts care received by the individual.

Costs are not limited to financial strains. For both countries with universal healthcare, and those with privatized healthcare, unnecessary medical procedures drain important resources. Unnecessary procedures and tests still require doctors, nurses, equipment, operating rooms, medications, and hospital beds. Resources used to perform unnecessary procedures are resources that could be used for children who need vaccinations, emergency treatment, specialist care, or other beneficial services.¹⁷² Additionally, performing unnecessary medical procedures increases waiting times for patients

to be seen. Children may be particularly harmed by these delays because early diagnosis and treatment can be critical to healthy development. This contributes to a cycle that reduces the quality of medical care provided for patients as a whole.¹⁷³

Such is the case with procedures during childbirth. Unnecessary cesarean sections take up operating rooms, surgical staff, anesthesia, medication, and longer recovery periods. However, restricting cesarean access too broadly can endanger pregnant patients and newborns who need emergency surgical care.¹⁷⁴ This balance directly affects children. Unnecessary interventions may expose newborns to avoidable risks and consume resources, while failing to provide a necessary procedure can threaten an infant's health or life.

Current Status

BALANCING HEALTHCARE ACCESS AND APPROPRIATE CARE IN CHILDREN

In 2025, more than 417 million children lacked access to healthcare services because of poverty.¹⁷⁵ While some children are not able to access essential health services, others receive treatment that provides no benefit. As a result, healthcare systems face two challenges: underuse of effective care and overuse of unnecessary care.¹⁷⁶

Improving Universal Health Coverage (UHC) is a focus for the World Health Organization.¹⁷⁷ UHC

aims to ensure that all people receive healthcare without financial insecurity. Although multiple countries have expanded healthcare coverage, it is still a challenge to ensure that every child receives the right care. This means delivering proper treatment at the proper time for every patient.¹⁷⁸ This helps to reduce misuse of medical services and improves health outcomes.

Underuse occurs when children cannot receive health services when needed. This is often caused by insufficient medical resources, rural communities being far from healthcare facilities, a lack of healthcare professionals, and financial limitations.¹⁷⁹ In many countries, healthcare centers are located in urban areas, leaving children in remote areas with limited access.¹⁸⁰ Armed conflicts, natural disasters, and humanitarian crises also damage hospitals and weaken health systems.¹⁸¹ As a result, many children do not receive routine vaccinations, appropriate medications, and follow-up care.¹⁸² Around the world, 20 million children still cannot receive basic vaccines. This has devastating consequences, as 1.5 million children under five years old die from vaccine-preventable diseases every year.¹⁸³

One reason healthcare is not widely accessible is inequality. These inequalities are often caused by social, economic and geographic factors. While children in most European Union countries have access to free and basic services like vaccines, those in lower-income countries lack essential health services.¹⁸⁴ Geographic barriers also contribute to these inequalities. Many rural and remote areas lack essential health services.¹⁸⁵ These shortages affect countries at

Despite advances in healthcare systems, millions of children around the world still do not receive quality medical care.

all development levels. In the United States, many rural communities experience a lack of pediatric specialists. This is due to low salaries, which can be up to 25 percent less than other medical specialties.¹⁸⁶ Migrant and refugee children also face legal and financial barriers that limit medical attention. Often, migrant families don't have access to medical insurance or face language barriers in countries of destination.¹⁸⁷ All of these factors contribute to an unequal distribution of medical care.

As a result, the balance between access to healthcare and quality of care remains an important concern. Developed countries have advanced medical infrastructure, trained specialists, and broader health coverage.¹⁸⁸ These countries have around 72 pediatric specialties per 100,000 children compared to 1 per 100,000 in lower-income countries.¹⁸⁹ Countries such as Canada, Germany, Switzerland, and Australia have vaccination programs, diagnostic technologies, and access to treatment. At the same time, broad access to these services has led to unnecessary medical overuse.¹⁹⁰ As a result, many high-income countries may look for strategies to prevent medical overuse while trying to maintain quality care.

In contrast, pediatric care in developing countries faces a lack of resources, poor infrastructure, and an insufficient number of medical professionals.¹⁹¹ Hospitals face power cuts, lack of clean water, and limited medications. This contributes to over 60 percent of child deaths in these regions.¹⁹² Political instability, armed conflicts, and economic crisis make these challenges worse. Yemen's current situation illustrates restricted healthcare access. Around 40 percent of the country's health facilities are closed, and only 20 percent of the remaining ones offer pediatric care.¹⁹³ For this reason, children experience delayed treatment and diagnosis, malnutrition, and preventable complications.

Healthcare priorities vary by national capacity,

but overuse and underuse can exist in the same system. Some countries may prioritize essential access, while others focus on reducing low-value care. Delegates should address both problems based on each country's needs.

TECHNOLOGY AND INNOVATION: ITS ROLE IN PEDIATRIC HEALTHCARE

Technology has become an important part of medical decision-making. Digital tools allow doctors to diagnose faster, communicate with patients and specialists in other regions, and analyze data. These technologies changed the way children are treated to be less invasive and sometimes more remote.¹⁹⁴ AI-assisted diagnostics, telemedicine, and robotic-assisted surgeries have improved health outcomes for children. While technological development can help millions of children gain access to healthcare, it does not guarantee better health by itself.¹⁹⁵ When used without regulations, it can increase overdiagnosis, overtesting, and health costs. Therefore, governments must evaluate not only whether technology expands access, but also whether it helps children receive appropriate care.

One major technology in pediatric care is telemedicine.¹⁹⁶ Telemedicine is the remote delivery of healthcare services. This includes consultations, diagnosis, and follow-up. This might happen through video calls with doctors and telephone appointments.¹⁹⁷ Telemedicine has multiple benefits for children with chronic conditions like asthma, diabetes, and epilepsy. They can be monitored and treated without leaving their homes.¹⁹⁸ During the COVID-19 pandemic, this became an important part of delivering health services. Between 2020 and 2021, telemedicine visits increased by 30 times compared to before the pandemic in high-income countries like the United States.¹⁹⁹ But telemedicine differs across countries. Digital inequalities, technological infrastructure, and virtual guidelines are big challenges.²⁰⁰ In developed countries, telemedicine supports

existing healthcare services and ensures that families in remote or rural areas have access to specialists who are located in urban areas. This reduces travel times and healthcare costs. In contrast, telemedicine may be the only way families in developing countries can access medical care at a lower cost.²⁰¹ However, telemedicine may contribute to medical overuse if providers cannot examine a child in person. It may also lead to repeated care if families receive conflicting recommendations from virtual and in-person providers.

However, barriers to access still exist in some developing countries. Around 2.6 billion people around the world don't have access to an internet connection.²⁰² In addition, armed conflicts and natural disasters make access to telemedicine difficult. To address these problems, the World Health Organization's Global Strategy on Digital Health 2020-2025 encourages governments and international organizations to improve internet connections, affordable electricity and devices, and policies to help vulnerable children.²⁰³ One successful example of telemedicine is India's eSanjeevani telemedicine platform. It is the world's largest telemedicine platform and has connected millions of patients with specialists

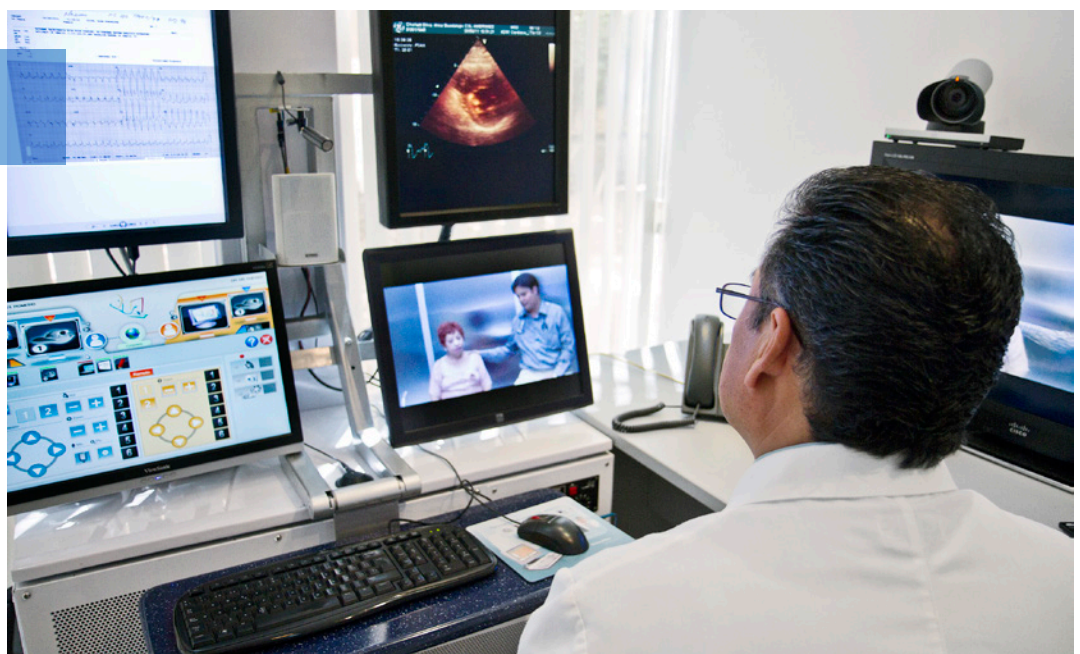
through virtual consultations, improving access to health services in rural areas.²⁰⁴ This gives patients access to doctors through mobile applications and teleconsultation, reducing healthcare inequality. However, platforms such as eSanjeevani should be evaluated not only by the number of consultations they provide, but also by whether patients receive appropriate diagnoses, referrals, and treatments. Greater access does not automatically mean better care.

Technologies such as robotic-assisted surgery may make necessary procedures less invasive, but they do not determine whether an operation is medically necessary.²⁰⁵ A less invasive operation can still constitute overtreatment if the child did not medically need surgery. High costs, limited pediatric evidence, and the need for specialized training may also restrict their usefulness. Governments should therefore evaluate both the clinical value and costs of investing in these technologies.²⁰⁶

Artificial intelligence (AI) has been an important development in recent years. AI systems analyze large amounts of data that help medical professionals make diagnoses, interpret medical images, and predict complications.²⁰⁷ Artificial intelligence has been successful in interpreting

Telemedicine

Credit: Intel Free Press



medical images such as chest x-rays. Some studies have found that AI systems can assist in detecting childhood pneumonia and interpreting medical images.²⁰⁸ However, results vary by system and dataset, and strong performance in a study does not guarantee accuracy in routine clinical care. This has helped doctors to make faster and more accurate diagnoses, but greater diagnostic sensitivity can also identify minor abnormalities that would never harm a child. Therefore, AI may increase overdiagnosis instead of improving care.

Rather than replacing healthcare professionals, AI is designed to support medical knowledge. In pediatric healthcare, AI may help to reduce unnecessary interventions by improving diagnostic accuracy. However, it can also contribute to medical overuse if specialists rely on its recommendations. AI systems may generate inaccurate recommendations or detect abnormalities that are either incorrect or unlikely to harm the child. Doctors must use clinical judgement and scientific evidence to prevent children from undergoing unnecessary medical procedures.

The World Health Organization's Ethics and Governance of Artificial Intelligence for Health (2021) helps ensure responsible use. It establishes that AI systems should always be used under human supervision and should never replace human judgement.²⁰⁹ WHO's six principles provide a framework for protecting autonomy, promoting safety and transparency, establishing accountability, and ensuring that AI remains responsive and sustainable. Without effective regulations, AI may lead to incorrect diagnoses and privacy problems.

Although technological innovations have transformed pediatric health care, they can both prevent and contribute to medical overuse. On one hand, these technologies can provide more precise medical care. On the other, they may contribute to overdiagnosis and overtreatment when used without clinical evidence or effective regulations. Technological innovations should

always be based on medical judgement. Delegates should consider how ethical frameworks, regulations, and guidelines ensure that these technologies strengthen pediatric care without contributing to unnecessary procedures.

INTERNATIONAL EFFORTS TO REDUCE UNNECESSARY PROCEDURES IN CHILDREN

International efforts to reduce unnecessary medical procedures have increased as patient safety and quality care have become global priorities. Organizations such as WHO and UNICEF promote safe, effective, and high-quality healthcare for children, principles that include reducing avoidable harm and inappropriate care. According to WHO, quality healthcare should be effective and safe, helping ensure that patients receive treatments that are necessary and beneficial.²¹⁰

The World Health Organization Global Patient Safety Action Plan 2021-2030 provides a framework for reducing avoidable harm in children.²¹¹ It promotes tools such as the WHO Surgical Safety Checklist, which outlines steps healthcare workers should complete before surgery to prevent errors in the operating room. It also supports the Medication Without Harm initiative, which encourages healthcare providers to verify that medications are necessary before prescribing them. Additionally, it strengthens systems for preventing and learning from medical errors. For example, patient-safety incident reporting and learning systems allow healthcare workers to document incidents and help institutions identify patterns and prevent similar harm. WHO encourages a learning-oriented approach rather than one focused solely on individual blame. It promotes patient and family engagement so correct medical decisions are taken to protect the child's best interests.²¹² More recently, in 2025, the WHO emphasized the priority of implementing pediatric and newborn care in healthcare facilities.²¹³

Other medical projects have helped reduce

unnecessary medical procedures in children. Choosing Wisely is one of the most notable international movements to prevent medical overuse. First launched in the United States in 2012, the campaign has expanded to more than 30 countries including Canada, Australia, Germany, Italy, Japan, and Brazil.²¹⁴ It encourages patients and physicians to discuss whether a test or treatment is truly necessary before proceeding.²¹⁵ Some participating hospitals have reported reductions in particular low-value services, although results vary among institutions and interventions.²¹⁶ This demonstrates that evidence-based decisions can reduce unnecessary medical procedures. Similarly, in 2022, the American Academy of Pediatrics and the Pediatric Emergency Medicine Committee published recommendations to avoid unnecessary medical procedures.²¹⁷ In this, multiple guidelines were developed to avoid CT scans for minor head injuries.

The Image Gently campaign was launched in 2007 by the Alliance For Radiation Safety in Pediatric Imaging.²¹⁸ This initiative urges health care professionals to use the smallest amount of radiation possible on children.²¹⁹ Further, organizations are working to improve guidelines

to determine when testing is appropriate. For example, the American College of Radiology's Appropriateness Criteria and the Image Gently campaign help to determine when imaging is truly necessary.²²⁰

Medical professionals should also use antibiotic prescriptions with caution. According to the WHO, antimicrobial resistance caused 1.27 million deaths in 2019.²²¹ Many countries and healthcare institutions have implemented antimicrobial stewardship programs (ASPs) to address antimicrobial resistance.²²² These programs promote prescribing the appropriate drug at the appropriate dose and for the appropriate duration. It guides doctors to follow evidence-based guidelines to prevent overuse of antibiotics.²²³ In addition, WHO encourages countries to adopt prescription-only sales to reduce unnecessary antibiotic prescriptions.²²⁴

Similarly, the WHO Safer Surgery Program provides surgical guidelines to ensure these procedures are performed only when clinically justified.²²⁵ Its recommendations include providing understandable health information to women and families, supporting communication with healthcare providers, auditing cesarean practices, and obtaining a second medical

*Children's department of the
National Cancer Institute*

Credit: President Of Ukraine



opinion when possible. These measures demonstrate that reducing unnecessary procedures does not always require banning or restricting care. Education, oversight, and shared decision-making can also improve whether procedures are used appropriately.²²⁶

Another element of reducing unnecessary care is seeing that children receive the appropriate care as soon as they arrive at the hospital. The WHO developed the Emergency Triage Assessment and Treatment (ETAT) to quickly assist children in need of critical care.²²⁷ Instead of performing extensive studies on every patient that enters the emergency room, this initiative trains health professionals to identify serious conditions. By helping providers identify children who require immediate treatment, ETAT can also support more appropriate use of limited diagnostic and clinical resources.²²⁸

Although these international efforts have made progress in reducing unnecessary medical procedures, medical overuse remains a global challenge. The examples above show that reducing unnecessary care requires more than simply limiting procedures. Evidence-based guidelines, professional medical training, patient and family involvement, and stronger oversight can help ensure that children receive the right treatment at the right time. Delegates should consider how international cooperation can expand these practices while allowing healthcare systems to address the specific causes of medical overuse in their countries.

Bloc Analysis

POINTS OF DIVISION

Member states and official documents such as the Convention on the Rights of the Child recognize that children deserve safe and equitable access to healthcare services. However, disagreement remains over how pediatric healthcare challenges should be

addressed and what contributes to inappropriate care. Some countries may primarily support professional education and adaptable, evidence-based protocols. In other systems, overuse may result from the broad availability of tests and technologies, financial incentives, defensive medicine, or pressure from families. These states may place greater emphasis on monitoring, accountability, and reducing low-value care.

A second division focuses on access to quality healthcare services. Medical overuse and underuse cannot be addressed while many children still do not have access to health services. Countries with this belief prioritize Universal Health Coverage (UHC) to ensure that every child receives adequate healthcare. In addition, infrastructure development, trained professionals, and financing should be considered to address this issue.²²⁹

Further, disagreements exist over the authority of families in pediatric decision-making. Some states emphasize parents' authority to make medical decisions based on their family's values and understanding of the child's needs. Others support limits when parents refuse evidence-based care, such as vaccination, or approve irreversible, non-emergency procedures. This raises the question of when governments should intervene to protect a child's best interests.²³⁰ Delegates should consider whether parental consent is sufficient or whether countries should require the child's assent, an independent advocate, an ethics review, or additional medical opinions.²³¹

Although all countries have an interest in protecting children, they disagree over which problem should receive the most immediate attention. Delegates should also consider how much influence UNICEF and other international organizations should have over national healthcare policies.

HIGH-CAPACITY SYSTEMS PRIORITIZING MEDICAL OVERSIGHT

Countries in this bloc have well-developed healthcare systems. They are characterized by high national healthcare expenditure, a high number of doctors per capita, and broad access to diagnostic technologies.²³² Healthcare expenditure is the total amount of money spent on healthcare services. Countries in this bloc rank among the world's highest healthcare spenders. The United States is the highest spender, followed by Switzerland, Germany, and Norway.²³³ Because healthcare access is already relatively widespread, these states may focus on whether available services are being used appropriately. This bloc is more likely to support clinical guidelines, data collection, hospital audits, provider education, technology assessments, and systems to identify unneeded care. Their goal is to reduce interventions where risks or costs outweigh expected benefits. These states may seek to ensure that pediatric procedures are supported by reliable evidence and that their expected benefits justify their risks.

These states advocate for strengthening evidence-based guidelines and policies. Organizations such as the WHO emphasize that strong guidelines ensure patient safety by maintaining high quality of care. The states may also support international initiatives to reduce low-value care, such as the Choosing Wisely movement. These initiatives aim to enhance healthcare quality and medical education according to the WHO Global Patient Safety Action Plan 2021-2030.²³⁴ This promotes better decision-making and reduces low-value care.

Innovations are an important priority in this bloc, as these can help with diagnoses. These technologies can complement medical professionals' judgment but not replace it. This bloc may promote human oversight, transparency, accountability, safety testing, and protection of patients' health data when AI is used in healthcare.²³⁵ These countries may also support stronger protections for children's

health data. UNICEF similarly identifies data protection, human oversight, transparency, and accountability as principles for child-centered AI.²³⁶ However, these countries may disagree over whether international recommendations should remain voluntary or be incorporated into national requirements.

Countries that may emphasize this perspective include Canada, the United States, Germany, Australia, Sweden, Switzerland, and the United Kingdom. While these countries have different healthcare structures, they rank among the world's highest healthcare spenders and may therefore place greater emphasis on improving quality and reducing overutilization.²³⁷ For example, the United Kingdom's National Institute for Health and Care Excellence (NICE) develops evidence guidelines to share with the National Health Service. Similarly, Germany has improved the quality of decision-making through the establishment in 2004 of the Institute for Quality and Efficiency in Health Care. This evaluates the benefits of medical procedures before recommending them.²³⁸

Ultimately, this bloc maintains that medical decisions should be based on reliable scientific evidence. Guidelines and national policies help ensure high-quality healthcare delivery.

EXPANDING SYSTEMS BALANCING ACCESS AND QUALITY

Countries in this bloc are expanding healthcare coverage while continuing to face major differences between urban and rural services. In addition, healthcare systems face unequal distribution of doctors, and there is a growing need for new specialized services. These states therefore seek to expand pediatric care while introducing safeguards that prevent new investments from contributing to overdiagnosis or overtreatment. Unlike Bloc 1, they may favor adaptable guidance, provider training, and lower-cost quality controls rather than expensive, high-tech monitoring systems or strict international

standards.

States prioritize investments in healthcare infrastructure, primary healthcare, essential medicines, immunization programs, diagnostic technologies, and financing. Countries within this bloc must address two challenges at once: expanding healthcare access and protecting the quality of newly available services. They recognize that with the implementation of new technologies, the risk of unnecessary medical procedures may increase if regulations are not implemented. For this reason, they support strengthening evidence-based medicine and guidelines as healthcare systems continue to develop.

Preventive healthcare is important to this bloc. Effective primary care can reduce overmedicalization by preventing illnesses from becoming severe enough to require hospitalization, emergency procedures, or other intensive treatments.²³⁹ These countries may support vaccination, routine health examinations, parental health literacy, and school-based health programs. Programs such as FRESH (Focusing Resources on Effective School Health) or the WHO's Health Promoting Schools initiative may be promoted.²⁴⁰ Health literacy among parents also helps families understand when medical attention is truly necessary.

Evidence-based preventive care is not medical overuse. Recommended vaccines and screenings may require resources now, but they can prevent serious illness and the need for more expensive or invasive treatment later. States in this bloc may therefore focus on helping families understand when medical attention is necessary and when additional testing is unlikely to benefit the child. This bloc may request technical assistance from UNICEF and WHO while maintaining national flexibility over how international guidance is implemented.

Countries within this bloc may include Mexico, Brazil, Colombia, Indonesia, Thailand, South Africa, and Malaysia. For example, Brazil's

Unified Health System has expanded primary healthcare through the Family Health Strategy. Also, Thailand's Universal Coverage Scheme has demonstrated how countries can develop healthcare systems while maintaining quality of care. These member states believe that healthcare systems should continue expanding while ensuring adequate access, responsible medical practice, and effective preventive care.

RESOURCE-LIMITED SYSTEMS PRIORITIZING ESSENTIAL CARE

Addressing medical overuse is an important global challenge. However, member states within this bloc argue that limited access to essential pediatric care should be addressed first. These countries face challenges such as limited healthcare infrastructure, shortages of basic medication, technologies, and doctors. Limited resources can also contribute to overtreatment. When diagnostic tests are unavailable, providers may have to treat patients based on symptoms rather than a confirmed diagnosis. For example, WHO reports that limited access to microbiological testing in rural clinics can lead to empirical and sometimes inappropriate antibiotic use.²⁴¹ Therefore, underuse and overuse can exist within the same resource-limited healthcare system.

Millions of children globally do not have access to basic services such as routine immunizations, basic medications, and consultations. In 2025, there were 13.5 million zero-dose children, meaning they had never received vaccines.²⁴² These states may argue that preventing deaths caused by delayed care must receive priority over building complex systems to measure medical overuse.²⁴³

Countries that support this position prioritize strengthening the capacity of their health facilities through investments in healthcare infrastructure, primary healthcare, diagnostic tools, essential medicine, and sustainable financing.²⁴⁴ Since a shortage of resources and personnel remains prevalent, countries primarily

advocate for expanding health coverage. Member states in this bloc rely on partnerships with organizations such as UNICEF, WHO and the World Bank to expand access to essential medicines and immunization strategies.²⁴⁵ These countries may support basic safeguards against unnecessary care, but argue that such policies must be affordable and appropriate for facilities with limited staff, equipment, and data systems. In many of these settings, the immediate consequences of delayed or unavailable treatment remain more severe than those of medical overuse.

Nevertheless, member states believe that expanding access to healthcare systems should not lead to unnecessary medical interventions.²⁴⁶ Healthcare access and healthcare quality are complementary.²⁴⁷ Expanding healthcare coverage without ensuring healthcare quality may not improve health outcomes. Countries within this bloc may advocate strengthening immunization programs, child and maternal health services, rural health delivery, and basic medications. International cooperation and funding are essential to help states develop their health systems. As health systems continue to expand and better quality is ensured, medical overuse can be reduced.

They may therefore request predictable funding, essential diagnostic equipment, training for community health workers, and technology transfers before accepting detailed reporting or oversight requirements. Some may also resist international standards that do not reflect local disease burdens, infrastructure, or cultural approaches to family decision-making.

SDG 3.8 aims to achieve Universal Health Coverage by ensuring access to quality essential health care services without exposing families to financial struggles.²⁴⁸ Countries in this bloc may include Ghana, Mozambique, Yemen, Afghanistan, Ethiopia, Nigeria, Nepal, and Bangladesh. Although these countries have different levels of development, their goal is to expand equitable access to essential pediatric care. As access

expands, evidence-based guidelines can be incorporated without diverting limited resources away from essential services. Expanding access to medical care and improving health quality allow children to receive appropriate care, therefore reducing unnecessary medical interventions.

Committee Mission

The United Nations Children's Fund (UNICEF) is responsible for the protection of children's rights and promoting their well-being. Guided by the Convention on the Rights of the Child, UNICEF works with humanitarian agencies to help meet children's basic needs and expand their opportunities. In addition, the organization responds to emergencies and crises to deliver help and resources to vulnerable children.

UNICEF can help address unnecessary medical procedures by supporting stronger maternal, newborn, and child health systems. Its work begins during pregnancy and continues through childbirth, the newborn period, and childhood.²⁴⁹ It works to strengthen healthcare systems, expand access to essential healthcare, and ensure quality of healthcare delivered. By working with governments, NGOs, local communities and healthcare professionals, UNICEF promotes evidence-based medicine, supports healthcare education and advocates for protecting the best interests of the children.²⁵⁰ It recognizes that high-quality care should be accessible, safe, and equitable.²⁵¹ UNICEF also encourages communication among doctors, families, and communities to ensure that every medical decision benefits the child's health while respecting their dignity and rights.

UNICEF works through partnerships to improve healthcare facilities, service delivery, professional training, and family education. This may include supporting maternal and newborn care, strengthening primary healthcare, improving access to essential diagnostics and medicines,

and helping countries collect information about healthcare quality.²⁵² UNICEF does not license medical professionals or determine which procedure is appropriate for an individual patient. Instead, it can work with WHO, governments, and healthcare organizations to promote safer and more equitable systems of care.

In this committee, delegates have the opportunity to develop innovative solutions that will improve pediatric healthcare while protecting children from unnecessary procedures. Delegates are encouraged to discuss how strong healthcare systems can help reduce unnecessary medical procedures while ensuring access to basic services. Strategies to strengthen ethical medical decisions and the collaboration between doctors and parents should also be debated. Since children often cannot advocate for themselves, solutions should be created to give voice and ensure rights that are often not respected.

Research and Preparation Questions

Your dais has prepared the following research and preparation questions as a means of providing guidance for your research process. These questions should be carefully considered, as they embody some of the main critical thought and learning objectives surrounding your topic.

TOPIC A

- 1 Should policy frameworks around parentification focus on prevention or response?
- 2 How should community leaders and governments approach the tensions between protecting family privacy and child protection? Where is it appropriate for systems or governments to intervene?
- 3 How can UNICEF help identify and support parentified children without unnecessarily separating families or stigmatizing parents experiencing poverty, illness, disability, or displacement?
- 4 What financial, educational, healthcare, and respite-care programs could reduce children's caregiving burdens while keeping families together?
- 5 How should governments distinguish between healthy family responsibilities and harmful parentification?
- 6 Which underlying causes of parentification should governments prioritize when resources are limited?

TOPIC B

- 1 What unnecessary medical procedures, diagnostic tests, and medications are the most prevalent in your country?
- 2 What economic, legal, or cultural frameworks contribute to overdiagnosis and overtreatment in pediatrics in your country?
- 3 What national policies has your country implemented to prevent unnecessary medical procedures in children and how effective have they been?
- 4 What role does artificial intelligence, telemedicine and diagnostic technologies play in your country? How can they be regulated?
- 5 How does your country balance parental authority and children's rights when making medical decisions?
- 6 What actions and solutions can your country propose to prevent unnecessary medical procedures in children, and how can these actions be implemented in other countries?

Important Documents

TOPIC A

- Dariotis, Jacinda K., et al. "Parentification Vulnerability, Reactivity, Resilience, and Thriving: A Mixed Methods Systematic Literature Review." *International Journal of Environmental Research and Public Health* 20, no. 13 (2023): 6197. <https://doi.org/10.3390/ijerph20136197>.
- International Labor Organization. "Child Labour." Accessed August 30, 2026. <https://www.ilo.org/topics-and-sectors/child-labour>.
- Stanić, L., and M. Ajduković. "Emotional Parentification in the Context of Family Financial Hardship: Relationship with Adolescent Self-Esteem and Internalising Problems." *Child and Adolescent Social Work Journal* 43 (2026): 583–593. <https://doi.org/10.1007/s10560-025-01038-6>.
- United Nations. Convention on the Rights of the Child. November 20, 1989. <https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-rights-child>.
- UNICEF. Best Practices for Working with Unaccompanied Migrant Children. <https://www.unicef.org/media/114286/file/Best-practices-working-with-unaccompanied-migrant-children.pdf>.
- UNICEF. "Protecting Migrant and Displaced Children." March 11, 2026. <https://www.unicef.org/stories/protecting-migrant-children>.
- UNICEF and UN Women. Adolescent Girls: Unpaid Domestic and Care Work in Latin America and the Caribbean. 2025. UNICEF report.

TOPIC B

- American Board of Internal Medicine, "Choosing Wisely Initiative", American Board of Internal Medicine, Accessed July 15, 2026, <https://abimfoundation.org/what-we-do/choosing-wisely>
- UNICEF "UN Convention on the Rights of the Child (UNCRC)" UNICEF, 1989, www.unicef.org.uk/what-we-do/un-convention-child-rights/
- World Health Organization and United Nations Children's Fund (UNICEF). Integrated Management of Childhood Illness (IMCI): Chart Booklet. Geneva: World Health Organization, (March, 2014), https://cdn.who.int/media/docs/default-source/mca-documents/9789241506823_chartbook_eng.pdf?sfvrsn=cccea3a6_1&download=true
- World Health Organization, "Global Patient Action Plan 2021-2030, Second Draft", World Health Organization, (November 2020) https://cdn.who.int/media/docs/default-source/patient-safety/gpsap/second-draft_global-patient-safety-action-plan_nov20.pdf?download=true&sfvrsn=728b040c_7
- World Health Organization. Global Strategy on Digital Health 2020–2025. Geneva: World Health Organization, 2021. <https://www.who.int/publications/i/item/9789240020924>
- World Health Organization, Ethics and Governance of Artificial Intelligence for Health. Geneva: World Health Organization, (June 2021), <https://www.who.int/publications/i/item/9789240029200>

About the Authors

TOPIC A: GINA DEMILLO WAGNER

Gina DeMillo Wagner, MMC, is an award-winning journalist and the author of *Forces of Nature: A Memoir of Family, Loss, and Finding Home*. Her work explores the intersections of disability and loss, nature and nurture, families of origin and families of choice. Her writing about parentification and family dynamics has been featured in *The New York Times*, *Washington Post*, *Memoir Magazine*, *Modern Loss*, *Psychology Today*, and other publications. She is a Yaddo Fellow, a winner of the CRAFT Creative Nonfiction Award, and her memoir won a 2024 Best Indie Book Award. Gina has a master's degree in journalism and is an instructor at Lighthouse Writers Workshop. She lives and works near Boulder, Colorado.

TOPIC B: FERNANDA MARTÍNEZ

Fernanda Martínez is a medical student at Universidad Anáhuac in Mexico City where she is originally from. She has been involved in Model United Nations since 2021 and has participated in NHSMUN since 2024. Her academic interests focus on health science research with a focus on cardiology and pediatrics. She has twice earned first place in research in the national LiderA competition and is a member of AUSOC, the college's cardiology interest group for medical students.

Additional writing by Kailena Song

Edited by Adam Allibhoy, Armen Bagdassarian, Ana Margarita Gil, Siya Goswami, Juliana Johnson, Sabeeh Mirza, Althea Turley, and Olivia Woodard

Endnotes

- 1 "What is Parentification?" Cleveland Clinic (October 2024). Accessed July 6, 2026. <https://health.clevelandclinic.org/parentification>
- 2 Salvador Minuchin, *The Disorganized and Disadvantaged Family: Structure and Process* (1967) <https://www.ebsco.com/research-starters/biography/salvador-minuchin>
- 3 UNICEF UK, "UN Convention on the Rights of a Child (UNCRC)," accessed September 14, 2026, <https://www.unicef.org.uk/what-we-do/un-convention-child-rights/>.
- 4 UNICEF, "UNICEF," accessed September 14, 2026, <https://www.unicef.org/>.
- 5 UNICEF, "UNICEF."
- 6 International Labour Organization, "Child Labour," accessed September 14, 2026, <https://www.ilo.org/topics-and-sectors/child-labour>.
- 7 Petrowski C.E., Stein C.H. Young Women's Accounts of Caregiving, Family Relationships, and Personal Growth When Mother Has Mental Illness. *J. Child Fam. Stud.* 2016;25:2873–2884. doi: 10.1007/s10826-016-0441-6.
- 8 Mayseless O., Bartholomew K., Henderson A., Trinke S. "I was more her Mom than she was mine": Role Reversal in a Community Sample. *Fam. Relat.* 2004;53:78–86. doi: 10.1111/j.1741-3729.2004.00011.x
- 9 "Facts About Young Carers." n.d. The Children's Society. Accessed July 7, 2026. <https://www.childrenssociety.org.uk/what-we-do/our-work/supporting-young-carers/facts-about-young-carers>.
- 10 Lindsey Culli, "New Study Reveals Millions of Young Americans Provide Essential Care to Adults." Johns Hopkins Bloomberg School (June 2024). Accessed July 7, 2026. <https://publichealth.jhu.edu/2024/new-study-reveals-millions-of-young-americans-provide-essential-care-to-adults>
- 11 Nagisa Osaki, "Invisible Young Carers in Europe: What Hides Their Existence?" Edinburgh Europa Institute, March 8, 2023, <https://europa.sps.ed.ac.uk/2023/03/08/invisible-young-carers-in-europe-what-hides-their-existence/>.
- 12 Leanne Lester et al., *Evaluation of the Young Carers Program* (Perth: Centre for Social Impact, University of Western Australia, July 2024), <https://assets.csi.edu.au/assets/research/Young-Carer-Final-report.pdf>
- 13 Republic of Korea Ministry of Health and Welfare, "Daily Care Service Program," last modified June 30, 2026, <https://www.mohw.go.kr/menu.es?mid=a10709020900>.
- 14 "The Demographics of Disability in the Family: Prevalence, Characteristics, and Implications for Financial Well-Being," United States Census Bureau (2023), accessed July 11, 2026; Natalie A. E. Young and Katrina Crankshaw, *The Demographics of Disability in the Family: Prevalence, Characteristics, and Implications for Financial Well-Being*, SEHSD Working Paper No. 2023-22 (Washington, DC: U.S. Census Bureau, July 17, 2023), <https://www.census.gov/library/working-papers/2023/demo/SEHSD-WP2023-22.html>; "Childhood Disability in the United States: 2019" <https://www.census.gov/library/publications/2021/acs/acsbr-006.html>.
- 15 Darren Miller, "Glass Children: The Hidden Psychological Weight of Growing Up Beside Disability," Rowan Center for Behavioral Medicine, August 6, 2026, <https://rowancenterla.com/glass-children-the-hidden-psychological-weight-of-growing-up-beside-disability/>.
- 16 Anna Ryu, "4 Countries with Conditional Cash Transfer Programs," The Borgen Project, November 23, 2021, <https://borgenproject.org/conditional-cash-transfer/>.
- 17 UNICEF, "Protecting Migrant and Displaced Children," March 11, 2026, <https://www.unicef.org/stories/protecting-migrant-children>.
- 18 Cecelia Huang, "How I Became My Family's Translator and Emotional Support System," Cold Tea Collective. Accessed July 11, 2026, <https://coldteacollective.com/parentification-of-immigrant-children-how-i-became-my-familys-translator-and-emotional-support-system/>
- 19 Huang, "How I Became My Family's Translator and Emotional Support System."
- 20 F. Leslie Seidle, *Migrant Integration Services in Canada: Adapting to the Changing Landscape* (Montreal: Institute for Research on Public Policy, May 7, 2026), <https://doi.org/10.26070/06dq-m575>.
- 21 King T.L. Young carers in the COVID-19 pandemic: Risks for mental health. *Lancet Reg. Health West. Pac.* 2021;16:100307. doi: 10.1016/j.lanwpc.2021.100307.
- 22 Chademana K.E., van Wyk B. Life in a child-headed household: Exploring the quality of life of orphans living in child-headed households in Zimbabwe. *Afr. J. AIDS Res.* 2021;20:172–180. doi: 10.2989/16085906.2021.1925311.
- 23 Republic of South Africa, *National Plan of Action for Children in South Africa 2012–2017* (Pretoria: Department of Women, Children and People with Disabilities, 2012), <https://www.unicef.org/southafrica/media/1301/file/ZAF-national-plan-of-action-for-children-in-South-Africa-2012-2017.pdf>.
- 24 Staff, Jeremy et al. "ADOLESCENT WORK INTENSITY, SCHOOL PERFORMANCE, AND ACADEMIC ENGAGEMENT." *Sociology of education* vol. 83,3 (2010): 183–200. doi:10.1177/0038040710374585
- 25 Greenberg R., Jurkovic G.J. *Lost Childhoods: The Plight of the Parentified Child*. Brunner/Mazel, Inc.; New York, NY, USA: 1997.
- 26 Jacinda K Dariotis et al. "Parentification Vulnerability, Reactivity, Resilience, and Thriving: A Mixed Methods Systematic Literature Review." *International journal of environmental research and public health* vol. 20,13 6197. 21 Jun. 2023, doi:10.3390/ijerph20136197
- 27 Hooper L.M., Marotta S.A., Lanthier R.P. Predictors of Growth and Distress Following Childhood Parentification: A Retrospective Exploratory Study. *J. Child Fam. Stud.* 2008;17:693–705. doi: 10.1007/s10826-007-9184-8; Greenberg R., Jurkovic G.J. *Lost Childhoods: The Plight of the Parentified Child*. Brunner/Mazel, Inc.; New York, NY, USA: 1997; Borchet J., Lewandowska-Walter A., Połomski P., Peplińska A., Hooper L.M. The Relations Among Types of Parentification, School Achievement, and Quality of Life in Early Adolescence: An Exploratory Study. *Front. Psychol.* 2021;12:635171. doi: 10.3389/fpsyg.2021.635171.
- 28 Salina Tiwari and Amelia Woodward, "Navigating Parentification Dualities: A Qualitative Analysis of Cultural Influences and Growth among South Asian Adults," *Contemporary Family Therapy* 48 (2026): 291–303, <https://doi.org/10.1007/s10591-025-09764-w>.
- 29 "Adolescent Girls: Unpaid Domestic and Care Work in Latin America." UNICEF guide. https://www.unicef.org/lac/en/media/52691/file/EN_Adolescent%20girls%20and%20unpaid%20domestic%20and%20care%20work_LAC_Aug25.pdf
- 30 Putnick, Diane L., and Marc H Bornstein. "GIRLS' AND BOYS' LABOR AND HOUSEHOLD CHORES IN LOW- AND MIDDLE-INCOME COUNTRIES." *Monographs of the Society for Research in Child Development* vol. 81,1 (2016): 104–122. doi:10.1111/mono.12228
- 31 Saha A. "Parentification: Boon or Bane?" *J. Psychosoc. Res.* 2016;11:289–301; Borchet J., Lewandowska-Walter A., Połomski P., Peplińska A., Hooper L.M. "We are in this Together: Retrospective Parentification, Sibling Relationships, and Self-Esteem." *J. Child Fam. Stud.* 2020;29:2982–2991. doi: 10.1007/s10826-020-01723-3.
- 32 Dariotis, Jacinda K et al. "Parentification Vulnerability, Reactivity, Resilience, and Thriving: A Mixed Methods Systematic Literature Review." *International journal of environmental research and public health* vol. 20,13 6197. 21 Jun. 2023, doi:10.3390/ijerph20136197
- 33 Neale Mahoney and Adam Shaw, "The Global Affordability Crisis Isn't Going Away," *Time*, January 15, 2026, <https://time.com/collections/davos-2026/7339214/global-affordability-crisis-cost-of-living-inflation-politics/>.
- 34 "2026 Kids Count Data Book" Annie E. Casey Foundation. Accessed July 8, 2026. <https://www.aecf.org/resources/2026-kids-count-data-book>
- 35 "Amidst Rising Costs and Care Challenges, Middle-Income Families Feel the Squeeze..." Bipartisan Policy Center. Accessed July 8, 2026.

<https://bipartisanpolicy.org/article/amidst-rising-costs-and-care-challenges-middle-income-families-feel-the-squeeze-in-a-system-not-built-for-them/>

36 Stanić, L., Ajduković, M. Emotional Parentification in the Context of Family Financial Hardship: Relationship with Adolescent Self-Esteem and Internalising Problems. *Child Adolesc Soc Work J* 43, 583–593 (2026). <https://doi.org/10.1007/s10560-025-01038-6>

37 UNICEF, “Protecting Migrant and Displaced Children.”

38 “Number of Children Displaced by Conflict Reached Record High in 2025” Save the Children. May 2026. <https://www.savethechildren.org/us/about-us/media-and-news/2026-press-releases/number-children-displaced-conflict-reached-record-high>

39 Norwegian Refugee Council, “Conflict and Violence Become the Leading Driver of Internal Displacements,” news release, May 12, 2026, <https://www.nrc.no/news/2026/conflict-and-violence-become-the-leading-driver-of-internal-displacements>.

40 USA for UNHCR, “Nearly 2 Million Refugees at Risk as Uganda Emergency Funds Dwindle and Services Cut,” August 4, 2025, www.unrefugees.org/news/nearly-2-million-refugees-at-risk-as-uganda-emergency-funds-dwindle-and-services-cut/.

41 “Coalition of more than 100 Legal Organizations Denounce Government’s Termination of Unaccompanied Kids.” Acadia Center for Justice. Accessed July 12, 2026. <https://acaciajustice.org/coalition-of-legal-organizations-denounce-governments-termination-of-unaccompanied-kids-program/>

42 UNICEF, Best Practices for Working with Unaccompanied Migrant Children in Humanitarian Contexts: A Guide for Staff and Volunteers in the United States (New York: UNICEF, October 2021), <https://www.unicef.org/media/114286/file/Best-practices-working-with-unaccompanied-migrant-children.pdf>.

43 “Legal Service Providers Demand Immediate Action as Unaccompanied Children Languish in Immigration Court Without Legal Representation.” Immigrant Defenders Law Center. April 2025. Accessed July 12, 2026. <https://www.immdef.org/blog/ucphearing3>

44 Energy Climate Intelligence Unit (2017, December). Heavy Weather: Tracking the Fingerprints of Climate Change, Two years after the Paris Summit. Retrieved from https://eciu.net/assets/Reports/ECIU_CHmate_Attribution-report-Dec-2017.pdf

45 “The Children’s Climate Risk Report 2026” UNICEF. Accessed July 12, 2026. <https://www.unicef.org/reports/childrens-climate-risk-report-2026>

46 Betty Pfefferbaum and Carol S. North, “How Parent Mental Health Can Affect Children After Disaster,” Natural Hazards Center, University of Colorado Boulder, accessed September 14, 2026, <https://hazards.colorado.edu/research-counts/children-and-disasters/how-parent-mental-health-can-affect-children-after-disaster>.

47 UNESCO, “Disaster Risk Reduction,” accessed July 9, 2026, <https://www.unesco.org/en/disaster-risk-reduction>.

48 Kessel, Ellen M et al. “Parenting style moderates the effects of exposure to natural disaster-related stress on the neural development of reactivity to threat and reward in children.” *Development and psychopathology* vol. 31,4 (2019): 1589-1598. doi:10.1017/S0954579418001347

49 Andrea Faith Kalvesmaki et al., “The Challenge of Identifying Young Carers in the US: How State Laws Put Families at Risk for Separation,” *International Journal of Care and Caring* 9, no. 1 (February 2025): 188–195, <https://doi.org/10.1332/23978821Y2024D000000082>.

50 The Yomiuri Shimbun, “Govt Subsidizes Surveys to Identify ‘Young Carers’; Effort to Ensure Support Reaches Those in Need,” *The Japan News*, June 1, 2025, <https://japannews.yomiuri.co.jp/society/general-news/20250601-257911/>.

51 Sylvester Kyei-Gyamfi, “Household Chores and Their Effects on Children: Perspective from Ghana,” *Humanities and Social Sciences Communications* 12 (September 29, 2025): article 1515, <https://doi.org/10.1057/s41599-025-05208-w>.

52 “Child Domestic Servitude and Haitian Girls’ Mental Health” *Journal of Interpersonal Violence* (2026). Accessed July 12, 2026. <https://journals.sagepub.com/doi/10.1177/08862605251404899>

53 United Nations General Assembly, Convention on the Rights of the Child, Resolution 44/25, A/RES/44/25, arts. 5, 12, 18–19 (Nov. 20, 1989), <https://undocs.org/A/RES/44/25>.

54 UNICEF Europe and Central Asia Regional Office, White Paper on Statutory Family Support in Europe and Central Asia (Geneva: UNICEF, September 2025), 6–7, [https://www.unicef.org/eca/media/43261/file/Statutory%20Family%20Support%20in%20Europe%20and%20Central%20Asia%20\(EN\).pdf](https://www.unicef.org/eca/media/43261/file/Statutory%20Family%20Support%20in%20Europe%20and%20Central%20Asia%20(EN).pdf).

55 UNICEF, White Paper on Statutory Family Support, 48–55.

56 UNICEF, White Paper on Statutory Family Support, 17, 37–41.

57 Parliament of the United Kingdom, Children and Families Act 2014, c. 6, § 96, <https://www.legislation.gov.uk/ukpga/2014/6/section/96>.

58 Salina Tiwari and Amelia Woodward, “Navigating Parentification Dualities: A Qualitative Analysis of Cultural Influences and Growth among South Asian Adults,” *Contemporary Family Therapy* 48 (2026): 291–303, <https://doi.org/10.1007/s10591-025-09764-w>.

59 Sylvester Kyei-Gyamfi, “Household Chores and Their Effects on Children: Perspective from Ghana,” *Humanities and Social Sciences Communications* 12 (September 29, 2025): article 1515, <https://doi.org/10.1057/s41599-025-05208-w>.

60 UNICEF UK, “UN Convention on the Rights of a Child (UNCRC).”

61 “Mission Statement,” UNICEF, accessed September 14, 2026, www.unicef.org/about/mission-statement

62 “Family for Every Child,” UNICEF Belarus, accessed September 14, 2026, help.unicef.org/family-for-every-child?language=en.

63 “Children in Alternative Care,” UNICEF, accessed September 14, 2026, www.unicef.org/protection/children-in-alternative-care

64 UNICEF, “Nearly 400 Million Young Children Worldwide Regularly Experience Violent Discipline at Home,” news release, June 11, 2024, <https://www.unicef.org/press-releases/nearly-400-million-young-children-worldwide-regularly-experience-violent-discipline>.

65 Jack Ng Kik Wah, “The rise of robotics and AI-assisted surgery in modern healthcare,” *Journal of Robotic Surgery* 19 no. 311, (June 2025), <https://doi.org/10.1007/s11701-025-02485-0>.

66 United Nations Children’s Fund, “Convention on the Rights of the Child: Convention Text,” UNICEF, accessed August 25, 2026, <https://www.unicef.org/child-rights-convention/convention-text>.

67 Katarina Karlsson et al., “Medical procedures in children using a conceptual framework that keeps a focus on human dimensions of care- a discussion paper,” *International Journal of Qualitative Studies on Health and Well-Being* 14 no. 1 (October 2019), <https://doi.org/10.1080/17482631.2019.1675354>.

68 Rony Kapel et al., “Child Maltreatment and Medical Traumatic Stress- A Double-Edged Sword,” *Children* 12 no. 1 (December 2024), <https://doi.org/10.3390/children12010017>.

69 Kao-Ping Chua et al., “Use of Low-Value Pediatric Services Among the Commercially Insured,” *Pediatrics* 138 no. 6 (December 2016), <https://doi.org/10.1542/peds.2016-1809>.

70 Morteza Arab-Zozani and Loai Albarqouni, “Editorial: Medical overuse and underuse in healthcare systems,” *Front Public Health* 13 no. 1590328 (April 2025), <https://doi.org/10.3389/fpubh.2025.1590328>.

71 Brian Lynch et al., “Are Radiographs Overutilized in Pediatric Orthopaedic Emergency Room Care?” *Journal of the Pediatric Orthopaedic Society of North America* 7 no. 100025 (March 2024), <https://doi.org/10.1016/j.jposna.2024.100025>.

72 Christine Harrison, “Treatment Decisions Regarding Infants, Children and Adolescents,” *Paediatrics & Child Health* 9, no. 2 (2004): 99–103, <https://doi.org/10.1093/pch/9.2.99>.

73 United Nations Children’s Fund, “Newborn Care,” UNICEF Data, updated November 2024, <https://data.unicef.org/topic/maternal-health/>

newborn-care/

- 74 Canadian Paediatric Society, "Treatment decisions regarding infants, children and adolescents," *Paediatric Child Health* 9 no. 2 (February 2004): 99-103, <https://doi.org/10.1093/pch/9.2.99>.
- 75 Aswin Thacharodi et al., "Revolutionizing Healthcare and Medicine: The Impact of Modern Technologies for a Healthier Future – A Comprehensive Review," *Health Care Science* 3, no. 5 (2024): 329–349, <https://doi.org/10.1002/hcs2.115>.
- 76 Eric R. Coon et al., "Overdiagnosis: how our compulsion for diagnosis may be harming children," *Pediatrics* 134, no. 5 (November 2014): 1013-1023, <https://doi.org/10.1542/peds.2014-1778>.
- 77 Audrey D. Kamzan and Elayna Ng, "When Less is More: The Role of Overdiagnosis and Overtreatment in Patient Safety," *Advances in Pediatrics* 68 (August 2021): 21-35, <https://doi.org/10.1016/j.yapd.2021.05.013>.
- 78 Kamzan and Ng, "When Less is More: The Role of Overdiagnosis and Overtreatment in Patient Safety," 21-35.
- 79 Ingrid Looijmans-van den Akker, Karen van Luijn, and Theo Verheij, "Overdiagnosis of Asthma in Children in Primary Care: A Retrospective Analysis," *British Journal of General Practice* 66, no. 644 (March 2016): e152–e157, <https://doi.org/10.3399/bjgp16X683965>.
- 80 Luise Kazda et al., "Evidence of potential overdiagnosis and overtreatment of attention deficit hyperactivity disorder (ADHD) in children and adolescents: protocol for a scoping review," *BMJ Open* 9, no. 11 (November 2019), <https://doi.org/10.1136/bmjopen-2019-032327>.
- 81 Richard Morrow et al., "Influence of relative age on diagnosis and treatment of attention-deficit/hyperactivity disorder in children," *Canadian Medical Association Journal* 184, no. 7 (April 2017): 755-762, <https://doi.org/10.1503/cmaj.111619>.
- 82 Kazda et al., "Evidence of potential overdiagnosis and overtreatment of attention deficit hyperactivity disorder (ADHD) in children and adolescents: protocol for a scoping review."
- 83 Centers for Disease Control and Prevention, "Diagnosing ADHD," CDC, July 30, 2026, <https://www.cdc.gov/adhd/diagnosis/index.html>
- 84 U.S. Food and Drug Administration, "FDA Updating Warnings to Improve Safe Use of Prescription Stimulants Used to Treat ADHD and Other Conditions," May 11, 2023, www.fda.gov/drugs/drug-safety-communications/fda-updating-warnings-improve-safe-use-prescription-stimulants-used-treat-adhd-and-other-conditions
- 85 United Nations Children's Fund, "Convention on the Rights of the Child: Convention Text."
- 86 Coon et al., "Overdiagnosis: how our compulsion for diagnosis may be harming children," 1013-1023.
- 87 Brian S. Kim et al., "Incidental Findings on Pediatric MR Images of the Brain," *American Journal of Neuroradiology* 23, no. 10 (November 2002): 1674–1677, <https://pmc.ncbi.nlm.nih.gov/articles/PMC8185842/>.
- 88 Wah, "The rise of robotics and AI-assisted surgery in modern healthcare."
- 89 Kamzan and Ng, "When Less is More: The Role of Overdiagnosis and Overtreatment in Patient Safety," 21-35.
- 90 Sabrina Bedhomme et al., "Pediatric pharmaceutical interventions in self-medication: a descriptive study in community pharmacies," *BMC Primary Care* 24, no. 1 (November 2023): 232, <https://doi.org/10.1186/s12875-023-02180-9>.
- 91 John Easton, "One out of 10 children receive unnecessary health care services," *UChicago Medicine*, December 1, 2016, <https://www.uchicagomedicine.org/forefront/pediatrics-articles/one-out-of-10-children-receive-unnecessary-health-care-services>.
- 92 John S. Murray and Parag M. Amin, "Overprescribing antibiotics in children: an enduring public health concern," *Journal for Specialists in Pediatric Nursing* 19, no. 3 (July 2014): 266-269, <https://doi.org/10.1111/jspn.12079>.
- 93 Dhrati V. Patangia et al., "Impact of antibiotics on the human microbiome and consequences for host health," *MicrobiologyOpen* 11, no. 1 (January 2022), <https://doi.org/10.1002/mbo3.1260>.
- 94 Easton, "One out of 10 children receive unnecessary health care services."
- 95 Murray and Amin, "Overprescribing antibiotics in children: An enduring public health concern," 266-269.
- 96 "Antimicrobial Resistance," World Health Organization, July 16, 2026, <https://www.who.int/news-room/fact-sheets/detail/antimicrobial-resistance>.
- 97 Tarjei Widding-Havneraas et al., "Geographical Variation in ADHD: Do Diagnoses Reflect Symptom Levels?," *European Child & Adolescent Psychiatry* 32, no. 9 (2023): 1795–1803, <https://doi.org/10.1007/s00787-022-01996-7>.
- 98 Centers for Disease Control and Prevention, "Treatment of ADHD," CDC, July 30, 2026, <https://www.cdc.gov/adhd/treatment/index.html>.
- 99 Rachel S. Meyers et al., "Key Potentially Inappropriate Drugs in Pediatrics: The KIDs List," *Journal of Pediatrics Pharmacology and Therapeutics* 25, no. 3 (2020): 175-191, <https://doi.org/10.5863/1551-6776-25.3.175>.
- 100 Wittich CM, Burkle CM, Lanier WL, "Ten common questions (and their answers) about off-label drug use," *Mayo Clin Proc.* 2012 Oct; 87(10):982–90, doi: 10.1016/j.mayocp.2012.04.017. Epub 2012 Aug 6. PMID: 22877654; PMCID: PMC3538391.
- 101 Xingxing Yuan et al., "Off-label and unapproved pediatric drug utilization: A meta-analysis," *Experimental and Therapeutic Medicine* 28, no. 5 (August 2024): 412, <https://doi.org/10.3892/etm.2024.12701>.
- 102 World Health Organization, "WHO Publishes New Global Research Agenda to Strengthen Paediatric Clinical Trials," WHO, November 6, 2025, www.who.int/news/item/06-11-2025-who-publishes-new-global-research-agenda-to-strengthen-paediatric-clinical-trials
- 103 Firomsa Bekele et al., "Childrens are not just 'little adults'. The rate of medication related problems and its predictors among patients admitted to pediatric ward of southwestern Ethiopian hospital: A prospective observational study," *Annals of Medicine and Surgery* 70, no. 102827 (September 2021), <https://doi.org/10.1016/j.amsu.2021.102827>.
- 104 Canadian Paediatric Society, "Treatment decisions regarding infants, children and adolescents," 99-103.
- 105 Donalds P. Frush et al., "Computed tomography and radiation risks: what pediatric health care providers should know," *Pediatrics* 112, no. 4 (October 2003): 951-957, <https://doi.org/10.1542/peds.112.4.951>.
- 106 Easton, "One out of 10 children receive unnecessary health care services."
- 107 Melita Nedzinskaite et al., "Assessment of Medical Test Overuse and Its Impact on Pediatric Emergency Department Outcomes in Upper Respiratory Tract Infections in a University Hospital in Lithuania," *Diagnostics* 14, no. 10 (May 2024): 970, <https://doi.org/10.3390/diagnostics14100970>.
- 108 Joris L. J. M. Müskens et al., "Overuse of diagnostic testing in healthcare: a systematic review," *BMJ Quality & Safety* 31, no. 1 (May 2021): 54-63, <https://doi.org/10.1136/bmjqs-2020-012576>.
- 109 Frush et al., "Computed tomography and radiation risks: what pediatric health care providers should know," 951-957.
- 110 Wei Weng and Yaomeng Chen, "Current status and solutions for the overuse of emergency CT in pediatric patients with abdominal pain," *Frontiers in Pediatrics* 13, no. 1654551 (September 2025), <https://doi.org/10.3389/fped.2025.1654551>.
- 111 Müskens et al., "Overuse of diagnostic testing in healthcare: a systematic review," 54-63.
- 112 Nedzinskaite et al., "Assessment of Medical Test Overuse and Its Impact on Pediatric Emergency Department Outcomes in Upper Respiratory Tract Infections in a University Hospital in Lithuania," 970.
- 113 Frush et al., "Computed tomography and radiation risks: what pediatric health care providers should know," 951-957.
- 114 Frush et al., "Computed tomography and radiation risks: what pediatric health care providers should know," 951-957.
- 115 Orly Ohana et al., "Overuse of CT and MRI in pediatric emergency departments," *British Journal of Radiology* 91, no. 1085 (February 2018), <https://doi.org/10.1259/bjr.20170434>.

- 116 Artunduaga M, Liu CA, Morin CE, Serai SD, Udayasankar U, Greer MC, Gee MS, "Safety challenges related to the use of sedation and general anesthesia in pediatric patients undergoing magnetic resonance imaging examinations," *Pediatr Radiol*, 2021 May;51(5):724-735. doi: 10.1007/s00247-021-05044-5. Epub 2021 Apr 16. PMID: 33860861; PMCID: PMC8049862.
- 117 Ohana et al., "Overuse of CT and MRI in pediatric emergency departments."
- 118 Tanveer Shaik et al., "Lab testing: a comprehensive analysis of overutilization in hospital-based settings," *Proceedings (Baylor University Medical Center)* 37, no. 2 (February 2024): 312-316, <https://doi.org/10.1080/08998280.2023.2288788>.
- 119 Czempik PF, Wilczek D, Herzyk J, Krzych ŁJ, "Hospital-Acquired Anemia in Patients Hospitalized in the Intensive Care Unit: A Retrospective Cohort Study," *J Clin Med*, 2022 Jul 6;11(14):3939. doi: 10.3390/jcm11143939. PMID: 35887702; PMCID: PMC9322508.
- 120 Shaik et al., "Lab testing: a comprehensive analysis of overutilization in hospital-based settings," 312-316.
- 121 Müskens et al., "Overuse of diagnostic testing in healthcare: a systematic review," 54-63.
- 122 "What Are the Risks and Limitations of Genetic Testing?," *MedlinePlus Genetics*, accessed August 27, 2026, <https://medlineplus.gov/genetics/understanding/testing/riskslimitations/>.
- 123 ² World Health Organization, *Imaging Ultrasound Before 24 Weeks of Pregnancy: 2022 Update to the WHO Antenatal Care Recommendations for a Positive Pregnancy Experience*, August 29, 2022, www.who.int/publications/i/item/9789240051461
- 124 Motilal Chandu Tayade and Shashank D. Dalvi, "Fundamental Ethical Issues in Unnecessary Surgical Procedures," *Journal of Clinical and Diagnostic Research* 10, no. 4 (April 2016), <https://doi.org/10.7860/jcdr/2016/18958.7694>.
- 125 Tayade and Dalvi, "Fundamental Ethical Issues in Unnecessary Surgical Procedures."
- 126 Tayade and Dalvi, "Fundamental Ethical Issues in Unnecessary Surgical Procedures."
- 127 World Health Organization, "Caesarean Section Rates Continue to Rise, amid Growing Inequalities in Access," *World Health Organization*, June 16, 2021, www.who.int/news/item/16-06-2021-caesarean-section-rates-continue-to-rise-amid-growing-inequalities-in-access.
- 128 World Health Organization, "Caesarean Section Rates Continue to Rise, amid Growing Inequalities in Access," *World Health Organization*, June 16, 2021, www.who.int/news/item/16-06-2021-caesarean-section-rates-continue-to-rise-amid-growing-inequalities-in-access.
- 129 Deborah Korenstein et al., "Overuse of health care services in the United States: an understudied problem," *Archives of Internal Medicine* 172, no. 2 (January 2012): 171-178, <https://doi.org/10.1001/archinternmed.2011.772>.
- 130 Bhargava Mullapudi et al., "Estimates of the number of children and adolescents without access to surgical care," *Bulletin of the World Health Organization* 97, no. 4 (January 2019): 254-258, <https://doi.org/10.2471/BLT.18.216028>.
- 131 Partika, "Pediatric Emergencies Associated With Unnecessary Testing: AAP"
- 132 Ellen A. Lipstein et al., "What Is Known about Parents' Treatment Decisions? A Narrative Review of Pediatric Decision Making," *Medical Decision Making* 32, no. 2 (October 2011): 246-258, <https://doi.org/10.1177/0272989X11421528>.
- 133 Lee Siew Pien et al., "Understanding Parental Role in Children's Participation in Decision Making during Hospitalisation: An Ethnographic Study in Malaysia," *Malaysian Journal of Medical Sciences* 30, no. 3 (June 2023): 143-150, <https://doi.org/10.21315/mjms2023.30.3.13>.
- 134 "Consent, capacity and medical-decision making for children," *SickKids, AboutKidsHealth*, last modified November 21, 2024, <https://www.aboutkidshealth.ca/consent-capacity-and-medical-decision-making-for-children>.
- 135 Stultiëns, Loes & Dierickx, Kris & Nys, Herman & Goffin, Tom & Borry, Pascal, "Minors and Informed Consent: A Comparative Approach," *European Journal of Health Law*, 2007, 1163/092902707X182788.
- 136 "Consenting to medical treatment without parental consent," *European Union Agency for Fundamental Rights*, accessed August 26, 2026, <https://fra.europa.eu/en/publication/2017/mapping-minimum-age-requirements-concerning-rights-child-eu/consenting-medical-treatment-without-parental-consent>
- 137 Lipstein et al., "What Is Known about Parents' Treatment Decisions? A Narrative Review of Pediatric Decision Making," 246-258.
- 138 Julian W. März, "What does the best interests principle of the convention on the rights of the child mean for paediatric healthcare?" *European Journal of Pediatrics* 181 (September 2022): 3805-3816, <https://doi.org/10.1007/s00431-022-04609-2>.
- 139 Jessica H. Guadarrama-Orozco et al., "Informed consent and parental refusal to medical treatment in childhood. The threshold of medical and social tolerance. Part I," *Boletín Médico del Hospital Infantil de México* 72, no. 3 (May 2015): 208-214, <https://doi.org/10.1016/j.bmhmx.2015.06.003>.
- 140 Ayse Kurtoglu and Berna Arda, "Ethics in Pediatric Decision-Making and Application Process," *Orthopedic Clinics* 56, no. 1 (January 2025): 49-58, <https://doi.org/10.1016/j.ocl.2023.12.003>.
- 141 März, "What does the best interests principle of the convention on the rights of the child mean for paediatric healthcare?" 3805-3816.
- 142 März, "What does the best interests principle of the convention on the rights of the child mean for paediatric healthcare?" 3805-3816.
- 143 Erica K. Salter et al., "Pediatric Decision Making: Consensus Recommendations," *Pediatrics* 152, no. 3 (September 2023), <https://doi.org/10.1542/peds.2023-061832>.
- 144 Ellen A. Lipstein et al., "Healthcare Providers Perspectives on Shared Decision Making with Parents and Adolescents," *Clinical Pediatrics* 64, no. 6 (November 2024): 809-815, <https://doi.org/10.1177/00099228241299897>.
- 145 Emily Boynton, "Pediatric Decision Making Recommendations Empower Parents, Emphasize Many Interests Impacting Kids," *University of Rochester Medicine*, August 21, 2023, <https://www.urmc.rochester.edu/news/story/pediatric-decision-making-recommendations-empower-parents-emphasize-many-interests-impacting-kids>.
- 146 Negri-Schwartz et al., "Shared decision-making, anxiety, and post-traumatic growth among parents in the context of their child's medical care: The moderating role of parental style."
- 147 Adrian Chi Heng Fung and Kenneth Kak Yuen Wong, "Parents making surgical decisions for their children: a pilot study," *World Journal of Pediatric Surgery* 6, no. 2 (May 2023), <https://doi.org/10.1136/wjps-2023-000587>.
- 148 Antje Aarthun et al., "Parental involvement in decision-making about their child's health care at the hospital," *Nursing Open* 6, no. 1 (July 2018): 50-58, <https://doi.org/10.1002/nop2.180>.
- 149 Poch, "The Number of Intersex People Is Comparable to the Number of Redheads, but Chances Are You Don't Know Any."
- 150 Arola Poch, "The Number of Intersex People Is Comparable to the Number of Redheads, but Chances Are You Don't Know Any," *El País*, July 10, 2023, english.elpais.com/society/2023-07-09/the-number-of-intersex-people-is-comparable-to-the-number-of-redhead-but-chances-are-you-dont-know-any.html.
- 151 David E. Sandberg and Melissa Gardner, "Differences/Disorders of Sex Development: Medical Conditions at the Intersection of Sex and Gender," *Annual Review of Clinical Psychology* 18 (February 2022): 201-231, <https://doi.org/10.1146/annurev-clinpsy-081219-101412>.
- 152 Hamza Bensaghir et al., "Unmasking the Deception: A Pediatric Surgery Team's Role in Diagnosing Factitious Disorder Imposed on Another," *Sage Open Pediatrics* 12, no. 30502225251337159 (April 2025), <https://doi.org/10.1177/30502225251337159>.
- 153 Aarthun et al., "Parental involvement in decision-making about their child's health care at the hospital," 50-58.
- 154 World Health Organization, "Universal Health Coverage," *World Health Organization*, accessed August 25, 2026, www.who.int/health-topics/universal-health-coverage.
- 155 "Foreign Countries with Universal Health Care," *New York State Department of Health*, last modified June 2022, <https://www.health.ny.gov/>

regulations/hcra/univ_hlth_care.htm.

- 156 Donald W. Light, "Universal Health Care: Lessons From the British Experience," *American Journal of Public Health* 93, no. 1 (January 2003): 25-30, <https://doi.org/10.2105/ajph.93.1.25>.
- 157 Light, "Universal Health Care: Lessons From the British Experience."
- 158 U.S. Census Bureau, Health Insurance Coverage in the United States: 2024, September 9, 2025, www.census.gov/library/publications/2025/demo/p60-288.html
- 159 Kelly Montgomery, "Single-Payer Healthcare vs. Universal Coverage," Verywell Health, last modified July 22, 2026, <https://www.verywellhealth.com/difference-between-universal-coverage-and-single-payer-system-1738546>.
- 160 Katherine E. Baird, "The financial burden of out-of-pocket expenses in the United States and Canada: How different is the United States?" *Sage Open Medicine* 4, no. 2050312115623792 (January 2016), <https://doi.org/10.1177/2050312115623792>.
- 161 Grace Sparks et al., "Americans' Challenges with Health Care Costs," *KFF*, April 30, 2026, <https://www.kff.org/health-costs/americans-challenges-with-health-care-costs/>.
- 162 Adil Aydoğdu and Bayram Şahin, "The cost of unnecessary test orders: a retrospective study," *Malawi Medical Journal* 37, no. 1 (April 2025): 23-29, <https://doi.org/10.4314/mmj.v37i1.4>.
- 163 Lynch et al., "Are Radiographs Overutilized in Pediatric Orthopaedic Emergency Room Care?"
- 164 Lunna Lopes et al., "Health Care Debt in the U.S.: The Broad Consequences of Medical and Dental Bills," *KFF*, June 16, 2022, www.kff.org/health-costs/kff-health-care-debt-survey/.
- 165 Zejia A. Yu and Michelle B. Gorgone, "Pay-for-Performance and Value-Based Care," in *StatPearls* (Treasure Island, FL: StatPearls Publishing, 2026), last updated May 2, 2024, www.ncbi.nlm.nih.gov/books/NBK607995/.
- 166 Eva W. Verkerk et al., "Key Factors That Promote Low-Value Care: Views of Experts from the United States, Canada, and the Netherlands," *International Journal of Health Policy and Management* 11, no. 8 (August 2022): 1514–1521, doi.org/10.34172/ijhpm.2021.53.
- 167 John August, "Healthcare Insights: How Medical Debt Is Crushing 100 Million Americans," Cornell University ILR School, October 21, 2024, www.ilr.cornell.edu/scheinman-institute/blog/healthcare-insights/healthcare-insights-how-medical-debt-crushing-100-million-americans.
- 168 Lunna Lopes et al., "Health Care Debt In The U.S.: The Broad Consequences Of Medical And Dental Bills," *KFF*, June 16, 2022, <https://www.kff.org/health-costs/kff-health-care-debt-survey/#c7f7c77b-dec4-4baf-bed1-78e3522b4f46--the-consequences-of-health-care-debt>.
- 169 Katherine E. Baird, "The Financial Burden of Out-of-Pocket Expenses in the United States and Canada: How Different Is the United States?" *SAGE Open Medicine* 4 (February 29, 2016), <https://doi.org/10.1177/2050312115623792>.
- 170 "NHS wastes over £2bn a year on unnecessary or expensive treatments," *The Guardian*, November 5, 2014, <https://www.theguardian.com/society/2014/nov/05/nhs-wastes-over-2-bn-on-unnecessary-treatment>.
- 171 Ruth Robertson, "Six ways in which NHS financial pressures can affect patient care," *The King's Fund*, March 31, 2016, <https://www.kingsfund.org.uk/insight-and-analysis/long-reads/nhs-financial-pressure-patient-care#6.-dilution>.
- 172 Luciana Ballini et al., "Interventions to reduce waiting times for elective procedures," *The Cochrane Database of Systematic Reviews* 2015, no. 2 (February 2015), <https://doi.org/10.1002/14651858.CD005610.pub2>.
- 173 Ballini et al., "Interventions to reduce waiting times for elective procedures."
- 174 World Health Organization, *WHO Recommendations: Non-Clinical Interventions to Reduce Unnecessary Caesarean Sections*, Geneva: World Health Organization, 2018, www.who.int/publications/i/item/9789241550338
- 175 "More than 400 million children globally live in poverty, missing out on at least two daily needs such as nutrition and sanitation," UNICEF, November 19, 2025, www.unicef.org/press-releases/more-400-million-children-globally-live-poverty-missing-out-least-two-daily-needs.
- 176 Vikas Saini et al., "Addressing overuse and underuse around the world," *The Lancet* 390, no. 10090 (July 2017): 105-107, [https://doi.org/10.1016/s0140-6736\(16\)32573-9](https://doi.org/10.1016/s0140-6736(16)32573-9).
- 177 "Most countries make progress towards universal health coverage, but major challenges remain, WHO–World Bank report finds," World Health Organization, December 6, 2025, <https://www.who.int/news/item/06-12-2025-most-countries-make-progress-towards-universal-health-coverage-but-major-challenges-remain-who-world-bank-report-finds>.
- 178 "What is Right Care?" Right Care Alliance, accessed July 14, 2026, <https://rightcarealliance.org/about-2/what-is-right-care/>.
- 179 Paul Glasziou et al., "Evidence for underuse of effective medical services around the world," *The Lancet* 390, no. 10090 (July 2017): 169-177, [https://doi.org/10.1016/s0140-6736\(16\)30946-1](https://doi.org/10.1016/s0140-6736(16)30946-1).
- 180 "Gaps and inequities in child health across the European Union," UNICEF, October 2025, <https://www.unicef.org/eca/reports/gaps-and-inequities-child-health-across-european-union>.
- 181 Jibin Park et al., *Inequalities in Access to Healthcare for Children* (Brussels: European Medical Students' Association, September 2025), <https://emsa-europe.eu/wp-content/uploads/2026/04/Inequalities-in-Access-to-Healthcare-for-Children-FINAL-edited-by-vpi.docx.pdf>.
- 182 Standards for improving the quality of health for children and young adolescents in health facilities (Geneva: World Health Organization, April 2018), https://cdn.who.int/media/docs/default-source/mca-documents/child/standards-for-improving-the-quality-of-care-for-children-and-young-adolescents-in-health-facilities--policy-brief.pdf?sfvrsn=1e568644_1.
- 183 "Ending Preventable, Child Deaths: How Britain Can Lead the Way," UNICEF, accessed July 14, 2026, <https://www.unicef.org.uk/campaign-with-us/child-health-report/>.
- 184 UNICEF, "Gaps and inequities in child health across the European Union."
- 185 Park et al., *Inequalities in Access to Healthcare for Children*.
- 186 Alana Semuels, "Why You Can't Find a Pediatrician," *TIME*, September 25, 2024, <https://time.com/7024080/why-you-cant-find-a-pediatrician/>.
- 187 Sibel T Saves et al., "Migrant-sensitive healthcare in Europe: advancing health equity through accessibility, acceptability, quality, and trust," *The Lancet Regional Health Europe* 41, no. 100805 (May 2024), <https://doi.org/10.1016/j.lanepe.2023.100805>.
- 188 Daniel R. R. Bradford et al., "Physical health of care-experienced young children in high-income countries: a scoping review protocol," *BMJ Open* 12, no. 9 (September 2022), <https://doi.org/10.1136/bmjopen-2022-063648>.
- 189 Beth D. Harper et al., "Where are the paediatricians? An international survey to understand the global paediatric workforce," *BMJ Paediatrics Open* 3, no. 1 (January 2019), <https://doi.org/10.1136/bmjpo-2018-000397>.
- 190 Saini et al., "Addressing overuse and underuse around the world," 105-107.
- 191 Mohamed Mustaf Ahmed et al., "Barriers to Pediatric Emergency Care in Low-Resource Settings: A Narrative Review," *Sage Open Pediatrics* 12, no. 305022251336861 (April 2025), <https://doi.org/10.1177/305022251336861>.
- 192 Eduardo Navarro-Jimenez et al., "Amenable Mortality in Children under 5: An Indicator for Identifying Inequalities in Healthcare Delivery: A Review," *Children (Basel, Switzerland)* 11, no. 7 (June 2024): 764, <https://doi.org/10.3390/children11070764>.
- 193 "Yemen: Children Cannot Wait- Funding Cuts Worsen the Pediatric Care Crisis," *Doctors Without Borders*, April 29, 2026, <https://msfsouthasia.org/yemen-children-cannot-wait-funding-cuts-worsen-the-paediatric-care-crisis/>.
- 194 Quratulain Zehra Memon et al., "Innovative Approaches in Pediatric Medicine: Emerging Trends and Future Perspectives," *Journal of Medical & Health Sciences Review* 2, no. 2 (May 2025), <https://doi.org/10.62019/yt7jq302>.

- 195 Hammad A. Ganatra, "Machine Learning in Pediatric Healthcare: Current Trends, Challenges, and Future Directions," *Journal of Clinical Medicine* 14, no. 3 (January 2025): 807, <https://doi.org/10.3390/jcm14030807>.
- 196 Yossef Alnasser et al., "Telemedicine and Pediatric Care in Rural and Remote Areas of Middle-and-Low-Income Countries: Narrative Review," *Journal of Epidemiology and Global Health* 14, no. 3 (March 2024): 779–786, <https://doi.org/10.1007/s44197-024-00214-8>.
- 197 C. Jason Wang et al., "The Opportunities for Telehealth in Pediatric Practice and Public Health," *Pediatric Clinics* 67, no. 4 (August 2020): 603–611, <https://doi.org/10.1016/j.pcl.2020.03.001>.
- 198 Alnasser et al., "Telemedicine and Pediatric Care in Rural and Remote Areas."
- 199 Golam Rabbani et al., "Digital Health Transformation Through Telemedicine (2020–2025): Barriers, Facilitators, and Clinical Outcomes—A Systematic Review and Meta-Analysis," *Encyclopedia* 5, no. 4 (December 2025): 206, <https://doi.org/10.3390/encyclopedia5040206>.
- 200 Alnasser et al., "Telemedicine and Pediatric Care in Rural and Remote Areas."
- 201 Rabbani et al., "Digital Health Transformation Through Telemedicine."
- 202 Measuring digital development: Facts and Figures 2024 (Geneva: International Telecommunication Union), <https://www.itu.int/itu-d/reports/statistics/facts-figures-2024>.
- 203 Global Strategy on Digital Health 2020–2025 (Geneva: World Health Organization, 2021), <https://www.who.int/publications/i/item/9789240020924>.
- 204 Wayan Vota, "eSanjeevani Shows What Works in Scaling Digital Health Solutions for LMICs," *ICT Works*, October 23, 2025, <https://www.ictworks.org/esanjeevani-shows-what-actually-works/>.
- 205 "da Vinci Robotic Surgery," *Cleveland Clinic*, last modified April 29, 2025, <https://my.clevelandclinic.org/health/treatments/16908-da-vinci-surgery>.
- 206 Amulya K. Saxena et al., "Narrative review: robotic pediatric surgery- current status and future perspectives," *Transitional Pediatrics* 12, no. 10 (October 2023): 1875–1886, <https://doi.org/10.21037/tp-22-427>.
- 207 Brais Galdo et al., "Artificial intelligence in paediatrics: Current events and challenges," *Anales de Pediatría* 100, no. 3 (March 2024): 195–201, <https://doi.org/10.1016/j.anpede.2024.02.009>.
- 208 Erica Louise Field et al., "Efficacy of Artificial Intelligence in the Categorisation of Paediatric Pneumonia on Chest Radiographs: A Systematic Review," *Children* 10, no. 3 (March 2023): 576, <https://doi.org/10.3390/children10030576>.
- 209 Ethics and Governance of Artificial Intelligence for Health (Geneva: World Health Organization, June 2021), <https://iris.who.int/server/api/core/bitstreams/f780d926-4ae3-42ce-a6d6-e898a5562621/content>.
- 210 "Quality of Care," *World Health Organization*, accessed July 15, 2026, https://www.who.int/health-topics/quality-of-care#tab=tab_1.
- 211 Global Patient Safety Action Plan 2021–2030: Towards Eliminating Avoidable Harm in Health Care (Geneva: World Health Organization, 2021), <https://iris.who.int/server/api/core/bitstreams/a28c34c0-089c-4f5d-a0b1-5d9c35a3cd67/content>.
- 212 Global Patient Safety Action Plan 2021–2030.
- 213 "World Patient Safety Day 2025," *World Health Organization*, September 17, 2025, <https://www.who.int/campaigns/world-patient-safety-day/2025>.
- 214 Steve Schering, "Choosing Wisely list outlines tests to avoid in pediatric ED patients," *American Academy of Pediatrics*, December 1, 2022, <https://publications.aap.org/aapnews/news/22821/Choosing-Wisely-list-outlines-tests-to-avoid-in>.
- 215 "Choosing Wisely," *American Board of Internal Medicine*, accessed July 15, 2026, <https://abimfoundation.org/what-we-do/choosing-wisely>.
- 216 Samantha A. House et al., "Trends in Low-Value Care Among Children's Hospital," *Pediatrics* 153, no. 1 (January 2024), <https://doi.org/10.1542/peds.2023-062492>.
- 217 Paul C. Mullan et al., "Recommendation for Choosing Wisely in Pediatric Emergency Medicine: Five Opportunities to Improve Value," *Annals of Emergency Medicine* 84, no. 2 (August 2024): 167–175, <https://doi.org/10.1016/j.annemergmed.2024.01.007>.
- 218 "Campaign Overview," *The Image Gently Alliance*, <https://www.imagegently.org/About-Us/Campaign-Overview>.
- 219 Sanyukta Desai et al., "Identifying opportunities to reduce imaging overuse in hospitalized children," *Journal of Hospital Medicine* 20, no. 6 (June 2025): 573–580, <https://doi.org/10.1002/jhm.13562>.
- 220 The Image Gently Alliance, "Campaign Overview."
- 221 "Antimicrobial Resistance," *World Health Organization*, July 16, 2026, <https://www.who.int/news-room/fact-sheets/detail/antimicrobial-resistance>.
- 222 Radosław Jaworski and Katarzyna Dzierzanowska-Fangrant, "Antimicrobial Stewardship in Pediatrics," *Antibiotics* (Basel, Switzerland) 13, no. 1 (January 2024): 105, <https://doi.org/10.3390/antibiotics13010105>.
- 223 Jesús Ruiz et al., "Antimicrobial stewardship programme implementation in a medical ward," *Revista Espanola de Quimioterapia* 31, no. 5 (October 2018): 419–426, <https://pmc.ncbi.nlm.nih.gov/articles/PMC6194872/>.
- 224 WHO Policy Guidance on Integrated Antimicrobial Stewardship Activities (Geneva: World Health Organization, 2021), <https://iris.who.int/server/api/core/bitstreams/bfc17315-e20c-4e61-8e08-c70d8a349437/content>.
- 225 WHO Guidelines for Safe Surgery 2009 (Geneva: World Health Organization, 2009), <https://iris.who.int/server/api/core/bitstreams/c2ea24bb-10f7-48e4-8f63-55932e817ddc/content>.
- 226 World Health Organization, WHO Recommendations: Non-Clinical Interventions to Reduce Unnecessary Caesarean Sections.
- 227 Abner Tagoola and Helena Hildenwall, "Paediatric Emergency Care in Low-Income Countries- Can Guidelines be generalized?" *Global Pediatric Health* 11 (May 2024), <https://doi.org/10.1177/2333794X241251787>.
- 228 Emergency Triage Assessment and Treatment (Geneva: World Health Organization, February 2005), <https://iris.who.int/server/api/core/bitstreams/defcbf2b-9d70-4610-b5a3-dd6d46301994/content>.
- 229 "Universal Health Coverage," *World Health Organization*, December 5, 2025, [https://www.who.int/news-room/fact-sheets/detail/universal-health-coverage-\(uhc\)](https://www.who.int/news-room/fact-sheets/detail/universal-health-coverage-(uhc)).
- 230 Poch, "The Number of Intersex People Is Comparable to the Number of Redheads, but Chances Are You Don't Know Any."
- 231 Salter et al., "Pediatric Decision Making."
- 232 "Global Healthcare Capacity: Top 100 countries by physicians per 1000 people, 2025," *StatRanker*, December 11, 2025, <https://statranker.org/medical/global-healthcare-capacity-top-100-countries-by-physicians-per-1000-people-2025/>.
- 233 Chris James, et al., *Health at a Glance 2025* (Paris: OECD, November 2025), https://www.oecd.org/en/publications/health-at-a-glance-2025_8f9e3f98-en/full-report/health-expenditure-per-capita_aaffe6b0a.html.
- 234 Global Patient Action Plan 2021–2030.
- 235 World Health Organization, "WHO Outlines Considerations for Regulation of Artificial Intelligence for Health," *World Health Organization*, October 19, 2023, www.who.int/news/item/19-10-2023-who-outlines-considerations-for-regulation-of-artificial-intelligence-for-health
- 236 United Nations Children's Fund, "UNICEF AI Strategy 2025–2030: AI for Every Child," *UNICEF*, accessed August 25, 2026, www.unicef.org/digitalimpact/unicef-ai-strategy-2025-2030-ai-every-child.
- 237 Shannon Brownlee et al., "Evidence for Overuse of Medical Services Around the World," *Lancet* 390, no. 10090 (January 2017): 156–168,

-
- [https://doi.org/10.1016/S0140-6736\(16\)32585-5](https://doi.org/10.1016/S0140-6736(16)32585-5).
- 238 “IQWiG,” InformedHealth, IQWiG, last updated June 3, 2025, <https://www.informedhealth.org/about-us/iqwig/>.
- 239 Ming-Jye Wang and Yi-Ting Lo, “Strategies for Improving the Utilization of Preventive Care Services: Application for importance-Performance Gap Analysis Method,” *International Journal of Environmental Research and Public Health* 19, no. 20 (October 2022), <https://doi.org/10.3390/ijerph192013195>.
- 240 “Health Literacy,” National Institutes of Health, last reviewed January 13, 2026, <https://www.nih.gov/institutes-nih/nih-office-director/office-communications-public-liaison/clear-communication/health-literacy>.
- 241 World Health Organization, “The Next Pandemic Is Already Here: Antimicrobial Resistance Is Upending a Century of Achievements in Global Health,” WHO Regional Office for the Western Pacific, November 18, 2025, www.who.int/westernpacific/newsroom/commentaries/detail/the-next-pandemic-is-already-here--antimicrobial-resistance-is-upending-a-century-of-achievements-in-global-health
- 242 “Immunization Coverage,” World Health Organization, July 15, 2026, www.who.int/news-room/fact-sheets/detail/immunization-coverage.
- 243 Saini et al., “Addressing overuse and underuse around the world,” 105-107.
- 244 Tagoola and Hildenwall, “Paediatric Emergency Care in Low-Income Countries.”
- 245 “Health and Child Development,” UNICEF, accessed July 16, 2026, <https://www.unicef.org/health/health-and-child-development>.
- 246 “Social Determinants of Health,” World Health Organization, May 6, 2025, www.who.int/news-room/fact-sheets/detail/social-determinants-of-health.
- 247 Quality Health Services, A Planning Guide (Geneva: World Health Organization, 2020), <https://iris.who.int/server/api/core/bitstreams/475743ef-8c37-4f5b-bbe9-dcfd386ade08/content>.
- 248 “SDG Target 3.8,” World Health Organization, accessed July 16, 2026, [https://www.who.int/data/gho/data/themes/topics/indicator-groups/indicator-group-details/GHO/sdg-target-3.8-achieve-universal-health-coverage-\(uhc\)-including-financial-risk-protection](https://www.who.int/data/gho/data/themes/topics/indicator-groups/indicator-group-details/GHO/sdg-target-3.8-achieve-universal-health-coverage-(uhc)-including-financial-risk-protection).
- 249 United Nations Children’s Fund, “Newborn Care.”
- 250 “Mission Statement,” UNICEF, accessed June 10, 2026, <https://www.unicef.org/about/mission-statement>.
- 251 Child Protection Guidelines for Health Workers (Accra: UNICEF Ghana, 2018), <https://www.unicef.org/ghana/media/2211/file/Child%20Protection%20Guidelines%20for%20Health%20Workers.pdf>.
- 252 “Strengthening health systems,” UNICEF, accessed July 20, 2026, <https://www.unicef.org/health/strengthening-health-systems>.

The National High School Model United Nations Conference (NHSMUN) is a project of IMUNA, a non-profit organization formally associated with the United Nations Department of Global Communications (UNDGC). IMUNA is dedicated to promoting global issues education through simulation.

© 2026 IMUNA. All Rights Reserved.

