



WHEC Update

Briefing of worldwide activity of the Women's Health and Education Center (WHEC)

March 2024; Vol. 19. No. 03

New Perspectives

Child maltreatment is the abuse and neglect that occurs to children under 18 years of age. It concludes all types of physical and/or emotional ill-treatment, sexual abuse, neglect, negligence and commercial or other exploitation, which results in actual or potential harm to the child's health, survival, development or dignity in the context of a relationship of responsibility, trust or power.

Child maltreatment is a global problem with serious life-long consequences. In spite of recent national surveys in several low- and middle-income countries, data from countries are still lacking. Child maltreatment is complex and difficult to study. Current estimates vary widely depending on the country and the method of research used. Estimates depend on:

- The definition of child maltreatment used;
- The type of child maltreatment studied;
- The coverage and quality of official statistics;
- The coverage and quality of surveys that request self-reports of victims, parents or caregivers.

Nonetheless, international studies reveal that nearly 3 in 4 children aged 2 to 4 years regularly suffer physical punishment and/or psychological violence at the hands of parents and caregivers, and 1 in 5 women and 1 in 13 men report having been sexually abused as a child. Every year, there are estimated 40,150 homicide deaths in children under 18 years of age, some of which are likely due to child maltreatment. This number almost certainly underestimates the true extent of the problem, since a significant proportion of deaths due to child maltreatment are incorrectly attributed to falls, burns, drowning and other causes. In armed conflict and refugee settings, girls are particularly vulnerable to sexual violence, exploitation and abuse by combatants, security forces, members of their communities, aid workers and others.

Child maltreatment has enormous immediate and long-term repercussions. Beyond death, physical injury and disability, violence can lead to stress that impairs brain development and damages the nervous and immune systems. This, in turn, is associated with delayed cognitive development, poor school performance and dropout, mental health problems, suicide attempts, increased health-risk behaviors, revitalization and perpetration of violence. The good news is that child maltreatment can be prevented through interventions that support parents and caregivers, promote non-violent norms and values, provide education and life skills training, strengthening families' income and economic security, offer quality response and support services, create and sustain safe environments for children, and implement and enforce laws and regulations against child maltreatment. Effort of the Women's Health and Education Center (WHEC), in collaboration with a number of partners are:

1. Provides technical assistance and normative guidance for evidence-based child maltreatment prevention;
2. Advocates for increased international support for and investment in evidence-based child maltreatment prevention;
3. Provides technical support for evidence-based child maltreatment prevention programs in several low- and middle-income countries.

The purpose of our child maltreatment prevention course is to acquire basic understanding of the public health approach to child maltreatment prevention including the importance of and need for evidence-based prevention strategies.

Child Maltreatment
Rita Luthra, MD



Your Questions, Our Reply

What is child maltreatment? Will reporting by the healthcare providers increase risk of harm for the child? What are the positive and negative impacts of reporting?

Identifying Child Maltreatment: Child maltreatment is often hidden and rarely disclosed. Child maltreatment includes the perpetration of physical, sexual and psychological/emotional violence and neglect of infants, children and adolescents aged 0 – 17 years by parents, caregivers and other authority figures, most often in the home but also in settings such as schools and orphanages. It is a significant health problem and a violation of fundamental human rights, including right to life, right to protection from all forms of violence, and the right to enjoy the highest attainable standards of health. Child maltreatment can have serious consequences and often lifelong negative physical and mental health, sexual and reproductive health, academic performance and social life.

Facts and Figures: Nearly a quarter of adults suffered physical abuse as a child, 36% experienced emotional abuse and 16% experienced neglect. Overall, 18% of girls and 8% of boys have experienced some form of sexual abuse. While the data available in cited in most of the studies is from high-income countries. Data from low- and middle-income countries are mostly not available.

Laws relevant to child maltreatment: Child maltreatment is a human rights violation and this is reflected in most national laws. As a healthcare provider, it is important to know these laws and how they affect your practice. The laws can have a direct impact on how health services are provided with regard to child maltreatment.

Provide Mental Healthcare: There is a strong association between experiencing violence and mental health issues. It is important to understand that child maltreatment is an exposure, not a diagnosis. Children should receive support based on their mental health symptoms, not on the basis of their exposure to violence. Identifying and helping children with more severe mental health problems is essential. It often includes depression, anxiety, post-traumatic stress disorders (PTSD) and behavior problems such as conduct-dissocial disorder. Depression is an important risk factor for suicidal behavior.

Reporting of Child Maltreatment: Take time to learn about reporting duties in your setting. It is important to have an accurate understanding of the reporting laws and policies in your context. Inform children, adolescent and caregivers about your duty to report. Where mandatory reporting laws exist, you should explain any obligation to share information at the very beginning of care and treatment.

Maintain the utmost discretion and confidentiality.

Make verbal and/or written reports (as indicated by law) within a specified time frame (usually 24 to 48 hours).

Avoid promising the child, adolescent, or family that you will be able to protect them, or “make things better.” Do not say things like “everything will be fine.” You cannot predict the outcome of a possible investigation. It is often a long and emotionally charged process. Children may be most afraid and concerned that the perpetrator will go to jail.

It is important to inform child protection services of your intention to provide any ongoing treatment or referrals for the child/family, as this can facilitate collaboration and continuity of care.

Taking care of your own health: working with children in cases of suspected child maltreatment can also be personally challenging and requires that healthcare providers take care of their own health and well-being. Protect yourself from aggressive behavior and violence. Protect yourself from STRESS. Recognize when you need help.



Virtual Side Events

Hosted by WHEC

2024 ECOSOC Partnership Forum; 30 January 2024, from 8:15 am to 9:30 am Education- and Health-for-All to Achieve United Nations 2030 Agenda

<http://www.womenshealthsection.com/content/whhec/ecosoc-partnership-forum.php3>

The aim of this Side Event is to understand the potential of social and economic impacts, that quality education and improved health can bring in achieving peaceful co-existence. For policy makers and individuals alike, this means planning for the future, and working together.

Program Video: https://www.youtube.com/watch?v=bGyy7_4Xe-c

Summary of the Program

<http://www.womenshealthsection.com/content/Summary-of-2024-Side-Event-hosted-by-WHEC.pdf>

62nd Session of Commission for Social Development (CSocD62)

6 February 2024; 10 am to 11:15 am (EST)

Towards Education and Health-for-All: Core Enabler of the UN 2030 Agenda

<http://www.womenshealthsection.com/content/whhec/csocd.php3>

The global movement towards education and health for all will directly facilitate the United Nations (UN) 2030 Agenda. As an enabler of several Sustainable Development Goals (SDGs), education and health can become the driving force behind poverty reduction strategies, in the service of humanity, democratization of the resources and an impetus for regional development in social and economic development – especially relevant for universal health coverage and access.

Program Video:

<https://www.youtube.com/watch?v=tCGWNC0KDi8>

Summary of the Program:

<http://womenshealthsection.com/content/Summary-CSocD62-Side-Event.pdf>

Education and Health are human rights. Join this global movement

We welcome everyone!

Thank you for your support



Learning Life Lessons Series

For Teachers and Students

A Quarterly Series for *WHEC Update*

TOOLS for CHILD DEVELOPMENT

Chapter VIII – Helping The World Become A Better Place

WHY READING AND LEARNING ABOUT SUSTAINABLE DEVELOPMENT GOALS IMPORTANT?

Understanding Sustainable Development Goals (SDGs) is essential to children's growth and development; stories can fuel their imagination and raise awareness of new possibilities. The Women's Health and Education Center (WHEC) aims to encourage students, teachers and administrators to learn about the SDGs in a fun, engaging way, empowering them to make a difference. **3 Steps of Learning**

Step 1: IMPROVE LOCALLY – volunteer with a local charity; reduce negative impact & take pride in where you live and work. Be civically engaged.

Step 2: IMPROVE AT HOME – be kind, set a good example, get a job, be positive, be helpful to everyone. And work with different cultures. Be Sincere.

Step 3: IMPROVING GLOBALLY – the 2030 Agenda for SDGs, adopted by all UN Member States in 2015, provides a shared blueprint for peace and prosperity for people and planet, now and into the future. At its heart are the 17 SDGs, which are an urgent call for action by all countries, developed and developing, in a global partnership. They recognize that ending poverty and other deprivations must go hand in hand with strategies that improve health and education.

20 Small Ways to Make The World A Better Place:

1. Donate your time, skills, money and volunteer for a cause.
2. Give an elderly person some of your time.
3. Donate blood or plasma (if you can).
4. Put your phone away and focus on what or who is in front of you.
5. Adopt or rescue pet.
6. Do not listen to, or participate in, Gossip.
7. Say please and thank-you often.
8. Cook someone a healthy meal.
9. Declutter, recycle, and donate.
10. Tell someone they did a Good Job.
11. Respect others at all times, no matter who they are.
12. Allow someone else their time to shine.
13. Travel respectfully.
14. Treat everyone the way you would like to be treated.
15. Read and share positive stories. Step through life with honesty and integrity.
16. Listen without passing judgment. Focus on positive.
17. Decrease your use of plastic.
18. Sprinkle kindness around like it is a fairy dust.
19. Mentor/coach someone free. Be a positive role model to kids/people younger than you.
20. Do what you love. It will inspire others.

SUGGESTED READING

Learning Life Lessons Series: Part III ; available at:

<http://www.womenshealthsection.com/content/gynmh/gynmh018.php3>

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United Nations at a Glance

Oman became Member State of the United Nations on 7 October 1971



Oman, officially the **Sultanate of Oman**, is an Arab country located in Western Asia. It is situated on the southeastern coast of the Arabian Peninsula, and spans the mouth of the Persian Gulf. Oman shares land and borders with Saudi Arabia, and United Arab Emirates, and Yemen, while sharing maritime borders with Iran and Pakistan. The coast is formed by the Arabian Sea on the southeast, and the Gulf of Oman on the northeast. Muscat is the nation's capital and largest city. Official

language: Arabic; Government Unitary Islamic absolute monarchy, Sultan: Haitham bin Tariq; Legislature: Council of Oman; Population: 4,520,471 (2021); Currency: Omani rial (OMR).

The first elective Imamate of Oman is believed to have been established shortly after the fall of the Umayyad Dynasty in 750 / 755 AD, when Jannah bin Sibadah Ailinnawi was elected. During the 11th and 12th centuries, the Omani coast was in the sphere of influence of the Seljuk Empire. They were expelled in 1154, when the Nabhani dynasty came to power. A decade after Vasco de Gama's successful voyage around the Cape of Good Hope and to India in 1497 – 1498, the Portuguese arrived in Oman and occupied Muscat for a 143 years, from 1507 – 1650. The Ottoman Empire temporarily captured Muscat from the Portuguese. The Persian empire then tried to take possession of the coast of Oman until 1747. Oman's Imam Sultan, defeated ruler of Muscat, was granted sovereignty after Gwadar, and area of modern-day Pakistan. The British government achieved predominating control over Muscat. In 1856, under British arbitration, Zanzibar and Muscat became two different sultanates. On 10 January 1623, an agreement between the Sultanate and the British government was signed in which the Sultanate had to consult British political agent residing in Muscat and obtain the approval of the High Government of India to extract oil in the Sultanate. Oman is absolute monarchy led by a Sultan since 1970.



Oman has oil reserve ranked 22nd globally. In 2010, the United Nations Development Programme (UNDP) ranked most improved nation in the world in terms of development during the preceding 40 years. a portion of economy involves tourism and trading fish, dates and other agricultural produce.

Oman is categorized as a high-income economy, and as to 2022, ranks as the 64th most peaceful country in the world according to the Global Peace Index. Since 1970, Oman has pursued a moderate foreign policy, and has expanded its diplomatic relations dramatically. Oman is among the very few Arab countries that have maintained friendly ties with Iran.

The National Human Rights Commission, established in 2008, is not independent from the regime. It is chaired by the former deputy inspector general of Police and Customs and its members are appointed by royal decree. Since the beginning of the "Omani Spring" in January 2011, a number of serious violations of civil rights have been reported, amounting to a critical deterioration of the human rights situation. Prisoners are inaccessible to independent monitors. The penal code was amended in October 2011 to allow the arrest and detention of individuals without an arrest and detention warrant from public prosecutors. Migrant workers remain insufficiently protected against exploitation.

As of 2014, women reserve wearing their traditional dress for special occasions, and instead wear a loose black cloak call an *abaya* over their personal choice of clothing, whilst in some regions, particularly amongst the Bedouin, the *burqa* is still worn. Women wear *hijab*, and though some women cover their faces and hands, most do not. The Sultan has forbidden the covering of faces in public office.

Details: <https://sdgs.un.org/statements/oman-14972>

Collaboration with World Health Organization (WHO)

WHO | Oman



Health Situation

The Sultanate of Oman enjoys a stable political, economic and social system. Sustained investment in economic development and high-political commitment to health has resulted in near universal access to health care. The country achieved all the health-related MDGs except for maternal mortality which did not quite reduce by three quarters; it went from 27.3 in 1990 to 12.3 per 100,000 live births in 2013.

The country is experiencing the epidemiological and demographic transition and rapidly growing private sector which is challenging the current PHC system. NCDs and injuries are among the leading causes of hospital mortality and morbidity. Rapid lifestyle changes in Oman are leading to unhealthy dietary habits, limited physical activity, and the spread of tobacco use. Risky behaviors such as reckless driving and substance abuse add to the dramatic rise of NCDs.

Health Policies and Systems

The majority of the health services are provided by the Ministry of Health (MOH); however there is a growing private sector. Primary health care is the basic building block of the health system with provision of near free-of-charge service in the public sector and near universal access. Key areas of focus are improving cost effectiveness and quality of services, strengthening the quality, quality, and appropriate mix of human resource capacity as involving non-health sectors to address the social and behavioral determinants of health particularly as they relate to NCDs prevention. A national team has been put in place to oversee the implementation of the Sustainable Development Goals.

The MOH is actively working towards the implementation of the International Health Regulations (IHR), and important activity given Oman's strategic geographical location and population dynamics. Oman ratified the Framework Convention on Tobacco Control in 2005. Tobacco control rules and regulations including ban on Tobacco Advertising and smoking in the workplace and public places are spread between many sub-national laws. A comprehensive tobacco law is required.

Per capita GDP has doubled within the past 10 years and the World Health Report 2008 highlighted the impressive achievements of the primary health care-based system in Oman while the Human development Report 2010 listed Oman as a leading country in making the greatest progress in education and public health .

Cooperation for Health

Oman receives minimal support from international and external partners in health due to its high-income status. Oman is also a prominent member of the Gulf Cooperation Council (GCC). WHO, FAO, UNICEF and UNFPA are present in Oman and work closely in supporting WHO country programs. Exemplary collaboration between WHO and MOH – expects WHO to provide high quality advice and advanced expertise with speed and ease. Oman play an active role in WHO governance at the global and regional levels, which demonstrates Oman commitment to global health, this subsequently contributes to the national health agenda.

As part of the preparations for CCS, 2018 – 2022, a joint MOH and WHO team reviewed the achievements made during the past CCS cycle. Oman plays and increasingly important role in global health and in WHO.

Details: <https://www.who.int/countries/omn/>



Oman Joined UNESCO on 10 February 1972



The Bahla Fort

The Oasis of Bahla owes its prosperity to the Banu Nebhan, the dominant tribe in the area from the 12th to the end of the 15th century. The ruins of immense fort, with its walls and towers of unbaked brick and its stone foundations, is a remarkable example of this type of fortification and attests to the power of the Banu Nebhan. Bahla was the center of Ibadism (a branch of Islam), on which the ancient Omani Imamates were based and whose influence can be traced across Arabia, Africa and beyond. The extensive wall (sur) with sentry walk and watchtowers enclosing the labyrinth of mud brick dwelling and cultivable land has several gateways. The oasis is watered by the Falaj system of wells and underground channels bringing groundwater from distant springs, and by management of the seasonal flow of water. Bahla is an outstanding example of fortified oasis settlement of the medieval Islamic period, exhibiting the water engineering skill of the early inhabitants for agricultural and domestic purposes.



Aflaj Irrigation Systems of Oman

The property includes five aflaj irrigation systems and is representative of some 3,000 such systems still in use in Oman. The origins of this system of irrigation may date back to AD 500, but archaeological evidence suggests that irrigation systems existed in this extremely arid areas as early as 2,500 BC. Using gravity, water is channeled from underground sources or springs to support agriculture and domestic use. The fair and effective management and sharing of water in villages and guided by astronomical observations. Numerous watchtowers built to defect the water systems form part of the site reflecting the historic dependence of communities on the aflaj system. Threatened by falling level of the underground water table, the aflaj represent an exceptionally well-preserved form of land use.



Oman embarks on development of K-12 AI curricula with support of UNESCO and RCEP (Regional Center for Educational Planning)

As artificial intelligence (AI) technology represents a new subject area for K-12 schools worldwide, there is a lack of historical knowledge for governments, schools and teachers to draw from in defining AI competencies and designing AI curricula. This mapping exercise analyses existing AI curricula with specific focus on the curriculum content and learning outcomes, and delineates development and validation mechanisms, curriculum alignment, the preparation of learning tools and required environments, the suggested pedagogies, and the training of teachers. Key considerations are drawn from the analysis to guide the future planning of enabling policies, the design of national curricula or institutional study programmes, and implementation strategies for AI competency development. As a leading part of the international community and conversation on technology in education, UNESCO has led number of important developments in the AI in/for Education space. The introduction of AI into life and work has already fundamentally changed the way people interact within their societies in both developed and developing nations. It raises significant questions, e.g., about the expression and protection of human rights, legal liability in AI-related injury, and the philosophical orientation of AI development and use. Details: <https://en.unesco.org/countries/oman>

Education-for-All and Health-for-all

Bulletin Board

Transforming Our World: The 2030 Agenda for Sustainable Development

Adopted at the United Nations Sustainable Development Summit on 25 September 2015

Peace

We are determined to ensure that all human beings can enjoy prosperous and fulfilling lives and that economic, social and technological progress occurs in harmony with nature.

Partnership

We are determined to mobilize the means required to implement this Agenda through a revitalized Global Partnership for Sustainable Development, based on spirit of strengthened global solidarity, focused in particular of all countries, all stakeholders and all people.

The interlinkages and integrated nature of the Sustainable Development Goals are of crucial importance in ensuring that the purpose of the new Agenda is realized. If we realize our ambitions across the full extent of the Agenda, the lives of all will be profoundly improved and our world will be transformed for the better.

DECLARATION

Introduction

1. We, the Heads of the State and Government and High Representatives, meeting at the United Nations Headquarters in New York from 25 to 27 September 2015 as the Organization celebrates its seventieth anniversary, have decided today on new global Sustainable Development Goals.
2. On behalf of the peoples we serve, we have adopted a historic decision on a comprehensive, far-reaching and people-centered set of universal and transformative Goals and targets. We commit ourselves to working tirelessly for the full implementation of this Agenda by 2030. We recognize that eradicating poverty in all its forms and dimensions, including extreme poverty, is the greatest global challenge and an indispensable requirement for sustainable development. We are committed to achieving sustainable development in its three dimensions – economic, social and environmental – in a balanced and integrated manner. We will also build upon the achievements of the Millennium Development Goals and seek to address their unfinished business.
3. We resolve, between now and 2030, to end poverty and hunger everywhere; to combat inequalities within and among countries; to build peaceful, just and inclusive societies; to protect human rights and promote gender equality and the empowerment of women and girls; and to ensure the lasting protection of the planet and its natural resources. We resolve also to create conditions for sustainable, inclusive and sustained economic growth, shared prosperity and decent work for all, taking into account different levels of national development and capacities.
4. As we embark on this goal collective journey, we pledge that no one will be left behind. Recognizing that the dignity of the human person is fundamental, we wish to see the Goals and targets met for all nations and peoples and for all segments of society. And we will endeavor to reach the furthest behind first.

To be continued.....



Collaboration with UN University (UNU)

UNU-WIDER (World Institute for Development Economics Research)

Expert Series on Health Economics

The Omani and Bahraini Paths to Development

Rare and Contrasting Oil-based Economic Success Stories

Oman and Bahrain are Middle Eastern success stories. There are some key similarities. Both have followed pragmatic development strategies built on a stable foundation of strengthened governance structures and enhanced economic liberalization. These improvements occurred in somewhat different settings, with Oman developing in a more authoritarian environment, whereas Bahrain enjoyed greater democracy but somewhat less stability. While both countries have relied on oil revenues to support their development efforts, it appears that, in contrast to their less successful oil producing neighbors, each country had just enough oil to do some good, but not enough to do serious damage.

One of the more perplexing patterns of growth found in developing countries in recent decades is that, except for short periods of resource boom, resource-based economies generally experienced significantly slower rates of growth than resource-poor countries. This finding is robust in light of both sensitivity tests and differences in how the natural resource endowment is classified. Economic theory provides not convincing explanation as to why resource abundance should be inherently disadvantageous. Developing oil states have a tendency to be rich but weak and unstable.

Oman's accomplishments border on the spectacular. The country has essentially developed from a medieval state into a nation poised to assume a regional and global role. Economic growth has in many ways been spectacular. Yet, while the changes in some cases have been exponential, the notion of rushing things with imported ideas and off-the-shelf solutions has never been considered. Oman has successfully resisted the temptation to copy some of its neighbors, and its growth has been sure and steady. Its development strategy is an unorthodox, but successful mixture of the conservative and the ambitious – a mixture that is distinctly Omani. As a result of this efforts at reform and diversification, Oman has grown beyond the early stages of development. It has moved beyond its initial reliance on oil revenues towards a diversified economy and is entering a development stage where efficiency will become an increasingly important factor in determining economic success.

Both Oman and Bahrain have enjoyed economic success because their governments made pragmatic choices at each phase of development, which allowed the countries to progress to higher levels of economic sophistication and welfare. Policies favoring improvements in economic freedom and governance clearly set these countries apart from their neighbors and go a long way in accounting for their superior growth records. These improvements occurred in somewhat different settings, with Oman developing in a more authoritarian environment, whereas Bahrain enjoyed greater democracy but somewhat less stability. However, the two countries also had one very important factor in common: each had just enough oil to do some good, but not enough to do serious damage. Still, both countries have relied on oil revenues to support their development efforts. The true test of the success of their development strategies may well be revealed by how well they fare if oil prices decline.

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Details of the paper can be accessed from the link of UNU-WIDER on CME Page
<http://www.womenshealthsection.com/content/cme/>

Two Articles of Highest Impact, February 2024

Editors' Choice – Journal Club Discussions

Fully open-access with no article-processing charges

Our friendship has no boundaries. We welcome your contributions.

1. **Maternal Obesity and Impact on Fetal Brain Development;**
<http://www.womenshealthsection.com/content/obsnc/Maternal-Obesity-and-Impact-on-Fetal-Brain-Development.pdf>
WHEC Publications. Funding: WHEC Global Initiatives are funded by a grant from an anonymous donor. Join us at WHEC Global Health Line for discussion and contributions.
2. **Non-Invasive Prenatal Genetic Testing for Fetal Anomalies;**
<http://www.womenshealthsection.com/content/obs/obs034.php3>
WHEC Publications. Funding: WHEC Global Initiatives are funded by a grant from an anonymous donor. Join us at WHEC Global Health Line for discussion and contributions.

Partnership for Maternal, Newborn & Child Health (World Health Organization)
PMNCH Member

Worldwide service is provided by the WHEC Global Health Line



From Editor's Desk

WHEC Projects under Development

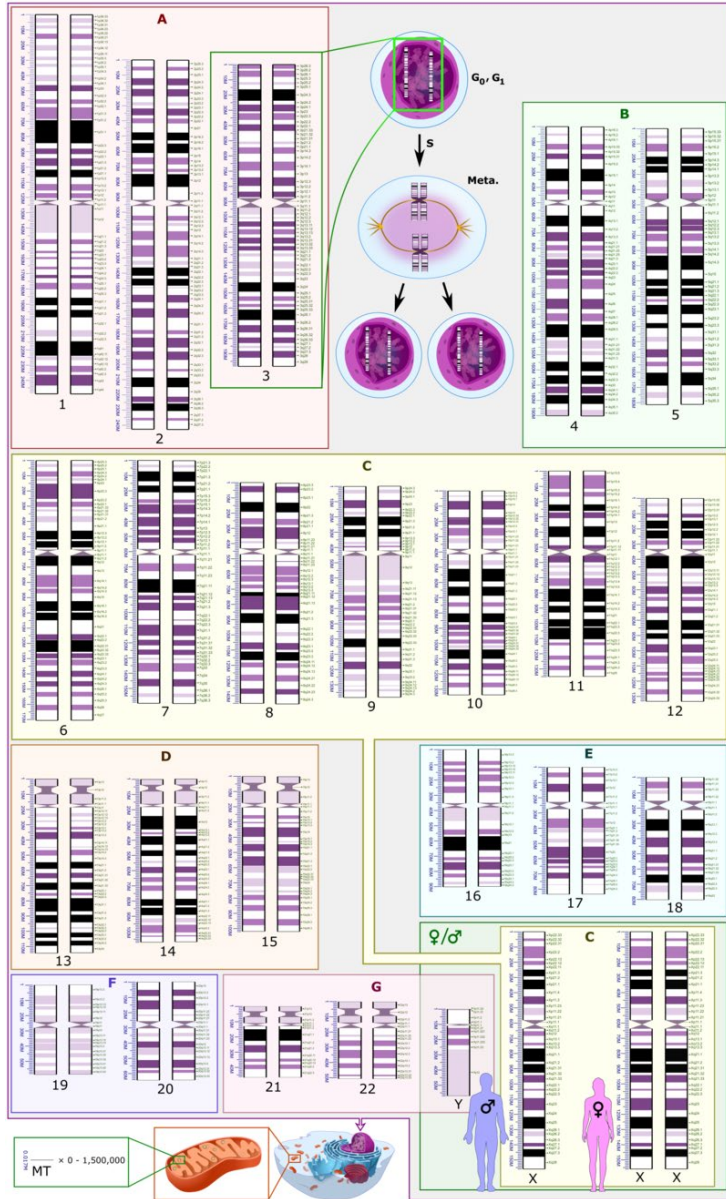
Understanding Human Genomes – Genes simplified.

THE HUMAN GENOME, is the complete set of nucleic acid sequences for humans, encoded as DNA (Deoxyribonucleic Acid), within the 23 chromosome pairs in cell nuclei and in small DNA molecules found within mitochondria. This includes both protein-coding DNA sequences and various types of DNA that does not encode proteins. This schematic representation of the human diploid karyotype shows the organization of the human genome into chromosomes, as well as annotated bands and sub-bands as seen on G banding. The diagram shows both the female (XX) and male (XY) versions of the 23rd chromosome pair. Chromosomal changes during the cell cycle are displayed at the top center. The human mitochondrial genome is shown on a scale at the bottom left.

While there are significant differences among the genomes of human individuals (on the order of 0.1% due to single-nucleotide variants and 0.6% when considering indels), there are considerably smaller than the differences between humans and their closest living relatives, the bonobos and chimpanzees (~1.1% fixed single-nucleotide variants and 4% when including indels). Size in base pairs can vary too; the telomere length decreases after every round of DNA replication. Although the sequence of the human genome has been completely determined by DNA sequencing, it is not yet fully understood. Most but not all genes have been identified by a combination of high throughput experimental and bioinformatics approaches, yet much work still needs to be done to further elucidate the biological functions of their proteins and RNA products. And yet, overlapping genes are quite common, in some cases allowing two proteins to coding genes from each strand to reuse base pairs twice. Recent results suggest that most of the vast quantities of non-coding DNA within the genome have associated biochemical activities, including regulation of gene expression, organization of chromosome architecture, and signals controlling epigenetic inheritance.

Human Genome Project (HGP), was an international scientific research project with the goal of determining the base pairs that make up human DNA, and of identifying, mapping and sequencing all of the genes of the human genome from both a physical and a functional standpoint. It started in 1990 and was completed in 2003. It remains the world's largest collaborative biological project. Planning for the project started after it was adopted in 1984 by the US government, and it officially launched in 1990. It

was declared complete on April 14, 2003, and included about 92% of the genome. Level “complete genome” was achieved in May 2021, with a remaining only 0.3% bases covered by potential issues. The final gapless assembly was finished in January 2022.



Genomic Information

Schematic representation of the human diploid karyotype, showing the organization of the genome into chromosomes, as well as annotated bands and sub-bands as seen on G banding.

Chromosomal changes during the cell cycle are displayed at top center.

NCBI genome ID: 51

Ploidy (number of complete set): diploidy

Genome size: 3,117,275,501 base pairs (bp)

Number of chromosomes: 23 pairs.

The sequence of the DNA is stored in databases; the **National Center for Biotechnology Information (NCBI)** is a part the United States National Library of Medicine, a branch of National Institute of Health. it is approved and funded by the government of the United States <https://www.ncbi.nlm.nih.gov/>

Two technologies enabled the project: gene mapping and DNA sequencing. The sequencing of the human genome holds benefits for many fields, from molecular medicine to human evolution. The Human Genome Project, through its sequencing of the DNA, can help researchers understand diseases including: genotyping of specific viruses to direct appropriate treatment; identification of mutations linked to different forms of cancer; the design of medication and more accurate prediction of their effects; advancements in forensic applied sciences; biofuels and other energy

applications; agriculture, animal husbandry, bioprocessing; risk assessment; bioarcheology, anthropology, and evolution. Another proposed benefit is the commercial development of genomics research related to DNA-based products – a multibillion-dollar industry.



IN THE MAIL

Our pleasure to share with you the Greetings / Acknowledgements of Director General of UNESCO Ms. Audrey Azoulay, UNESCO HQ, Paris, France

<http://womenshealthsection.com/content/documents/UNESCO-2024-Greetings-DG.pdf>

Fighting Slavery's Legacy of Racism through Transformative Education



The racist legacy of the Transatlantic Slave Trade reverberates today in harmful prejudices and beliefs, which are still being perpetuated and continue to impact people of African descent across the world.

Transformative education seeks to empower learners to see the social world critically and through an ethical lens to challenge the status quo, in order to end racism and injustice and to build inclusive societies, based on dignity and human rights for all. On 25th March we mark the International Day of Remembrance of the Victims of Slavery and the Transatlantic Slave Trade. For centuries, people of African descent have been marginalized due to the legacy of slavery and colonialism.



Outreach Program on Transatlantic Slave Trade and Slavery

The program raises awareness of the history of transatlantic slave trade, its impact on the modern world, and its legacies, including racism and prejudice. Over the years, the Program has established a global network of partners,

including from educational institutions and civil society, and developed resources and initiatives to educate the public about this dark chapter of history and promotion action against racism. It was established in 2007 with the adoption of General Assembly resolution 62/122.



Permanent Memorial – Ark of Return

The Permanent Memorial was unveiled on 25 March 2015, which marks the International Day of Remembrance of the Victims of Slavery and the Transatlantic Slave Trade. The memorial, located on the United Nations Visitors Plaza in New York, invites people everywhere to contemplate the legacy of the slave trade and to fight against racism and prejudice today.

Visitors can pass through the Ark of Return to intimately experience three primary elements. The first element, Acknowledge the Tragedy, is a three-dimensional map that depicts the global scale of the triangular slave trade.

The Second element, Consider the legacy, is a full-scale human figure lying in front of a wall inscribed with images of the interior of a slave ship. This element illustrates the extreme conditions under which millions of African people were transported during the Middle Passage.

The third element, Lest We Forget, is a triangular reflecting pool where visitors can honor the memory of the millions of souls who were lost.

Over 4 centuries, more than 18 million people were forcefully removed from Africa to the Americas (including the Caribbean) and Europe.

Seven Ages Of Man

All the world's a stage,
And all the men and women merely players,
They have their exits and entrances,
And one man in his time play many parts,
His acts being seven ages.

At first the infant,
Mewling and puking the nurse's arms.

Then, the whining school boy with this satchel
And shining morning face, creeping like snail
Unwilling to go to school.

And then the lover,
Sighing like furnace, with a woeful ballad
Made to his mistress' eyebrow.

Then a soldier,
Full of strange oaths, and bearded like the pard,
Jealous in honour, sudden, and quick in quarrel,
Seeking the bubble reputation,
Even in the cannon's mouth.

And then the justice,
In fair round belly, with good capon lin'd,
With eyes severe, and beard of formal cut,
Full of wise saws, and modern instances.
And so he plays his part.

- William Shakespeare (1564 – 1616);

*Monthly newsletter of WHEC designed to keep you informed on
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