

# WALLINGTON HIGH SCHOOL FOR GIRLS The Wallington Week

HEIRS OF THE PAST, MAKERS OF THE FUTURE

## **Message from the Headteacher**

Well done to all our wonderful performers for another successful KS3 music recital last week. Thank you to the PFA for raising £515 for the Music Dept at the uniform sale on Friday.

This week we hold the W Factor with students from Wallington Boys and our Year 11 have their prom on Friday.

The public exams are now over, and I would like to say well done to all our students who sat these exams, and I hope they all now have a well-deserved rest.

We now have four WoHAA teams through to the semifinal at the House of Lords on Thursday, winners get to go to a trip to India to see some of the schools in Chenai that the charity support so please wish them good luck. The semi-finalists are...The Kharities: Averie, Teni,Vithu, Pelumni, Sumayya- Year 9. Team EmpowerHER: Karima, Kowthur, Najira, Nissi,Mozn, Sarah-Year 12. Team Education Sansfronteire: Estella, Aleena and Safa from Year 10.

Congratulations to Princess in Year 12 who recently participated in the 33rd International Philosophy Olympiad, after passing internal competitions and a national competition, representing the UK delegation in the international round.

The new Year 7 Parents BBQ will take place on 5th July - it would be great to have a few parents there supporting the PFA - I will hopefully be at the WoHAA finals if one of our teams gets through! We held a successful Governor visit last Friday where a team of Governors worked with SLT to shape Governor Visits to school.

The gardening club has now filled our new raised beds with plants they have grown from seed. Congratulations to Mehreen (commendation for French to English) and Riya (Area winner for Spanish) as part of the Anthea Bell Prize for Young Translators run by Queens College, Oxford.

# Useful Links

Monday 23<sup>rd</sup> June 2025

## **Co-Curricular Activities**

<u>SOCs</u>, the school's online system for Co-Curricular activities, will allow your child to see all available activities but also allow you to view after school registers to see if your child is attending and in school.

## **Careers Noticeboard**

For live updates on careers related opportunities please <u>click here.</u>

## **Current Vacancies**

Click here for a link to our <u>vacancies</u> page

## **Upcoming Events**

24<sup>th</sup> June- Sixth Form Induction Day

27<sup>th</sup> June- Y11 Prom

**30<sup>th</sup> June-** Y13 Prizegiving (NEW DATE)

1<sup>st</sup> July- Sports Day



# Calendar



# Monday 23rd June

- Public Exams
- Y10 Exams
- Wilson School Talk- Y12 Philosophy

# **Tuesday 24th June**

- Public Exams
- Year 10 Exams
- Sixth Form Induction Day
- Y7 & Y8 LAMDA Showcase (F02 3-5pm)

# Wednesday 25th June

- Year 10 Exams
- Team Global x10 Y12- all day
- Central Detention (3:10-4:10pm)

# Thursday 26th June

- Year 10 Exams
- The W Factor- talent show (Main Hall 6-8pm)

# Friday 27th June

- Year 10 Exams
- Central Detention (3:10-4:10pm)
- Year 11 Prom (Farleigh golf club, 7-10:30pm)





 Monday 1st & Tuesday 2nd September

## Attendance Percentages

<u>Between 02/09/24 - 17/06/25</u>

# **DSL** Messages

### Android Smartphone Guide for Parents/Carers

Android smartphones can be incredibly popular with children and young people.

As with other devices there are a variety of parental controls, including controls that allow parents to set the maturity level of apps and games. Full information including detailed instructions can be found <u>HERE</u>.

#### Optimus Wellbeing Survey

As you will know, we have been working towards the Wellbeing Award for Schools, developed by the National Children's Bureau and Optimus Education, which recognises the work being done at WHSG to promote mental health and wellbeing within our school community. We had the verification visit on 10th June and I'm pleased to say we have achieved the award.

#### Parent Workshop: Transition from Primary to Secondary School

Date and time: Wed 2nd July 2025, 18.30-20.00

Facilitator: Hayley Cameron (Education Safeguarding Manager - Cognus), Steve Welding (Education E-safety Adviser -Cognus) and Aniké Clarke (Education Welfare Officer - Cognus) Location: This is a virtual event – Teams

Hayley Cameron and Steve Welding from Cognus will be providing parents with helpful hints and tips on how to support their child as they transition from Primary to Secondary school. The Education Welfare Officer will also be on hand to provide guidance on attendance and the legal framework around school absence.

Please see the meeting details below:

Microsoft Teams Meeting Meeting ID: 320 567 861 621 Passcode: SG7msa

In particular, I would like to highlight the following comments from the report:

- "The Headteacher is ambitious in her vision for the school and there is a developing culture of listening and acting upon suggestions."
- "Students were able to describe not only what support they had access to but why and how this is important and how it contributes to general wellbeing."
- "Wallington prides itself on creating a balance between academic attainment and managing wellbeing."

Thank you for your support with completing the surveys, your feedback has been invaluable.



-Mrs M Sundborg Assistant Headteacher DSL & Mental Health Lead

# KS3 Music Recital











#### KS3 Music Recital

On Monday 17th June, our KS3 pupils took to the stage for a delightful music recital that highlighted their hard work and growing confidence. From solo performances to small ensemble pieces, the students impressed the audience with their musical skills and enthusiasm.

A big thank you to all the staff who supported the event and to our families for their wonderful encouragement. It was a joyful celebration of creativity and progress!

# Maths

Last month, Manha in 7 Curie proudly represented WHSG at a Maths Battle hosted by King's College London, in collaboration with Parallel Academy.

Out of over 500 students, Manha was selected to join the junior team—a testament to her outstanding participation and performance in the Parallel Academy programme. Competing alongside other talented young mathematicians, the team tackled a range of challenging problems, successfully solving the majority and even presenting rigorous mathematical proofs on several occasions.

We are incredibly proud of Manha's achievement and her valuable contribution to the team's success. Congratulations to Manha for her dedication, enthusiasm, and for representing WHSG with such distinction.

#### Manha has also written about her experience of the day-read on to hear her reflections!

One fine day in April, I received this wonderful news that I was selected to participate in a Maths Battle which is a team-based Maths competition. Over the Easter break, I attended training camps along with other members of my team to prepare for the big day. Finally, the day arrived - a full day of tackling some of the toughest mathematical challenges alongside some of the brightest young minds from across the country. On a cloudy Saturday Morning, I stepped into the grand halls of Bush House at King's College London, feeling energised and excited.

My team, made up of fellow young problem-solvers, spent the day brainstorming, debating, and working through tricky problems that pushed our thinking to the limit. The atmosphere was electric, everyone their loved maths and wasn't afraid of a challenge. It was amazing to see how each person brought a different idea to the table and how working together made solving problems not only easier but also a lot more fun.

In the middle of the day, the teams took a break for a special lecture by Dr Tom Crawford, better known as Tom Rocks Maths. A lecturer at both Oxford and Cambridge, Dr Crawford brought maths to life in the most unexpected ways. He showed how mathematical models help explain real-world things. It was fascinating to realise that maths isn't just about numbers and equations, it's a powerful tool for understanding the world around us.

At the end of the day, certificates and souvenirs were awarded to the teams. The highlight of the day for me wasn't just solving the difficult problems or the thrill of the competition, it was being surrounded by other enthusiastic young mathematicians. The spirit of teamwork and the shared love of learning made the event unforgettable. I left the venue feeling inspired, proud, and more excited about maths than ever.

-Manha, 7 Curie 2025



# Mathematical Kangaroo & Olympiad Results

An impressive 80 students achieved highly enough in the UKMT Junior Mathematical Challenge to qualify to take part in the Junior Mathematical Kangaroo.

The Mathematical Kangaroo is an international competition to promote mathematics among young people around the world – around six million young people take Kangaroo competitions each year. The name "Kangaroo" acknowledges the contribution made by Australia in establishing large-scale mathematics contests.

This year the following students qualified for the Junior Kangaroo follow-on round...

#### <u>Year 8</u>

Corrina, Aksharaa, Isabella, Aanya, Prisha, Dithusha, Ananya, Avni, Livia, Michelle, Jotheega, Anaisa, Srisakthi, Aashi, Alice, Ritika, Emma, Si Xuan Celine, Harine, Shermin, Mahi, Oviya, Aswathy, Rhea, Ji Tung Victoria, Anna, Eshika, Sharlene, Yogitha, Anushka, Thuvaraka, Meera, Fatima, Michelle, Josephine, Jessica, Mia, Meryem, Emily, Anjani, Monica, Isabella, Sarah, Sreemaa, Vanisha, Jessica, Ashvita and Freya.

#### <u>Year 7</u>

Tanishqa, Yuehan, Manha, Sahana, Keira, Khadija, Anaya, Saanvi, Chen Hui, Zlata, Elizabeth, Iyarkai, Sienna, Saanvi, Annabelle, Mia, Vihaana, Cecily, Madeleine, Hrishika, Krithi, Sameeksha, Mia, Theertha, Celina, Sanjana, Arisha, Swara, Lily, Kavinila, Prahavi, Sohana and Izabela.

We are very proud of everyone who qualified to take part and extremely pleased to announce some excellent results.

#### <u>Year 8</u>

Gold Certificates Aksharaa, Isabella, Aanya, Anna, Harine, Mahi and Meryem. Silver Certificates Sharlene, Corrina, Alice, Aswathy, Ji Tung Victoria, Ritika, Isabella, Thuvaraka, Jessica, Yogitha, Si Xuan and Celine. Bronze Certificates Livia, Dithusha, Emma, Freya, Prisha, Eshika, Vanisha, Anaisa, Michelle, Shermin, Sreemaa, Oviya, Rhea, Michelle, Aashi, Jotheega and Srisakthi.

#### Year 7

Gold Certificates Tanishqa Silver Certificates Chen Hui, Manha, Keira, Mia, Sahana and Zlata. Bronze Certificates Lily, Sienna, Swara, Sameeksha, Saanvi, Saanvi, Vihaana, Yuehan, Theertha, Elizabeth, Hrishika, Sohana, Mia and Iyarkai.

Well done to Aksharaa (Y8) and Tanishqa (Y7) for achieving the highest scores in their year groups. Congratulations to everyone who took part – it is a real achievement to qualify to sit one of these exams. We hope you enjoyed the experience.

> -Miss Tucker Maths Teacher



## Messages

#### Students' Medication at School

If your child requires medication such as Adrenaline Auto Injectors (referred to as Epipen), Antihistamines, or Inhalers, we kindly ask that you ensure the following:

- Students must carry their own first-response medication at all times.
- A spare set of the same medication must also be provided to the school to be stored in the First Aid Room.
- All medication must be supplied in its original container with the accompanying information leaflet.
- A completed and signed Parental Permission to Store and Administer Medication form must accompany any medication. This form is available:
  - On the WHSG website under School Life > Pastoral Care, or
  - Directly via this link <u>https://www.wallingtongirls.sutton.sch.uk/page/?</u>

title=Student+First+Aid+%26amp%3B+Medication+Information&pid=105

Please ensure that **replacement medication is provided when expiry dates are reached**. Regular checks of your child's medication are essential, as it is the **parent's/carer's responsibility** to ensure the medication is correct and in date.

With upcoming enrichment activities and school trips, it is **especially important that students have** access to their required medication while off-site. Please note: students without the necessary medication will not be able to participate in school visits.

Thank you for your continued support and cooperation.



-Mrs D Newell First Aid and Reprographics

#### Essay Writing Competition Results

We are delighted to announce the winners of our recent writing competition, judged with the support of Mrs Collins. The entries this year were truly outstanding, and we'd like to commend all participants for their creativity and effort.

A special congratulations to our top three winners:

- Eshika Manu (8 Curie) First Place
- Sahana Srinivasan (8 Bronte) Second Place
- Alana Jinson (9 Athena) Third Place

Their exceptional essays impressed the judges with their originality, depth, and clarity of expression. With their permission, we are pleased to share their winning pieces, which we've put at the end of this newsletter. We hope you enjoy reading them as much as we did and well done to all involved!

## **General Notices**

## Attendance

Requests for absence, including illness or appointments should be sent to: <u>attendance@wallingtongirls.org.uk</u>

Please provide at least 2 full school days notice of a planned absence for the school to complete the required processes before the event.

Absences for longer that one day need to be confirmed at least 2 weeks prior to the event. Families should note that requests for holidays during term time will not be approved and penalty fines can be issued.

To notify WHSG of a leave of absence, please complete this form and return to the email above

## **Contact Information and emails**

If you need to update your home address or contact telephone number, emergency contacts or any other information, please send the updates to:

KS3 and 4 – <u>mandrews@wallingtongirls.org.uk</u> KS5 – <u>jday@wallingtongirls.org.uk</u>

When replying to any SchoolComms emails, please use the individual contact email provided and for general enquiries use <u>info@wallingtongirls.org.uk</u>



## Parking

Parking Please note that parents are unable to park or drive into the school grounds between the hours of 7.30am-4.30pm for safeguarding reasons. Families can contact our reception to ask for permission, where the needs arises for a pupil with mobility issues.

#### reception@wallingtongirls.org.uk

Please also ensure that when dropping your child at school each day, you are respectful of our local residents by not blocking drives and roads or impacting others safety by parking or dropping off your child(ren) irresponsibly

## Punctuality

Punctuality Good punctuality to both lessons and to school is expected of all students. We know that employers place great importance on punctuality and attendance, therefore it is important for our students to understand the value of being on time.

If a student is late 3 times within a half-term (roughly 6 weeks) they will receive a 60 mins detention on a Wednesday or a Friday. If the student is late again within the half-term they will receive an automatic 60 mins detention, a late report and there will be a meeting with parents. This will re-set at the start of each half-term

We ask that parents support these actions as important processes for the school and understand that detentions cannot be moved for any after school clubs or enrichment events. Should a detention clash with a medical appointment, evidence will be requested for the school to show flexibility.

# **Frugal Futures**

One step closer to affordable healthcare

# By Eshika 8 Curie

What is the greatest invention that has impacted the medical field? There are many close candidates: from the elusive MRI scanners to medical prosthetics and even artificial hearts for transplants! But the biggest question to tackle is: What makes something 'great'? The word 'great' can describe many qualities in medicine: how it is used today, and how many lives it has impacted. Because of these breakthroughs, severe gaps in our understanding have been stitched up to pioneer the work of global health. However, even though our modern world has significantly improved over the last century, there is one huge problem that is barely untangled: accessibility and affordability.

Let's put this into perspective: In Europe and North America, which have more developed countries, the accessibility and cost of healthcare are  $\approx$  90 - 100%. However, if we look at the bigger picture, the number of developed countries vastly outnumber developing countries and LDCs. In enormous continents such as Africa and Asia, the poverty and accessibility levels are much lower (from  $\approx$  42% in sub-Saharan Africa alone and 67 - 85% in Asia ). Put in other words, over half the global population receives poor healthcare due to many disadvantages such as poverty and convenience. Additionally, even if there were sufficient amounts of hospitals or healthcare centres in general, people who live in mountainous or arid physiography cannot access major cities to make meaningful change.

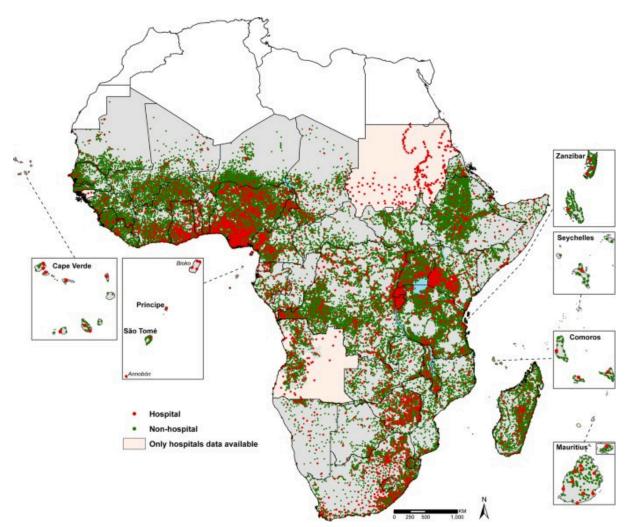
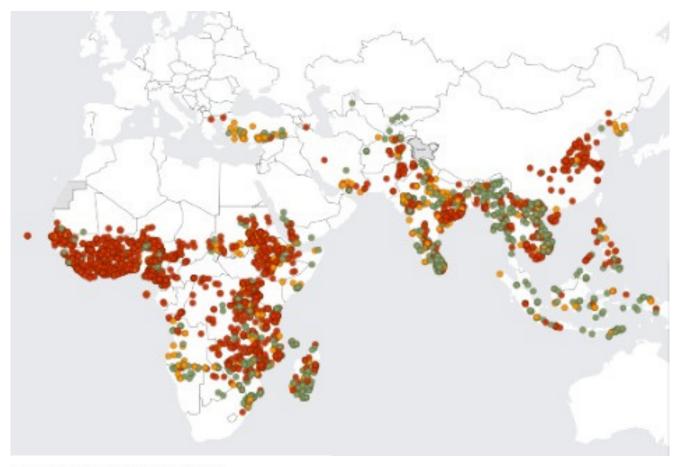


Image from Nature Journal - showing the number of hospitals in different areas of Africa.

The other major factor is cost. Most of the machinery that we call 'revolutionary' and 'life-saving' cost thousands if not millions of dollars that areas in poverty cannot access. For example, MRI scanners cost anywhere from \$500,000 - \$2,000,000 and centrifuges, though costing much lower, are too impractical to carry or use in areas with no electricity supply. These vital pieces of medicinal technology are used to diagnose many infections, diseases and conditions such as malaria (or blood disorders in general ) and cardiovascular diseases! Moreover, the areas which are more prone to these pathogenic infections are the areas of poverty and poor accessibility, namely in sub-Saharan Africa and the WHO African region - accounting for 94% of global cases - as well as southern and southeastern Asia from countries like India, Pakistan and Thailand.

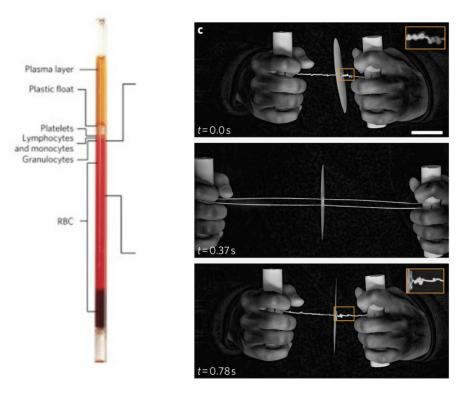


#### Insecticide resistance status Determined by the most recent data in a site

- Confirmed (0 to <90%)</p>
- Possible (90 to <98%)</p>
- Susceptible (≥98%)

Malaria Threat Map World Health Organisation

With all of this data and facts, we can see that there are various problems that still need to be solved, for people everywhere. Fortunately, there is an area of science focussing on creating tools that are affordable, accessible and easy to produce : Frugal science. Many people have realised this problem and are now creating products that use minimal resources to revolutionise the medicine playing field by making items like water-purification devices such as LifeStraw and even refrigerators made out of clay! However, there is one area of frugal technology that tops them all : the Foldscope and Paperfuge by Manu Prakash and team at Stanford University.



# PAPERFUGE & FOLDSCOPE:

How the Paperfuge works and results of blood separation - Prakash Lab

The paperfuge was created by Manu Prakash - associate professor at Stanford University - in the hopes of creating something that could help millions of lives for less than \$1 :

# What is the best human-powered

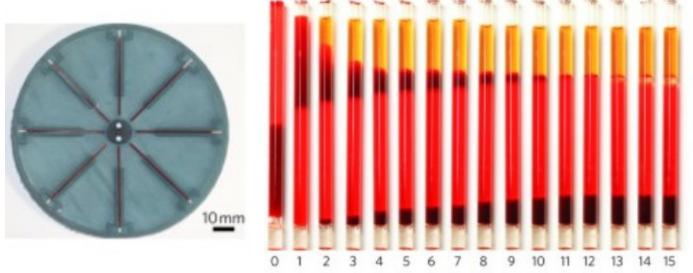
# centrifuge we can design with under \$1 in parts?

- Prakash Lab on the Paperfuge (created 2017)

Centrifuges are vital to diagnosing many diseases that are related to the blood such as anemia and malaria by spinning the sample blood to high speeds to separate the different constituent substances such as the red blood cells ( RBC's ), plasma and pathogens. While the dense particles migrate outwards, the lighter particles are more close to the centre due to the centrifugal force. Unfortunately, electricity and space are needed to use it - adding to its non- efficiency in resource-limited surroundings.

Initially, Prakash and team first looked at different spinning toys that could yield high results such as yo-yo's and whirligigs (which are thousands of years old). By using affordable materials such as paper, toilet rolls and simple string, we can manually create similar spinning rates of 250,000 RPM and a raw price tag of just 20 cents ( or 16 pence )! They then used what they created in various parts of the world like Tanzania and Kenya to educate people about these dangers!

I would argue that this simple yet powerful tool that affects over 50 million people annually from the 'Big Three' highly infectious illnesses is a 'greater' achievement compared to inventions such as MRIs , which focus on a niche audience rather than the bigger picture.

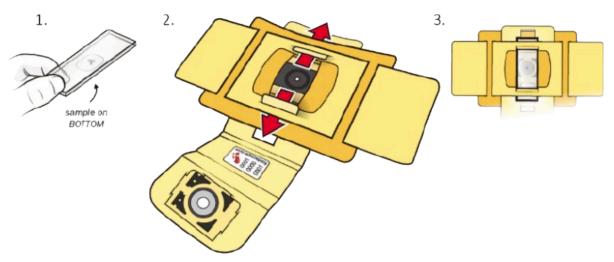


Time (min)

How the Paperfuge works and the recorded time taken to separate - Source by Nature Magazine.

Another piece of frugal technology which is paired with the paperfuge is the foldscope, created 2 years before in 2015. Prakash saw how microscopes were not accessible to explore the microscopic world in areas of low income. To achieve this, they needed to create a microscope which was cost-effective and easy to produce.

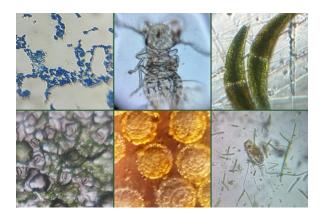
The Foldscope is made up of 3 fundamental parts : Paper synthetic components, magnetic components and the lens ( a piece of borosilicate glass in black plastic ). With just this, you can see a magnification of up to 140x and a resolution of about 2 microns for \$1!



How to use the Foldscope - Source : Foldscope.com

Before early forms of microscopes were invented, we did not know how our bodies worked, and how infectious diseases came to be. By studying cells and pathogenic behaviour, we were able to diagnose many diseases such as fungal infections and parasitic infections such as Giardiasis and Helminth.

With the invention of the Foldscope, many healthcare workers in rural areas can examine samples and detect various diseases such as tuberculosis, bacterial infections and blood disorders!



Source: B-School News : Images taken by the Foldscope

All of the above and the whole principle of frugal tech is to utilise different concepts in science such as the centrifugal force to create simple 'toys' that can save lives or by harnessing our muscle strength to rotate winding and unwinding paper discs to separate blood in 1.5 minutes or detect malaria parasites in 15! By using the simple laws of physics, we can create a microscope which magnifies objects to 140x and simple chemical reactions to purify unhygienic waters worldwide in a few minutes!

We as humans are born to tinker and create new things - sometimes, science isn't just about creating complex systems to achieve complicated things, but simple systems to pioneer the biggest breakthroughs in curiosity, courage and compassion! Consider this:

# " f a 20 cent 'toy' could revolutionize lives, what frugal future will you devise?

#### Medical Essay Entry:

"The art of medicine is to amuse the patient while nature cures the disease." This quote, often attributed to Voltaire, suggests that medical treatment is mostly psychological and that doctors simply distract patients with tests, medicine and hospital visits while the body heals on its own. At first glance, this could seem quite dismissive of the medical journey we have travelled together with vaccines, antibiotics and more. But behind this, there seems to be a deeper point: that belief, trust, and emotional care are just as important as pills or procedures. Still, to reduce medicine to a mere distraction would mean to ignore everything modern science has achieved so far, therefore, this essay will explore both sides of the argument and ultimately conclude that medicine is both a science and a personal experience— and its true power lies in combining the two.

An argument in favor of this view is the placebo effect — where a patient's symptoms improve after taking treatments with no actively helpful ingredients, simply just because they believe they're being helped or treated. In a 2014 Harvard study on migraine patients, some people were given placebo pills and told exactly what they were — fake and ineffective pills - yet they still experienced relief. In fact, the placebo was about 50% as effective as **real** migraine medication. These aren't just imagined improvements either — brain scans showed actual chemical changes, like dopamine and endorphin release mirroring similar effects to proper medication, showing just how powerful expectation and trust can be in the healing process. Sometimes, it really is belief and abstract ideas themselves that begin to mend the body.

The connection between doctor and patient also plays a big role in recovery. When people feel listened to, respected, and cared for, they tend to respond better to treatment. Just like in therapy — where people feel heard and understood — can help anxiety, when patients feel genuinely listened to and empathized with, they're more likely to trust medical advice, follow treatment, and even recover more quickly. Patients often aren't just

looking for a cure— they want to feel like someone understands what they're going through and can empathize with them. In this way, the "art" of medicine isn't about distraction, but about building a relationship where the patient feels supported and seen.

That said, it would be wrong to suggest that nature alone can cure serious illnesses. Many diseases — from smallpox to tuberculosis — once killed millions until science stepped in. During the Black Death in the 14th century, many believed the plague was God's punishment and turned to prayer or self-punishment. But without scientific help, such beliefs couldn't stop the disease — around a third of Europe's population died. It's a reminder that while emotional comfort does matters, science is what prevents history from repeating itself. Vaccines, antibiotics, organ transplants, and insulin treatments aren't just products of nature. They're the result of research, testing, and human innovation. In those cases, no amount of belief or reassurance could replace actual medical intervention. While emotional care helps, it can't do what modern medicine now can. To suggest otherwise would be to turn a blind eye to how far we've come — and how many lives those advancements continue to save.

Still, medicine isn't just about curing. Rather than entertaining patients, the role of doctors is to provide clarity and support, especially when a cure isn't possible. It's not about distracting the patient or keeping them cheerful — it's about helping them face reality with strength and support. As neurosurgeon Paul Kalanithi wrote in When Breath Becomes Air, patients don't necessarily want empty comfort — they want someone to walk with them through uncertainty, someone who won't shy away from difficult truths. This kind of presence can't be reduced to amusement; And that, too, is healing.

While looking at it like this, this quote still holds some truth. Medicine isn't just biology — it's a human experience. People might forget the details of a treatment, but they will definitely remember how they were treated. A kind word, a calm voice, a doctor who really listens — these things matter. Even

in the most high-tech hospitals, emotional connection can shape a patient's whole experience. That's why medicine will always be part science, part humanity.

In conclusion, while Voltaire's quote may oversimplify what doctors do, it also reminds us of something important: that healing isn't only physical. The placebo effect and strong doctor-patient relationships show that belief and emotional care are quite important and vital parts of recovery. At the same time, we must recognize the life-saving power of medical science. Who knows how many lives could have been ruined or lost without the sufficient medical science needed to cure them. Medicine is not just an illusion that distracts the patients while nature heals them —it's a combination of humanity and science, where comfort and cure must work side by side. The true art of medicine is not amusement – but actually understanding not just the illness or problem, but the person behind it.

-Sahana 8 Bronte

# Anaesthesia

3,2,1 Go! Before the invention of anaesthetics, surgery was painful, traumatic and had extremely high mortality rates. It was seen as the last resort, a last try when a patient was beyond hope and experiencing unimaginable pain. Surgery options were limited as surgeons had to work with incredible speed and precision to ensure success. In 1840, a famous surgeon named Robert Liston could amputate a leg within 25 seconds, which meant the patients had to endure reduced suffering and had lower risks of infection with only 1 in 6 of his patients dying. At this time, patients were forcibly held down (by people called 'dressers'), but mistakes were inevitable as once Liston cut through the dresser's fingers during an amputation in which both the dresser and the patient died (via infections) and an observer died from shock. This surgery had a 300% mortality rate!

Anaesthesia is when substances are used to reduce or block pain during surgery and other medical procedures. In modern hospitals, anaesthetics are one of the most common and important doctors. However, anaesthesia can be traced back to the 16th century, where mixes of drugs and various herbs were used as sedatives by surgeons such as Chinese doctor Hua Tuo, but the first recorded use of general anaesthetics were in 1804, by Japanese physician Seishu Hanaoka on a 60-year-old woman with breast cancer. It was partially successful as his patient survived and lived for a further 6 months. Regrettably for the world of medicine, his teachings did not go further than Japan till 50 years later.

In the early 19th century, one popular informal gathering held was called 'ether frolics' where people inhaled colourless liquid, Ether, to experience what is often called a high. Ether was so popular that it started to be sold in British pubs as a substitute to alcohol. Soon dentists and other medical professionals who heard of or attended these frolics noticed that the intoxicated seemed to experience no pain. One such dentist called William Morton tested the drug on himself and his friends at different doses before considering it suitable for use as an anaesthetic on his patients. In 1846, Morton demonstrated his findings during a public operation, it was judged a success and so his techniques were adopted by fellow doctors across Europe and America. Another anaesthetic used at the time was called chloroform and discovered by Dr. James Young Simpson, a firm advocate for anaesthetics to be used during childbirth. There were hesitations due to safety and religious concerns, but his methods earned the royal seal of approval when Dr. John Snow administered it to Queen Victoria during the birth of two of her children. Royal recognition meant the public were more accepting of the drug.

As with most discoveries, there were many obstacles along the way. One prevalent objection to using chloroform rose as most surgeons were not aware of the actual dosage required to be given to patients. Such a case was recorded in 1848, when 15-year-old Hannah Greener lost her life during surgery on her toenail because the dosage given to her was too strong. As similar distressing cases arose, public concern grew with the usage of chloroform being linked to liver damage and cardiac arrests. Later it would be found that most of these were the results of surgeons attempting to execute more invasive surgery. In fact, during the Crimean war, the use of chloroform was banned in battlefield surgery, with a military surgeon insisting he would rather hear the 'lusty screams' when under a knife as it demonstrated the soldier's will to live. Lastly, the majorly religious population of the 19th century argued that the pain at childbirth had been sent by God and had to be felt and experienced not evaded or tampered with.

After an eventful history, currently anaesthesia is used for a range of purposes in most medical fields. There are 4 types:

• Local anaesthesia

For minimally invasive procedures such as a skin biopsy, a local anaesthesia is used to numb only a small section of your body, so you will be awake.

• Sedation

Some would call this 'twilight sleep' as you are not likely to remember the procedure but can be woken if communication is required. Examples include wisdom teeth removal.

• Regional anaesthesia

This will block pain in a large section of your body such as a whole limb. A common example is an epidural during childbirth. In some cases, it can be used alongside a sedation.

• General anaesthesia

For the most invasive surgeries held at high-risk areas such as your head, chest, or abdomen a general anaesthesia is required, a treatment that makes you unconscious and insensitive to pain or other stimuli. Anaesthesia is one of the greatest innovations of medicine as it saves lives of millions and gives them a chance to return to ordinary life without lifelong psychological distress and trauma. This was also aided by inventions such as the germ theory, but the invention of anaesthesia made surgery less of a traumatic experience to doctors who otherwise had to work under high pressure and with the knowledge that their patients are undergoing tremendous amounts of pain hoping to reach the light at the end of the tunnel.

By,

Alana 9 Athena