MURMUR

Featured

Interview

Mary Meilak

Beyond the School

Student Exchanges

Medical School Event

Voluntary Work

Medical Myths,Advances and more

MMSA

Malta Medical Students' Association

L-Għaqda tal-Istudenti tal-Mediċina ta' Malta

www.mmsa.org.mt

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About MMSA

The Malta Medical Students' Association (L-Għaqda tal-Istudenti tal-Mediċina ta' Malta) represents all medical students at the University of Malta (UoM) since 1951. The Malta Medical Students' Association (MMSA) aims to enhance the medical student life through promoting active participation in the academic system, international exchanges and training in various fields of the public health sector. MMSA also aims at empowering society to become functionally involved in holistic health decision making.

Affiliated with

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International Federation of Medical Students' Associations

KSU

EMSA
European Medical Students' Association

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Editorial

Samuel Debono
MMSA Media Officer
4th Year Medical Student

I'm at the MMSA office and trying to think of what to write for this editorial, even though all that springs to mind right now are the upcoming exams I will be facing in less than four weeks - Yes, the amount of weeks has just been prompted to me by an enthusiastic colleague.

This year, the Department of Medicine took the initiative of starting an annual project entitled 'Beyond the School', together with the third year medical students. We medical students are renowned for the long hours we spend studying in the library so the faculty came up with this bright idea of having a competition on what we did medically related, but not part of our curriculum. I had an even brighter idea of incorporating this project's title as the magazine's theme to try explore what medical students do when they're not stuck to a book studying.

This edition happens to be quite a chunky one since this magazine was not published last year - but I hope it will remind all those who've passed through medical school of the fun times - and for those who haven't, let this act as an insight to the fact that we're not just a bunch of geeks ;)

We are students who dedicate such a large amount of time to studying because we want to become the best doctors we can be. However, like any other University student, we also like to have fun, experience new things and look forward to the day we graduate. Murmur's front cover was in fact chosen to instil in the readers an enthusiastic approach towards life.

This will be one of the last projects I will be performing as Media Officer, since my term ends soon. So I would like to conclude by thanking all of the Media team including the authors without whom this publication wouldn't have been possible and also the rest of the MMSA executive board, who were part of this successful year.

May this magazine serve as a good distraction for those who need one, and for those who don't; a light read!

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President's Message

Jacob Vella
MMSA President
3rd Year Medical Student

First of all I would like to express my satisfaction in being part of this Association – I believe that the same emotion is what triggered the editor and his team to suggest 'Beyond' as the theme for this edition of Murmur. Surely, we have lately gone beyond several challenges - we continued to build upon what previous dedicated members left for the benefit of others.

As from the beginning of our term, we aimed at the actualisation of this idea – a multipartite, 360-degree view approach for a holistic achievement for everyone. Cosmopolitan – that was the theme for this years' TRD - an annual 3-day seminar which is mainly meant to introduce the endeavours of the Association to new medical students. This holistic idea is meant to go beyond both individual and collective borders, beyond what one perceives and beyond what the medical students' body stands for.
And it worked...

Just to mention a few examples, we strived to involve as many new students as possible so that more can enhance their skills and talents: in fact all project coordinator posts were occupied by issuing a call to which anyone could apply for. Freshers' sessions were organised alongside the Faculty to better acquaint first years with the Association, in fact more preclinical students took initiative in running for executive board and standing committee posts and even holding premiere events such as International Women's Day. Five first year students represented the MMSA for the International Federation of Medical Students' Association (IFMSA) European Regional Meeting.
A long-awaited, functional and resourceful website was launched. It features a member's area with medical resources, research publishing opportunities, numerous grants and opportunities. These include the recently enacted Physical Activity Fund and Training Assisting Fund. A medical student can apply for TAF when attending both local and foreign initiatives which relate to one's own medical and surgical training, apart from affairs pertaining to the association. The subsidy percentile is calculated by the entire Executive Board via a published meritocratic system. Other transparency efforts include reports,meeting minutes and contracts being published online and available to every MMSA member. The website is further complemented by a frequent e-newsletter and a feedback area.

This year we liaised with MOTNA, the Theatre Nurses Association, which organised suture workshops to which over 81 medical students attended. Over 70 exchange agreements were signed with worldwide national medical organisations to allow students to go abroad for a month in summer so as to learn about different medical practices, lifestyles and culture. Recently, in conjunction with KSU, we donated 17 medical books to the library and we're awaiting the arrival of medical training mannequins purchased from the funds of the Association for all medical students.

We are now publishing referenced, up to date and properly designed material to complement any orga-

nised event. This greatly increased our creditability and efficacy in the national, European and global community. The collaboration of the MMSA Public Health and Human Rights committees led to the start of the new mental health campaign. This project also went beyond committee collaboration since it gave way to the idea of establishing a Maltese Mental Health Network. In this team we have representatives from the MMSA, KPS Health Committee, BetaPsi, Richmond Foundation, the MAPN,Mount Carmel hospital and Malta Association for the Counselling Profession.

Together with organisations from Italy, Romania and Latvia, we worked on a transnational global health project to sensitise Europeans towards health disparities present beyond the borders of the continent.

With other students' organisations the first-ever ever campus Human Rights Week was held between the 7th and the 11th of March. Further proof of our will to work with others was the Website and Corporate Identity launch get-together held during KSU Organisations' Days to which representatives from all campus organisations were invited.

This all-encompassing idea does not substitute individual identity and development: On the contrary,it transcends limits which its absence might offer. On an individual level, having a holistic view of your environment and future profession contributes to self-actualisation. We want the individual to think of oneself, 'my existence and raison d'etre goes beyond the 60 annual ECTS credits and the criteria of my future employment. I am an individual with deeper insight and life fulfilment – I am part of a global effort for the prosperity and contentment of all'.

This commitment and hard work does not substitute the dolce vita which youth offers. We still present our message and campaigns in an enthusiastic and youthful manner and we still dedicate a whole team for leisure activities. Everyone now knows about the great Ball that was organised this year. We also went a step further in organising the Medical Education meeting in a pub, a Public Health committee night out and a dance flash mob at the University Quad (which I personally tried joining in and miserably failed).

Even if it is never enough, I would like to again thank and congratulate the other members of the Executive Board for the excellent and exemplary action; Hon. Dr Cassar and all the medical school administration who treat us as mature colleagues, support our initiatives and act on our suggestions and ideas; as well as KSU and all students' organisations for trusting in our collaboration and sharing their initiatives with us.

All things mentioned above are just a few novel projects adding up the already impressive repertoire present: We just wanted to give more space for feedback, empowerment and student-centred incentives; and be a genuine stakeholder on campus and in global efforts. The only way to pursue these achievements is to give constructive and objective criticism and to take initiative yourself. Ultimately, we want these qualities to be ingrained in tomorrow's doctors and society decision-makers so as to go beyond current boundaries in patient care and prosperity.

Medical Myths

Elizabeth Gialanze'
1st Year Medical Student

Medical myths are part of our everyday life. Everyone must surely have heard of one or another, but very few realise that these are indeed myths and not facts that we should abide by. Some might enclose a pinch of truth within, but others are just plain falsehoods.

"I believe in everything until it's disproved. So I believe in fairies, the myths, dragons. It all exists, even if it's in your mind. Who's to say that dreams and nightmares aren't as real as the here and now? " John Lennon

And who's to say that these myths cannot be disproved? Here are some of the most popular medical myths – solved by professionals!

Sometimes myths can be deemed just as true as fairies and dragons, but the importance of a healthy lifestyle is not as fictitious! With the demanding schedule most have nowadays, it can be particularly hard to find a balance between work and leading a healthy lifestyle – which not only contributes towards prevention of disease, but also in keeping you in top physical and mental shape.

Check out for the medical myths as you leaf through the magazine, the first two are found here...

Cracking your knuckles will cause arthritis in later life

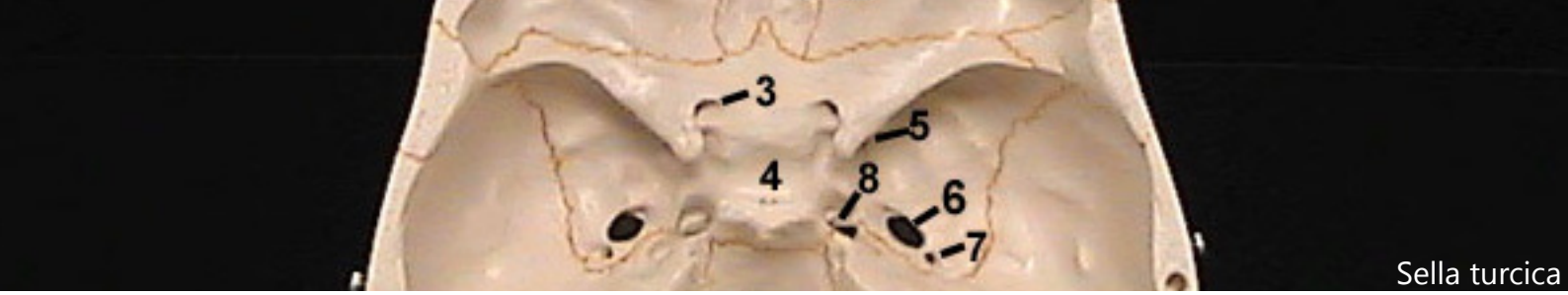
If you can crack your knuckles repeatedly - then you may be causing bone to bounce against bone and possibly worsening one's risk for arthritis - however if you can only crack them once - this is nitrogen and air popping out of solution as the joint space expands. In this case you are unlikely to be causing any increased risk.

Dr. Pierre Schembri-Wismayer

Coffee is harmful to our health

Compelling experimental and epidemiological evidence suggests that in healthy adults a moderate coffee intake (about 3-4 espresso cups, 40 mg of caffeine each) provides many health benefits. Coffee consumption can reduce the risk of fatal liver disease, certain cancers, diabetes type 2, heart rhythm problems and strokes. Coffee is also good for your brain: Indeed, it is well known that coffee boosts your brain function and alertness. It also reduces the risk of developing some neurological disorders, such as Alzheimer's, Parkinson's diseases and certain dementias. However, there is some contrasting evidence that coffee does harm too.

Prof. Giuseppe Di Giovanni

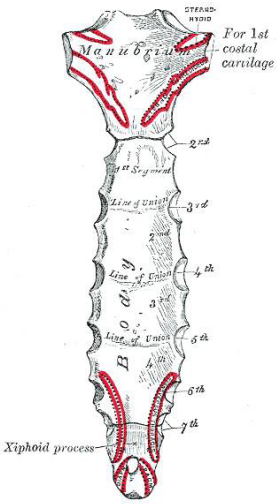


Sella turcica

Anatomical Weaponry

Christian Camilleri
4th Year Medical Student

Since childhood, I have always been fascinated by the origin of words. I'm also keen on military history, so I was delighted to learn that many words in anatomy have their roots in ancient weaponry. If you think that anatomy is a dead and boring subject, then here is a list of some curious associations with military history that will change your opinion of anatomy forever!



The xiphos is a double-edged, single-hand sword used by the ancient Greeks. It was a secondary battlefield weapon for the Greek armies after the spear or javelin. The blade was around 65 cm long. The xiphos was good for both cutting and stabbing attacks due to its leaf-shaped blade. It was generally used only when the spear was discarded. The body of the sternum is traditionally also known as the gladiolus, coming from the roman "gladius". The word "Gladius" referred to a variety of two-edged swords designed both for slashing and stabbing, owing to the combination of a double-edged blade and a tapered point. The manubrium sterni is obviously the hilt of this weapon of bone and cartilage, as the word manubrium is latin for "handle".

A galea was a Roman soldier's helmet. Depending on the context (e.g. war, gladiatorial, ceremonial, or rank) it may be fitted with a mask of a crest of plumes or horse hair. The galea aponeurotica refers to the tough helmet of dense fibrous tissue which covers the upper part of the skull.

Falx is a Latin word used for curved blades such as the sickle and the scythe. Thracians and Dacians used sickle-like weapons and Romans used a "siege falx" to pull down stones from enemy walls. The falx cerebri is an arched fold of dura mater separating the cerebral hemispheres

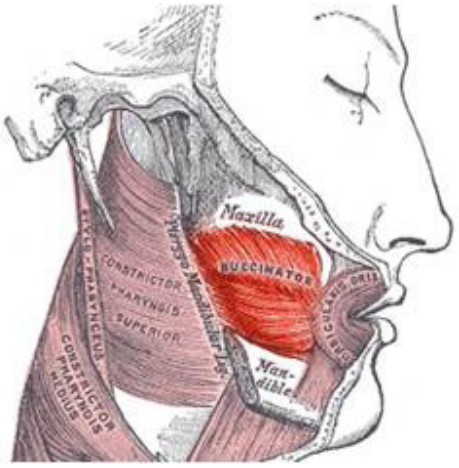
Falx - The sword

The cingulum militare was a heavily decorated Roman military belt designed to hold the sword (gladius) and dagger (pugio). The cingulum may also refer to the belt of white matter in the brain, or the anatomical feature of incisors and canines.

The pilum was a heavy two metre long javelin commonly used by the Roman army. Standard tactics called for Roman soldiers to throw one at the enemy, just before charging to engage with

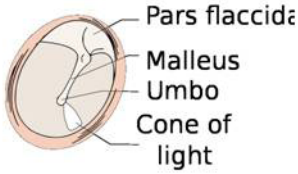
the gladius. Pilum also features in medical terminology that involves hair, for example the pilonidal (nest of hair) cyst or the pilocytic astrocytoma with its characteristic bipolar cells with long pilocytic processes. The pilum was later replaced by the spiculum at around AD 250. The word spiculum, from which the word spike comes from, features quite a bit in medical terminolgy. Bone spicules are aggregates of bony matrix found in intramembranous ossification. "bone-spicule"-like pigmentation of the retina is pathognomonic of retinitis pigmentosa. In radiology of the breast, spiculated masses are suggestive of cancer.

The buccina was a brass sound producing instrument used in the ancient Roman army similar to the Cornu. An aeneator who blew a buccina was called a "buccinator". The buccinator is a thin quadrilateral muscle, occupying the interval



between the maxilla and the mandible at the side of the face. Besides more important functions, it also permits blowing and whistling.

The umbo is the most depressed part of the tympanic membrane. Umbo literally means a shield boss - the round, convex or conical piece of material at the centre of a shield. So if you could imagine the ear drum to be a shield, the umbo would be the shield boss. The umbo is really just a concavity formed by the tug of the manubrium (handle) of the malleus (hammer) which in turn is articulated with the incus (anvil). The 3rd bone of the middle ear - the stapes - is named after the latin word for stirrup. The stirrup holds the foot of a horse rider, giving him better control and stability while riding. Because of this, it has been described as one of the most significant inventions in the history of warfare.



The phalanges are the small long bones that make up the fingers and toes. The phalanx also refers to the famous Hellenic rectangular military formation, usually composed entirely of heavy infantry armed with spears. Warfare in ancient Greece relied heavily on phalanges of hoplites lined up in ranks in close order. With a bit of imagination, one may guess that five adjacent phalanges would look like a menacing hand advancing slowly to crush the enemy forces.

The sella turcica (Turkish saddle) is a saddle of bone and the pituitary gland is the Turkish rider. It is so called because it has supports in front and at the back similar to saddles used by the Eastern cavalrymen.

I hope that this small collection of associations will help Anatomy students find their inner warrior so that they may breech the walls of boredom and disinterest and strike the heart of Anatomy with the full force of a Spartan phalanx!

Getting a flu shot will result in contraction of the flu

The answer is no - The commonest current flu vaccine (flu shot) is made up from attenuated (killed) virus from three strains. The person who gets immunised gets mild flu like symptoms from the immunological reaction to the vaccine but this cannot be called flu. The symptoms may include redness and mild swelling at the site of injection, fever and muscle aches.

Mr. Joseph Galea

France - Neurosurgery

Jacob Vella
3rd Year Medical Student

Unknown country. Unkown health system. Barely knowing the language. First medical and surgical placement. Alone. First medical exchange. This is what motivated me towards my choice!

Yes, I know, some of you might be already wonder whether I am nuts and that is why I need to explain. The exchange programme is all about making you a better and more complete person – this is what ultimately motivates your peer medical students to organise all this for you! The less you know, the more you will get back in return.

The exchange programme is not only about medical skills. It will open opportunities towards new cultures, friends and survival skills. Never think that 400,000 people on a 316 sq. km of land can ever provide you with all skills and experience that you can achieve. Never exclude the possibility that you might be working abroad in few years' time.

Now, back to France. Tours is the largest city in the Centre region of France. It is on the river Loire on which one can visit numerous châteaux and enjoy endless cultural, wine and gastronomical festivals. It takes a little bit more than an hour to reach Paris from Tours – in fact I visited the flabbergasting capital two times during my stay. France does not only excel in culture but it also offers one of the best health care system in the world. The neurosurgical team of Hôpital Brettonneau is one of the best in the country and were very approachable and kind to me. I attended daily theatre interventions and multidisciplinary meetings and learnt about techniques and protocols which are not used in Malta.

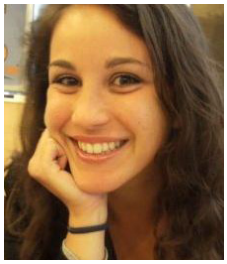
French medical students were also very helpful – I lived in an apartment close to hospital and they were so hospitable that on some evenings I had to refuse their invitation so as to catch up on sleep! I also had the time to improve my French and I am currently attending French lessons during the Degree Plus hours. In the afternoon we used to go and visit nearby châteaux and then either go for dinner at someone's place or/and attend one of the daily events organised on the riverbank.

My experience ended by going to the IFMSA General Assembly in Montreal, Canada were as MMSA delegation we signed 74 exchange contracts so that more and more medical students can benefit from these unforgettable experiences. I would like to especially thank Aaron who as Exchange Officer did an awesome job. I would also like to thank Anne-Sophie, the Tours Local Exchange Officer, who was always made herself available to ensure that I and other exchange students get the best ever experience in Tours.

Do feel free to approach me if you have any questions regarding my startling experience! I encourage you all to make us of this and the other endless opportunity which the MMSA offers!

Slovenia

Ann Victoria Farrugia
3rd Year Medical Student



I feel sLOVEnia

When you are still a fresher, everything associated with the new course seems to excite you. This was especially true for me when I learnt all about the summer exchanges offered by MMSA. I remember reading and hearing about exchanges in the Freshers' Booklet and TRD sessions, and wondering to myself whether I will ever have the opportunity to do something so memorable. Two and a half years later and here I am planning to go on my second exchange!

Choosing the country was the easiest thing to do when I applied for my first exchange. A good friend of mine had been on an exchange to Slovenia the previous year and I had heard so many good things about the country and the whole exchange experience from him that choosing Slovenia came naturally to me. To be quite honest, I never really thought of Slovenia as a country I would be visiting one day. It is one of those little countries that, for lack of a better cliché, are described as 'hidden gems' and always exceed expectations; I was about to find this out for myself during the glorious month I spent there!

A few months and a few hundreds of very well-spent euros later I was making my way to Slovenia, armed with a considerably large suitcase and plenty of enthusiasm! Having been to an IFMSA General Assembly in Canada just before the exchange, I was afraid that I would arrive in Slovenia feeling totally drained and lacking the energy required for a month in a totally new country. For some reason this all seemed to melt away as soon as I got there. The country is incredibly enchanting; being the third most forested country in Europe made it even more alluring. I remember waking up from a daze at sunrise on the train from Graz (where I had landed) to Ljubljana and looking out of the window in awe at the beauty that surrounded me. I could almost see the embodiment of Magic play in the first rays of sunlight that dawned on my month in Slovenia.

I was stationed in the country's capital, Ljubljana for the duration of my exchange – it is a little city nestled in forest and built around the Ljubljanica river which snakes gracefully through the city, and crossed by pretty bridges and lined with colourful flowers and trees. By day the city bustles with life as lucky tourists who discovered the city explore its charm while locals make their way to work on bikes. The riverbanks are occupied by street vendors selling an eccentric and artsy array of knick-knacks and delicious ice-cream. By night the city quietens down and life is confined to a few excellent bars which are hidden away in side streets, and the streets are populated by couples strolling past the delightfully-lit river. It is not difficult to see how easy it is to fall in love with Ljubljana. With students comprising around 20% of the city's population, Ljubljana is buzzing with good vibes and a raw atmosphere. I was lucky enough to be present at the start of freshers' week, when the city literally came to life.

I was attached to the Department of Neurosurgery for my exchange and I spent all my weekday mornings at the city's main hospital, the University Medical Centre, which has an excellent reputation for this speciality. I met

my mentor Dr Vranič everyday around 8.30am before outpatients or theatre. The day used to last till around 2pm (or whenever either I or my mentor got hungry). Despite having absolutely no command of the Slovenian language, sitting in at the outpatients clinic was informative and proved to be a good revision of neurological examinations. My mentor used to translate most of the consults to me as well too and that proved to be quite useful. Having never been to theatre before, I was ecstatic about observing procedures on the brain and spinal cord. Most of the times I was observing monitors, since the surgeons used a microscope hovered on the operating field for better vision. The young, budding neurosurgeons were very helpful and they used to answer all of my questions and explain to me the procedures. I'll never forget the first time I was given the awesome opportunity to assist in an operation on my last day of the clerkship! I remember my heart skipping a beat or two when the chief announced to me that I will be assisting him; I was very excited and also very scared that I might mess up. Thankfully that did not happen and as soon as the first incision was made I calmed down and relished in the experience. I would recommend anyone going on an exchange to make the most of it: ask a lot and show that you're there to learn. If they see that you are willing enough they will be very helpful in return.

Together with my fellow Maltese exchange-partner, I was in a group of around thirty medical students from all over Europe. Bonding with the group was effortless and everyone was great company and fun to be with. We spent our afternoons having lunch together, trying out the local cuisine, shopping and exploring Ljubljana. Evenings were for take-away pizza, dorm parties, street festivals and cocktails at our favourite bars. We had four contact persons, all of whom were very dedicated and organised. They held weekly meetings for us to get together and discuss the social programme. This included highlights of the country such as Lake Bled, a mystifying place in the Julian Alps; Piran and Portoroz, two seaside towns in the Adriatic coast; and Ptuj, the oldest city in Slovenia. They also organised trips for us to the country's second largest city Maribor, Lipica, famous for its white stallions; and an afternoon at a waterpark. Undoubtedly, one of the best adventures I had in Slovenia was rafting in the freezing Soča river, battling with the wild waters was an adrenaline rush and very exhilarating.

We lived in students' dormitories set in a very quiet location. The buildings were clean and modern, had communal bathrooms and kitchens and laundry facilities to make use of. Living in Slovenia is relatively cheap and with special student discounts the average price for a three-course meal is around €3.50. Transport is problem-free within the city and the bus system covers a lot of the destinations both within the city and its surrounding areas. The people are generally friendly (apart from the occasional stern waitress) and many of the younger people speak English.

Slovenia has borders with four countries and thus it makes for an excellent base to travel around this part of Europe. Weekend trips to Venice, Trieste and Vienna were easily planned between us and within a couple of days we managed to book hostels, buy train tickets and plan out two full weekends.

This exchange was certainly life-changing and unforgettable. Not only did I get a taste of living by myself, but I also had the opportunity to discover a unique speciality in an amazing country which has a lot to give and which is so far still unspoilt. I encourage anyone who's thinking of going on an exchange to make use of this great opportunity given by MMSA and just go for it! Face your exchange with an open mind, eagerness to learn and an element of 'joie de vivre', and I can assure you that it will be one of the best decisions you have ever made.

EVENT REPORT

Beyond Med School

Lara Vassallo
4th Year Medical Student

Fourth year medical student Jessica Casey became the first ever winner of the Beyond the School contest for fourth year students last March with her presentation about research developments in Crohn's disease.

The contest was organised for the first time this year by the Department of Medicine to give medical students an opportunity to share and document their medicine-related extracurricular projects.

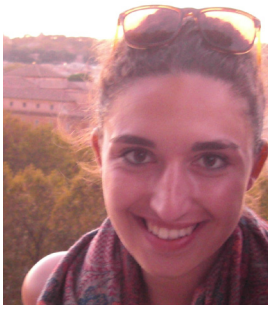
12 students submitted projects for the competition, and six were asked to present their projects in front of lecturers and fellow students at the Radisson Blu Hotel. The six final presentations were judged by Professors Josanne Vassallo, Simon Camilleri, Angela Xuereb, Godfrey Laferla, Simon Attard Montalto, Gloria Lauri Lucente and Charles Savona Ventura,

Ms Casey, Chris Rolé and Joseph Attard placed first, second and third respectively. The other three contestants were Samuel Debono, Doriella Galea, and Daphne Gatt and Stephen Micallef Eynaud who placed together. Certificates of participation and cash prizes of €350, €250 and €150 were awarded to the top three contestants, with the remaining participants each receiving a certificate and a €50 conciliatory prize.

Joseph Cacciottolo, head of the Department of Medicine, explained that the contest was created to allow the Medical School to go 'beyond what we usually do, both in terms of entertainment and in terms of education'. He was 'very satisfied' with the outcome, and he hopes future contests will attract more participants as well as more Medical School staff.

Prof Cacciottolo believes the certificate will be of great help to the six finalists when they come to apply for hospital positions after they graduate. 'Money comes and money goes, but what will remain is a little certificate,' he said. 'Hopefully we can repeat the contest next year if I'm here and if we have the money'.

Ms Casey told Murmur that the contest taught her invaluable lessons about public speaking in front of a medically competent audience and about composing and presenting medical and scientific research. 'It was amazing that I won', she said. 'It was really exciting to be involved in cutting edge research about Crohn's disease and I thought the competition was a fantastic opportunity to share this information. It was hard work but a really worthwhile experience.'



Status Upate: Am I likeable enough?

Christine Spiteri
Final Year B.Pyschology (Hons) Student
Insite Media Officer

It's 6:59am on Monday morning. Jenna popped out of bed just like a piece of crispy sliced bread would pop out of a toaster. Her sight still adjusting to the morning light, she switched on her computer and logged on to Facebook to tell the world she was awake. Then, she checked whose birthday it was and what events she had been invited to, confirmed her friends are going and clicked 'attending'.

In a swift lifestyle such as ours, Facebook has become our relationship lifesaver. It is a utility that facilitates our social world by making friends, colleagues and acquaintances accessible from any place at any time. Facebook is one of the most popular social networking website which was launched in the beginning of 2004. In 2011, Facebook has become what is being quoted as the third biggest 'country' in terms of population, hosting over 500 million users worldwide.

Jenna has grown increasingly fond of Facebook as it has allowed her to create an online identity, meaning that her social life is now extended to the digital realm. She makes sure that her profile is always up to scratch, by updating her status depending on her mood and often posts song lyrics which reflect what she is going through. She changes her profile picture once a month according to where she has been, such as her most recent one, which was taken at MMSA's Ballo Bianco.

The Facebook profile (better known as the 'Wall') contains copious amounts of personal information that reveal a lot about a person and can therefore be considered as a modern day mechanism for expressing one's identity. Our identity on Facebook is constructed according to what we write about ourselves, what our friends post on our Wall and the photos we appear in. Then, there are also users who add a list of hobbies, their favourite bands or films.

In this manner, Facebook gives us full control over the identity we choose to create online. We tend to be selective over how and what personal information we disclose to our Facebook friends, so as to create a positive impression. Apart from the good memories attached, Jenna chose her profile picture because she felt she looked good in it. There is a choice involved when changing the profile picture: some users might upload a photo of them with their closest friends or significant other, some might want to add that creative element and edit their photos beforehand, then there are those who choose a photo that could generate most 'likes' from their peers. All in all, the profile picture can be considered a primary identity marker; it is the picture that defines you as it unco-

vers a facet of your personality.

The profile picture is undoubtedly the best way of grasping one's attention. Without her knowing, Jenna may be more motivated to invest time editing her photos and thinking of something witty to post, rather than reflecting about who she is on a deeper level. This could imply that users are spending more time thinking about external qualities and may eventually nurture superficial identities. Facebook users tend to spend their time trying to gain approval from as many friends as possible by creating an online identity that gauges positive peer reviews. In this way, a Facebook user's perceived value is achieved from external sources rather than from within.

This might create a sense of emotional connectedness towards the Facebook community. Communities are important in everyday life because they provide common norms, values, goals and language. It is easier to relate to others who share common interests because it helps validate one's attitudes and beliefs. Facebook may give us a sense of safety whereby we feel safe enough to express who we are with those in our network because the screen acts as a barrier that makes us feel less self-conscious. However, we must be careful because it is much easier to spend hours browsing through photos and reading people's comments in the cosiness of our room than actually spending time with others.

The Facebook community has re-defined our concept of socialisation, making friendships accessible regardless of one's physical location. This suggests that technology is altering our sense of togetherness, because we tend to feel connected to people even in the absence of physical proximity. For this purpose, students may fail to realise that the sense of belonging and acceptance felt upon logging into Facebook is only psychological as it exists nowhere but in our heads. An authentic sense of belonging and acceptance comes from acknowledgment, of being loved and knowing you are loved.

An inner void and a yearning for company can never be satisfied by embracing 1,000 friends on Facebook because there is nothing factual per se. The profile is merely a fraction of who we are; there's more to Jenna than tennis, Funk Initiative and Gossip Girl. Clearly, this information is not enough to get to know the truth about a person's identity because this requires personal recognition, which comes with individual contact. Only through experiencing Jenna as a person can we add depth to the metaphorical picture that represents who she is. As such, Facebook can only tell us where she goes and who he or she hangs out with, which is considered trivial.

It's 13:02 and Jenna's day of lectures are over. After bidding adieu to her fellow course-mates, she sat in a wi-fi hot spot to check her latest Facebook updates. She felt a surge of excitement as she realised she received a friend-request. His name was Ben Dingli. She reckoned that she must have known him from somewhere because they shared 25 mutual friends. After a quick snoop through his profile, she realised they had met at the Ballo on Saturday. She felt flattered at the request and hit 'accept'.

Facebook seems to be changing our perception of friendship because we are increasing our contacts but not necessarily our friends; acquaintances are now friends and who was once considered a friend has now been promoted to a 'close' friend. With the rise of social media, the communication between peers and people from various social ties is becoming easier and simpler albeit less deep, because real friendships require experiences together.

Nonetheless, even though we don't communicate in the same way as in the 1950s, we still communicate; we are just undergoing a rapid transition. The Facebook community is anchored in pre-established offline relationships, and this is what makes it all the more pervasive. We need to be aware of the discrepancy that lies between our online and offline identities because it is easy to feel part of the impersonal interactive environment that the Facebook community endorses. Since we cannot turn back the clock, we need to see how we can allow social media (such as Facebook) to enhance our lives. By the time Jenna realised how much time she spent chatting to Ben when he's online or waiting for him to show up when he's not, she decided best to invite him for a real-life chat in the sun.

Christine Spiteri is a final year B. Psychology (Hons). student and Insite's Media Officer. Ms Spiteri has just completed a dissertation about Facebook's effect on identity formation among Maltese University students. Author's note: Jenna and Ben are fictitious characters.

Interview

Mary Meilak

kelly iles | elizabeth gialanze'

We met Ms. Meilak on a Thursday morning, with a long list of questions at hand and curious to know how she'd reply. At first glance, Meilak appears to be an ordinary women, in fact as she proudly stated, she was born and bred in Tarxien and still resides there. Meilak has a younger brother and has only recently retired from her post as a senior registrar in Mater Dei.

Born on the 25th March 1950, she completed her secondary education at St Joseph School in Paola. The first challenge she faced was during these years as, unfortunately, the school did not offer classes in science subjects. However in less than a year she managed to get her O'Levels in all 3 subjects and further her studies at Junior College, to eventually start her medical training at the Malta University in Valletta back in 1968 in a course consisting of just 4 women from a total of 38 students.

Ms. Meilak graduated in 1974 and started work at the ENT department under the supervision of Prof. Rizzo Naudi. In 1987 she was appointed a Senior House Officer and then advanced to become a Senior Registrar in 1990.

A lot of medical students dream of touring the globe, offering medical aid in third world countries once we graduate and we were anxious to ask Ms. Meilak about her experiences in Ethiopia, however, much to our surprise Ethiopia was only one of the array of countries Ms. Meilak had visited.

It all started in 1975, when she was asked to sit for an interview in Dublin by the mission group 'Concern Worldwide'. She recalls that during the interview she was asked whether she had any hobbies. She thought that this was rather irrelevant considering the purpose of the interview, however when she replied that she enjoyed doing crochet she was immediately accepted to start her missionary. Only much later did she find out the importance of this question, since "the ability to entertain yourself in the face of poverty and sufferance is imperative."

Ms. Meilak chose her speciality with missionary work in mind, she had reasoned that becoming a general surgeon would be ideal in missionary countries since the language barrier would not interfere with her work as most of the patients would be anesthetised. Despite finding her work in Ethiopia very fulfilling, Meilak had no choice but to leave the country after residing there for only 2 years as it was no longer safe to reside in Ethiopia due to an ongoing civil war and also since the British Ambassador could no longer offer them protection.

After a history professor was shot, the missionary group sought to hurriedly leave the country, aware of the possibility that the state would refuse to issue their exit visas since their services were required in the country - Fortunately everyone's visas were issued. Despite the sour ending, from her loving remarks about the country, it is obvious that Ethiopia remains imprinted in her heart.

In 1977, while working at St. Luke's Hospital, she had to flee to India with the Sisters of Mother Theresa to avoid the chaotic atmosphere on the island. Here she nursed children sheltered in a covered railway station. Her missionary work continued: starting from Liverpool with Jospice International from where she was sent to Latin America as a volunteer surgeon. After working for some time in Columbia and the Honduras, she travelled

to Vienna to complete her post-graduate education and shortly afterwards found herself in Uganda in order to treat victims of the civil war.

In 1985, together with her colleagues Prof Rizzo Naudi, Sr Francis Jaccarini and Dr Joseph Cassar, Dr Meilak founded 'Voluntary Lay Missionaires', an organisation placed under the Hospices of Quantificial Missions which attempts to organise missionary groups to third world countries, housed in Merchants Street, Valletta.

Just as we were almost convinced that this was about as interesting as a medic's life could get Ms. Meilak retold her experiences her Sudan, where she had to perform surgery in a mobile operating theatre. This felt rather unorthodox, since the vehicle was originally an army vehicle; however it was very well equipped. Thankfully, police officers in Sudan were obliged to offer her their assistance should she require it as this was part of the law. As she journeyed from village to village in the mobile theatre she mastered a keen sense of organisation, as each time she had make sure that the van was equipped with water adequate for surgery, for drinking and

''Always try to leave something of what you know in the country you go to...''

for maintenance of the truck. This lasted for a year, after which she returned to Malta and continued her work in St. Luke's.

While we sit for hours being lectured about the same ramblings on diabetes and hypertension, sometimes one wonders if it ever gets interesting, will we ever learn something about illnesses which are uncommon on the island but very common in third world countries.

Ms. Meilak explains:
Ourselves, at university we underwent a short course on Tropical Medicine. As well as two weeks of Dentistry which I found extremely helpful since I even had to extract teeth in Ethiopia! I even had to perform hysterectomies, caesarean sections and eye surgeries. Once I had to remove an eye and make sure that I leave the muscles intact just in case the patient ever received a glass eye, even though this was improbable since the patient lived in a developing country. Due to the lack of specialists, and after reading the appropriate material I always had to assess whether I had enough knowledge to perform the surgery. Sometimes I even had to anaesthetise the patients for surgery myself.

Every experience in a third world country is a new one, she states. During her first work on missionary in Africa she still remembers that it was an ordinary custom to show any removed tissue from the surgery to the relatives of the patient afterwards, as a means of reassuring them that the procedure had been carried out.

Out of all experiences, all the skills she acquired along the way together with various life lessons, the most prominent value remains the value of appreciation of what we have, as she recalls a particular case back in Tanzania: After removing gangrenous tissue from the bowel of a 15- year old boy, Ms. Meilak reassured him that he could eat a good meal two days or so after surgery. However, every time she visited him and asked what he had eaten on the day he would always reply that he only had tea. "I began to worry about his lack of progress, however, I soon realised that the child's poor diet was not due to a lack of appetite but because he had nothing to eat but tea."

Despite retiring from her full time job, her love for missionary work persists. We notice this as she reveals her plans to return to Makingu Hospital in Singida, located in a semi-desert in Tanzania and to another clinic in Hola, Kenya.

Inspired by such a fulfilling and interesting life we ask her to give us some advice in case we ever decide to follow her path and she replied that having a good relationship with God and being proficient in your profession are essential. Her final comment was simple yet profound, ''Always try to leave something of what you know in the country you go to...''

Leisure

Lift Off

End Of Summer Party

TRD Parties

Ballo Bianco

SCORP

Peace Test

Media

Corporate Identity Launch

SCOME

Aches and Pains

Medik T

SCOPH

Reach on the Beach

Christmas Presents Campaign

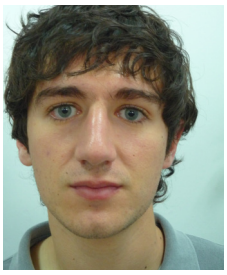
World Diabetes Day

World Heart Day

Healthfest

Medicine, Literature and the confluence of Sinuses

Leonard Farrugia
3rd Year Medical Student



The phrase "beyond med school" doubtless evokes a myriad of different images in each and every one of us, depending on our sets of values, dreams and aspirations – on whatever constitutes who we are now and who we would like to be a couple of years down the line. Some conjure images of frantic dashes from one patient to the next, swapping differential diagnoses à la House MD. Those more heroically-inclined dream of that glorious once-in-a-lifetime experience where they get to be the ones to save a patient by puncturing their tension pneumothorax. A very admirable minority may look forward to the satisfaction of an unusually productive outpatients session. But "beyond med school" may be conceived in broader terms than its literal meaning. This article explores the unique contribution of the doctor and medicine at large to literary writing, thereby attempting to shed some light on the way the doctor perceives and relates to his identity as a professional and, "beyond" that, as a human being.

The first significant characterisation of the doctor in known European literature may be traced back to Homer's Iliad. Aesculapius' son Machaon, an expert healer but also a brave fighter and the co-commander of the Thessalians, is one of the several minor characters in the Trojan saga. A key episode in Book 11 illustrates the high regard of the man of medicine in archaic Greek society - When Machaon is wounded, the Cretan commander Idomeneus, filled with concern over the healer's life, advises Nestor to take him back quickly to the warships because a "good healer is worth a troop of other men". The injury of Machaon would also prove decisive in the gradual unfolding of the doom of Achilles, the protagonist of the Iliad. The godlike hero sends his dear friend Patroclus to inquire after Machaon's health, considering the event as a final confirmation of the grave calamity to the Greeks. However, Patroclus' visit to Nestor, assisting Machaon, would contrarily prove very costly to Achilles because Patroclus would be moved by the suffering of the fellow Greeks, beg Achilles to let him go to war instead of him, and consequently die fighting. In Homer, the doctor is a versatile, esteemable figure, whose rudimentary characterisation and importance in the plot paved the way for the permanent role of the doctor in later European literature.

The way society esteems and relates to doctors has changed over time, depending on the historical, social and sanitary context in question. The nuances associated with the medical profession in literature have evolved in like measure. It is a widely-accepted generalisation that the "doctor ethos" has always been associated with intelligence and knowledge, practical common sense, and altruistic dedication; at times – particularly in the past, when education was more sparing – exalting the doctor persona to an omniscient being with quasi-divine properties. The image of the doctor as a wise and learned man – as useful in practical remedies as he is in lofty debates – dates back to Plato's Symposium, in which the doctor Eryximachus not only relieves Aristophanes of his hiccups, but also relates the art of medicine to the harmony of the universe. A similar stance of intellectual prowess may be discerned in Dr. Grogan, the doctor in Fowles' The French Lieutenant's Woman. This novel, set in the Victorian era – when Puritanism and ideological conservatism still reigned supreme, presents the doctor persona as an open-minded and avant-garde character as able to cure illness as he is to criticise the oppressive insularity of society at the time. This intellectual superiority, as well as his singular (and, back then, heretical) belief in Darwin's findings, isolated him from the rest of society, generating a sense of estrangement and disillusionment from the bourgeois which is echoed in other examples of doctor characters in literature. A case in point may be found in Bulgakov's A Country Doctor's Notebook, in which the doctor is depicted as a lonely and oppressed advocate of reason and enlightenment submerged by the dark, ocean-like mass of peasant ignorance and superstition. Another example that comes to mind is the country doctor in Kafka's eponymous short story, who, having served as a doctor for all his life, now confesses that "changing the world is not his affair", and carries out his duties with existential resignation and reluctance. In stark contrast, the doctor in George Eliot's Middlemarch, Tertius Lydgate, is an idealistic young man full of advanced ideas for medical reform. However, his well-meaning disposition and his attempts to be a better doctor by working without pay ironically result in a similar alienation from the populace. Unlike Bulgakov's country doctor, who gleans personal enrichment from his tough experiences, Lydgate abandons his hopes and dreams.

The inclusion of a doctor in a literary work can sometimes involve a profound appropriation of the doctor ethos to reflect a particular philosophical position. This is nowhere more strongly evident than in Albert Camus' The Plague. The doctor Bernard Rieux is at the centre of the text as the narrator of the events of the plague striking the Algerian city of Oran. Dr. Rieux's work as a doctor makes him the object of the urgent requests of the pestiférés and also a source of inspiration because by his example, fortitude and solidarity, he becomes a yardstick against which the validity of the others' positions can be measured. Rieux's perspective is distingui-

shed by its pragmatism and agnostic commitment to alleviate human suffering despite the apparent meaninglessness of life in the face of impending doom. Unlike the Jesuit Paneloux, his antagonist in the novel, who resorts to dogmatic, religious abstraction to tackle the notions of pain and death, Rieux's humanitarian position is grounded in concrete experience, in his protracted contact with dying patients, which does not leave him time for abstractions and metaphysical speculation. Rieux effectively comes to know the plague through an appreciation of the suffering involved, and, consequently, reacts by the confirmation of the worth of his everyday routine as a doctor: "There was certainty, in everyday work." Rieux in The Plague thus embodies Camus' philosophical principles – the doctor profession is chosen precisely because of the doctor's unique vocation to embrace tragic suffering and death (the absurd) without abandoning the belief in man and the persistent struggle for life.

The characterisation of the doctor in Gabriel Garcia Marquez's novels is as rich and textured as his depiction of exotic diseases. The first example would be Dr. Juvenal Urbino in Love in the Time of Cholera, for whom the medical profession is so entwined with his personal life that he is repeatedly unable to disentangle the two. He first courts his patient Fermina Daza under the pretext of a follow-up examination, and later develops an intense passion for Miss Barbara Lynch, a patient suffering from volvulus. On being told that his conduct was not permitted by his ethics, he candidly replies: "Our code of ethics supposes that we doctors are made of wood." On the other hand, the brilliant doctor Abrenuncio in Of Love and Other Demons is a complete stranger to the effects of love, and considers it to be "an emotion contra natura that condemns two strangers to a base and unhealthy dependence". The delicious blend of medicine and humanity in Marquez's novels is, in my opinion, an invaluable hallmark of the Nobel-prize-winning author's style.

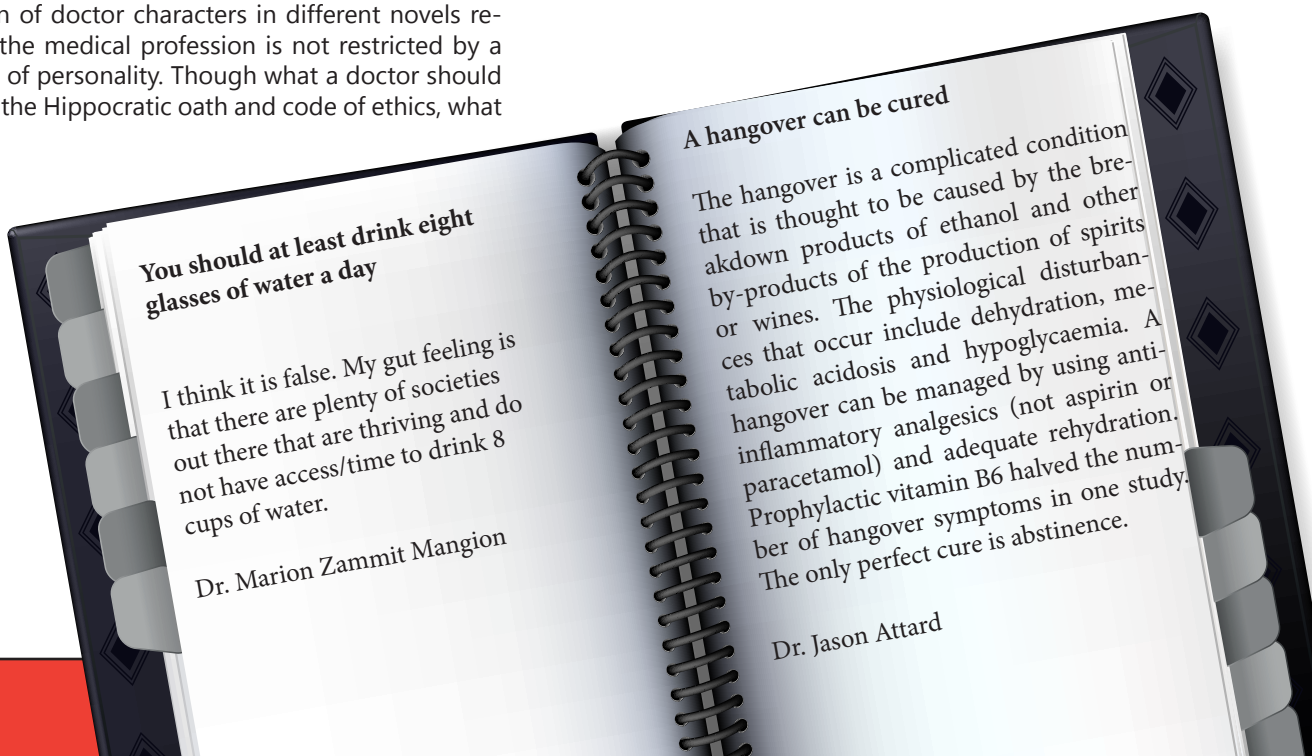
The examples mentioned above are by no means representative of the multitude of doctor characters which have adorned, and still adorn, our favourite novels. Indeed, the diversity in the exposition of doctor characters in different novels reassures us that the medical profession is not restricted by a single paradigm of personality. Though what a doctor should be is defined by the Hippocratic oath and code of ethics, what a doctor can be is an entirely different kettle of fish. Fiction is thus riddled with vignettes of how the "kind doctor" stereotype is neither mandatory nor universal – from Lovecraft's eccentric Herbert West to the terrifying Benway in Burrough's Naked Lunch, Proust's buffoonish Dr Cottard and Kundera's womanising surgeon Tomáš.

Another tie which may exist between medicine and literature is where doctors themselves are writers, such as the poet William Carlos Williams, the Russian playwrights Anton Chekhov and Mikhail Bulgakov, and Sir Arthur Conan Doyle, who, having completed his doctorate on tabes dorsalis, gave birth to the immortal Sherlock Holmes. John Keats, who gave up his medical training soon after earning his licence as an apothecary in 1817, might have been another, had not Poetry sequestered him all for herself.

Keats' life-story testifies our current predicament in two ways. Firstly, as Fowles implies in the aforementioned The French Lieutenant's Woman, we live in an age which is blessed, as well as threatened, by the double-edged sword of specialisation. While allowing immersion in a level of detail extremely fascinating in both breadth and depth, it also poses the danger of inhibiting inter-disciplinarity and of muffling the importance of polymathy. In light of this, new initiatives have been set up to promulgate the union of medicine and the humanities, including the Wellcome Trust Book Prize and Medical Humanities – both of which treat and promote the intersection of these two branches of human knowledge.

"because of the doctor's unique vocation to embrace tragic suffering and death (the absurd) without abandoning the belief in man and the persistent struggle for life."

Secondly, and most importantly, Keats' life and death illustrate how the raw material, as well as fountainhead, of every human endeavour is consistently the same: human nature. And it is in view of this realisation that the confluence of sinuses beneath our occipital protuberances achieves its full metaphorical significance: a metaphor for the confluence of knowledge, critical acumen and creativity that every student – but particularly the medical student – should strive to gather under their scalp.



Medical Drama, Anyone?

Malcolm Mintoff
2nd year Medical Student

After a long and tiring day of medical school, I like to unwind in front of the television. Top Gear might rev up my pleasure centres to 18,000 rpm or maybe a travel special could transport me to a Hawaiian beach with a cool mojito to keep me company. The ugly truth is that I am often slapped in the face with a score of medical television series showing at the same time. My first thought would be to watch something else but I just cannot bear to - like a mindless drone, glued to the screen and under an unbreakable spell!

Since its inception in 1994 and with over a decade of air-time to its name, ER remains one of the most watched medical television series. The show revolves around a group of health care professionals working at the Emergency Department in a Chicago public hospital. The viewers are exposed to both the professional and personal aspects of their lives (and how these sometimes interconnect). Was it just George Clooney's debonair manner and good looks that made the show a sensation? No (but it helps). Viewers fall in love with the adrenaline pumped heroes rushing off to save suicide attempters, rape victims and many others. Glimpses of their personal lives such as Kayson pursuing Lewis romantically or Carter struggling with his rehab program also contribute greatly to its entertainment factor.

A typical Scrubs episode may initially seem to consist of just a string of comical events but there is more to it than that. With humour as its 'muse', the show portrays caricatures of all the usual stereotypes in the medical field. Carla, a sensitive and caring nurse who tries her best to pick up the pieces (and sometimes pries into everyone's business) and Dr. Cox, an overworked physician who loves nothing more than to insult inexperienced interns and mock hospital politics are two examples. The leading character is John Dorian, a sincere but clumsy doctor who narrates most of the episodes in a voice-over. Throughout the seasons, the viewers get to see the characters develop and cannot help but feel a part of their lives; delighted to see the characters accomplish something yet feel gutted for their misfortunes. The show also features 'general life lessons' to conclude each episode's happenings.

A series which never reached the stardom of ER but is equally as captivating is Nip/Tuck. The subject matter is vanity and the lengths at which some people will go to achieve a perfect body in the heat of Miami. Other evident themes include sexuality, violence and recreational drug use. Inseparable since their college years, plastic surgeons Sean McNamara and Christian Troy have opened up their own practice and are best of friends. Together, they not only tackle interesting medical cases but also personal issues which they are faced with. However, Nip/Tuck has been criticised as being boundary-less and is definitely not for the faint-hearted. "There's no realism in it at all. We think it's an abomination of what real plastic surgeons and true patients do..." said Dr. Rod Rohrich, president-elect of the ASPS (American Society of Plastic Surgeons). The surgical incisions may be superficial but the show delves deeply into the psyche of the characters: such as a mother who injects collagen implants into her infant child to kick start the child's modelling career. Aimed at a more mature audience, the series is replete with crude humour, dark characters and macabre twists to scandalise its audience and ultimately keep them on tenterhooks.

One of my favourite medical series has to be House M.D. The show is an innovative take on modern day medical drama where protagonist Gregory House is a self-centred and outspoken physician who resorts to unorthodox methods of practice. He is a true enigma of a man, portrayed as both a villain and a hero, a freewheeler who is dependent on his few friends to look after him and an expert diagnostician who cannot solve his Vicodin addiction problem. House and his team strive to solve the toughest of medical cases, even if the analytical method is based on House's assumption that "every patient lies". The lack of variety of health care professionals in the show remains questionable but nonetheless House M.D. is a must see in my books.

The three popular English medical dramas in Malta are Doctors, Casualty and Holby City. They are in my opinion, by comparison, staid and rarely ever melodramatic. However, they probably portray a truer perspective with regards to the medical aspects than their American counterparts.

Medical television series have always been popular in western civilisation and have had an enormous impact on the way we function. More than one of today's health care professionals will tell you that their initial choice in career was somewhat inspired by shows such as Casualty or ER. Some viewers might even turn into hypochondriacs. There is also an ever growing fear that health care professionals may have to deal with patients who are convinced that they are suffering from a disease which they saw on television. The fact of the matter is that we all watch television as a form of 'escapism' but we have to learn when to take certain things with a pinch of salt.

Obesity among the Maltese

Doriella Galea
4th year medical student

What is obesity?

The issue of being overweight has long been amongst us...but do we really distinguish between being overweight and obese? Calculating the body mass index (dividing the person's weight by the person's height squared) is the only way by which we can address the issue in a politically correct manner. Having a body mass index between 25 and 30kg/m2 classifies you as overweight; but then beyond 30 you become obese. Maybe it is in the person's nature to minimize the issue to 'simply' overweight: but unfortunately the problems are likely to be more serious.

The Health Behaviour in School-aged Children (HBSC) study carried out in 2001-2002 brought into the limelight a number of alarming statistics. Malta placed first with an incidence of 25.4% of Maltese children aged 10 to 16 years being overweight. We were followed by the United States with an incidence of 25.1% and Wales with 21.1%.
Then, looking at the population in general, 7.9% of the Maltese were found to be obese, followed by the United States with an incidence of 6.8% and England with 5.1%.

According to a Canadian study amongst 34 different countries, Maltese children were more likely to be overweight than others. The HBSC study offers a reason for this by showing that only 25.6% of Maltese children were physically active and that 42.7% spent an equivalent of 3 or more hours watching television daily.

Major contributing factor: Sedentary lifestyle
This clearly highlighted the fact that Maltese children were not in the culture of doing some sort of physical activity, be it going for a walk, cycle or practicing some sport. One should certainly ask why: Why are Maltese children more likely to spend 3 hours watching television to being physically active?

A number of factors favouring a sedentary lifestyle may be:
- Transport: many children go to school by bus or car; only a few actually walk to school even if this is within walking distance. One should also consider the fact that more and more parents are working and so it would be always easier to drive them to school or send them with an organised transport system
- Whereas before children used to play on the roads, these are now busy with vehicles so it is unlikely to find children running and playing outdoor games even in the quieter villages
- Busy parents would not have time to take their children to indulge into a sport and it is easier to leave the child watching television at home
- Advancing technology has brought about new games

On the other hand a number of concrete actions are being taken by the Maltese Government, local governments and many non-profitable organisations:
Open air spaces are being embellished for recreational purposes, enabling more families to be able to organise outdoor fun activities for their children. Numerous campaigns to increase awareness of the importance of physical activity are being done within schools.

Other factors: Eating habits
It is a well known fact that us Maltese tend to eat large portions of food. It is almost inconceivable for a Maltese to have a meal without having an additional slice of bread along with the main plate, our mentality is that bread and other carbohydrates make one's tummy full! It is no one's intention to criticise our culinary tradition but it is time for a change. Bread is not unhealthy, in fact carbohydrates are essential for a healthy diet but surely it must be in moderate amounts.

Interestingly, during the HBSC, 38% of Maltese children were observed to have a high sweet intake with a quarter having soft drinks. However at the same time children admitting to eating sweets at more regular intervals were found to be less likely overweight. This in no way implies that eating sweets is healthy, but reflects the idea of portions. Since the question asked was the number of times sweets are eaten, portions were not taken into consideration.

The FOOD campaign organised by the Maltese Medical Students' Association emphasises the importance of healthy balanced eating, by trying to raise awareness with the public.

Obesity is a national issue which is to be taken seriously by all parties as ultimately it affects the development of our Maltese society. Having an obese population not only places us first on lists, but also makes us more prone to health issues such as cardiovascular diseases and diabetes. Ultimately it makes us a 'sick' population whereby we may discourage foreign investment as we would have a less healthy workforce which is more prone to taking sick leave (amongst other issues).

After all we have to keep in mind that our children are the future and their education is the way forward. It is not a matter of having all the family members being obese, but we should try to ask why. Family members living in the same environment are more likely to share the same eating habits by consuming larger portions: let us eat less!

Progeria

Thea Dimech
1st year Medical Student

The concept of 'growing up' is one we all have to learn to understand, some less than others. Our perception of our age changes, we view ourselves as too young and too old depending on different stages in life, whether we wish to be old, or to be younger, however, one thing which makes this concept easier to tackle, is the fact that in growing up we are rarely alone. Society often organises us chronologically, so that automatically, we find ourselves spending a lot of time with peers of our same age, and therefore, with people who are going through similar life-scenarios as we are. For very small number of unfortunate children however, a curse in the form of a disease, forces their bodies to wither and grow, disproportionally to their age.

Progeria, or more specifically - Hutchinson Gilford Progeria Syndrome (HGPS) is a genetic disease which causes an appearance of accelerated ageing in children. The name of this syndrome is derived from Greek and means 'prematurely old'. The syndrome is named after the two English doctors who first described it - Dr. Jonathan Hutchinson and Dr. Hastings Gilford in late 19thCentury.

HGPS is not the only disease to produce an appearance of premature ageing but unlike the other diseases, it is the only disease which exhibits a wide range of the signs of ageing. Diseases such as Werner`s Syndrome only exhibit a few signs of the ageing process. In light of this fact HGPS is often viewed as being the most severe of these premature ageing diseases.

Studies conducted shows that HGPS affects one in 4- 8 million births, making it truly one of the rarest diseases around. It affects both sexes and all races equally, in fact, despite of coming from different ethnic backgrounds children suffering from progeria look significantly similar, with some common features being a small jaw relative to head size, baldness, pinched nose and aged-skin.

Even though children with progeria are born looking healthy, signs and symptoms of this fatal disease start around 18-24 months of age and these include weight-gaining problems, skin problems, limited growth and alopecia. Faithful to its name, this disease induces conditions often associated with ageing such as stiffness of the joints, hip dislocations and severe progressive cardiac disease. However, certain other conditions normally associated with ageing like cataracts and osteoarthritis do not develop in these patients. Like other people who suffer from heart disease, common events for Progeria children are high blood pressure, strokes, angina and heart failure. These patients often die of atherosclerosis, a symptom often associated with ageing. In fact, children suffering from Progeria rarely live to see their twenties with the average age of mortality being 13. Needless to say, this distinctive disease causes severe distress to both patients and their parents. To this day there is no treatment available for the underlying condition even though several patients undergo bypass surgeries or angioplasties to relieve their cardiac conditions.

This correlation between heart disease and Progeria has sparked quite some interest in researchers. By means of studying Progeria patients, researchers can, not only, find the cure to this disease but also make discoveries on the process of aging and heart disease. The discovery of the Progeria gene by National Human Genome Institute (NHGRI) researchers along with the Progeria Research Foundation, the New York State Institute for Basic Research in Developmental Disabilities, and the University of Michigan, was quite an important discovery. This was published in the scientific journal Nature in 2003. Dr. Francis Collins, NHGRI Director said that 'Isolating the Progeria gene is a major achievement for the medical research community' as 'the discovery not only gives hope to children and families affected by Progeria, but also may shed light on the phenomenon of aging and cardiovascular disease.'

Progeria is caused by a point mutation in a single gene known as LMNA. Remarkably, this is caused by a substitution of just one base pair in the 25,000 that make up the LMNA gene. This is a de novo mutation, which means that it arises first in the patient, and therefore cannot be inherited. As evidence to this, the chances of Progeria also affecting the relatives of the patient are practically none. This mutation appears to develop, in almost all instances in the sperm prior to conception.

LMNA is an autosomal dominant gene which codes for the protein Laminin A which plays an essential role in stabilising the cell's nucleus. The mutation causes abnormal Laminin A production which appears to destabilise the cell's nuclear membrane. This destabilisation is seen to be particularly harmful to tissues routinely subjected to intense physical force, such as the cardiovascular and musculoskeletal systems. Since it is not expressed in brain tissue, these children do not have any mental or cognitive deficiencies, having the same vibrancy, energy and mischievous disposition of their peers.

Such rare devastating diseases pose a challenge because educating the family on how to improve the sufferer's lives is a challenge. The Progeria Research Foundation aims to discover treatments or a cure for Progeria and other ageing related diseases, as well serve as an information hub for affected families. It is highly unlikely you'll ever meet such a disease in your professional life, however, its existence will surely fascinate those who have an interest in intricate details in medicine.

The Truth behind Potty Training

Elizabeth Gialanze'
1st year Medical Student

The Potty: a small toilet bowl-shaped device which is most often seen proximal to the gluteal region of a sulky infant.
Training: The activity of imparting or acquiring skills.

But what if these skills do not want to be acquired by the individual? Woe and behold, and we have what some parents describe as 'The Difficult Age of Potty Training'. You the reader has definitely done one of the below, or both:

- Seen your little brother or sister being potty trained - maybe even a niece or nephew
- Heard stories about when you were being potty trained and how 'difficult' those times of turmoil were

They don't call the 'terrible twos' terrible for nothing!

Most children show signs of readiness to begin using the toilet as toddlers, usually between 18 months and 3 years of age. These are days in which most mothers spend their days constantly checking on their infant and frantically grabbing hold of them and trying to rush him or her to their potty on signs of wanting to pee.

Little do these mothers know that successful potty training depends on something beyond their control - the autonomic stretch reflex! This is responsible for the incontinence of infants – as soon as their bladder fills a bit, it empties. In healthy individuals, the lower urinary tract has two separate phases of activity: the storage phase, when urine is stored in the bladder and the voiding phase, when urine is released through the urethra.

The state of the reflex system is dependent on both a conscious signal from the brain and the firing rate of sensory fibers from the bladder and urethra. At low bladder volumes, afferent firing is low, resulting in excitation of the outlet (the sphincter and urethra), and relaxation of the bladder. At high bladder volumes, afferent firing increases, causing a conscious sensation of urinary urge.

When the potty-trained infant is ready to urinate, he or she consciously initiates voiding causing the bladder to contract and the outlet to relax. Voiding continues until the bladder empties completely, at which point the bladder relaxes and the outlet contracts to re-initiate storage. The muscles controlling micturition are controlled by the autonomic and somatic nervous systems.

During the storage phase, the internal urethral sphincter remains tense and the detrusor muscle relaxed by sympathetic stimulation. During micturition, parasympathetic stimulation causes the detrusor muscle to contract and the internal urethral sphincter to relax. The external urethral sphincter is under somatic control and is consciously relaxed during micturition.
In infants, voiding occurs involuntarily (as a reflex). The ability to voluntarily inhibit micturition develops by the age of 2–3 years, as control at higher levels of the central nervous system develops. In the adult, the volume of urine in the bladder that normally initiates a reflex contraction is about 300–400 ml.

What about when the infant has been successfully potty trained? Three steps remain:

Aim for the potty
Relax the external urethral sphincter
And Go!

Don't go swimming directly after you eat

After you eat, blood is directed to the gastrointestinal system (to aid digestion and absorption) and therefore there is less blood available to the muscles. You therefore easily get tired when swimming directly after a meal due to this decreased blood supply to the muscles.

Dr. Lynn Grech

Reading in dim light ruins your eyesight

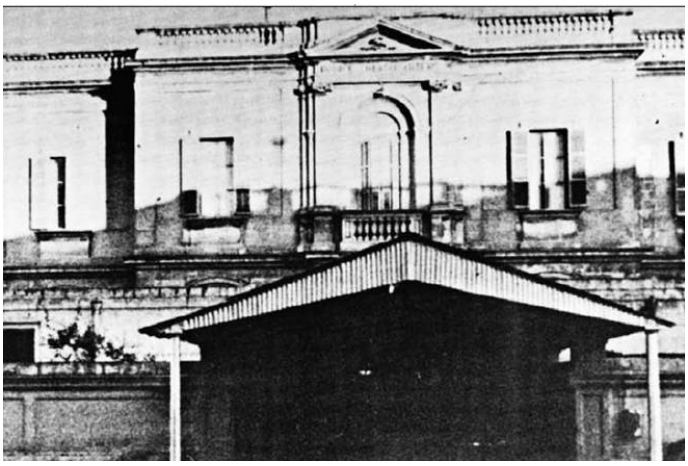
In long sighted individuals (hypermetropes) the combination of 'reading' which induces accommodation with increase in the antero-posterior diameter of the natural lens, and 'dim light' which induces pupil dilation can precipitate acute angle closure glaucoma which can 'ruin your eyesight'. This risk is higher in middle aged females.

Mr. Franco Mercieca

Struggle in the midst of progress

Fiction based on medical records,literature and other sources

Faraaz Bhatti MD - UK Foundation Doctor



Floriana Central Hospital, Malta. 1900.

Monday January 01, midnight.
The turn of the century.

Party-goers and revellers pass through the streets arm-in-arm, drunk on rum and Malta's finest. Some head back from Valletta, where they have spent their last few coppers on this annual celebration as others tumble towards the slums that line the outskirts of the city.
Within the Floriana Central Hospital, the mood is a sombre one. The patients celebrate in the best manner they can and hope that this year will bring them a cure or some form of respite from their ailment.

1900. One in five children will die this year. The life expectancy will remain at a dismal average age of 45 years. A 'National Health Service' is still some time away – it won't set into motion in the United Kingdom for another 48 years.Times are tough. Records which will be retained by the Ministry for Health will show that a vast spectrum of diseases will enter this hospital's doors over the coming year: "Bronchitis, asthma, cardiopathia, haemorrhoids, paraplegia with contusion, fractures, rheumatic fever, epilepsy, lumbago, hyperemesis, haemoptysis, syphilis, diarrhoea, hepatitis, dyspepsia, smallpox, trichiasis, 'softening of the brain', anthrax, scrophila, typhoid fever, brain congestion, neuralgia, anaemia, eczema, psora, tuberculosis, metrorrhagia, cephalgia, chancroid" and the list goes on.

Some of our patients will inevitably die, fading away as their sickness and ill-health gets the better of them. Many will be discharged as cured.
Cured?!

You mean a testament to the fact that they are still living and no further medical or surgical treatment can be offered here? Then yes, "cured".

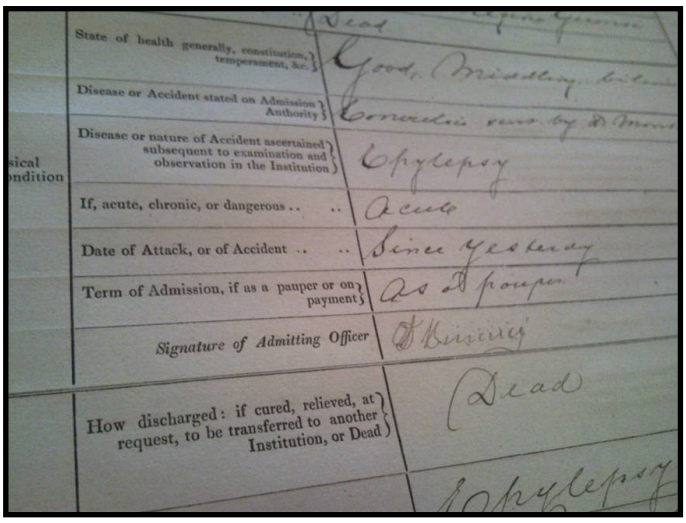
The diagnosis and management of disease improves day-by-day. Each death brings with it a further resolve to improve our services. The last twenty-years have seen much progress. Living conditions are as of yet far from ideal, but they are getting there. Take the following case for example where I was the attending doctor.

FM, a 37-year old single male from Valletta presented to Floriana Central Hospital suffering from convulsions. Diagnosis: epileptic seizure. He remained in the male ward for 7 days and 13 hours before succumbing to the brain injury at 12am on April 1878.

From journals published in the United Kingdom, it is believed that these seizures are due to 'sudden electro-chemical discharges of energy in the brain' (Hughlings Jackson, London Neurologist).

Sir Charles Pocock, Physician to Queen Victoria, proposed potassium bromide as an anticonvulsant. In this instance the brain injury from the seizure was too great, it had no effect. Surgery to the cranium and brain play a very limited role in our daily practice as the mortality is beyond any doubt disastrously high.

Bromide will later on in the century become a commonly used anticonvulsant – in dogs and cats!



Death from acute epilepsy-records retained by the Ministry for Health

Our greatest killer is blasted infection. Diseased patients with all kinds of exotic conditions pour through our doors. Thank God erysipelas is not an everyday occurrence here or I may as well be working for the undertakers! Every outbreak brings with it the need to decontaminate the entire ward with carbolic acid, to burn the vermin off the bed sheets and to isolate the patient in the Poor House for incurable diseases. The last case I was involved in was a male, 54 years of age, who presented with a fever of 103°F. Over the next week he developed abscesses on the scalp and arms. The disease spread from the face to the arms leaving his skin puffy, red with a dry brown tongue and rapid pulse. I opened the abscesses to release the pus and prescribed him quinine every four hours. He was also painted with pure carbolic acid followed by a paint of alcohol. He died in the following weeks being consumed by the infection. I am surprised he lasted that long!

We lie at the mercy of all types of infections which have greatly hindered the population. Various epidemics have caused numerous deaths, leaving many others suffering from its ill effects. Vast numbers of people have died, with 700 of those occurring from the smallpox epidemic thirty years ago. Smallpox still continues to cause death and havoc to this day. The vaccine, pioneered by Edward Jenner has been the subject of much debate over the past century. The Government of Malta has made immunisation a compulsory necessity and rightly so! The idea was there, the incentive was not – large proportions of the island remain at risk of contracting this fatal disease after refusing the vaccine.

Malta will embrace its final smallpox epidemic in 46 years time, with one needless death.

A decade ago there was a disastrous cholera outbreak on the island. This not only affected the public, but also the institutions, such as this hospital.

The superintendent to the Attard Lunatic Asylum, Dr. F. Xuereb, has long raised critical concerns of the situation there. The inmate population has reached in excess of 650 in an institution designed to accommodate a meagre 200.

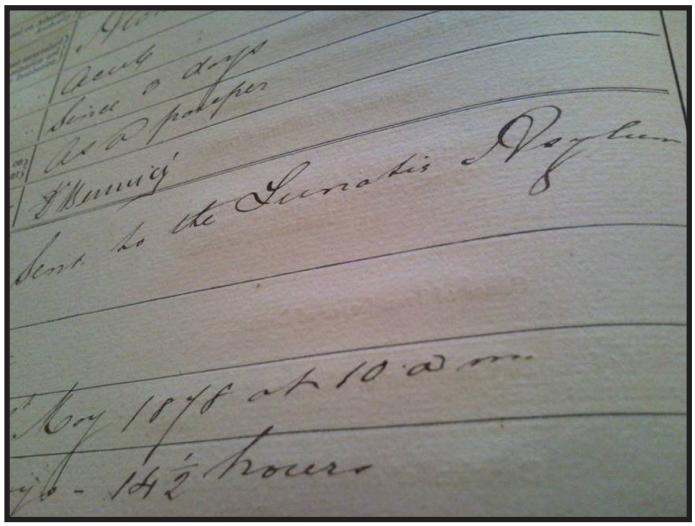
Mount Carmel Psychiatric Hospital was built in 1853, costing the Maltese Government a staggering £14, 000 (equivalent to £819,420 today).

The overcrowded unsanitary conditions have strongly encouraged the spread of disease. The deteriorating state over there only encourages further epidemics. Patients being admitted to this Asylum today include those diagnosed with 'idiocity', 'imbecility', 'mental degeneration' amongst other conditions.

Some of these derogatory terms will be phased out over the next century as the field of Psychiatry advances from the primacy it is currently in.

The Lunatic Asylum has long used archaic methods to control epileptic seizures and violent patients. These procedures include the inhumane use of physical restraints, which has been repeatedly frowned upon by the growingly restless authorities. The white straitjacket is still to this day utilised by the Asylum, along with Floriana Central Hospital and by the Police. No doubt a great deterrent to those considering taking a dip in the insanity-mire!

It was only last week when I, myself called in two Police constables to escort a restless patient to Attard. This gentleman was consumed by the effects of his chronic alcoholism and was in his current ungentlemanly-mental state, deemed untreatable. Restrained in a robust unbreakable straitjacket he was bundled out of the front-door into a horse-drawn Police carriage. As to be expected, this is usually an attraction for the passers-by, who revel at the sight of a madman constrained in cuffs. What a sad state of affairs!
The poor soul will undoubtedly face the feared seclusion room at the Asylum. The rooms are nothing less than prison-like in structure, with a barred window situated fairly close to the ceiling, a vast improvement to their state six years ago. They are considerably dark and air circulation is terrible – the stench of faeces and urine runs through the grime-ridden air – an insult to any proper gentleman's nose. The Attardians have minimal sanitary facilities, which is true for much of the rest of the Asylum.


Sent to the Lunatic Asylum due to alcoholismus chronis-
records retained by the Ministry for Health

What can be done regarding aggressive patients you

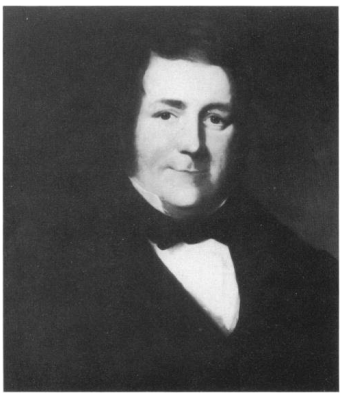
may ask? Well, other than restraining them – not a lot! Medical sedation does not play a central role in our treatment. In fact, according to doctor's preference, one may use: potassium bromide, chloral hydrate, sulphonal, coniium or tobacco snuff. Do they work? Questionable!

Barbiturates will come into use in 3 years time and will revolutionise the future treatment in Psychiatry.

What I blame for this rapid increase in diseases entering the island are the ever-growing trade-routes emerging which connect Malta to the rest of the world. Meningitis and typhus are examples of such diseases. Only recently has Dr. M. Hughes revealed that typhoid outbreaks are due to a typhoid bacillus – we know the cause yet are powerless to stop it!

I have witnessed more daring surgeries being carried out in recent years with reasonable results. For this we can thank the emergence of a cocktail of drugs, known as anaesthetics. Ether, which was introduced to the island earlier in this century, has had debatable results. It was first used by the young Thomas Wells in the Naval Hospital in Bighi.

Forms of spinal anaesthesia will be tried in London, using drugs such as stovaine in the coming years. Their use and adverse side-effects will raise many question marks, yet will be ignored by the authorities in the hope of advancing medical science.



Sir Thomas Spencer Wells

Chloroform, another ludicrously wonderful drug - it was advocated by its founders, and opposed by radical churchmen as it went against the principles of 'labour pain' as set out in Genesis 3,16. Interestingly, Queen Victoria sanctioned its legality during the birth of her own son and it then became widely available.
In April 1855, nine years after its conception, the drug was directly responsible for a death in the town of Senglea where a thirty-five year old gentleman was undergoing a surgical amputation of a toe. The post-mortem analysis of his death would reveal that he had a 'trembling' pulse, with blood-flow to his vital organs ceasing. I for one have always been wary of the risks coming from these new drugs.
To illustrate how effective our surgery has become, 9 years ago, a successful Caesarean section was carried out on a live woman by our own hospital's consultant gynaecologist, Professor Guiseppe Batta Schembri. He has also performed many laparotomies using this drug to render the patient unconscious, with good results.

Other forms of anaesthesia, such as Nitrous Oxide will not be used as a form of anaesthesia for another 11 years.

The Central Hospital offers pain relief in the form of morphine. This can be given orally in tablet form or by intramuscular injection. Unfortunately a side-effect that is seen too often is respiratory arrest and has left many patients dead as a result of this. It continues to be used judiciously by many of my Maltese colleagues allowing a welcome pain-free period in our patients.

Other recent advances include the founding of the X-ray by a German chap called Dr. Wilhelm Röntgen just five years ago. Our Central Hospital has employed this oversized machine and is now utilising it to aid in the diagnosis and treatment of a variety of conditions. The monstrosity can be found in the radiology room, which truly fascinates our young medical students. They will hopefully be taking advantage of it a little more than our old practitioners, who all too often fiercely resist change!
The Floriana Central Hospital is a teaching one and with that come the enthusiastic students from the University of Malta. Tomorrow, some will make their way from places as far as Rabat by karrozzin, others will walk from Msida and the surrounding areas.

The strong British-Maltese connections will become strengthened over the next year, allowing Maltese graduates to practice in the field of Medicine in the United Kingdom.

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The Central Hospital continued to see advances in local practices in the coming decades. Names like Sir. Temi Zammit would become forever engrained in Malta's vast and illustrious medical history.

Opening in 1850, one-hundred years on in 1954, Floriana Central Hospital became and is to this day the Malta Police Headquarters. St. Luke's Hospital opened its doors in 1940 which heralded the end of tertiary medical care in Floriana.

Many hospital records and patient notes from 1900 remain unfortunately lost.

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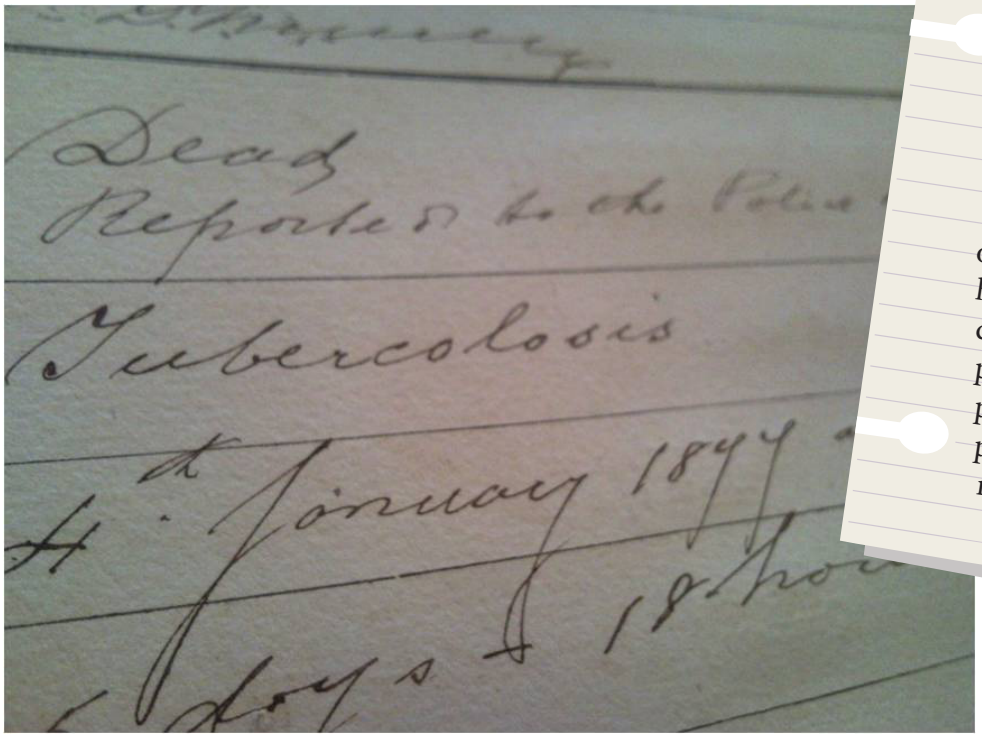
Special thanks to: Prof. Savona Ventura, Dr. Neville Calleja and the Office of the Ministry of Health and the elderly.

Death from Tuberculosis in 1877 after 5 days 18 hours-records retained by the Ministry for Health (left)

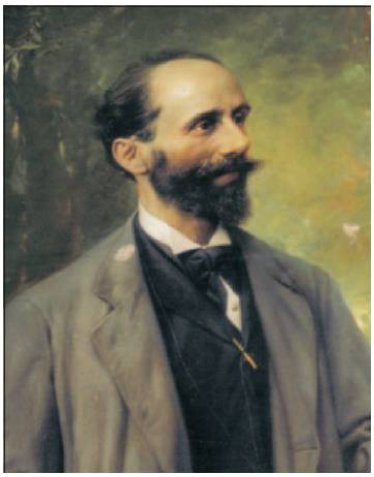


You can catch an STD from the toilet seat

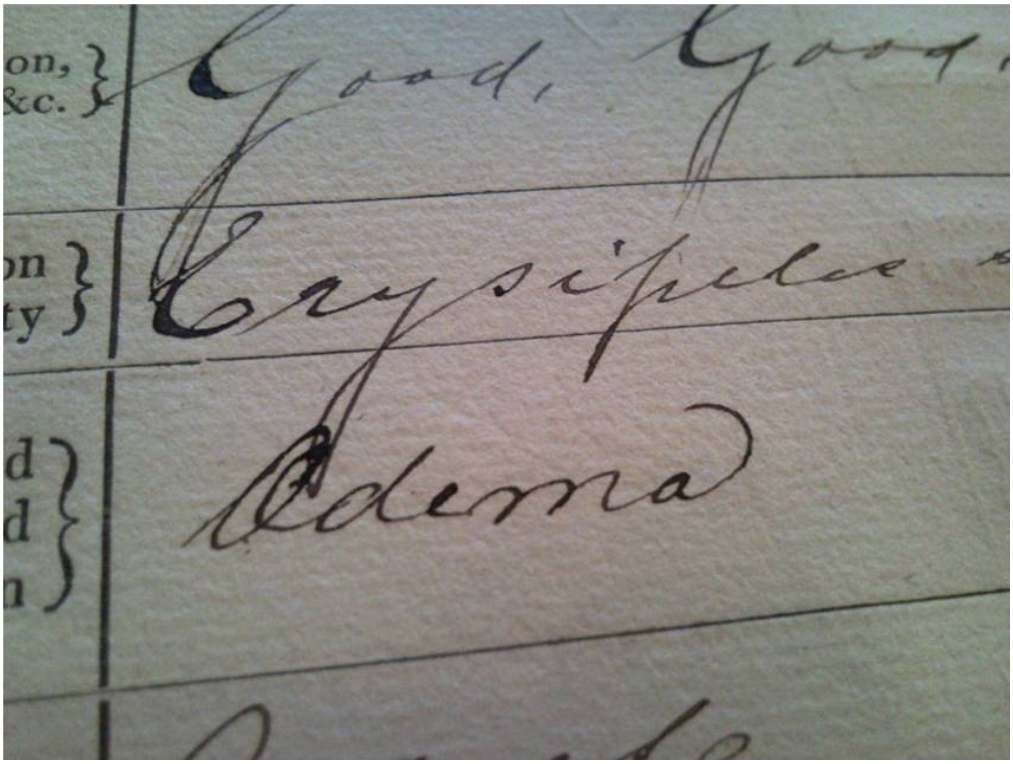
Toilet seats are not common vectors of infections. There is no evidence that HIV or the viruses responsible for hepatitis B or C can be spread in this way. Most STDs need some sort of sexual contact with a person that has it (vaginal, oral, or anal) or by direct skin to skin contact with that person. The only STD you could possibly get from a toilet seat is pubic lice (crabs) and even this is really rare.

Prof. Isabel Stabile

Yet another erysipelas infection-records retained by the Ministry for Health (below)

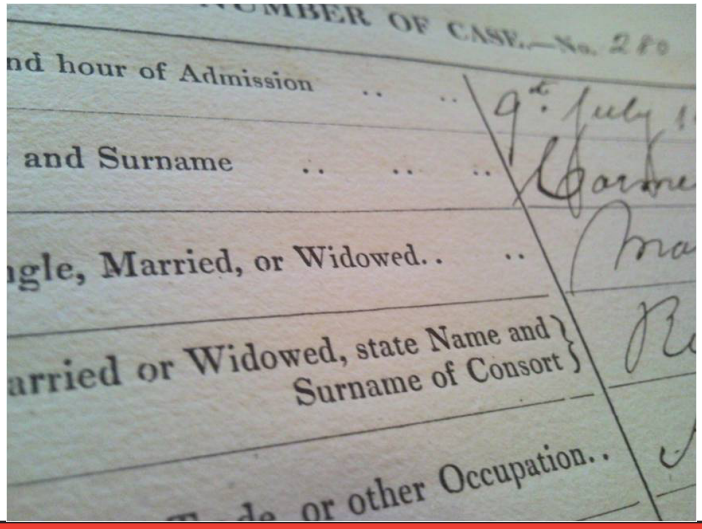


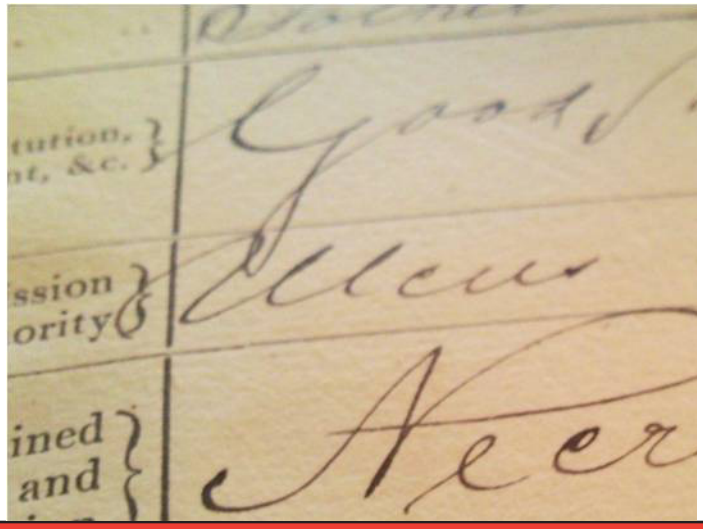
Professor Giuseppe Batta Schembri



Admissions form-records retained by the Ministry for Health (bottom left)

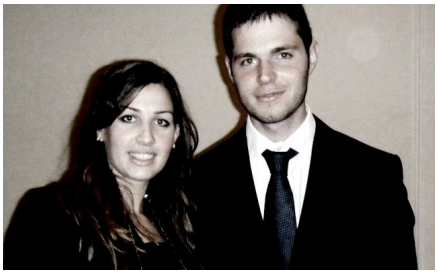
Necrosis chronis-records retained by the Ministry for Health (bottom right)





A Clinic in Buza

Daphne Gatt
Stephen Micallef Eynaud
4th Year Medical Students



During the summer of 2010, while still grinning with post-exam fever, we joined a voluntary organisation called FACES in one of their ongoing projects on the African continent. We set out to open a clinic in Buza, a slum on the outskirts of Dar es Salaam, in Tanzania.

Our first task was to convert a room that had long been used for choir practice into a fully functional clinic. This was hard work but Tanzanian hospitality is legendary and the community were very willing to help us. Within 2 days we could open up our clinic doors.

Our team was made up of four doctors, a pharmacist, a physiotherapist, and ourselves. We also had some local people helping us to translate. Needless to say nothing would have been possible without the help of these translators. Our initial task was to take blood pressure and temperature readings, and measure other vital parameters. However, during the course

of the first week we became so overwhelmed by the amount of people queuing up that we had to take on more responsibilies to balance out the work load. These included giving injections and dispensing medication, urinalysis, pregnancy testing, wound management and malaria testing.

Our first challenge really started before we left for Africa. This was to gather enough medicines and equipment to set up the clinic. Through the immense generosity of many local pharmaceutical companies and hospitals we soon collected more than enough medicines. In fact the twenty-five of us each had to carry 10kg of medicines in our backpacks all the way to Tanzania. Luckily, none of us were stopped by airport security! Even something as simple as getting clean running water into the clinic proved to be a serious setback but after some rudimentary plumbing skills we managed to overcome this problem.

Certainly one of the biggest and most unexpected challenges was, having to organise the large crowds. We wanted to treat the sickest and poorest people first and decided upon a ticketing system whereby local helpers would give out tickets to the most needy. However, in the first few days we were surprised to be met by hordes of women and men who appeared to be much more affluent than those we would see on the streets. Many of them looked very well-fed, and wore lavish clothes and jewellery. After a little probing into the issue it soon transpired that one of the helpers was selling the tickets for profit. We immediately put a stop to this and left the Sisters in charge of handing out the tickets. From that day onwards, we started to see the poorest of the poor and had a huge influx of very sick children. We did not see another golden bangle when taking blood pressures.

We struggled with the fact that we would only be there for a month, in which time there is only so much that one can do. We wanted to leave the people of this community with something that was more permanent – Education. One of the doctors gave daily sessions to the people waiting outside. Topics included the prevention of malaria, women's health, HIV/AIDS and hygiene matters. More specific sessions

targeted albino patients and their families and HIV-positive patients to discuss social stigmas and offer concrete help. In the very least, this gave us peace of mind that we were educating and empowering people whilst also ridding the community of the many misconceptions that they had.

Witchdoctors are still very much at large in rural Tanzania, and are one of the main sources of spreading appalling superstitions across communities. We began to see evidence of their practice all around us, such as a woman with massive cheloid scars following intentional burns conducted in a botched attempt to cure a chest infection. It is a well known fact that witchdoctors ask for albino limbs as ingredients for their potions. This has led to the killing of hundreds of albinos and it is only now that a female albino is a member of parliament that this is being stamped out. Another shocking misconception is that men who are HIV positive think they can be cured by having sex with an albino or a virgin, the younger the better, leading to the rape of thousands of albinos and children over several years. It is these insane beliefs that we tried to eradicate besides just treating wounds and infections.

Of course, being an African country we expected to see a wide range of infectious diseases, and Tanzania was no exception. Indeed, Malaria, Tuberculosis, Scabies Infestations, Leishmaniasis, Pneumonia, Pelvic inflammatory disease, Infectious Diarrhoea and HIV were a daily occurrence. The list is endless. We saw some conditions that almost never reach our shores, such as a young boy with Malarial Meningitis and a woman suffering from elephantiasis. These are just a few of the infectious diseases that through the years have brought tiny Buza to its knees. However we were surprised to find a high prevalence of non-communicable disease, including diabetes mellitus, cardiovascular disease and hypertension. Strange for an African country, or so we thought - We now believe this to be due to what we refer to as a ''new level of poverty" where those of a higher socioeconomic status, who are not dying of starvation, are living almost exclusively on a diet rich in deep fried foods. The hundreds of vendors selling deep fried gristle and chips that line the streets of Dar are testament to this fact. This may be a consequence of the rapid urbanisation seen in many parts of Africa.

It was this incredibly high level of hypertension that drove us to carry out a study on the prevalence of hypertension in our cohort of patients. Results from our study showed a prevalence rate of 44.9% which is remarkably high. 19 patients had malignant hypertension. We also confirmed links to socioeconomic status and age. We hope that this study will bring

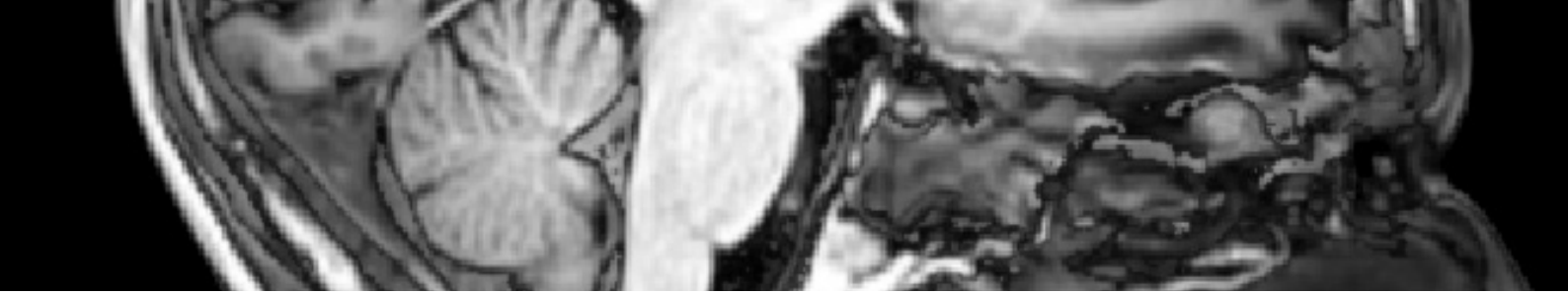
awareness to Tanzanian public health authorities to try to rectify this problem. In conclusion, this experience has thought us so much and in the best possible way.

As the old Chinese proverb says, "tell me and I may forget, show me and I may remember, involve me and I'll understand".

Eating chocolate and fried foods causes acne

Articles on the perceptions of acne patients regarding the role of diet in acne show that diet, including chocolate and fried food, is uniformly regarded as a major cause in the pathogenesis of acne. There is however insufficient evidence that these are acne-inducing. The American Academy of Dermatology published recommendations in 2007 suggesting that dietary restriction is not demonstrated to be of benefit in the management of acne. On the other hand, omega-6 fatty acids found in fried foods are pro-inflammatory and their pro-inflammatory mediators have been associated with acne. Also diets high in saturated fats have been associated with increased IGF-1 levels which may also be associated with increased risk of acne.

Dr. Alison Micallef Fava



Medical Advances this decade

Neville Borg
4th year Medical Student

The first decade of the 21st century brought a number of medical advances in the form of new discoveries and new clinical evidence. These have changed deep-seated beliefs, and opened up new doors in medicine, which may in turn lead us to further progress in the very near future. Medpage Today, a prominent medical online database, together with a team of over 800 specialists worldwide have compiled a list of the top 10 advances in medicine so far into this century.

1.**The Human Genome Project** – Having commenced in 1990, the Human Genome Project boldly set out to map the entire human genetic code. Two separate teams were involved: the government funded Human Genome Project, and another privately funded effort led by Celera Genomics.

Both teams announced a rough draft of their findings at a joint press conference on June 26, 2000. For the first time, the general public could look up the complete set of the human genome. A final draft was released in 2003, and more analysis is currently underway.

"It's the precursor for lots of medical advances," said Craig Venter, PhD. the chief scientist leading the Celera team. Venter insists it will change the way we practice medicine. "I think the biggest area of the future will be preventive medicine," said Venter. "By understanding the genetic causes and links to disease we can spend more and more attention on preventing disease." This also means that we can reduce costs of treating some diseases and help alleviate the burden on the taxpayer and the NHS, with the help of genomic research.

2.**The IT Revolution and the Practice of Medicine** – Doctors insist that the internet and the advances in information technology have changed medicine for the better.

Previously, for every clinical question, a doctor would have to go to a library and manually look up endless editions of medical journals and literature. With luck, one would have an answer in a few hours.
"Now I can be on rounds and in five minutes have more information on the topic than I need. On my smart-phone, I can look up a medication, check the formulary to see if it's covered, check for interactions with a patient's other meds and double-check details of the pharmacology of the med plus quickly review the problem I am treating, and I don't even have to go online," said John Messmer, MD, associate professor at the Penn State College of Medicine.

IT advances also enforce patient education, who can now read up on their diseases online from user-friendly databases. This has its benefits, but it can also lead to increased patient hysteria. Even hospitals are moving towards digital patient records and digital processing of patient lab testing and medication tracking. However, this also means increased costs, something which puts a frown on all government administrations.

3.**Anti-Smoking Legislation and Education** Reduces Public Smoking – While there are still limitations and loop-holes in anti-smoking legislation present in many countries, one cannot deny that the public smoking bans have led to a decrease in the exposure to 2nd hand smoking, and a decrease in consequent heart disease.

Anti-smoking legislation also encourages people to quit smoking. The beneficial effects of these bans and increased anti-smoking campaigns will be seen in the years to come.

4.**Heart Disease Deaths Drop by 40%** - Progress has been very dramatic in cardiology. 25 years ago, patients suffering from a Myocardial Infarction had a very bleak prognosis. MIs were usually either directly fatal or lead to significant post-MI morbidity and mortality (death from heart failure). The only treatment was pain-relief with opiates, and anti-arrhythmic medication.

Today, speed is the key when dealing with heart attacks. Emphasis is being made to rush a patient with a suspected MI to hospital, and education about the symptoms of MI is being given to the public. Early hospitalisation can lead to effective treatment, via Thrombolysis (clot-breaking therapy) or via PCI (percutaneous coronary intervention) i.e. Angioplasty.

Other patients with heart disease can undergo bypass surgery to prevent the occurrence of MI, and improve their quality of life. Pharmacological advances have given us Statins, which lower the blood lipid levels and slow down the Atherosclerotic process.

More importantly, the general public is aware of and appreciates the seriousness of heart disease. The pu-

blic is also more aware of the risk factors like Hypertension, Smoking and Diabetes Mellitus, and how beneficial a healthy lifestyle is in preventing heart disease.

5.**Stem Cell Research** – Quite probably, this area of research has ignited more public imagination and controversy than any other.

However, ignoring any ethical dilemmas which have been brought up, the early clinical evidence has been astounding. The ongoing progress has also ensured a way of bypassing any ethical issues, since we can now transform normal adult skin cells into embryonic-like stem cells, which paves the way for a multitude of new drug therapies based on stem cells. There have been very positive results in the treatment of chronic, progressive diseases like Adrenoleukodystrophy.

6.**Targeted Therapy in Oncology –** There has been a lot of publicised progress in the treatment of cancer. One of the more publicised advances was Herceptin, which targets a particular type of breast cancer which expresses the HER-2 oncogene. These cancers account for about 25% of all breast cancers, and in such cases Herceptin may be effective even when other treatment fails.

Another breakthrough was the introduction of Glivec (Imatinib), which is used to treat Chronic Myeloid Leukaemia and Gastrointestinal Stromal Tumours (GIST). The breakthrough in each of these therapies is that these two drugs specifically target the cancer, and not the patient.

7.**Combination Drug Therapy Extends HIV Survival** – The introduction of Highly Active Antiretroviral Therapy (HAART) has changed the diagnosis of HIV/AIDS from a death sentence to that of a very serious, but manageable disease. This combined drug therapy has been nothing short of miraculous for the individuals testing positive for HIV.

"In 1996 a 20-year-old person in the U.S. with AIDS expected to live about three to five years and now expects to live to be 69 years. That is amazing," said John Bartlett, MD, past president of the Infectious Diseases Society of America, "Next challenge is the cure."

In the US, a further 10% decrease in mortality from HIV was noted between 2006 and 2007. Constant revision and testing of the combined therapy is leading to ongoing progress in therapeutic protocols.
However one must note that these advances are being noticed in the developed world, where most HIV patients can afford medication. How to deal with HIV in developing countries is an issue which we may have to entrust the future generations with.
8.**Minimally Invasive and Robotic Techniques** Revolutionise Surgery - Ten years ago, surgery left the patients with a great deal of scars coupled with long, painful post-operative recovery periods.

In 2007, a whole kidney was removed through a small incision in the patient's umbilicus, as opposed to the 10-inch scar associated with a traditional nephrectomy. Further progress in the technique of 'key-hole surgery' has lead to major surgeries being performed laparoscopically instead of 'open surgery'. Another modern technique is Natural Orifice Transluminal Endoscopic Surgery, which involves surgery via a naturally occurring opening (e.g. mouth; urethra), possibly involving another internal incision.

The advantages of minimally invasive surgery have long been appreciated, primarily because of decreased inpatient recovery periods. This is particularly important in hospitals plagued with high rates of hospital-acquired infections.

Robotic techniques are also more commonplace, since the use of these sophisticated machines greatly improves the accuracy and finesse of procedures. Richard Caselli, MD, of the Mayo Clinic in Scottsdale, Arizona, pointed out that robotic surgery "offers the potential for surgeons to operate on patients remotely." However, critics comment that the sheer cost of these robots may outweigh their benefits, and that not enough evidence has been collected to substantiate all the praise that they have generated.

9.**Hormone Replacement Therapy Reviewed** – Until July 2002, HRT was regarded as a godsend in the treatment of post-menopausal complications, which include heart disease, osteoporosis, depression, weight gain and the loss of libido.

Then the news was issued that the National Heart Lung and Blood Institute was cancelling a large-scale study on HRT patients, due to the increased risk of breast cancer, stroke and clot formation that was being associated with HRT.

Today we appreciate that although HRT isn't all bad, and that it does have very valid beneficial effects, it does bring an increased risk for certain pathologies. It still has a place in clinical medicine, however more caution is being exercised by endocrinologists worldwide, and it is not to be prescribed lightly.

10.**Functional MRI (fMRI)** – 'Mind reading' has become possible with fMRI. This modality of MRI is a sophisticated technique which maps brain activity.

The process involves measuring the change of blood flow in relation to neuronal activity, with the patient (awake) inside the scanner performing simple cognitive tasks (e.g. simple arithmetic).

First developed in the 1990s, it began finding its plac in research at the dawn of the previous decade. Th technique has helped us obtain valuable informa on diseases like depression, brain cancer, autism, a memory disorders.

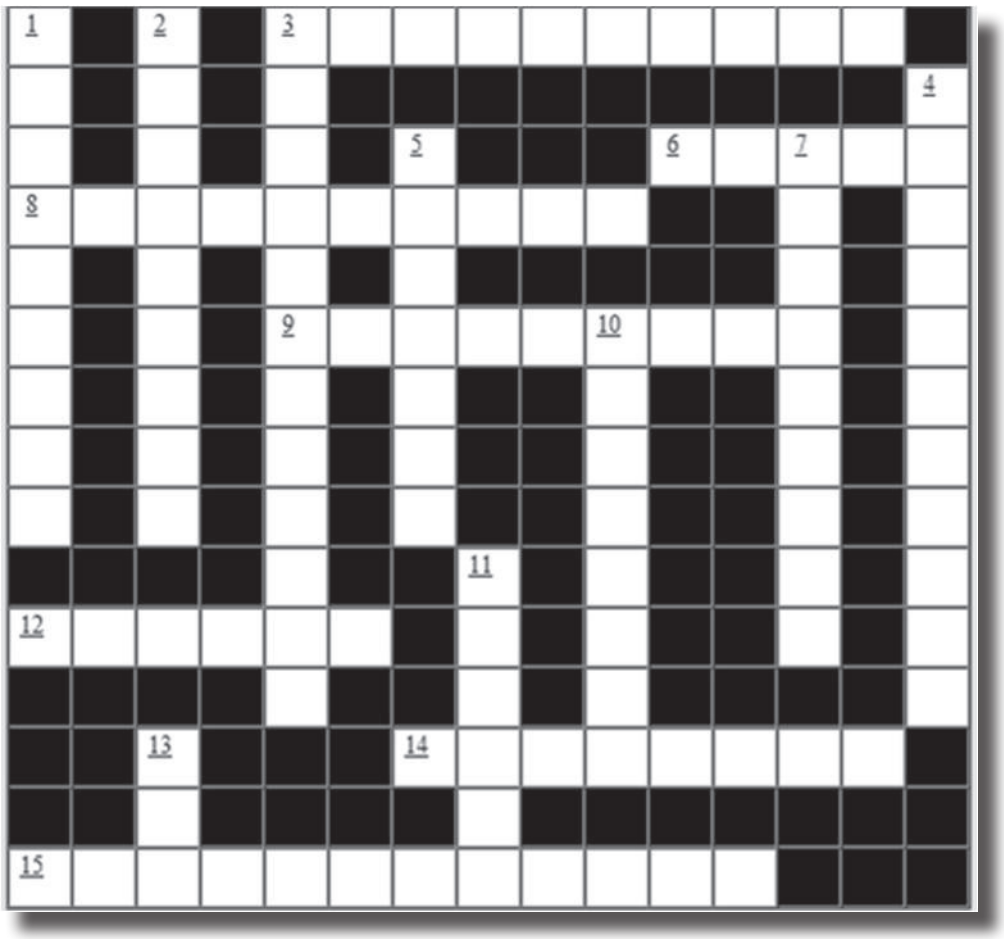
You can determine the sex of your baby by th way you are 'carrying'

The gender of the baby is only determined by the sex chromosome present in the genetic make-up of the particular sperm which manages to fertilise the oocyte. If the sperm carries a Y chromosome, then a male offsring will result, while if the sperm has an X chromosome, a female will form. The shape of the uterine fundus depends only on the position that the fetus happens to be, and not on the gender.

Dr. Jean Calleja Agius

fun page

Crossword....to tickle your brains!...



Hints

Down

1. What is the medical term for fingers or toes?
2. What is the microscopic study of the structures, composition, and functions of tissue called?
3. What is the term for low blood sugar?
4. What is the medical term for red blood cell?
5. What is the medical term for painful or difficult urination?
11. What is the medical term for a benign fatty tumor?
13. What medical prefix refers to pain?

Across

3. What is the medical term for profuse bleeding?
6. What is the medical prefix that means "too much"?
7. What is the medical term indicating inflammation of a vein?
8. What medical term means dissolving a stone?
9. What is the medical term for white blood cells?
10. What is the science which deals with the formation, structure, and function of cells?
12. What is the correct term for no production of urine?
14. What is the correct term for excessive amounts of urine?
15. What is the proper term for blood vesssels gettng larger in diameter?

answers on page 39 (bottom)

comics

by Joe Attard

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crossword answers

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