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EDITORIAL

The changing face of Medicine

Simon Paul Attard Montalto

Many years ago, we had written an article, published in the MMJ, that highlighted the advances that had occurred in Paediatrics during the preceding ten years or so.[1] Now that we are in the twilight of our careers and on the cusp of retirement, we can re-visit this topic with a retro-telephoto lens in combination with a generous dollop of nostalgia.

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COVER PICTURE

'House Facade, Allerheiligen, Black Forest, Germany'
Acrylic on canvas, 2.5m by 70cm

Mario Borg first read Pharmacy at Bachelor level (1982-86) and later read History of Art at both Bachelor & Master levels (1994-2001).

He has been practicing art in several of its techniques since a long time ago with watercolours, assemblage, acrylics and collage being his preferred media.

As a fresh houseman (now a foundation doctor 1), I would have admitted several adults with ischaemic heart disease on a daily basis. These patients would be given intravenous hydration, adequate analgesia and bed rest. All the guidelines based on STEMI, non-STEMI, etc.[2], simply did not exist, let alone emergency percutaneous coronary intervention (PCI) or thrombolysis,[2] followed by alleviation of symptoms and rapid discharge from hospital. Our typical 'MIs' went home after a few weeks in hospital for slow rehab in the community.

Ultrasound and CT scanning had been around for a few years[3,4], but I witnessed the advent of MRI scanning, later PET and 'clever' labelled isotope scans of various forms and modalities. Many of these imaging techniques, such as MRI, were initially 'niche' or restricted to certain narrow domains, yet are now used in all corners of medicine and surgery. Whereas a simple X-ray sufficed for most orthopaedic complaints, it is now not uncommon to MRI-scan everything that moves! Advances in oncology, endocrinology, diabetes . . . the list goes on and on . . . have been astounding. Refinements in care have been supported by new investigations, assays, gizmos (e.g. smart-readers for glucose monitoring[5]), delivery devices and an entire field of Interventional Radiology.[6] 'Clever' targeted medications have been developed in all pharmacological fields including chemotherapy, radioisotopes, biologicals, . . . etc, etc. The MAB family of drugs alone, i.e. those ending in 'mab' (monoclonal antibodies), have increased astronomically since their introduction during the early part of the millennium![7]

In Neonatology, surfactant[8] to name just one drug, revolutionised the morbidity of premature babies: in the pre-surfactant era (my time!) neonatal senior house-officers (BST1 or 2 equivalents) were up all night intubating and re-intubating tiny tracheae, followed by repeatedly inserting chest drains to relieve air leaks as a consequence of the severity of RDS without surfactant, coupled with the barotrauma that was commonplace with early, crude pressure-driven ventilation techniques. The morning hand-over listed the number of chest drains inserted (usually several!), whereas nowadays most Resident Specialists in Neonatology are required to carry out this procedure very infrequently, such that many are not confident to do so!

Surgical techniques for both children and adults across the board have also changed drastically and, increasingly, supported (or taken over?) by artificial intelligence-driven methodology. Advances and additions in vaccinology (not just for children but expanded to include the elderly, pregnant women, etc.), Public Health and, dare I add, the management of a pandemic have all materialised during my working lifetime.

The jack of all trades – 'Generalists' – have become a rare species, replaced by superspecialists that in some cases are restricted to single-disease consultants. A healthy mix of doctors with different skill sets that can work symbiotically with one another is probably the ideal. Genetics is the buzz-word in nailing a diagnosis for so many diseases and, in many cases, a particular gene mutation will determine treatment options and outcome. Indeed, the influence of genetics in patient management cannot be underestimated and will only continue to increase.

Ultimately, all of the above – by no means comprehensive review – of changes in medicine over 40 years or so have dramatically improved the options for patient care. Thankfully, this has not always been at the expense of the humane side of the caring profession, although it has increased the cost of healthcare tremendously. Inevitably, there is a price to pay for ever-improving Healthcare and this needs to be accepted and budgeted for by the powers-that-be. I look forward to the new changes over the next 40 years...!

REFERENCES

1. Attard Montalto SP, Gatt M, Changing clinical activity in Paediatrics in Malta, 1996-MMJ. 2014; 26:(1) 3-7.
2. Rao SV, O'Donoghue ML, Ruel M, et al. 2025 ACC/AHA/ACEP/NAEMSP/SCAI Guideline for the Management of Patients With Acute Coronary Syndromes: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines. Circulation. 2025: 151:(13)e771-862.
3. Friedland F Present status of ultrasound in medicine. J Am Med Assoc. 1957; 163:(10) 799-803.
4. Raju TN. The Nobel Chronicles. 1979: Allan MacLeod Cormack (b1924); and Sir Godfrey Newbold Hounsfield (b1919). Lancet. 1999; 354(9190): 1653.
5. Bailey TS, Wallace JF, Pardo S, Warchal-Windham ME, Harrison B, Morin R, Christiansen M. Accuracy and User Performance Evaluation of a New, Wireless-enabled Blood Glucose Monitoring System that Links to a Smart Mobile Device. J Diabetes Sci Technol. 2017; 11:(4) 736-743.
6. Brock KK, Chen SR, Sheth RA, Siewerdsen JH. Imaging in Interventional Radiology: 2043 and Beyond. Radiology. 2023; 308(1):e230146.
7. von Mehren M, Weiner LM. Monoclonal antibody-based therapy. Curr Opin Oncol. 1996: 8:(6) 493-8.
8. Possmayer F, Zuo YY, Veldhuizen RAW, Petersen NO. Pulmonary surfactant: A mighty thin film. Chem Rev. 203; 123:(23) 13209-90.

Corinthia Group Prize in Paediatrics for 2025

The Corinthia Group Prize in Paediatrics for 2025 was awarded to Dr Nathaniel Mercieca, who obtained the highest aggregate mark over the combined examinations in Paediatrics in the fourth and final year of the undergraduate course. Whilst offering our congratulations to Dr Mercieca, we would also like to congratulate all those who performed admirably during the undergraduate course in Paediatrics. In the accompanying photograph, Dr Mercieca is seen receiving her prize from Professor Simon Attard Montalto, Head of Paediatrics. Finally, the Academic Department of Paediatrics and Medical School remain indebted and are extremely grateful to the Corinthia Group for their ongoing support.