



A Journey of Discovery The road less travelled

Inaugural Lecture

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FACULTI PERUBATAN
Faculty of Medicine

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SYNOPSIS:

In my inaugural lecture, I will explore the transformative theme of self-discovery and its profound impact on both personal and professional growth. Drawing from my extensive experience in occupational and public health, I will share insights from my unique career path, characterised by a willingness to explore unconventional routes and embrace new challenges. By delving into the significance of self-discovery, I aim to illustrate how stepping off the beaten path can lead to innovative solutions and a deeper understanding of oneself and the world.

I will recount my journey from a physician to a leader in occupational health, highlighting key moments of introspection and decision-making that have guided my career. These experiences underscore the importance of adaptability and continuous learning in navigating the complexities of public health. By reflecting on these broader implications, I will emphasise how self-discovery can inform public health strategies, enabling us to address complex health challenges more effectively.

My lecture aspires to inspire the audience to embark on their own journeys of discovery. I will encourage them to question the status quo and pursue paths that align with their passions and values. By embracing the road less travelled, we can unlock our true potential and make meaningful contributions to society. This journey of exploration not only enriches our own lives but also has the power to impact the world in significant ways.

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Professor Victor Hoe Chee Wai is a distinguished academic and expert in occupational and public health. He currently serves as Professor of Occupational and Public Health and Head of the Department of Social and Preventive Medicine at the Faculty of Medicine, University of Malaya in Kuala Lumpur, Malaysia.

Professor Hoe obtained his medical degree from the University of Mangalore, India in 1995. He went on to earn multiple postgraduate degrees, including a Master of Public Health, Master of Public Health (Occupational Health), and Master of Engineering (Safety, Health and Environment) from the University of Malaya. He further expanded his expertise with a Master of Occupational Safety and Health from the University of Turin in 2017. In 2013, he completed his Doctor of Philosophy at Monash University in Australia.

With over 20 years of experience in academia, Professor Hoe has made significant contributions to teaching, research, and service. His teaching focuses on undergraduate medical programs and postgraduate public health programs, covering topics such as occupational health, environmental health, and health risk assessment. He has supervised numerous postgraduate students at the PhD, clinical master's, and master's levels.

Professor Hoe's research interests span a wide range of occupational and public health issues. His current research projects examine musculoskeletal disorders among teachers, health impacts of shift work, prevention of work-related upper limb disorders, and environmental impacts of e-cigarette smoking. He has published extensively, with over 50 journal articles in ISI/Scopus-indexed publications and numerous conference presentations.

As a recognized expert in his field, Professor Hoe has received several prestigious awards and fellowships. He is a Fellow of the Academy of Medicine Malaysia and the Academy of Occupational and Environmental Medicine Malaysia. He was awarded the International Commission on Occupational Health's International Labour Organization (ILO) Master Fellowship and has received multiple awards for his research presentations and innovations.

Professor Hoe is actively involved in professional societies and editorial boards. He serves as an editor for the Medical Journal of Malaysia and the Journal of Health and Translational Medicine. He is also an associate editor for BMC Musculoskeletal and a guest associate editor for Frontiers in Public Health. His expertise is further recognized through his membership on the international advisory board for Occupational Medicine Oxford.

During the COVID-19 pandemic, Professor Hoe has played a crucial role in public health communication and policy. He has appeared in over 120 newspaper, online news, radio, and TV interviews, providing expert commentary on the pandemic. He has also published numerous articles for public consumption on COVID-19 related topics.

Throughout his career, Professor Hoe has demonstrated a commitment to advancing occupational and public health through research, education, and service. His multidisciplinary expertise and dedication to improving health outcomes have made him a respected figure in the field both nationally and internationally.

PROLOGUE

It was during my secondary school at Bukit Bintang Boys Secondary School (BBBS), almost 40 years ago, that I first read the poem written by Robert Frost, “The Road Not Taken”.

*Two roads diverged in a yellow wood,
And sorry I could not travel both
And be one traveller, long I stood
And looked down one as far as I could
To where it bent in the undergrowth;

Then took the other, as just as fair,
And having perhaps the better claim,
Because it was grassy and wanted wear;
Though as for that the passing there
Had worn them really about the same,

And both that morning equally lay
In leaves no step had trodden black.
Oh, I kept the first for another day!
Yet knowing how way leads on to way,
I doubted if I should ever come back.

I shall be telling this with a sigh
Somewhere ages and ages hence:
Two roads diverged in a wood, and I—
I took the one less travelled by,
And that has made all the difference.*

Robert Frost, 1975

Secondary school was an interesting time, especially in an all-boys school (well almost, there were girls joining the school for form six, I will be sharing more of my school life later). I still remember the poem which was one of the few that we read in our class. There was much debate on its meaning, however, the line that stuck in my head was '**Two roads diverged in a wood, and I—I took the one less travelled by, and that has made all the difference.**' This sentiment encapsulates the essence of my journey in my professional and personal life. I need to start from the beginning to help you to understand the things in my life that have made me who I am today. There are times of joy and times of tribulations, times of success and times of failures. All those experiences have enriched me and has make me better at who I am and what I do.

I hope this is true, however, a disclaimer, I am only telling my side of the story here. I am not going to share my whole life story here, only the part that matters, as there are parts of me which is still personal, and it will be between me, myself and I.

I am going to share with you my journey and the choices that I have make that has bring me before you today in my Professor's Inaugural Lecture.

THE BEGINNING

I remember the stories my parents would tell me about the day I was born, a day that marked a new chapter in our family's history. It was the early hours of a Saturday morning on April 19, 1969, the day was dawning quietly, the air still and expectant, as if nature itself paused to welcome a new life. The cry of a newborn was heard in the maternity room of the **Rumah Sakit Universiti**. There was a sudden silence, followed with a swift flurry of activity, as the doctors examined the newborn, a sudden concern crossed their faces as they found that the baby was not "normal". My head circumference was large, it exceeded the upper-limit of the two-standard deviation. My mother and I must stay in the wards for a few more days so the doctors can do further test to ensure that I was in a good health before being discharged.

This is just how I have imagined it, most of it was me hallucinating, the only part that is true was that my head was big and the doctors kept us in the ward for an extra few more days. Just a warning, many parts the story was how I have imagined it, so please bear with me.



Figure 1 - Rumah Sakit Universiti (Universiti Hospital)

We used to have this tales on how our names come about, "Fun" my elder sister, the first of the Family, means more, "May" or in Cantonese "Mui" means the beauty, "Mei" means last, and "Wan" means feeling dizzy, and "Wai" means glorious.

I am the third child of my loving parents, Judy and Bobby Hoe, and the fifth grandchild to my loving grandparents, Ho Kai and Phoon Lai Wah. What made my arrival particularly special was that I was the first son to my parents and first grandson to my grandparents. There was joy and excitement that filled our home on that day. Before me came a parade of

strong, vibrant women who would shape my early years. My two elder sisters, Suit Fun and Suit Mei, had already filled our home with laughter and the sweet chaos that only siblings can bring. Beyond our immediate family, my two elder cousin sisters, Suet May and Suet Wan, completed our little band of five grandchildren. Together, we formed a tight-knit group, bound by blood and shared experiences.

Just after my birth, the country was plunged into a state of emergency following the racial unrest that erupted after the General Election in May 1969. These events, known as the **13 May Incident**, led to a declaration of emergency and the imposition of a curfew across the nation. My mother would tell me that we were lucky as we were discharged from the hospital before the curfew and was able to go home. Despite the chaos outside, within the walls of our home in Petaling Jaya (PJ), a different kind of story was unfolding—a story of family, tradition, and resilience.

In Cantonese culture, the "**full moon**" celebration, marking 30 days after a child's birth, is a cherished tradition. It symbolises the baby's coming-of-age and the mother's emergence from confinement, celebrated with family and friends. Red eggs and pickled ginger are shared as gifts, representing good luck and the hope for more grandchildren. However, due to the curfew and unrest, our celebration was a modest affair, limited to our immediate family. The streets outside were patrolled by soldiers, and the usual hustle and bustle of PJ had come to a standstill.

The scarcity of resources during this time was palpable. Eggs, a central element of the full moon celebration, were in short supply. Yet, my family, determined to uphold tradition, saved the last three eggs for the ceremony. These eggs, dyed red for good luck, became a symbol of our family's perseverance and commitment to cultural heritage, even in the face of adversity.

On the day of the celebration, our home was filled with a sense of quiet joy and gratitude. The red eggs and pickled ginger were laid out, a testament to our family's ability to adapt and find joy amidst uncertainty. My family gathered around, sharing stories and laughter, their spirits unbroken by the events outside. It was a poignant reminder of the strength and unity that defined us—a family bound by love and tradition, navigating the challenges of the world together.

The full moon celebration, though small and intimate, was a powerful affirmation of our cultural identity and the enduring bonds that held us together. It was a celebration not just of my birth, but of the hope and continuity that family represents, even in the most trying of times.

As I pen down these memories, I'm transported back to those early days, feeling the weight of the legacy I was born into and the love that has carried me through life. This is where my story begins – in a home filled with laughter, in a family bound by love, and in a community that would shape the person I would become.

The Early Years

In the early years of my life, our home in PJ was full of people as all of us stayed under one roof, my granddad, grandma, grand aunty, parents, uncles, aunties, sisters and cousins. It was a vibrant tapestry of laughter and love, woven together by the presence of my immediate and extended family. The house was always bustling with activity, filled with the sounds of children playing, meals being prepared, and the gentle hum of conversations that carried the wisdom of generations. It was a place where joy was a constant companion, nurtured by the close-knit bonds that tied us all together.

Central to our family's daily rhythm was the shared commitment to **Malaya Optical**, located on High Street in Kuala Lumpur. My dad, along with my granddad, grandma, and uncle, Kum Kai, all worked there in various capacities. My granddad and grandma, worked behind the cashier, my father was the optician and Kum Kai working as optical technician. Their dedication to their work was a testament to the values of hard work and perseverance that were deeply ingrained in our family ethos. From Monday to Saturday, they left the house early in the morning, embarking on their daily journey to the bustling city, where they spent their days contributing to the family business.

Their workdays stretched from 9 am to 6 pm, Monday to Saturday, and it wasn't until the sun dipped below the horizon that they would return home. Despite the long hours and the demands of their jobs, their homecoming each evening was a moment of celebration. As the sound of their car approached, a wave of excitement would ripple through the house. We would gather eagerly at the door, ready to greet them with smiles and stories of our day's adventures.

The evenings were a cherished time, where the family would come together to share a meal and recount the events of the day. The dining table became a place of connection, where laughter flowed freely, and the bonds of family were strengthened. My father's stories of the city, my granddad's gentle wisdom, and my uncles' playful banter filled the room, creating memories that would stay with me for a lifetime.

These early years, marked by the rhythm of work and the joy of family reunions, laid the foundation for my understanding of what it means to belong to a family. It was a time of innocence and wonder, where each day was an opportunity to learn and grow under the loving guidance of those who came before me. The happiness that filled our home was a reflection of the love and dedication that each family member brought to our shared life, a legacy that continues to shape my journey.

My subsequent encounters with Rumah Sakit Universiti

The encounters that I have with Rumah Sakit Universiti which was later renamed Universiti Hospital (UH) did not stop when I came home after my birth. Remember, during my birth, the doctors think that **my head is too big**, well they felt that I need to continue with follow up at UH. I came under the capable care of **Prof Dr K. Somasundram** the first Paediatric Surgeon in Universiti Malaya (UM) and **Assoc Prof Dr Jagdish C Chawla** the first Neurosurgeon. The follow-up lasted till I was six years old just before I started my primary school. Trips to the UH was always an adventure, and I always enjoyed them. During those days, there was not much entertainment at home, so getting out of the house was really something we look forward to. It was always my mother and me.

There was no TV in the morning both RTM1 and RTM2 only started their broadcast at around 5-6 pm in the evening, and of course there was no computer or internet

My mother is a strong woman and a home maker. She is my nurturer and caregiver, my educator and mentor, and my emotional anchor and confidante.

We must take the bus to UH, there were only two buses that ply the route near my house, the Sri Jaya bus no. 238 and 50. The Sri Jaya bus no. 50 (Green Line) ply the route between Sentosa Cinema, and State PJ, and **Sri Jaya bus no. 238 (Red Line)** connects us to Klang bus stand in Kuala Lumpur city centre (the current Pasar Seni bus stand). We will take the 238 as it passed through Jalan University on the way to Kuala Lumpur. My mother will make the trip more an adventure, she makes the walk from the bus stand to the UH a joy – she will say,

“We will have to go through a jungle track and then enter a tunnel leading to the hospital”. It’s a wonder of how words and imaginations can make a boring and trivial walk to an adventure that I remember.

Now I wonder, why the doctors need to see me so many times. Are they worried or am I part of the bigger experiment? Anyway, I am happy that I am taken care of and came out 'OK'.

The School Years

My educational journey began at the age of five when I attended Pui Chee Kindergarten, just a short walk from my home. Both of my sisters attended the same kindergarten, creating a familial thread that wove through my early educational experiences. Every day, my mother would accompany me to and from school, her presence a comforting constant as I stepped into the world beyond our family for the first time. Interacting with other children was a new and challenging experience for me. I was somewhat of a “**grumpy boy**”, as my teachers recall that often I would mumble on my way back to my seat after being “taught”—a quirky habit that perhaps hinted at my introspective nature or the way that I was brought up to never speak up to my elders.

So, it is one of the defence mechanisms that I have developed, talk to me, myself and I

Primary School Adventures

My primary education was at **Sekolah Rendah Alam Shah (Dua)**, located on Jalan Bukit in PJ, just a stone throws away from UH. The school shared its building with Sekolah Rendah Alam Shah (Satu), leading to an interesting schedule where our classes alternated between afternoons in the first half of the year and mornings in the second half. Both of my sisters also attended the same school—my elder sister was five years older, and my second sister was three years older—so for the first three years, we shared the same educational environment.

Those six years at Sekolah Rendah Alam Shah (Dua) were filled with a mix of joyful and challenging moments. We took the school bus daily, which gave us ample time before and after school to engage in various activities to build friendships. I thoroughly enjoyed this time, running around the schools in games like “catching” and “police and thief”. More often than not, I would arrive to class sweaty and exhilarated from the morning’s activities. Those carefree moments of play were some of the happiest times of my school years.

However, this period of uninhibited fun didn't last indefinitely. One unfortunate day, I had a bad accident while running around. Injured and in pain, I called my mother, expecting comfort and sympathy. Instead, her reaction was quite the opposite of what I anticipated. Concerned for my safety, she decided from that day forward to personally drop me off and pick me up from school each day. This change meant less time for play before and after school, but it also reflected her deep care and desire to protect me.

Academic Challenges and Personal Growth

In the classroom, I was able to follow along with the lessons, but my grades were not among the top in my class. Language was a particular challenge for me in both English and *Bahasa Melayu*. I wasn't exactly the model student either and was sometimes labelled as "**sangat nakal**" by my class teacher. This reputation stemmed from my spirited nature and a unique learning style that didn't always align with my teacher's expectations or methods. The experience of being labelled will later shape how I treat my students now, understanding that everyone is special and unique.

Sports were another area where I faced challenges. I wasn't particularly athletic and did not excel in sports. I tried out for the hockey team but didn't make it, which was a bit disappointing. Nevertheless, these experiences taught me valuable lessons about perseverance and accepting that not every attempt leads to success.

Memorable Encounters with the University Hospital Dental Team

One of the more positive and enduring memories from my primary school years was the regular visits from the Dental Team from the UH. They would come to our school to conduct dental examinations, and students who required further care were taken by their van to the hospital which is just around the corner. I always looked forward to these trips—not just because they provided a welcome break from classes but also because of the fascinating experiences they offered.

At the dental clinic, the staff would show us around and introduce us to various health promotion materials. I vividly remember the UV machine that highlighted food particles left on our teeth, a visual lesson that left a lasting impression on me. Our school was also selected to participate in a demonstration of proper toothbrushing techniques for a news segment on RTM. Being part of this event was exciting, and the lessons I learned about dental hygiene during that time have stayed with me to this day. The way the boring act of brushing is transformed into a dance rhythm-up-down, for-back, 1, 2, 3, 4, 5, 6, 7, 8.

Time for Secondary School

As I approached the end of my primary education, selecting the right secondary school became a significant concern for my parents and sisters. My spirited nature and the reputation I had developed made this decision particularly challenging. They were worried that enrolling me in an unsuitable school with negative peer influences might lead me down a precarious path. At that time, most students from Sekolah Rendah Alam Shah (Dua) typically advanced to Sekolah Menengah Sultan Abdul Samad, which had a reputation—perhaps unfounded—for being a “gangster” school. Regardless of the accuracy of this reputation, my parents were not willing to take the risk.

In their quest to find a conducive learning environment for me, they registered me for the entrance evaluation at Sekolah Sri Inai in Kuala Lumpur, one of the few private secondary schools available at the time. The experience was intriguing; taking the entrance exam and immersing myself in a private school setting offered a glimpse into a different educational landscape. Although I passed the entrance evaluation, my parents ultimately secured a place for me at **Bukit Bintang Boys Secondary School (BBBS)**. Continuing my scholarly journey there proved to be the right choice, as the experiences and lessons I gained at BBBS significantly contributed to shaping the person I am today.

The BBBS experience

Moving from the familiar confines of my small primary school—with just two main buildings—to the expansive campus of BBBS was both exciting and overwhelming. The school's sprawling layout, felt like a maze. On my first day, I found myself lost amid the corridors and staircases, a physical manifestation of the new journey I was embarking upon.

Adjusting to this new environment posed its challenges. Most of my primary school classmates had enrolled in different schools, so I was starting afresh without the comfort of familiar faces. Being accepted by my peers was incredibly important to me. Many students at BBBS had come from the feeder schools—Bukit Bintang Boys Primary School 1 and 2—and had longstanding friendships. Integrating into these pre-existing social circles required effort and perseverance. This situation pushed me out of my comfort zone, compelling me to develop my communication skills and build new friendships. Over time, this experience boosted my confidence in meeting new people and navigating unfamiliar social settings.

An All-Boys Environment

BBBS was an all-boys school, except for the Form 6 classes where girls were present. Learning in an all-boys environment had its advantages. Without the distractions that sometimes come with co-ed settings, I found it easier to focus on my studies and extracurricular activities. The brotherhood among the students was strong, and friendships formed one of the central pillars of my secondary school experience.

However, this setting also had its drawbacks. Communication with the opposite sex became a challenge me, especially as I navigated the tumultuous years of adolescence. Interactions with girls were limited, primarily occurring through joint activities with nearby girls' schools such as Assunta, Sri Aman, and Taman Petaling. These occasions were both exciting and nerve-wracking, highlighting the social gaps that an all-boys environment could inadvertently create.

Embracing Extracurricular Activities

From an early age, my father had expressed his wish for me to pursue a career in medicine, viewing it as a noble profession. He preferred that I not follow in his footsteps into the optical business, even though Malaya Optical was thriving in KL at the time. With this guidance, I sought out activities that would align with this future path. In Form Two, I joined the Red Crescent Society (RCS) and remained an active member until I finish my secondary schools.

Being part of the RCS was a formative experience. We learned essential skills such as first aid, teamwork, leadership, and discipline. The many activities organised by RCS offered numerous opportunities for personal growth. Among them were the memorable three-day camping trip at the Central Police Brigade Headquarters in Cheras. Although it is just in Cheras, at those times there were still primary jungles. The was the first-time we use a hammock-camp, where our camp was above ground to avoid the undergrowth and crawling insects and small mammals. Our camps were within where we honed our survival skills and teamwork. Organising a blood donation campaign at the school fostered a sense of community service. A collaborative visit to the Gurney Blind Centre with the school's Leo Club heightened my awareness of the challenges faced by people with special needs and deepened our empathy.

Our involvement extended to providing medical support during significant events. We were present at the school's Annual Sports Day and Cross-Country runs, ensuring the safety and well-being of participants. Externally, we assisted during the opening of McDonald's Bangsar and supported sports events organised by Sime Darby and Dunlop at Padang Timur. Contributing to the Selangor Teachers' Day Celebration in Shah Alam and offering medical assistance during the Sukan Malaysia Swimming Championships at the MPPJ swimming pool were among our notable services. Participating in the training with the Fire Brigade at Kuala Kubu Bahru and participation in advanced first aid courses have enabled me to not just improve my first aid skills but also skills in disaster preparedness.

During the times at RCS, it was my first foray into significance of symbols in international politics. When the history of the International Federation of Red Cross and Red Crescent Societies was presented to us, I found that there were three main symbols, i.e., the Red Cross, the Red Crescent and the Red Lion with Sun symbols, each of the symbols has its existence due to the interrelations between organisations, religions and politics.

One more memorable anecdote from this time was when a tailor came to measure us for our RCS white uniforms, which included a beret. He was surprised to find that my head circumference was 24 inches. A form six girl remarked that it was the size of her waist, a moment that humorously highlighted my apparently large head. That was the time that I really understood how big my head was.

Another significant extracurricular involvement was with the Maintenance Club, a rather unique society not commonly found in schools. The club's main activities revolved around maintaining and repairing the school's furniture. We learned practical skills like woodworking, metalworking, and even welding. The hands-on experience was immensely satisfying, allowing me to work with my hands and see tangible results from our efforts.

The Maintenance Club operated with minimal supervision from teachers, fostering a sense of independence and peer-to-peer learning. One notable project was repairing the school's perimeter fence along Jalan Utara. The fence was frequently broken because students would dismantle it to create a shortcut. A fellow club member and my classmate, Thomas Loke, suggested that installing a gate might solve the problem. We implemented this idea, and the fence remained intact thereafter. This taught me valuable lessons about problem-solving, empathy, and the importance of understanding the needs of those affected by an issue.

Our club advisor, Ms. Jacqueline Toh, acknowledged our efforts in her memoirs, expressing pride in our dedication and contribution to the school. In her memoirs, she wrote:

"BB can also boast of the fact that it has one of the finest maintenance crews among the Petaling Jaya or Selangor schools. The love for the school and the unselfishness is so obvious when one sees the total dedication the Maintenance Club boys put into the repairing of school furniture and maintenance of the other parts of the school. At this juncture, the efforts of the members of the Interact Club, Leo Club, Scouts, Red Crescent, and other societies must be applauded too. I am proud to have been the advisor (and working member) of the Maintenance Club and to be associated with this group of fine and dedicated workers who have done a great service for the school."

Our clubroom became a central hub of activity—a makeshift clubhouse where we spent our breaks listening to music on a portable record player someone had brought in. It was a place of brotherhood and occasional mischief, as we sometimes excused ourselves from class under the pretence of club duties to spend time there. These moments were integral to my teenage years, contributing to personal growth and lifelong memories.

Leadership and Initiative in Clubs

As I progressed to Forms Three and Four, it became 'mandatory' for students to join a social club. The primary options were the Leo Club and the Interact Club. Most of my friends joined the Leo Club, which was associated with the PJ Lions Club, where my uncle Kum Moon was a member. My father was involved with the Gombak Rotary Club, which did not govern clubs in PJ. Seeking to chart my own course, I chose to join the Interact Club, despite knowing it might be a lonelier path.

This decision sometimes left me questioning whether I had made the right choice, especially when I saw my friends enjoying the social activities of the Leo Club. However, the Interact Club offered its own opportunities. I was elected as the Funding Director, responsible for identifying and securing funding opportunities for the club. Initially, my father was concerned, thinking I might have to use personal funds. Once I explained my role and responsibilities, he was supportive and pleased with my involvement.

One of our significant accomplishments was organising a warehouse book sale in collaboration with Federal Publications. The event was a success, generating substantial sales for the publisher. This experience enhanced my organisational and communication skills, providing practical experience in project management and teamwork. After the Form 5 (Sijil Pelajaran Menengah) examination, the publisher even offered me a job, which I declined as I had plans to work at my dad's shop, Malaya Optical.

Our community service efforts included visits to the Spastic Centre, where we conducted work sessions and fostered a sense of social responsibility. Participating in flag day fundraisers and collecting food donations for the centre highlighted the importance of giving back. Besides this the club's International Understanding organised cultural activities mostly between schools in the Petaling Districts. These activities become a venue and opportunity for us to connect with students from other schools. There were fashion shows and 'Best of P.J.' music and drama competition. It was where I learn to respect for different gender and race. Organising these events provided practical experience in leadership and teamwork, contributing significantly to my personal development.

Witnessing Public-Private Partnerships

During my time at BBBS, I observed firsthand the impact of innovative initiatives on the school's infrastructure and student life. When I first enrolled, the school's sporting facilities were limited. We had one indoor badminton court situated in our only assembly hall, a few open-air badmintons and *sepak takraw* courts, and a tennis and basketball court. Recognising the need for better facilities, one of our teachers, Mrs. Jacqueline Toh, spearheaded a public-private partnership to upgrade the school amenities.

The initiative involved renovating the canteen and constructing a five-court badminton hall above it, along with 12 squash courts, two of which were glass-backed for competitions. This was a groundbreaking project, as there were limited public badminton and squash courts in PJ at the time. The private company managed the courts after school hours, while students had access during school times. This venture transformed BBBS into a focal point for squash, contributing to the development of the sport in Malaysia.

Mrs. Toh reflected on this achievement:

"Today, thanks to privatisation and the efforts of Mr. C.T. Chan together with the cooperation of the Headmaster, Mr. Oh, and the School Board, BB has something to be very proud of. Which school in Malaysia can boast of having 12 squash courts (2 glass courts for competitions) and 5 badminton courts on its school grounds? Well, BB has indeed gone a long way, and we must make sure that it maintains its position as the best squash school in Malaysia."

This experience taught me the value of collaboration between public institutions and private entities, highlighting how such partnerships can bring about significant improvements in community resources.

Academic Pursuits and Personal Challenges

Despite my enthusiasm for school life, academics presented their own set of challenges. I excelled in mathematics and science, subjects that appealed to my logical and analytical nature. The clarity of mathematical concepts and the tangible understanding of scientific principles resonated with me far more than the nuances of literature and poetry. Art was another area where I struggled; I only managed to get C my art subjects.

Language proficiency, particularly in *Bahasa Melayu*, was a persistent hurdle. My difficulties with language arts affected my overall grades, preventing me from securing a place in the top classes. This was a source of emotional challenge, especially since my two elder sisters,

Suit Fun and Suit Mei, and my cousin sister, Suet May, consistently achieved top rankings at their school, Sri Aman Girls Secondary School. Suit Mei and Suet May were even recognised as top students upon graduating. In contrast, I was seen as less academically inclined, which caused my parents to worry about my prospects.

Form Three was a particularly stressful year due to the *Sijil Rendah Pelajaran* (SRP) examination, a critical assessment that would determine my placement in the upper forms. The possibility of being assigned to the Arts stream loomed over me, which would have derailed my ambition to pursue medicine—a path I was encouraged to follow to fulfil my father’s wishes. During assemblies, I would watch the Form Four and Five students heading to their science classes, yearning to be among them.

When the SRP results were released, it was a significant relief to learn that I had performed well enough to continue in the Science stream. My passion for mathematics and science continued to flourish in Forms Four and Five, and these subjects remained my strongest areas. Passing Bahasa Melayu with a C6—just enough to meet the passing criteria—in my *Sijil Pelajaran Menengah* (SPM) was another relief, as it allowed me to continue with my studies.

An Adventure at Outward Bound School

During the break after the SRP examination, in 1984, my dad enrolled me for Outward Bound Schools (OBS) in Lumut, Perak to attend the 2nd Children Programme. It was a 10-day programme, blending excitement, learning, and personal growth through a series of carefully curated activities. We were divided into three groups, the senior boys, girls and junior boys. All of us, the senior boys, were housed on the hill with the in the Irau dormitories. There were various activities organised starting from the early morning jogs through the hiking trails, followed with different activities each day, e.g., abseiling, raft-building and rafting, canoeing, water survival skills training, basic first aid training, and team building activities. The highlight of the programme was canoeing trip across the Selat Dinding from Telok Batek to the Island of Pangkor which is more than 3 km and setting up the camp on the island itself. The challenges we faced taught me resilience, teamwork, and leadership.

My adventure at OBS was more than just an outdoor experience; it was a journey of self-discovery that left an indelible mark on my life.

Closing Chapter of Secondary Education

I briefly attended Form Six in BBBS but left after a few days, as I had already planned my next adventure: pursuing further studies in India for pre-university and medical school. Reflecting on my time at BBBS, I recognise how these formative years shaped my character, skills, and aspirations. The combination of academic challenges, extracurricular involvement, and personal experiences contributed to a well-rounded education that extended beyond textbooks and classrooms.

Reflection

My years at Bukit Bintang Boys Secondary School were a transformative period filled with growth, learning, and self-discovery. Participation in societies like the Red Crescent Society, the Maintenance Club, and the Interact Club provided practical experiences that fostered leadership, teamwork, and a strong sense of community service.

The RCS taught me valuable medical skills and the importance of being prepared to assist others in times of need. Providing medical support during various events and participating in training programmes deepened my understanding of service and responsibility. The Maintenance Club allowed me to work with my hands, understand problem-solving from a practical perspective, and appreciate the value of caring for shared resources. Collaborating on projects like repairing the school fence taught me lessons in empathy and innovative thinking.

The Interact Club broadened my horizons, emphasising international understanding and the impact of **“Service Above Self.”** Organising events, engaging in community service, and fostering international connections enriched my perspective and enhanced my interpersonal skills.

Witnessing initiatives like the public-private partnership for sports facilities expanded my understanding of collaboration and community development. Academically, while facing

challenges, I found my strengths and passions in mathematics and science, which guided my future academic pursuits.

These experiences underscored the importance of perseverance, self-reflection, and embracing opportunities—even those that deviate from the expected path. As I stood on the cusp of a new chapter, preparing to continue my education abroad, I carried with me the lessons and memories from BBBS, ready to face the adventures that lay ahead.

Malaya Optical: A Second Home

I cannot tell my life story without sharing the time I spent at Malaya Optical, located on Jalan Bandar in Kuala Lumpur. For as long as I can remember, this place was like a second home to me. During my early years, entertainment options at home were limited, so any opportunity to venture out was always welcome. Almost every Saturday, we would go down to Kuala Lumpur for breakfast, and afterward, my mother would take us to visit my maternal grandmother who lived on Petaling Street, just next to Jalan Bandar.

She stays in a small, rented room on the first floor of a shop; to reach it, we had to climb the back stairs, which were steep and dimly lit. My mother would leave me with my grandmother while she completed her grocery shopping at Madras Lane—where the Shaw Brothers' Madras Cinema once stood before it burned down in 1978. At that time, the Madras Lane market and the nearby Central Market were among the main places for grocery shopping in Kuala Lumpur and the surrounding suburbs of PJ.

Stories of Resilience and Family

Spending time with my grandmother was special. She would share stories of her life as a hawker selling noodles at the site where Menara Maybank now stands. She would tell me the story of my maternal granddad, who worked as a staff cook catering to goldsmith shops, as food options were limited back then, and most shops hired cooks to prepare meals for their employees. Tragically, he fell and passed away, leaving my grandmother to fend for herself and her five children.

She recounted how she had to run from authorities because she didn't have a license for her stall—a terrifying experience. Eventually, one of her kind customers helped her secure a license, allowing her to continue her business legally. Through her hard work, she was able to raise my mother and her siblings.

My mother also shared stories from her childhood. As the youngest in the family, she often faced hardships, especially during mealtimes. With my grandmother at work, her older sisters prepared meals, which often consisted of rice and a single salted egg. Being the youngest, she was usually left with only half an egg.

These stories of my mother's early struggles taught me the value of family and resilience. I often wondered how different her life might have been if my granddad had still been around. Yet, I realised that every event shapes the future, and dwelling on "what ifs" can detract from appreciating the present.

After our visits, we would take the Sri Jaya bus No. 238 back to our home in PJ.

Growing Up at the Shop

As I began attending school, our routine changed. Instead of returning home with my mother, I would spend the entire day at the shop. It was a vibrant environment where I mingled with my grandfather, grandmother, father, uncles, staff, customers, and salespeople who came to promote their latest spectacles and contact lenses. I listened to their stories and began learning about the optical trade.

My father often explained how the optical industry in Malaysia differed from that in England. He had the opportunity to travel to England during the early years of Malaya Optical to train as an optician and learn about the trade. In England, the industry was well-organised and governed by a professional body. Clients made appointments for eye examinations, and prices for refractions and spectacles were standardised.

In contrast, the optical business in Malaysia at the time was like the Wild West—a free-for-all situation where anyone with limited experience could open a shop. It functioned more as a retail market than a professional service. There was no governing body to regulate opticians and optometrists; the Malaysian Optical Council was only established in 1992. This lack of regulation was one reason my father did not want me to venture into the optical trade.

Exploring Kuala Lumpur

The area surrounding the shop—Jalan Bandar, Petaling Street, Jalan Sultan, Madras Lane, Jalan Cecil, Pasar Seni, Kota Raya—was my backyard. I spent much of my early life and teenage years exploring these streets. I witnessed the city change over the years: the transformation of Central Market into Pasar Seni, the erection of new buildings like the Main Post Office, Dayabumi, and Menara Maybank. Kuala Lumpur was a safe place back then, and having the freedom to explore it on my own gave me confidence and a sense of independence.

As my uncles Kum Moon and Kum Seong returned from their studies in New Zealand, the business expanded from a single shop in Jalan Bandar to include two more locations on Jalan Bukit Bintang and in Pertama Complex. This expansion broadened my horizons and allowed me to explore even more of the city.

My dad – the craftsman

Watching my father work in his contact lens laboratory was nothing short of mesmerising. With meticulous precision, he transformed a small cylindrical piece of plastic—just 2 centimetres in diameter and 0.5 centimetres in length—into a delicate contact lens less than 1 centimetre in diameter and a mere 0.01 centimetres thick. The process was intricate and required detailed calculations for each individual lens. He would adjust the machine's settings meticulously, ensuring that every parameter was tailored to the specific needs of the client.

The creation began by cutting one surface of the plastic cylinder into a concave shape that matched the curvature of the client's cornea as the lens need to be perfectly flush to the cornea with only a single layer of tears separating them. This required exact measurements to ensure a perfect fit. Then, he carefully shaped the opposite surface into a convex form to achieve the necessary dioptre or power correction based on the client's vision requirements. This dual-surface crafting meant that each lens was a unique piece, customised to provide optimal visual clarity for the wearer.

In the beginning, my father devoted his weekends to working in the contact lens laboratory, diligently completing orders while continuing his role as an optician during the weekdays. His dedication was unwavering; despite the long hours, he remained passionate about providing the best possible solutions for his clients. Observing his commitment and the artistry involved in his work left a profound impression on me. It exemplified the blend of science and craftsmanship that defined his approach to his profession, and it instilled in me a deep appreciation for the meticulous effort required to excel in one's craft.

Expanding the business

Simultaneously, my uncle Kum Kai started manufacturing customised prescription lenses for spectacles. Both ventures initially produced lenses for our customers, with facilities established within our Jalan Bandar shop. As demand grew, the services expanded to supply other optical companies throughout the Klang Valley and Malaysia, leading to the establishment of separate companies: Polymycon for contact lens manufacturing and Optikai for prescription lens manufacturing.

When the businesses expanded further and the number of employees increased, these companies moved out of the Jalan Bandar shop into their own facilities. Polymycon also began importing cleaning and conditioning solutions for RGP lenses from the United States. However, the differences between operating a retail business and a manufacturing enterprise soon became apparent. In retail, transactions were straightforward; customers paid for their purchases at the point of sale. Manufacturing, on the other hand, involved complex layers of production, supply chain management, and client relations that we hadn't fully anticipated. Challenges such as collecting debts, miscalculations regarding import taxes,

exchange rates, and handling charges led to cash-flow problems, eventually resulting in the winding down of Polymycon. Observing the challenges and setbacks my family faced in expanding their business into manufacturing made me aware of the complexities and uncertainties inherent in the business world. This experience will be engrained in my memories influenced my career choice in the future.

Joining the Family Business

Eager to have similar experiences as my eldest sister—who had worked at Malaya Optical after her SPM examinations and developed a close bond with my father and uncles—I took the opportunity to join the family business upon completing my own SPM. This role became a gateway to the burgeoning world of computers, a field that was beginning to revolutionize the way businesses operated.

My fascination with computers had been ignited earlier, during my Form Four year, when we acquired a clone of the Apple II through a supplier-sales initiative, the computer was supplied by 3E Trading Co., a shop located in Ampang Park. This machine, based on the 8502 architectures with an 8-bit processor and 64KB of memory, was a marvel of its time. The screen resolution was a modest 40x48 pixels, and while it could switch to higher resolutions, the colour palette remained limited. Nevertheless, it opened up a new realm of possibilities that captivated me.

In 1985, while in Form Four, I attended an Elementary BASIC programming course at LL World Computer and was thrilled to obtain a Grade 1 certification. This course provided me with firsthand experience in programming, fuelling my growing passion for technology. I began exploring WordStar, one of the first word processing software programmes, which transformed the way I approached writing. Additionally, I delved into dBASE IV, a powerful database management system of that era. With dBASE IV, I learned to create tables, queries, and forms, and even ventured into programming basic search functions.

Working at Malaya Optical allowed me to apply these newfound skills in a practical setting. I was tasked with digitising records, creating databases, and streamlining processes—all of which deepened my appreciation for how technology could enhance business operations. This experience was transformative, blending professional development with personal growth. It marked my first meaningful venture into computer programming, a field that would continue to intrigue and influence me in the years to come.

By integrating technology into my role at the family business, I not only contributed to its modernization but also discovered a passion that extended beyond the optical trade. This period reinforced the value of embracing new skills and adapting to changing times—a lesson that has remained with me throughout my personal and professional journey.

Reflection

My experiences at Malaya Optical were integral to my upbringing and personal development. The shop was more than a business; it was a place where family stories were shared, skills were learned, and values were instilled. Witnessing my family's dedication and adaptability—from my maternal grandmother's resilience to my father's innovations—taught me the importance of hard work, continuous learning, and perseverance.

These lessons have stayed with me throughout my life, influencing my approach to challenges and opportunities. The time spent at the shop and exploring Kuala Lumpur not only enriched my childhood but also laid a foundation for my future endeavours, both personally and professionally.

CHAPTER II – THE NEXT FRONTIER

The next chapter of my life unfolded with an exhilarating journey to the exotic and mystical land of India. My fascination with studying medicine there began early, sparked by the adventurous tales of my aunt's brother, Kee Neng. When I was young, we would listen in awe as he recounted his voyage by ship from Port Klang to Madras. From there, he traversed the vast Indian landscape by train, journeying from Madras to Mangalore before finally arriving at Kasturba Medical College (KMC) in Manipal. His stories were rich with vivid imagery of bustling ports, scenic train rides through lush terrains, and the vibrant tapestry of Indian culture.

Years later, during my secondary school days, my eldest sister embarked on a similar journey, though her experience was shaped by the advancements of modern travel. She flew from Subang International Airport to Mangalore Airport. While her voyage lacked the maritime romance of a sea journey, the stories she shared about her life there were no less enthralling. She spoke of the challenges and rewards of medical studies, the camaraderie among international students, which is mostly from Malaysia, and the unique cultural experiences that only India could offer. Her dedication and excellence were evident when she was awarded the Gold Medal in Community Health—a testament to her hard work and passion.

Through her narratives, she painted an intricate picture of the excitement and opportunities that awaited me. The vivid descriptions of campus life, the richness of Indian traditions, and the profound personal growth she experienced ignited a desire within me to embark on my own journey. The prospect of following in the footsteps of both Kee Neng and Suit Fun filled me with anticipation. I felt a compelling pull to walk the halls of KMC, to immerse myself in the rich educational and cultural landscape that had so profoundly impacted them.

As I prepared to take this significant step, I was filled with a mixture of excitement and introspection, and anxiety, apprehension and trepidation of the uncertainty that lies ahead. I was both eager and fearful to embrace the adventures that lay ahead. This journey to India was more than a geographical move; it was the beginning of a new chapter in my life—a journey towards realising my aspirations and uncovering the depths of my own potential.

Embarking on a New Journey: India

The journey began at Subang International Airport, marking my first time travelling alone on an international trip. None of my friends had planned to study medicine, so I was embarking on this adventure solo—a pattern that seemed to define my life, charting my own unique path. It was a bittersweet moment as I prepared to leave; the joy of having my entire family, extended relatives, and friends there to send me off was immeasurable. Yet, as I approached the departure gate, a mix of excitement and sadness welled up inside me. I was leaving the comfort of home and the immediate guidance of my parents for the first time, stepping into a new world of independence.

The flight itinerary took me from Subang to Madras, then onward to Bangalore, and finally to Mangalore. My sister, Suit Fun, would be waiting for me at Mangalore airport to take me to our new home in Manipal, at Herga Panchayath near the New P.G. Flats—a place she had thoughtfully arranged for us.

Touching down at Madras International Airport introduced me to the complexities of international travel. Navigating immigration and customs was a daunting experience. India had strict regulations on what could be brought into the country, especially concerning electronics and currency. Modern electronic items were scarce and expensive in India at the time, making them highly regulated upon entry. Owning a hi-fi system was considered quite fashionable among young adults, so I had brought along my portable JVC hi-fi system from home. Unfortunately, this led to a challenging encounter with customs officials, who imposed taxes on the device. The ordeal was overwhelming and somewhat disheartening, casting a shadow over my initial excitement.

Despite this rocky start, I pressed on, eager to reunite with my sister and begin this new chapter of my life. The experience at customs, though unpleasant, was a stark introduction to the realities of international living—lessons in adaptability and resilience that would prove invaluable in the years to come.

My Education in India

Almost every student from Malaysia who planned to study medicine at Kasturba Medical College in Manipal would first go to Kerala for their pre-university education, which was equivalent to Form Six in Malaysia. Kerala served as an introduction to life in India, where students became acquainted with the culture and formed close bonds through orientation activities and, yes, even “ragging.” This initiation process, though intimidating to some, often forged lifelong friendships and a sense of brotherhood among peers.

However, my path diverged from this common route. My sister, Suit Fun, had a different plan for me. Instead of sending me off to Kerala, she enrolled me directly in Manipal Junior College (MJC), which was near our home in Manipal. This choice meant that I would not experience “ragging” or the traditional hostel life that many of my peers underwent. In fact, throughout my entire undergraduate career, I never stayed in a hostel—a fact that I sometimes ponder, unsure whether it was a missed opportunity or a fortunate avoidance. The only exception was a brief period when I attended the International Labour Organization’s International Training Centre in Turin, Italy many years later, but that is a story for another chapter.

Attending MJC offered me a unique opportunity to familiarise myself with the Indian education system in a more comfortable setting. The transition from learning in BM in Malaysia to studying entirely in English required some adjustment. For instance, I had to relearn chemical elements: Na and K, known as Natrium and Kalium in BM, were Sodium and Potassium in English. These subtle differences initially caused confusion but ultimately expanded my understanding. Besides the language there was also the style of teaching, where remembering facts and concepts was the norm instead of understanding. This was another challenge to me, as my learning style was different, however, I must adapt as this is what I will be facing during my medical studies.

Another unexpected twist was the requirement to learn a second language. As part of the pre-university curriculum, all students were mandated to study an additional language. While still in Malaysia preparing for my studies, my sister informed me that MJC offered German as the second language. Eager to get a head start, I enrolled in a German language

class and began learning the basics. To my surprise, upon arriving at MJC, I discovered that the offered language was actually French. This sudden change was disorienting, but I embraced the new challenge, adding another layer to my educational experience.

Overall, my time at MJC was smooth sailing. I met new friends from India and different parts of Malaysia, each with their own unique stories and perspectives. The shared experience of adapting to a new country and educational system created strong bonds among us. After two years of dedicated study, I completed the Government of Karnataka's Second Year Pre-University Education with First Class and obtained the Education Department Certificate. This achievement was not just a personal milestone but also a ticket that allowed me to continue my studies at KMC.

The Majestic Kasturba Medical College

Kasturba Medical College in Manipal was located on a hillock in coastal Karnataka. It was established in 1953 by Dr. T.M.A. Pai who have transformed the barren rocky hill of Manipal into a burgeoning educational hub. Established as India's first private medical college under a public-private partnership model, KMC had gained a reputation for delivering quality education. The college was affiliated with Mangalore University until 1993, when it became part of the newly formed Manipal Academy of Higher Education, a deemed university.

Manipal was located on a hillock in coastal Karnataka, offered picturesque views of the Arabian Sea and the Western Ghats. It was relatively quiet and less commercialised compared to today, providing an ideal environment for students to focus on their studies. The community was closely knit, with students from various parts of India and abroad forming a vibrant cultural mosaic.

The campus life at KMC was dynamic, with students engaging in various academic and extracurricular activities. The college's infrastructure included well-equipped laboratories and a comprehensive health sciences library, supporting an enriching educational experience. The presence of international students added to the cultural diversity, making Manipal one of India's first truly international university towns.

Manipal itself was evolving during this time, transitioning from a small hamlet into a burgeoning educational hub. The town's growth was fuelled by its ability to attract students from across the globe due to its high educational standards and innovative teaching methods.

The humble life of a medical student

In 1989, I took my first steps into the world of medicine at KMC. The air was thick with anticipation and nervous energy as I, along with hundreds of other aspiring doctors, embarked on this life-changing journey. That year was particularly memorable due to an unusually large intake of students, prompting the administration to divide us into two batches.

My friends from MJC and I, armed with a mix of excitement and trepidation, made a strategic decision. We deliberately waited to enrol in Batch B, harbouring the notion that it might be an easier ride with more local students. Looking back, I chuckle at our youthful logic, but at the time, it seemed like a brilliant plan.

The KMC Curriculum: A Traditional Approach

The medical programme at KMC was a four-and-a-half-year odyssey that would test our limits and transform us in ways we couldn't imagine. Our curriculum followed a traditional structure, quite different from the integrated teaching methods popular today. This approach, while challenging, provided us with a solid foundation in each discipline.

The Pre-Clinical Years

Our first year was devoted to pre-clinical subjects: Anatomy, Physiology, and Biochemistry. These formed the bedrock of our medical knowledge, teaching us the intricacies of the human body's structure, function, and biochemical processes.

The Para-Clinical Year

The second year introduced us to para-clinical subjects: Pathology, Microbiology, Pharmacology, and Forensic Medicine. This year bridged the gap between basic sciences and clinical practice, helping us understand disease processes, microorganisms, drug actions, and legal aspects of medicine.

The Clinical Years

From the third year onwards, we delved into clinical subjects: Community Medicine, Ophthalmology, ENT, Medicine, Surgery, and Obstetrics and Gynaecology. These years were where theory met practice, and we began to see ourselves as future doctors.

Beyond the Books: The Hands-On Experience

While the examinations were undoubtedly challenging, everything else about medical school was an exhilarating adventure. The anatomy lab, in particular, stands out vividly in my memory. We had the incredible privilege of having our own cadavers to dissect, allowing us to explore the human body in intricate detail from skin to bone. This hands-on approach brought our textbook knowledge to life in a way no lecture ever could.

The dissection hall had a distinct scent that I can still recall to this day. The pungent odour of formaldehyde was initially overwhelming, but as time passed, it became a familiar, almost comforting smell that signalled the start of another day of discovery. Looking back, our cavalier attitude towards personal protective equipment seems almost reckless. We worked without masks or gloves, considering such precautions unnecessary and even a sign of weakness. "Wearing gloves seemed silly and sissy," I remember thinking at the time. The daily exposure to formaldehyde left its mark, quite literally, thinning the skin on my fingers and palms - a reminder I carry to this day of those formative years.

Our anatomy lecturers were nothing short of awe-inspiring. Their ability to recall every minute detail of human anatomy—from the tiniest tendon to the most intricate neural pathway—left us in constant amazement. They could effortlessly describe the origin, course, and termination of every ligament, nerve, and vessel in the body. Their passion and expertise fuelled our own desire to master this fundamental aspect of medical knowledge.

Memorable Moments in Medical Education

Every subject brought its own unique experiences and lessons. In pharmacology, for instance, we didn't just learn about drugs from textbooks. I vividly remember compounding our own liniment methyl salicylate (LMS) and packaging it in small tubes. This hands-on experience gave us a deeper appreciation for the art and science of drug formulation.

Microbiology classes were equally engaging, albeit a bit more painful. We would prick our own fingers with stainless steel disposable lancets to obtain blood samples for analysis. These lancets were far sharper and more painful than the ones used in clinical practice today, making each class a test of our dedication to learning.

One of the most unforgettable moments occurred during a Community Health class. As we filed into the lecture hall, we found our lecturer sitting quietly on a table at the front. The room was filled with an uneasy silence, as was customary when a lecturer was present. Suddenly, he broke into an uncontrollable cough, punctuated by the characteristic high-pitched "whoop" sound of pertussis. Some students, caught off guard, rushed to his aid. Before they could reach him, the coughing fit stopped, and he calmly explained that this was the sound of whooping cough - a sound we might never hear again in our careers due to the effectiveness of the DPT vaccine. This dramatic demonstration left an indelible impression on us about the power of vaccination in public health.

Lessons in Bedside Manner

During our clinical rotations, we had the privilege of learning from some truly exceptional doctors. One who stands out in my memory is Dr. Benjamin Joseph, a paediatric orthopaedic surgeon who had recently returned from England. His approach to teaching was as memorable as it was effective. I vividly recall a moment during one of our clinical rounds when Dr. Joseph posed a question to our group. As we stumbled through our answers, he gently corrected us with the phrase, “no bovine droppings.” His use of this genteel euphemism, a remnant of his time in England, was both amusing and instructive. It taught us the importance of precision in our language and diagnoses, while also demonstrating how to provide criticism in a constructive and respectful manner.

Learning medicine at KMC left an indelible impression on me, from the remarkable capabilities of our lecturers to the invaluable hands-on experiences. These experiences shaped not just my medical knowledge, but my entire approach to the practice of medicine, instilling in me a deep respect for the human body and the privilege we have as doctors to understand and heal it.

Life in Manipal

Manipal, despite its impressive cluster of learning centres, e.g., KMC, Dental College, Nursing College, Manipal Institute of Technology, it remains essentially a village. Beyond the imposing gates of the university campus lies the heart of Manipal’s social scene—Tiger Circle.

Across this landmark roundabout, a cluster of modest establishments caters to the needs of students seeking respite from their academic pursuits. Shangri-La, Shantala, Snack Shack, and Iceland - these unassuming eateries and hangouts become vibrant hubs of student life after classes conclude. Their walls echo with laughter, conversations, and the clinking of cutlery as students unwind and connect.

In addition to these permanent fixtures, Manipal’s streets are dotted with roadside shacks that offer a unique culinary experience. These makeshift eateries serve a delightful fusion of Flavours, blending local ingredients with culinary influences from various regions of Malaysia. Interestingly, many of these roadside chefs are former cooks who once worked in

the homes of Malaysian students. Their presence adds a comforting touch of home, offering familiar tastes.

The limited options for socialising in this small town ironically foster a strong sense of community. Shared experiences in these few cherished spaces create lasting bonds among students. The simplicity of Manipal's social scene serves as a reminder that connection that flourish even in the most unassuming of settings.

Beyond the Campus

Manipal's charm extends beyond its educational institutions. The town offers several attractions that have become popular among students. End Point, a scenic viewpoint, provides a panoramic vista of the surrounding landscape, and a dating spot for some. For those seeking a beach experience, Malpe Beach is just a short distance away, providing us with a weekend getaway.

Calling Home

During my medical studies in Manipal, staying in touch with family was a significant challenge, far removed from today's instant connectivity.

The Rarity of International Calls

International calls were a luxury, both scarce and expensive. The campus had just one telephone booth with an operator, serving as our sole link to the outside world. We often resorted to calling collect or using pre-arranged signals to have our families call us back. Each call was precious, with every word carrying weight due to the limited time and high cost.

The Absence of Digital Communication

Email and internet access were non-existent for students. This lack of immediate connection meant we had to become more independent and resourceful, though it sometimes led to feelings of isolation. In this digital void, traditional mail became our lifeline. Writing and receiving letters was an art form and a source of great joy. The anticipation of checking the

campus post office for mail from home was palpable. Each letter was a treasure, read and re-read, offering comfort and connection to loved ones far away.

Fostering Resilience and Appreciation

While frustrating, these communication challenges fostered resilience and independence. We learned to solve problems on our own and truly value our connections back home. The infrequent nature of our communications made each interaction more meaningful and memorable.

These experiences shaped not just my time in medical school, but also my approach to relationships and communication throughout my career. They instilled a deep appreciation for the ability to connect with loved ones, a lesson that remains relevant in today's world of instant communication.

Memorable Destinations: A Journey Through Southern India

During my study breaks, I had the opportunity to explore some of the most captivating destinations in southern India. These trips not only provided a much-needed respite from our intense medical studies but also offered invaluable insights into the rich tapestry of Indian culture and geography.

Ooty: The Queen of Hill Stations

Ooty, officially known as Udagamandalam, was a revelation. Nestled in the Nilgiri Hills, this hill station offered a stark contrast to the tropical climate we were accustomed to in Manipal. As we ascended the winding roads, the temperature dropped noticeably, and we found ourselves enveloped in a cool, misty atmosphere.

The town's colonial architecture, a remnant of its history as a British summer resort, added to its charm. But it was the natural beauty that truly captivated us—rolling hills covered in tea plantations, dense eucalyptus forests, and serene lakes. One of my most cherished memories from Ooty was learning to ride horses. We traverse the surrounding hills enjoying

the made the crisp mountain air, panoramic views and the rhythmic clip-clop of hooves making every moment worthwhile.

Goa: Where East Meets West

My trips to Goa were a study in contrasts, both in terms of the destination itself and the modes of travel we chose. Our initial journey to Goa was by bus, a long ride that allowed us to witness the changing landscape as we crossed state borders. Upon arrival, we were immediately struck by how different Goa felt from the rest of India. The Portuguese influence was evident everywhere - in the whitewashed churches, the colonial-era buildings, and even in the local cuisine.

The beaches were a major highlight, Goa's beaches seemed endless stretches of golden sand meeting the Arabian Sea. The laid-back atmosphere and the blend of Indian and Portuguese cultures made Goa feel like a world apart.

Second Visit: Our return to Goa was an adventure. Five of us decided to make the journey on four Yamaha RX100 bikes. This trip was as much about the journey as the destination. We set off early, our small but robust bikes loaded with luggage. The ride was exhilarating and, at times, nerve-racking. We navigated narrow, winding roads that snaked through lush forests and small villages. Dodging overloaded trucks and speeding buses added an element of danger that, in retrospect, probably should have worried us more than it did.

Despite the challenges, the sense of freedom was intoxicating. We made frequent stops in small towns. Arriving in Goa after this arduous ride made us appreciate its beauty even more.

Mysore: A Royal Experience

Our visit to Mysore was a deep dive into India's royal heritage. The city, with its wide boulevards and well-planned layout, was a pleasant change from the often-chaotic urban centres we were used to.

The Mysore Palace, the jewel in the city's crown, left us awestruck. Its Indo-Saracenic architecture, a blend of Hindu, Muslim, Rajput, and Gothic styles, was a visual feast. We

timed our visit to witness the palace illuminated at night—a spectacle of thousands of light bulbs outlining the palace’s contours against the night sky.

The Brindavan Gardens, with its terraced layout and musical fountains, provided a serene counterpoint to the grandeur of the palace. We spent a peaceful evening strolling through the rose gardens, the fragrance of thousands of roses filling the air.

Weekend Getaways

For shorter breaks, we often motorcycled to Mangalore, just an hour away, or took an 8-hour bus ride to Bangalore. These cities provided a taste of urban life, a stark contrast to our usual routine in Manipal. We also have the chance to visit Tipu Sultan’s Summer Palace. Located in the heart of old Bangalore, this architectural gem offered a fascinating glimpse into the life and times of the legendary Tiger of Mysore.

These trips, while ostensibly breaks from our studies, were educational in their own right. They exposed us to the diversity of India’s landscapes, cultures, and histories, enriching our understanding of the country we were calling home during our medical education. The memories of these journeys, the friendships they strengthened, and the perspectives they offered have remained with me long after the details of our medical textbooks have faded.

From Internship to Graduation: A Year of Growth and Creativity

After completing my final year at KMC, I embarked on a mandatory one-year internship at Kasturba Hospital, Manipal from 1994-1995. This period served as a crucial bridge between medical education and professional practice, allowing me to apply the knowledge and skills I had acquired over the years in a real-world setting.

Balancing Clinical Work and Creative Pursuits

The internship, while demanding, offered a more flexible schedule compared to our rigorous medical school years. This newfound balance allowed me to pursue a passion project that had been brewing in my mind since attending my sister Suit Fun’s graduation—planning and executing an unforgettable graduation night for my cohort.

Crafting a Cultural Spectacle

Drawing inspiration from my Chinese heritage, I envisioned a grand Chinese Dragon Dance as the centrepiece of our graduation night entertainment. This ambitious project became a labour of love that spanned several months.

Building the Dragon

The construction of the dragon was a monumental task:

- The Head: Over three months, I meticulously crafted the dragon's head using a bamboo frame, chicken wire, and paper mâché.
- The Body: With the help of friends, particularly Yong Chun Woon, we created a 12-segment body and tail using similar materials.
- The Pearl of Wisdom: I designed this crucial prop with a glowing effect, symbolising knowledge and enlightenment.
- Costumes: We printed the Chinese character for "dragon" on 13 white shirts, adding authenticity to our performance.

This project not only showcased our creativity but also fostered a sense of community among my peers, who eagerly joined in as the dragon took shape.

Documenting the Journey

Recognising the importance of preserving these memories, I took on the role of video production coordinator:

- Collaborated with a local production company in Udipi to plan a three-part video covering Manipal, the graduation night, and the convocation ceremony.
- Post-event, I immersed myself in the challenging task of editing 18 hours of footage into a cohesive 2-hour final cut.

This experience with analogue linear editing equipment provided invaluable insights into video production, a skill far removed from our medical training and would become useful later on in my life.

Orchestrating the Grand Finale

As the program director for the graduation night, my responsibilities extended beyond the dragon dance:

- Designed the stage layout, including a platform extension to bring performers closer to the audience.
- Choreographed the dragon dance and participated as the bearer of the Pearl of Wisdom.
- Coordinated various performances, including my participation in a *Joget Melayu* dance, showcasing the cultural diversity of our student body.

The Opening Act

The culmination of our efforts was a spectacular opening sequence:

- Our Chinese Dragon made a grand entrance from the back of KMC Greens.
- We danced to the ethereal music of Kitaro, captivating the audience.
- The performance seamlessly transitioned into a Bharatanatyam dance by Shyamala P, highlighting the rich tapestry of cultures represented at KMC.

Reflection

This experience of balancing my internship duties with the extensive preparations for graduation night was incredibly rewarding. It allowed me to explore my creative side, hone leadership skills, and create lasting memories for myself and my peers. The project embodied the spirit of our journey through medical school—challenging, collaborative, and ultimately, transformative.

As I look back on this period, I realise that these experiences, while seemingly unrelated to medicine, have enriched my perspective as a healthcare professional. They taught me the value of teamwork, creativity, and cultural appreciation—qualities that continue to serve me well in my medical career.

CHAPTER III – BACK TO REALITY

Returning to Malaysian soil after years in India was a moment of mixed emotions. The excitement of completing my medical education was tempered by the looming reality of my houseman posting. Stories of gruelling hours and challenging work environments weighed heavily on my mind as I contemplated the next phase of my medical journey.

A Brief Respite

Fortunately, I had the luxury of taking a few months off before starting my housemanship. This period of reflection and rest was invaluable, allowing me to mentally prepare for the challenges ahead. After about six months, I felt ready to take the plunge and applied for my housemanship.

First Posting: Hospital Kuala Lumpur

To my relief, I was assigned to Hospital Kuala Lumpur (HKL), close to my home in PJ. The comfort of being near family and friends seemed like a blessing. However, this initial comfort was short-lived when I learned of my specific posting: Ward 22, a medical ward headed by the renowned Dato Seri Dr. Mohammed Ismail Merican.

The Crucible of Ward 22

My time in Ward 22 was transformative, to say the least. Dr. Ismail Merican's reputation for excellence and high standards quickly became apparent. Under the watchful eye of Dr. Ismail Merican, I found myself in a crucible that would shape my entire approach to medicine.

Each morning, as we gathered for rounds, I braced myself for Dr. Ismail Merican's keen observations. His ability to pinpoint areas where I fell short was uncanny, and at times, unnerving. "Dr. Hoe, explain why you ordered BUSE for this patient," he would demand, his piercing gaze fixed upon me. When I replied that it is a routine investigation, he says that nothing is a routine, everything you ordered needed a reason. He also shared that for every test there is a cost to it and who will pay for the test. These daily challenges, while daunting, became the catalyst for my growth as a doctor.

The frenetic pace of Ward 22 demanded nothing less than peak performance. Blood draws, vital sign checks, and patient monitoring all had to be completed with military precision before the morning rounds began. Initially, I fumbled, struggling to keep up with the relentless rhythm of the ward. But necessity, as they say, is the mother of invention.

After a few gruelling shifts, I devised a systematic approach that transformed my workflow. I began grouping task type and optimising my task the ward. This method not only improved my efficiency but also reduced errors—a small victory that boosted my confidence immensely.

While Dr. Ismail Merican's exacting standards pushed me to excel, it was the support of my colleagues that truly sustained me through this intense period. The consultants offered wisdom, the registrars shared practical tips, and my fellow house officers provided much-needed camaraderie. But it was the nurses—the true queens of Ward 22 - who taught me one of the most valuable lessons of my career—the power of kindness.

The thing that I learned is being nice to people, especially, the nurses. The nurses who took a liking to you could make your call nights bearable. They'd handle minor issues without waking you, allowing for precious moments of rest. Some would even bring breakfast after a particularly rough night—a small gesture that felt like a lifeline in those exhausting moments.

Of course, not every interaction was smooth sailing. I still chuckle remembering one nurse's oft-repeated refrain when asked for assistance: "I only got two hands!" she'd exclaim, throwing her arms up in exasperation. It was a reminder that even in the most demanding environments, a touch of humour could lighten the load.

Lessons Learned

Looking back, I wouldn't change this experience for anything. The rigorous training under Dr. Ismail Merican and his team moulded me into a more attentive, thorough, and responsible doctor. I learned to approach every aspect of patient care with utmost seriousness, treating each moment as potentially life changing. It made me more confident in my work and courage to face the rest of my postings.

Subsequent Postings

My later postings with the Universiti Kebangsaan Malaysia (UKM) Obstetrics and Gynaecology team in HKL and Surgery team were less intense by comparison. While these rotations had their own interesting encounters, they didn't match the transformative intensity of Ward 22.

Looking back at housemanship, it was one of the best times of my working life, although the work is long, tedious and tough, you can get a good night sleep. There is not much worry as being a houseman, we are still in training, and the responsibility lies with our Registrar.

Reflection on Career Choices

After completing my housemanship in a year, I continued as a medical officer in Surgery at HKL for a few months. In retrospect, I realise I made an uninformed decision when selecting my next posting. Choosing Perak state, I had assumed I would be placed in Ipoh Hospital, not fully appreciating the size of the state and the various placement possibilities.

Conclusion

The transition from medical student to practicing doctor was challenging, but ultimately rewarding. The intense training I received, particularly under Dato Seri Dr. Mohammed Ismail Merican, laid a strong foundation for my medical career. It taught me the importance of attention to detail, continuous learning, and resilience in the face of high-pressure situations.

These experiences, combined with my earlier involvement in organising our graduation night at KMC, have shaped me into a well-rounded medical professional. The creativity and leadership skills I developed during my student days, coupled with the rigorous clinical training of my housemanship, have provided me with a unique perspective in my approach to medicine and patient care.

As I continue on my medical journey, I carry with me the lessons learned from each of these experiences, grateful for the challenges that have helped me grow both as a doctor and as a person.

Venturing into the Unknown: My Journey to Public Health

As I reflect on my career path, the transition from clinical medicine to public health stands out as a pivotal moment. It was a journey that began with uncertainty and trepidation but ultimately led me to discover my true calling.

An Unexpected Assignment

Fresh from my stint in HKL, I found myself driving from PJ to Ipoh, anticipating my next posting. Upon arriving at the Perak State Health Office, I was handed a letter that would change the course of my career. “Report to the Hulu Perak District Health Office,” it read. My heart sank as I consulted the state map, realising Hulu Perak was the northernmost district of Perak—practically uncharted territory for this city boy.

Panic set in. I immediately sought an audience with the State Health Director, Dato Dr. S. Noor Ghani. Entering his office, I pleaded my case, hoping for a reprieve. “Sir, please reconsider. Surely there’s a position available in Ipoh?” I implored. But Dato Ghani remained unmoved, his eyes twinkling with a mix of amusement and determination. “Dr. Hoe,” he said, leaning forward, “Hulu Perak needs you. It’s only for two years, and then you can apply for a transfer elsewhere in Perak.” His tone was firm but not unkind. I left his office with a heavy heart, knowing I had no choice but to accept or risk my entire medical career in Malaysia.

A Journey of Misadventure

The next day, I set off in my father’s Mercedes Benz 200-W123, a vehicle that seemed ill-suited for the rugged journey ahead. As I navigated the winding trunk road beyond Kuala Kangsar, the sun began to set, casting long shadows across the unfamiliar landscape. Then, disaster struck. The car sputtered and died, leaving me stranded in the darkness near Lenggong, still 60 kilometres from my destination.

Panic threatened to overwhelm me as I sat in the silent car, surrounded by the inky blackness of the countryside. Then, a stroke of luck—I remembered my old school friend from BBBS, See Meng, whose family home was in Lenggong. With shaking hands, I dialled his number, relief

washing over me as he answered. Soon, I found myself at his family home, waiting for my father to make the long drive from PJ to rescue me.

A Frosty Welcome

The next morning, I finally reported to Dr. Nawawi, the District Health Officer for Hulu Perak. His greeting was far from warm: “If you’re not happy, you can quit.” The words stung, but I bit my tongue, knowing that quitting wasn’t an option if I wanted to complete my compulsory service.

I was assigned to Klinik Kesihatan Plang temporarily, with a future posting to Klinik Kesihatan Pengkalan Hulu on the horizon. These names meant nothing to me then - just more unfamiliar dots on a map I was struggling to understand.

Finding My Footing

Fortunately, a familiar face awaited me in Pengkalan Hulu. Dr. Yee Chee Seng, another alumnus from BBBS, was there to show me the ropes before his departure. His guidance proved invaluable as I settled into my role as Medical and Health Officer (M&HO).

One piece of advice from Dr. Yee stood out: “Read and understand the General Order,” he insisted. This thick tome, outlining the roles and responsibilities of civil servants, became my bible. Its eight chapters, covering everything from appointments and promotions to medical benefits and overtime, provided a roadmap for navigating the complexities of public service. The GO, which initially seemed like dry reading, became a powerful tool. It empowered me to manage staff effectively, understand my own rights and responsibilities, and navigate the sometimes murky waters of bureaucracy.

Settling into My New Quarters

After Dr. Yee’s departure, I moved into the government quarters at Klinik Kesihatan (KK) Pengkalan Hulu. The property was expansive, featuring two wings: the main quarters with three rooms and a large hall, and the servant quarters. However, years of neglect had left it in a state of disrepair. Dr. Yee, being one of the first doctors after a hiatus, had opted not to

live there. Initially, I considered finding accommodation elsewhere, but after raising the issue with the Hulu Perak District Health Office and the State Health Office, a team led by the State Health Deputy Director inspected the premises. To my relief, they ordered an emergency renovation. This action demonstrated Dato Dr. Ghani's compassionate leadership and empathy for his staff's needs. After several weeks of renovation, I finally had a comfortable space to call home in Pengkalan Hulu.

Pengkalan Hulu

Pengkalan Hulu, formerly known as Kroh, was a small but strategically important border town in the Hulu Perak district of Perak, Malaysia. Covering approximately 40 square kilometres, it bordered Thailand to the north and Kedah to the west, serving as a crucial gateway between Malaysia and its northern neighbour. The town's diverse population of about 15,000 included Malays, Chinese, Indians, Siamese (Malaysian), and Orang Asli, reflecting the rich cultural tapestry of the region.

Pengkalan Hulu's multicultural character is prominently displayed through various festivals observed by the different ethnic groups. The Siamese community, particularly in Tasek, celebrates the Songkran or Water Festival, typically in April, with traditional water-splashing activities. The Indian population observes Thaipusam, carrying offerings around Tasek Pengkalan Hulu in a colourful procession. Muslim residents, including the Malay community, celebrate Hari Raya and Hari Raya Haji with family gatherings and religious observances. The Chinese community marks the Lunar New Year with traditional customs and festivities. These celebrations not only showcase Pengkalan Hulu's cultural diversity but also foster community spirit and intercultural understanding, highlighting the town's inclusive nature and the harmonious coexistence of its various ethnic groups.

The local economy was primarily driven by traditional industries, with residents engaged in rubber tapping, farming, and tin mining in Klian Intan. Government service also played a significant role in employment.

A significant part of Pengkalan Hulu's economy and history is tied to the tin mining industry, particularly through Rahman Hydraulic Tin Sdn Bhd, located in Klian Intan. It is about 15 km from Pengkalan Hulu town. Rahman Hydraulic was established in 1907 and operates Malaysia's largest open-pit alluvial tin mine and a hard rock mining operation in Klian Intan. The mine covers an area of approximately 700 hectares and has been a major contributor to Malaysia's tin production in the last decades.

There are eight national primary schools, two Chinese primary schools, one Tamil primary school, and two secondary schools in Pengkalan Hulu. In addition, there are also several *Sekolah Pondok* and Madrasah, which is mostly situated in Kuak Luar.

As a former "Black Area" during the communist insurgency, Pengkalan Hulu maintained a significant security presence. This included a Territorial Army Regiment camp (Rejimen Askar Wataniah 303) and the 18th Battalion of the General Operations Force (Pasukan Gerakan Am, PGA). These security forces not only provided protection but also contributed to the local economy and community life.

The town's administrative importance was evident in its government offices. In addition to standard sub-district (mukim) offices, Pengkalan Hulu housed immigration and customs offices to serve the land border crossing to Betong, Yala District, Thailand.

Healthcare Facilities in Pengkalan Hulu

Healthcare facilities in Pengkalan Hulu were limited during this period, there was KK Pengkalan Hulu and two private clinics serving the sub-district. The nearest hospital was in Baling, Kedah, which is around 10 kilometres away. KK Pengkalan Hulu is the main healthcare facilities for most of the residence from the Pengkalan Hulu town and surrounding towns and villages.

KK Pengkalan Hulu encompassed various departments, units and teams: the Outpatient Department, Mother and Child Health Clinic (Klinik Kesihatan Ibu dan Anak, KKIA), Pharmacy and Medical Laboratory, School Health Team, Mobile Health Team, Vector and the Water Supply and Environmental Health unit (BAKAS) units. Additionally, within Pengkalan Hulu's

coverage area were Klinik Desa (KD) locations in Kuak Luar, Felda Leping Nenering, Tasek, Klian Intan, and a border health post between Pengkalan Hulu and Betong in Thailand.

Transitioning from a Doctor to a Leader

Working at KK Pengkalan Hulu required a new set of skills that I hadn't acquired in medical school or during my time at HKL. As a Medical & Health Officer (M&HO), my responsibilities extended beyond clinical duties to include overseeing public health aspects for the area served by the KK. Suddenly, I found myself leading and managing nearly 40 staff members, many of whom were senior in both age and experience.

This transition was both a challenge and an opportunity for growth. As a young doctor fresh out of housemanship, I needed to effectively manage a diverse team that included nurses, medical assistants (MA), community health nurses (Jururawat Masyarakat, JM), assistant nurses, pharmacy assistants, medical laboratory assistants, assistant environmental health officers, clerks, and general workers.

The leadership experience I had during secondary school, my time at Malaya Optical, and medical school proved invaluable. The advice to leverage the General Order (GO) was also crucial. My leadership approach involved understanding each everyone's roles and responsibilities by listening to staff members in charge of specific activities. I practiced management by walking around to engage with all the staff at the place of their work.

Initially, there was minimal support from the District Health Office in managing the facility. However, this turned out to be a blessing in disguise as it allowed me to learn on the job and refine my management skills. My trusty public health textbook from medical school days—*Textbook of Preventive and Social Medicine, Park & Park*—served as an essential reference for public health-related issues.

After several months of adjustment and struggle, managing these responsibilities became routine. This experience deepened my understanding of public health practice in Malaysia and highlighted the Ministry of Health's role at the district level, which is different from what we have learned and experience while in India. As a city boy navigating rural healthcare challenges for the first time, this journey was both rewarding and educational.

My position as the sole Government Doctor also placed me in a role of significant importance. I was often invited to official functions and celebrations, experiences that were both memorable and humbling. I still recall having lunch with the His Royal Highness Raja Jaafar bin Raja Muda Musa the Raja Di-Hilir of Perak and breaking fast with the then Raja Muda of Perak, who is now the Sultan of Perak, His Royal Highness Sultan Nazrin Muizzuddin Shah Ibni Almarhum Sultan Azlan Muhibbuddin Shah Al-Maghfur-Lah.

These experiences gave me a feeling of being an important person, but they also taught me a valuable lesson in humility. I understood that it was the position they were celebrating, not the individual. This realisation has stayed with me throughout my career, reminding me of the importance of humble service.

Being a Medical and Health Officer

The initial setback with the lack of support from the District Health Officer changed with the arrival of Dr Jamal Ali Johari our new District Health Officer or Medical Officer of Health, things started to get better. Dr Jamal having obtained his Master of Public Health from Universiti Malaya in 1992, and with more experience after his graduation working in various positions in Melaka has provided us with leadership and direction for all of us in Hulu Perak Health District.

A Multifaceted Role

My duties were multifaceted and demanding. I was responsible for running the Outpatient clinics, which saw between 100 and 150 patients daily. Additionally, I managed and ran the Child Health Clinic, the Ante-natal Clinic (ANC), and attended to patients referred by MAs, nurses, and JMs. My role also included supervising four KDs, and overseeing the Vector and BAKAS units, which were responsible for surveillance of diseases like Malaria and Dengue, as well as food, sanitation, and community projects. It was a role that took me out of being a typical doctor sitting in the clinic waiting for patients to out and about in the community to assess and implement public health programmes.

Community Engagement

In addition, I was involved with various health promotional activities. Organising these activities was a significant part of my role, including programmes like PROSTAR (HIV/AIDS Programme for the Youth), “Minggu Diabetes Gerik 1999” (Diabetic Week in Gerik District), “Kempen Cara Hidup Sihat 1999” (Healthy Lifestyle Campaign in Hulu Perak District) and “Forum HIV/AIDS 2000” in conjunction with the World AIDS day. These initiatives aimed at promoting healthy lifestyles, preventing accidents, and raising awareness about critical health issues. The opportunity to organise these activities further enhanced my leadership and organisational skills.

Collaboration with other agencies and non-governmental organisations was crucial. I worked closely with the Rukun Tetangga of Pengkalan Hulu to organise a Mental Health Forum in 2000 and Healthy Lifestyle Campaigns in 1998 and 1999. These partnerships underscored the importance of community engagement in public health, fostering a sense of ownership and participation among the local population.

Understanding People’s Needs: A Lesson in Empathy and Flexibility

During my time at the Child Health Clinic in Pengkalan Hulu, an incident occurred that profoundly shaped my approach to community health. This experience underscored the importance of understanding the people we serve beyond mere medical criteria.

One day, three neighbouring families brought their children for routine weight monitoring. Two of the children were found to be underweight, qualifying their families for food baskets - a supplement provided by the Ministry of Health to address malnutrition. The third child’s weight was within the normal range, so that family didn’t receive the basket.

Over the next few months, we continued to monitor these children. To our surprise, the child who initially had a normal weight became underweight by the second month of monitoring. This unexpected turn of events raised questions: Had the child fallen ill, or had the family perhaps reduced the child’s food intake to qualify for the food basket?

A Deeper Understanding

Regardless of the reason, this situation taught us a valuable lesson. I realised that our approach to community health needed to go beyond rigid criteria and consider the broader social context. If two out of three neighbouring families received benefits, it could create unintended consequences or tensions within the community.

This experience highlighted the need for empathy and flexibility in our decision-making process. While guidelines are important, they shouldn't be followed at the expense of community harmony or individual well-being. Sometimes, providing equal support to all families in a close-knit community, even if some don't strictly meet the criteria, can be more beneficial in the long run.

Being a teacher

When I first arrive at KK Pengkalan Hulu, I never imagined I'd be also stepping into the shoes of a teacher. The JMs weren't even there when I started—they only joined us about a year later, replacing the assistant nurses in the Klinik Desa (KD).

Traditionally, during the ANC, the assistance nurse will be assisting the doctors to examine the pregnant mothers. When the JMs first arrive, they were tasked to screen the pregnant mothers before referring to me. However, after several week observing the work of the JMs and found that they fumble with the assessment of the pregnant mothers.

I decided to change the routine. I brought the JM into the ANC sessions with me. I had the JM examine the mothers first, then report their findings to me, before I did my own assessment. The clinic session was turn to a training session. This allowed them to learn and increase their confidence in managing ANC on their own.

In addition to ANC, the KKIA also conduct delivery for low-risk pregnant mothers, who do not wish to go to Hospital Baling. This was an initiative to reduce home birth. The JMs were able to enhance their skills in delivering babies.

This experience proved to be useful, I still remember one of the JMs who was transferred to Kelantan, later shared her story of how she delivered a baby while she was on a *sampan* in Gua Musang, Kelantan. She shared that the training in KK Pengkalan Hulu has saved the mother and baby that day.

Rekindling my passion

In those days, computers were still a novelty in our rural clinic. We had just one machine in the administrative office, primarily used for basic data entry of monthly reports in Excel which was sent to the Hulu Perak District Health Office for compilation. However, looking at an opportunity to use the skills that I have acquired while I was working in Malaya Optical, I took it upon myself to create a comprehensive database system for the clinic. Though nearly a decade had passed since I last coded, my foundation in BASIC programming proved invaluable. I immersed myself in books on Microsoft (MS) Access and Visual Basic, determined to expand my capabilities.

Bit by bit, I built a robust system with interconnected tables, user-friendly forms, and powerful queries. The crowning achievement was developing a custom dashboard and search function to make information retrieval quick and effortless.

Pioneering the Alternative Birthing Centre

Although Baling Hospital was just 10 kilometres away, many pregnant mothers continue to choose to be delivered at the KKIA. This preference stemmed from the strong relationships they had built with our nurses, JMs, and assistant nurses throughout their antenatal care. In addition to providing routine antenatal check-ups at the ANC. The JMs and assistant nurses conducted regular home visits, fostering a sense of trust and familiarity with our patients. This personal touch made KKIA a preferred choice for many women in our community.

Recognising this trend and the need for improved birthing facilities, I saw an opportunity when funding became available from the Perak State Health Department. I proposed the establishment of an Alternative Birthing Centre (ABC) at our clinic. This initiative aimed to provide a more comfortable and home-like environment for low-risk deliveries.

The process of planning the ABC was a new and exciting challenge for me. I took on the task of identifying a suitable location within our facility and developing a floor plan. Embracing technology, I utilised free computer software to design the layout, ensuring it met both medical requirements and patient comfort needs

This project allowed me to combine my medical expertise with project planning skills, pushing me out of my comfort zone. While I didn't have the opportunity to see the ABC's construction and completion due to my subsequent move to Universiti Malaya for Public Health Training, I felt a sense of accomplishment in laying the groundwork for this important facility.

Reflection

My tenure in Pengkalan Hulu was a transformative period that shaped my approach to public health. This rural posting, with its unique challenges, became a crucible for developing adaptability, leadership, and community engagement skills.

The MS Access project stands out as a pivotal moment. With just one shared computer, we revolutionised our workflow and enhanced patient care. This experience taught me that innovation isn't about having the latest tools, but about creatively using available resources. It demonstrated that with determination and willingness to learn, we could overcome significant challenges.

Our approach to Antenatal Care (ANC) and planning the Alternative Birthing Centre (ABC) reinforced the importance of patient-centred care. By listening to our community's needs, we designed services that truly resonated with them. This experience honed my healthcare planning skills and deepened my understanding of how innovative approaches can significantly impact public health outcomes.

Understanding that the role of the leader is capacity building and empowering local healthcare workers. The story of the JM who delivered a baby on a sampan in Kelantan serves as a powerful reminder of our efforts' far-reaching impact.

The experience of the Food Basket incident was a turning point in my approach to public health. It taught me that effective healthcare delivery isn't just about following protocols; it's about understanding the people we serve, their lives, their challenges, and their interconnectedness within their communities.

These experiences in Pengkalan Hulu laid the foundation for my ongoing interest in leveraging technology to enhance public health. They showed me how innovative thinking and continuous learning could open up new possibilities to better serve communities.

This chapter of my life not only enriched my understanding of public health but also instilled in me a deep appreciation for the complexities and rewards of working in rural healthcare settings.

CHAPTER IV – BACK TO SCHOOL

When I entered medical school, my heart was set on ophthalmology. My experience in the optical business and my sister Suit Fun's acceptance into the Master of Ophthalmology programme at Universiti Malaya seemed to pave a clear path. However, life had other plans for me.

A Change in Perspective

My time in KK Pengkalan Hulu transformed my view of medicine. The challenges and rewards of rural healthcare opened my eyes to a different aspect of medical practice. Even when offered a transfer back to Ipoh Hospital by Dato Dr S Noor Ghani, the retiring Perak State Health Director, I declined. I had found my niche in Pengkalan Hulu and spent three and a half fulfilling years there.

The Push Towards Public Health

It was my colleagues, Dr Wan Ahmad Razman and Dr Siah Chiu Khim application to join the Master of Public Health programme, along with the encouragement from Dr Jamal Ali Johari, our Medical Officer of Health, that push me to consider applying to Universiti Malaya.

The Application Process

The application process for the MPH programme was simpler then than it is now. We were told that only our first-choice university would invite us for an interview, so I focused solely on Universiti Malaya. I prepared for the entrance examination using my trusted Park&Park textbook from India.

On the day of the examination and interview, I found myself among a small group of ten applicants. Alongside my Hulu Perak colleagues were Abdul Fattah Mohd Shukri, Malek Sazali Abdul Razak, Mas Ayu Said, Mohammad Ismail Mohammed Yusoff, Nor Bizzura Abdul Hamid, Nurashikin Ibrahim, Richard Avoi, and Rosidah Shaikh Salim. I also found a familiar face there, Dato Dr S. Noor Ghani has made the transition from being the State Health

Director to an Associate Professor at the Department of Social and Preventive Medicine, Faculty of Medicine, Universiti Malaya.

To our delight, all of us were accepted into the program.

A New Chapter Begins

With my acceptance secured, I prepared to leave my spacious quarters in Pengkalan Hulu and return to my family home in PJ. This move was not just a change of residence but a significant step towards a new phase in my career. The proximity of our PJ home to Universiti Malaya made it an ideal base for my studies.

This transition marked a pivotal moment in my journey. While I had once envisioned a career in ophthalmology, my experiences in rural healthcare and the encouragement of my colleagues led me down a different path. The decision to pursue an MPH at Universiti Malaya would prove to be a turning point, setting the stage for my future contributions to public health.

As I embarked on this new academic adventure, I carried with me the invaluable lessons from Pengkalan Hulu. Little did I know then how profoundly this decision would shape my future career and impact on public health in Malaysia.

Being a Student Again: A New Chapter at Universiti Malaya

Attending Universiti Malaya, the premier university in Malaysia, had always been my dream. The Master of Public Health (MPH) program I enrolled in was a rigorous one-year, term-based course that required all students to complete the same set of courses within the year.

A Diverse Learning Environment

Our cohort was a diverse mix of local and international students, including five from Sudan joining the Malaysian contingent. Additionally, the programme welcomed students from allied health professions through the Master of Medical Science in Public Health, further enriching our learning environment. Although we have different programme, all of us are in

the same class, learning the same stuff. The only difference was when it came to examination, the MPH were more clinically based. This diversity fostered broader discussions and provided insights from various cultural and professional perspectives.

Applying Real-World Experience

My experience in Pengkalan Hulu proved invaluable during the MPH programme. Many courses felt like they were providing theoretical foundations for the practical work I had been doing. This connection between theory and practice deepened my understanding and appreciation of public health principles.

Challenges and Growth

While most courses came naturally to me, Epidemiology and Biostatistics presented some challenges. The support of fellow students, particularly Richard Avoi, was crucial in navigating these more complex subjects. Our post-lecture discussions often proved more enlightening than the lectures themselves.

Learning from Experts

The programme boasted an impressive roster of professors and lecturers, including some of Malaysia's most respected public health academics. Their diverse experiences and viewpoints provided a comprehensive understanding of the field.

First Research Project

Under Dr. Hamidah's supervision, I conducted my first research project on "The Perception and Practice of Evidence-based Medicine Among the Medical Officers in Hospital Kuala Lumpur." I learned the process of planning the research, developing the research proposal and protocols, coming up with the questionnaire, data collection and analysis, and the final write up. The process of approaching medical officers in HKL for them to reply to the questionnaire proved to be a challenge. This experience not only honed my research skills but also highlighted areas for improvement, particularly in language proficiency.

Discovering Occupational Health

The MPH programme introduced me to Occupational Health, a field that would significantly shape my future career. Lectures and guidance from Dr. Rahim and Dr. Ling, coupled with a visit to Malaysian Airlines' health clinics and flight simulators, opened my eyes to the possibilities of combining community practice with occupational health.

This exposure to Occupational Health during the MPH programme was a pivotal moment, setting the stage for my next career move as an Occupational Health Physician. It exemplified how education can unexpectedly chart new paths in one's professional journey.

The MPH experience at Universiti Malaya was transformative, blending academic rigor with practical insights. It not only expanded my knowledge but also opened doors to new specialties and career possibilities, proving that returning to school can be a catalyst for significant professional growth and redirection.

Stepping in to Occupational Health

At the culmination of my Master of Public Health (MPH) program, an unexpected opportunity arose that would shape the trajectory of my career. While I had initially planned to specialise in Health Services Management, the introduction of a new MPH (Occupational Health) programme at Universiti Malaya caught my attention. Recognising this as a unique chance to explore a growing field, I, along with Dr. Siah Chiu Khim, became the inaugural students in this specialised programme. This decision, though diverging from my initial plan, would prove transformative for my career.

A Comprehensive Curriculum

As one of only two students in the inaugural MPH (Occupational Health) program at Universiti Malaya, I found myself at the forefront of an emerging field in Malaysia. The MPH(OH) program was designed as an advanced 1+2 year course, comprising one year of intensive coursework followed by two years of practical attachment. The program's comprehensive curriculum covered crucial areas such as Occupational Toxicology, Hygiene, Safety, Ergonomics, and Health Law, providing a solid foundation for my future practice.

Research and Practical Application

Under Dr. Ling's supervision, I conducted a significant research project on visual defects among commercial vehicle drivers. This study, which revealed a high prevalence of undetected visual impairments, underscored the critical role of occupational health in public safety.

Adapting to Challenges

An unexpected turn of events at the start of the programme's second year - the departure of both primary Occupational Health lecturers, Dr Rahim left for PETRONAS Malaysia and Dr Ling moved to the United Kingdom - presented both a challenge and an opportunity. This situation allowed me to tailor my learning experience, seeking out diverse experiences across various organisations.

Two Years of Experiential Learning

The programme's structure included two years of supervised public health practice, a crucial component in translating theoretical knowledge into practical skills. My rotations included:

- Social Security Organisation (PERKESO)
- Department of Occupational Safety and Health
- National Institute of Occupational Safety and Health
- ExxonMobil's Medical & Occupational Health Department
- Occupational Health Units in various government departments and hospitals

Each posting offered unique insights into different aspects of occupational health, from policymaking to corporate implementation, and from research to clinical practice.

Key Achievements and Contributions

During these rotations I had the opportunity to contribute to the following activities and projects at the various organisations:

- Developed innovative software solutions for data management and analysis
- Contributed to national guidelines and policies
- Conducted and analysed health risk assessments in various industries
- Designed and implemented health promotion programs
- Delivered lectures and training sessions to diverse audiences

Academic Engagement

Concurrent with my training, I took on the role of a part-time lecturer at Universiti Malaya, teaching Occupational Health to third-year medical students. This experience not only filled a crucial gap in the university's curriculum but also honed my skills in academic instruction and course development.

A Transformative Journey

This intensive period of study and practical experience was transformative. It not only equipped me with a comprehensive understanding of Occupational Health but also developed my skills in research, policy development, and education. The diverse experiences gained during this time laid a solid foundation for my future career, positioning me to make significant contributions to the field of Occupational Health in Malaysia.

As I completed this specialised training, I found myself uniquely positioned at the intersection of clinical practice, public health policy, and academic instruction—ready to advance the field of Occupational Health in meaningful ways.

CHAPTER V – EMBRACING ACADEMIA

After completing my postgraduate training, I found myself at a crossroads. The departure of key faculty members had left a void in Universiti Malaya's Occupational Health programme, presenting an unexpected opportunity. Dato S Noor Ghani, the Head of the Department of Social and Preventive Medicine, approached me with an offer to join as a Medical Lecturer.

A Pivotal Decision

The decision to join academia wasn't straightforward. I weighed the benefits Dato Noor Ghani highlighted—a permanent work location, research and sabbatical leave opportunities, and a modest salary increase—against my obligations to the Ministry of Health, which had sponsored my specialty training. Ultimately, the prospect of shaping occupational health practice in UM, combined with the convenience of working near my family home, tipped the scales. This decision was further solidified after an unsuccessful application to join Shell Sarawak.

Building from the Ground Up

Joining UM in June 2004, immediately after completing my training, I faced the challenge of developing a fledgling programme. Compared to the well-established occupational health programme at Universiti Kebangsaan Malaysia, UM's programme was in its infancy. Recognising the need for additional expertise, I took the initiative to court Dr. Retneswari Masilamani from the Ministry of Health's Public Health Institute. My persuasive efforts, coupled with support from UM management, successfully brought Dr. Retneswari on board as an Associate Professor, significantly strengthening our team.

Establishing the Occupational Health Clinic

Shortly after joining UM, Professor Dato' Dr. Mohd Amin Jalaludin, the Dean of the Faculty of Medicine and Director of Universiti Malaya Medical Centre (UMMC), tasked us with setting up an Occupational Health Clinic in UMMC. This project required careful planning and consideration of various factors:

1. We designed the clinic to offer diagnosis and management of work-related diseases, fitness for work assessments, and medical surveillance.
2. After evaluating private sector and international models, we opted for a cost-effective approach. Instead of investing heavily in specialised equipment like audiometric and spirometry tools, we decided to leverage existing facilities within UMMC.
3. The clinic opened on March 4, 2005, within the Department of Otorhinolaryngology at UMMC, operating as a referral clinic every Friday morning. This further reduce the cost of setting up a dedicated clinic,

This transition into academia marked a significant turning point in my career. It allowed me to combine my practical experience with academic pursuits, contributing to the development of occupational health education and services in Malaysia. The challenges of building a programme from the ground up and establishing a specialised clinic provided invaluable experiences that would shape my future contributions to the field.

The establishment of the Occupational Health Clinic at UMMC was particularly significant, as it not only served as a practical training ground for students but also filled a crucial gap in specialised occupational health services in the region. This initiative demonstrated the potential for academic institutions to play a pivotal role in advancing public health through targeted clinical services.

Addressing Professional Gaps: A Journey of Continuous Learning

As I embarked on my career as an Occupational Health Physician and Lecturer, I quickly recognised the dual nature of Occupational Safety and Health: clinical management and workplace risk assessment with control measures. My MPH(OH) training had instilled in me the importance of the Hierarchy of Control—Elimination, Substitution, Engineering Control, Administrative Control, and Personal Protective Equipment (PPE).

Bridging the Engineering Gap

While I was confident in my medical expertise, I realised that my advice on engineering controls might not carry the same weight as that of an experienced engineer. A memorable

incident where a consultant dismissed my recommendations about air flow in an isolation ward underscored this limitation.

Seizing an opportunity for growth, I enrolled in the Master of Engineering (Safety, Health and Environment) programme at Universiti Malaya's Chemical Engineering Department in 2006. This executive programme, conducted on weekends, allowed me to enhance my knowledge in safety and health engineering without disrupting my work schedule.

The programme presented challenges, particularly in engineering-focused courses like Quantitative Risk Assessment and Air Pollution Control. However, I persevered, completing the taught courses in one year and a research project on Chemical Health Risk Assessment in a Hospital Laboratory the following year under the supervision of Dr. Che Rosmani Binti Che Hassan. In 2008, I proudly added a third Master's degree to my qualifications, significantly bolstering my credibility in engineering aspects of occupational health.

Pursuing Advanced Research Skills

Despite the clinical equivalency of my MPH and MPH(OH) degrees to a PhD, I recognised the importance of formal research training and a doctoral qualification. Encouraged by Dato Dr. S Noor Ghani, I explored PhD opportunities.

A fortuitous meeting with Prof. Malcolm Sim from Monash University in Victoria, Australia, during an MPH(OH) final examination in UM opened a new door. Australia had long been an attractive destination for me, both academically and for my young family. Prof. Malcolm's willingness to supervise my PhD studies set the wheels in motion.

In early 2008, while still completing my Master of Engineering, I began my application process for a PhD at Monash University. The successful application marked the beginning of a new chapter, with plans to relocate to Australia by the end of 2008. This journey of continuous learning—from clinical practice to engineering principles and advanced research—exemplifies my commitment to holistic professional development. Each step was a deliberate move to address perceived gaps in my expertise, ultimately aiming to become a more well-rounded and effective Occupational Health professional.

Moving to Melbourne: A Family Adventure

The opportunity to pursue doctoral studies abroad brought a new level of excitement and challenge. Unlike my previous academic journeys, this time I was not alone. My young family—my wife, our seven-year-old daughter Natasha, and our eight-month-old son Daniel—would be accompanying me to Melbourne, Australia.

Preparing for the Move

As I prepared for my PhD journey in Melbourne, I faced the dual challenge of preparing my family for the move and ensuring a smooth transition of my responsibilities at the Department of Social and Preventive Medicine (SPM) at Universiti Malaya (UM). The preparations for my family were extensive. We had just purchased an apartment in PJ and needed to prepare it for rental. My wife had to arrange for unpaid leave, and we needed to secure a school placement for Natasha in Melbourne. The logistics were daunting, but the prospect of this family adventure kept us motivated.

Building a Strong Team

Between 2004 and 2008, we had successfully expanded our Occupational and Environmental Health Unit within the SPM. This growth was crucial for the department's future and for my ability to pursue further studies. We were fortunate to recruit two new medical lecturers, Dr. Azlan Darus and Dr. Anselm Su Ting, both graduates of our MPH(Occupational Health) program. Additionally, we brought on board a trainee lecturer, Dr. Marzuki Isahak, who was initially enrolled in the MPH(OH) program but later transitioned to the newly introduced DrPH program due to curriculum changes in 2008.

These new faculty members joined our existing team, which included Associate Professor Dr. Restneswari and Dr. Htay Moe, our Environmental Health specialist. This expansion not only strengthened our department but also provided the necessary support structure for my impending absence.

Handover of Responsibilities

One of my key responsibilities was managing the SPM website. To ensure continuity and maintain the quality of our online presence, I developed a comprehensive “Guideline for Managing the SPM Website.” This document was specifically created for Dr. Azlan, who would be taking over this responsibility. The guidelines meticulously outlined, the webpage format, explanations of website codes, and the overall website structure. This detailed handover document was designed to facilitate a smooth transition and maintain the consistency and quality of our department’s online presence.

Beyond the website management, I also worked closely with my colleagues to ensure a smooth handover of my teaching responsibilities.

Finding a Home in a New City

Our housing search in Melbourne presented unexpected challenges. Initially, we focused on Clayton, near Monash University, only to learn from my supervisor, Malcolm, that I would be based at the Alfred Campus in Melbourne’s CBD. The Australian rental market, with its requirements for credit history and tenant ratings, posed another hurdle. Fortunately, our cousin Su Yee, who had migrated to Australia, used her credentials to secure a place for us in Caulfield South.

This quiet suburb within Zone 1 of Melbourne’s transport network proved ideal. It offered affordable transportation to the Alfred Campus and housed the Caulfield South Primary School, where Natasha could enrol for free as the child of a doctoral student.

A Temporary Detour and Valuable Lessons

Upon arrival, we faced another challenge—our rented house wasn’t ready. After weighing various options, we found temporary accommodation with my old friend from BBBS, David Cheah. This unexpected arrangement turned into a blessing in disguise. Living with David and his family shifted our perspective on life. We learned about sustainable living practices like growing food, recycling, composting, and water conservation—valuable lessons during

Melbourne's long drought. This experience reshaped our priorities, focusing us more on family and experiences rather than material possessions.

Settling into Our New Life

After a couple of weeks, we moved into our new home in Caulfield South. This house would be our base for the next three years until our return to Malaysia in 2011. It marked the beginning of a new chapter in our lives, one that would not only advance my academic career but also profoundly impact our family's worldview and values.

This move to Melbourne was more than just a relocation for studies; it was a transformative experience for our entire family. It taught us adaptability, resilience, and the importance of embracing new perspectives—lessons that would continue to shape our lives long after our return to Malaysia.

My PhD Journey

Embarking on my PhD under Professor Malcolm Sim's supervision at Monash Centre for Occupational and Environmental Health (MonCOEH) Monash University in Australia proved to be a pivotal decision in my academic career. From the outset, the experience at the Alfred campus was both technologically advanced and intellectually stimulating, setting the stage for groundbreaking research in occupational health.

Embracing Technological Advancements

On my first day at the Alfred campus, I was introduced to a dual-screen workstation - a simple yet transformative tool that significantly enhanced my productivity—a setup I had never used before. From that moment, I was hooked on the efficiency of dual monitors. Every workstation I've had since then includes at least two screens, enhancing productivity by allowing simultaneous access to work documents, reference materials, analytical software, or bibliographic tools. The possibilities are endless, and this arrangement has consistently made my work more efficient.

A Supportive Learning Environment

The Alfred campus provided a conducive learning environment, characterised by approachable faculty and collaborative peers. Monthly sharing sessions fostered a sense of community and cross-pollination of ideas among researchers, enriching the overall academic experience.

The Australian Nurses' Work and Health Study

My PhD project focused on the Australian Nurses' Work and Health Study, part of the larger international CUPID (Cultural and Psychosocial Influences on Disability) study. This 12-month prospective study investigated factors associated with musculoskeletal disorders among nurses in three Melbourne hospitals: The Alfred, Caulfield Hospital, and Sandringham Hospital.

Adapting to Challenges: The Birth of Plan B

Faced with delays in obtaining ethical approval, I proactively developed a 'Plan B'—a Cochrane Systematic Review on ergonomic interventions for preventing work-related upper limb disorders. This approach, inspired by Professor Jason Teoh's teachings, proved invaluable in maintaining research momentum and broadening the scope of my work.

Key Research Outcomes

My thesis comprised several pivotal studies:

1. A published article in *Occupational and Environmental Medicine* examining risk factors for neck and shoulder pain among hospital nurses.
2. A study on physical and psychosocial factors associated with wrist or hand pain in nurses, published in *Injury Prevention*.
3. An investigation into the relationship between multiple sites of musculoskeletal pain and work ability.

4. A Cochrane Systematic Review on ergonomic interventions for preventing work-related upper limb disorders in adults.

International Collaboration and Support

The research benefited immensely from international collaboration, particularly with the CUPID study team led by Professors David Coggon and Keith Palmer from the University of Southampton. The support of my supervisors—Professor Malcolm Sim, Dr. Helen Kelsall, and Dr. Donna Urquhart—was instrumental in navigating the complexities of doctoral research.

Personal and Professional Growth

This PhD journey was not just about academic achievement; it was a period of significant personal and professional growth. It honed my skills in research methodology, data analysis, and scientific writing. The opportunity to present findings at international conferences in Melbourne, Bangkok, and Oxford further broadened my academic horizons.

Reflection

My PhD journey was a period of significant professional and personal growth. Facing challenges such as delays in ethical approval taught me the importance of adaptability and proactive problem-solving. Developing a contingency plan with the Cochrane Systematic Review not only kept my research on track but also expanded my expertise in systematic methodologies.

Working within an international collaboration broadened my perspectives on global health issues, particularly in understanding how cultural factors influence musculoskeletal disorders. The support and mentorship I received were instrumental in shaping my approach to research and have had a lasting impact on my career.

The experience reinforced the value of perseverance, teamwork, and the pursuit of knowledge. It prepared me to face future challenges with confidence and to continue contributing meaningfully to the field of public health and preventive medicine.

Returning to Malaysia: A New Chapter

After completing my PhD in three years, our family embarked on the journey back to Malaysia, returning to our apartment in PJ. This transition was not without its challenges.

Preparing to Leave Melbourne

The process of vacating our Melbourne home was daunting. We had to decide what to pack and send back to Malaysia, either through our flight luggage allowance or via package postage. Many items accumulated over the three years had to be disposed of, including Daniel's beloved castle and the "Tree House" I had built, as well as electrical appliances and furniture. We utilised the online marketplace platform Gumtree to sell these items, a resource we had grown accustomed to using during our time in Melbourne.

Reintegrating into Work

Returning to the Department of SPM at UM in late 2011 was not easy. The department had undergone significant changes since my departure in 2008. Two new research centres, the Julius Centre UM for Clinical Epidemiology and Evidence-Based Medicine (JCUM) and the Centre for Population Health (CePH), had been established. The Occupational and Environmental Health (OEH) unit had also set up its own centre, the Centre for Occupational and Environmental Health.

The department's physical space had also been transformed with major renovations to accommodate the new centres. Fortunately, the changes within the OEH unit were minimal, allowing for a smoother transition.

New Colleagues and Challenges

Dr. Marzuki Isahak, who had completed his DrPH, joined us as a lecturer in 2013. With his addition and the experience of our existing faculty members in Occupational Health (OH), we planned to expand the OH programme. However, this expansion was soon hindered by the departure of several key colleagues.

Dr. Anselm Su Ting left for a teaching position at Universiti Malaysia Sarawak (UniMAS) in Kuching, Sarawak. Dr. Azlan Darus moved to the Social Security Organization (SOCSO), and Associate Professor Dr. Retneswari Masilamani took early retirement. These departures left the department with Dr. Nasrin Agha Mohammadi, Dr. Marzuki, and me.

Dr. Nasrin Agha Mohammadi, an Environmental Health Engineer specialising in Air Pollution, joined us in late 2012 to replace Dr. Htay Moe, who had retired a few years earlier. With only two of us remaining in the Occupational Health field, Dr. Marzuki and I continued with the established activities and focused on our individual research interests.

Continuing Responsibilities

Our responsibilities included teaching in various programmes such as the MBBS, MPH, DrPH, and Master of Engineering (Safety, Health and Environment). We also managed the Occupational Health clinics in UMMC and served as advisors for the UMMC and Faculty of Medicine Occupational Safety and Health Committee.

Despite our efforts to continue and expand our work, recruiting new lecturers proved challenging due to both internal and external pressures. Occupational Health trained doctors were often lured by better opportunities in the private sector, and the multifaceted role of university lecturers—teaching, research, administrative work, consultations, publishing, and securing grants—was not attractive to many potential candidates.

This period highlighted the complexities of maintaining and growing an academic programme in Occupational Health, but it also underscored our commitment to continuing the important work we had established. Despite the challenges, Dr. Marzuki and I remained dedicated to our roles, ensuring the continuity of our teaching, research, and clinical activities.

The return to Malaysia marked a new chapter in my career, one filled with both familiar challenges and new opportunities. It reinforced the importance of adaptability, teamwork, and perseverance in academic and professional settings.

My Fourth Master: An Unexpected Journey

It was pure coincidence that led me to embark on my fourth Master's program. In 2015, while submitting an abstract for the 31st International Congress on Occupational Health in Seoul, I accidentally ticked a box to participate in a competition for a partial grant to study for a Master of Occupational Safety and Health (MOSH) at the ILO-ITC in Turin, Italy. I wasn't looking to embark on another Master's degree. Little did I know that this small action would lead to an incredible journey.

During the International Commission on Occupational Health (ICOH) congress in Seoul, I was overjoyed to hear my name announced as one of the two winners of the first ICOH-ILO Master Fellowship. My paper on "Barriers in notification on Occupational Disease in Malaysia" had impressed the judges, earning me a partial scholarship for the MOSH program. The paper was from the consultation work we have done for DOSH.

Despite already having three master's degrees and a PhD, I was excited about this new opportunity. However, there were still hurdles to overcome. I needed to secure additional funding for tuition fees, travel, and living expenses. Thankfully, UM approved payment for the registration fees, and I received support from the UMSC CA.R.E fund for travel and subsistence. I have to postpone my admission to the programme for one-year to coincide with my sabbatical leave.

My MOSH journey began in September 2016 with an online learning component. The tutors, Mr. Roman Lityakov and Mr. Davide Bosio, were instrumental in guiding us through the digital learning platform and materials.

The highlight of the program was undoubtedly the residential component in Turin. Here, I met an incredible group of classmates from around the world - from Australia to Sudan, from Bangladesh to Peru. We formed a tight-knit community, learning not just from our instructors but from each other's diverse experiences and perspectives in Occupational Safety and Health.

Our time in Turin was a perfect blend of serious study and joyful camaraderie. We attended classes, visited various sites to learn about OSH practices, and spent our free time exploring

the city together—cycling, shopping, eating, and even cooking meals as a group. As I have mentioned earlier, this is the first time I experience staying in a hostel environment in my entire academic career.

The most valuable aspect of this Master's programme wasn't just the formal curriculum, but the opportunity to learn about OSH practices in different countries from my classmates. This global perspective has been invaluable in shaping my approach to improving OSH in Malaysia.

As our three months in Turin came to an end, we felt a bittersweet mix of emotions—sad to part ways with our new friends, yet excited to return home and apply our new knowledge.

I'm deeply grateful to Ms. Liza Zambarnardi, Ms. Daniela Trombetta, and Mr. Felix Martin-Daza for their support throughout our time in Turin. Their efforts made our stay both comfortable and productive.

This unexpected fourth Master's degree has been one of the most enriching experiences of my academic career. It reinforced my belief in the value of lifelong learning and the power of international collaboration in advancing the field of Occupational Safety and Health.

As I bid farewell to Turin, I carried with me not just a new degree, but a wealth of experiences, friendships, and a truly global perspective on OSH.

The journey did not stop when I left Turin, as I still had to complete my dissertation under the supervision of Enrico Pira, an Occupational Health Physician from the Department of Public Health and Paediatrics, CTO Hospital, University of Turin, Italy. My dissertation, titled "Determinants of Multisite Musculoskeletal Disorders among School Teachers in Malaysia," was part of the Cohort study on clustering of lifestyle risk factors and understanding its association with stress on health and wellbeing among school teachers in Malaysia (CLUSTer). The final achievement was obtaining Cum Laude for the MOSH from the University of Turin, a testament to the hard work and dedication I put into this unexpected academic journey.

Reflection

Reflecting on my unexpected journey to a fourth master's degree, I'm reminded of how chance can lead to profound experiences. An accidental application led me to win a fellowship for the Master of Occupational Safety and Health program in Turin, Italy. Despite already holding multiple degrees, I embraced this opportunity during my sabbatical.

The programme's highlight was the residential phase in Turin, where I connected with professionals from around the world. This enriched my understanding of global occupational safety and health practices and fostered lasting friendships. Earning the MOSH degree with Cum Laude honours was rewarding, but the true value lay in the personal growth and the global network I developed.

This unexpected journey reinforced my belief in the power of lifelong learning and the importance of embracing new opportunities. As I reflect on my time in Turin, I'm grateful for the serendipity that led me there and the enriching experiences that will continue to influence my work in occupational safety and health.

Addio Torino, fino a quando ci incontriamo di nuovo!

CHAPTER VI – MY LEADERSHIP AND INNOVATION JOURNEY

When I reflect on my career, I'm often struck by how much of it has been shaped by unexpected opportunities and the willingness to venture down roads less travelled. While my academic pursuits have been a cornerstone of my professional life, it's the leadership roles and innovative projects I've undertaken that have truly broadened my horizons and allowed me to make a lasting impact in the field of Occupational and Public Health.

My Research Journey - From MPH to Global Recognition

As I reflect on my research journey, I'm astonished at how far I've come from those early days as a nervous MPH student. My path in research began with my MPH dissertation, focusing on "The Perception and Practice of Evidence-Based Medicine Among Medical Officers at Hospital Kuala Lumpur." Under Dr. Hamidah's guidance, I learned the fundamentals of research—from planning a study to writing the final dissertation. It was during this time that I also realised my limitations in English, a challenge I was determined to overcome.

My second significant research project, during my MPH (Occupational Health) programme, was a turning point. Under Dr. Ling's supervision, I studied visual defects among commercial vehicle drivers at the Selangor Road Transport Department. The findings of high prevalence of undetected visual impairments among drivers opened my eyes to the critical intersection of occupational health and public safety.

PhD and Research Experience

The CUPID (Cultural and Psychosocial Influences on Disability) Study during my PhD was a game-changer. It was the first time I was involved in an international project. The projects were led by Prof Dr David Coggon and Prof Dr Keith Palmer from the University of Southampton, with research groups coming from 18 countries. Participation in the project expanded my global research perspective immensely, learning the workings of a multi-country research, how the data from multi-country are combined, and the process of

publication. We contributed the data from the Australian Nurses' Work and Health Study to the project. In addition to the learning the process of the research, the project also increases my understanding on how cultural factors can influence disease outcome. In addition to the CUPID research, I also completed a Cochrane Systematic Review.

Beyond PhD

Beyond my PhD projects, I have been involved in many my research projects. From studying mercury levels in newborn cord blood to investigating hand-arm vibration syndrome among construction workers. From non-therapeutic anti-neoplastic drug exposure and the prevention of work-related upper limb musculoskeletal disorders.

The CLUSTER project, which was the brainchild of Prof Moy Foong Ming, focusing on the clustering of lifestyle risk factors among school teachers in Malaysia, was particularly close to my heart as it expanded on the project that I have done for my PhD on musculoskeletal disorders and interests in occupational health.

Response to the COVID-19 Pandemic

When the COVID-19 pandemic hit, I found myself applying my research skills and engineering background to urgent public health challenges. At that time due to the shortage of mask and respirators around the world, everyone was researching on ways to sterilise the respirators for re-use. Working together with Ir Dr Mohd Ridha from the Department of Mechanical Engineering, Faculty of Engineering we received a grant to develop and test a facial respirator hybrid decontamination method using ultraviolet irradiation combined with hydrogen peroxide vapour. Our team was successful in developing the system with an innovative method to isolate the mask during the sterilisation process, which is a requirement to minimise cross-contamination. Although the research was a success, due to increase in the supply of respirators, there is no further need for a mask sterilizer. However, the findings will still be useful for future research. It won Gold Medal at the 4th World Invention Academic Conference in Seoul, South Korea and a Silver Award at The Malaysia Technology Expo (MTE 2021)—Covid-19 International Innovation Award II

Another project that Dr Ridha and I participated was with Assoc Prof Dr Jacob John from the Department of Restorative Dentistry, Faculty of Dentistry. Dental procedures due to its proximity with the patient and it is an aerosol generating procedure, the danger of transmission of the COVID-19 virus was high. We embark on a project to designed aerosol collectors for dental treatments to minimise the exposure during dental procedures. The project won Silver Award at the Malaysia Technology Expo-MTE 2021.

The final project that we work together was to analyse indoor airflow for infection prevention. The project focus on the use of computational flow dynamics in investigating outbreaks of airborne pathogens. CFD modelling was used in understanding the transmission dynamics of airborne pathogens. We apply CFD to investigate and mitigate an outbreak of COVID-19 in an oncology ward. The interdisciplinary research projects highlighted the adaptability required in public health research.

Research Funding

Throughout my career, I've been grateful for the numerous research grants that have supported my work. Each grant, whether from the High Impact Research to Fundamental Research Grant Scheme (FRGS) or university funds, has enabled me to pursue important questions in occupational and public health.

Reflection

My research journey has been more than just academic growth; it's been about making a tangible difference in people's lives. From improving workplace safety to informing policies on public health, each study has been a step towards creating a healthier, safer world.

Academic and Personal Growth Through International Engagements

During my time at the UM, I had the privilege of traveling to three countries for academic engagement and research purposes: Indonesia, Cambodia, and Nigeria. Each of these trips provided invaluable learning opportunities and experiences that enriched both my academic and personal life.

Indonesia: Aceh Rehabilitation and Reconstruction Project

In Indonesia, I was involved in the Aceh Rehabilitation and Reconstruction Project following the devastating 2004 tsunami. This project, facilitated through the Department of Social and Preventive Medicine at UM, allowed me to contribute to the reconstruction efforts and gain insights into disaster response and public health interventions. The experience taught me about the importance of community engagement, cultural sensitivity, and the role of public health in disaster recovery. It was a poignant reminder of the impact of natural disasters on communities and the need for sustainable and community-driven reconstruction efforts.

Cambodia: Public Health Research Project

In Cambodia, I participated in a public health research project focused on the health issues of the Muslim community. This project, a collaboration between Malaysia and Cambodia, involved identifying critical public health issues, understanding socio-cultural and socio-economic barriers to healthcare, and developing intervention strategies. The project highlighted the challenges faced by the Muslim community in Cambodia, including limited access to education, healthcare, and economic opportunities. It also underscored the importance of addressing these issues through targeted interventions and community engagement. The experience broadened my understanding of public health in a global context and the need for culturally sensitive health interventions.

Nigeria: Academic Collaboration and Health Research

In Nigeria, I visited Usmanu Danfodiyo University in Sokoto as part of the Asia-Africa Development University Network. This trip involved discussions on potential research collaborations, mentoring potential PhD candidates, and delivering public lectures on occupational health. I also had the opportunity to visit the Zamfara State Ministry of Health's Health and Demographic Surveillance station, which provided insights into their data collection and management systems. The experience in Nigeria taught me about the resilience and adaptability of the local population, the importance of international collaborations in public health, and the challenges of conducting research in resource-limited settings.

Reflection

Each of these trips was a significant learning experience, enriching my academic and personal life. They underscored the importance of global health research, cultural sensitivity, and community engagement, and have shaped my approach to public health interventions.

The key learning points that I learned from this international engagement are:

- **Cultural Sensitivity and Community Engagement:** All three trips emphasised the importance of cultural sensitivity and community engagement in public health interventions.
- **Resourcefulness and Adaptability:** The experiences in Cambodia and Nigeria highlighted the resourcefulness and adaptability of local communities in the face of limited resources.
- **Global Health Perspectives:** These engagements broadened my understanding of public health issues in different global contexts and the need for tailored interventions.
- **Academic Collaborations:** The trips reinforced the value of international academic collaborations in advancing public health research and practices.

My Publications Journey: A Chronicle of Public Health Contributions

My journey into the world of academic publishing began with a significant milestone: the publication of my research project from my MPH (Occupational Health). This project, which was published in the Journal of the University of Malaya Medical Centre (JUMMEC) in 2006, "Hoe VCW. The prevalence of visual defect among commercial vehicle drivers in Selangor, Malaysia. Journal of the University of Malaya Medical Centre (JUMMEC) 9 (1), 35-38", marked a crucial turning point in my career.

Overcoming Initial Challenges

However, the path to this achievement was not without its challenges. Early on, I found the process of publishing in peer-reviewed journals daunting. My first attempt at publication was in 2004, when I submitted my paper to the Medical Journal of Malaysia (MJM). The feedback from the reviewers was harsh and discouraging, making it difficult for me to tolerate the criticism. This initial setback took a toll on my confidence, and it took me two years to muster the courage to resubmit my work to another journal. The necessity to publish a paper for my confirmation of service at the UM served as a catalyst for my persistence. Despite the lack of guidance on how to navigate the publication process, I persevered.

Development During PhD Studies

It was during my PhD studies at Monash University in Australia that I truly began to develop my skills and confidence in writing and publishing academic papers. The process of publishing my first paper based on the findings of the Australian Nurses' Work and Health Study was a pivotal learning experience. Under the guidance of my supervisor, Malcolm, who was also the Editor-in-Chief of Occupational and Environmental Medicine (OEM)—one of the key journals in the field—I learned the intricacies of the submission process, including making corrections and responding to reviewers. Malcolm's advice was invaluable; he emphasized the importance of addressing all major issues raised by the reviewers and advised against disputing their comments unless absolutely necessary. This guidance transformed the daunting task of peer-reviewed publication into a manageable and even rewarding process.

After two revisions, our paper, "Hoe VC, Kelsall HL, Urquhart DM, Sim MR. Risk factors for musculoskeletal symptoms of the neck or shoulder alone or neck and shoulder among hospital nurses. *Occup Environ Med.* 2012 Mar;69(3):198-204," was finally accepted. Although this was not my first publication during my PhD—the first being the Cochrane Systematic Review protocol for "Ergonomic design and training for preventing work-related musculoskeletal disorders of the upper limb and neck in adults (Protocol)"—it was this paper that provided me with the skills and confidence I needed to move forward.

To further hone my writing skills, I began volunteering to review papers, particularly for the Medical Journal of Malaysia (MJM). Starting with just one paper in 2010, I reviewed 17 manuscripts in 2011. This process allowed me to learn from others' writing styles and improve my own writing and English proficiency.

Publication Record and Impact

Since completing my PhD, I have authored or co-authored 57 Web of Science-indexed articles with a H-Index of 19 and 65 SCOPUS-indexed manuscripts with a H-Index of 21. In addition to these, I have published conference abstracts, book chapters, and books, including the latest title, “Notes on Occupational Health – Managing Hazards and Risks at Work” (ISBN 978-967-488-344-7).

My work spans a wide range of topics within occupational and public health, reflecting my diverse interests and collaborative spirit. As my research progressed, I found myself increasingly drawn to the complex interplay between work environments and health outcomes. Throughout my career, I have been fortunate to collaborate with a diverse group of researchers from around the world. These collaborations have not only enriched my work but have also allowed me to contribute to a wide range of studies, broadening the scope and impact of my research.

Response to the COVID-19 Pandemic

The COVID-19 pandemic marked a pivotal moment in my research career. As the world grappled with this unprecedented health crisis, I redirected my expertise to address urgent pandemic-related issues. My publications during this period reflect this shift, covering topics such as the mental health impacts of the pandemic on healthcare workers, the challenges of remote work, and the development of risk assessment tools for COVID-19 exposure.

Reflection

Looking back on my publication record, I am struck by the breadth and depth of the topics I have explored. These publications have not only contributed to academic knowledge but have also informed policies and practices aimed at improving workplace health and safety.

As I move forward, my goal remains the same: to produce research that makes a tangible difference in people's lives and contributes to the creation of healthier, safer work environments for all.

I am deeply honoured to share that my dedication to research has been recognized on a global scale. In 2024, I was named among the Top 2% Scientists in the World for my field by Stanford University through the Elsevier Data Repository. This recognition is not just a personal achievement but a testament to the importance of our work in occupational and public health at the University of Malaya.

From a reviewer to Editor-in-Chief

My journey into the world of peer reviewing began with an invitation from the Asia-Pacific Journal of Public Health (APJPH) in 2007 to review a paper titled "The Prevalence Study of Work Related Upper Limbs Symptoms (WRULS) among office workers." This initial engagement marked the beginning of a significant phase in my academic career.

My involvement in reviewing manuscripts accelerated during my PhD studies at Monash University. I started reviewing papers for the Medical Journal of Malaysia (MJM) in 2010, beginning with one manuscript that year and followed by 17 in 2011. In 2012, I reviewed 24 manuscripts for MJM, *APJPH*, *Preventive Medicine*, *Annals of Medical and Health Sciences Research*, and *BMC Public Health*. Over time, I have completed 333 reviews for 288 manuscripts from over 35 peer-reviewed journals.

Learning from Early Experiences

The experience of submitting my first paper to MJM in 2004, although challenging due to the harsh and critical feedback from reviewers, was a pivotal learning moment. It made me realise the profound impact that reviewers' comments can have on authors, influencing not only the manuscript's fate but also the authors' morale. This understanding has guided my approach to reviewing, where I strive to structure my comments constructively. I focus on identifying both the strengths and weaknesses of the paper and provide authors with clear guidance on how to improve their manuscripts.

Impact on Academic and Professional Development

This skill in providing constructive criticism has also enhanced my role as an examiner for dissertations and theses. The ability to balance critique with constructive feedback has been invaluable in my academic and professional development.

Transition to Editorial Roles

Upon returning to Malaysia after completing my PhD, I sought to further engage in journal reviewing and applied to become an Editor for MJM. I was fortunate to be accepted as a member of the MJM Editorial Board in 2014. Under the guidance of Prof Datuk Dr Lekhraj Rampal, the then Editor-in-Chief of MJM, I not only improved my role as a member of the Editorial Board but also gained valuable insights into leadership and communication.

In addition to my role at MJM, I have also served as a member of the Editorial Board for the Journal of Health and Translational Medicine (JUMMEC) and as an associate editor for BMC Musculoskeletal Disorders and Frontiers in Public Health. These diverse roles have provided me with the opportunity and confidence to take on the position of Editor-in-Chief of MJM.

I am deeply indebted to Prof Datuk Dr Rampal, who proposed me to succeed him as the **Editor-in-Chief of MJM**, a position he held from 2014 to 2024. His mentorship and advice have been instrumental in my growth, and I am honoured to continue his legacy in this esteemed role.

Reflections

My journey from a reviewer to Editor-in-Chief has been a transformative one, marked by significant learning moments and opportunities for growth. The skills and insights gained through these experiences have not only enhanced my academic and professional development but have also prepared me to lead and contribute to the advancement of public health research and publication.

Pioneering Digital Presence – The Webmaster story

My journey in managing digital presence began in 2005 when I was tasked with overseeing the website of the Department of SPM at UM. I was thrilled, as computer programming had always been a passion of mine since secondary school, and this opportunity allowed me to blend it with my professional work. Little did I know that this would be the beginning of a long and rewarding journey in digital leadership.

The SPM website

The SPM website, initially established by Professor Awang Bulgiba in 1999, had already been updated by various staff members before I took over. During my tenure from 2005 to 2008, I transitioned the website from static HTML pages to dynamic PHP pages, utilising web authoring software such as Macromedia Dreamweaver. Before leaving for my PhD in Australia, I wrote the “Guideline for Managing the SPM Website” to ensure continuity in my absence. This document reflected my growing understanding of digital infrastructure and its importance in academic settings.

My journey with web management took an unexpected turn after my PhD when Prof Dr. Mohd Amin Jalaludin, the Dean and President-Elect of Asia-Pacific Academic Consortium for Public Health (APACPH), asked me to manage their website. This introduced me to WordPress, a content management system that was new to me at the time. I remember feeling both excited and daunted by the prospect of learning yet another system. But as I delved into WordPress, I discovered its user-friendliness and versatility. This experience would prove invaluable in the years to come.

The transition of the SPM website to WordPress in 2018 was a game-changer. Suddenly, our digital presence became a collaborative effort, with staff and students contributing content. It was no longer a one-person job, and I found immense satisfaction in seeing others engage with our online platform.

User Experience and Design

As we redesigned the SPM website, I applied principles of user experience that I had learned over the years. We made the site responsive for both desktop and mobile platforms, understanding the shift in how people consume online content. The main landing page was redesigned to feature four core business areas aligned with public health education, followed by the latest news to showcase the activities of students, staff, and the department. This design encouraged frequent visits to the site, keeping stakeholders informed about the department's activities.

Integration with Social Media and Other Platforms

In addition to managing the SPM website, I have been involved in managing social media presence across multiple platforms for various organisations. In 2008, while in Australia, I created the first Facebook page for any alumni group in UM—the Public Health Graduates from UM page (<https://www.facebook.com/phgrads/>). This experience paved the way for my role in social media management, further expanding the digital presence of the department and other organisations.

The SPM website is linked to its Facebook page and Twitter feeds, ensuring that news and updates are disseminated widely. Additionally, the department has its own YouTube Channel to share recorded lectures, webinars, interviews, and other video content. This multi-platform approach has enhanced the department's visibility and engagement with its audience.

Managing During the COVID-19 Pandemic

During the COVID-19 pandemic, the SPM website became a crucial resource, hosting over 450 articles on various aspects of the crisis. This period highlighted the importance of a well-managed digital platform in times of global health emergencies. The website's responsiveness and user-friendly design ensured that it remained a vital source of information for both the public and the academic community.

Additional Digital Roles and Skills

My digital journey has also involved managing databases, implementing search engine optimization, and ensuring website security and uptime. These skills have allowed me to assist other organizations in establishing their online presence, including various medical societies and academies.

Reflections

Reflecting on my journey, it is clear that embracing new challenges and continuously adapting to technological changes are essential in the rapidly evolving landscape of digital communication. This experience has taught me the value of embracing new challenges and continuously adapting to technological changes. In the rapidly evolving landscape of public health and digital communication, I've found that being open to learning and innovation is key.

Harnessing Technology in Teaching and Learning

As I reflect on my journey, it's clear that technology has been a constant companion, shaping my approach to teaching and learning in profound ways. My fascination with technology began early, during my secondary school days when I first laid hands on the Apple II clone computer. This exposure opened my eyes to the immense power of technology, and I was determined to harness it to enhance the educational experience.

Innovating in the Field: The Health Promotion Kiosk

One of my earliest ventures into using technology for teaching and learning was during my time at the Hulu Perak District health office in KK Pengkalan Hulu. The office was organising an innovative day in Gerik, and each clinic was tasked with showcasing their innovations. Inspired by a promotional kiosk I saw at a mall, where a screen allowed people to click for more information, I decided to develop a self-directed health promotion kiosk. I built the kiosk with a computer, making only the monitor and mouse accessible to the public, and created a Microsoft PowerPoint presentation with the "Browsed at a kiosk" option enabled. This was a groundbreaking innovation in the late 90s, and we won the prize for innovation.

Embracing Online Learning at the University of Malaya

When I joined the UM, my passion for integrating technology into teaching only grew stronger. Familiar with web technology and overseeing the SPM website, I began posting my Occupational Health lecture notes for MBBS students online in 2005. At that time, online notes were not widely used, and the Learning Management System (LMS) was still in its infancy.

Leveraging Learning Management Systems

The introduction of SPeCTRUM, a Moodle-based LMS, around 2011, was a significant milestone. I quickly adopted the tools available, including developing interactive lectures using H5P plugins. H5P allowed me to create, share, and reuse HTML5 content, further enriching the learning experience.

Developing Massive Open Online Courses (MOOCs)

In 2016, when UM introduced Massive Open Online Courses (MOOCs) and allocated MYR50,000 for each MOOC, I saw an opportunity to develop the “**Essentials in Public Health**” course. This course, hosted on the OpenLearning platform, was designed to provide a foundational understanding of public health for candidates joining the Master of Public Health programme. It was a crucial step in ensuring that all candidates had a baseline understanding of public health principles.

Addressing Necessity with Innovation: The EndNote Guide

Innovation often arises from necessity. During a session for the Research Methods course in the MPH programme, I was scheduled to teach EndNote Bibliography software, but a timetable clash with other commitments made it impossible. Instead of rescheduling the class, I wrote the “**Brief Guide to Using EndNote X6,**” a step-by-step guide that covered everything from navigating the Library Window to inserting references in Microsoft Word documents. This guide proved invaluable to students, as it was easy to follow and accessible at all times. Over the years, I updated the guide with each new version of EndNote, and in

2020, I incorporated links to YouTube videos demonstrating each part of the guide. This comprehensive resource is now freely available for download on the SPM website.



(<https://spm.um.edu.my/knowledge-centre/books/brief-guide-to-using-endnote-x9/>)

Micro Credentialing: Reducing Workload and Enhancing Learning

Innovation is not just about making things more accessible and user-friendly; it can also significantly reduce workload in the long term. When UM introduced the concept of Micro credentialing (MC) and required each faculty to create MC courses, I saw another opportunity. We identified the Occupational Health courses as potential candidates for MC and decided to convert four of our modules into two MC courses: “Occupational Safety and Health Hazards” and “Risk Assessment and Management.” These courses were published on the FutureLearn platform as an ExpertTrack–“**Occupational Health: Managing Hazards and Risk at Work.**”



(<https://www.futurelearn.com/experttracks/occupational-health-managing-hazard-and-risk-at-work>)

This was the first ExpertTrack published by UM and remains the only one on FutureLearn. This innovation not only reduced our teaching workload but also aligned with UM's goals of offering MC courses.

From Notes to Books: The Evolution of Educational Resources

The journey didn't stop there. During one of the Occupational Health sessions, students requested notes for the **"Occupational Health: Managing Hazards and Risk at Work"** course. I realised that the volume of notes we had created could be compiled into a book. Thus, we published **"Notes on Occupational Health–Managing Hazards and Risks at Work"** with UM Press in 2024.

Navigating the COVID-19 Pandemic: Transitioning to Online Teaching

The COVID-19 pandemic presented another significant challenge and opportunity. When the first Movement Control Order (MCO) was announced on March 15, 2020, and to take effect on March 18, 2020, our department had to transform our teaching from conventional face-to-face to online teaching almost overnight. With only 10 Zoom licenses available at UMMC, I requested two licenses, one for the MPH and one for the DrPH programmes, and was approved. To ensure our academics were equipped, we organised a Zoom tutorial led by Mohammad Haizril, our Project Officer for e-Learning. Even before this, I had been using YouTube streaming for some of my night classes, leveraging OBS Studio open broadcaster software to stream my lectures live.

Reflections

In each of these instances, technology was not just a tool but a catalyst for innovation. It allowed us to adapt, to innovate, and to enhance the educational experience in ways that were previously unimaginable.

From Environmental Health to Planetary Health

My love for environmental health began during my time as a M&HO in KK Pengkalan Hulu. There, I witnessed firsthand the crucial work of the BAKAS team in ensuring safe water supply and sanitation, and the vector team's efforts in controlling malaria breeding sites. These early experiences, combined with the scientific knowledge gained during my MPH, laid the foundation for my understanding of environmental health.

When I joined the UM in 2004, my primary focus was on developing Occupational Health programmes. Environmental Health took a backseat until a serendipitous opportunity arose in 2013. Dr. Low Kwan Sim from the Asia Pacific Environmental Consultant Sdn Bhd (ASPEC) approached Professor Wong Li Ping and me to join her team bidding for a Detailed Environmental Impact Assessment (DEIA) project for the Proposed Pekan Nenas Sanitary Landfill in Johor. This led to my certification as a subject matter expert in Health Impact Assessment (HIA) by the Department of Environment on November 11, 2013.

This certification opened doors to a fascinating world of environmental health consultancy. I found myself working on diverse projects - from aluminium smelting plants to hydroelectric dams, from gold refineries to petrochemical factories. Each project presented unique challenges and learning opportunities, broadening my understanding of the intricate relationships between development and public health. However, as I delved deeper into this role, I began to grapple with ethical dilemmas. The limitations of being a subject matter expert sometimes conflicted with my desire to ensure minimal health impacts from these projects. This internal struggle eventually led me to step back from this role, but the experience proved invaluable for what was to come.

A pivotal moment came when the late Professor Emeritus Dato' Dr. Khairul Anuar Abdullah invited me to join the **Academy of Sciences Malaysia (ASM)** team for the **Association of Academies and Societies of Sciences in Asia (AASSA)** Climate Change and Health (CCH) project. This project, sponsored by the German National Academy of Science Leopoldina and **Interacademy Partnership (IAP)** was part of a global initiative involving over 130 science academies, opened my eyes to the broader implications of environmental health on a global scale.

Following the unfortunate passing of Dr. Khairul Anuar, I was asked to lead the project to its conclusion. This responsibility culminated in the presentation of our final report, "**The imperative of climate action to promote and protect health in Asia,**" at the AASSA webinar on CCH in Asia in 2022. This report contributed to the larger IAP global report, "**Health in the climate emergency: a global perspective,**" highlighting the critical intersection of climate change and public health.

This experience catapulted me into the global arena of climate health. I found myself participating in international workshops and forums, from Malaysia to Nepal to China. These engagements not only expanded my network but also deepened my understanding of the complex interplay between climate change, health, and equity on a global scale.

Currently, I'm a member of the Health Nexus of the ASM **National Planetary Health Action Plan (NPHAP)** team, contributing to the development of a national strategy that recognises the link between human health and planetary health.

Reflections

My journey from local environmental health issues to global planetary health challenges has been one of continuous learning and adaptation. Each step has built upon the last, demonstrating the interconnected nature of public health challenges and the need for a holistic, global perspective in addressing them.

This path has taught me the value of remaining open to new opportunities and continuously expanding one's viewpoint. In public health, adaptability and growth are key to making meaningful contributions to global health and well-being.

Professional Engagement

Throughout my career, I've been privileged to contribute to various professional associations and societies, both nationally and internationally. These engagements have not only allowed me to share my expertise but also to learn from colleagues across different specialties and geographical regions.

Malaysian Medical Association (MMA)

My involvement with the MMA has been a significant part of my professional journey since joining in 2002 as a member of the MMA-Wilayah Persekutuan State Branch. Within the MMA, I've been active in various capacities, particularly in the Society of Occupational and Environmental Medicine (SOEM), where I served as a committee member from 2006-2008 and 2014-2015. Since 2018, I've been an elected committee member for the MMA-Wilayah

Persekutuan Branch, a role I'll continue until 2026. In 2019-2020, I served as the SOCHOMOS representative for MMA-Wilayah Persekutuan, achieving 2nd Place for Membership Challenge Awards.

My contributions extend beyond branch activities. I've been appointed to several key roles within the MMA, including serving as an Editorial Board Member for the Medical Journal of Malaysia (MJM) from 2014-2024, and as the MJM Editor-in-Chief for 2024-2026. I've also been a member of the MMA CPD Committee (2017-2019), MMA Representative for the National Council for Occupational Safety and Health (2017-2019), and part of the Action on Smoking and Health (ASH) Committee (2020-2022).

These efforts have been recognised through several awards. In 2023, I was honoured with the MMA Meritorious Service Award, acknowledging my contributions to the medical profession and community health in Malaysia. Additionally, I received the MJM Best Editor award for 2019-2021 and 2023-2024, reflecting my commitment to advancing medical literature and research in the country.

College of Public Health Medicine (CPHM)-Academy of Medicine Malaysia (AMM)

Since joining the AMM in 2008 and becoming a Fellow in 2018, I've been actively involved in advancing public health medicine as a council member of the CPHM. My contributions include developing key documents like the Specialist Specific Requirements for Public Health Medicine and National Postgraduate Medical Curriculum for Public Health Medicine, serving on the Public Health Medicine Sub-Specialist Committee for Occupational Health, and organising educational initiatives such as Pre-MEDEX workshops and the Asia-Pacific Conference on Public Health.

Academy of Occupational and Environmental Medicine, Malaysia (AOEMM)

My journey with the AOEMM began in 2014 when I joined as an ordinary member. Two years later, I was promoted to Fellow. Since 2018, I've served as a council member, a role I'll

continue until 2026. In 2016, I took on the task of developing the AOEMM website, incorporating database functions for members and certification information. From 2018 to 2024, I've held the position of Censor in Chief, overseeing membership and certification processes. Throughout my tenure, I've contributed to various educational initiatives and participated in DOSH technical committees for developing occupational safety and health guidelines. These roles have allowed me to contribute significantly to the advancement of occupational and environmental medicine in Malaysia, bridging academic knowledge with practical policy-making and professional development initiatives.

Asia-Pacific Academic Consortium for Public Health (APACPH)

My involvement with the APACPH spans over two decades, beginning in 2002 when I participated in the 34th APACPH Conference hosted by UM. This introduction to APACPH, an international non-profit organisation with over 81 member institutions across 23 countries in the Asia-Pacific region, marked the start of a long and rewarding association.

In 2008, I contributed to the organisation of the 40th APACPH Conference in Kuala Lumpur. A significant milestone came in 2011 when I was appointed as the Web-Master of the APACPH website, a role I have maintained since. My involvement grew further as I served as a committee member from 2013 to 2021, was elected Vice-President 2 for the 2021-2023 term, and continue to serve on the committee for 2023-2025. Throughout this time, I've actively contributed to various APACPH conferences and academic activities, fostering collaboration and knowledge exchange among public health professionals across the region. This long-standing association has allowed me to contribute to the advancement of public health education and research on an international platform.

In 2023, my contributions were recognised with the APACPH Medal of Merit, a prestigious accolade that acknowledges outstanding service aligned with APACPH's mission of enhancing professional education for public health. This recognition was a humbling experience, affirming the impact of my work in advancing public health education across the Asia-Pacific region.

International Commission on Occupational Health (ICOH)

My involvement with the International Commission on Occupational Health (ICOH), the oldest and most prestigious scientific association in occupational health, began in 2015 when I became a member. That year, I was awarded the International Labour Organisation (ILO) Master Fellowship at the 34th ICOH Congress in Seoul, enabling me to complete the Master of Occupational Safety and Health at the ILO-International Training Center in Turin, Italy.

Since 2018, I've served as the National Secretary for Malaysia, bridging international best practices with local initiatives. Throughout my association with ICOH, I've actively contributed to various congresses and Scientific committee meetings, presenting papers and sharing insights from my research and practice.

Other Associations

In addition to the four main associations that I joined, I was the founding member of the Asia Hyperbaric and Diving Medicine Association and was the Honorary Secretary (2005-2007). I joined the Malaysian Industrial Hygienist Association (MIHA) as an Associate member during the inception of MIHA in 2004 and continue my membership for the subsequent two years.

Reflections

My involvement in various professional associations and societies has been a journey of continuous learning and mutual growth. These engagements have provided me with a comprehensive perspective on global health issues across various specialties and regions. They've offered platforms for knowledge exchange, collaboration, and the opportunity to shape policies and mentor future specialists.

My roles in international organisations like ICOH and APACPH have been particularly instrumental in broadening my global perspective. These experiences have allowed me to bring international expertise to Malaysia while sharing our country's unique approaches globally, contributing to the elevation of our national standards and practices.

Event Organisation: Fostering Knowledge Exchange

My journey in event management began in secondary school with the Interact Club and was further developed during my time at Kasturba Medical College, where I helped organise our Graduation Night. These early experiences laid the groundwork for organising health promotional activities at KK Pengkalan Hulu.

Since joining the UM in 2004, I've organised numerous workshops, seminars, and conferences. A significant milestone was the seminar "How to Sell Occupational Health?"—the first of its kind in Malaysia. This experience paved the way for my involvement in larger international and regional conferences, including the 40th Asia Pacific Academic Consortium for Public Health (APACPH) Conference in Kuala Lumpur and the 5th through 8th Asia-Pacific Conferences for Public Health, which attracted over a thousand participants.

Reflections

These events have enhanced my organisational skills and provided invaluable opportunities for knowledge exchange and networking within the public health community. Each gathering has presented unique challenges, from managing logistics to coordinating with international speakers, reinforcing the critical role that well-organized events play in advancing public health.

Reflecting on this journey, I recognise the power of events to foster collaboration and drive progress in our field. I'm grateful for the opportunity to contribute to these important gatherings, which collectively enrich our understanding and practice of public health.

Managing COVID-19 Through OSH Principles

As I reflect on the challenging period of the COVID-19 pandemic, I'm reminded of how my background in occupational and public health became crucial in navigating the crisis at UMMC. The experience was a testament to the power of applying occupational safety and health (OSH) principles in a real-world, high-stakes situation.

Early Days: Preparation Amid Uncertainty

I remember vividly the early days of January 2020 when UMMC began its preparations for what would become a global pandemic. As news of the novel coronavirus outbreak in Wuhan, China reached us, there was a palpable sense of urgency in our corridors. We quickly established a task force, recognising the potential risk of global spread. Little did we know then how prescient this decision would be.

On January 25, 2020, when UMMC received its first case of a person under investigation (PUI), the gravity of the situation hit home. The next day, I found myself in intense discussions with the task force, planning procedures and processes for what we anticipated would be a rise in cases. However, the true scale of what was to come was still beyond our imagination.

The First Wave: A Rude Awakening

The relative calm that followed our initial preparations was shattered by the first wave of cases in late February 2020. I recall the sudden realisation that our preparations, while well-intentioned, were insufficient for the tsunami of cases that was about to hit us. The sudden rise in cases and our lack of adequate preparation led to the Government of Malaysia declaring the first movement control order (MCO) on March 18, 2020. On that day, there were 790 confirmed cases, with 60 recovered and two deaths recorded.

Addressing the Human Element: Our Healthcare Workers

As a public health professional, I've always believed in the importance of understanding and empathising with the needs of our clients. In this case, our clients were our own healthcare workers (HCWs), who were facing unprecedented challenges.

When the first MCO was announced, including the closure of all childcare services, I immediately recognised the potential impact on our staff. I could see the worry in their eyes—how would they care for their children while working on the frontlines? I knew we had to act fast.

I shared my concerns with Prof Dr Nazirah Hasnah, the then Deputy Medical Director of UMMC. Her quick response and collaboration with the Chief Nurse led to the establishment of two on-site childcare centres staffed by student nurses.

Innovating Under Pressure: The Online Risk Assessment System

As the cases surged, I noticed our manual risk assessment process for exposed HCWs was becoming overwhelmed. We had over 40 staff and volunteers working around the clock, yet we were struggling to keep up. I knew we needed a more efficient solution.

To address the overwhelming manual risk assessment process for exposed healthcare workers, we developed an online risk assessment system with an algorithm that could automatically risk categorize the HCW into low, medium, or high risk and provide appropriate recommendations. This system, integrated into the existing UMMC portal, allowed us to track each HCW's exposure and risk, assess the effectiveness of control measures, and reduce our assessment workforce by 75%, even as case numbers increased.

Engineering Solutions: Creating Safe Spaces

One of the most daunting challenges we faced was adapting our hospital environment to control the spread of the virus. I was tasked by the UMMC COVID-19 task force to work with our engineering team to review and improve our environmental measures.

Our first focus was the Trauma and Emergency Department. I'll never forget the day we surveyed the Respiratory Ward in ED, realising the open layout could easily allow aerosolised virus particles to spread. With hardware stores closed due to the MCO, we had to get creative. We scoured the hospital for materials and managed to create isolated cubicles using plastic sheets and curtain rails.

The General Intensive Care Unit (GICU) presented another complex challenge. We only had four negative pressure rooms, clearly insufficient for the growing number of severe cases. After poring over mechanical and electrical drawings, we devised a plan to isolate an entire phase of the GICU for COVID-19 patients, increasing our capacity from 4 to 10 beds. We also

designed connecting anterooms and designated two rooms as donning and doffing areas for personal protective equipment (PPE).

These are just a few examples of the effort that I took working together with the Engineering Team in UMMC to provide a safe space for healthcare workers.

Reflections

The COVID-19 pandemic at UMMC was a transformative experience that highlighted the critical importance of adaptability, innovation, and empathy in public health. I'm struck by the resilience and adaptability of our team at UMMC. The pandemic taught us the critical importance of having a flexible, responsive engineering team capable of quickly adapting hospital infrastructure in times of crisis.

This crisis underscored the necessity of addressing both the physical and emotional needs of healthcare workers, enabling us to maintain an effective workforce under extreme stress. The experience has reinforced my commitment to fostering resilient, flexible, and human-centered healthcare systems.

This experience has undoubtedly changed me as a professional and as a person. It's reinforced my belief in the power of innovation, collaboration, and empathy in public health. The lesson learned can be transformed into case-studies and incorporated into our teaching for both undergraduate and postgraduate students.

From Funding Director to Head of Department

My journey as a leader has been a winding path, filled with diverse experiences that have shaped my approach to leadership and management. It's a journey that began long before my current role, rooted in the formative experiences of my youth and early career.

Early Leadership Foundations

My first taste of leadership came during my secondary school days when I was elected as the Funding Director for the Interact Club. This role presented me with a significant challenge: organising a warehouse book sale in collaboration with Federal Publications. This experience was my first real test in project management and teamwork, laying the groundwork for my future leadership roles.

Balancing Act: Internship and Graduation Night

As I progressed through my education, I faced another significant challenge: balancing my internship duties with the extensive preparations for graduation night. This period was a crucible of sorts, testing my ability to juggle multiple responsibilities while maintaining a high standard of performance in both areas.

Organising the graduation night allowed me to tap into my creative side, envisioning and executing an event that would create lasting memories for my peers and myself. It required careful planning, delegation, and the ability to inspire others to contribute their best efforts. This experience not only honed my leadership skills but also taught me the importance of creating meaningful experiences for others—a lesson that continues to influence my leadership style today.

First Professional Leadership Role: M&HO at KK Pengkalan Hulu

My first workplace leadership role as the Medical and Health Officer (M&HO) and head of KK Pengkalan Hulu marked a significant transition in my career. Suddenly, I found myself responsible for leading and managing nearly 40 staff members, many of whom were my seniors in both age and experience. This situation presented a unique set of challenges that required a thoughtful and adaptive approach to leadership.

To navigate this complex dynamic, I adopted a leadership style based on understanding and engagement. I made it a priority to comprehend each staff member's roles and responsibilities by actively listening to those in charge of specific activities. This approach not

only helped me gain a comprehensive understanding of our operations but also demonstrated respect for the experience and expertise of my team members.

I also implemented a “management by walking around” strategy, regularly engaging with staff at their workstations. This hands-on approach allowed me to build relationships, identify potential issues early, and create an open channel of communication across all levels of the organization. It was during this time that I truly began to appreciate the importance of visibility and accessibility in leadership.

Current Role: Head of Department of Social and Preventive Medicine

This journey has led me to my current position as the Head of the Department of SPM at the Faculty of Medicine, UM. This role presents a new set of challenges, shifting my focus from managing staff to managing and attracting academic talent.

Leading academics requires a unique approach that focuses on fostering an environment where independent, passionate researchers and educators can thrive. As the Head of Department, my role centres on attracting and retaining talent by emphasising research opportunities, promoting collaboration, and offering clear career development pathways. A key challenge is helping faculty balance teaching and research responsibilities, which we address through ongoing strategy development.

The COVID-19 pandemic has further underscored the need for adaptability in academic leadership. We've had to quickly pivot to online teaching methods and adjust our research priorities. This experience has reinforced the importance of flexibility and innovation in our approach to academic work.

Reflection

This journey from organising school events to leading a university department has been a continuous process of growth and adaptation. Each experience has built upon the last, preparing me for new challenges. I've learned that leadership is about creating environments where others can succeed, balancing diverse needs, and constantly learning from those around you. It's not a destination but an ongoing journey of discovery.

EPILOGUE: THE ROAD CONTINUES

As I stand here today, delivering my Professorial Inaugural Lecture, I am reminded of the words of Robert Frost that have guided me throughout my life: "Two roads diverged in a wood, and I—I took the one less travelled by, and that has made all the difference." This sentiment, which first resonated with me during my secondary school days at Bukit Bintang Boys Secondary School, has been the cornerstone of my journey in occupational and public health.

Born under the zodiac sign of Aries, I was destined to embody ambition with a passion. My innate drive to lead and explore has shaped every step of my path, from the bustling home in Petaling Jaya to the halls of academia at Universiti Malaya. The energetic and enthusiastic nature characteristic of my zodiac sign has propelled me forward, always seeking new adventures and opportunities in the field of public health.

My journey, which began on that quiet April morning in 1969, has been one of continuous discovery and growth. From the early days at Malaya Optical, where I learned the value of precision and dedication, to my transformative experiences in India pursuing medical education, each chapter of my life has contributed to the professional I am today.

The challenges I faced, from academic struggles in language arts to navigating the complexities of an all-boys school environment, have honed my resilience and determination. My involvement in extracurricular activities like the Red Crescent Society and the Maintenance Club fostered skills in leadership and community service that continue to serve me well in my career.

As I reflect on my journey from a young boy in Petaling Jaya to a Professor of Occupational and Public Health, I am struck by how each experience, each decision to take the road less traveled, has shaped my approach to research, teaching, and community engagement. My straightforward honesty, a trait of Aries, has ensured that I remain true to myself and others in my professional endeavours.

The field of occupational and public health has provided me with countless opportunities to embrace my pioneering spirit. From managing the COVID-19 pandemic through OSH principles to leading various professional organizations, I have continually sought to push the boundaries of our understanding and practice in public health.

As we face new challenges in public and occupational health, I am reminded that innovation often comes from taking the path less travelled. My optimistic outlook, another Aries trait, continues to guide me toward growth and discovery in our field.

To the aspiring professionals and students here today, I encourage you to embrace your own unique qualities and to seek out the roads less travelled in your journeys. Be open to new experiences, never stop learning, and always strive to make a positive impact in your chosen field.

The road continues, and I look forward to the discoveries and contributions we will make together in the years to come. As we navigate the complexities of public and occupational health in an ever-changing world, let us remember that it is often the unconventional paths that lead to the most significant breakthroughs and personal growth.

Thank you for joining me on this reflection of my journey. May we all continue to embrace the spirit of discovery and the courage to forge our own paths in the pursuit of knowledge and the betterment of public health.

APPENDIX I: LIST OF POSTGRADUATE STUDENTS (GRADUATED)

Master

1. Abdelgadier Ibrahim Mohammed Jamo
2. Ahmad Riadz
3. Ahmed Mohammed Saeed Abubakr
4. Amos Ujulu
5. Elseddig Eltayed Wahaballa Elsamani
6. Ibrahim Musa Moi
7. Lana Fathelrahman Hassan Ali
8. Maheshwara Rao A/L Appannan
9. Marzuki Bin Isahak
10. Mohammed Monhal Malla Monhal
11. Mohd Izwan Bin Hussin
12. Mohd Shahiri Abd Ghapar
13. Mona Mohamed Hassan Sorkati
14. Nanthnithevi A/P Anbarasan
15. Nofi Yuliani Dahlan
16. Nurul Hannah Binti Mohd Feizal
17. Nyein Zaw Htet Doe
18. Omer Mohamed Ahmed Abdalla
19. Ruben Rama Krishnan
20. Ruzita Othman
21. Saber Ali Idris
22. Sami Elshaikh Mohammed Yousif
23. Shahida Ismail
24. Soe Kyaw
25. Suhainizam Muhd Saliluddin
26. Tan Chee Choong
27. Tarig Ahmad Omer Idriss
28. Tarig Hamad Ali Hamad
29. Vijayendran A/L N.Swaminathan
30. Yousif Mohammed Yousif Elnoor
31. Zuhaida Binti Che Embi
32. Zuraida Abdullah

PhD/DrPH

1. Abuobieda Khogali Abdalla Abdalrouf
2. Azizan Bin Omar
3. Eva Nabiha Binti Zamri
4. Faridzal Harrymen Bin Mohd Din
5. Gan Saw Chien
6. Lim Yin Cheng
7. Shazana Rifham Binti Abdullah

Clinical Master

1. Ahmad Riadz
2. Anselm Su Ting
3. Azlan Darus
4. Christine Yeow Siew Lin
5. Ganesh Balasingam
6. Mohd Iqbal Hamzah
7. Suhainizam Muhd Saliluddin
8. Sunita Abdul Rahman

APPENDIX II: LIST OF PEER-REVIEWED PUBLICATIONS

The following is the list of peer-reviewed publications that I have published over the course of career.

1. C.W. VH. The prevalence of visual defect among commercial vehicle drivers in Selangor, Malaysia. *Journal of the University of Malaya Medical Centre (JUMMEC)*. 2006;9(1):35-8.
2. Karunakaran R, Raja NS, Quek KF, Hoe V, Navaratnam P. Evaluation of the routine use of the anaerobic bottle when using the BACTEC blood culture system. *Journal of microbiology, immunology, and infection*. 2007;40(5):445-9.
3. Su T, Hoe V. Reliability of a Malay-translated questionnaire for use in a hand-arm vibration syndrome study in Malaysia. *Singapore medical journal*. 2008;49(12):1038-45.
4. Su T, Hoe V. Awareness on Ex-Gratia Compensation Scheme Among Medical Department Staff in a Tertiary Government Hospital in Kuala Lumpur. *Med J Malaysia*. 2008;63(4):302-5.
5. Hoe V, Kelsall HL, Urquhart D, Sim M. Ergonomic design and training for preventing work-related musculoskeletal disorders of the upper limb and neck in adults (Protocol). *Cochrane Database of Systematic Reviews*. 2010;9:1-10.
6. Maizura H, Retneswari M, Moe H, Hoe V, Bulgiba A. Job strain among Malaysian office workers of a multinational company. *Occupational medicine*. 2010;60(3):219-24.
7. Moy FM, Hoe V, Tan CPL, Rosmawati M. Cardiovascular risks among shift and non-shift workers in a public medical centre in Kuala Lumpur. *Journal of the University of Malaya Medical Centre (JUMMEC)*. 2010;13(1):45-9.
8. Hoe V, Kelsall H, Urquhart D, Sim M. A prospective study of work ability and multisite musculoskeletal pain among hospital-based nurses. *Occupational and Environmental Medicine*. 2011;68(Suppl 1):A67-A.

9. Su TA, Hoe VCW, Masilamani R, Mahmud ABA. Hand-arm vibration syndrome among a group of construction workers in Malaysia. *Occupational and environmental medicine*. 2011;68(1):58-63.
10. Coggon D, Ntani G, Palmer KT, Felli VE, Harari R, Barrero LH, et al. The CUPID (Cultural and Psychosocial Influences on Disability) study: methods of data collection and characteristics of study sample. *PloS one*. 2012;7(7):e39820.
11. Hoe VC, Kelsall HL, Urquhart DM, Sim MR. Risk factors for musculoskeletal symptoms of the neck or shoulder alone or neck and shoulder among hospital nurses. *Occupational and Environmental Medicine*. 2012;69(3):198-204.
12. Hoe VC, Urquhart DM, Kelsall HL, Sim MR. Ergonomic design and training for preventing work-related musculoskeletal disorders of the upper limb and neck in adults. *Cochrane Database of Systematic Reviews*. 2012;2012(8):CD008570.pub2.
13. Coggon D, Ntani G, Palmer KT, Felli VE, Harari R, Barrero LH, et al. Disabling musculoskeletal pain in working populations: is it the job, the person, or the culture? *Pain*[®]. 2013;154(6):856-63.
14. Coggon D, Ntani G, Palmer KT, Felli VE, Harari R, Barrero LH, et al. Patterns of multisite pain and associations with risk factors. *Pain*[®]. 2013;154(9):1769-77.
15. Coggon D, Ntani G, Vargas-Prada S, Martinez JM, Serra C, Benavides FG, et al. International variation in absence from work attributed to musculoskeletal illness: findings from the CUPID study. *Occupational and environmental medicine*. 2013;70(8):575-84.
16. Hoe V, Kelsall H, Urquhart D, Sim M. Physical and psychosocial factors associated with musculoskeletal disorders among hospital based nurses in Australia. *Journal of Health and Translational Medicine*. 2013:37.
17. Su AT, Fukumoto J, Darus A, Hoe VC, Miyai N, Isahak M, et al. A comparison of hand-arm vibration syndrome between Malaysian and Japanese workers. *Journal of Occupational Health*. 2013;55(6):468-78.
18. Su AT, Maeda S, Fukumoto J, Darus A, Hoe VC, Miyai N, et al. Dose–response relationship between hand-transmitted vibration and hand-arm vibration syndrome in a tropical environment. *Occupational and environmental medicine*. 2013;70(7):498-504.

19. Surawera IK, Hoe VC, Kelsall HL, Urquhart DM, Sim MR. Physical and psychosocial factors associated with wrist or hand pain among Australian hospital-based nurses. *Injury prevention*. 2013;19(1):13-8.
20. Urquhart DM, Kelsall HL, Hoe VC, Cicuttini FM, Forbes AB, Sim MR. Are psychosocial factors associated with low back pain and work absence for low back pain in an occupational cohort? *The Clinical journal of pain*. 2013;29(12):1015-20.
21. Hoe V. 0254 Commuting Accident in Malaysia: Are we doing enough? *Occupational and environmental medicine*. 2014;71(Suppl 1):A94-A.
22. Moy FM, Hoe VCW, Hairi NN, Buckley B, Wark PA, Koh D, et al. Cohort study on clustering of lifestyle risk factors and understanding its association with stress on health and wellbeing among school teachers in Malaysia (CLUSTER)—a study protocol. *BMC public health*. 2014;14:1-9.
23. Gan SC, Chan CK, Hoe VCW, Ng C-W. Equitable distribution of public hospitals according to health needs in Malaysia: does it exist or not? *Asia Pacific Journal of Public Health*. 2015;27(8_suppl):79S-85S.
24. Mohd Din F, Hoe VC, Chan C, Muslan M. Cultural adaptation and psychometric assessment of Pain Catastrophizing Scale among young healthy Malay-speaking adults in military settings. *Quality of Life Research*. 2015;24:1275-80.
25. Moy FM, Hoe VCW, Hairi NN, Chu AHY, Bulgiba A, Koh D. Determinants and effects of voice disorders among secondary school teachers in peninsular Malaysia using a validated Malay version of VHI-10. *PloS one*. 2015;10(11):e0141963.
26. Din FM, Rampal S, Muslan M, Hoe VC. Association between pain catastrophizing and musculoskeletal disorders is modified by past injuries in Malaysian military recruits. *Occupational and environmental medicine*. 2016;73(7):429-34.
27. Sarquis LM, Coggon D, Ntani G, Walker-Bone K, Palmer KT, Felli VE, et al. Classification of neck/shoulder pain in epidemiological research: a comparison of personal and occupational characteristics, disability, and prognosis among 12,195 workers from 18 countries. *Pain*. 2016;157(5):1028-36.

28. Vargas-Prada S, Coggon D, Ntani G, Walker-Bone K, Palmer KT, Felli VE, et al. Descriptive epidemiology of somatising tendency: findings from the CUPID study. *PloS one*. 2016;11(4):e0153748.
29. Wong LP, Alias H, Aghamohammadi N, Aghazadeh S, Hoe VCW. Shisha smoking practices, use reasons, attitudes, health effects and intentions to quit among shisha smokers in Malaysia. *International journal of environmental research and public health*. 2016;13(7):726.
30. Wong LP, Mohamad Shakir SM, Alias H, Aghamohammadi N, Hoe VC. Reasons for using electronic cigarettes and intentions to quit among electronic cigarette users in Malaysia. *Journal of community health*. 2016;41:1101-9.
31. Coggon D, Ntani G, Walker-Bone K, Palmer KT, Felli VE, Harari R, et al. Epidemiological differences between localised and non-localised low back pain. *Spine*. 2017;42(10):740-7.
32. Hoe VC. Book Review: *Work and Sleep: Research Insights for the Workplace*. 2017.
33. Hoe Victor C. Book review: *Work and sleep: research insights for the workplace* (Barling J, Barnes CM, Carleton EL, Wagner DT, eds.). *Asia Pac J Public Health*. 2017;29(1):81-2.
34. Moy FM, Hoe VC, Hairi NN, Vethakkan SR, Bulgiba A. Vitamin D deficiency and depression among women from an urban community in a tropical country. *Public health nutrition*. 2017;20(10):1844-50.
35. Wong LP, Alias H, Agha Mohammadi N, Ghadimi A, Hoe VCW. E-cigarette users' attitudes on the banning of sales of nicotine E-liquid, its implication on E-cigarette use behaviours and alternative sources of nicotine E-liquid. *Journal of Community Health*. 2017;42:1225-32.
36. Zamri E, Moy F, Hoe V. Association of psychological distress and work psychosocial factors with self-reported musculoskeletal pain among secondary school teachers in Malaysia. *PloS one*. 2017;12(2):e0172195.
37. Hoe V, Moy F, Hairi N, Rampal S, Bulgiba A. 1285 Association of psychological distress and work-related factors and multisite musculoskeletal pain among teachers in malaysia. *Occupational and Environmental Medicine*. 2018;75(Suppl 2):A252-A.

38. Hoe VC, Urquhart DM, Kelsall HL, Zamri EN, Sim MR. Ergonomic interventions for preventing work-related musculoskeletal disorders of the upper limb and neck among office workers. *Cochrane Database of Systematic Reviews*. 2018;2018(10):CD008570.
39. Lai V, Su A, Isahak M, Hoe V, Kwan S, Darus A, et al. 511 Workplace bullying and metabolic syndrome among private sector workforce in Malaysia. *Occupational and Environmental Medicine*. 2018;75(Suppl 2):A588-A.
40. Lim YC, Hoe VC, Darus A, Bhoo-Pathy N. Association between night-shift work, sleep quality and metabolic syndrome. *Occupational and environmental medicine*. 2018;75(10):716-23.
41. Mulimani P, Hoe VC, Hayes MJ, Idiculla JJ, Abas AB, Karanth L. Ergonomic interventions for preventing musculoskeletal disorders in dental care practitioners. *Cochrane Database of Systematic Reviews*. 2018;2018(10):CD011261.
42. Zulkipli MS, Dahlui M, Jamil Na, Peramalah D, Wai HVC, Bulgiba A, et al. The association between obesity and dengue severity among pediatric patients: A systematic review and meta-analysis. *PLoS neglected tropical diseases*. 2018;12(2):e0006263.
43. Al-Hunaishi W, Hoe VC, Chinna K. Factors associated with healthcare workers willingness to participate in disasters: A cross-sectional study in Sana'a, Yemen. *BMJ open*. 2019;9(10):e030547.
44. Moy FM, Razali N, Hoe VCW, Karimi G, Omar SZ. Association of Maternal Fish Consumption with Mercury Levels of New Born Infants in a Tertiary Medical Centre in a Middle Income Country. *Open Science Journal of Clinical Medicine*. 2019;7(1):20-4.
45. Chong DW-Q, Jayaraj VJ, Rampal S, Said MA, Farid NDN, Zaki RA, et al. Establishment of a hospital-based health care workers surveillance programme to keep them safe during the COVID-19 pandemic. *Journal of Global Health*. 2020;10(2).
46. Fadlallah MA, Pal I, Hoe VC. Determinants of perceived risk among artisanal gold miners: A case study of Berber locality, Sudan. *The Extractive Industries and Society*. 2020;7(2):748-57.

47. Lim YC, Hoe VC, Darus A, Bhoo-Pathy N. Association between night-shift work, sleep quality and health-related quality of life: a cross-sectional study among manufacturing workers in a middle-income setting. *BMJ open*. 2020;10(9):e034455.
48. Rampal L, Liew B, Choolani M, Ganasegeran K, Pramanick A, Vallibhakara SA-o, et al. Battling COVID-19 pandemic waves in six South-East Asian countries: A real-time consensus review. *Med J Malaysia*. 2020;75(6):613-25.
49. Rampal L, Liew B, Oothuman P, Philip R, Hoe V, Baharudin A. From the MJM Editors' Desk: Common errors authors make in submission to the Medical Journal of Malaysia. *The Medical Journal of Malaysia*. 2020;75(4):323-4.
50. Wong LP, Salim SNM, Alias H, Aghamohammadi N, Hoe VCW, Isahak M, et al. The association between e-cigarette use behaviors and saliva cotinine concentration among healthy e-cigarette users in Malaysia. *Journal of Addictions Nursing*. 2020;31(2):102-9.
51. ZAMRI EN, HOE VCW, MOY FM. Predictors of low back pain among secondary school teachers in Malaysia: a longitudinal study. *Industrial health*. 2020;58(3):254-64.
52. Binns C, Low WY, Wai Hoe VC. Red alert: Climate change and public health in the Asia Pacific Region. 2021;33(8):810-1.
53. Chan CMH, Siau CS, Wong JE, Wee LH, Jamil NA, Hoe VCW. Prevalence of insufficient sleep and its associated factors among working adults in Malaysia. *Nature and science of sleep*. 2021:1109-16.
54. Chang CT, Rajan P, Hoe VCW. Filtering facepiece respirators for healthcare workers protection in the time of COVID-19 pandemic. *The Malaysian Journal of Medical Sciences: MJMS*. 2021;28(3):151.
55. Chong DW-Q, Jayaraj VJ, Ng C-W, Sam I-C, Said MA, Ahmad Zaki R, et al. Propagation of a hospital-associated cluster of COVID-19 in Malaysia. *BMC infectious diseases*. 2021;21:1-12.
56. Gopalan T, Mohd Yatim RaA, Muhamad MR, Mohamed Nazari NS, Awanis Hashim N, John J, et al. Decontamination methods of N95 respirators contaminated with SARS-CoV-2. *Sustainability*. 2021;13(22):12474.

57. Hoe VC. In This Issue of Occupational Medicine. Occupational Medicine. 2021;71(6-7):241-2.
58. Eva N, Hoe VCW, Moy FM. Prevalence of knee pain and its associated factors among school teachers in Selangor, Malaysia. Journal of Health and Translational Medicine. 2022;25(Special):9-16.
59. Hasani MHM, Hoe VCWA, Aghamohammadi N, Chinna K. The role of active ergonomic training intervention on upper limb musculoskeletal pain and discomfort: a cluster randomized controlled trial. International Journal of Industrial Ergonomics. 2022;88:103275.
60. Hoe V, Muhamad MR, Rajie M, Shukri NSM, Nasser NLDM. COVID-19 outbreak investigation in a hospital using computational flow analysis. Safety and Health at Work. 2022;13:S190.
61. Jayaraj VJ, Hoe VCW. Forecasting HFMD cases using weather variables and google search queries in Sabah, Malaysia. International Journal of Environmental Research and Public Health. 2022;19(24):16880.
62. Wan KS, Tok PSK, Yoga Ratnam KK, Aziz N, Isahak M, Zaki RA, et al. Implementation of a COVID-19 surveillance programme for healthcare workers in a teaching hospital in an upper-middle-income country (vol 16, e0249394, 2021). PLOS ONE. 2022;17(5).
63. Wan KS, Tok PSK, Yoga Ratnam KK, Aziz N, Isahak M, Zaki RA, et al. Correction: Implementation of a COVID-19 surveillance programme for healthcare workers in a teaching hospital in an upper-middle-income country. Plos one. 2022;17(5):e0268492.
64. Zamri EN, Hoe VCW, Moy Foong M. Factors associated with health-related quality of life among female secondary schools teachers. Asia Pacific Journal of Public Health. 2022;34(5):524-36.
65. Zamri EN, Wai VHC, Ming MF. PREVALENCE OF KNEE PAIN AND ITS ASSOCIATED FACTORS AMONG SCHOOL TEACHERS IN SELANGOR, MALAYSIA: Received 2022-07-15; Accepted 2022-10-09; Published 2022-12-31. Journal of Health and Translational Medicine (JUMMEC). 2022:9-15.

66. Binns C, Yun Low W, Shunmugam B, Minh Pham N, Lee A, Bulgiba A, et al. Internet-Based Research in Public Health: Can It Ever Be Reliable? *Asia Pacific Journal of Public Health*. 2023;35(2-3):189-93.
67. Doraimuthu S, Dahlui M, Hoe VCW, Su TT. Exploration of Malaysian stakeholders view on barriers to and facilitators of colorectal cancer screening among older population. *Asia Pacific Journal of Public Health*. 2023;35(1):27-33.
68. Fears R, Canales-Holzeis C, Caussy D, Harper SL, Hoe VCW, McNeil JN, et al. Climate action for health: Inter-regional engagement to share knowledge to guide mitigation and adaptation actions. *Global Policy*. 2023.
69. Khan S, Fears R, McNeil JN, Harper S, Hoe VC, Caussy D. Strategic Interventions for Addressing Regional Climate Change and Health Challenges. *Agenda*. 2023.
70. Lim YC, Hoe VCW, Pathy NB. THE EFFECT OF NIGHT-SHIFT WORK ON THE LEVEL OF URINARY 6-SULPHATOXYMELATONIN IN MEN OVER FIVE DAYS: Received 2023-04-13; Accepted 2023-06-27; Published 2023-10-19. *Journal of Health and Translational Medicine (JUMMEC)*. 2023;26(2):197-203.
71. Tan WM, Ng WL, Ganggayah MD, Hoe VCW, Rahmat K, Zaini HS, et al. Natural language processing in narrative breast radiology reporting in University Malaya Medical Centre. *Health Informatics Journal*. 2023;29(3):14604582231203763.
72. Yap JF, Ng RJ, Chin SM, Mohammed Abu Bakar R, Nik Jaafar NZ, Mohamad Razali SZ, et al. Factors associated with nosocomial COVID-19 infection among health care workers in an urban-setting Malaysia hospital. *Asia Pacific Journal of Public Health*. 2023;35(2-3):162-7.
73. Zhang H, Wong LP, Hoe V. Bibliometric analyses of turnover intention among nurses: Implication for research and practice in China. *Frontiers in Psychology*. 2023;14:1042133.
74. Gopalan T, Muhamad MR, Wai Hoe VC, Hassandarvish P. N95 respirator hybrid decontamination method using Ultraviolet Germicidal Irradiation (UVGI) coupled with Microwave-Generated Steam (MGS). *Plos one*. 2024;19(2):e0296871.

75. Jayaraj VJ, Ng C-W, Hoe VC-W, Chong DW-Q, Rampal S. Rapidly scalable and low-cost public health surveillance reporting system for COVID-19. *BMJ Health & Care Informatics*. 2024;31(1).
76. Rajendran K, Hoe VC, Danaee M, Khan G, Khan MA, Haron MH, et al. Work Fatigue Among Air Personnel: Protocol for Fatigue Intervention Program (FIP) and Quasi Experimental Study. *Malaysian Journal of Medicine & Health Sciences*. 2024;20(2).

APPENDIX III: LIST OF RESEARCH PROJECTS

The following are the list of research projects that I have participated in over the course of my career.

1. Aceh Rehabilitation and Reconstruction Project
2. The Ministry of Higher Education Malaysia, Cambodia Public Health Research Project
3. Mercury Levels in Newborn Cord Blood and Maternal Blood and the Association with the Antepartum Consumption of Seafood of Pregnant Mothers in UMMC.
4. Influence of Lifetime Occupational on Muscle Strength and Functional Ability, Co-Investigator.
5. Prevention of Chronic Diseases at Worksite, Co-Investigator, 2007-2008.
6. A Cross-Sectional Study on Hand-Arm Vibration Syndrome Among Construction Workers Contracted to a Private Construction Company in Selangor, Malaysia.
7. UMMC Wellness - worksite wellness
8. Cultural and Psychosocial Influences on Disability Study (CUPID)
9. Stress management intervention among secondary school teachers with stress or burnout.
10. Clustering of Lifestyle Risk Factors and Understanding its association with Stress on Health and Wellbeing among school teachers in Malaysia (CLSUTer).
11. Post traumatic stress disorder among rescue and healthcare Workers Following disaster.
12. 25-hydroxyvitamin D, obesity and cardiometabolic risks among a multi-ethnic female cohort in Malaysia.
13. Evaluation of non-therapeutic anti-neoplastic drug exposure.
14. Study of indoor air contaminants in various working area and exposure.
15. The Impact of Electronic Cigarette Smoking: Environmental and Public Health Perspectives.
16. Workplace Bullying and Metabolic Syndrome Among Private Sector Workforce in Malaysia.

17. Prevention of Work-Related Upper Limb Musculoskeletal Disorders: A Randomized Controlled Trial (Principal Investigator).
18. Health Impact of Shift Work Among Employees in Malaysia.
19. Risk Factors of Musculoskeletal Pains and Impact on Quality of Life and Working Ability Among Secondary School Teachers in Selangor.
20. Low-Cost Hearing Screening in Adult Population at Risk of Noise-Induced Hearing Loss.
21. Design and Development of Aerosol Collector During Dental Treatment for COVID-19 Prevention.
22. Facial Respirator Hybrid Decontamination Method Using Ultraviolet Germicidal Irradiation Combined With Hydrogen Peroxide Vapor.
23. Indoor Airflow Analysis to Prevent Air-Borne COVID-19 Infection.
24. Sungai Selangor: Towards Sustainable and Resilient Water Supply.
25. Implementation of an Occupational Safety and Health (OSH) School-Based Gamification Intervention Among Primary School Children.
26. Community Engagement for Long COVID Self-Support Management.
27. Impacts of COVID-19 on Quality of Life, Work Performance, and Monetary Loss Among Infected Health Care Workers in Different Countries.
28. Multicentered Study Comparing Knowledge, Attitude and Practice Regarding COVID-19 Among Healthcare Workers in Malaysia and Thailand.
29. Effect of Clockwise and Counter-Clockwise Rotation Shift Work on Fatigue: A Cohort Study.

