32. Case study of leadership crossing borders: the Burma Skincare Initiative[1]

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INTRODUCTION

As authors of this chapter and practising clinicians, we view leadership in healthcare, as a tapestry of optimism, equitability and flexibility, with each characteristic being used appropriately and effectively to achieve an overarching goal despite the challenges. Such challenges are magnified when a team is working overseas in a poorly resourced healthcare system that has been further compromised by a combination of COVID-19 and a military coup d'état. We describe our experiences in establishing a healthcare charity, the Burma Skincare Initiative (BSI), and maintaining its prime objective of promoting excellence in skincare for the disadvantaged people of Myanmar despite the aforementioned challenges. The chapter will introduce the reader to the geopolitics of Myanmar and the authors' back stories which together led to the establishment of the BSI in 2019 and its strategic roadmap comprising education, research and clinical service provision, with a ten-year mission of building a regional dermatology training and research centre (RDTRC) in the country. Rapid, early achievements were stalled initially by the arrival of COVID-19 in Myanmar in February 2020, compounded by the brutal military coup in Myanmar on 1 February 2021 and the pandemic's third (Delta) wave escalation in the summer of 2021. To maintain the focus on skincare provision required agility in navigating the choppy waters from dermatology to politics and re-orientating the tactics to online education of healthcare workers by way of videos, webinars and protocols, and engaging media channels to promote awareness of the humanitarian crisis in the country. Our story highlights a number of leadership lessons, including refracting challenges as opportunities, crisis leadership, strategic flexibility, optimism, and equitable and sustainable partnerships, all building to an overall 'anti-fragile' approach. We also introduce our concept of the 'reverse prism' principle of leadership across borders whereby one finds alternative, previously unimagined routes, born out of adversity, to achieve the primary objective.

MYANMAR

Myanmar, previously known as Burma, is a country in South-East Asia, bordered by China to the north, Laos and Thailand to the east, and India and Bangladesh to the west. It has a total land area of approximately 677,000 Km^2,[1] almost three times the size of the United Kingdom, and a population approaching 55 million.[2] The geography and thereby the landscapes of the country are diverse with mountainous regions in the North, the arid central plateau, subtropical jungle in Eastern Shan and Karen states, the fertile flatlands of the Irrawaddy delta region and the Andaman Islands in the South. The Irrawaddy River courses the length of the Western side of the country serving, in a way, as the nation's aorta, along whose broad

banks agriculture flourishes as one of the main livelihoods. The country is rich in natural resources including precious gemstones, such as the famed 'pigeon blood' rubies and 95% of the world's jade, oil and gas, various minerals, hardwood timber and forest products.[3] At one time, Myanmar was the richest country in South and South-East Asia. Possessing more than 130 ethnic groups, with their own languages and cultures, Myanmar is also one of the most diverse countries in Asia.[4]

Myanmar was under British rule from 1824–1948, when it gained independence, contingent on the tragically short but pioneering leadership of Aung San, the father of Aung San Suu Kyi.[5] The assassination of Aung San tipped the country into turmoil resulting in almost five decades of military dictatorship from 1962.[4] Under the military regime, a long-standing civil war between the Myanmar army (Tatmadaw) and armed militias has ravaged the border states. The civil war, along with systematic disinvestment in the public sector, has worn down the Burmese people and destroyed the economy, turning Myanmar into one of the poorest countries in the world.[6] Many thousands of people from Myanmar have been externally displaced and have resettled as refugees abroad, some of whom, the Rohingya, are in huge camps in Cox's Bazar, Bangladesh. In addition, according to the United Nations High Commissioner for Refugees (UNHCR), almost 600,000 internally displaced persons (IDPs) were living in Myanmar before the military coup d'état of 1 February 2021.[7] After this, the number of IDPs in Myanmar increased rapidly to at least 1 million.[6]

After several decades of international pressure on the Burmese military dictators, exemplified by trade embargoes, the economy was in dire straits triggering a series of political, economic and administrative reforms in the country. These included the transition to a democratically elected civilian government in 2011, led by Aung San Suu Kyi, the Nobel Peace Laureate and *de facto* leader (State Counsellor) of Myanmar. Despite the new constitution, as a part of the roadmap to democracy, the military reserved 25% of the 'Hluttaw' legislature's seats for themselves but the vast majority of the 75% contestable seats were won by Aung San Suu Kyi's party – the National League for Democracy (NLD).[8]

Healthcare in Myanmar has for many years been one of the poorest in the world with 2.3% of the country's GDP spent on healthcare in 2014 which is a negligible amount compared to 3.7% in neighbouring Thailand, and 9.8% in the United Kingdom.[9–11] Under the quasi-democratic rule of the NLD, Myanmar opened up to the world and bounced back to become the fastest-growing economy in Asia in 2016.[12] Better progress was also made in healthcare under the NLD with more GDP spent on healthcare – 4.68% in 2019 with a Health Index Score of 106/167 in 2021.[13,14] Furthermore, many UK and international healthcare and research institutions have partnerships with those in Myanmar, for example, the Myanmar UK Health Alliance (MUKHA), and there has been a notable improvement in the country's healthcare with strategic plans to develop universal health coverage (Latt et al., 2016).

SKINCARE IN MYANMAR

Despite the healthcare improvements from 2011–2021 under the NLD party, resources and specialist dermatology services remained extremely limited. There are only three dermatology training and secondary/tertiary care centres in the country – two in Yangon (previously Rangoon) – the economic capital in the South, and one in Mandalay, the country's second-largest city located in Central Myanmar. The two dermatology centres in Yangon are based

at the Yangon General Hospital (YGH) at the University of Medicine (UM) 1 in downtown Yangon, acknowledged as the main dermatology training centre in Myanmar; and North Okkalapa General Hospital (NOGH) at UM2 in the North of Yangon. The dermatology centre in Mandalay – Mandalay General Hospital (MGH), based at UM Mandalay (UMM) serves as the main dermatology centre for people from Northern and Central Myanmar. Beyond these two cities, consultant dermatologists provide services in the larger towns and cities only, usually working alone without any junior doctor or nursing support. There are approximately 90 dermatologists for a population of 55 million people – approximately 1 dermatologist per 611,000 population, compared to 1 dermatologist per 68,000 in the United Kingdom[15] and 1 per 283,000 in Thailand (Kullavanijaya, 1995). In some urban areas, a general physician would be responsible for all medical patients including those with dermatological problems and emergencies. For instance, in the southernmost town in Myanmar – Kawthaung – a 100-bed township general hospital has only one general physician for a population of half a million. People with skin problems living in rural areas usually must travel for hours and sometimes days to reach the nearest dermatology centre. The Global Burden of Disease (GBD) study estimated that in 2010, an average of 496 years were lost due to disability per 100,000 population in Myanmar because of non-fatal skin disease (Hay et al., 2014). However, there are virtually no data on the epidemiology of skin diseases in Myanmar; the latest WHO data, published in 2020, showed that deaths from skin disease in Myanmar accounted for 734 or 0.2% of total deaths.[16]

THE BURMA SKINCARE INITIATIVE: OUR STORY

The BSI was born out of a shared passion and determination, following a serendipitous meeting of the authors of this chapter, Dr Su Mar Lwin and Professor Chris Griffiths, in May 2018 at the quinquennial International Investigative Dermatology (IID) meeting held in Orlando, Florida, United States. Su is a trainee dermatologist at St John's Institute of Dermatology, Guy's and St Thomas' NHS Foundation Trust, King's College London, UK. She was born in Yangon and grew up in a village situated on the Irrawaddy delta under the military regime in Myanmar, but at the age of 15, through the generous sponsorship of her father's childhood friend, Dr Jimmy Aung Myo, an anaesthetist in Southwest Wales, she had the life-changing opportunity to attend Queen Elizabeth Cambria High School in Carmarthen, Wales. This meant leaving her family behind in Myanmar for eight years; learning English as her second language and adjusting to the lifestyle and culture in the United Kingdom, amongst other challenges. Through the support and generosity of her teachers, led by Dr Allan Evans, and local members of parliament, she was able to remain in the United Kingdom and study Medicine at Guy's, King's and St Thomas' School of Medicine in London from 2002–2008. Appreciating the importance of life opportunities, Su has a dream of giving back to her home country through education and healthcare one day.

Chris trained in London and Michigan before taking up his post of Foundation Professor of Dermatology (now as an Emeritus) at the University of Manchester. He developed a deep interest in global health and migrant skin health following his involvement with the International League for Dermatological Societies (ILDS) and Directorship of the Global Psoriasis Atlas. His interest in global skincare was further crystallised following the establishment of skin clinics in the Syrian refugee camps in the Bekaa Valley, Lebanon and in the camp for Rohingya refugees in Cox's Bazar, Bangladesh. These interests were recognised by

his appointment as a Special Advisor to the ILDS on global health research and policy. He has a keen interest in Myanmar and is dedicated to ensuring optimal access to skincare for its disadvantaged people.

When we met at the IID meeting in May 2018, the natural flow of conversation led us to share our experiences of humanitarian work, related endeavours and a mutual interest in Myanmar which built the foundation for our visit to dermatology departments in the country later that year. We viewed dermatology departments at MGH/UMM and YGH/UM1 to explore opportunities to form partnerships in skincare with the dermatology community in Myanmar. Both of us were energised and humbled by the enthusiastic welcome we received from the Myanmar dermatology community and were impressed by the calibre of the trainee doctors and nurses. Following ward rounds, we held educational sessions at both departments where we were able to discuss and identify unmet needs and challenges in delivering skincare, in other words, to refract challenges as opportunities. Discussions pivoted on what could be done to help address these by establishing equitable and sustainable partnerships between Myanmar and international dermatology communities for mutual benefit. With this vision in mind, we co-founded the BSI which subsequently became a registered charity in England and Wales in January 2020 (Registration no. 1187197; burmaskincare.org) (Lwin and Griffiths, 2020). Burma, instead of Myanmar, was chosen as an anti-military undertone of the charity since the latter was adopted by the regime in 1989. In line with its mission – to promote excellence in skincare for the people of Myanmar – we developed a ten-year strategic roadmap comprising short-, medium- and long-term goals (Table 32.1). We are also trustees of the charity, along with the third trustee, Mr Stephen Lue.

Table 32.1 The ten-year strategic roadmap of the Burma Skincare Initiative as of 2021

	Short-term (2 years)	Medium-term (5 years)	Long-term (10 years)
Education	• **First international BSI meeting** • **Travel fellowships** • Virtual case conferences • ***Training frontline healthcare workers**	• Annual BSI specialty workshops • Biennial international BSI meetings • **Dermatology curriculum (UG** and PG)	• Regional Dermatology Training and Research Centre (RDTRC)
Research	• MACADAMIA • Pemphigus Project • Global Psoriasis Atlas (GPA)	• Research exchange fellowships • Skin disease survey (an epidemiological study)	• RDTRC
Clinical Services	• Clinical exchange fellowships • Nursing exchange fellowships • **Ad-hoc and virtual clinics** • ***Essential emergency skincare**	• Diagnostic laboratories – immunofluorescence and genetics • Rural and community skin clinics • Specialist clinics • **Teledermatology service** • Patient support groups	• RDTRC

*New strategic goals of the BSI added and prioritised since the military coup of 1 February 2021, as dictated by the urgent and unmet need due to the collapse of the healthcare system in Myanmar and the COVID-19 pandemic. Goals achieved are in **bold. Abbreviations**: *MACADAMIA: Mycetoma and Chromoblastomycosis: a Dermatology Access in Myanmar Initiative; PG: Post-graduate; UG: Undergraduate.*

Stephen is a Jamaican-born barrister who met Su at University in 2002. In their early 20s, they spoke wistfully of going to Myanmar and Su's dream to give back to her country of birth. Stephen, a passionate advocate for LGBT rights and diversity and inclusion, is a trustee of other charities and has a commitment to human rights and access to healthcare for all. Stephen was moved by his visit to Myanmar in February 2020 and struck by the work being undertaken by healthcare workers in the country. He is keen to undertake fruitful partnerships with medics in Myanmar to improve the skincare available in the country. It is out of love and respect for the Burmese people and the desire to see them thrive to their full potential that motivates Stephen to be involved in the BSI charity.

THE JOURNEY OF THE BSI

Education

The first international dermatology meeting and the first nurses' meeting of the BSI in Myanmar

As one of the first steps in achieving the BSI goals, it was proposed to hold annual BSI educational meetings as a platform for Myanmar and international dermatology communities to exchange knowledge and experience on the management of, and the latest research in, common and rare skin diseases for mutual benefit. Furthermore, networking opportunities would enable local and international dermatologists to work together to conduct crucial research, such as understanding the prevalence of skin disease in Myanmar, and to address the long-term sustainable goals of the BSI. These meetings could be realised by collaboration with partners from industry and non-governmental organisations (NGOs), such as Medical Action Myanmar (MAM;medicalactionmyanmar.com).

With the support of the British Association of Dermatologists (BAD), British Dermatological Nursing Group (BDNG), the NLD Myanmar Ministry of Health and Sports and the three dermatology centres in Myanmar, the BSI organised the first international dermatology meeting in Yangon, Myanmar on 21–24 February 2020. The meeting was made possible by an international effort galvanised by finance from the corporate social responsibility arms of industry partners, overwhelming enthusiasm from UK dermatologists and dermatology nurses and crucial buy-in from the Myanmar medical and nursing communities. The delegates comprised more than 70 nurses and 200 dermatologists, General Practitioners (GPs) and physicians from across Myanmar; it was a success, academically, socially and culturally. The first day of the meeting was devoted to dermatology nursing, the first of its kind in Myanmar; whilst the second and third days – the main meeting, were developed specifically for Myanmar dermatologists, consisting of plenary lectures by eminent international speakers from the United Kingdom and Germany, important presentations by Myanmar dermatologists, and oral and poster presentations by Myanmar and UK dermatology trainees. The BSI brought world-class experts in dermatology to Myanmar and provided the stage for the local trainees to shine. The last day focused on a sustainability round table discussion amongst key stakeholders, including dermatologists, trainees and nurses from both specialist dermatology centres and township (district general) hospitals, along with industry, national and international academic partners. The outcome of the round table discussion helped firm up the direction of travel for the BSI as our Myanmar colleagues wholeheartedly supported our ten-year strategic roadmap, with the ultimate aim of establishing an RDTRC in the country (see Table 32.1).

Fellowships

The BSI, together with three British and international partners in dermatology: the European Society for Dermatological Research (ESDR); the British Society for Paediatric Dermatology (BSPD); and the International Society of Atopic Dermatitis (ISAD), was able to award five travel and one clinical observer fellowships from 2019–2020, prior to the military coup. As President-Elect of the ESDR in 2019, Chris introduced a global health theme to this international society. As a collaborative initiative with the BSI, two Myanmar dermatology trainees, Dr Hlaing and Dr Thu, were awarded the first BSI-ESDR Myanmar fellowships to enable them to attend the 49th Annual Meeting of the ESDR, held in Bordeaux, France, in September 2019. This provided a significant opportunity for Myanmar dermatology trainees to: enter a meritocratic competition to earn a fellowship to attend an international dermatology meeting for the first time; learn the latest skin science from the world's experts; and network with international colleagues.

The two BSI-ESDR Myanmar fellows subsequently shared their experiences and knowledge gained from the meeting with their respective teams in Yangon thereby allowing the dissemination of learning from a world-class dermatology event. Dr Hlaing wrote in her report:

> Before attending this meeting, I was like a frog in the well. Now I have jumped out from the well and have seen a more adventurous and amazing dermatology world … I hope BSI-ESDR will give a chance like this to our young Myanmar dermatologists in the future.

Indeed, the BSI has since, in partnership with the ESDR and the Psoriasis: from Gene to Clinic Congress Committee, awarded ten educational fellowships that waived registrations for Myanmar dermatologists to attend the virtual 50th annual ESDR meeting and/or the 9th international congress Psoriasis: from Gene to Clinic. These fellowships provided our colleagues with access to high-quality, international continuing professional development and demonstrated our solidarity with them during those dark times.

Due to the COVID-19 pandemic, travel fellowship awardees – Associate Professor Aye of YGH/UM1, the recipient of the first Paediatric Dermatology Fellowship Award of the BSI-BSPD; and Dr Kyi, a trainee dermatologist and the first travel fellowship awardee of the BSI-ISAD, attended the respective BSPD and ISAD annual meetings virtually. Furthermore, Associate Professor Aye's plan as part of her clinical observer fellowship, to visit tertiary paediatric dermatology centres in Birmingham, Oxford and Guy's and St Thomas' Hospitals in the United Kingdom in 2021 was postponed because of the military coup on 1 February 2021. The BSI continues to work in close partnership with the Global Health Committees of the ESDR and the BAD to promote learning opportunities for Myanmar dermatologists.

RESEARCH

The second pillar of the BSI's mission is research. In Myanmar, as has been proven elsewhere in the world, a strong research culture that helps advance knowledge of epidemiology and pathogenesis of local skin diseases will drive excellence in clinical care. Building the foundations of skincare research in Myanmar required a degree of resourcefulness and adaptability to the local healthcare needs. We obtained competitive funding from the European Academy of Dermatology and Venereology and the International Foundation of Dermatology for a clinical research fellow to perform field research in Myanmar on a neglected tropical disease

called mycetoma. This is a mixed fungal/bacterial disease contracted by penetration injuries to the feet, particularly in agricultural workers, and if left undiagnosed and untreated can be disabling, sometimes leading to amputation. Myanmar lies in the WHO-designated mycetoma belt between the Equator and the Tropic of Cancer. This crucial work with colleagues in UM1 and MAM would have raised awareness of the disease in Myanmar and trialled field diagnostics leading to early treatment. COVID-19 and the military coup on 1 February 2021 led to the research being transferred to the Mycetoma Research Centre in Sudan where almost unbelievably another military coup occurred in November 2021. At the time of writing and in collaboration with our global health dermatology colleagues, the mycetoma project was subsequently relocated to Madagascar (also in the mycetoma belt), where the research fellow will be trained in the diagnosis and management of the disease and investigate its long-term health implications. In time, these learnings can be brought back to Myanmar to benefit its people.

On our two visits to Myanmar, we saw many adult patients with pemphigus – a life-threatening autoimmune blistering skin disease in which antibodies attack the skin. In a well-equipped health system, this would be diagnosed by measuring antibodies in the skin and blood using specialised diagnostic tools, namely immunodiagnostics. This service is not available in Myanmar, making diagnosis and management difficult. Through collaboration with expert dermatologists at the University of Lübeck, Germany, we had the approval to develop training in immunodiagnostics for the two BSI-ESDR Fellows, Drs Hlaing and Thu, on secondment in Germany and then establish this service in Yangon.

The third research project was to conduct an ambitious survey of the prevalence of skin disease in Myanmar – in other words, to investigate which skin diseases are present in the country; is there regional variation and which are the commonest? All such data are vital to designing a national skincare service whilst providing a unique opportunity for an equitable British-Burmese collaboration. This survey has been put on hold until our teams can return to Myanmar.

The long-term objective of the BSI is to establish a RDTRC in Myanmar. We were impressed with what had been achieved by the regional dermatology training centre (RDTC) established at the Kilimanjaro Christian Medical Centre, Moshi, Tanzania in 1992. This serves as the supra-regional training, research, and clinical centre for dermatologists in Sub-Saharan Africa and is the blueprint for the Myanmar RDTRC. Such a centre would provide dermatology training and clinical research opportunities for young Burmese clinicians and scientists, and facilitate international collaborations replete with bidirectional exchange programmes and mutual benefits. We had the immense privilege of meeting with one of the founders of the Tanzanian RDTC, Professor Terence Ryan, at the University of Oxford in September 2020. He was generous with his time and advice as to how to make the business case for such an enterprise.

CLINICAL SERVICES: AD-HOC AND VIRTUAL SKIN CLINICS

The third pillar of the BSI is clinical service provision, specifically to help remove barriers to skincare access for marginalised communities, such as the IDPs. As part of our first fieldwork in February 2020, with the help of two local philanthropists, we visited five orphanages, located in monasteries and nunneries, in central Myanmar, each catering to 100–200 children, most of whom were IDPs – victims of the civil war. After consultation with the heads of the orphanages, we were given permission to perform impromptu dermatology clinics. Overall,

and as expected, communicable skin diseases were prevalent, such as scabies and scalp ringworm in most of the children, with severe scarring and disfigurement in some. Interestingly, non-communicable skin diseases such as eczema and work-related dermatitis were also common in IDPs as most orphans had to partake in communal domestic activities such as cooking and cleaning. The diagnoses and management plans for the children as a group, as well as for individual cases, were conveyed to the resident monks and nuns and the relevant medications required for treatment were donated. The BSI has the development of sustainable skincare services for the orphanages as one of its long-term objectives.

As the news of our skincare mission in Myanmar spread to the mountainous Chin State in the Northwest, the parents of two children suffering from chronic debilitating skin diseases reached out to us via a local NGO. We conducted virtual consultations using the 'Viber' mobile app with the two children and their parents during our visit. We diagnosed an 11-year-old girl with long-standing tree bark-like skin lesions and a 6-year-old boy with multiple, rapidly growing skin tumours on his face as ichthyosis and xeroderma pigmentosum, respectively – both of which are rare inherited skin diseases. We counselled the parents about the respective diagnoses and referred the children to the dermatology centre at YGH for further management. We were deeply moved by the resilience of these children despite the profound social and psychological stigma that they and their families suffered due to a lack of education and knowledge about these serious skin diseases. It motivated us to strive to establish clinical and patient support services to provide much-needed diagnostics and long-term care. Indeed, we had ongoing discussions with patient support group charities such as Dystrophic Epidermolysis Bullosa Research Association UK and International Federation of Psoriasis Associations to establish the first ever patient support groups in Myanmar, along with our local colleagues, until the military coup halted such endeavours.

As for pemphigus, there are no molecular diagnostics in Myanmar – a technology by which the inherited skin disease is diagnosed and the defective gene identified, which is crucial for disease classification, treatment planning, prognosis and genetic counselling. There is, thus, a significant and desperate unmet need for individuals living with rare genetic skin diseases in Myanmar. Our experience in conducting *ad-hoc* and virtual clinics in rural Myanmar taught us the importance of agility, adaptability and resourcefulness in managing patients in suboptimal clinical settings in marginalised communities. Connectivity to local skincare services, and patient and family education were key in ensuring long-term, sustainable management of these disadvantaged children with rare genetic skin diseases.

THE COUP, COVID-19 AND CIVIL WAR …

Just as all the BSI projects were gathering momentum, the Myanmar military staged a coup d'état on the morning of 1 February 2021 when the Tatmadaw seized power and deposed the members of the country's ruling party, the NLD, who had won a landslide victory in the November 2020 election. Senior members of the NLD including its leader and State Counsellor for Myanmar – Aung San Suu Kyi – were arrested and face long jail sentences. In response to the coup, many other elected lawmakers and members of parliament ousted in February fled over the border into neighbouring countries and further afield and joined together to form the National Unity Government (NUG).

The coup turned the clock back over half a century in Burmese history and gripped the heart of the international healthcare community. The situation escalated rapidly as the junta suppressed peaceful protests with lethal force. The dignified protests by the people of Myanmar are, in the main, organised and spearheaded by healthcare workers, under the leadership of Professor Zaw Wai Soe, Rector of the most prestigious Medical School in the country – UM1 Yangon, in the vanguard of the country's Civil Disobedience Movement (CDM). Hospitals and healthcare workers, including doctors and nurses, are targeted for arrest and worse by the Myanmar police and army. Our dermatology colleagues – consultants, trainees and nurses – in Myanmar are no exception. They were barred from their public and private hospitals; indeed, many are still in hiding because of the constant fear of arrest, serious injury or death. Consequently, they are no longer able to care for acutely ill patients in any healthcare setting. One year after the military coup, according to Physicians for Human Rights (phr.org), Myanmar remains 'one of the most dangerous places in the world to be a healthcare worker'. As of 10 January 2022, Insecurity Insight (www.insecurityinsight.org) reported 415 incidents, 286 healthcare workers arrested, 128 raids on hospitals and 30 healthcare workers killed since the coup.

The international community has been slow to act and is ineffective in introducing hard-hitting sanctions on the junta, enforcing arms embargoes and collecting information on crimes against humanity. Furthermore, the UN Security Council Resolution 2286 condemning attacks on medical facilities and personnel in conflict situations should be invoked. Peaceful protest has been ineffective, and protesters are now taking up arms and training in guerrilla tactics to take the fight to the Tatmadaw, particularly in the border states. In effect, the civil war has escalated with the indiscriminate killing of civilians and burning of homes, especially in Chin State in the north of the country, by the military. The arrival and rapid spread of the third wave of COVID-19 in the summer of 2021 was a disaster for the people of Myanmar as at the start of the coup, the Director for the country's immunisation programme, Dr Htar Htar Lin, was arrested and imprisoned, thereby halting the nascent programme for immunisation and establishment of quarantine centres at the end of 2020. COVID-19 spread unchecked with cases peaking in July 2021. There are still barriers to testing and contact tracing and families prefer to treat affected relatives at home rather than use healthcare facilities because of significant distrust of authorities. Hospitals are understaffed and ill-equipped; both essential medicines and oxygen, particularly in rural and border regions are very difficult to source. Long queues to buy oxygen cylinders were commonplace and there were social media reports of soldiers firing on people queuing to refill oxygen cylinders. The blunt assessment of what happened is that the junta 'weaponised COVID-19' against its own people.[15] At the time of writing (January 2022), the number of COVID-19-related deaths is at least 20,000, the number of daily deaths is 2% of the peak in July 2021 and it is estimated that 36% of the population had been fully vaccinated, at least based on the figures reported to WHO.[16]

FROM POLITICS TO SKINCARE …

Following the devastating events of 1 February 2021, the authors formed a closer partnership with the Tropical Health and Education Trust (THET), a specialist global health organisation, and MUKHA and ventured into politics. We had as our aim, to invoke crisis leadership to drive coordinated international action to stop the military coup along with the atrocities committed

against the Burmese people, and to hold the junta accountable by the International Court of Justice (ICJ) at the Hague. We joined the weekly working groups of THET on Myanmar which were established in relation to advocacy, communications, education and fundraising. As members of the THET advocacy group, Chris (Chair) and Su, executed their plans in seeking political and legal advice and support from various governmental and other influential figures, including a retired judge of the ICJ, a distinguished international human rights barrister and Queen's Counsel, members of the House of Lords and charitable organisations including Amnesty International and Burma Campaign UK. Through this political journey, the BSI has: helped raise political and public awareness internationally of the abominable situation and the plight of the dermatology and healthcare communities in Myanmar following their engagement in the CDM (Lwin and Griffiths, 2021); provided steadfast support – clinical, educational and moral – to dermatology and other frontline healthcare colleagues; helped connect various organisations and institutions with THET working groups and contributed to the making of various documentaries on the mainstream media, such as the BBC, Channel 4 News, the Guardian and Daily Mail, amongst others. Meanwhile, the authors began to strategically rethink and restructure the BSI ten-year roadmap, thereby putting most of the ongoing education, research and clinical projects on hold whilst addressing the more immediate unmet needs on the ground. Our overall objective, the ten-year roadmap, remained the same but we needed several routes to achieve that rather than the linear approach we had first envisioned. We have termed this the 'reverse prism principle of leadership' – finding alternative ways to achieve the primary objective. This is akin to reversing a prism that scatters a beam of white light into its constituent rainbow colours to one where the rainbow coalesces into one goal of white light – the key objective.

Disruptive Innovation

In business theory, disruptive innovation is an innovation that creates a new market and value network (Bower and Christensen, 1995). We have adopted and adapted this term to express that in the face of an external disruptive influence, in this case, a military coup d'état, COVID-19 and civil war, which disabled the provision of healthcare services in Myanmar, we had to reorientate our approach to delivering skincare and developed the concept of 'essential emergency skincare'. This concept is the essence of antifragility (Taleb, 2012) whereby order and strength are built out of disorder and uncertainty. An anti-fragile mindset is in our opinion a necessity for leadership in uncertain times.

Essential emergency skincare

Essential emergency healthcare is more than the immediate care of the critically injured but is about preserving the fabric of comprehensive healthcare of which skincare is a part. Owing to the fragmentation of the healthcare system following the military coup, compounded by the COVID-19 pandemic and civil war, the country became reliant on NGOs, doctors, nurses and even medical students in hiding as well as community healthcare workers (CHWs). They have since become the main frontline healthcare workforce who deliver care not just for acute injuries and COVID-19 but also for common, chronic and emergency conditions, such as diabetes and heart attacks, especially for the poor and rural populations. Similarly, skincare services are also delivered by non-specialist doctors, nurses and CHWs in marginalised communities outside of central Yangon and Mandalay where a degree of private healthcare continues. In

effect, the disruption has led to new ways of achieving the goals of the BSI. Thus, the overarching construct of 'essential emergency skincare' was the key innovation to come out of the disruption which decimated skincare provision in Myanmar. It comprises a multi-disciplinary-led webinar and video-workshop series complemented by the one-page algorithms to instruct non-dermatologists – medical students, GPs, CHWs and nurses – in the diagnosis and basic management of common and emergency skin disease, the development of a teledermatology service, and inclusion of dermatology as a key and popular component of the revised NUG Myanmar undergraduate medical curriculum. At the time of publication, the essential emergency skincare framework innovated by the BSI for Myanmar had been applied to another low-and-middle-income country in crisis – Armenia. The authors, along with their colleagues: French-Armenian dermatologists in Paris and local dermatologists in Armenia, first visited Armenia in October 2022 and conducted community and secondary skincare clinics at four major hospitals in Yerevan (capital) and Vanadzor (the third largest city in Armenia) over a week, providing bedside training and education to both dermatologists and non-specialist healthcare workers including nurses. Building on the collaboration with Armenian dermatologists and the diaspora in France, the BSI is working closely with the HENAR (Health Network for Armenia) Foundation to help adapt and apply the BSI framework to Armenia.

Online education on common and emergency skin disease

In close partnership with the NUG Myanmar Ministry of Health, Royal College of GPs, Royal College of Paediatrics and Child Health, BAD, BDNG, THET and the Burmese medical diaspora in the United Kingdom, United States and Australia, the BSI had the privilege of playing a vital role in the restoration of undergraduate medical education, especially for final-year medical students who are in hiding from the junta following their engagement in the CDM. Our experience of running online webinars on common and emergency skin diseases brought home to us the thirst for knowledge and continuing medical education and, most importantly, the curiosity that the frontline HCWs displayed despite being in unimaginably challenging circumstances. At the time of publication, seven multi-disciplinary-led webinars on skin disease management had been delivered; online surveys revealed high uptake of the webinars by 956 frontline HCW delegates (83.4% GPs; 16.6% other HCWs) based in 29 Myanmar cities/townships; 88.7% found the webinars relevant to their clinical work and 75.9% had increased confidence in managing skin conditions. The one-page dermatology algorithms, complementary to the online webinars, are designed to have low-bandwidth for ease of access and download on the website – myanmarclinicalguidance.com – especially for those working in remote parts of the country with suboptimal internet connections. These one-page clinical protocols were shared with frontline HCWs in Ukraine and translated into Ukrainian through collaboration with UK-Med – a UK medical aid charity. At the time of writing, in collaboration with the BDNG and industry partners, the BSI is developing a video-workshop series on the diagnosis and management of non-communicable and infectious skin diseases applicable not only to Myanmar, but also to other low-and-middle-income countries globally.

Teledermatology

Since our first visit to Myanmar in 2018, through our sustained links with MAM and other local health partners, we received an increasing number of dermatological cases sent to us via messaging applications such as Viber and WhatsApp. As a disruptive innovator, this expedited the realisation of another of the short-term BSI goals to develop a sustainable teledermatology

service in collaboration with our colleague and a supporter of the BSI, Professor Jemima Mellerio, Chief Dermatologist at Guy's and St Thomas' NHS Foundation Trust in London. Professor Mellerio introduced us to Consultant Connect, a company that came to prominence during the COVID-19 pandemic in the United Kingdom, which provides secure confidential teledermatology services – to facilitate diagnostic and management advice for NHS healthcare workers dealing with skin disease. The teledermatology initiative will provide far more than a virtual clinical service to our Myanmar colleagues; it will create opportunities for case-based learning in a multi-faceted environment for healthcare workers in both Myanmar and the United Kingdom, thereby also reverse translating as a benefit to the NHS.

CONCLUSIONS

The future of Myanmar and its people hang in the balance. Despite the unprecedented overwhelming challenges involved in realising a high-quality and sustainable dermatology service for Myanmar with equitable skincare access, it is our belief that this is still achievable. The disruptive innovation of the BSI drew upon crisis leadership work, strategic flexing, resourcefulness and the optimistic orientation of its trustees. Our experience of leadership crossing borders is, we believe, instructive in how to maintain focus on the primary objective; constantly re-routing to realise the goals of the strategic roadmap using our reverse prism principle. This could only happen by collaboration between the international and local dermatology communities, industry, charities, NGOs and government to build a solid foundation based on education, research and clinical services – the very vision on which the BSI was established.

Feedback from our colleagues on the ground in Myanmar about the impact our educational and clinical projects have on their daily lives; from continuing medical education to completing a medical degree; from video-workshop series to specialist teledermatology services, has been encouraging. As the newly founded essential emergency skincare programme of the BSI continues to flourish and certain urban areas of the country begin to return to a new normality, we will endeavour to resume some of the educational and research projects from the original ten-year strategic roadmap with the ultimate aim of establishing an RDTRC in Myanmar. The invaluable experience gained, and the network of friends, colleagues and supporters of the BSI and Burma that we have established, serendipitously or strategically, throughout this journey, have armed us with the antifragility, resourcefulness, creativity and connectivity necessary to face any further contingencies of a Burmese nature or otherwise. We are at the start of a long journey, beset with difficulties, but worth embarking on, primarily for the benefit of the underprivileged people of the vulnerable yet beautiful country that is Myanmar.

NOTES

Conflict of interest: Dr Su Mar Lwin and Professor Christopher Griffiths are co-founders and trustees of the Burma Skincare Initiative charity.

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