of data. For example, error messages would appear if appointments were double booked. We also had a built-in follow up system. This would highlight patients whose results hadn't been followed up which would also help prevent mistakes. This QI project had 5 cycles in which the system was fine-tuned, tutorials were given to members of the MDT and feedback was taken. This helped us promote a sustainable change and allowed us to troubleshoot any issues with the appointment system. After each cycle our objectives were measured quantitatively.

Results

1. We found that the number of patients with three pieces of patient identifiable data increased by 56% (patients with at least 2 pieces of identifiable details also increased).
2. The number of patients with clear reasons inputted for coming to the paediatric ambulatory care unit increased by 22%.
3. The number of double bookings decreased by 20%.
4. The number of patients who weren't followed up were also reduced (results went down from 4 serious incident form in the 6 month period before the computerised system to no serious incident forms in the 6 months after the system).

Conclusions This QI project showed that simple IT solutions can often lead to dramatic improvements in patient safety and better care. The reduction of human error is important for any paediatric department. Involving the multidisciplinary team in projects can lead to a more sustainable change and is necessary when creating changes to systems.

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PARENTAL PERCEPTION ON INHALER AND SMOKING AT HOME

Sze Ka Ng, Sze Ka Ng, Florence Choi, Po King Ma. *Hong Kong*

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Background Fear of treatment of asthma is common amongst patients and their carers, and often leads to poor disease control and poor quality of life. Some carers preferred the use of complementary or alternative medicine, such as Chinese herbal medicine or supplement, to inhaled medications.

Objectives This paper aims to describe the perception of parents with asthmatic children on inhaler treatment and smoking at home.

Methods The clinical trial was carried out at an acute respiratory Paediatric unit in a public hospital in Hong Kong. The proposal of the clinical trial was registered in the Chinese Clinical Trial Registry, World Health Organization Organisation (ChiCTR1800019706) and was approved from the Ethic Committee review board. Parental consents were obtained. Fifty-six children aged 4–11 years were admitted to an acute paediatric unit for asthmatic attack during the study period from Oct 2018 to Jun 2019. Their parents were invited to participate in a semi-structured interview using open-ended questions, guided by several themes. The interview lasted 15 to 20 minutes. Content analysis was used to analyze the data collected from the interviews. All transcriptions were undertaken by the same investigator.

Results Four aspects were concluded.

Doubt about asthma diagnosis. According to the most updated concept, asthma is considered an allergic disease that can be controlled without primary symptoms, such as repeated coughing, wheezing and breathing difficulties.

However, many parents perceived asthma as a different entity from allergic airway. Some were unable to differentiate between asthmatic attack, upper respiratory tract infection and wheezing in pneumonia. With these misconceptions, parents would doubt the diagnosis of asthma and would default follow-up eventually.

Steroid phobia. Many parents expressed their concern on the adverse effects of corticosteroids on their children, especially for those who started treatment at an older age. They were worried that inhaled corticosteroids would do more harm than good. One parent even used the term 'steroid abuse' when referring to the regular use of steroid. Another parent had fear of oral ulcer development as a side effect of corticosteroid.

Perception on inhaler. There were several misconceptions on inhaler medications. Some parents perceived the long term use of bronchodilator would lead to asthma or persist the asthma symptoms. Some thought nebulizing medications were more effective than delivering medications via inhalers.

Smoking at home. Some parents believed indirect exposure to tobacco smoke at home would not affect the control of asthma in their children. Parents understood the harm of smoking at home but expressed their difficulty in asking the elder family member living with child to quit smoking.

Conclusions These qualitative data highlight the communication problem between healthcare professionals and patients and the misconceptions of asthma management. Firstly, the updated concept on allergic diseases such as asthma, was not well-publicized. Many parents could not accept their children being diagnosed with asthma, although they themselves had asthma or other allergic disease during their childhood. Furthermore, the concept of controlled asthma used by healthcare professionals and parents are often different. Lastly, third-hand smoking is a commonly overlooked issue.

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HEALTH-RELATED QUALITY OF LIFE OF RARE DISEASE PATIENTS AND CARE-GIVERS IN HONG KONG

Yvette Nga Chung Ng, Brian Hon Yin Chung, Claudia Ching Yan Chung. *Hong Kong*

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Background A rare disease (RD) is a disease affecting less than one in 2,000 people. In Hong Kong, one in 67 people is living with one or more RDs. RD patients live with different degrees of life-long physical or intellectual disability and often require special care. Approximately 80% of the RDs are genetic in origin, in which some are with childhood onset. The paediatric RD patients constitute 35% of the whole RD population in Hong Kong.

Objectives To investigate the health-related quality of life (HRQoL) of patients and care-givers in the RD population in Hong Kong.

Methods This was a cross-sectional study between 25 April and 16 October 2020. The EuroQol 5-Dimension 3-Level (EQ-5D-3L), a generic preference-based patient-reported outcome measure instrument, was distributed to the RD patients and care-givers through RD patient groups to describe HRQoL. The five dimensions assessed were mobility, self-care, usual activity, anxiety/depression and pain/discomfort. The three levels represent severity in each dimension, with Level 1 indicating absence of problem and Level 3 indicating extreme

problems. The EQ-5D-3L was available in self-complete version, and proxy version for care-givers of patients mentally or physically incapable of reporting. In the proxy version, care-givers reported the HRQoL for both patients and themselves. A reverse crosswalk algorithm was used to generate five-level (EQ-5D-5L) utility scores from EQ-5D-3L profiles with reference to the Hong Kong value set, to allow comparison with the general population. The utility score ranges from 0 (death) to 1 (perfect health), with negative values indicating worse-than-death health states.

Results During the study period, 284 valid and independent responses were collected, including 165 patients from self-complete version and 119 patients and their care-givers from proxy version. The median age of patients and care-givers participated were 32.1 and 42.9, respectively. The mean utility score of patients and care-givers were 0.5207 and 0.7992, both significantly lower than that of the normal population, 0.9186 ($p < 0.0001$). 77 (65%) of the 119 patients from the proxy version were below 18 years old, with a mean utility score of 0.4504. Among all 284 patients, patients able to self-report had a higher mean utility score, 0.5753, than patients requiring a care-giver for reporting, 0.4449. Patients requiring a proxy reported more severe problems in self-care and usual activities dimensions, while their care-givers reported more problems in anxiety/depression dimension. Overall, only 16% of patients and 29% of care-givers had Level 1 in all five dimensions. In contrast, five (3%) patients in self-complete version and 25 (21%) patients in proxy version were reported with negative utility scores, in which two had Level 3 in all five dimensions. Out of the 30 patients with negative utility scores, 93% had no self-care ability, 87% were unable to perform usual activities and 67% were confined to bed.

Conclusions This is the first study in Asia to demonstrate that RD as a group has a negative impact on the HRQoL of both patients and care-givers. It illustrated the impact of RDs on different aspects of quality of life, which warrants exceptional care from policy makers and the society.

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ESTABLISHING NATIONWIDE STANDARDISED WORKPLACE-BASED LEARNING FOR PAEDIATRIC DOCTORS IN MYANMAR – A PILOT STUDY

Nilar Lwin, Khin Nyo Thein, Ei Phyu Lwin, Ian Maconochie, Marcus Wootton, Aye Han. Myanmar

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Background The Myanmar Paediatric Society and the Royal College of Paediatrics and Child Health collaborated to set up a nationwide workplace-based learning and assessment strategy for MSc postgraduate paediatric doctors in Myanmar.

Objectives A Myanmar/UK joint working group created an Assessment portfolio and supported 40 supervisors and 170 students in its completion. The portfolio contained workplace-based practice learning (WPBL) approaches, including Directly Observed Procedures, Case-Based Discussions and the Hand-over Assessment Tool.

Postgraduate students (PPS) were asked to complete their portfolios during their clinical placements (in a range of Myanmar hospitals) with support and feedback from their clinical supervisors.

Methods Between August 2018 and December 2020 a two-phase pilot was undertaken; phase 1 supported all second-year postgraduate students ($n=85$), phase 2 continued with phase 1 year 2 group going into year 3, while also supporting the new year 2 cohort (another 85 PPS). Remote support was provided by senior Myanmar, UK paediatricians and educationalists throughout.

At phase 1 and 2 completion, all portfolios were collected, anonymised and assessed by senior Myanmar paediatricians affiliated to all Myanmar Medical Universities. Using a standardised rubric, including a 1–5 Likert scale, reviewers assessed the completeness of the portfolio and the quality of the feedback from the supervisor to the student.

Results Phase 1 portfolio results are presented, as at the time of submission phase 2 portfolios were being analysed, concluding in February 2021.

Overall completeness and quality scores

In the case of the portfolios, we found that more than 69% had at least 50% of their portfolio sections completed. When we audited the supervisor feedback quality we found that 74% of the total were scored at 3 or above, adjudged to be at least a 'Fair attempt to comment on candidate performance and provide recommendations'.

In the case of Mini-CEX - Case selection there was a relatively even distribution of patient presentations selected by the postgraduate students in Mini-Cex showing a broad range of detailed clinical knowledge, which can be built on in the workplace through practical support.

Abstract 283 Table 1

Mini-Cex case selection (case chose by trainees)	The proportion of the cohort (n85)
Acute Respiratory Illness	29%
Jaundice	29%
Nephrotic Syndrome	19%
Dengue Haemorrhagic Fever	13%
Congenital Heart Disease	6%
Pyrexia of Unknown Origin	4%

Conclusions The pilot demonstrated the introduction of a standardised programme of non-didactic WBPL to support greater standardisation of practice across Myanmar.

Phase 1 demonstrated the importance of linking clinical practice to academic curricula, and setting up structures to support supervisors and PPS to deliver WBPL and constructive feedback.

The pilot helped to develop a cadre of supervisors able to support the enhancement of clinical learning within hospitals as sites of improved professional development.

There is further scope to explore the application of the methodologies of WBPL to assess and support wider clinician skills. Improving hospital systems to develop these skills can have a positive effect on the whole hospital system. For example, encouraging better leadership, governance, communication and teaching among paediatricians, will have wider positive implications for the care of children.