

HA Convention 2025 Oral Presentation F1.6:

暢所欲眠

- Multidisciplinary Weight
Control Program for Children
and Adolescents with
Moderate to Severe
Obstructive Sleep Apnea

Presenting author:

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UNITED CHRISTIAN HOSPITAL

兒童癌病基金
Children's Cancer Foundation

ChildLife
兒童生命線

「暢所欲眠」

體重管理入門秘笈2023

姓名: _____

7/2023 - 7/2024

暢所欲言 - Participant Authors

Disciplines	Authors
Paediatric Nurses <i>United Christian Hospital</i>	Ms. TANG LS (Presenting author) Ms. WONG LY Pamela
Paediatricians <i>United Christian Hospital</i>	Dr. LEE Po Yee Lilian Dr. TSANG Yuk Ping Dr. LO Wai Chee Dr. CHAN King Ho
Physiotherapists <i>United Christian Hospital</i>	Ms. FAN Olivia Ms. MOK SY Cecilia Mr. LEUNG TC Michael Ms. POON LY Ashley
Dietitians <i>United Christian Hospital</i>	Ms. HO TS Stephanie Mr. LI YT Brian
Child Life Specialists <i>Children's Cancer Foundation, Hong Kong</i>	Ms. CHAN YM Mandy Ms. MOK UP Ronnie Ms. YUEN KY Kelly



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暢所欲眠 – the Targets

The targets were:

- 1) children or teenagers of 7 – 18 years old,
- 2) with moderate to severe OSAS,
- 3) who require nocturnal non-invasive ventilatory (NIV) support for sleep, *and*
- 4) with other obesity-related co-morbidities



課程總覽



官體操



網上會面



物理治療師



醫生*



營養師**

July 2023
opening

Session 0 ✓
 基督教聯合醫院
 內容: 活動簡介

Nov 2023

Session 1 ✓
 賽馬會紀念中心
 內容: 體重管理及口腔肌肉功能治療 (OMT)

Session 2 ✓
 賽馬會紀念中心
 內容: 體重管理及OMT

Mar 2024

Session 3 ✓
 賽馬會紀念中心
 內容: 體重管理及OMT

Session 4 ✓
 內容: OMT

Session 5 ✓
 內容: OMT

* 呼吸科、內分泌科及青少年科醫學會館
 ** 營養師諮詢及團隊，將會由營養師個別通知



官體操



網上會面



物理治療師



醫生**



營養師

Session 6 ✓
 賽馬會紀念中心
 內容: 中期評估

Session 7 ✓
 內容: OMT

Session 8 ✓
 內容: OMT

基督教聯合醫院

Session 9 ✓
 內容: OMT

Session 10 ✓
 賽馬會紀念中心
 內容: 終期評估

June 2024
graduation

積極參與且完成計劃的組員，將在計劃完結後得到禮物一份。



July 2023

Opening ceremony for the first class of 暢所欲眠





Oro-myofunctional therapy



6-min walk



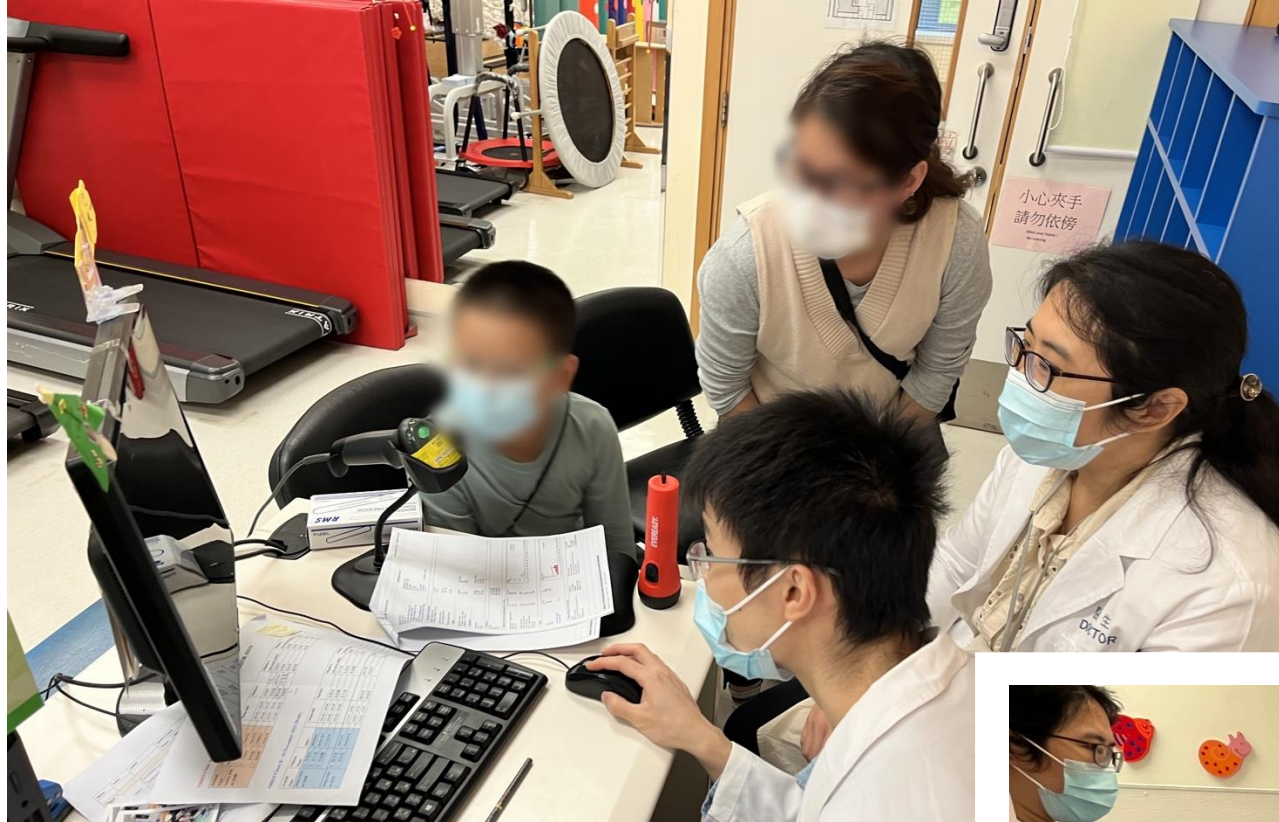
cardio assessment



core muscle strengthening



health talk by dietitian



Multi-disciplinary medical reviews by

- Respiriologist
- Endocrinologist
- Adolescent specialist

Our objectives

1. To infiltrate practical tips for healthy lifestyle
2. To achieve weight control and reduce obesity-related comorbidities
3. To promote motivation via mutual peer support

基督教聯合醫院 UNITED CHRISTIAN HOSPITAL 醫院管理局 HOSPITAL AUTHORITY ChildLife 兒童生命線

暢所欲言 zZZz

對象 因肥胖而引致睡眠窒息，需要呼吸機治療的兒童及青少年

目標

- 學習輕鬆及健康減肥的方法
- 了解合適自己的運動及正確運動方法
- 了解如何利用食療配合減肥
- 認識一班志同道合的朋友，互相鼓勵

內容

- 減肥計劃為期一年 (7/2023-7/2024)
- 十堂由專業物理治療師進行的實體及網上運動課程，包括體適能評估
- 營養師諮詢及食療指導
- 三次綜合兒科醫生諮詢及覆診，包括有呼吸科，內分泌科，及青少年科

誓師大會

Class A - 2023年7月12日 1-4 pm
Class B - 2023年7月19日 1-4 pm
地點：聯合醫院 P座4樓兒童日間中心

課程時間表及地點
請參閱小冊子

Demographics of participants (2023/24)

(Pre-class parameters)

Patient	Gender	Age (yrs)	Body weight (kg)	BMI (kg/m ²)	OSAS
1	M	16	93.1	29.3	severe
2	M	14	100.3	33	severe
3	M	17	95.3	30.5	severe
4	M	15	73.4	25.1	moderate
5	M	10	40.3	23.1	severe
6	M	8	39.5	22.1	severe
7	M	11	65.7	27.6	severe
8	F	16	128.1	42	severe
9	F	15	116.4	36.8	moderate

Demographics of participants (2023/24)

(*Post-class parameters*)

Patient	Gender	Age (yrs)	Body weight (kg)	BMI (kg/m ²)	OSAS *
1	M	16	93.1 → 77.7	29.3 → 24.1	severe → mild *
2	M	14	100.3 → 101.8	33 → 32	severe → moderate
3	M	17	95.3 → 101.9	30.5 → 32.1	severe → mild
4	M	15	73.4 → 70.6	25.1 → 23.7	moderate → mild *
5	M	10	40.3 → 44.4	23.1 → 22.2	severe → mild
6	M	8	39.5 → 43.1	22.2 → 22.1	severe → severe
7	M	11	65.7 → 67.8	27.6 → 26.5	severe → (default)
8	F	16	128.1 → 116.4	42 → 38.4	severe → moderate
9	F	15	92 → 91.2	36.8 → 36.3	moderate → severe

* Two participants could wean the nocturnal NIV post-class

Number and Percentage improvement after 1 year

Anthropometric measures

Anthropometric parameters	No. improved	% improved
Body weight (kg)	4	44%
BMI (kg/m ²)	6	66%
Neck circumference (cm)	3	33%
Waist circumference (cm)	3	33%
% Body fat	7	78%

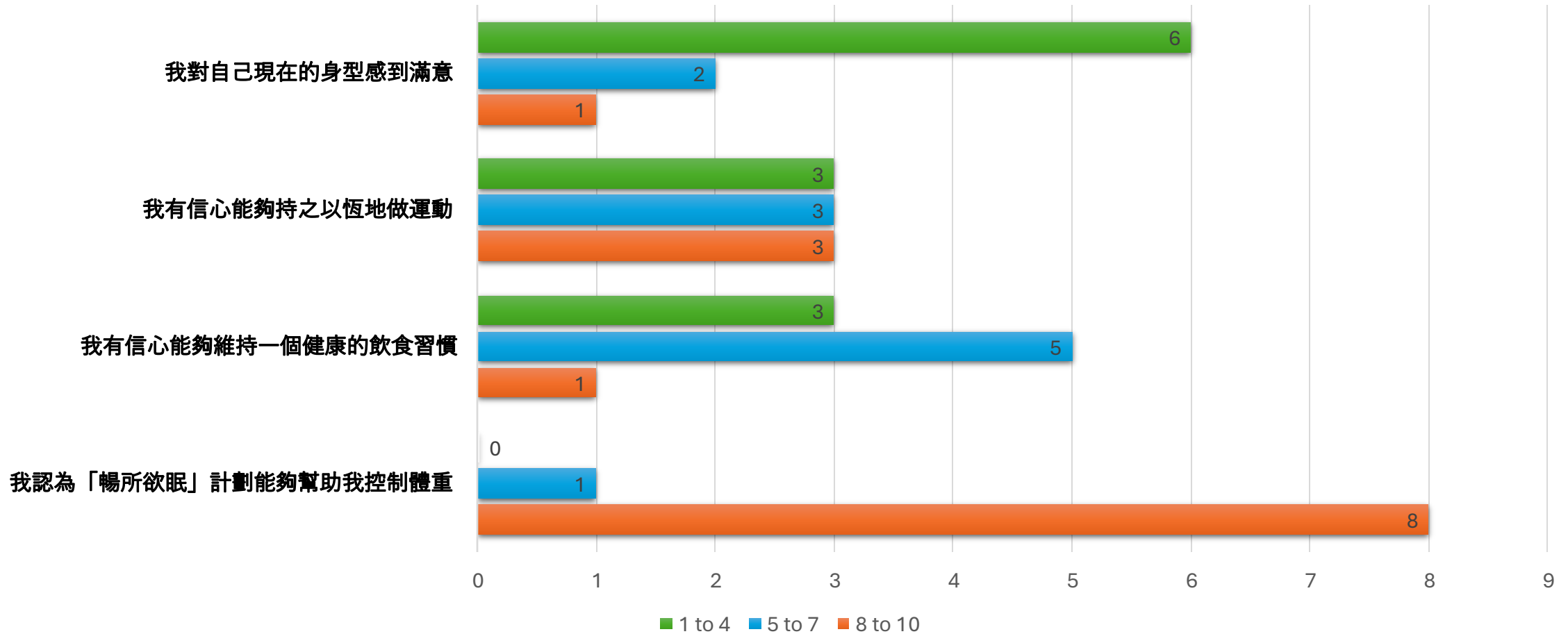
Physiological and metabolic measures

Physio. and metabolic parameters	No. improved	% improved
HOMA (insulin resistance)	6	66%
Fasting lipid profile	4	44%
Clinic BP	4	44%
Apnea Hypopnea Index (AHI)*	6	66%
SpO2 nadir	5	56%

(total no. of participants = 9)

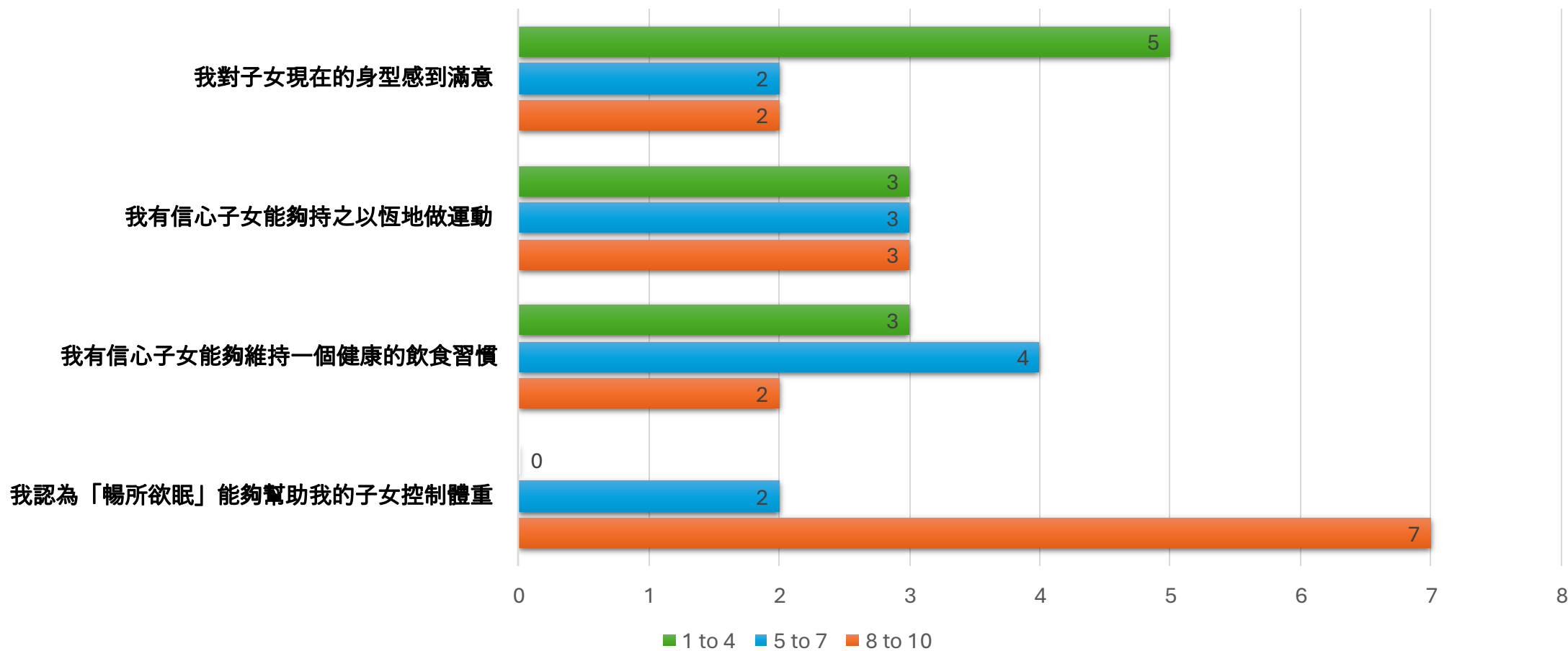
Motivational change and self evaluation

參加者的評價 (1 - 10)



Evaluation from parents

家長的評價 (1 – 10)





Conclusion from 暢所欲言

1. Multi-disciplinary weight control programme is effective in weight reduction and alleviation of obesity-related co-morbidities, especially OSAS.
2. Two-third children are motivated to sustain the lifestyle modification after the 1-year programme.
3. All children and parents appreciate the programme

