

A Health and Wellbeing Barometer for Hong Kong: Translational Impact Attained over a Decade and Counting

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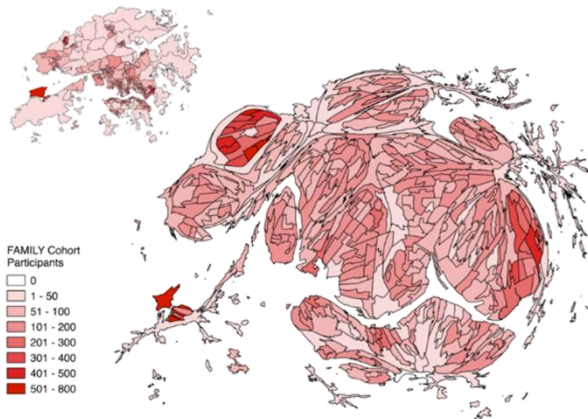


HKU
Med

LKS Faculty of Medicine
School of Public Health
香港大學公共衛生學院

Family  愛+人

FAMILY Cohort: A Unique Health and Wellbeing Barometer for HK since 2009



ICEA

International Journal of Epidemiology, 2017, e111-131
doi: 10.1093/ije/dyx257
Advance Access Publication Date: 23 January 2015
Cohort Profile



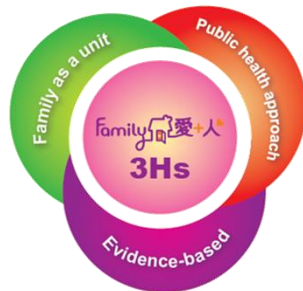
Cohort Profile

Cohort Profile: FAMILY Cohort

Gabriel M Leung,¹ Michael Y Ni^{1,*} Paul TK Wong,^{1,2} Paul H Lee,^{1,3}
Brandford HY Chan,¹ Sunita M Stewart,⁴ C Mary Schooling,^{1,5}
Janice M Johnston,¹ Wendy WT Lam,¹ Sophia SC Chan,⁶
Ian McDowell,⁷ and Tai Hing Lam¹

- The first HKU-led research programme in HK to comprehensively assess physical, mental, and social wellbeing
- Population-based: 1% of the HK households (n=20,000; 46,000 participants) covering 99.8% of all neighbourhoods in HK

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Why does HK need a Health and Wellbeing Barometer?

THE LANCET
Public Health

Comment

The epidemiology of population mental wellbeing in China



**Michael Y Ni, Candi M C Leung, Gabriel M Leung*

THE LANCET
Psychiatry

Comment

Says who? The significance of sampling in mental health surveys during COVID-19

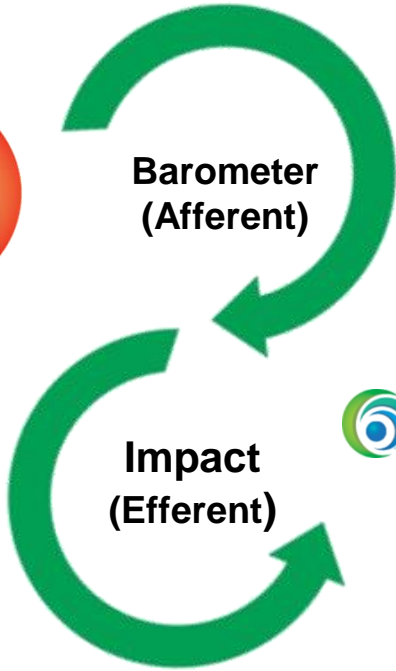
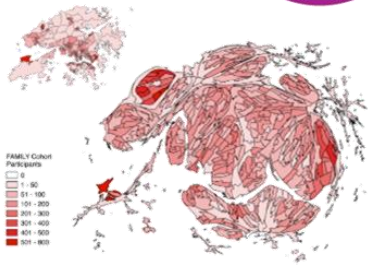
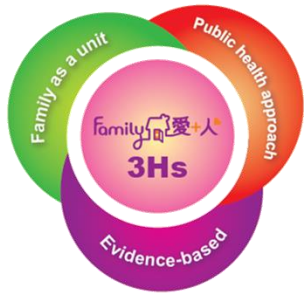


**Matthias Pierce, Sally McManus, Curtis Jessop, Ann John, Matthew Hotopf, Tamsin Ford, Stephani Hatch, Simon Wessely, Kathryn M Abel*

- Policymakers, NGOs, philanthropic foundations, health and social services and professionals need to know the **magnitude of needs** and the **high-risk groups**
- Population-representative cohorts with baseline data (allowing comparisons of population health and wellbeing before and after) are **critical for precision policy planning and evaluation**

ENGAGEMENT

From Science to Impact



UNDERPINNING RESEARCH – CASE STUDY (1)

Mental Health during Major Population Shocks

THE LANCET

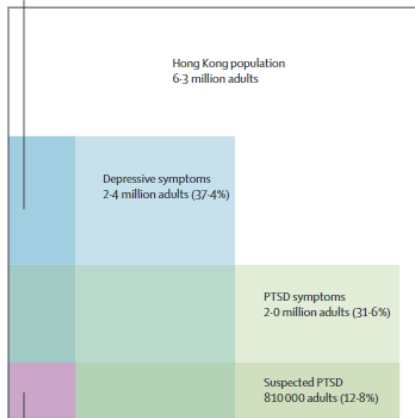
Depression and post-traumatic stress during major social unrest in Hong Kong: a 10-year prospective cohort study

Michael Y Ni, Xiaoxin I Yao, Kathy S M Leung, Cynthia Yau, Condi M C Leung, Phyllis Lun, Francis P Flores, Wing Chung Chang, Benjamin J Cowling, Gabriel M Leung

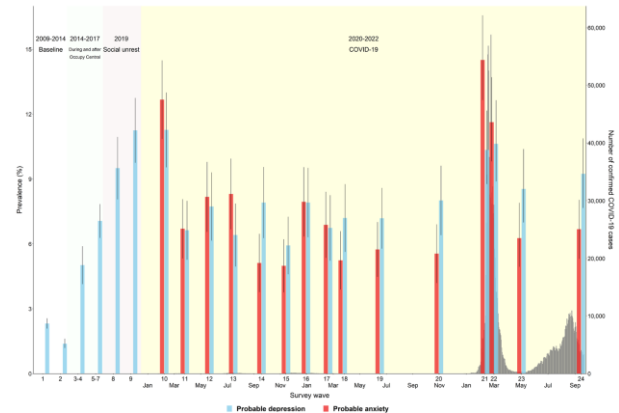
Summary

Background Hong Kong has been embroiled in increasingly violent social unrest since June, 2019. We examined the associated population mental health burden, risk factors, and health-care needs.

Probable depression
710 000 adults (11.2%)



Comorbidity
160 000 adults (2.5%)



- The largest and longest prospective cohort study worldwide on collective actions and mental health
- Real-time monitoring of population mental health and psychobehavioural responses throughout the COVID-19 pandemic

IMPACTS ACHIEVED

Evidence for Mental Health Services Planning

16. Chairman, AC advised that HKU's research, together with the mental health prevalence surveys being conducted by the Administration, would provide a basis for long-term manpower and service planning. As an



立法會
Legislative Council

LC Paper No. CB(2)1389/19-20
(These minutes have been
seen by the Administration)

Ref : CB2/PL/HS

Panel on Health Services

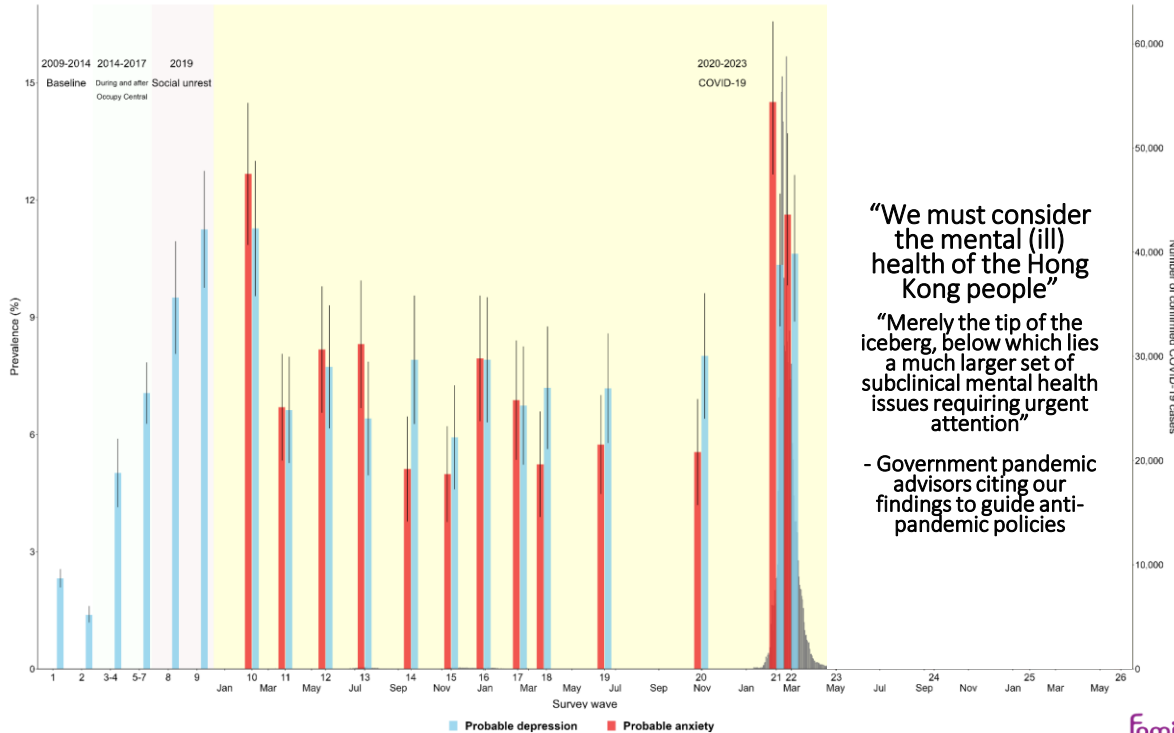
Minutes of meeting
held on Friday, 10 January 2020, at 10:45 am
in Conference Room 2 of the Legislative Council Complex

Chairman of the Advisory Committee for Mental Health cited our work in the Legislative Council as the “basis for the Government's long-term manpower and service planning”



Wong YL. 黃仁龍主席Live同你講. 2020.

CASE STUDY (2) – Guiding pandemic response



“We must consider the mental (ill) health of the Hong Kong people”

“Merely the tip of the iceberg, below which lies a much larger set of subclinical mental health issues requiring urgent attention”

- Government pandemic advisors citing our findings to guide anti-pandemic policies

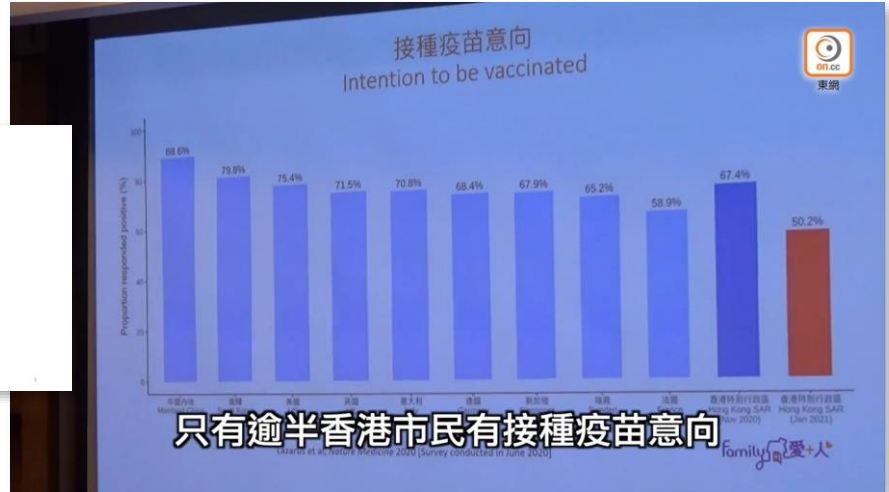
CASE STUDY (III)

Nowcasting COVID-19 Vaccine Confidence

HKU Faculty of Medicine
The University of Hong Kong
香港大學醫學院

香港市民對新型冠狀病毒疫苗的信心程度

Real-time population data on
vaccine confidence



Our data also provided sentinel alert for declining COVID-19 vaccine confidence in January 2021 (prior to vaccine rollout) and that vaccine confidence in Hong Kong was lower than other jurisdictions

CASE STUDY (IV)

How Did Hong Kong Become the Longest Living Population in the World?

“There could not be a more important puzzle to solve for the rest of the world”



NATIONAL ACADEMY OF MEDICINE

NAM Perspectives

Chung RY and Marmot M. People in Hong Kong have the longest life expectancy in the world:
Some possible explanations. NAM Perspectives 2020

UNDERPINNING RESEARCH

Hong Kong's Journey to Become the World's Longest Living Population

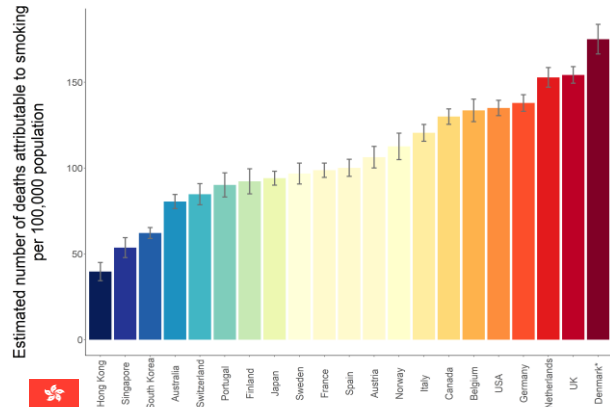
THE LANCET
Public Health

Understanding longevity in Hong Kong: a comparative study with long-living, high-income countries

Michael Y Ni*, Vladimir Canudas-Romo*, Jian Shi, Francis P Flores, Mathew S C Chow, Xiaoxin I Yao, Sai Yin Ho, Tai Hing Lam, C Mary Schooling, Alan D Lopez, Majid Ezzati, Gabriel M Leung

Summary

Background Since 2013, Hong Kong has sustained the world's highest life expectancy at birth—a key indicator of population health. The reasons behind this achievement remain poorly understood but are of great relevance to both rapidly developing and high-income regions. Here, we aim to compare factors behind Hong Kong's survival advantage over long-living, high-income countries.



- Showed that Hong Kong's longevity was underpinned by its successful tobacco control
- Contributed to 50.5% and 34.8% of Hong Kong's survival advantage over males and females in high-income countries, respectively

CASE STUDY (V

Identified Potential ‘Best Buys’ to Comprehensively Improve Population Health

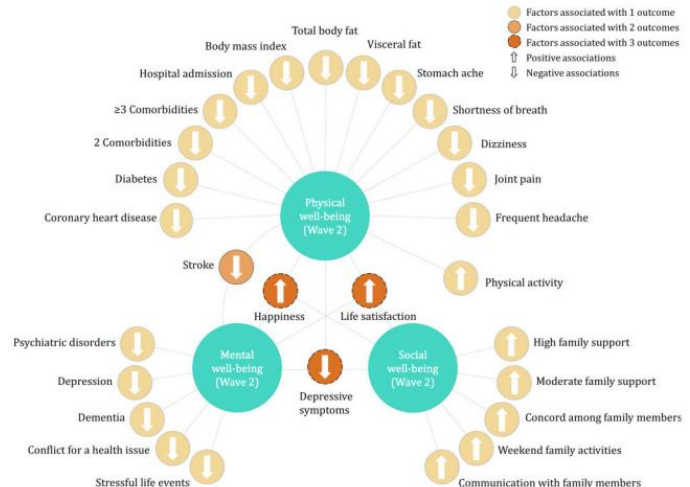
Mental Health

Determinants of physical, mental and social well-being: a longitudinal environment-wide association study

Michael Y Ni,^{1,2,3†} Xiaoxin I Yao,^{1†} Felix Cheung,¹ Joseph T Wu,¹ C Mary Schooling,^{1,4} Herbert Pang,^{1*} and Gabriel M Leung¹

International Journal of
Epidemiology

- A fundamental disconnect in HK’s population wellbeing: attained the world’s highest life expectancy yet also ranked among the worst globally for mental wellbeing
- First to identify determinants that could simultaneously improve physical, mental and social wellbeing

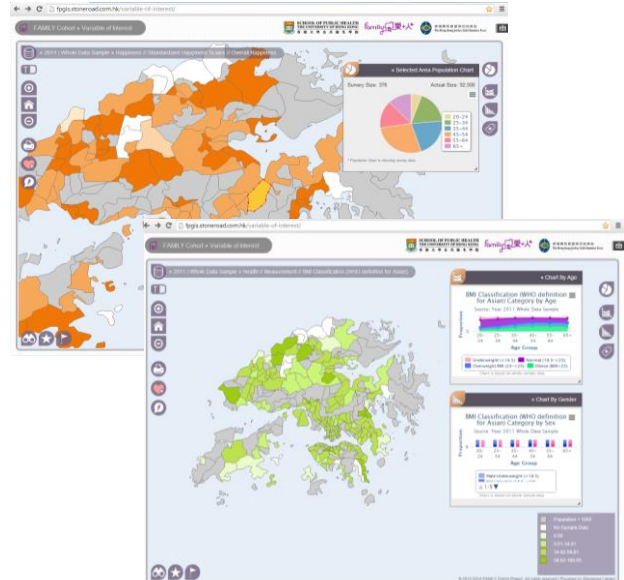


ENGAGEMENT

Knowledge Exchange with Stakeholders

Reports for 18 Districts

Open-access Geographic Information System (GIS)



ENGAGEMENT

Public Engagement and Press Conferences

香港人口轉化為「全世界最長壽」的解讀
Hong Kong's journey to become
the world's longest living population



LKS Faculty of Medicine
The University of Hong Kong
香港大學醫學院

Real-time population data on depression
and suicidal ideation



LKS Faculty of Medicine
The University of Hong Kong
香港大學醫學院



Family 家人

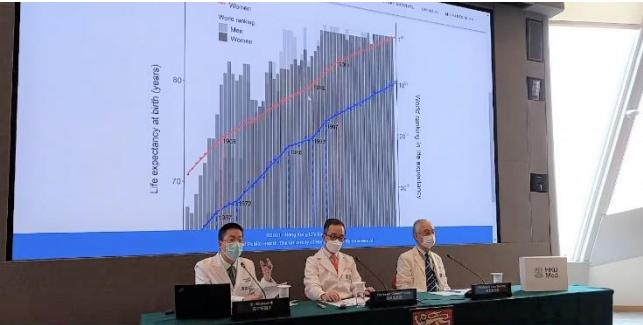


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The University of Hong Kong
香港大學醫學院


香港市民對新型冠狀病毒疫苗的信心程度
Real-time population data on
vaccine confidence



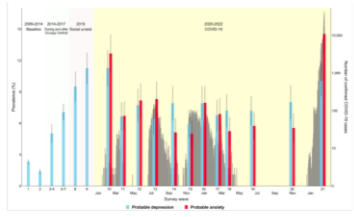
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HKU Med on Hong Kong's journey to become the world's longest living population
港大醫學院就香港人口轉化為「全世界最長壽」的解讀 新聞發布會



Mental health of HKers under stringent PHSMs and
Interminable cycles of "suppress and lift"



ENGAGEMENT

Selected Media Coverage

涉逾190小區 為社會探熱

「這是社會探熱針，想透過這批逾萬名香港住戶的追蹤研究，幫社會探熱。」港大社會醫學系系主任梁卓榮表示，研究覆蓋190多個港人居住的小區，可以顯示那一區「發熱」，包括肥胖、精神健康及富貴病等。而研究初會公布各小區反映富貴病熱的各個系統。

地圖顯示 各區健康和睦快樂

所謂小區，是指政府用作規劃的小規模統計區 (Tertiary Planning Unit)，全港約300個，當中190多個有人居住。港大社會醫學系的研究對象涵蓋全小區，包括：非政府機構的長者中心，亦會將研究結果全面電子化及公開，以地圖方式，顯示各區的(體)康、和(睦)、(快)樂的情況及改變。研究區內的物業較為肥胖，會在地圖上顯示較紅色，有可能就是該區康樂設施不足或不健康的快樂地方較多。

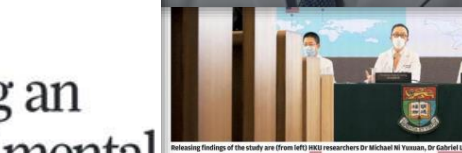
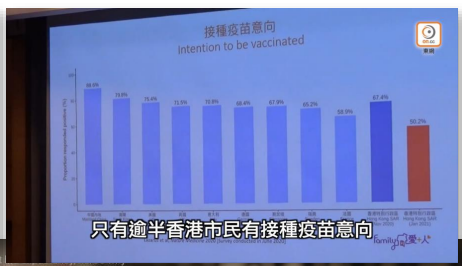
「非政府機構服務層層時，可用此數據匯，也歡迎政府參考，這是公共資源。」梁說。

該數據庫可顯示各區的快樂情況，不單是飲食、慢性流行情況、運動習慣、與家人的關係、精神健康、自殺傾向，以及家庭與工作平衡等，當中青少年對家會特別抽出來。

梁又稱，下星期會先公布區域調查中顯示的港人慢性病情情況，以高血壓最多人罹患，稍後會公布快樂指數；而明年年初會再公布富貴病的報告，會有真正影響各小規模統計區的壓力指數，又特別就東港、將軍澳及天水圍三個新發展區。

港大除了研究，亦會介入的工作，與非政府機構合作，針對社區的需要，提供服務。

Dr Michael Ni
Clinical Associate Professor
Faculty of Medicine, The University of Hong Kong



SMOKING BAN 'KEY' TO LONGEVITY IN THE CITY

Releasing findings of the study are (from left) HKU researchers Dr Michael Ni Yuman, Dr Gabriel Leung and Professor Lam Tai-ling. (Photo: Nicka Tam)

Family 愛人

高血壓病情八成失控

定期測量 加強認識

【本報訊】香港大學調查顯示，全港成人中有三成二人有高血壓，但當中八成人卻未能控制病情，另外有一成四人需要藥物才能控制。港大指，有四份一死亡個案同高血壓有關，建議要加強市民的認識，包括要定期量度血壓。另外，為推動腦中風和大腦麻痺的病人多動動手腳，進行康復治療，理工大學昨日公布，成功研發出一個可以提病人進行康復治療的系統。

港大公共衛生學院學系系主任梁卓榮表示，該研究是2009年3月至去年3月期「新冠疫苗」港大研究指，結果顯示有46%的人已被醫生被病案中，有70%有吃藥，但受訪者的抑鬱指數，但受訪者的抑鬱指數，但機會便高5%；與家人的有高血壓的機會便低1%；棄受控制便高10%。今次調



2021年01月29日
Explains

32% 成人高血壓

快樂易受控

【本報訊】港中每有20%成人高血壓與患高血壓有直接間接關係。港大一項研究發現，本港20歲或以上成人人口，32%人患有高血壓，當中有66%患者，近6成病情未受控。研究亦發現，快樂的患者較易控制高血壓。

港大公共衛生學院「愛+人」計劃研究，其中一項為了解港人患高血壓情況。研究人員於09年3月至11年3月，成功訪談15,357名20歲或以上成人居民，並為其量度2次血壓，再取得平均數以確定被訪者的血壓情況。

港大調查 當中46%獲確診

調查顯示，4,846被訪者有高血壓，即佔約32%，當中僅約46%獲診，獲醫生確診患高血壓；當中7成人有服藥以控制病情，但58%的病情未能受控。

研究人員估計，有服藥的患者病情未能受控，可能因沒定時或定量食藥、多運動、戒煙及改善不良飲食習慣等有關；相反，部分沒服藥患者，因建立健康飲食及運動習慣，病情反受控。

負責研究的港大社會醫學系系主任梁卓榮表示，結果顯示高血壓患者從患病、確診、治療到成功控制病情，每階段人數以一半的比率遞減，每年約有四分之一死亡個案，與患高血壓有直接間接關係，故應加強對高血壓認識，並多了解血壓水平及定期量血壓。

梁指出，家庭和社區支援對控制高血壓都有幫助。調查顯示，主觀快樂指數每升1分，血壓受控機會便可提升3%，綜合壓力指數每升1分，血壓受控機會更可提升10%。

低吸煙率為港人長壽關鍵

【本報訊】香港連續7年蟬聯全球最長壽地區，箇中原因未被充分研究，由香港大學李嘉誠醫學院領導的研究團隊，以8年時間比較全球18個國家及地區，合共2.63億人，發現港人長壽關鍵在本港不論男女心血管率均是眾多地區中最成功控煙是香港人口關鍵因素，促請立法全面禁止電子煙和加草案。

學者促禁禁加熱

研究發現，相比地區，香港人因心血管意外致死的比率其中一個女性癌症列區，分析發現低吸煙分別佔男性的50.5%及換言之，本港男性預年，其中有50.5%，即



HEALTH

City suffering an 'epidemic' of mental health problems

South China Morning Post

IMPACTS ACHIEVED

Detecting the Rule of Halves in the HK Population

Letters to Healthcare Professionals



監測及流行病學處

HP 衛生防護中心
Centre for Health Protection
保障市民健康
Protecting Hong Kong's health

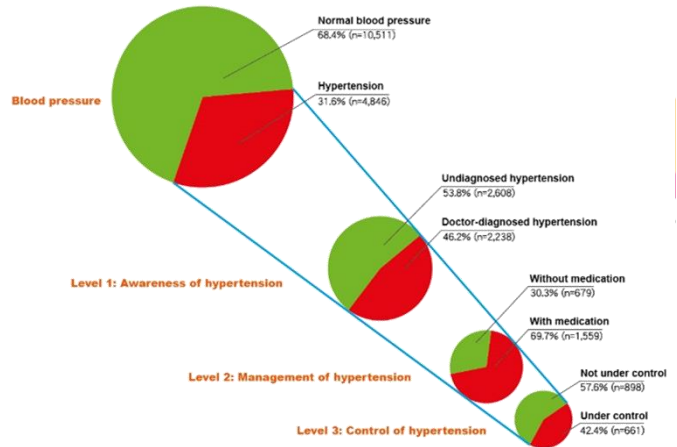
Surveillance
And
Epidemiology
Branch

本署編號 Our Ref.: DH SEB NCD/7/107
來函編號 Your Ref.:
電話 TEL.: (852) 2961 8918
傳真 FAX No.: (852) 2574 4263

20 March 2013

Dear Doctor,

World Health Day 2013
"Is your blood pressure normal? –
High blood pressure kills but it's preventable and treatable"



- Detected that a third of the HK population had hypertension, of which the majority were undiagnosed
- The findings was cited by Department of Health and Centre for Health Protection in their 'Letters to Doctors'

IMPACTS ACHIEVED

Policymaking for a New Mode of Primary Care

LC Paper No. CB(2)1787/17-18(01)

For discussion
on 16 July 2018

Legislative Council Panel on Health Services

District Health Centre in Kwai Tsing District



食物及衛生局
Food and Health Bureau

HEALTH PRIORITIES FOR KWAI TSING

7. In determining the scope of services to be provided by the DHC, the Steering Committee examined the findings of four large-scale surveys/data sources to better understand the health profile of the Kwai Tsing population, namely -

- (a) Chronic Disease Virtual Registry of HA²;
- (b) Population Health Survey (“PHS”) conducted by DH³;
- (c) Thematic Household Survey conducted by the Census and Statistics Department (“THS”)⁴; and
- (d) The collaborative project entitled “FAMILY: A Jockey Club Initiative for a Harmonious Society” (“FAMILY Project”) conducted by the School of Public Health of The University of Hong Kong and funded by the Hong Kong Jockey Club⁵.

Since item (d) above contains district-based health data most relevant to the DHC, we have consulted the Steering Committee and have agreed to adopt the data of the FAMILY Project as the baseline.

- Invited by the then Secretary of Food and Health to identify health needs in each of the 18 districts and to help inform primary care reform
- Legislative Council Briefing Paper: cited as the “most relevant” data source
- Only non-governmental info source for decision-making

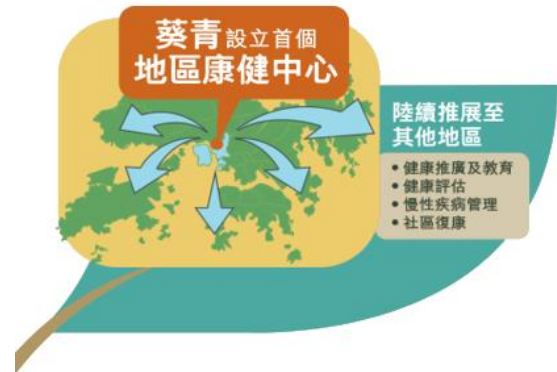
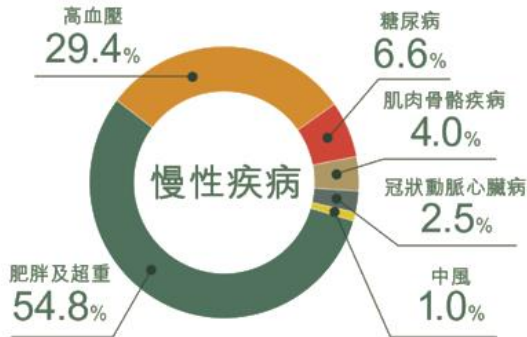
IMPACTS ACHIEVED

First District Health Centre (DHC) in Hong Kong

改善醫療體系和服務
2018年施政報告

及早預防
為市民健康

但是...



The 2018 Policy Address has directly drawn on findings from the FAMILY Cohort for formulating the first District Health Centre (DHC) in Hong Kong

IMPACTS ACHIEVED

Extended to All 18 Districts in HK



DHCs / DHC Expresses have now been launched in all 18 districts

IMPACTS ACHIEVED

Passage of the Smoking (Public Health) (Amendment) Bill 2021

THE LANCET Public Health

Understanding longevity in Hong Kong: a comparative study with long-living, high-income countries

Michael Y Ni*, Vladimir Canudas-Romo*, Jian Shi, Francis P Flores, Mathew S C Chow, Xiaoxin Yao, Sai Yin Ho, Tai Hing Lam, C Mary Schooling, Alan D Lopez, Majid Ezzati, Gabriel M Leung

Summary

Background Since 2013, Hong Kong has sustained the world's highest life expectancy at birth—a key indicator of population health. The reasons behind this achievement remain poorly understood but are of great relevance to both rapidly developing and high-income regions. Here, we aim to compare factors behind Hong Kong's survival advantage over long-living, high-income countries.



SMOKING BAN 'KEY' TO
LONGEVITY IN THE CITY

- Our study showing that tobacco control was the most important reason for HK's attaining world-leading
- Our findings helped influence the final session of the Smoking (Public Health) (Amendment) Bill committee proceedings

由2022年4月30日起

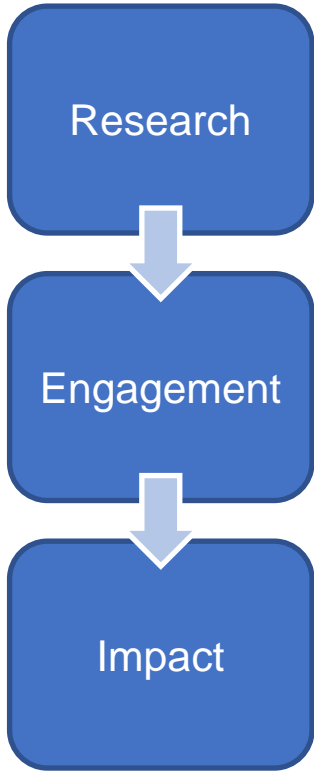
任何人不得進口、推廣、製造、售賣或為商業目的而管有另類吸煙產品，包括電子煙、加熱煙產品及草本煙。違例最高刑罰為監禁6個月及罰款\$50,000。

From 30 April 2022, no person may import, promote, manufacture, sell, or possess for commercial purposes alternative smoking products, including electronic smoking products, heated tobacco products, and herbal cigarettes. The maximum penalty is imprisonment for 6 months and a fine of \$50,000.

查詢及投訴電話號碼
2961 8823
註冊熱線
1833 183

欲了解詳情，可參閱《2021年修訂〈吸煙(公眾衛生)(修訂)條例〉全文》。
For details, please refer to the full text of the Smoking (Public Health) (Amendment) Ordinance 2021.

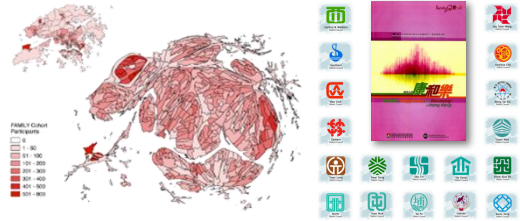
Impact Summary of the FAMILY Cohort



Tracking physical, mental, and social wellbeing of the HK population since 2009

Engaging stakeholders and the public through publications, press conferences, among others

- I. Policymaking
- II. Legislation
- III. Resource mobilisation



香港人口轉化為「全世界最長壽」的解讀
Hong Kong's journey to become the world's longest living population

 **HKU Med** LKS Faculty of Medicine
School of Public Health
香港大學公共衛生學院

 **地區康健中心**
District Health Centre

