



香港中文大學
The Chinese University of Hong Kong



香港中文大學醫學院
Faculty of Medicine
The Chinese University of Hong Kong



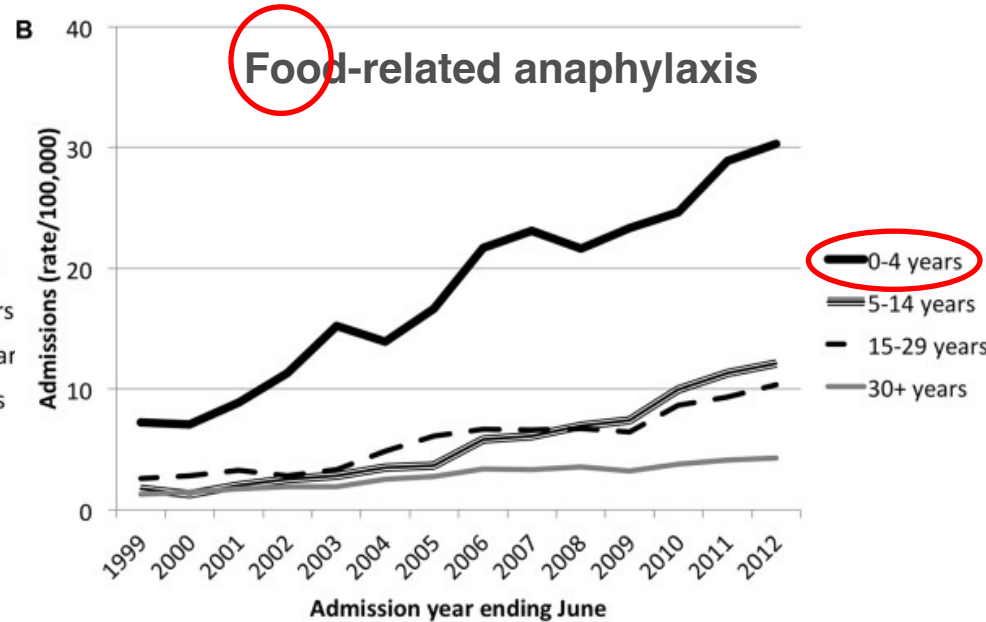
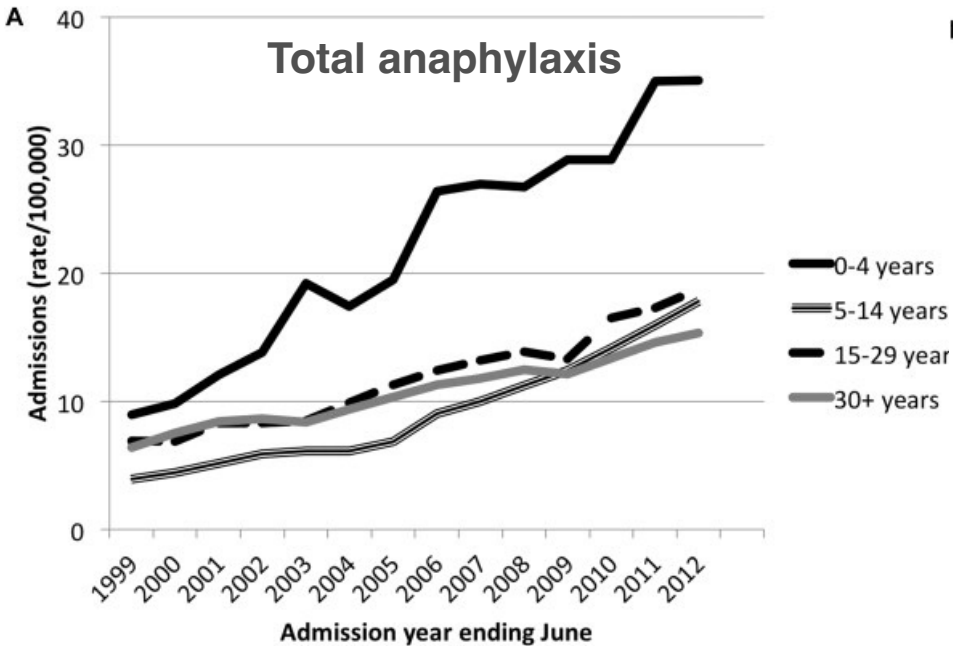
HMRP Research Fellowship Scheme – Experience Sharing

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Outline

- Brief introduction of my HMRF Research Fellowship Application
- Proposal writing and interview
- Challenges during the implementation phase
- Take-home messages

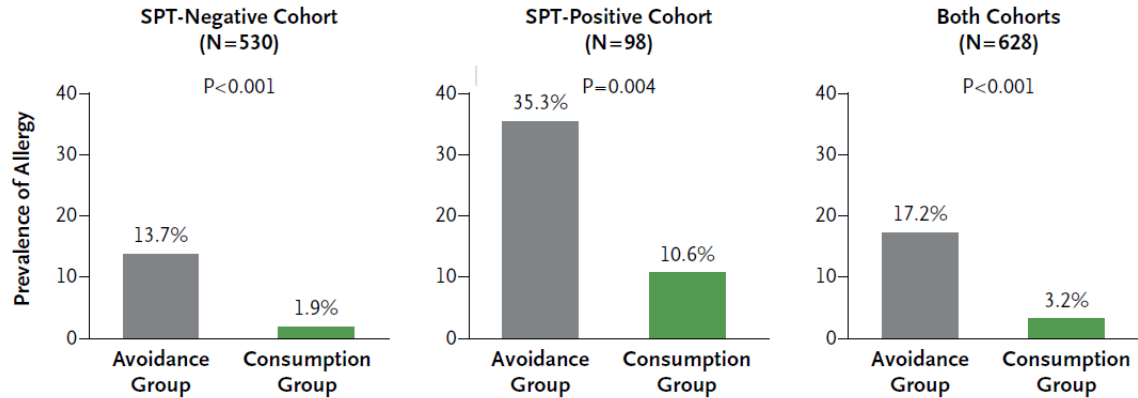
Time-trend of Anaphylaxis in Australia (national statistics)



Rise in anaphylaxis incidence was mainly driven by **food anaphylaxis in young children**

Early peanut consumption reduced the risk of peanut allergy

Intention-to-Treat Analysis



Part I: Research project on food allergy

- 2-year research project

Aim 1: To evaluate the disease burden of FA and FA-induced anaphylaxis in HK

Aim 2: To investigate the relationship between timing of solids introduction and FA development in HK children

Approach: Retrospective time-trend evaluation of anaphylaxis incidence in HK

Approach: Prospective epidemiological survey to study the prevalence and risk factors of FA

The 6 participating centres:

1. Prince of Wales Hospital
2. Queen Mary Hospital
3. Pamela Youde Nethersole Eastern Hospital
4. Queen Elizabeth hospital
5. Princess Margaret Hospital
6. United Christian Hospital

1st Stage (4 months): all FA, DA and anaphylaxis cases in the 6 participating centres will be reviewed retrospectively

Jul 1, 2019 - Oct 31, 2019

2nd Stage (18 months): investigators from the 6 participating centres will prospectively recruit FA, DA and anaphylaxis patients

Nov 1, 2019 - Apr 30, 2022

In-patient wards

Out-patient clinics

Electronic database

All paediatric patients aged 0-18 years old with the diagnosis of physician-diagnosed FA, DA and anaphylaxis

All medical records reviewed;
Additional or missing information collected during follow-up interviews

Skin prick test, Bloods x total IgE values, sIgE for food allergens, serum tryptase

- 1) The relationship between timing of introduction of solids and FA development in HK children
- 2) The incidence rate of FA, DA and anaphylaxis in HK children in this 18-months prospective study
- 3) Common FA, DA & anaphylaxis triggers, the management strategy of FA (use of adrenaline)

Part I: Research project on food allergy

Components	Actions
A research project	<ul style="list-style-type: none">• Scientific merits and translational value• Include preliminary data (<i>Mine and my Mentor's local data</i>)• Feasibility within proposed time frame (<i>Seek the advice of Mentor</i>)• Powered sample size (<i>Not just based on feasibility</i>)• Limitations and alternative solutions (<i>Important for the interview...heed the advice of the panelists</i>)
	<ul style="list-style-type: none">• Local, regional and international perspectives in mind (<i>Seek the support of Mentor and Overseas Preceptor</i>)• Consider having knowledge-transfer activities in mind (<i>Support from professional organizations, consumer engagement strategies</i>)



Part I/II: Research project & training plan

Components	Actions
A mentorship program	<ul style="list-style-type: none">• Seek support of a Mentor (<i>early advice from local mentors – allergy specialists</i>)• Develop the proposal with the Mentor (<i>study design, objectives, feasibility to conduct the study within the proposed timeframe</i>)
An overseas training program	<ul style="list-style-type: none">• Training plan carries equal weightage as the research plan (<i>both 35%</i>)• Liaise with an overseas research group for training program early (<i>early contact and avoid Christmas</i>)• Set clear learning objectives (<i>must be relevant to the project</i>)• Include deliverables and time frame (<i>work with Overseas preceptor on the training schedule</i>)• Provide justification for the budget (<i>Avoid over-or under-budget...</i>)



Part II: Training proposal

- To conduct **epidemiological research** and **clinical trials** on food allergy
- Received **clinical exposure** and **coordination of projects** relating to allergic and immunological disorders in children, particularly food allergy.
- Build up **research experience** and **collaboration** between research teams in this **cross-cultural epidemiological study**

Project Period: Unexpected Challenges

2021: COVID

- **Reduced training period** due to closed border.
- **Recruitment activities** of Part II of the research project were interrupted due to the activated Hospital Authority's Emergency response level. However, most severe allergic reactions could still be captured.
- **Project extension** (It's OK... provide justification and a concrete plan).

Communicate with Research Fund Secretariat on amendments and budget revision



Take-home messages

- Training/ Mentorship Plan is as important as the Research Plan
- Research project with an impact: Local, regional and international perspectives
- Begin with the end in mind: Publications, societal impact and knowledge-transfer activities
- Preparing for interview: Be cognizant of the limitations and alternative solutions
- Challenges during implementation: Seek the advice of the Mentor and Collaborators
- Progress report submission time is a good checkpoint
- Timely communication with the Research Fund Secretariat on amendments and budget revisions

Acknowledgement

- Mentors: Professor LEUNG Ting-fan; WONG Wing-kin Gary
- Overseas Preceptor: Professor Mimi TANG
- Local collaborators:
 - *Dr. Philip Li (QMH M&T)*
 - *Dr. YS Yau, Dr. Polly Ho, Dr. WH Chan (QEH Paediatrics)*
 - *Dr. Mike Kwan, Dr. Joshua Wong, Dr. Ivan Lam, Dr. QU Lee (PMH/YCH Paediatrics)*
 - *Dr. James Cheng, Dr. David Luk (UCH Paediatrics)*
 - *Dr. Jaime SRD, Dr. Gilbert Chua (QMH Paediatrics)*
 - *Dr. CH Wong, Dr. WT Ko (PYNEH Paediatrics)*
- Food-allergic children and families
- CUHK Office of Research and Knowledge Transfer Services
- FHB Research Fund Secretariats, Consultants and Scientific Officers (past/present)

