Knowledge Exchange on HIV/AIDS to promote HIV prevention and care

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Brief History of HIV/AIDS

1981 AIDS identified

1983/84 HIV identified as the cause of AIDS

1995 HAART introduced

2009 RV144: modest efficacy (31.2%)

2009-2013 multiple HIV-1 bNAbs isolated

2008 2 million new infections/year

Asia: 2nd largest epi. region

37 years

40 million deaths
36.9 HIV Carriers

No Vaccine

No Cure
Summary of the Impact

Research results from us and others indicate that there remains neither a vaccine nor a cure for AIDS. Based on knowledge learnt, our team has done tremendous amount of KE work in promoting HIV prevention and care in Hong Kong and in China during the past 10 years, and has achieved significant impacts in following areas.

A. Governmental policy and guideline
B. Public awareness
C. Community education
D. Biomedical industry development
Underpinning Research (or Teaching & Learning)

We have been studying AIDS pathogenesis, vaccine and therapeutic cure since 1991. Our KE activities are based on knowledge learnt from following ways.

1. Frontier research outputs from the KE team
2. Professional expertise on HIV over 27 years
3. Leading HIV research in Hong Kong
4. Real time knowledge updates over time
5. Frequent scientific publications by the KE team
6. HKU patents generated by the KE team
Engagement Process

Our engagement process is through several means including:

1. Our scientific publications caught public attention
2. Press releases by HKU or press interviews
3. Attending international and local meetings
4. Writing reports to corresponding parties
5. Organizing or co-organizing KE events
6. Active KE communications with NGOs, etc.
Details of the Impact Achieved

- A. Governmental policy and guideline

- Serving Hong Kong Advisory Council on AIDS (ACA)
  - Promoting Treatment as Prevention since 2009
  - Contribution to Strategic Plan and HIV Manual
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Details of the Impact Achieved

A. Governmental policy and guideline

• Lectures for Council for AIDS Trust Fund (ATF) and Hospital Authority (HA)
  – Updating the latest knowledge on HIV prevention and cure from international meetings
Details of the Impact Achieved

A. Governmental policy and guideline

• Providing professional advice to Shenzhen CDC and infectious disease hospital
Details of the Impact Achieved

B. Public sharing of our HIV research
Details of the Impact Achieved

B. Public awareness
- KE via newspaper series
Details of the Impact Achieved

B. Public awareness

• Addressing issues related mainly to HIV/AIDS and KE via reporters, social media and others
Details of the Impact Achieved

B. Public awareness

- by organizing open lectures and symposia
Details of the Impact Achieved

C. Community education

- Supporting community events on HIV/AIDS
Details of the Impact Achieved

C. Community education

Annual Quiz on HIV/AIDS 2017

- AIDS prevention and control among young people in HK by co-organizing a campaign for all students in secondary schools.
Details of the Impact Achieved

- Community education
- Providing KE and training to Hong Kong and regional NGOs for HIV prevention
Details of the Impact Achieved

- Community education

• Raising HIV awareness to help over 500 AIDS orphans in China
Details of the Impact Achieved

D. Biomedical Industry initiative

• HKU Technology transfer
  – Support a startup company in Hong Kong
  – Develop brand new biomedical product against HIV
KE impact achieved

PD1-based DNA vaccine amplifies HIV-1 GAG-specific CD8+ T cells in mice

HKU Patent 2013

HKU TSSSU/ImmuneCrue Ltd 2015

ITC UICP 2017

RGC TRS 2018

Significant key insights from our research

Zhou J, ..., Chen Z*. Molecular Therapy. 2013
Cheung A, ..., Chen Z*. Nature Microbiology. 2017
Summary: Impacts Achieved

A. Governmental policy and guideline:
   Contribution to Strategic Plan and HIV Manual

B. Public awareness:
   Providing evidence-based new knowledge on HIV

C. Community education:
   Educating thousands local youth, students and NGOs

D. Biomedical Industry initiative
   Hong Kong biomedical company, namely Immuno Cure Ltd, has been established based on our scientific discoveries