

Sharing session of Pilot Attachment Programme in Guangdong province

Sharing from Infectious Diseases physician perspective

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Key messages

- History of development of clinical infectious diseases in China
- Emergency response preparedness
- Hospital role in public education
- Personal reflections

Infectious Diseases as a clinical specialty in Guangdong

A long history of research and clinical development in infectious diseases in Guangdong

鼠疫和霍乱 Plague and Cholera

鼠疫是由鼠疫杆菌引起严重危害人类健康的烈性传染病。十九世纪上叶前，雷州半岛曾发生多次鼠疫流行，并波及全省大部分县区。为控制鼠疫疫情，全省开展了大规模的灭鼠、灭蚤和疫源调查等活动。1953年以来广东省再无人间鼠疫疫情发生。为了巩固鼠疫防治成果，我省防疫人一直坚持常年开展鼠疫疫情监控工作。

The plague is a severe infectious disease caused by *Yersinia pestis*. Through large-scale extermination of rats and rat-fleas in the whole province, and investigation of epidemic origins, Guangdong Province has no more human plague occurred since 1953.



●中央防疫大队在雷州半岛开展细菌检验和病家消毒
Conducting bacterial tests and disinfection of patients' living environment

寄生虫病 Parasitic Disease

血吸虫病是由血吸虫寄生于人体所引起的一种地方性疫病。20世纪五六十年代，我省遭受血吸虫病蔓延，涉及的村庄有200多个，危害农田1万多公顷，患病及病残难以统计。通过发动农民开展群众运动，采取“水（利）、粪（肥）、种（植）、灭（螺）、管（病人牲畜）、管（水、粪）”六字综合措施，经过三十多年艰苦的努力，于1985年全省达到消灭血吸虫病的标准。

Schistosomiasis is an endemic disease caused by schistosome parasitism in the reservoir areas of human beings. After implementing six comprehensive prevention and control measures of "Water Conservancy, Land Reclamation, Planting, Fertilization, Control, Treatment of Patients and Sick Livestock, and Management of Faces and Waste", Guangdong met the standard of eliminating schistosomiasis in 1985 after 30 year of hard work.



●1953年，毛泽东主席在雷州半岛考察血吸虫病防治工作
Chairman Mao Zedong visits and inspects the work of schistosomiasis prevention and control in Leiqiao

疟疾是由疟原虫所致的虫媒传染病。上世纪50年代，全省平均每年报告56万多例，死亡282例。通过采取对症病人治疗、集体化疗、滞留喷洒灭蚊和幼虫清除蚊帐等措施，疟疾流行得到有效控制，到2018年全省实现消除疟疾目标。

Malaria is a mosquito-borne disease caused by plasmodium. The goal of eradicating malaria by 2018 will be achieved by adopting measures such as the treatment of current patients, collective chemotherapy, control of mosquito by residual spraying, and using insecticide-coated mosquito nets.



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丝虫病是由丝虫寄生在人体的淋巴系统引起的疾病。广东省1982年丝虫感染人数200多万。经过采取反复查治、查治结合全民服药和查治结合流行区全民服海群生等措施，于1987年达到基本消灭丝虫病标准。此后通过系统监测（包括扫尾净化、纵向、横向监测等），全省于2001年达到国家消除丝虫病标准。

Filariasis is a disease caused by filaria parasitism in the lymphatic system of the human body. After repeating checks and treatments, combining with the universal drug taking, and treatment combining with the universal taking of ivermectin in the epidemic area, the national standard for the elimination of filariasis was reached in Guangdong in 2001.



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Guangdong Provincial Centre for Disease Control and Prevention

Infectious Diseases as a clinical specialty in Guangdong

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The Third Affiliated Hospital of Sun Yat Sen University, Guangzhou

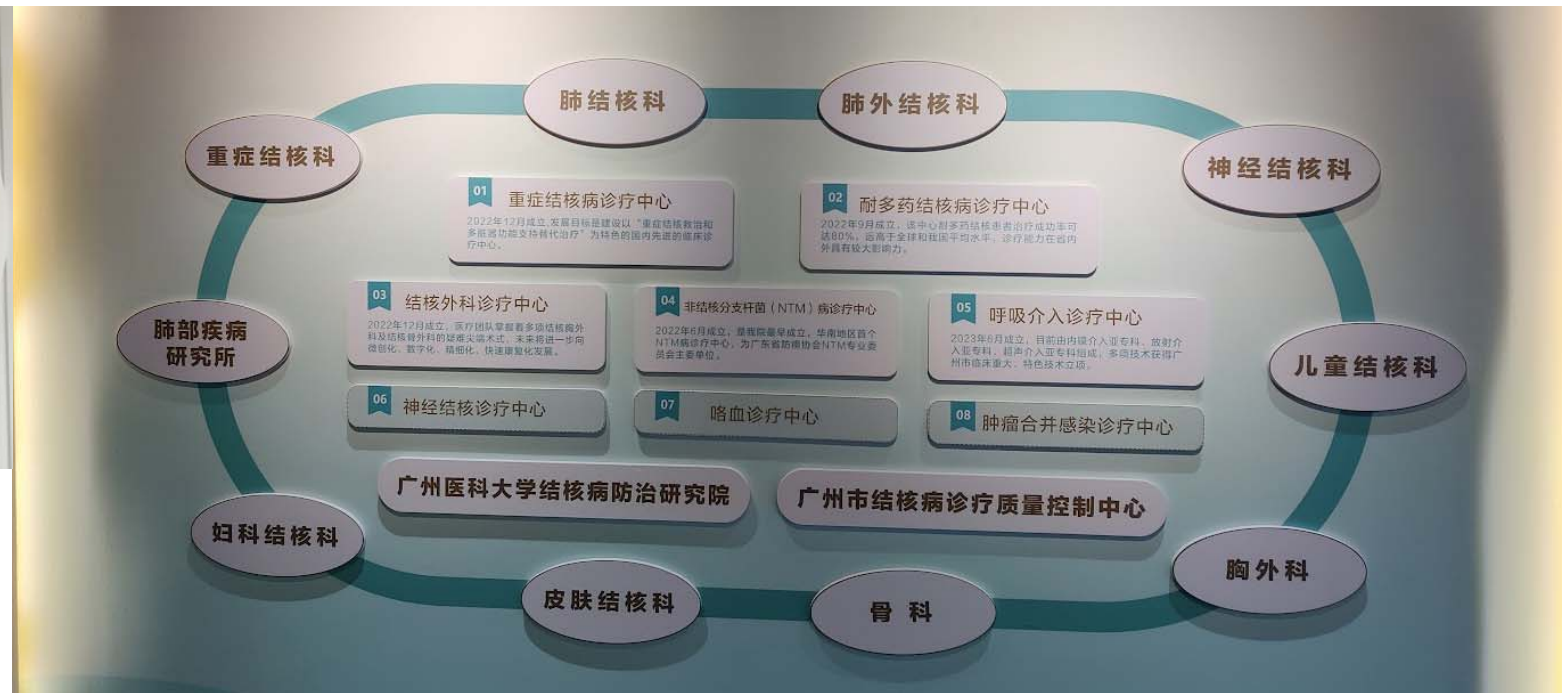
Infectious Diseases as a clinical specialty in Guangdong

Viral hepatitis and liver diseases



Infectious Diseases as a clinical specialty in Guangdong

Tuberculosis



Infectious Diseases as a clinical specialty in Guangdong

HIV care



The Third People's Hospital of Shenzhen, Shenzhen

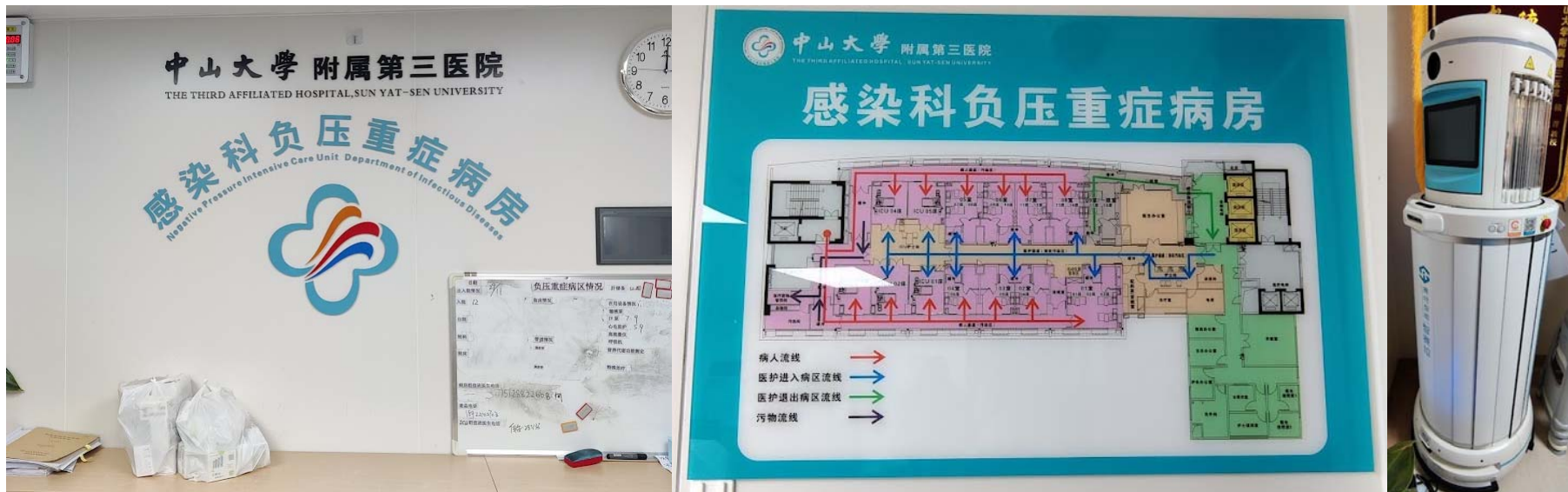
HIV prevention services



The Third Affiliated Hospital of Sun Yat Sen University, Guangzhou

Infectious Diseases as a clinical specialty in Guangdong

Respiratory viral infections and COVID



The Third Affiliated Hospital of Sun Yat Sen University, Guangzhou

Infectious Diseases as a clinical specialty in Guangdong

Three major ID pillars in Guangzhou

Clonorchis
Rickettsial infection
Chickenpox

Other infectious diseases



Support for hospital service development in other cities and provinces

- Guangdong No.2 Provincial People's Hospital
- Established hospitals in other cities since 2015
 - 陽山
 - 雲浮
 - 東莞
 - 饒平
 - 惠來



The Third Affiliated Hospital of Sun Yat Sen University, Guangzhou

Emergency response: provincial level



Guangdong Provincial Emergency Hospital

国家重大疫情救治基地

Emergency Response Preparedness efforts

Contribution during SARS in 2003

Established one of the first six national Emergency Medical Teams in 2010

Established as first provincial level emergency hospital in 2012

Provincial emergency hospital

Facilities

- CT, including mobile CT
- PET-CT
- MRI

Clinical specialty development

- Trauma
- cardiothoracic
- rehabilitation
- obstetrics and neonatology
- emergency medicine
- infectious diseases

Three pillars

- Clinical service
- Training, including accredited training centre for infection control
- Research

Emergency response: national level

- In response to emergency situations
 - Natural disasters
 - Major accidents
 - Public health emergencies
 - Social disorder
- Establishment of Emergency Medical Teams
 - Accreditation
 - Selection of members
 - Training
 - Drills



Emergency response: national level

Mobile hospital



廣東省第二人民醫院 民航院區

Emergency response preparedness – infectious disease outbreaks



Guangdong Provincial Centre for Disease Control and Prevention

Drills as an important part of preparedness plan



Role of Emergency hospital and EMT during COVID pandemic

- Guangzhou hospital complex
 - Major parts of hospital converted to COVID wards since 2020
 - Suspected and confirmed COVID cases at different periods of time
 - Intensive care and HDUs for patients with severe disease
 - Different patient populations, e.g. pregnant patients and children
- EMT dispatched to other provinces, including Wuhan, Hainan and Hong Kong
- Mobile facilities
 - Including P2 laboratory and mobile CT
- Sharing of expertise
 - Surveillance / buddy system to enhance infection control measures

Role of hospital in public education 科普教育



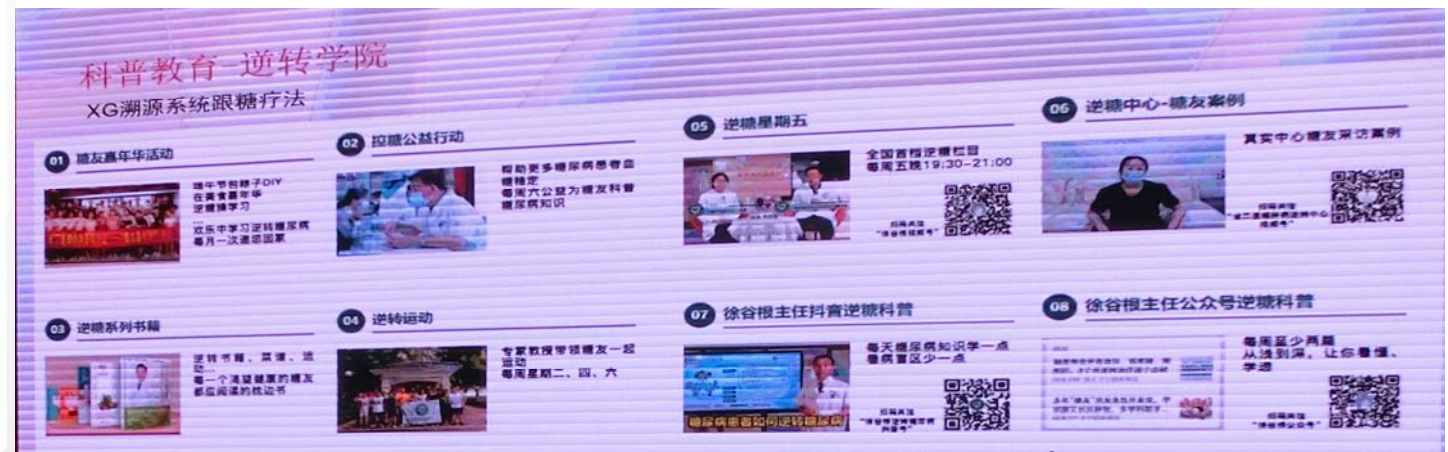
Guangdong Hospital of Traditional Chinese Medicine University City Hospital

Role of hospital in public education 科普教育



Lectures
Social media platform

Example:
糖胖逆轉學院



Personal reflections

- Emphasis on clinical research in 三甲 hospitals
 - Translation and clinical research
 - Research personnel training
 - Laboratory facilities
- Incorporation of Chinese medicine into conventional Western medicine
 - Clinical practice and clinical research
- Role of hospitals in public education on medical science
 - Use of social media platforms