Traditional Values in Healthcare
Design - UIA-PHG 2007

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• Introduction
• The state of the matter
• Retrospective of Issue
• Ideas rerun
• Recommendations
introduction

Definition
Location
Population & Health Facts
Sustainability has been defined as “that which meets the needs of the present without compromising the ability of future generations to meet their own needs” – UN World Commission on Environment and Development report
Healthcare buildings

• “...fulfils many functions and accommodates the whole life span of Man. They shelter services for the promotion of health and prevention of illness, for assistance of natural functions such as childbirth, the cure of disabilities and the support of those who a variety of ways are afflicted or incapacitated.”

### Population 2005

- Land Area (Sq. Km) 330,252
- Population ('000) 26,127.7
- Population Density (Sq. Km) 79
- Population By Age Group: ('000)
  - Below 15 Years 8,525.2
  - 15 to 64 Years 16,483.0
  - 65 Years & Above 1,119.5
- Annual Population Growth Rate (%) 2.1
Financial Allocation 2005

- Total MOH Budget RM 7,860,430,500
- Operating Budget RM 6,778,264,700
- Development Budget RM 1,082,165,800
- Per Capita Allocation RM 301
- Per Capita GNP RM 17,742
- % of Total MOH Allocation to National Budget - 6.69 %
Geographical Distribution of Selected Hospitals

- National Referral Hospitals
- Regional Hospital
- Tertiary / Secondary State Hospitals
- Large District Hospital

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Health Facilities 1999

- Total Number of Government Hospitals (MOH) 114
- Total Number of Beds in Government Hospitals (MOH) 28,163
- Total Number of Special Medical Institutions (MOH) 7
- Total Number of Beds in Special Medical Institutions (MOH) 6,292
- Total Number of Non-MOH Government Hospitals 7
- Total Number of Beds in Non-MOH Government Hospitals 2,800
- Total Number of Private Hospitals, Maternity/Nursing Homes 225
- Total Number of Beds in Private Hospitals, Maternity/Nursing Homes 9,498
- Number of Government Dental Clinics 1,667
- Number of Government Dental Chairs 2,713
- Number of MOH Health Clinics 773
- Number of MOH Rural Clinics 1,990
Health Facilities 2005

- Total Number of Government Hospitals (MOH) 122
- Total Number of Beds in Government Hospitals (MOH) 30,021
- Total Number of Special Medical Institutions (MOH) 6
- Total Number of Beds in Special Medical Institutions (MOH) 4,740
- Total Number of Non-MOH Government Hospitals 6
- Total Number of Beds in Non-MOH Government Hospitals 2,916
- Total Number of Private Hospitals, Maternity/Nursing Homes 222
- Total Number of Beds in Private Hospitals, Maternity/Nursing Homes 10,794
- Number of Government Dental Clinics 2,047
- Number of Government Dental Chairs 3,407
- Number of MOH Health Clinics 809
- Number of MOH Rural Clinics 1,919
- Number of MOH Maternal & Child Health Clinics 89
- MOH Mobile Clinics 146
The state of the matter

Evolution of Healthcare Design in Malaysia
Achievement and Issues
This year Malaysia celebrate its 50th year of independence...Towards a developed nation in 2020, Malaysia has only 13 years through 2 Malaysian Development Plans to achieve the attainable.
Evolution of Healthcare Design in Malaysia

- In supporting healthcare services towards Health for All, Malaysia continue building new, improved and replaced healthcare facilities building pre and post independence.
Hospital Design

Pre Independence
Post Independence
Standard
Customised
Traditional Values in Healthcare

The European Hospital

General Hospital Kuala Lumpur

Institute Medical Research (IMR)

Hospital Kuala Lumpur

Pavilion Low Rise ‘pauper’ hospital
Pre independence Hospital Architecture
medium or high rise state hospitals

Melaka Hospital

Sultanah Aminah Hospital, Johor Bahru
60- early 70s
Standard Design or Type Design

The Jerteh Type Hospital 100-150 bed hospital

Sik Hospital
After Independence Hospital Architecture

Late 70s-Late 80s
Kuala Brang Type
Hospital 150-250 beds

Baling Hospital
After Independence Hospital Architecture

Late 80s to Early 90s
Malaysianised Nucleus Hospital 90-314 beds
Selayang Hospital… the first IT hospital in Malaysia
1000 beds hospital
Ampang Hospital, Kuala Lumpur
-500 beds (2006)

Pandan hospital, Johor, -700 beds
(2004/5)
**Traditional Values in Healthcare**

Putrajaya Hospital
(200 beds IT hospital)

Sungai Buloh Hospital
600 beds Referral/ Trauma Hospital
Primary Care Centres
Design

Pre and Post
Independence
evolution
Health Centres
60s-80s Period

Local Setting

Rural Health Clinic

Colonial

Health Clinic-Beetle Type

Health Clinic –Mantin Plan

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Health Centres

90s-2000 designs

KK2

KK3

KK2-Kangar Type

Rural Clinic
Achievement, Challenges & Issues
Achievement

- Customised design to customise briefs
- Additional new hospital beds from new hospital
- Reduce acute beds per hospital
- Improved bed bays from 6 to 4 bed bays
- Additional new clinics
- Improved hospital environment and facilities
- New design-non standard
- Improved operational policies with additional services
- Infection control strategy
- Information Communication Technology (ICT) integration
- Other
Challenges

• Architecturally
  – Maintainability
  – Green building requirement (including healing environment, value engineering)
  – Seismic consideration
  – Industrialised Building System (IBS) application
  – Cost
Challenges

• Health Services
  – Infectious Disease
  – Information
    Communication
    Technology
  – Day care services
  – Lifestyle diseases
  – Women and Children
  – Rehabilitation Hospital
  – Cancer Hospital

• Unknown factors
Issues

- Sustainability in Design
- Sustainability in healthcare planning and design professionals
- Procurement process in relation to quality in design process and quality in delivery service
- Sustainability of utilisation
Retrospective of Issues

- Process Cycle
- Redefining who we really are through case Studies on outcome
The Process Cycle

Brief Formulation
Briefing

Debriefing

Masterplanning
Design Development
- Layout-Sketch Design
- Room Data
- Final Design &
- Construction Drawing

Post Occupancy Evaluation

Operationalised

Tender Process/Negotiation
Construction

Commissioning and
Hand over

To sustain the process
We need qualified human resource,,,,
Reviewing Product Outcome

Selected case studies on past and recent hospital design
Hospital 1 - Just open
Layout plan
Main Entrance
The wide corridors

What activity happening here?
Does it protect from the weather?
The garden

Are the gardens accessible?
Is it maintain?
Who can access?
From where?
Emergency department
Staff base
Labour delivery room
Hospital 2- Hospital in Use
Main Entrance Lobby
The long corridors
The lift lobby
Patient/staff/public amenities
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ICU beds
WE IMPORT ALIEN CULTURE WHICH WE CONSIDER MODERN

**Modern Design Elements**
- Atrium
- 4 bed bays with ensuite toilet
- Long and wide corridors
- Air Condition spaces
- Visitors facilities
- Staff facilities
- gardens

**‘Healing’ interior environment**
- Colours
- Finishing
- etc
What they lack

FROM UTILISATION STUDIES THROUGH OBSERVATION AND RANDOM QUESTIONNAIRE.....WE FOUND OUR FACILITIES LACK...

• Values.....the soul, the care....that comes with tradition..
• ......when in use
Malaysia in a hurry...towards modernisation...for a developed nation status

Architects and planners said
“we shaped the environment and the environment will shaped us”. Thus, we must keep on building new and modern facilities adopted from the 1st world so that society will be shaped by them.....
The outcome

..POE,,was not continue,,due to lack of resources
the brief is very brief...prepared by inexperience person
.... the design in package using standards literally and inflexible...as human resources in healthcare industry depleted
... no design process but work process to deadlines due to inappropriate procurement system ...,
We forget that we need constant reminder

- Westernization would mean that a certain indigenous cultural element of the traditional East is replaced by the penetrating Western element, and the functional role of the former is taken over by the latter.
- Modernization, on the other hand, basically means to remold a cultural system into a new mode.

Prof. Hideo Kishimoto definition Hirai.N (1999)
How could we overcome it before it is too late?

- Relook at the process
- Take the process of design into the overall time span of the project realistically
- Know your ultimate customer..
- Do POE on your own projects….mistakes can be learn
Rerun of Ideas

Redefine Sustainability
Relook at design process
Relook at procurement method
Sustainability

• “He has raised the Heaven on high, and He has enforced the balance. That you exceed not the bounds; but observe the balance strictly; and fall not short thereof.” (55:7–9)

• “Mankind! Your transgression will rebound on your own selves.” Quran (10:23)
Sustainability

- "Excess and deficiency are equally at fault." - Confucius

- "creating an environment in which people can develop their full potential and lead productive, creative lives in accord with their needs and interests." — (Prugh & Assadourian, 2003)
• “..sustainable development and sustainability itself are about collective values and related choices. Different choices will lead to different outcomes. Thus the notion of what is sustainable will never be static.” (Prugh & Assadourian, 2003)
Traditional values

- is about being practical, wise, honest, and humble
- Tradition" can be regarded as a new source of "reflexive modernization as well as a self-sustaining progress that considers the indigenous conditions of our separate regions.

As Designers

- Re trace your steps
- Re learn Design Process...that take notes of the details...human needs, values
- THINK GLOBAL ACT LOCAL
Procurement Method

- Review methods that supports clients intention
Recommendations

Summary to Ponder
Summary to Ponder

- KNOW WHO YOU ARE
- KNOW WHAT YOU ARE PLANNING
- KNOW WHO YOU ARE PLANNING FOR
- KNOW WHY YOU ARE DOING WHAT YOU ARE DOING
- KNOW HOW TO GO ABOUT DOING IT
- IF YOU DO NOT KNOW….ASK
THANK YOU

FROM MALAYSIA