Well Ageing and Death
- ICT support for the end of life -

Matthias RAUTERBERG
2015
Brahma, Vishnu, and Shiva

The creator

The preserver

The destroyer
The Oedipus trilogy

SOPHOCLES
[429 BC]

love  power  death

[pictures taken from http://en.wikipedia.org/wiki/Oedipus_the_King]
The three psycho-analytical schools

love

Sigmund FREUD

power

Alfred ADLER

death

Carl G JUNG
Three phases in life…

- **Functionality in %**
  - **Childhood**
  - **Adulthood**
  - **Retirement**

- **Transition-1**
- **Transition-2**

- **Age**
  - **Love**
  - **Power**
  - **Death**

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Well Ageing and Death
Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

The correct bibliographic citation for the definition is: Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19-22 June, 1946; signed on 22 July 1946 by the representatives of 61 States (Official Records of the World Health Organization, no. 2, p. 100) and entered into force on 7 April 1948.

I swear to fulfill, to the best of my ability and judgment, this covenant:

I will respect the hard-won scientific gains of those physicians in whose steps I walk, and gladly share such knowledge as is mine with those who are to follow.

I will apply, for the benefit of the sick, all measures which are required, avoiding those twin traps of overtreatment and therapeutic nihilism.

I will remember that there is art to medicine as well as science, and that warmth, sympathy, and understanding may outweigh the surgeon’s knife or the chemist’s drug.

I will not be ashamed to say "I know not," nor will I fail to call in my colleagues when the skills of another are needed for a patient's recovery.

I will respect the privacy of my patients, for their problems are not disclosed to me that the world may know. Most especially must I tread with care in matters of life and death. If it is given me to save a life, all thanks. But it may also be within my power to take a life; this awesome responsibility must be faced with great humbleness and awareness of my own frailty. Above all, I must not play at God.

I will remember that I do not treat a fever chart, a cancerous growth, but a sick human being, whose illness may affect the person's family and economic stability. My responsibility includes these related problems, if I am to care adequately for the sick.

I will prevent disease whenever I can, for prevention is preferable to cure.

I will remember that I remain a member of society, with special obligations to all my fellow human beings, those sound of mind and body as well as the infirm.

If I do not violate this oath, may I enjoy life and art, respected while I live and remembered with affection thereafter. May I always act so as to preserve the finest traditions of my calling and may I long experience the joy of healing those who seek my help.

[Written in 1964 by Louis Lasagna, Dean of the School of Medicine, Tufts University]
### Place of death 2011

<table>
<thead>
<tr>
<th>Place of Death</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital</td>
<td>39104</td>
<td>28.8</td>
</tr>
<tr>
<td>Psychiatric hospital</td>
<td>429</td>
<td>0.3</td>
</tr>
<tr>
<td>Nursing home</td>
<td>33411</td>
<td>24.6</td>
</tr>
<tr>
<td>Care facility</td>
<td>13097</td>
<td>9.6</td>
</tr>
<tr>
<td>Other institution</td>
<td>5447</td>
<td>4.0</td>
</tr>
<tr>
<td>At home</td>
<td>39234</td>
<td>28.9</td>
</tr>
<tr>
<td>Elsewhere</td>
<td>2246</td>
<td>1.7</td>
</tr>
<tr>
<td>Unknown</td>
<td>2773</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>135741</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Life that doesn't end with death

In **Tana Toraja**, weddings and births aren’t the social gatherings that knit society together. In this part of **Indonesia**, big, raucous funerals form the center of social life. A look at this culture the bodies of dead relatives are cared for even years after they have passed. While it sounds strange to Western sensibilities, this could actually be a truer reflection of the fact that relationships with loved ones don’t simply end when breathing does.

[from April 2013 at TEDMED 2013
http://www.ted.com/talks/kelli_swazey_life_that_doesn_t_end_with_death]
Well Ageing and Death

Palliative Care

Holistic Approach

Care of the body, mind & spirit: Focusing on, social, emotional, cultural, spiritual & intellectual or knowledge aspects of care supported by an interdisciplinary team and training.

Quality of Life

Patient-centred care incorporating respect for patients’ values and preferences, provides information in clear and understandable terms, promotes autonomy in decision-making and attends to the need for physical comfort and emotional support.

Patients & families

Patients referred to DPH have an expectation of dying, therefore care of the families is included in the care i.e. Care of the infected and affected by the team while the patient is alive and into the bereavement period.

Identification, impeccable assessment & treatment of symptoms

Identification: knowledge & recognition of symptoms; Impeccable Assessment: knowledge based professional evaluation; Treatment: Medication management, specialist referral, holistic intervention by Palliative Trained Team.

Life-threatening & life-limiting illness

Life-threatening illness is an illness which could cause a patient to die (cancer, AIDS, old age, MND, terminal diabetes or heart disease) and life-limiting includes conditions which may compromise quality of life (spastic children, metabolic disorders, severe CVA).
Luxembourg may be a small country but its potential for research and innovation is high. Boosting ICT as an enabling technology in order to tackle the challenge of an ageing population, to enhance independent living and improve the quality of life of elderly people is a key priority for the Luxembourg ICT R&D community.

Why Luxembourg?

Luxembourg offers a wide range of competitive advantages, making the country a particularly attractive location for the development, testing and the market launch of innovative ICT solutions for an ageing population.

- With its strategic geographical location and its multicultural society, Luxembourg is an ideal location to develop, test and launch innovative solutions taking into account the diversity of the European population.
- Luxembourg offers powerful, hightech ICT infrastructures and fibre networks (e.g. data centres, public wi-fi hotspots) and holds a leading position in Europe in terms of internet adoption.
- The Luxembourg players, including technology-friendly healthcare organisations, research actors, i.e. the University of Luxembourg as well as various public research centres, technology providers and integrators are ready to respond to the needs and requirements of elderly people.
- Luxembourg presents a dynamic research community as well as many young and innovative enterprises who often collaborate in Public-Private-Partnerships. Following a pro-active and interdisciplinary economic development policy, Luxembourg supports innovation and research with a strong focus on both ICT and healthcare technologies.
- Luxembourg offers a rewarding business environment, including Governmental support for collaborative development projects and funding for innovative products and services.
Realization

Well Ageing and Death
ICT 1: Web based tool - How to Make Preparations for a Funeral
[http://www.wikihow.com/Make-Preparations-for-a-Funeral]

1-Choose a funeral home.

2-Call your pastor, rabbi, spiritual leader to help you set up at your place of worship for a service.

3-Ask friends and loved ones to bring pictures of the deceased to make photo collages.

4-Also have a photo to give to the funeral director for reference.

5-Consider asking for donations instead of or as well as flowers.

6-Leave a guest book at the wake and funeral so that people can leave their addresses if they wish.

& 2 more steps ...
Well Ageing and Death

[pictures taken from
https://khooet.wordpress.com/confucius-computer/
http://mixedrealitylab.org/projects/all-projects/confucius-computer/]

Confucius Computer
Transforming the Future through Ancient Philosophy

Body state:
Your body state is hot:

Mooncake skin:
Suzhou style (warm)

Fillings:
Filling 1: Deer (hot)
Filling 2: Black fungus (cool)
Filling 3: Ginseng (warm)

Yin-yang value of mooncake:
Sylvia says: (7:20:08 PM)
How do you come out with Confucius thinking?

Confucius 孔子 says: (7:20:10 PM)
No wind, no waves; No Confucius, no thought.

Sylvia says: (7:20:29 PM)
What is more important, money, health, love or family?

Confucius 孔子 says: (7:20:32 PM)
Not thinking of Po, not thinking of virtuous.

Sylvia says: (7:20:50 PM)
I really do not understand what is the purpose of love in our life.

Confucius 孔子 says: (7:20:53 PM)
Not delight to love, not love for virtuous aim.

Sylvia says: (7:21:10 PM)
Can you explain to me the purpose of life?

Confucius 孔子 says: (7:21:13 PM)
Life and aim, the answer is in your heart.

Sylvia says: (7:21:33 PM)
Is there another life after death and where do we go?

Confucius 孔子 says: (7:21:37 PM)
Is it not benevolent to determine with a constant death and life?

Sylvia says: (7:21:54 PM)
Why is there suffering in this world?

Confucius 孔子 says: (7:21:57 PM)
World fear wall, friend office, man master.

Sylvia says: (7:22:13 PM)
How do we get peace in this world?

Confucius 孔子 says: (7:22:17 PM)
A complaisant ease is a virtuous dwelling.
Thank you very much!
Aubrey de Grey: A roadmap to end aging.
http://www.ted.com/talks/aubrey_de_grey_says_we_can_avoid_aging

Jane Fonda: Life's third act.
http://www.ted.com/talks/jane_fonda_life_s_third_act

Judy MacDonald Johnston: Prepare for a good end of life.
http://www.ted.com/talks/judy_macdonald_johnston_prepare_for_a_good_end_of_life

Peter Saul: Let's talk about dying.
http://www.ted.com/talks/peter_saul_let_s_talk_about_dying

Alison Killing: There's a better way to die, and architecture can help.
http://www.ted.com/talks/alison_killing_there_s_a_better_way_to_die_and_architecture_can_help

Kelli Swazey: Life that doesn't end with death.
http://www.ted.com/talks/kelli_swazey_life_that_doesn_t_end_with_death