



Contributions of Allied Health Professionals in Primary Healthcare

-Health Promotion, Disease Prevention, Chronic Disease
Management and Community Rehabilitation

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Today's Content

1. Primary Healthcare and Allied Health (AH)
2. Contributions of Allied Health Professionals
 - a. Physiotherapy
 - b. Occupational therapy
 - c. Dietitian
 - d. Social Worker
 - e. Other Allied Health Professionals
3. Key to success

Primary Healthcare and Allied Health

Historical View

- Most Allied Health professionals were born after World War I or II
- Their roots were on various aspects of health related issues observed in the community:
 - Physical strength and movement → Physiotherapy
 - Occupations → Occupational Therapy
 - Food and Nutrition → Dietitian & Nutritionist

Primary Healthcare and Allied Health

Historical View:

- Occupations (Daily living activities) had healing effect
- Knowledge and skills evolved to become a new profession- Occupational Therapy

Table 2-1 PERSONAL CONTEXTS OF FOUNDERS AND NEAR FOUNDERS				
FOUNDER	BIRTHPLACE	RESIDENCE IN 1917	PROFESSION	INTERESTS BROUGHT TO THE TABLE
George Edward Barton (March 7, 1871–April 27, 1923)	MA (East)	NY (East)	Architect, author	Environment (architecture, physical context) work simplification, activity analysis (via friendship with Frank Gilbreth)
William Rush Dunton Jr. (July 24, 1868–December 23, 1966)	PA (East)	MD (East)	Physician/psychiatrist, author, journal editor, quilter	Moral treatment
Eleanor Clarke Slagle (October 13, 1870–September 18, 1942)	NY (East)	IL (Midwest)	Social worker, arts and crafts teacher	Habit training
Thomas Bessell Kidner (1866–June 14, 1932)	England	Canada	Architect, educator, vocational secretary	Vocational rehabilitation, manual training
Susan Cox Johnson (December 29, 1875–January 18, 1932)	TX (Southwest)	NY (East)	Arts and crafts teacher	Arts and crafts knowledge
Isabel Gladwin Newton Barton (July 21, 1891–November 4, 1975)	NY (East)	NY (East)	Secretary, author	Assisted George Barton with starting NSPOT
Susan E. Tracy (January 22, 1864–September 12, 1928)	MA (East)	MA (East)	Nurse	Moral treatment, arts and crafts knowledge
Herbert James Hall (March 12, 1870–February 19, 1923)	NH (East)	MA (East)	Physician	Work cure

Primary Healthcare and Allied Health

Global View

- The World Confederation for Physical Therapy had a policy statement on Primary Health Care since 2003
- Support primary health care is important to address health care needs
- Encourage development of PT programmes for primary health care
- Training of PT prepares them to work in primary care settings

Policy statement



Primary health care

The World Confederation for Physical Therapy advocates for the provision of primary health care that is sensitive to local cultural, socio-economic and political circumstances and provides equitable access to effective services. Individuals, their carers and communities must have access to primary health care services if health services are to be responsive to their needs.

WCPT recognises that principles of best practice exist that should be evident in any model of health services delivery, not just primary care. WCPT supports an approach that:

- is flexible and innovative, using models of service delivery that have been developed in response to an assessment of local needs, mindful of the ethical use of resources
- is developed taking account of local cultural and social norms
- is based on collaboration within and across professions, agencies and sectors (eg health, education, social welfare)
- involves local communities and individuals as partners in health service delivery, planning, operating and monitoring
- ensures that health services are equally accessible to all
- supports communities and individuals to be self-reliant
- utilises relevant evidence to ensure best practice
- has mechanisms in place to monitor and evaluate services and procedures for review and modification
- incorporates health promotion, disease prevention and intervention/treatment/rehabilitation

WCPT encourages its member organisations and individual physical therapists to raise awareness of the important role and contribution of physical therapists in primary health care as:

- direct and indirect providers of services
- collaborative members of multi-professional teams
- consultants to governments, non-governmental organisations (NGOs) and disabled people's organisations (DPOs)
- developers, implementers and managers of services
- educators of other health personnel and support staff

Physical therapist entry level education and continuing professional development opportunities prepare and equip physical therapists to practise in a variety of settings for both urban and rural communities. These educational opportunities ensure that physical therapists' roles as facilitators and educators of other health personnel are recognised.¹

WCPT encourages its member organisations and physical therapists to work with governments, NGOs and DPOs to facilitate the development of primary health care and promote the contribution of physical therapists.

Primary Healthcare and Allied Health

Global View

- The World Federation of Occupational Therapists also advocates development of OT service in Primary Health Care
- Service development varies in different countries
- Focus on:
 - impact of habits and routines on the management of chronic conditions and the development of healthy lifestyles
 - address the needs of individuals with chronic conditions with regard to limitations in daily activities

Primary Healthcare and Allied Health

Global View

➤ OT services in primary care in USA

- Self-management of chronic conditions and prevention of secondary complications such as diabetes,
- Health promotion Lifestyle medication to prevent chronic conditions such as obstructive pulmonary disease,
- Self-management of psychiatric conditions and promotion of mental health,
- Management of musculoskeletal conditions including pain management,
- Safety and falls prevention within the home and community environments,
- Promoting and ensuring access to community resources for social participation and community integration,
- Palliative and end-of-life care to allow for quality of life,
- Driving and community mobility resources for older adults,
- Redesign of physical environments to support participation in valued activities, and
- Family and caregiver assistance and support

Primary Healthcare and Allied Health

Global View

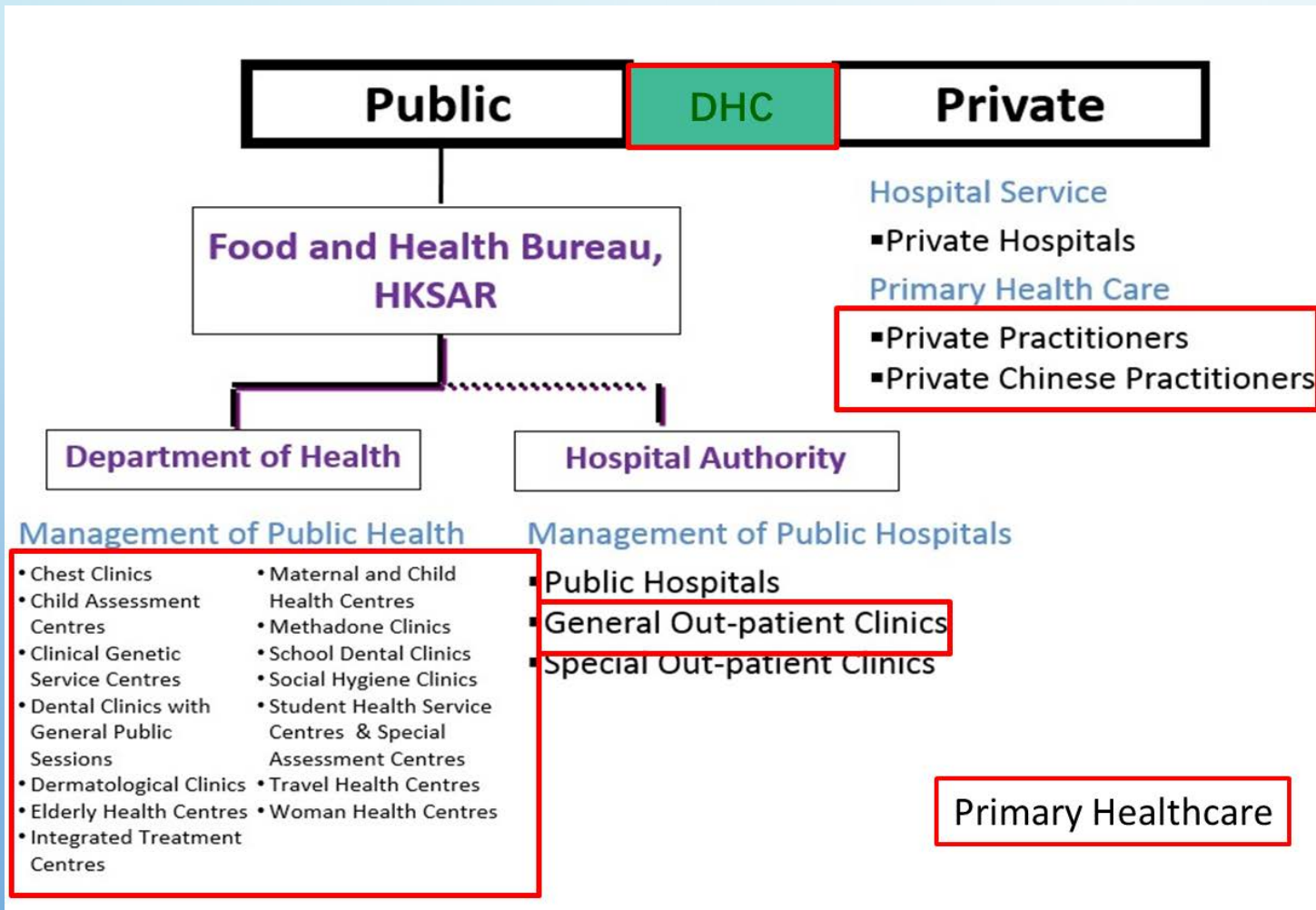
➤ Situation varies among different European Union member countries

Country	Total No. of OT 2018	No. of OT working in primary health	Funding Source		
			Insurance	Government	Self
Belgium (79)	10802	400	X	X	X
Demark (115)	9250	400			
France (22)	12406	800	X		X
Ireland (124)	2430	500			
The Netherlands (68)	4400	740	X		X
Norway (119)	4600	1400		X	
Switzerland (100)	3100	1200	X		X
United Kingdom (21)	38919	700	X		

(Population Ranking for Countries/ Special Admin. Region) Hong Kong (104)

Bolt M, Ikking T, Baaijen R, Saenger S. , 2018

Primary Healthcare and Allied Health



Local View:

➤ AH service are available

- Child Assessment Centers 1970s
- Elderly Health Centers 1990s
- General Out-patient Clinics 2010s
- District Health Centers 2019.....

Primary Healthcare and Allied Health

➤ AH manpower

	No. of registered AH (July 2019)	Estimated No. of AH private practitioners
OT	2258	258 (10%)
PT	3331	1330 (40%)
RSW	24025	NA



Contributions Of Allied Health Professionals

Physiotherapy

Physiotherapy is defined by the World Confederation for Physical Therapy (WCPT) as “providing services to individuals and populations to develop, maintain and restore maximum movement and functional ability throughout the lifespan”.

In order to achieve therapeutic outcome, physiotherapy adopts the beneficial effect of human physiological response to physical stimulation. For instance, the physical modalities which will be commonly used including electricity, water, cold, heat, light, magnetism, exercise, manual technique and ... etc.

With the skillful practice of scientific evidence and the art of empathy, physiotherapy will apply the principle of physical, psychological, pathological and anatomical sciences, to achieve an ultimate goal of safe and effective clinical outcome on the patients.

In summary, physiotherapy will enhance patient's physical activity and functional movement recovery, improve the muscle strength, prevent disease and improve quality of life.

Physiotherapy

➤ Target Clients:

- Musculoskeletal Pain- Back, Neck, Knee, Osteoarthritis
- Osteoporosis
- Falls
- Chronic Obstructive Pulmonary Disease (COPD)
- Obesity
- Occupational Health and Safety
- Mental Health

Physiotherapy

➤ Musculoskeletal Pain- Back, Neck, Knee, Osteoarthritis

- Education, including self-management
- Aerobic exercise to increase general fitness
- Hydrotherapy/ Strengthening exercise particularly of the quadriceps muscles
- Provision of walking aids and orthotics



Physiotherapy

➤ Knee Pain

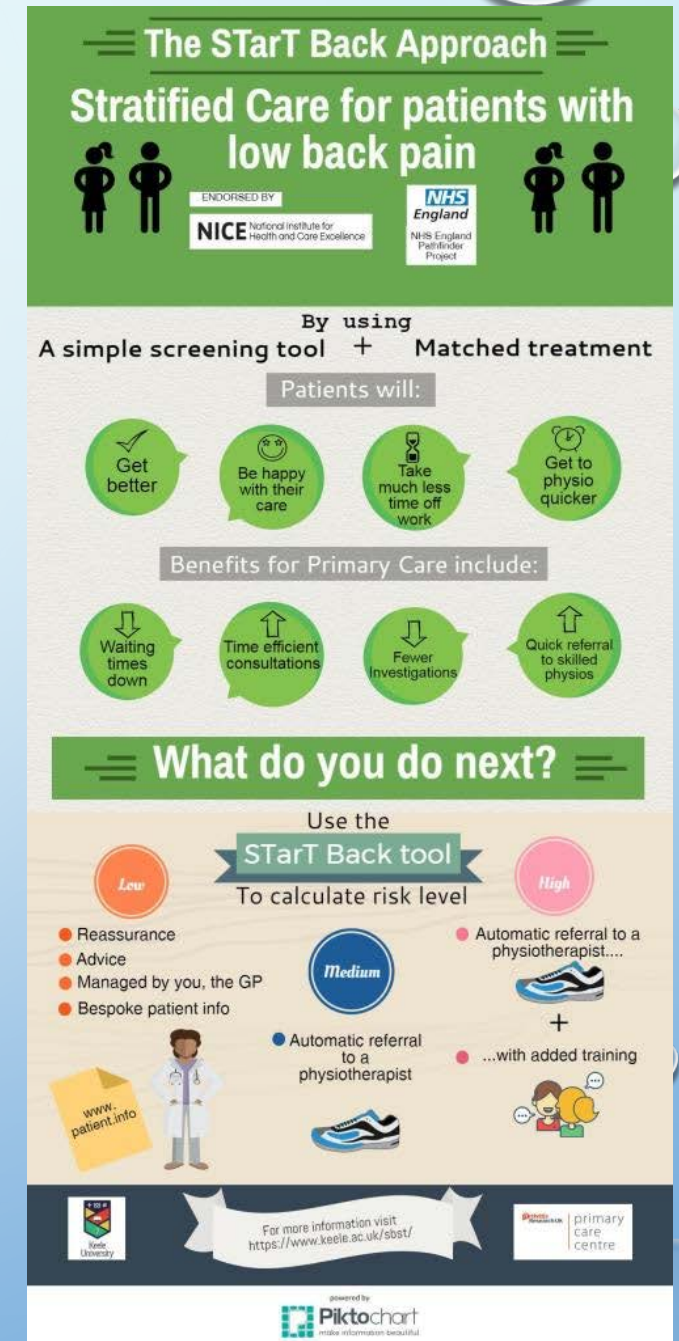
- Escape Pain in UK
- RCT done in UK
 - safe and produces better clinical outcomes
 - lower healthcare utilization and cost savings
 - more cost-effective than usual care
 - Positive feedback from participants
- Class size is usually about 8–10 people , 2 classes per week for 6 weeks
- 20 minutes group discussion around a specific topic relating to joint pain + 40 minutes of a simple circuit-type exercise programme
- 40 minutes of a simple circuit-type exercise programme
- Some local hospitals have started the programme in Hong Kong



Physiotherapy

➤ Back Pain

- The STarT Back Approach in UK
- RCT done in UK
 - Stratified care for back pain in primary care is more cost effective
 - Standardized tools plus clinical assessment by PT help to stratified patients into low, medium and high risk
 - They are provided with different level of care
- Some local hospitals have started the programme in Hong Kong



The Keele STarT Back Screening Tool

Patient name: _____ Date: _____

Thinking about the last 2 weeks tick your response to the following questions:

	Disagree 0	Agree 1
1 My back pain has spread down my leg(s) at some time in the last 2 weeks	<input type="checkbox"/>	<input type="checkbox"/>
2 I have had pain in the shoulder or neck at some time in the last 2 weeks	<input type="checkbox"/>	<input type="checkbox"/>
3 I have only walked short distances because of my back pain	<input type="checkbox"/>	<input type="checkbox"/>
4 In the last 2 weeks, I have dressed more slowly than usual because of back pain	<input type="checkbox"/>	<input type="checkbox"/>
5 It's not really safe for a person with a condition like mine to be physically active	<input type="checkbox"/>	<input type="checkbox"/>
6 Worrying thoughts have been going through my mind a lot of the time	<input type="checkbox"/>	<input type="checkbox"/>
7 I feel that my back pain is terrible and it's never going to get any better	<input type="checkbox"/>	<input type="checkbox"/>
8 In general I have not enjoyed all the things I used to enjoy	<input type="checkbox"/>	<input type="checkbox"/>

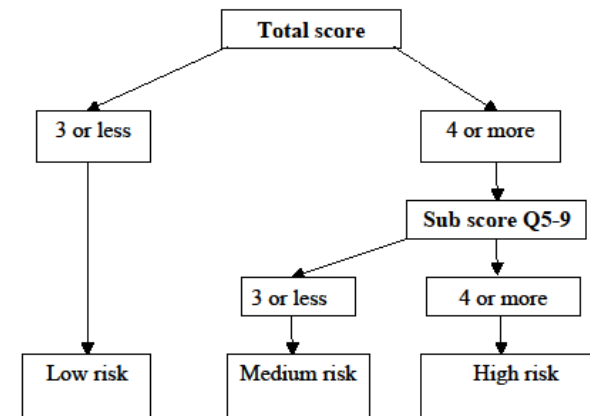
9. Overall, how bothersome has your back pain been in the last 2 weeks?

Not at all	Slightly	Moderately	Very much	Extremely
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0	0	0	1	1

Total score (all 9): _____ Sub Score (Q5-9): _____

© Keele University 01/08/07
Funded by Arthritis Research UK

The STarT Back Tool Scoring System



© Keele University 01/08/07
Funded by Arthritis Research UK

Physiotherapy

➤ Osteoporosis

- Encouraging physical activity in all patients to prevent osteoporosis
- Designing and implementing group exercise programs to help in building up bone density for those who have osteoporosis



Physiotherapy

➤ Fall Prevention

- conduct “Fall Risk Assessment” to identify the high risk individuals
- Education/ advices / exercise programs /provision of walking aids to prevent the occurrence of real falls
- Otago Exercise Programme originated from Professor John Campbell of Otago Medical School in New Zealand. Now adopted in many countries:
 - Numerous RCTs with positive results in fall reduction
 - Structured exercise on Strengthening, Balance Retraining & Walking plan
 - Well defined grading in 4 levels



Physiotherapy

➤ Community Rehabilitation

- Start with 3 selected conditions in DHC: Stroke, AMI, Hip Fractures
- Focus on:
 - Physical Training
 - ambulatory training and advice
 - All other related physiotherapy modalities
- Can extend to other conditions such as COPD, cancer survivors, Parkinsonism

Occupational Therapy

A client-centered health profession concerned with promoting health and well being through Occupation. The primary goal of Occupational Therapy is to enable people to participate in the activities of everyday life. Occupational therapists achieve this outcome by working with people and communities to enhance their ability to engage in the occupations they want to, need to, or are expected to do, or by modifying the occupations or the environment to better support their occupational engagement.

Occupational Therapy

Occupations:

Groups of activities and tasks of everyday life, named, organized, and given value and meaning by individuals and a culture: occupation is everything people do to occupy themselves, including looking after themselves (self care), enjoying life (leisure), and contributing to the social and economic fabric of their communities (productivity); they are the domain of concern and therapeutic medium of occupational therapy.

Townsend & Polatajko, 2007

Nature of Occupation:

- Occupation is active (mental/cognitive and physical)
- Occupation is purposeful (to enable the maintenance and development of the body, the mind, cultural and spiritual beliefs)
- Occupation is meaningful (the value/significance of occupation to that person; is subjective)
- Occupation is contextualized (in the physical, social or economic environment)
- Occupation impacts on health (some occupations are positive, some occupations are negative)

Molineux, 2010

Occupational Therapy

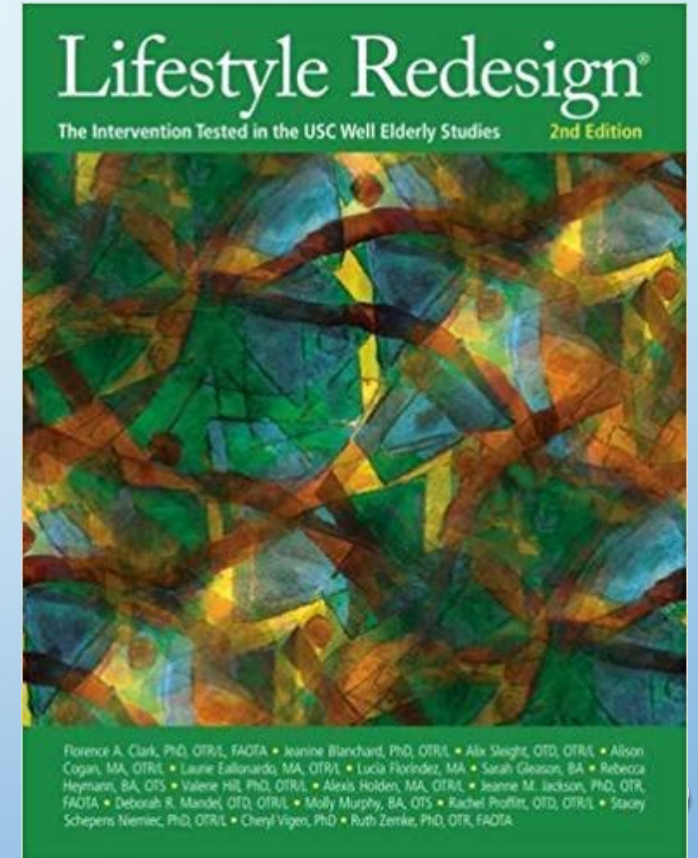
➤ Target Clients:

- problems in activity of daily living due to pain, deconditioning and illness
- occupational dysfunction resulting in health and wellbeing issues
- Fall
- Cognitive decline
- mental health
- Occupational Safety and health

Occupational Therapy

➤ Lifestyle Redesign®

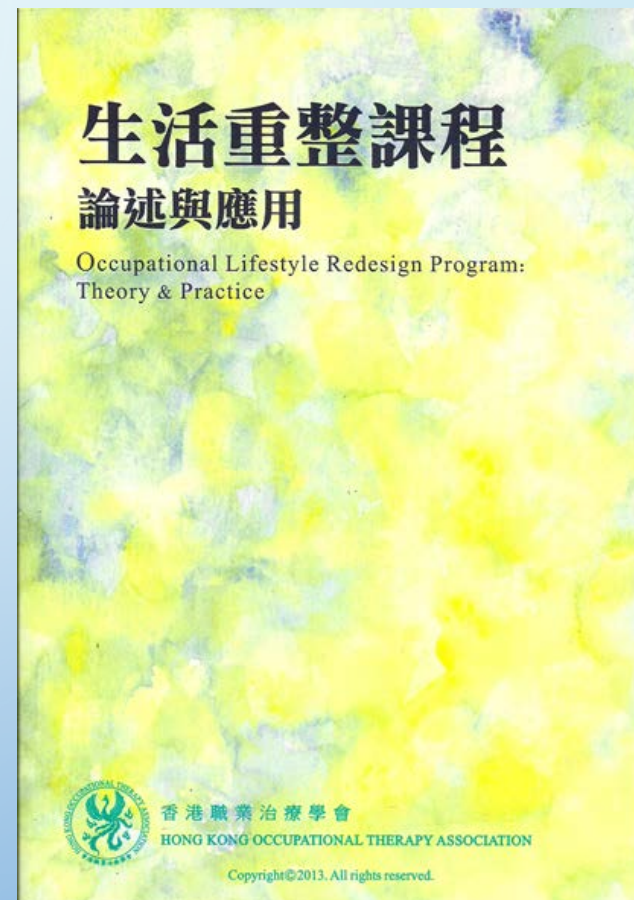
- RCT of well elderly in 1997 & 2011 by USC of USA
 - Occupational Therapist led
 - Focus on engagement of daily occupations and building habits (Lifestyle)
 - Demonstrated both efficacy and effectiveness in reducing health decline and promote well being
 - Proved to be cost effective
- Standardized Programme of 6-9 months weekly 2 hour group sessions + Outing in the community in every 4 weeks + 10 hour individual sessions
- Many similar follow up studies in USA, UK, EU countries with positive results on active aging



Occupational Therapy

➤ Occupational Lifestyle Redesign Programme

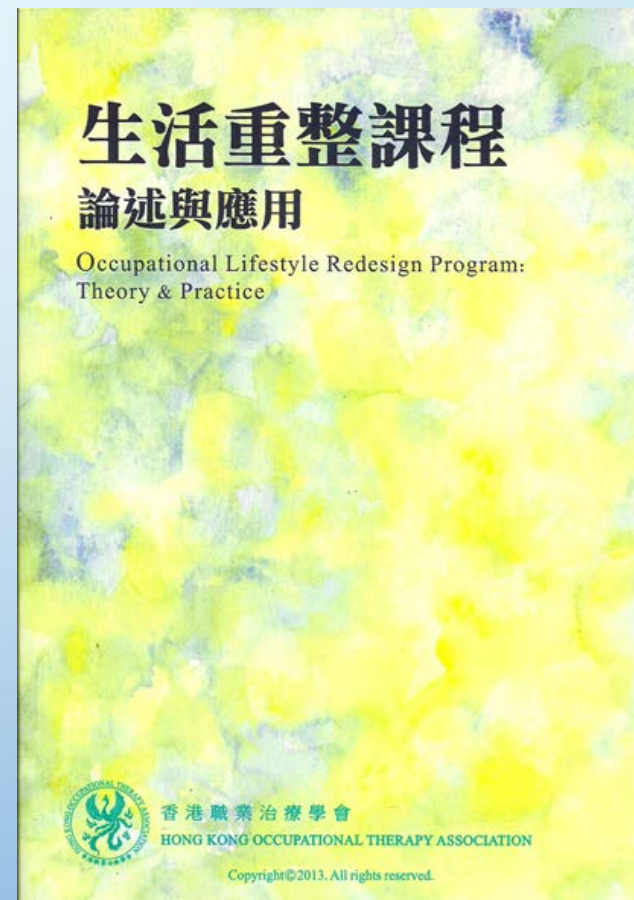
- Inspired by the work in USA
- A group of OTs in the Hospital Authority explored occupation focused programme since 2005
- Organized for “difficult patients” e.g. chronic pain, SARS survivors, stroke patients with residual occupational dysfunction, mental patients etc.
- Expanding applications in other patient groups such as DM, Mild NCD (MCI) with similar positive results
- Positive and long term effect
- positive experience for OTs



Occupational Therapy

➤ Occupational Lifestyle Redesign Programme

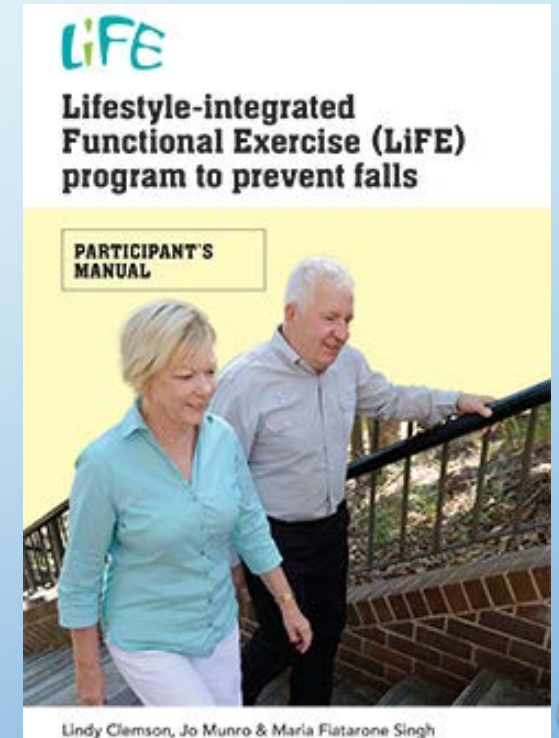
- Can be incorporated in DHC for promoting health and wellness
- target at change of lifestyle (Attitude, Choice, Habits)
- 6 months' programme usually with theme on "Happiness"
 - Usually composed of 10 group sessions with 1-2 outings for 3 months + individual home programme for 3 months + 1-2 booster session at programme end.
 - 4-5 individual sessions arranged based on the need
 - 1-2 home visit



Occupational Therapy

➤ Lifestyle integrated Functional Exercise (LiFE) programme to prevent falls

- Based on RCT on older adults aged 70 or above by University of Sidney in Australia in 2012
- Participants in the LiFE exercise group (Intervention Group 1) demonstrated a significant 31% reduction in fall rate compared with the control group practicing structured exercise programme
- 5 training sessions + 2 booster visits + Telephone FU
- 14 exercise for improving Balance and Strength embedded in daily activities
- Individualized and tailored to the person's living environment
- Repeated RCT done with similar results



Occupational Therapy

➤ Lifestyle integrated Functional Exercise (LiFE) programme to prevent falls

- Professor Lindy Clemson came to Hong Kong and trained a group of OTs
- With permission, HKOTA translated the programme into Chinese with culturally relevant illustrations
- The programme consist of 7 Balance Training and 7 Strength Training activities
- All activities are included in the participants' daily life
- Preliminary findings is very positive including fall rate and feedback



Occupational Therapy

➤ Community Rehabilitation

- Patients with residual disability after illness
- Start with 3 selected conditions in DHC: Stroke, AMI, Hip Fractures
- Living well with the illness with optimal participation and contribution:
 - Functional Training
 - Daily living tips
 - Adaptation of the occupation and environment
- Other possible clients: Cancer survivors, COPD, Parkinsonism, Mild NCDs

Dietitian

Dietitians are clinically trained to provide individualized medical nutrition therapy which includes nutritional diagnosis, designing individualized meals plans, providing nutritional counselling and recommending nutritional supplements when appropriate. Dietitians are qualified to provide nutrition services to both the healthy as well as those with chronic illnesses.

Dietitian

➤ Target Clients in DHC:

- DM
- Hypertension
- Obesity
- AMI
- Osteoporosis
- All clients with nutritional issues

Dietitian

➤ Possible service:

- Individual Counselling
- Education Class on food choice and nutrition
- Cooking Class
- Nutritional Diagnosis for health care plan
- Healthy Eating Information to the citizens in Kwai Tsing District

Social Worker

- Roles of Social Worker in DHC is a new development in Hong Kong
- Reference to MSW service in SWD:
 - To provide counseling services for patients and their family members with emotional, family, caring, relationship problems etc. arising from illness, trauma or disabilities;
 - To formulate discharge plan and conduct psychosocial assessment for patients, and make referral for rehabilitation services and community resources for patients and their families;
 - To offer financial/material assistance e.g. waiving of medical charges, application for trust fund, referral for social security benefits, and purchase of medical appliance, etc.;
 - To collaborate with other medical and allied health professionals to identify persons in the community who are in need of treatment or rehabilitation services, and to provide the necessary assistance for them;
 - To provide group counseling services or organize seminars for patients or their families with similar problems.

Social Worker

➤ Target Clients:

All service users and their family with the following indicated needs for:

- individual counseling services
- referral for community service and resources
- financial/material assistance
- psychosocial service

➤ Bridging DHC with Social Service providers in the district

➤ Supporting families at risk in the district with other service providers

➤ The “antenna” of the DHC on the psychosocial needs of the district

Other Allied Health Professionals

➤ Podiatrist

- Foot Care
- Advice on shoe wear
- For DM clients and elderly with foot health issues such as hallux valgus of big toes, overlapping toes etc.

➤ Speech Therapist

- Mainly for clients with speech and swallowing problems e.g. Stroke

Key to Success

Focus on the key Issues



Focus on the key Issues

- IN AND OUT
- SLEEP
- GROWTH (PHYSICAL AND STRENGTH)
- ACTIVITY (COGNITIVE AND PSYCHOSOCIAL)
- SICKNESS

WITH ALL THE DEMANDS IN LIFE, WE SHIFTED OUR FOCUS AND FORGOT ALL THESE KEY ISSUES

Enjoyable Experience

- WOW
- FUN
- FLOW
- MEANING

POSITIVE EXPERIENCE CAN MOTIVATE AND BRING CHANGE

Collaborate as a Team

- NO PROFESSIONAL BOUNDARY, ONLY TAP ON TALENT
- NO SOLO WORK, ALWAYS WORK WITH SOMEONE
- LISTEN MORE, SPEAK LESS
- ACT MORE, JUDGE LESS
- SHARE BOTH SUCCESS AND FAILURE
- INVOLVE CLIENTS, THEIR FAMILY AND THE COMMUNITY

HEALTH IS NOT YOUR CONCERN BUT OUR CONCERN
WE CAN LEARN FROM EACH OTHER
WE CAN MOBILIZE MORE EASILY

Empowering our clients

- TEACH FISHING, NOT SERVE FISH
- SELF MANAGEMENT
- COACHING

THEY CAN TAKE CARE OF THEIR OWN HEALTH WITHOUT YOU
RESOURCE IS LIMITED!

Importance of Data

- DISTRICT POPULATION HEALTH DATA, NOT MERELY DISEASE BUT ALSO FUNCTION AND QUALITY OF LIFE
- EVIDENCE FOR SERVICE PLANNING, MODIFICATION AND OUTCOME

WE CAN EASILY TELL PEOPLE NEEDS OF THE DISTRICT AND WHY DHC

Acknowledgement

1. Professor Shamay Ng, Hong Kong Polytechnic University
2. Mr. Thomas Cheung, HA OTCOC, Specialty Group on GOPC service
3. Professor Marco Pang, Hong Kong Physiotherapy Association

The background is a light blue gradient. In the top-left and bottom-right corners, there are several realistic-looking water droplets of various sizes, some overlapping. The droplets have highlights and shadows, giving them a 3D appearance.

THANK YOU

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