



Caring for Caregivers : Implementation of Telehealth to Strengthen Health Care for Caregiver of Geriatric Patients with Chronic Conditions

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Objectives

- Caring for Caregivers
 - Background
 - Purposes and Methods
 - Results
 - Conclusions
- Project ECHO
- Future Perspective
- Take home message
- Acknowledgements

Disclosure: I do not have any relevant financial relationships with any commercial interests.



Background: How Is It Important?; World Situation

- Many social and health problems are from geriatric population.
- Number of elder people has been largely increased and still ongoing
 - Nowadays, among the 31 million elderlies, 5.1 million need assistance
 - 2/3 of elder in US have has two or more NCDs
 - doubling by the year 2025 in western countries which means 1/3 persons in these countries are elder.
- Elders who are living by themselves appear to show less quality of life than elders who live with others.

Singh AP, et al. Indian J Psychol Med. 2012;34(1):39-43.

Rosenbloom S. Sustainability and automobility among the elderly. 2001;28(4):375-408.

Knickman JR, et al. Health Serv Res. 2002;37(4):849-84.

Chou K-L, et al. Journal of Gerontological Social Work. 2000;33(4):51-66.

Table 2.1 Comparison of assisted living facilities and nursing homes⁵

	Assisted living (AL)	Nursing home (NH)
Number of beds in the U.S.	1 million	1.9 million
Average size	9–65 beds depending on subtype*	120 beds
Physician visits	Typically occur in office; visits required once a year	Typically occur in facility; visits required every 60 days
Predominant model of care	Social	Medical
Involvement of licensed nursing	Variable, often as supervisors rather than direct care providers	24 hours/day
Nursing procedures, physical therapy, IV treatment	Provided by home health personnel or not at all	Provided by facility staff
Help with dressing, bathing, other ADLs	Provided by facility staff	Provided by facility staff
Payment sources	Private pay (including Social Security Disability) 85%; other public funds 2%; Medicaid and other public funds 15%	Private pay 44%; Medicaid 40%; Medicare 13%
Percent of facilities with ≥50% of beds in private rooms	55%–75% depending on subtype*	11%

* “Small” AL (<16 beds), “Traditional” AL (board and care type; 16 or more beds), “New Model” AL (variable pay rates and care need requirements, RN/LPN on duty at all times)?

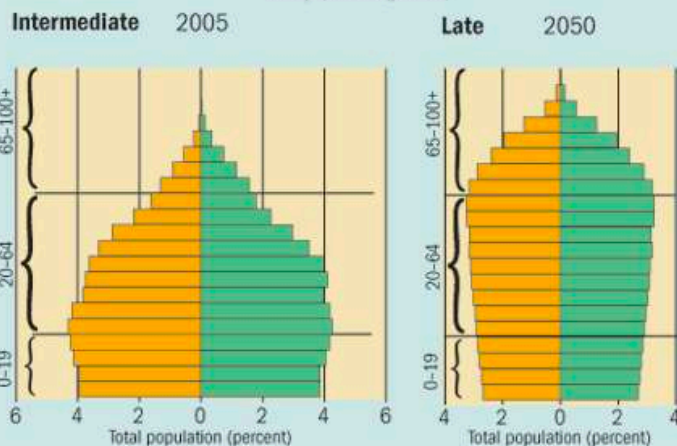
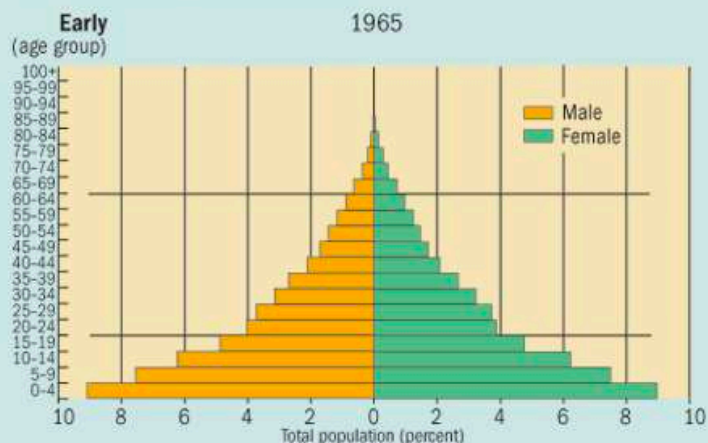


Background : How Is It Important?; Thailand Situation

Chart 1

Thailand's demographic transition

Thailand has just begun the intermediate stage, its chance to seize the demographic dividend.



Source: UN World Population Prospects, 2004 revision.

- Thailand is already an aging society.
- The number of elder will reach 32.1% of population in 2040 which 61.6% are chronic conditions (NCDs).
- So,..
“Caregivers as a key person.”

UN World Population Prospects, 2004 revision.



Background : The Fact of Caregivers

- There are 34.2 million of in formal caregivers in US in 2015, and the number still increasing.
- Affect the caregivers' own
 - physical and mental health,
 - financial challenges
 - social isolation
- **Received little attention**
 - “hidden patients”
 - lack prior caregiving experience and knowledge
- **Caregiver need**
 - Caregivers need care for themselves
 - Improves care for care receivers

Hunt GG, et al. The AARP Public Policy. The National Alliance for Caregiving; 2015.

Vaidyanathan S, et al. Journal of Geriatric Mental Health. 2018;5(1):30.

Bevans M, et al. JAMA. 2012;307(4):398-403.

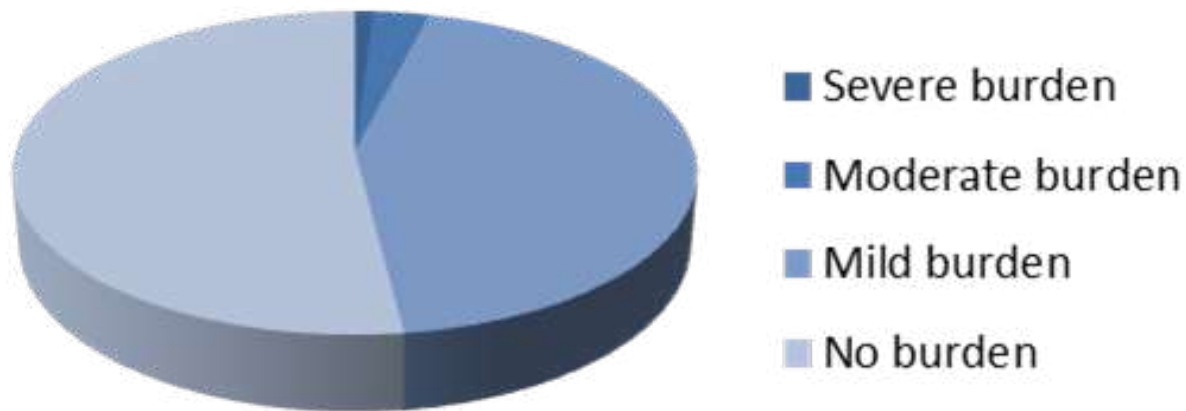
Perlick DA. Bipolar disorders. 2018;20(7):622-33.

Segrin C, et al. Journal of psychosocial oncology. 2019;37(2):213-27.



Background : The Fact of Caregivers

Caregivers burden in Thailand in 2012



SO, how can we help them?



Purposes and Method

- Nowadays, There are large numbers of researches published on caregiver's burden in the field of psychosocial or economic aspects involving new technologies, strategies, and solutions

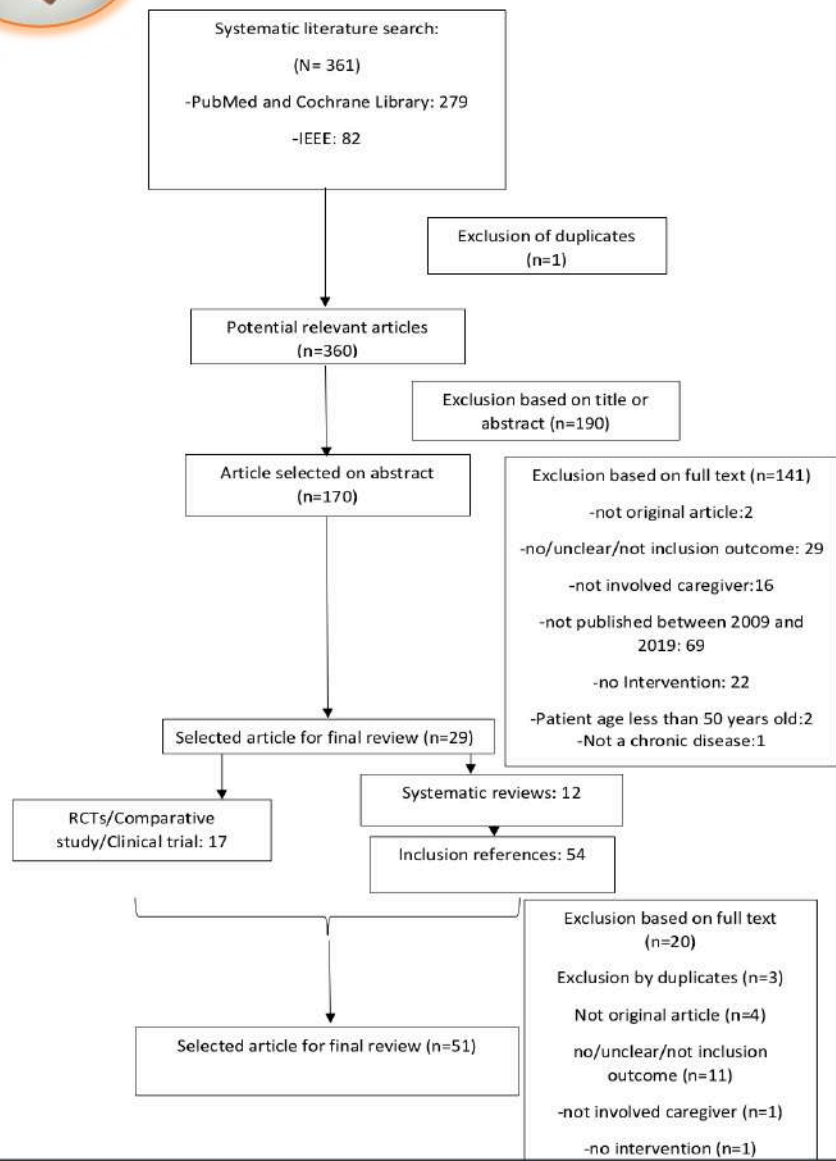
Glasdam S, et al. Clinical Nursing Research. 2010;19(3):233-65.

- THE AIM of this systematic literature review article is to aggregate and evaluate the interventions and find the most suitable way to support the caregivers by focusing on the outcome of their quality of life, knowledge and psychosocial issues.

“What interventions provide optimal **support for caregivers** of the elderly chronically ill?: A systematic review”



Purposes and Method



Inclusion criteria:

- 1).Programs, supports, sessions, or resources provided to and directed towards supporting elderly caregivers to improve their own functioning or assisting them in providing support for the elders (e.g., Home-based care for caregiver, internet-based intervention).
- 2).Focus groups are older than 50 years old with chronic conditions that existed more than 1 year and require ongoing medical attention and/or have limit activity in daily routine.
- 3).Caregivers are older than 18 years old.
- 4).The studies have been published between 2009 and 2019

Exclusion criteria:

- 1).Interventions that disregard the role of caregivers.
- 2).The intervention with unclear result.



Results

UNDER THE PROCESS OF PUBLICATION



Conclusions

- Interventions delivered via remote technology, such as telephone, videophone, telehealth or internet, have the most acceptable potential.
- social-peer support group and direct help from specialist interventions also are useful.
- The information provision should at least include education/information and psychosocial/psychoeducation via the interventions.





Project ECHO : What Is Project ECHO?



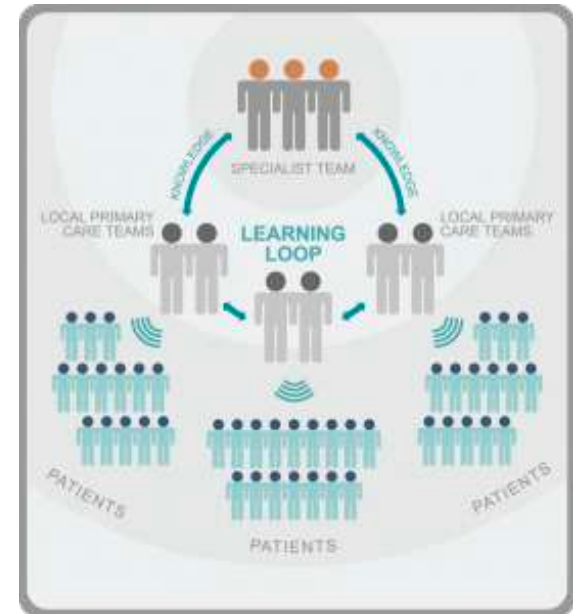
- Project ECHO stood for **Extension for Community Healthcare Outcomes (ECHO)** is the TeleHealth platform developed at The University of New Mexico for over 15 years.
- Starting with the first program for hepatitis C, ECHO has developed over 40 teleECHO programs all over the world covering such wide areas as diabetes, HIV, TB, chronic pain, substance use disorders, behavioral health, etc.
- Under the concept of

“Move knowledge, not people...”



Project ECHO : How Does It Work?

- Using proven adult learning techniques and interactive video technology, the ECHO Model™ connects groups of community providers with specialists at centers of excellence in regular real-time collaborative sessions.
- designed around case-based learning and mentorship
- help local workers gain the expertise required to provide needed services.
- Providers gain skills and confidence; specialists learn new approaches for applying their knowledge across diverse cultural and geographical contexts.





Project ECHO : How Is It Different from Other Platforms?

Features	TeleECHO	Telehealth	Telemedicine
Hub and Spoke Model	✓	✓	
Videoconferencing/Internet	✓	✓	✓
Rural/Underserved Populations	✓	✓	✓
Direct Doctor-Patient Relationship			✓
Patients are De-identified	✓	✓	
Remote Patient Monitoring			✓
Case-Based Learning	✓	✓	
Didactic Presentations	✓	✓	
Case Consultation	✓	✓	✓
CME Credit	✓	✓	
Coverage of Services (CPT Codes)			✓
Develops Subspecialty Expertise Over Time	✓ Health Affairs 2011 Jun;30(6):1176-84		
Care Provided by Participants is as Safe and Effective as That of a Specialist	✓ NEJM 2011 Jun; 364;23		
Demonopolizes Specialty Knowledge	✓ Acad Med. 2014 Jan;89(1):30-2		



Project ECHO : Principles of the ECHO Model

- Amplification - Use **Technology** to leverage scarce resources



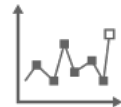
- Share **Best practices** to reduce disparity



- **Case-based learning** to master complexity



- Web-based Database to **Monitor Outcomes**





Project ECHO : ECHO's Impact

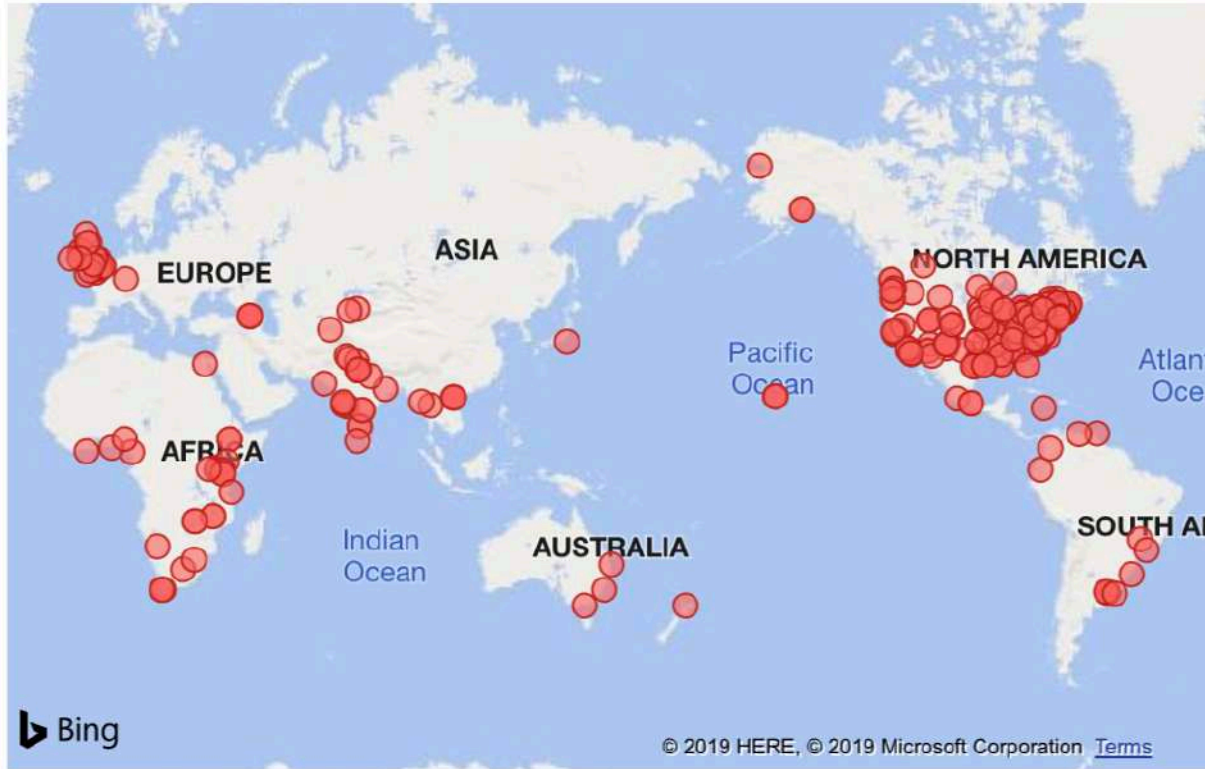
- **Over 70,000 learners and 650 ECHO Programs in 37+ countries**
- The ECHO Institute works in New Mexico, the USA, in India through our partnership with the ECHO India Trust and across the **globe** by forming and supporting partnerships with over 250 organizations.



ECHO Partner Locations

Count: 338

Last Updated: 10/12/2019



ECHO Focus Categories

Count: 74



For more: [ECHO Dashboards](#)

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Future Perspective

- Start **establishing the Thai “Caregiver Care ECHO” program** which plan to launch the first pilot program at Chiang Mai University before distributing to other. This will be the first Caregiver Care ECHO program in the world.
- Including caregivers as well as ECHO staffs.(moderator, specialist, IT team, etc.).
- expanding ECHO hub and other ECHO programs in Thailand.
- Setting up the ECHO training for new participant.
- Promoting the program to be the part of Thai public health policy which will improve Thai patients’ quality of life thoroughly and equally.



Acknowledgement

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- Department of Orthopedic Surgery and Rehabilitation, The University of New Mexico, USA
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- Heading home organization
- Nutcha Wiwat..... ,MD
- Prof. Jonathan Eldredge, PhD

THANK YOU

For Your Kind Attention

