Elders dementia friendly
Local Settled in Pingtung County-
Happiness City

Pingtung County Government
Deputy Magistrate : WU LI-HSUEH
Aging Population Situation in Pingtung County

Elders population was over 138 thousands people in 2019 Apr.

<table>
<thead>
<tr>
<th>108/04</th>
<th></th>
<th>Dependency Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Old age dependency ratio</td>
<td>Young age dependency ratio</td>
</tr>
<tr>
<td>Nationwide</td>
<td>20.48%</td>
<td>17.80%</td>
</tr>
<tr>
<td>Pingtung County</td>
<td>23.11%</td>
<td>14.65%</td>
</tr>
</tbody>
</table>
## Disability People Ratio over 65 years old

<table>
<thead>
<tr>
<th>Ages</th>
<th>Healthy ratio (%)</th>
<th>Mild Disability ratio (%)</th>
<th>Moderate Disability ratio (%)</th>
<th>Severe Disability ratio (%)</th>
<th>Number of Healthy people</th>
<th>Number of Mild Disability</th>
<th>Number of Moderate Disability</th>
<th>Number of Severe Disability</th>
<th>Number of People over 65 years old in Pingtung County</th>
</tr>
</thead>
<tbody>
<tr>
<td>65-69 years old</td>
<td><strong>34.93</strong></td>
<td>0.27</td>
<td>0.51</td>
<td>0.18</td>
<td>47,602</td>
<td>367</td>
<td>694</td>
<td>241</td>
<td>48,904</td>
</tr>
<tr>
<td>70-74 years old</td>
<td><strong>20.07</strong></td>
<td>0.34</td>
<td>0.59</td>
<td>0.17</td>
<td>27,350</td>
<td>462</td>
<td>808</td>
<td>230</td>
<td>28,850</td>
</tr>
<tr>
<td>75-79 years old</td>
<td><strong>17.17</strong></td>
<td>0.55</td>
<td><strong>0.93</strong></td>
<td><strong>0.31</strong></td>
<td>23,400</td>
<td>747</td>
<td>1,271</td>
<td>415</td>
<td>25,833</td>
</tr>
<tr>
<td>80-84 years old</td>
<td>11.44</td>
<td>0.54</td>
<td><strong>1.11</strong></td>
<td><strong>0.36</strong></td>
<td>15,591</td>
<td>740</td>
<td>1,513</td>
<td>492</td>
<td>18,336</td>
</tr>
<tr>
<td>85-89 years old</td>
<td>5.82</td>
<td>0.36</td>
<td><strong>0.93</strong></td>
<td><strong>0.29</strong></td>
<td>7,930</td>
<td>487</td>
<td>1,269</td>
<td>394</td>
<td>10,080</td>
</tr>
<tr>
<td>over 90 years old</td>
<td>2.40</td>
<td>0.11</td>
<td>0.47</td>
<td>0.15</td>
<td>3,270</td>
<td>150</td>
<td>637</td>
<td>210</td>
<td>4,267</td>
</tr>
<tr>
<td>合計</td>
<td><strong>91.83</strong></td>
<td><strong>2.17</strong></td>
<td>4.54</td>
<td>1.46</td>
<td><strong>125,143</strong></td>
<td><strong>2,953</strong></td>
<td><strong>6,192</strong></td>
<td><strong>1,982</strong></td>
<td><strong>136,270</strong></td>
</tr>
</tbody>
</table>

94% Healthy and mild disability elders
## Preventive Care v.s Disability Care Funding Proportion In Pingtung

(NTD dollars)

<table>
<thead>
<tr>
<th>Years</th>
<th>Community Caring Unit</th>
<th>Long-term caring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Central government subsidy</td>
<td>County matching grants</td>
</tr>
<tr>
<td>104</td>
<td>23,311,740</td>
<td>1,004,430</td>
</tr>
<tr>
<td>105</td>
<td>27,400,030</td>
<td>3,868,170</td>
</tr>
<tr>
<td>106</td>
<td>32,543,450</td>
<td>4,891,050</td>
</tr>
<tr>
<td>107</td>
<td>35,901,878</td>
<td>5,418,370</td>
</tr>
</tbody>
</table>

Preventive Care funding ratio: 4.97% vs. Disability Care Funding ratio: 95.03%

Healthy and mild disability elders ratio: 94% vs. Disability elders ratio: 6%
Pingtung County Continuous Care Service

Health Improving
- Community Caring Unit
- Civilized Healthy Center
- Senior Citizens Learning Center
- Senior citizen adult education program
- Senior Citizens’ Bus
- Elderly Card
- Emergency-Care Systems

Health Caring
- Senior care during day time
- Adult health examination
- Cancer examination
- Senior regular exercise
- Senior issue education
- Chronic disease management
- Health Improving
- Activity

Home Caring
- Home service
- Home physiotherapy
- Home nursing
- Auxiliary equipment rental and barrier free environment repair
- Transpiration service
- Meal service
- Home nutrition
- Mobile Pharmacist
- Home medicine
- Home Bath service

Agency Caring
- Nursing home
- Senior welfare agency

Community Caring
- Day care center
- Community physiotherapy
- Intelligence examination unit
- Senescence examination
- Family caring
- Small scale multifunction

LTC 2.0 Dementia Preventing and Postponing Plan

LTC 2.0 Dementia-care plan

Time
Constructive integration, Continuous Care Service
A case of Community Caring System in Pingtung County

- Home Caring
- Seniors Learning Center and Citizens’ Equal rights
- Mobile Pharmacist
- Distance Caring
- Preventive Medicine
- Local Settled Community
- One care unit Per village & One care center per town
- LTC course in Junior School
- Care service training class

Cross-Bureau integration
Medium and Long Term Objective Planning — Local Settled Community

- 463 villages
- 33 towns
- 3 districts
- 1 county

- One care unit per village
- One care center per town
- One community care center per district

- Senior Citizens Learning Center
- Senior citizen adult education program
- LTC sources

Pingtung County Community Caring Research and Development Center

“Local Settled Community” meeting between Cross-Bureau
<table>
<thead>
<tr>
<th>Year</th>
<th>Objective</th>
<th>One care unit Per village</th>
<th>One care center per town</th>
<th>One learning center per town</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>unit</td>
<td>Civilized Healthy Center</td>
<td>Care center for Healthy Seniors (CCHS)</td>
</tr>
<tr>
<td>2014</td>
<td>130</td>
<td>20</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>2015</td>
<td>180</td>
<td>21</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>2016</td>
<td>215</td>
<td>23</td>
<td>9</td>
<td>14</td>
</tr>
<tr>
<td>2017</td>
<td>251</td>
<td>31</td>
<td>8</td>
<td>19</td>
</tr>
<tr>
<td>2018</td>
<td>Until Sep.</td>
<td>279</td>
<td>38</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Objective Number</td>
<td>350</td>
<td>(7CCHS+29CCSD)</td>
<td></td>
</tr>
</tbody>
</table>

**Village** | **care unit** | **Density**
--- | --- | ---
Pingtung County | 463 | 317 | 68.47%
Taiwan | 7848 | 2782 | 35.44%
Constructive integration, Continuous Care Service
A case of Community Caring System in Pingtung County 《Community Prevention Caring》

Community care unit

<table>
<thead>
<tr>
<th>Health Improving Activity</th>
<th>Caring, visiting, referralling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service</td>
<td>Of community care unit</td>
</tr>
<tr>
<td>Nutritious meals</td>
<td>Telephone visiting</td>
</tr>
</tbody>
</table>

More than 30 students need to be enrolled, and the activity time should be at least 4 hours. It should be a structured one-day process: health care services, health promotion courses, and centralized food service.

A comprehensive visit to the elderly living alone, the seniors need high-care cases will be visited at least once a month, and once every six months, to trace the healthy changes of the elders.
Develop Zhu-tian dementia-friendly model community

The conditions which correspond to Elders Dementia environments

There should be schools, night markets, religion sites, parks, markets and shops within the scope of 500 meters, as an appropriate walking range for seniors with dementia.

Purpose - develop a friendly care system in the community. Make the seniors and the caregivers be supported and do activities safely in the community.
Build the culture of aging-friendly city.
Promote seniors’ quality of life.
Aging in place.
Planning area

Zhutian Township

Linluo

Neipu

Wandan

Wanluan

Kanding

Chaozhou

The area surrounding the core

Xishi Village

The core area

Population: 17,170 people

The central area where hakka people dwell in

The only village including Hakka people and Hoklo Taiwanese people

Population: 2,832 people

The biggest village in Zhutian Township

Include Liudui Hakka Cultural Center and abounding cultural sites

Figure. Location of Zhutian Township
By utilising local particular resources

Create a friendly, community-based care system

- Intersection safeguard system
- Rebuilt infrastructure
- The guiding signs for seniors
- Mobile pharmacists services
- Oral health screening
- Community network
- Outdoor courses
- Family Caregivers Support Services

Municipal Senior Cultural And Entertainment Activity Center
- Geriatric Psychiatric Day Care Center
- Long-term care unit(level c)

Zhutian Junior High School
Yuqing Temple
Liudui Martyrs’ Shrine
Hakka Museum
Hakka Museum

Location names:
- Zhutian Junior High School
- Yuqing Temple
- Liudui Martyrs’ Shrine
- Hakka Museum

Facility names:
- Municipal Senior Cultural And Entertainment Activity Center
- Geriatric Psychiatric Day Care Center
- Long-term care unit(level c)
Seniors Wenkang Center

Create a Cross-generation Integrated Exchange Space

Chutien Kitchen(tai fo fong)

Teenager After School Program

Cross-age Co-learning Center(Hakka culture, computer class)

Business Center

Day Care Center(including disability and dementia)

Temporary Care

Exchange Station(selling coffee & dessert. Relieve the pressure of taking care and create warm atmosphere of the space)

Community Service Shuttle Bus
Friendly Walkway Environment Planning

**Temple front intersection**
1. Set pedestrian traffic signal

**Temple front**
1. Pavement improvement-permeable
2. Friendly sidewalk design
3. Repair flower terrace
4. Wheelchair ramp

**West side of school**
1. Friendly sidewalk design
2. Environmental greenification
3. Set street furniture & leisure facilities
4. Cleaning ditch weeds
5. Set barrier-free gutter cover

**South side of school**
1. Friendly sidewalk and pavement design
2. Remove and re-planning of existing leisure facilities and flower terrace
3. Set street furniture & leisure facilities
4. Set barrier-free gutter cover

**East side of school**
1. Friendly sidewalk design
2. Wall improvement and environmental greenification
3. Set street furniture & leisure facilities

**School parking**
1. Friendly sidewalk design
2. Wall improvement and environmental greenification
3. Parking lot improvement
Makes People with Dementia Closer to Their Home

Promote “Community friendly shops & house”, “Friendly institution”, ”Considerate chair”

Active and willing to help seniors and the people with dementia in the community

- Leave Chairs For Seniors

- Found abnormal (helpless, repeated behavior)
- Take care their need (come from where, go to where)
- Contact their family or help them returning their home through network
- Appropriate assistance (provide them seats, tea and accompany them)
### Question Raised by Local, Solved by the Industry:

- The Local Government provide trial field according to governance needs and questions raised by local industries.
- Solicit company for solution and encourage cross-regional integration, local research, and innovated cooperation.
- Achieve goals of satisfactory by the people, upgrades in industries, consolidated information, and creating ecology.
- Subsidy Ratio: 40% Maximum

### Project Details

<table>
<thead>
<tr>
<th>Local Project</th>
<th>Partnered Company</th>
<th>Project Execution Follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pingtung County Elderly-Friendly Smart Community Demonstration Project</td>
<td>OPEN-LiFE, Fashion Intelligence Co. Ltd.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Expenditure</th>
<th>NTD. 85 million 340k</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Government Subsidy</td>
<td>NTD. 32 million 430k</td>
</tr>
<tr>
<td>Self-Raised fund by Partnered Company</td>
<td>NTD. 52 million 910k</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Est. Completion</th>
<th>2 years</th>
</tr>
</thead>
</table>
Elder Security Environment with IoT

Build Intelligent Security Services and Friendly outdoor environment for Elderly and Children Community

IoT Defense Network

① Set safety range
② Color Zone
   Green - Safe
   Yellow - Attention
   Red - Warning
③ Line notification if person leaves the safe Zone
D+Long-term Security Services for Indoor and Outdoor

Health x Safety x Convenience

D+ security services use Bluetooth sensor with security radar
1. Quick installation
2. Remote tracking of each wearer
3. Low power consumption

Zhutian Care Center as the starting point
Combining Technology and Belief, PingAmulet Increases the Wear Rate

Different types of devices can be developed as needed. With Bluetooth positioning technology and low energy consumption, the function of anti-lost and tracing position can be developed.

When the user is out of safe range, the caregiver receives a warning from Line. When the user presses the SOS button, the caregiver also receive a notification from LINE to let the caregiver know the situation immediately.
Industry, Academia, and Government Working Together for Creating Friendly Communities

1. Social Benefit
   Create the care field for senior citizens with IoT

2. Local Collaboration
   Collaboration with local schools, associations, palaces, and 7 stores

3. Industry-Academia Collaboration
   Collaboration with NCKU and E-DA Hospital for data analysis

4. Extended Applications
   Apply to more fields such as hospitals, schools, etc. with PingAmulet experience
PingAmulet make Elderly be More Likely to Participate in Outdoor Activities

Tseng Ruei Ying  
Age 66
Since having PingAmulet, more and more people in Xishi Village are willing to go out of their homes. It took only a day or two to go out for a week, but now almost every time there are people gathering together. I feel like I am back to youth.

Jhang Chiou Jhen  
Age 62
Thanks to Pingtung County Government and Fashion Intelligence for promoting PingAmulet and many activities in Xishi Village, the villagers remind each other to wear cards and go out of the house. It is really a good activity that takes care of health and saves money.

Wun Sieh Mu Lan  
Age 66
My children and grandchildren are growing up. They have their family. I don’t want to become a burden. Therefore when I knew the PingAmulet, I immediately applied for myself and my family. Now, when I go out, I will receive a phone call from my child to remind me to be careful, so I am very touched.

Tseng Mei Jhu  
Age 67
With PingAmulet, the relationship between neighbors is better. We invite each other to go out together. We often chat at Hakka Museum and see who has the most days to be outdoor. I still remember that someone didn’t come for two days, everyone cared about her. I really appreciate that PingAmulet has made Xishi Village more energetic.
Thank You