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# Economic Costs of Informal Care for Individuals with Disabilities and Chronic Diseases in Hong Kong

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## 1. WHY TO ESTIMATE COSTS OF INFORMAL CAREGIVING?

- Most types of disabilities and chronic diseases bring not only challenges on patients in their daily lives but also burdens on their families and caregivers.
- According to existing evidence, providing informal care can lead to **significant burden on caregivers and society**, highlighting the need for adequate support and resources to ensure the well-being caregivers [1].
- To inform effective healthcare policies, resource allocation, and support systems, it is imperative to gain insights into the economic aspects of informal caregiving [2].

## 2. THE IMPORTANCE OF STUDYING HONG KONG

### RESEARCH GAPS:

- Research regarding the economic burden of informal caregiving is limited in Hong Kong. Existing studies primarily concentrate on the caregiving situation, such as the proportion of individuals receiving informal care and the number of hours spent on care per week. However, there is less understanding of the overall economic costs of informal care across the population, particularly from the perspective of caregivers.
- Informal care provided to individuals with disabilities and chronic diseases receives less attention, with most current studies focusing on informal caregiving for the elderly. In 2020, according to the Census and Statistics Department (C&SD), 7.1% of the whole population were disabled and 24.1% had at least one type of chronic diseases. The prevalence of informal caregivers was 44.2% and 42.7% respectively [3].

### SIGNIFICANCE:

Against the shared demographic shifts and healthcare systems across many Asian societies, insights derived from the Hong Kong experience can offer valuable guidance to inform policy and practice in addressing similar issues within the broader Asian context.

## 3. METHODS

To calculate the overall economic burden associated with informal caregiving for persons with disabilities and chronic diseases in Hong Kong, this study used purposive territory-wide surveys and the cost of informal care was calculated using a prevalence-based bottom-up approach, multiplying the number of caregivers by the economic cost incurred per person.

### 3.1 Data Source

In this study, our data is primarily from the 63rd issue of the Special Topics Report series, which focuses on persons with disabilities and chronic diseases, and was conducted through the General Household Survey (GHS) from August 2019 to December 2020.

### 3.2 Study Sample

Participants were identified as qualified informal caregiver when he/she satisfied the following criteria: (1) provide caring tasks to at least one care recipient, (2) provide unpaid caring services, and (3) deliver caring services at a minimum frequency of once per week on a long-term basis. According to such criteria, a representative sample of **146,196** informal caregivers of individuals with disabilities and chronic diseases were included.

### 3.3 Cost Estimation

We employed the human capital approach to value the **opportunity cost** of informal care, by assessing the potential income losses due to delivering informal caregiving incurred in different demographic groups of caregivers. **Three** subgroups are classified based on their employment status and their opportunity costs are calculated as the **caregiving hours multiplied by the value of their hourly time**.

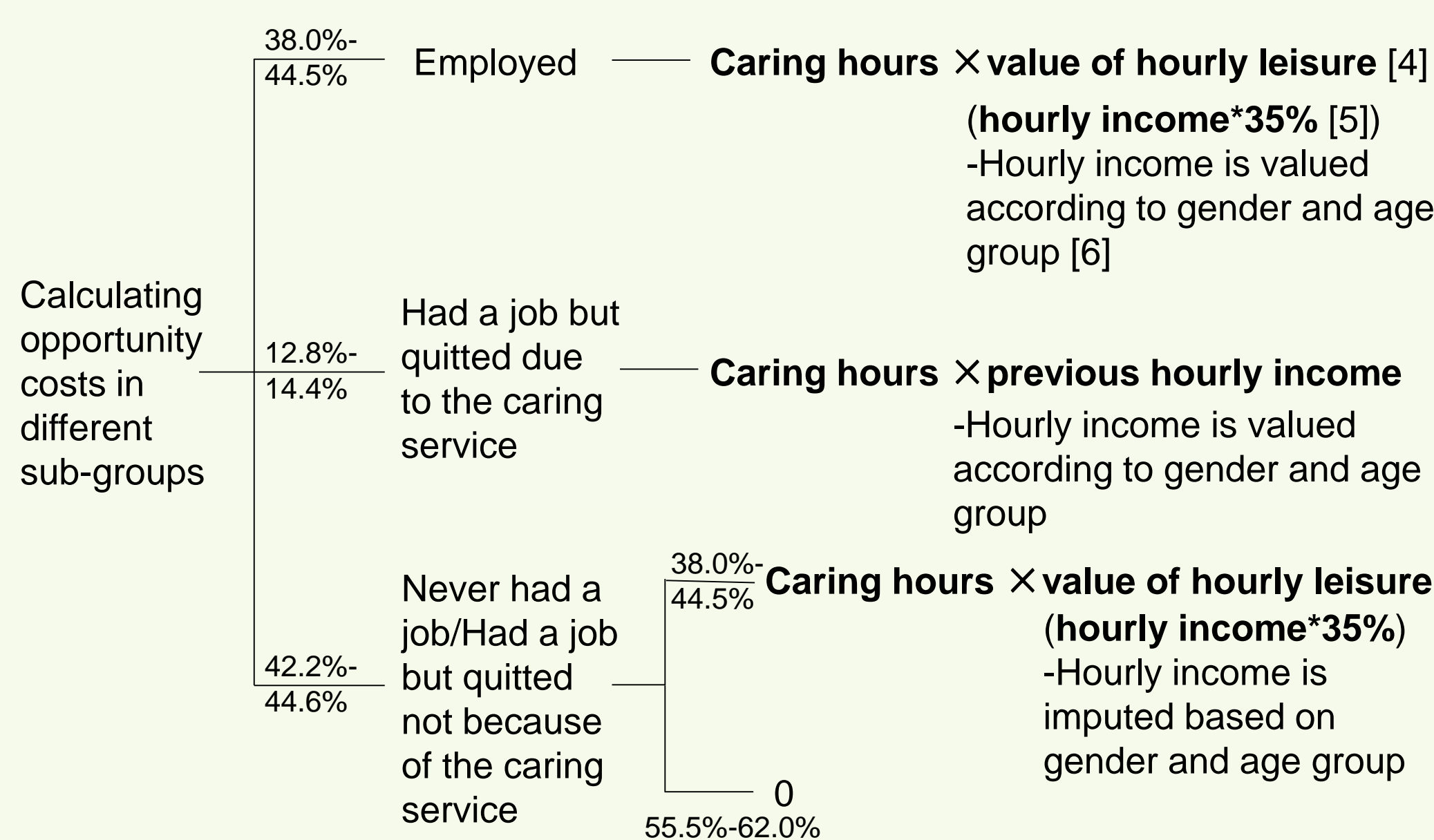


Figure1: Opportunity costs of informal care based on caregivers' employment status

## 4. RESULTS

The total annual cost of informal care for individuals with disabilities and chronic diseases surpassed **US\$988 million**, approximately **4%** of Hong Kong's total health expenditure in 2020. Specifically, the weekly cost of caregivers who are employed (**40.9%** among all the caregivers) was about HK\$40 million, accounting for **26%** of the **total weekly opportunity cost (over HK\$150 million)**.

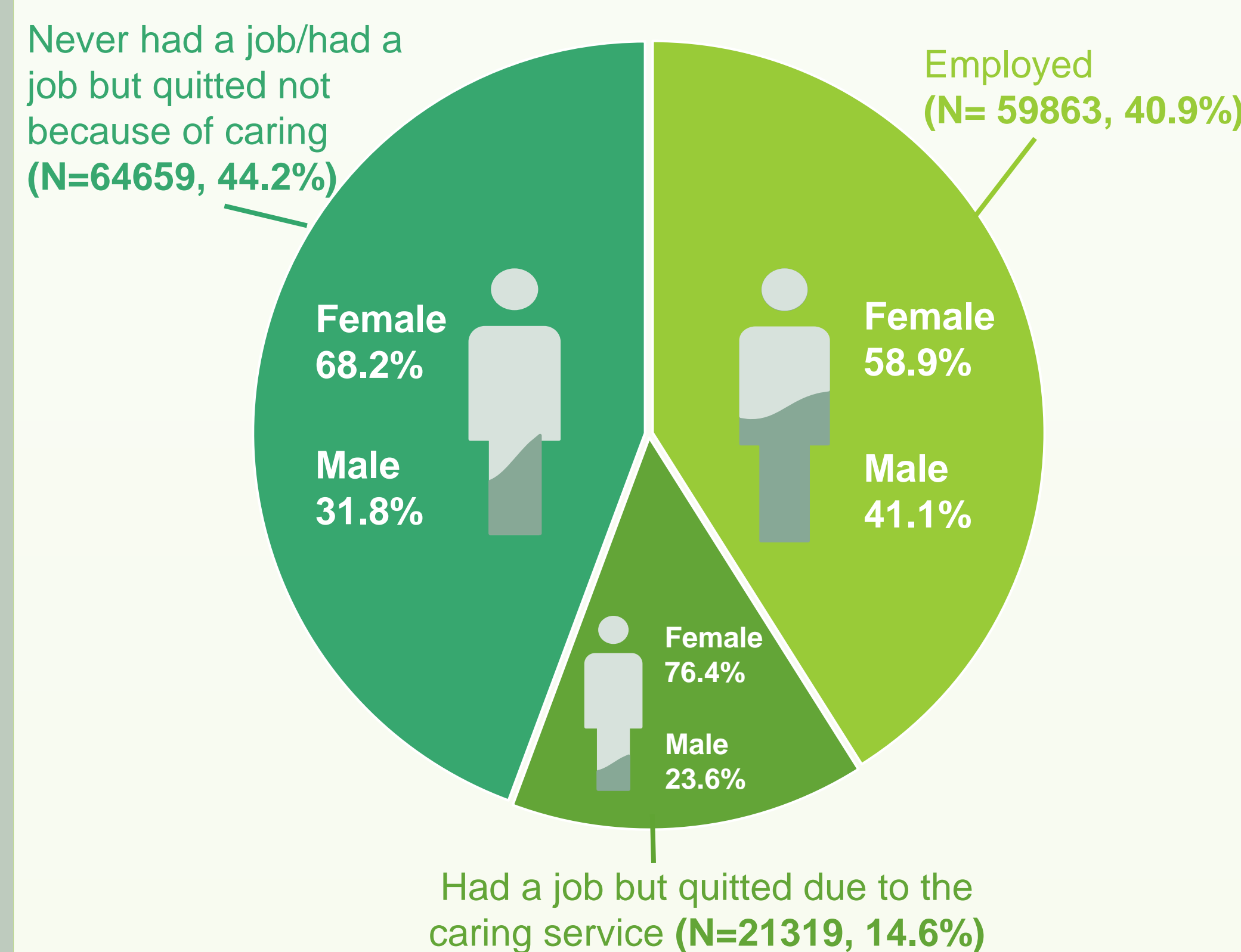


Figure2: Number of informal caregivers taking care of those with disabilities and chronic diseases based on employment status and gender distribution

Caregivers who had a job but quit due to caregiving duties exhibit a significantly higher opportunity cost of around HK\$84 million per week. Approximately **14.6%** of caregivers shoulder an overwhelming **55%** of the total opportunity costs. Women aged 35 and above make up **70%** of the caregivers.

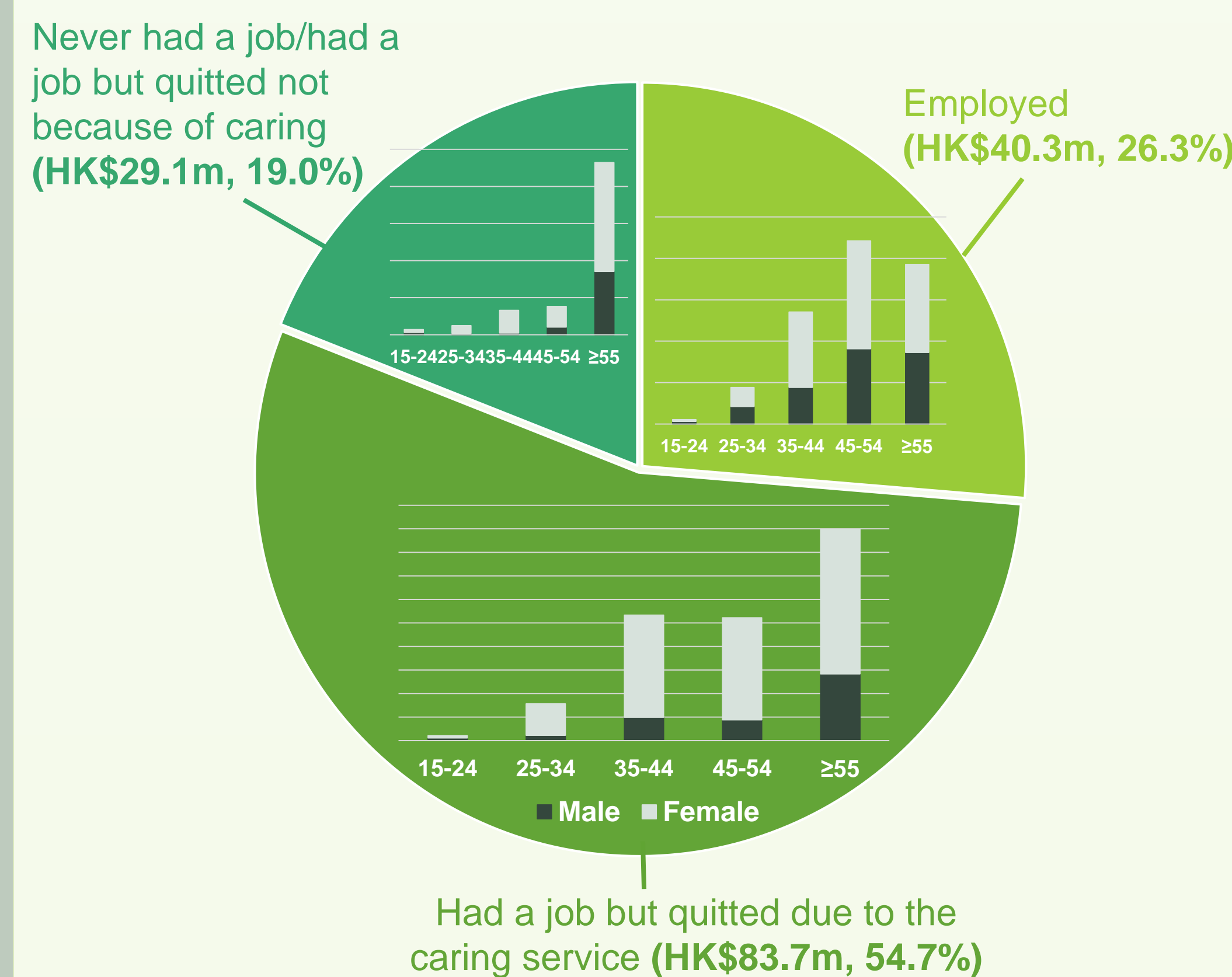


Figure3: Informal caregiving opportunity cost estimation per week and age distribution based on employment status of caregivers taking care of those with disabilities and chronic diseases

Caregivers who never had a job or did not quit employment due to caregiving responsibilities (**44.2%** among all the caregivers) have the lowest opportunity cost per week, approximately HK\$29 million (about **19%** of the total costs). Women aged 55 and above make up **45%** of the caregivers.

We also employed the **proxy good method** to assess the potential economic implications of **replacing informal caregivers with formal caregivers**.

$\text{mean wage of personal care worker (HK\$110)} \times \text{mean caring hours per week (46.4h)} \times \text{estimated caregiver population (146,196)} \times 52 \text{ weeks}$

We obtained an annual cost of formal caregiving at **US\$4958 million**. This is **five times** the annual cost of informal caregiving.

## Main Findings

- Informal caregiving plays a vital economic role in Hong Kong at lower costs to formal care for those with disabilities and chronic diseases.
- Gender disparities and their impact on workforce participation must be considered by policymakers to manage caregiving in the region.

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