

Physical and Emotional Needs of Primary Caregivers of In Home Oxygen-Dependent Children.



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Background

To identify the predictors of primary caregivers' need in caring for in-home oxygen-dependent children by examining the association between their levels of caregiver needs.

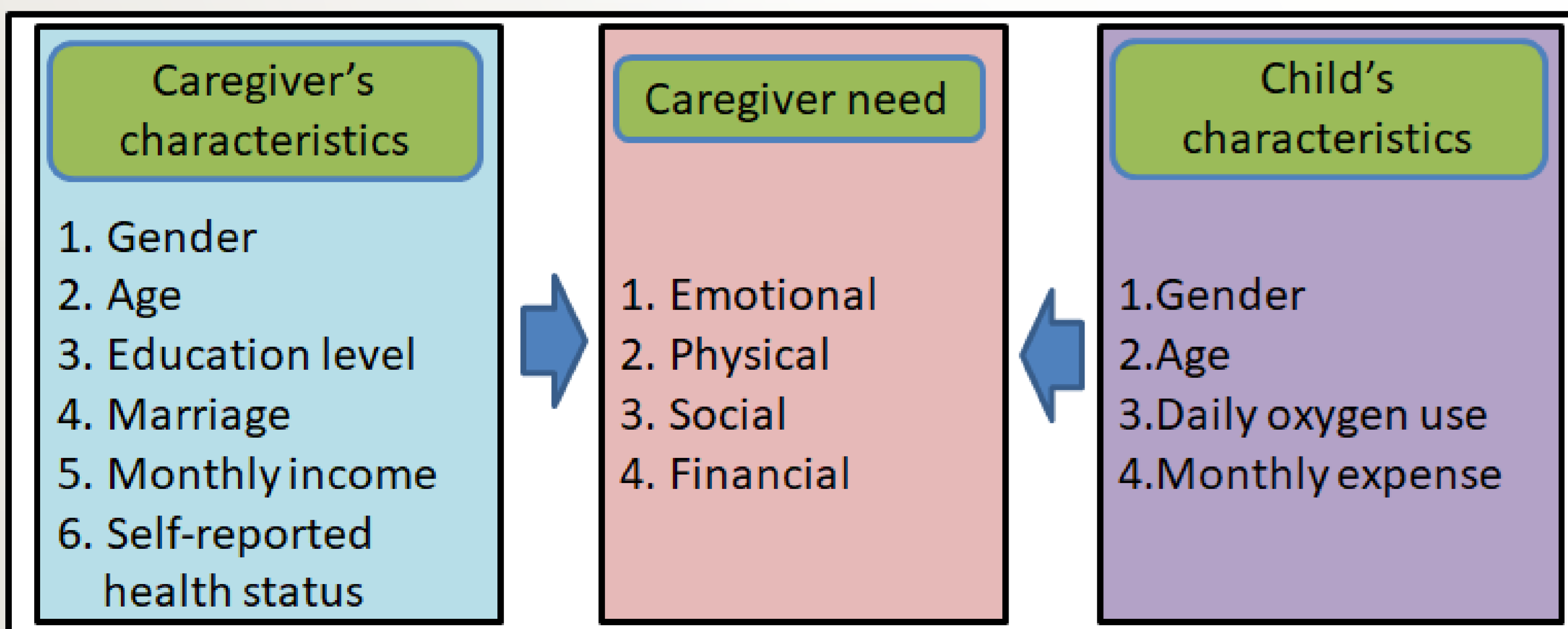
Supplementary oxygen-dependent children are progressively increasing in number over the past few years. The primary caregivers of these oxygen-dependent children face high levels of stress and therefore their needs require investigation. This paper focuses on reporting the physical and emotional needs of primary caregivers of children depending on oxygen therapy at home. Increasing numbers of primary caregivers of oxygen-dependent children experience caregiving need that warrants investigation.

Purpose

To explore the physical and emotional needs and its related factors of primary caregivers of the in-home supplementary oxygen-dependent children.

Method

Beginning to collect care for these home caregivers for in Home oxygen-dependent children during 2010-2011. These in Home oxygen-dependent children include oxygen therapy for ≥ 6 hours/day; the children's age ranges from 3 months to 16 years old. This study used cross-sectional design and structured questionnaires. A total of 104 participants were recruited from a medical center in Taipei city, including the Paediatric outpatient and inpatient department, ENT outpatient department, greater Taipei home-care facility and Cheers Children foundation.



Keywords : oxygen-dependent children, primary caregivers, needs.

Results

Among all items, four items of the highest level of need came from the physiological needs of the children. The level of physiological needs was highest among the four subscales and that of psychological needs was second high. Multivariable GEE analysis revealed that all the variables of the primary caregiver were not associated with overall need. However, the oxygen-dependent children's gender, age and total medical cost were able to independently explain the overall need of the caregivers.

Table 1 Descriptive statistics for need of the participants (N = 104)

| Scale/subscale | Item no | Range of score | Mean | SD | % higher or lower level |
|----------------|---------|----------------|------|------|-------------------------|
| Emotional | 13 | 0.85-3.00 | 2.25 | 0.52 | 69.2 |
| Physical | 6 | 1.50-3.00 | 2.75 | 0.37 | 98.1 |
| Social | 5 | 0.00-3.00 | 1.79 | 0.65 | 40.4 |
| Financial | 4 | 0.50-3.00 | 2.20 | 0.65 | 67.3 |
| Overall | 28 | 1.21-3.00 | 2.26 | 0.43 | 75.0 |

Table 2 Association need with adjustment of caregiver's and child's characteristics (N = 104).

| Explanatory variable | Double variable analysis | | | Multivariate analysis | | |
|--|--------------------------|-------------|------|-----------------------|---------------|------|
| | B | 95% CI | P | B | 95% CI | P |
| Caregiver's characteristics | | | | | | |
| Gender (male) | -0.02 | -0.16-0.12 | .785 | -0.02 | -0.15-0.11 | .767 |
| Age (per decade) | -0.07 | -0.15-0.02 | .123 | -0.03 | -0.11-0.06 | .538 |
| Education level (per year) | 0.03 | -0.15-0.21 | .732 | -0.04 | -0.23-0.15 | .692 |
| Marriage (married) | -0.24 | -0.57-0.10 | .163 | -0.22 | -0.55-0.10 | .178 |
| Monthly income (\geq NTD\$40,000) | 0.08 | -0.09-0.24 | .367 | 0.05 | -0.14-0.23 | .619 |
| Self-reported health status (poor) | -0.04 | -0.20-0.12 | .647 | -0.04 | -0.20-0.12 | .607 |
| Child's characteristics | | | | | | |
| Gender (boy) | 0.17 | 0.01-0.34 | .041 | 0.09 | -0.06-0.24 | .226 |
| Daily oxygen use (≥ 10 hours/ <10 hours) | 0.18 | -0.002-0.36 | .052 | 0.09 | -0.075-0.26 | .274 |
| Age (1-5 years) | 0.28 | 0.07-0.49 | .008 | 0.26 | 0.04-0.48 | .019 |
| Age (11-18 years) | 0.08 | -0.16-0.32 | .524 | 0.12 | -0.14-0.37 | .359 |
| Monthly expense (per NTD\$1,000) | 0.008 | 0.002-0.014 | .011 | 0.007 | -0.0004-0.015 | .063 |

ps : The reference groups for each category of self-change are as follows: gender is female, education is below high school, marriage is unmarried/divorced/widowed, family income is less than 40,000, conscious health is normal/good, daily oxygen use time For less than 10 hours, age is 6-10 years old; B is unnormalized regression coefficient, CI is the confidence interval.

Conclusion/Practical for Practice

The need to understand the physiologic needs of the oxygen-dependent children seems to be the priority of these primary caregivers, especially on the aspects regarding disease monitoring, disease management and disease knowledge. Thus, a comprehensive discharge planning model is recommended to decrease the long-term stress and enhance the needs of the primary caregivers.