Caregiving Impact on Depressive Symptoms for Family Caregivers of Terminally Ill Cancer Patients in Taiwan

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Family Caregivers in End-of-Life Care

- The trend toward shortened hospital stays and outpatient or home care implies the burden of caring for chronic ill patients (including terminally ill patients) is increasingly falling on their families.
- Family are partners in health care.

Family Caregivers in End-of-Life Care

- Family caregiving is particularly prevailing in Chinese cultures for terminally ill patients.
  - Confucian cultures place great emphasis on filial piety and familism.
  - Children should take care of parents when they are aged, sick, or even dying in return of parents’ efforts in bringing them up.

Family Caregivers in End-of-Life Care

- Preferences of dying at home (Tang, 2000)
  - Cultural meaning of dying at home for Chinese/Taiwanese terminally ill patients.
- Death at home does not come without significant challenges and potential consequences for families.
- Caring for a patient contributes to physical disease, psychiatric morbidity, and increased mortality.

Depression among Family Caregivers

- Depression is the most frequently documented negative psychological consequences of caregiving.
  - Advanced diseases or receiving palliative care: 30% ~ 50%. **(Pitceathly & Maguire, 2003)**
  - Caregivers of terminally ill cancer patients reported higher prevalence of depressive symptoms than caregivers of AIDS or dementia patients. **(Flaskerud, Carter & Lee, 2000)**

Depression among Family Caregivers

- Gap of current knowledge
  - Family caregivers in East Asian countries are known to have a strong sense of filial piety and a traditional caregiving ideology.
  - They are generally presumed to be protected from psychological distress arising from caregiving.
  - There is scant information regarding the impact of caregiving on Chinese/Taiwanese families of terminally ill cancer patients.

Purposes of The Study

- Investigate the objective and subjective caregiving burden for family caregivers of terminally ill cancer patients in Taiwan.
- Identify determinants for negative emotional impact of caregiving—depressive symptoms for Taiwanese family caregivers of cancer patients.

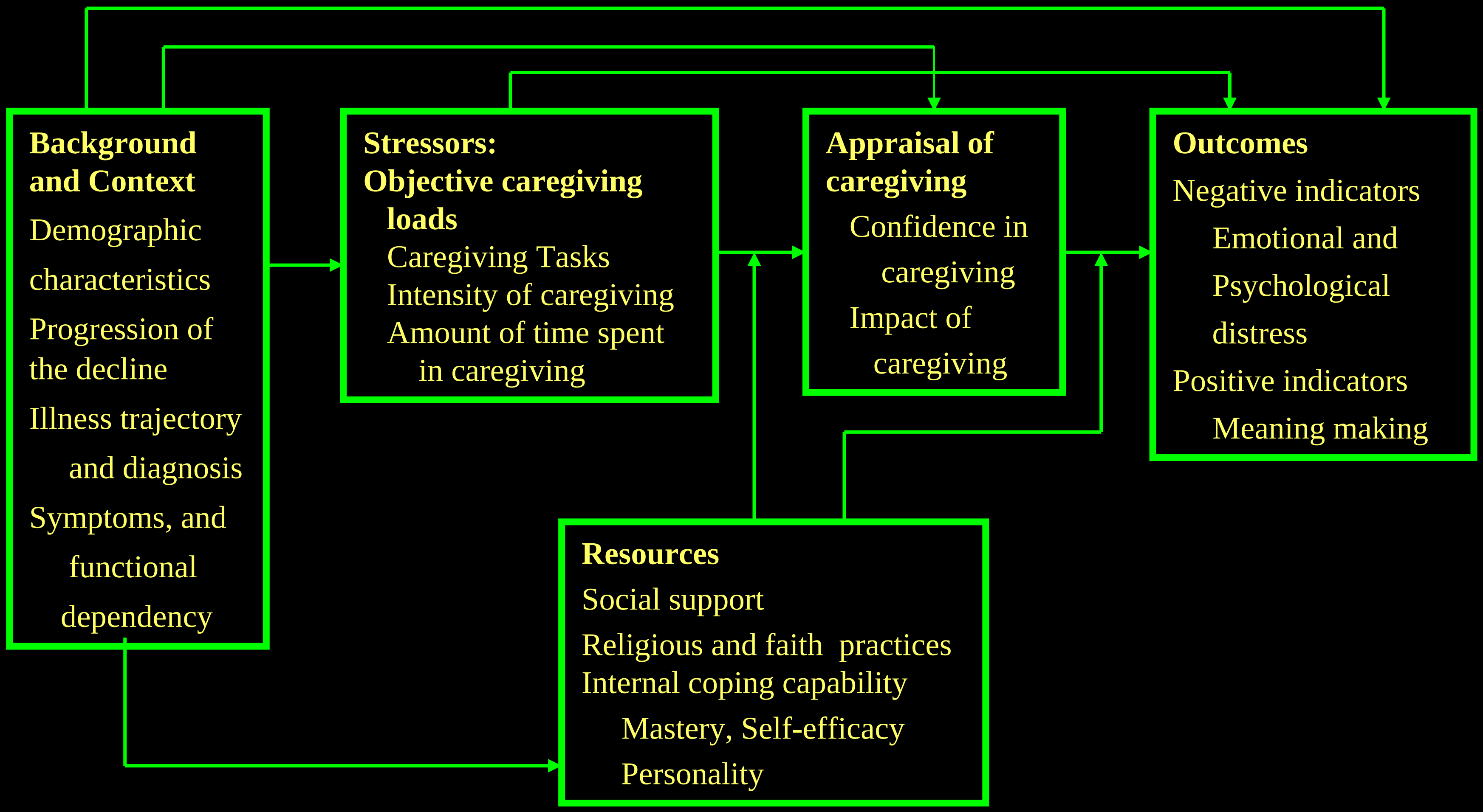
Research Design

- Cross-sectional survey conducted from March to October 2005
- 112 caregivers were recruited from 126 potential subjects (participation rate: 88.9%) by a convenience sampling strategy.
- Eligibility criteria:
  - Identified as the person most involved with the actual care of the terminally ill cancer patient
  - Age > 21 years old and agree to participate

The Profile of Family Caregivers

- The majority of family caregivers of terminally ill cancer patients were:
  - female (63.9%), married (88.6%)
  - the patient’s spouse (42.0%), child (39.3%)
  - Mean age : 49.9 years old (range: 21-86, median: 50.8 years old)
  - educational level ≤ high school (65.2%)
  - lived with the patient (73.2%)

Theoretical Framework of Caregiving



Background and Context

Demographic characteristics

Progression of the decline

Illness trajectory and diagnosis

Symptoms, and functional dependency

Stressors: Objective caregiving loads

Caregiving Tasks

Intensity of caregiving

Amount of time spent in caregiving

Appraisal of caregiving

Confidence in caregiving

Impact of caregiving

Outcomes

Negative indicators

Emotional and Psychological distress

Positive indicators

Meaning making

Resources

Social support

Religious and faith practices

Internal coping capability

Mastery, Self-efficacy

Personality

(Pearlin et al., 1990; Nijboer et al., 1998)

Measurements

- Background or contextual factors
  - Patient characteristics and disease variables
    - Symptom distress: Symptom Distress Scale

(McCorkle & Young, 1978)

  - Caregiver characteristics:
    - Demographics and relationship with the patient
    - Frequency and intensity of contact between patients and families (Lobchuk & Degner, 2002)
    - Prior caregiving experience

Measurements

- Objective caregiving burden:
  - Amount of time spending in caregiving per day
  - Care tasks and levels of care (Emanuel et al., 1999)
    - Personal care
    - Homemaking
    - Transportation
    - Health care
    - 4-point scale: “none at all” to “always”

Measurements

- Subjective caregiving appraisal:
  - Confidence in caregiving (Teno et al., 2001)
    - Confidence in taking care of the patient at home and knowing how to expect /do at death
  - Caregiving Reaction Assessment (CRA)
    - daily schedule, health, finance, social support, and self-worth (esteem) (Given et al., 1992)
    - A higher score represented a stronger negative impact of the attribute

Measurements─Outcome Measure

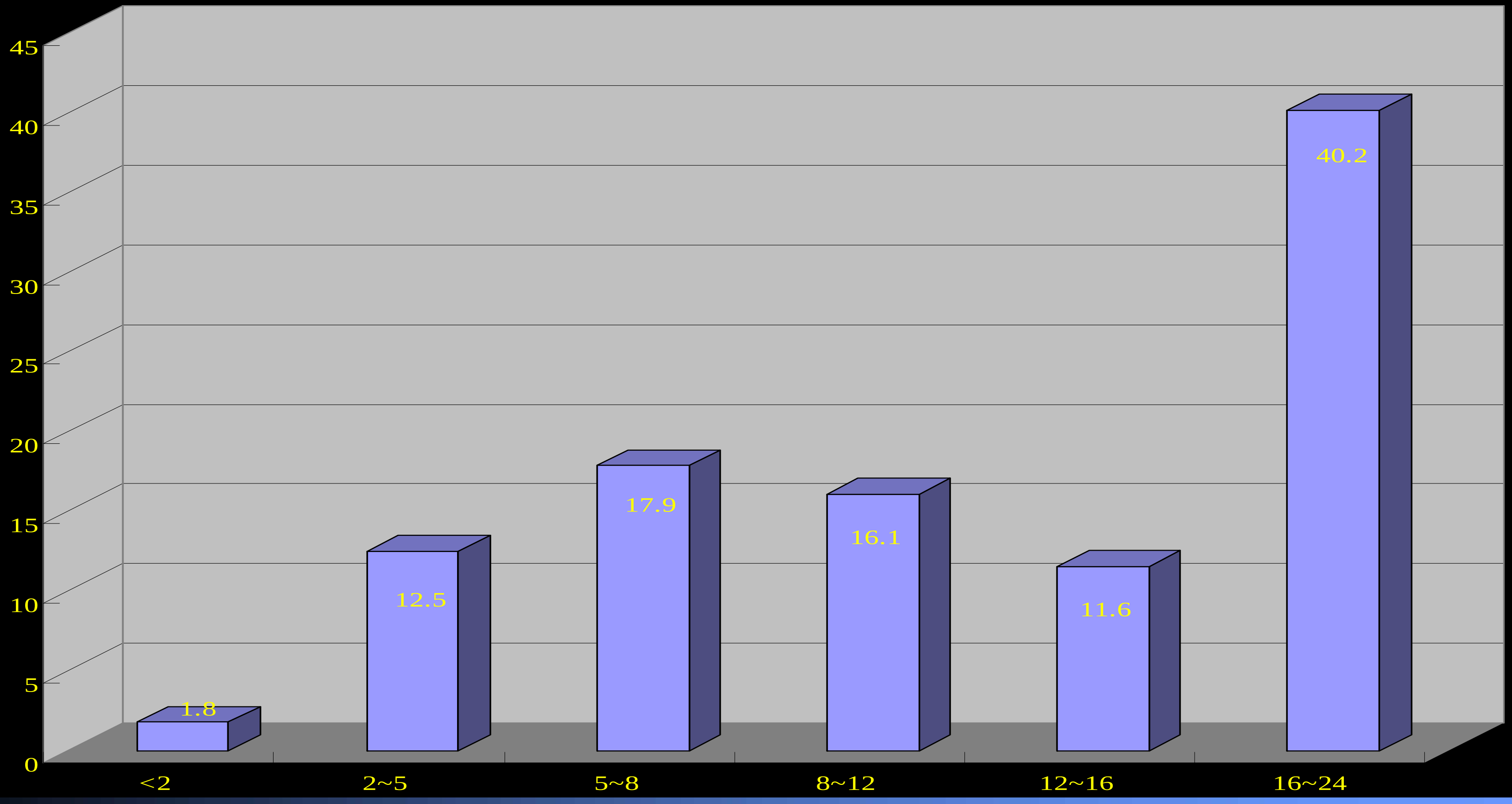
- Negative emotional impact of caregiving
  - Center for Epidemiological Studies-Depression Scale (CES-D) (Radloff, 1977)
  - Total score: 0~60
  - Cutoff: >15─clinical depression

Statistical Analysis

- Multivariate logistic regression with backward selection was used to identify determinants of depressive distress.
- For parsimony, only those variables that exhibited statistically significant associations or differences with depressive distress at bivariate analyses by chi-square statistics and independent t-tests were entered into the initial model.

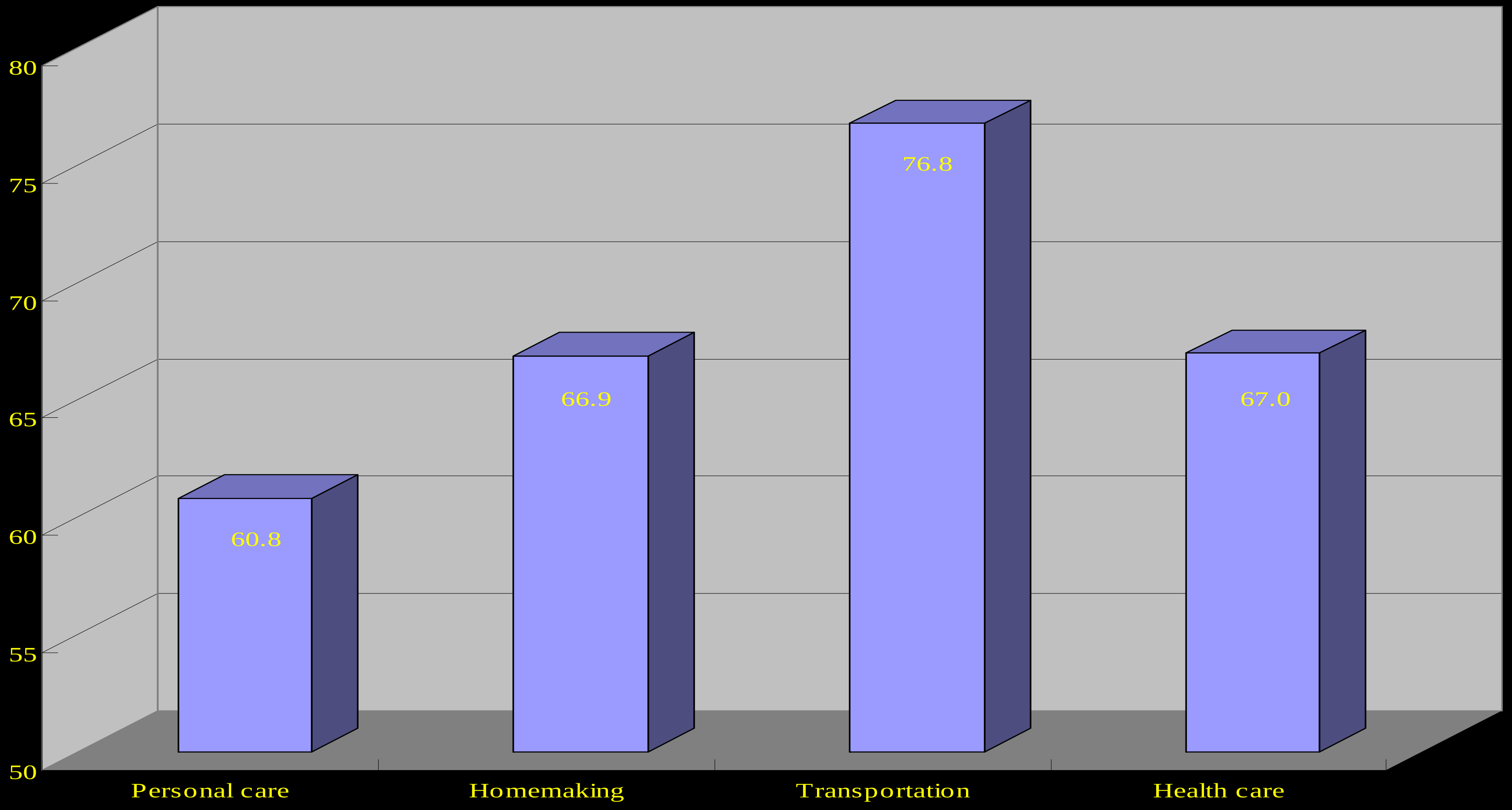
Results—Objective Caregiving Burden

Time spent in caregiving each day (Hours)



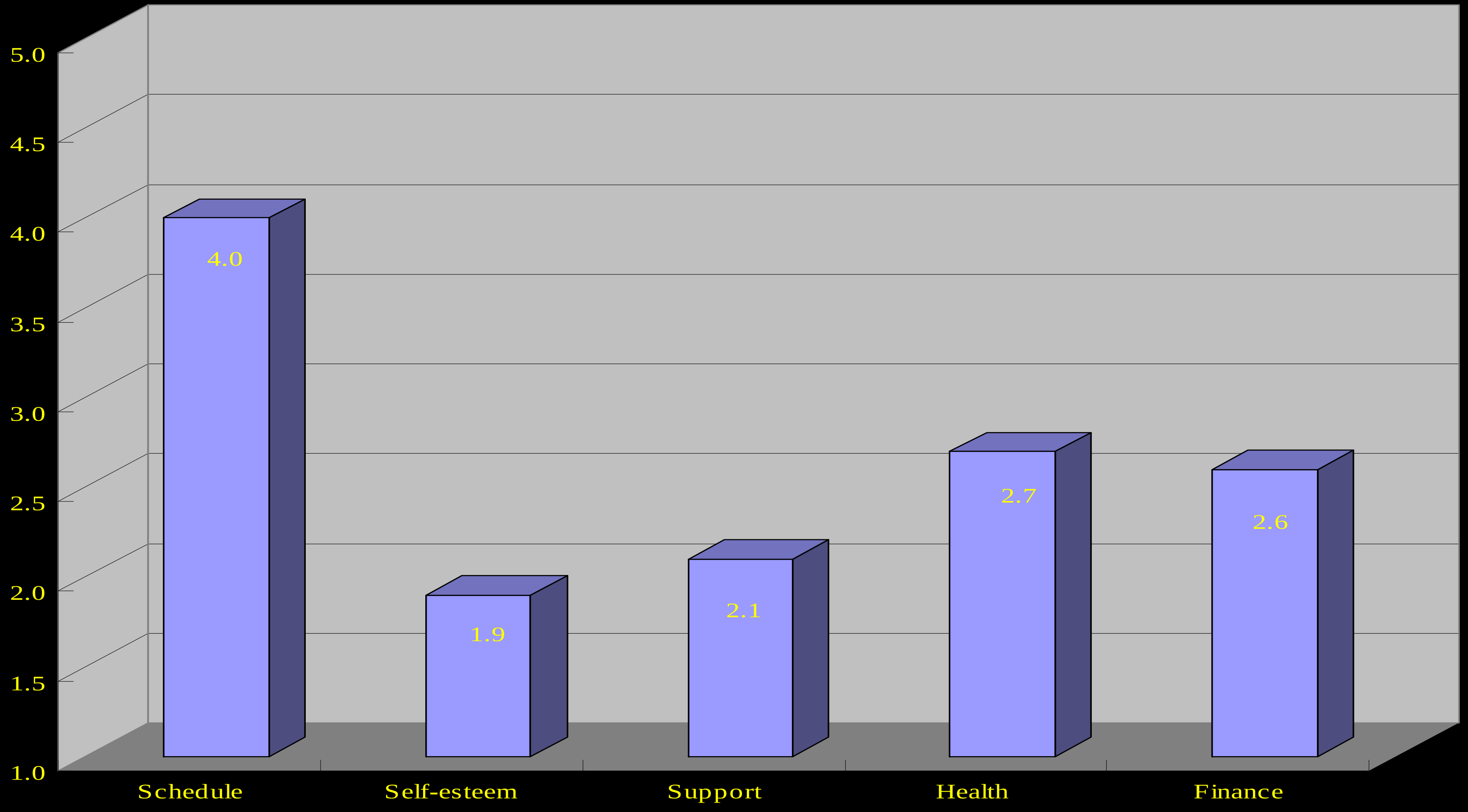
Results－Objective Caregiving Burden

Care Tasks provided frequently or always (%)



Results–Subjective Caregiving Burden

Item mean scores of the CRA subscales



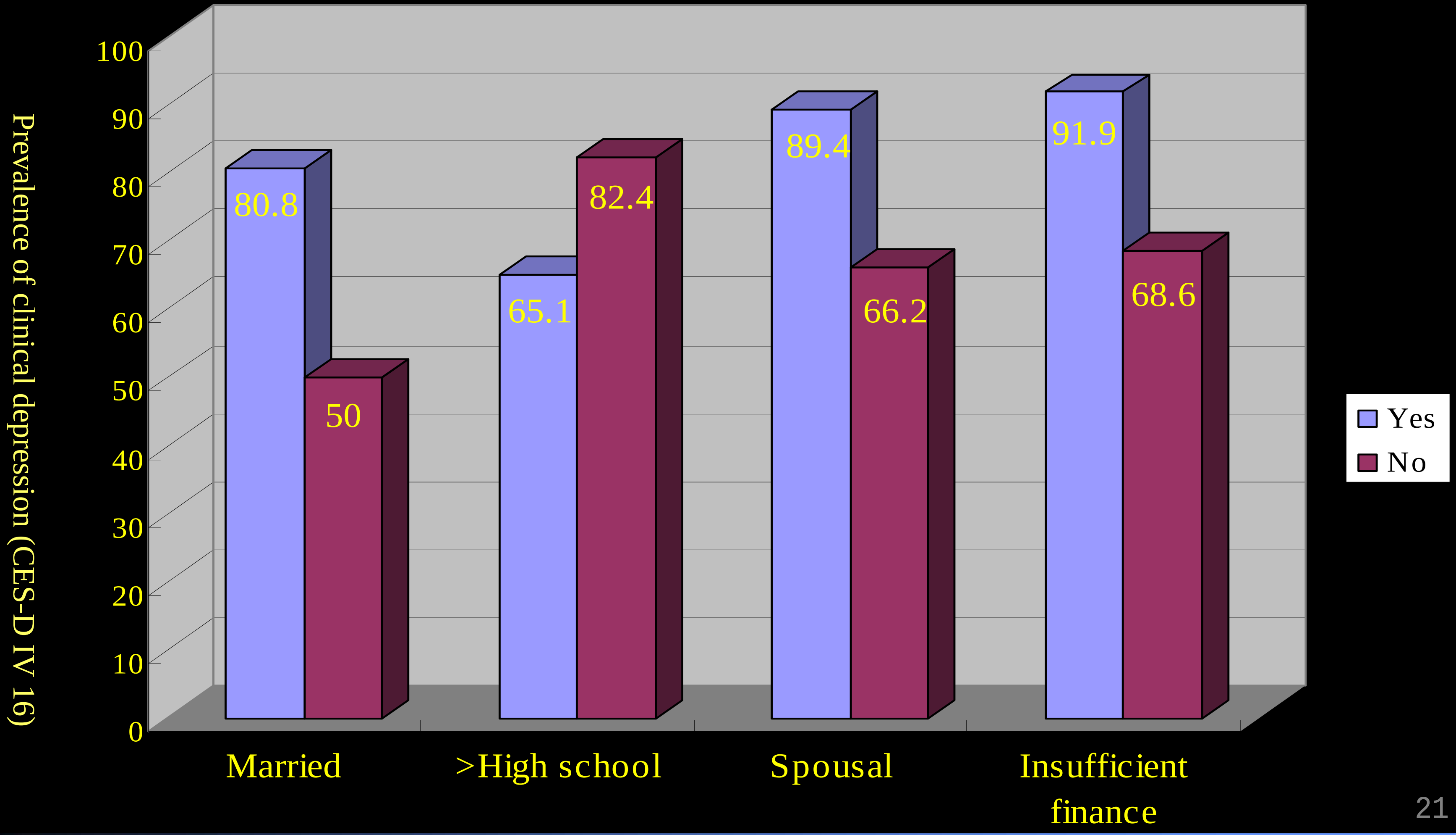
Depression among Family Caregivers

- CES-D scores for Taiwanese caregivers
  - Range: 3-55, M (SD)=24.01 (11.24)
  - Prevalence of clinical depression: 75.9%

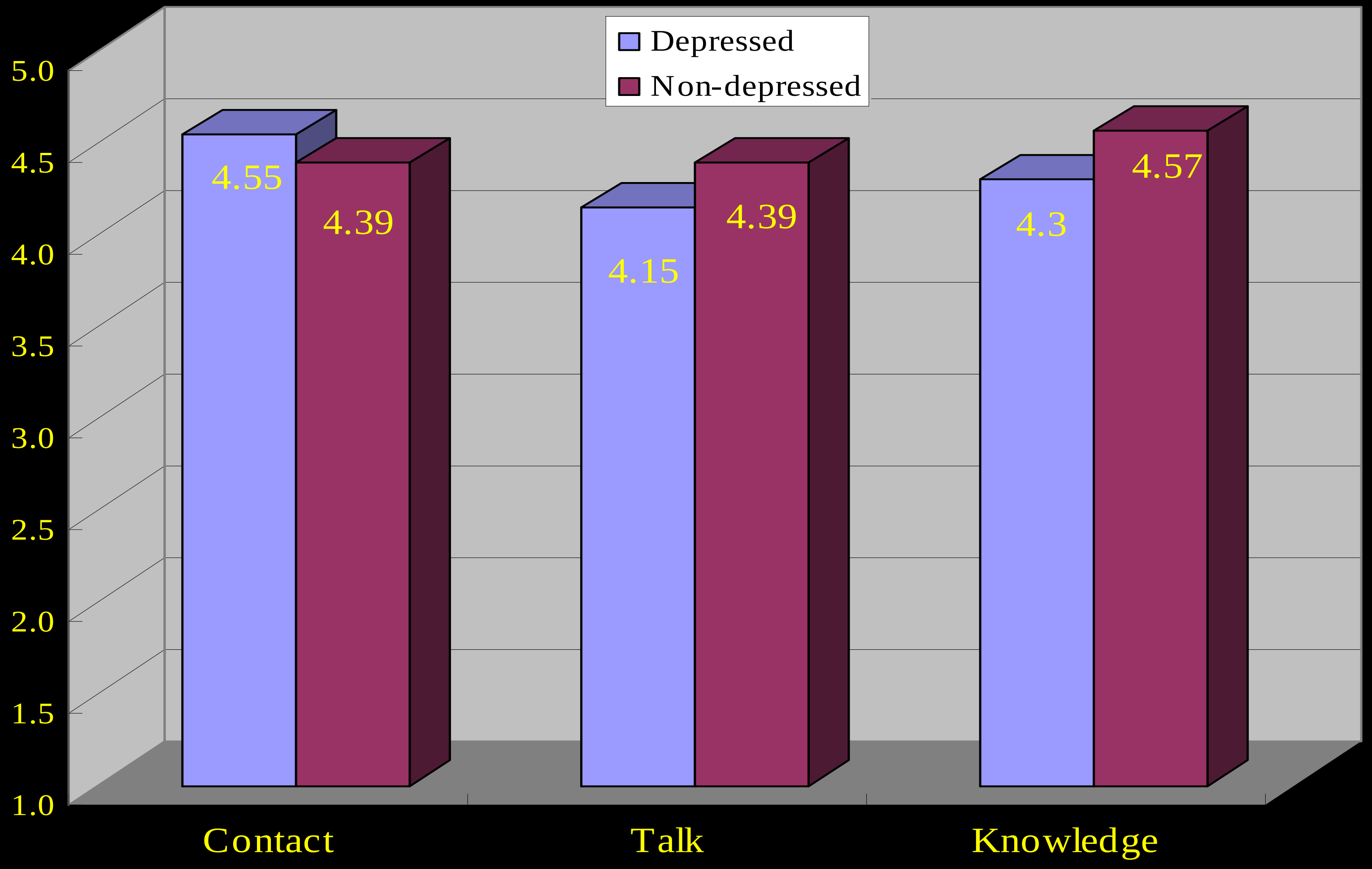
Depressed vs Non-Depressed Caregivers

- Bivariate analysis:
  - Patient demographics and disease-related:
    - None was significantly different between depressed and non-depressed caregivers.
  - Caregiver demographics/relationship
    - Married, spousal, with low educational level and insufficient financial status were more likely to be depressed.
    - No influence of closeness of relationship

Depressed vs Non-Depressed Caregivers



Depressed vs Non-Depressed Caregivers

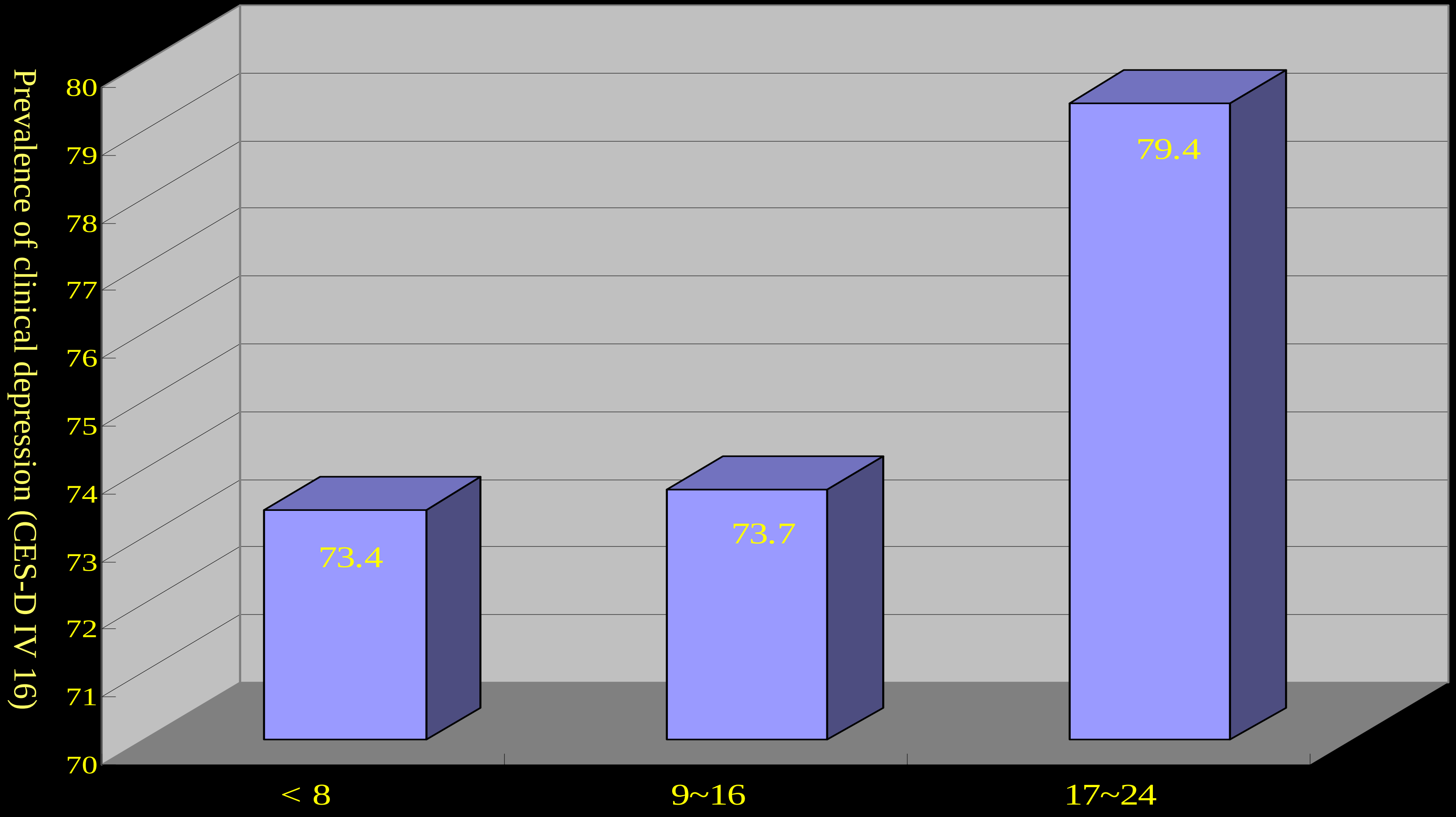


Depressed vs Non-Depressed Caregivers

- Bivariate analysis:
  - Objective caregiving burden:
    - None was significantly different between depressed and non-depressed caregivers.
  - Subjective appraisal of caregiving:
    - There were significances in
      - Confidence in taking care of the patient at home
      - Caregiving impact on schedule, health, finance, and support.

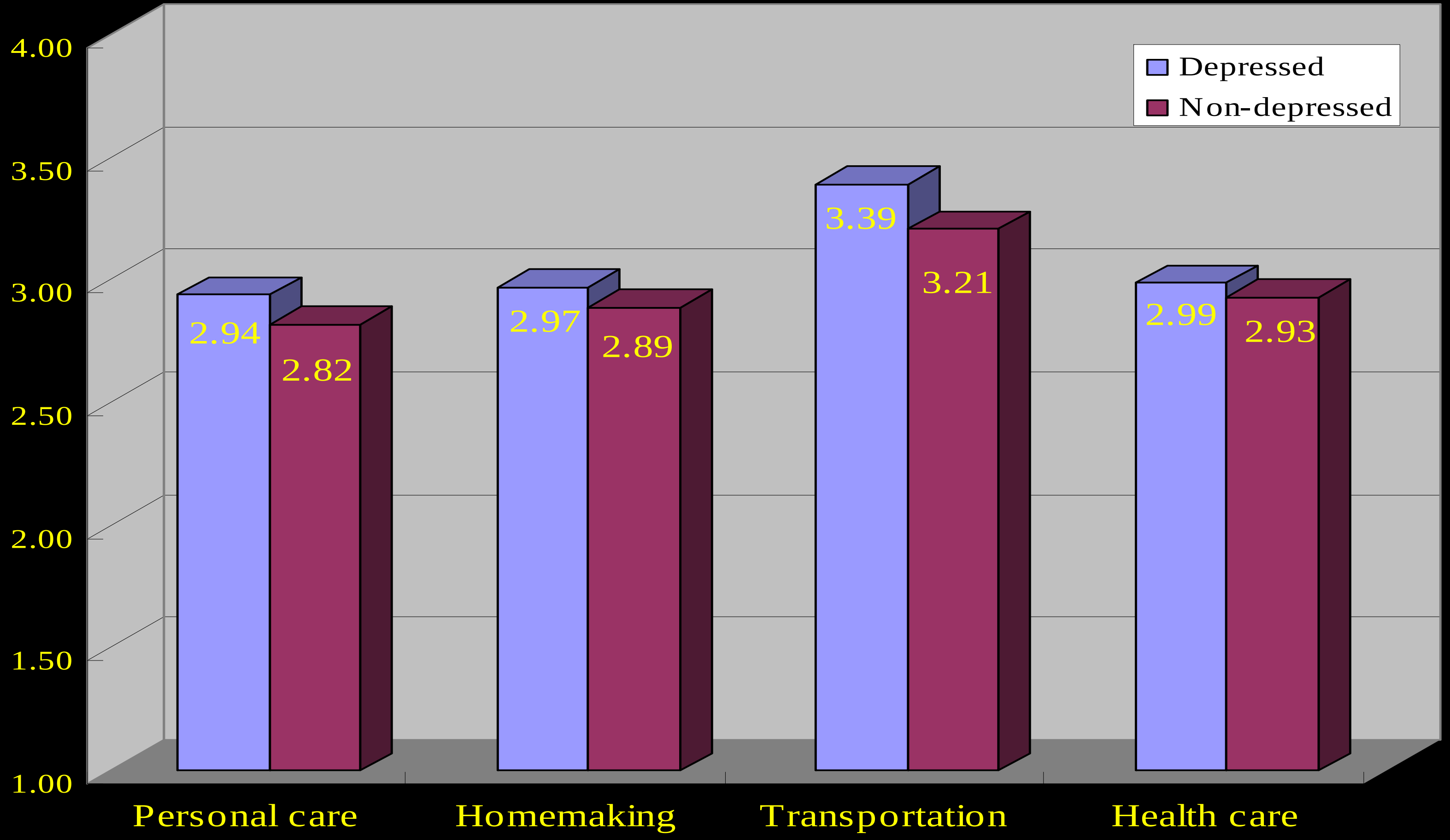
Depressed vs Non-Depressed Caregivers

Time spent in caregiving each day (Hours)



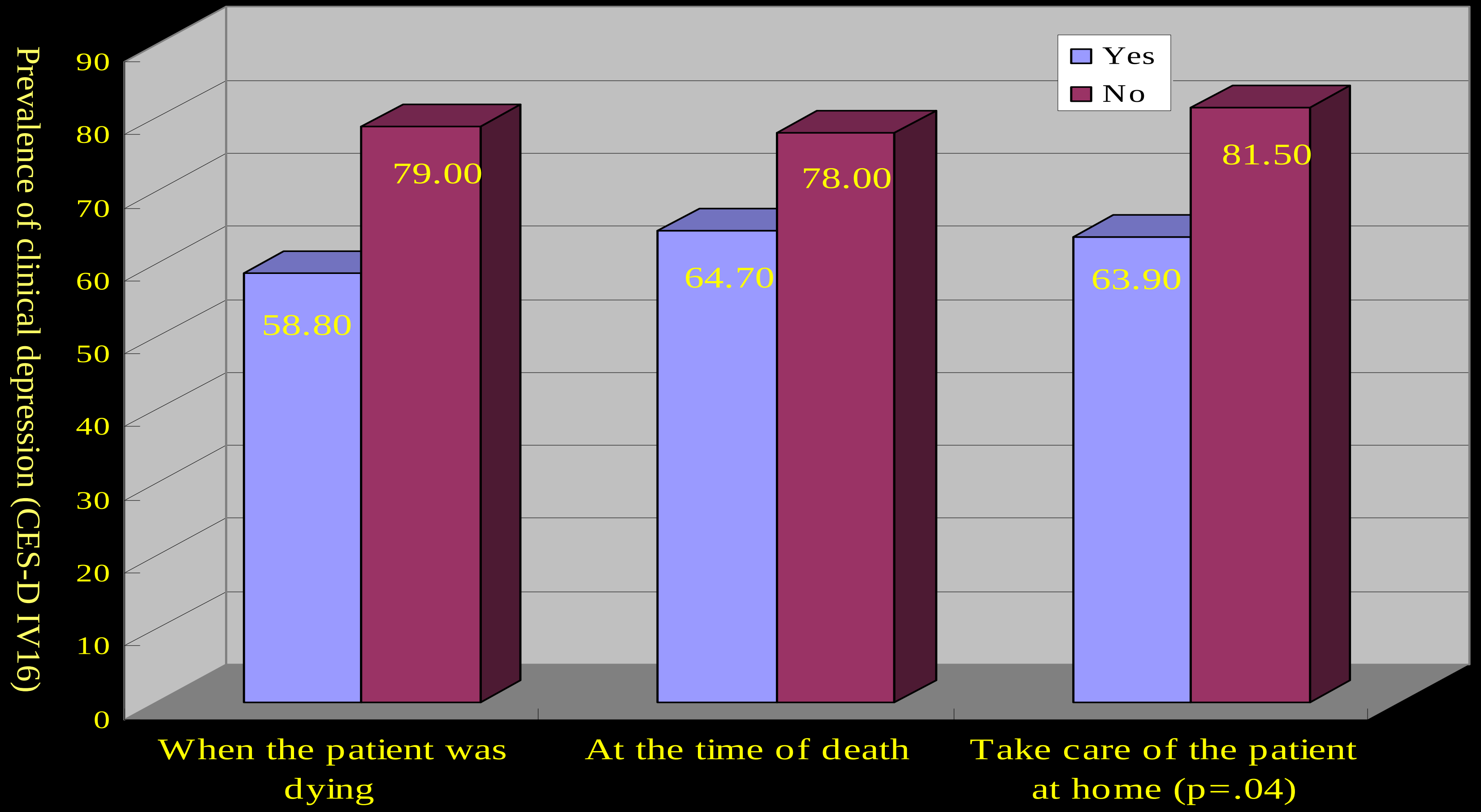
Depressed vs Non-Depressed Caregivers

Care Tasks and Level of Care

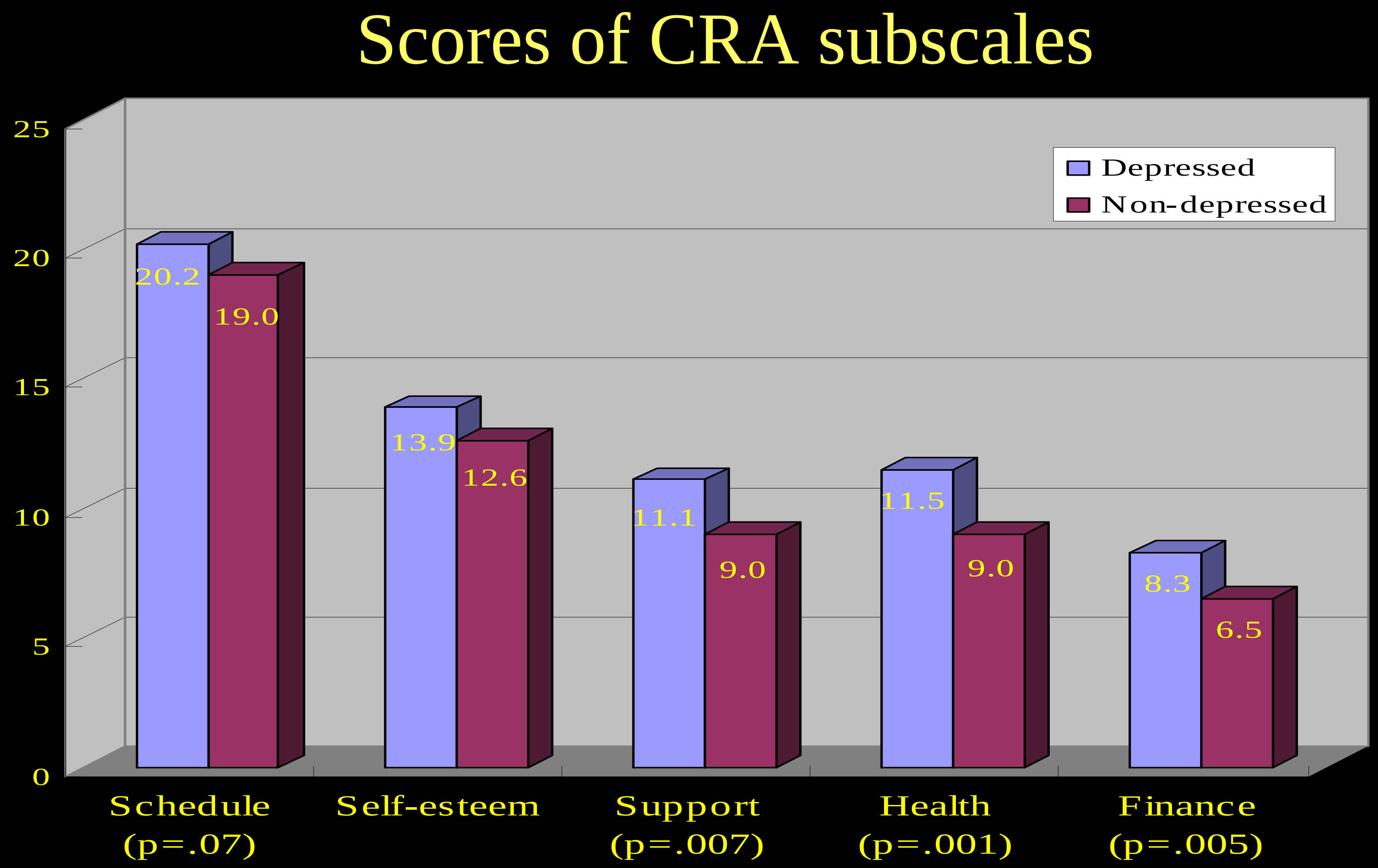


Depressed vs Non-Depressed Caregivers

Confidence in knowing what to do



Depressed vs Non-Depressed Caregivers



Determinants of Clinical Depression

Variable	b*	Wald χ^2	p	Odds Ratio	95% CI** OR
Intercept	-1.50	3.09	0.08		
Caregiving impact on health	0.23	6.92	0.009	1.26	1.06, 1.49
Spouse	1.12	3.88	0.05	3.06	1.01, 9.32

Model significance

Model Chi-square (df=2)	16.02	*p*=0.0003

Model Goodness-of-Fit Statistics

Criterion	Value	df	Value/ df	*p*
Deviance	100.32	103	0.97	0.55
Pearson	116.17	103	1.13	0.18

Discussion

- High prevalence of clinical depression among Taiwanese family caregivers

Author (year)	Country	%	Author (year)	Country	%
Raveis (1998)	USA	30	Kim (2005)	USA	30
Flaskerud (1998)	USA	50	Schreiner (2003)	Japan	52.9
Aranda (2001)	Australia	21-30	Lee (2004)	Korea	85.0
Haley (2001)	USA	55		KA	71.0
Grov (2005)	Norway	18-30		CA	63.0

Discussion

- Appropriate threshold of CES-D for different ethnic groups
  - Threshold may not be applied to cultural groups that tend to somatize psychological problems
  - Cheng and Chan (2005): 22 vs 16
  - Revised prevalence of clinical depression for Taiwanese family caregivers of terminally ill cancer patients: 52.9%

Discussion

- Determinants of clinical depression
  - “Appraisal of caregiving” is the more salient predictor than objective measures of caregiving stressors, such as amount and duration of time spent in caregiving, care tasks, and intensity of caregiving
  - Caregiving impact on health
  - Confidence in taking care of patients at home

Implications

- Taiwanese family caregivers were at an extraordinarily high risk of clinical depression.
- Effective interventions shall target on spousal family caregivers to reduce the negative impact of caregiving on their health by modifying their subjective appraisal of caregiving loads.