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Psychosocial factors correlate todepression in elderly : comparative studyin Bangkok and Uthaithani province

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Psychosocial factors correlate to depression in elderly : comparative study in Bangkok and Uthaithani province.

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Surveyed and studied 711 Thai elderly, aged over sixty in Bangkok and Uthaithani province representing urban and rural area. The study was performed by using the questionaires to find out the prevalence of depression and correlated psychosocial factors. The prevalence of depression was 82.28% among total studied population, 80.3% in Bangkok and 84.8% in Uthaithani province. The same psychosocial factors correlated to depression in both area were dissatisfaction to health status, physical and mental health problems in the form of illness and changes according to age, insomnia, economic and financial problems, maladjustment to personality and emotional changes. For other factors there were differences in each area. In Bangkok the findings of sex, age, loss of spouses and close relations or loved objects, loneliness, time of being alone, lack of social respect, recognition and acceptance correlated to depression while in Uthaithani, psychosocial factors correlated to depression were physical and mental illness, substance abused, emotional uncontrolled to routine life events and low frequency of religious activities participation.

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นันทิกา ทวิชาชาติ, อรพรรณ เมฆสุภะ, ธงชัย ทวิชาชาติ. การศึกษาความสัมพันธ์ของปัจจัยทางจิต-สังคมต่อภาวะซึมเศร้าในผู้สูงอายุ : เปรียบเทียบในเขตกรุงเทพมหานครและจังหวัดอุทัยธานี. จุฬาลงกรณ์เวชสาร 2533 เมษายน; 35(4): 195-203

ศึกษาประชากรผู้สูงอายุ ที่มีอายุ 60 ปีขึ้นไป 711 คน โดยวิธีการสำรวจจากการสุ่มตัวอย่างพื้นที่ในชุมชนเขตเมืองและชุมชนชนบท ใช้แบบสอบถามเพื่อค้นหาภาวะซึมเศร้า และปัจจัยทางจิต-สังคมที่เกี่ยวข้องกับการเกิดภาวะซึมเศร้าในเขตพระโขนง กรุงเทพมหานครและเขตจังหวัดอุทัยธานี พบความชุกของภาวะซึมเศร้าในประชากรกลุ่มที่ศึกษา ร้อยละ 82.28 โดยเขตกรุงเทพมหานครพบร้อยละ 80.3 และเขตจังหวัดอุทัยธานี พบร้อยละ 84.8 ปัจจัยทางจิต-สังคมที่เกี่ยวข้องกับการเกิดภาวะซึมเศร้าที่พบเหมือนกันทั้ง 2 พื้นที่ ได้แก่ ความไม่พอใจต่อสุขภาพ ปัญหาทางสุขภาพทั้งทางร่างกายและจิตใจ ทั้งรูปของการเจ็บป่วย และการเปลี่ยนแปลงตามอายุ ปัญหาการนอนไม่หลับ ปัญหาสภาพเศรษฐกิจและการเงิน การปรับตัวที่บกพร่องต่อการเปลี่ยนแปลงบุคลิกภาพ นิสัยใจคอและอารมณ์ ส่วนปัจจัยที่เกี่ยวข้องกับการเกิดภาวะซึมเศร้านั้น พบว่า พื้นที่ต่างกันพบปัจจัยที่เกี่ยวข้องต่างกันไป ซึ่งน่าจะเป็นผลจากพฤติกรรมและแนวทางการดำเนินชีวิตในสังคมวัฒนธรรมที่แตกต่างกัน ในเขตกรุงเทพมหานครพบว่า เพศ อายุ การสูญเสียหรือพลัดพรากจากสามี-ภรรยา ลูก หลาน หรือบุคคลที่รัก ความรู้สึกเหงา ว้าเหว่ หรือเวลาที่ต้องอยู่คนเดียว การขาดความเชื่อถือ หรือการยอมรับนับถือจากบุคคลอื่นในสังคม มีความสัมพันธ์กับการเกิดภาวะซึมเศร้า ส่วนในเขตจังหวัดอุทัยธานี ปัจจัยที่มีส่วนเกี่ยวข้องกับภาวะซึมเศร้า คือ ความเจ็บป่วยทางกายและจิต การใช้สารหรือยาเสพติด ความไม่สามารถควบคุมจิตใจต่อเหตุการณ์ที่เกิดขึ้นในชีวิตประจำวัน และการมีส่วนร่วมในกิจกรรมทางศาสนาน้อย

Depression is an abnormal and complex mental disorder which is most frequently found in the elderly.[1] Reports on reseach work done in different areas and varying age groups, in Thailand and elsewhere show that depression occured among 3 percent of the general population and 24-65 percent of the elderly.[2-7] Compilation of research findings indicate clearly that depression is found most frequently among those over the age of 65.[8] It is worth being cautious about the data on the occurence of depression. Epidemiologists claim that the data vary, depending on who report them, ie. either by general practitioners, psychiatrists or community study researchers. The variation for one thing, may be related to the difference in the Depressive Scale used.[9] On the other hand, certain patients had been found to show physical symptoms of depression, but were not diagnosed as suffering from depression.[10] It is probable that such physical symptoms as insomnia, fatigue and weakness, loss of apetite, constipation may be indicative of depression, if found in conjunction with such mental states as guilt feeling, hopelessness, helplessness, boring, loss of interest to the environment and social surroundings, pessimism, self-dissatisfaction, loss of self-confidence and low self-esteem, etc. Thus it is very possible that reported cases of depreesion might have been too low.[11] At present two factors work for higher, prevalence of depression, namely, widespread socio-economic changes and normal changes in physical and mental health that make troublesome to routine life adjustment of the elderly. Thus several variables have already been mentioned as possible causes of depression, ie. relating to socio-cultural and economic conditions.[12-14] Yet there is need to go into details as to the mode of correlation of each variable to depression. It is also hypothesized that communities with different socio-cultural surroundings, beliefs, values and modes of living should affect depression phenomenon in Thailand.

Objectives

1. To investigate prevalence of depression in the elderly.

2. To established correlation between psychosocial factors and depression.

3. To compare prevalence and relevant factors of depression in an urban area (Bangkok) and a rural area (Uthaithani Province).

A Survey of Literature

Past research endeavours concerning mental abnormality in the elderly in Thailand have been limited in scope. Most studies are epidemiological in nature and tend to focus on those in hospitals, health centers and only in Bangkok, e.g. in 1976, 1978 John Thongyoun, M.D.[2,3] published reports on depression among the Thai elderly, together with methods of diagnosis and management. In 1982 Supatana Dejatiwongna Ayuthaya, M.D.[5] studied on symptoms and signs of depression in general practice. Most of these studies were clinical aspects and were not up to date. Studies on the etiology and factors correlate to depression in Thai population every age group were done by John Thongyong, M.D. in 1971 and 1972.[12,13] They were comparative or cross-cultural in nature. They showed differences in basic data, including relevant variables, e.g. marital status and socio-econimic status. In addition, they showed that cultural differences affected the occurence of depression.

In foreign countries there are numerous reports on social factors which are correlated to depression, e.g. those produced by Margaret W. Linn, Kathleen Hunter and Rachel Harris.[15] In 1980 they studied 188 elderly and tried to find correlation between depression and serious life events. They discovered that loss or severance from the loved ones entailed severe depression. Elaine Murphy and George W. Brown[16] in 1980 studied the relationship between life experiences and mental abnormality and physical illnesses. They found, however, positive correlation between those experiences and emotional disorders, Elaine Murphy in 1982[17] made a comparative study of the general population and the elderly and found that depression in the elderly were related to unpleasant experiences, social problems, ill health and personality problem. Later in 1985[18] Elaine Murphy discovered that favorable social relationships helped improved the condition of those elderly inflicted with depression.

The above studies failed to pinpoint the differences in social factors affecting depression in different communities of cultural vairation. Furthermore they were either conducted several years ago or mostly in foreign countries.

Materials and Methods

1. Subjects It covered 711 elderly with the minimum age of 60 in Phrakanong District (396) and Uthaithani Province (315)

2. Methods of Seleotion In Phrakanong District the samples were drawn from 8 public health centers. Data collection was done by home visiting nurses. Each center covered some to 50 samples through random sampling from sensus records. In Uthaithani the samples were spread out among 8 districts, each one which would pinpoint one subdistrict with a public health center. Health officers from the center were assigned to random about 40 samples to answer questionaires.

Methodology

1. Surveyed and interviewed the elderly by home visiting nurses of Public Health Center in Bangkok and by Sub- district health officers in Uthaithani.

2. The questionaire was devided into 3 parts, biographical and personal data and the Zung 1965 Self-Rating Depressive Scale[19] which has been widely recognized as very reliable. The third part was a questionaire aiming to identify variables associated with depression in the elderly. The 5 point scale, indicateing the continuum of severity was used. The 3 part questionaires had been pretested.

3. The data were computer analyzed through Discriminant analysis by SPSS and a step wise method.

Research Results

Statistical analysis for the prevalence of depression in the two areas showed little or a almost no difference in Bangkok and Uthaithani, ie. 80.3 and 84.8 percent consecutively. An average of the frequency is 82.3 percent. (Table 1)

Ten sorts of personal data were compared in order to find out about the correlation with depression in the two areas. They were sex, age, place of bith (same as present address or moved from other places), status in the family (head or ordinery member), marital status, educational level, religious affiliations, responsibility on supporting other people, source of own income or dependence on others and problems faced after the age of 60, e.g. illness, poverty and financial, insomnia, familial and residential problems etc. These personal data were correlated with depression in the 2 areas. (Table 2)

There were differences in the 2 areas. Four factors were found with statistical significance to positively correlate with depression in both areas, namely older age, low educational level, dependent income, and various problems faced beyond the age of 60, most of which were health, financial and insomnia, consecutively. (Table 3)

It has been found that depression and older age factor were significantly correlated. Depression was varied by age increasing. (Table 4)

It has been found that depression correlated with older age, lower educational achievement, lower income, dependence on financial support and larger numbers of problems faced beyond the age of 60 e.g. health, economic and financial and insomnia problems.

For other factors we found that more depression in lower level of educational achievement, no own income or dependence on financial support especially by their offsprings.

Personal datas correlated to depression that were different between 2 areas were sex, marital status and factor of supporting role. Sex was significantly correlated with depression in the elderly in Bangkok. We found that depression in female are more than male. (Table 5)

As for marital status divorce and married persons tended to have depression in Bangkok. Responsibility in helping or taking care of others was found only in Uthaithani to be correlated with depression. Personal factors not associated with depression significantly were original residence, or place of birth, familial status (head or member of household) and religious affiliations.

To discover variables associated with depression a 35 item questionaire was administered falling into 4 categories.

1. Biological factors In some other studies measurement was conducted on the amount of biogenic amines neurotransmitter. In this study data were collected on history of depression in the family, previous emotional problems especially depression and changes associated with aging.

2. Physical factors They included present or past illnesses e.g. Diabetes Melitus, Hypertension, cardiovascular problems, paralysis and paresis, renal disease, psychosis and neurosis, pain and pain associated with bodily movement, drugs used to relief pain, drug and substances abused especially betal nut and smoking, degeneration of sensory function e.g. seeing and hearing, eating problem caused by teeth, hospitalization, either as in or out patient and also history of surgical operation.

3. Psychological factors These included loss of memory, dementia, loss of ability in self-care, anxiety concerning physical illnesses, changes in physical conditions and satisfaction with one's health, changes in personality, character and emotion, problems or events which affect mental and psychological conditions in the forms of anger, guilt feeling, self-control, self-satisfaction with work duties and past achievements.

4. Social factors These include loss or separation of family members, e.g. spouses, offspring or relatives, loss or separation from friends, occupation and income, economic conditions and satisfaction with those conditions, change of residence, loss of job or resignation from it, solitary existence leading to lonesomeness, aloneness, lack of familial interactions, social participation, physical exercises, participation in religious activities, recreation, recognition or respect displayed toward the elderly, self-satisfaction or satisfaction with one's own image.

Almost all the above factors, after the analysis, was found to be in one way or another correlated with depression in the elderly with the statistical significance of $p < .05$. Some were found to positively correlated with depression in both areas, while others were so correlated only in one area. The following variables

Table 1. Prevalence of depression in the Elderly in Bangkok and Uthaithani.

Area	Depression	
	Number	Percent
Bangkok (N=396)	318	80.3
Uthaithani (N=315)	276	84.8
Total	**711**	**82.3**

Table 2. Percentage of depression in elderly by personal data in both area.

Factors	Bangkok (n=396)	Uthaithani (n=315)
1. sex male : female	27.4 : 72.6*	40.8 : 59.2
2. age (60-90 year)	68.91*	69.97*
3. native town		
- born and stay here	36.1	84.5
- move from other area	63.9	15.3
4. familial status		
- leader	37.3	60.5
- tenant	62.7	39.5
5. marietal status	*	
- single	2.9	1.5
- married	47.0	60.7
- widowed	44.1	36.0
- divorced,separate	6.1	1.9
6. educational status	*	*
- none,cannot read and write	35.8	38.6
- none,can read and write	17.0	14.6
- educate	47.2	46.8
7. religion		
- Budhist	79.0	98.9
- Christian	0.3	1.1
- Islam	20.0	-
- Khongjuo	0.3	-
- Hindu	0.3	-
8. supporting role to others		
- no	74.8	59.6
- do	25.2	40.4
9. source of finance	*	*
- ownself	31.3	42.5
- support from others	68.7	57.5
10. problems faced after 60 year of age	*	*
- none	4.4	8.2
- have problems	95.6	91.8

*$p<0.05$

Table 3. Summary table of factors correlate to depression in elderly in Bangkok and Uthaithani province*.

Bangkok	Uthaithani
1. Sex (female)	1. Increasing age
2. Increasing age	2. Low educational status
3. Marietal status (married)	3. Role of supporting and taking care to others
4. Low educational status	4. Source of finance (depend on sons, daughters, grandchild support)
5. Source of finance (depend on sons, daughters, grandchild support)	5. Problems faced after 60 year (health, financial and economic, insomnia)
6. Problems faced after 60 year of age (health, financial and economic, insomnia)	

* $P < 0.05$

Table 4. Percentage of depression in elderly by age, compared between Bangkok and Uthaithani.

Age range (year)	Bangkok (n=396)	Uthaithani (n=315)
60-64	34.3 (78.4)	25.5 (78.0)
65-69	23.9 (80.8)	23.5 (82.9)
70-74	22.6 (79.1)	25.3 (91.8)
75-79	8.5 (81.8)	16.9 (86.1)
80-84	6.9 (84.6)	7.1 (86.4)
> 85	3.1 (92.3)	1.6 (100)

Table 5. Persentage of depression in elderly by sex, compared between Bangkok and Uthaithani.

Sex	Bangkok (n=396)	Uthaithani (n=315)
male	27.4*	40.8
female	72.6*	58.2
total	100	100

* $p<0.05$

were exceptional cases in which no correlation of $p>0.5$) was found with incidence of depression, such as history of having one or two parents or relatives suffering from some type of mental disorder, frequency of hospitalization during one year previous, change of residence, loss or separation from close friends during the previous year. Thus the investigators decided to bring all variables, plus ten personal data for discrimination analysis through SPSS and step-wise for culling or isolating those variables which were truely correlated with depression. The results were as follows.

In Bangkok (Table 6), satisfaction with one's health conditions could be the first rank as negatively related to depression. Those who could adjust oneself to the inevitable decline through aging would be less likely to suffer from depression. The second rank was the category of having to face with variety of problems after the age of 60, with more problems we found more depression. Common problems were health problems, financial and economic problems and insomnia. Compared to other reports, these factors correlated to depression in the elderly as high as 35%.[20]

Table 6. Summary table of factors correlate to depression in elderly in Bangkok.

Ranking number	Factors
1	Satisfaction to health status
2	Problems faced after 60 year of age
3	Frequency of lonely feeling
4	Female sex
5	Personality and emotional change
6	Social respect and acceptance
7	Loss of spouse and close relatives
8	Increasing age

$P<0.01$

Table 7. Summary table of factors correlate to depression in elderly in Uthaithani province.

Ranking number	Factors
1	Satisfaction to health status
2	Personality and emotional change
3	Drugs and substances used (betal, areca nut)
4	Capacity of mental and emotional controlled to life stress situation
5	Problems faced after 60 year of age
6	Frequency of religious activity participation
7	Physical and mental illness

$P<0.01$

Another significant variable was loneliness or the feeling of solitary existence. The correlation can be easily explanable in view of special need for companionship in old age. Thai family used to be predominantly extended in character, i.e. having several members with differing age-group is one residence. In Bangkok, a heavily densely populated area, nuclear family with few members tend to be on the rise. Thus companionship is increasingly lacking. As for sex or gender as variable, proportionately more females tended to suffer from depression. That may be related to the fact that women, even at an old age, were expected to help with grandchild's rearing. Social recognition was negatively correlated with depression, for the simple reason that it is one of basic human needs, as thorized and pronounced by Maslow in the form of "esteem". Loss of or separation from loved ones could help bring about depression because it means there is no one to keep company or give solace, when required. Older age caters to depression because it tends to be associated with the discrepancy between physical strength and problems faced.

The data for the rural area in Uthaithani province (Table 7) ranked the variables in terms of correlation from the strongest to the stronger as follows: satisfaction with one's health, and changes in personality and predisposition (in Bangkok this variable ranked no. 5). Chewing betal nuts and smoking was the habit or practice of the elderly in both areas. But only in Uthaithani were they found to have significant relationship with depression. The variable with negative correlation to depression was ability to control one's self. As for the number of probems faced beyond the age of 60, the data were similar with those ini Bangkok, e.g. health, financial and insomnia problems. Another variable, it was found that those who took part in religious activities were less prone to depression. That may be because participation means having company. Otherwise those who go to a monastery in Thailand may wish to practice meditation for peace of mind. Illness and anxiety about illness were correlated with depression probably due to 2 reasons, fear of death were correlated with depression probably due to 2 reasons, fear of death and cost of caring as well as negative effects on routine works.

Common variables found in both areas were satisfaction with one's health (ranking no.1) and changes in personality and predisposition. Those two factors are natural outcome of the aging process. To alleviate the incidence of depression it is thus suggested that old people are to be encouraged to join religious activities and to be adumbrated upon again and again that on must stand up to face changes which are always inexorable. Furthermore, it is incumbent upon the authorities concerned to propagate the ways and means of keeping healthy body and a sane mind.

Discussion

The prevalence of 80.3% and 84.8% of depression in the elderly of Bangkok and Uthaithani province has some policy implications. Depression cases must be well taken of, despite unfavorable attitude toward the malady as espoused by the general public, public health officials and even physicians.[21] Health personnel often harbors the feeling that treating depression patients is downgrading. Besides, their age speaks for itself as being near death's door. Health personnel may feel therefore that it is hardly worth the effort.[22] In addition, treating means being in proximity with the depressive patients, causing a dismal outlook. It is thus necessary to think seriously as to the manner of facing up with the depression incidence. Preventive efforts should be methodically conducted apart from habilitation and remedy.[23] Socio-cultural environments should be taken into consideration.

Concerning social psychological factors regardless of the area and whatever they are; health, financial and economic, insomnia, loneliness, etc. should be tackled via the 3 type mechanism of community mental health care, namely, promotion, prevention and remedy, covering the providers and the receivers of the service. The receivers or the targets are the public in general. If the targets become more specific, it is necessary to supply the best service possible to the depressive patients for humanitarian sake as well as to alleviate negative socioeconomic consequences. It is important to garner cooperation from those in the receiving end. In addition, information flow should be continuous to self-help care, public health measures and risk factors.

Conclusion

Prevalence of depression in the elderly were 80.3% and 84.8% in Bangkok and Uthaithani. Factors correlated to depression in the elderly were biological and psychosocial. We found difference among factors correlated to depression in each area, urban and rural area.

Suggestion

The presentation should serve a two-fold purpose. First, it may serve as a basis for policy making. Second, the data serve as a starting point for future research work for the benefits of the elderly by finding strategies in prevention, control and management of depression that can be the measures in improving quality of life.

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