INDIAN ELDERLY: COPING WITH CHRONIC ILLNESS

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Summary
Chronic illnesses are an integral part of the process of old age and present as repetitive psychological stress as a result of physical disability, decline in productivity and finances, and disruption in family and social life. Coping is the process of adjustment with stress of any kind. Coping behavior changes over life span normatively as people grow old. The effect of age on coping abilities of 100 patients hospitalized with a chronic respiratory illness was evaluated. Patients were divided into 3 groups on the basis of age; young: aged between 12-39 years, middle aged: in the age group of 40 to 59 years, and elderly: aged 60 years or more. The coping resources were found to be similar in all the three groups. They were highest in the middle aged although there were significant variations in different domains. The average scores in the cognitive domain were significantly highest in young and steadily declined with age. On the other hand the coping resource in spiritual domain was also lowest in young which significantly improved with age. Thus the ability to cope with stress does not decline with ageing though the mode of coping changes with spirituality taking over the sense of self worth and optimism towards life.

Key words: Coping, coping resources inventory, ageing, elderly, chronic illness.

Introduction
Multiple chronic illnesses are an important aspect of old age. Chronic illness apart from its effect on physical state has significant impact on psyche of the individual, decline in productivity and financial status, and disruption of the family and social life. Chronic illness thus is stressful, which unlike acute illness has an extended time course and produces repetitive emotional stress. Several psychiatric disorders are known to be associated with chronic illness which results from this stress. Coping or attempting to restore order into one’s life

is a psychological process evoked by stress in dealing with the changes in the environment. It serves as an internal source of emotional strength and mediates an individual’s reaction to perceived stress; internal or external. Coping behavior tends to vary in different situations as observed in different disease states, and changes over the life span normatively as people age. It has been hypothesized that people become more effective and realistic in face of various stresses of life as they grow older. The concept of coping with stress has two components; namely: coping strategies and coping resources. While coping strategies comprise of actions of an individual in reaction to a specific stressor occurring in a specific concept, coping resources have been defined as adaptive capacity that provide immunity against damages from stress. Hammer and Marting defined coping resource as an inherent ability of an individual that enables him or her to deal with a stressor more effectively, experience fewer/less intense symptoms on exposure to a stressor and recovers faster from exposure. It is viewed as a pre-disposition derived from genetic factors, environmental influences and learned relationship. It can be considered as a “social and psychological prophylaxis” that can reduce the likelihood of stress induced disease. Individuals with low resources have been described as vulnerable and constitutionally fragile while those with high resources have been characterized as hardy and resilient.

Research into association between physical illness, psychological stress and coping with physical and psychological stress has generated considerable interest over the years. Clinical theory and practice most often focus on what is wrong with people rather than what is right with them. There is a need to emphasize on resources rather than deficits. Identifying and acknowledging clients’ resources and competencies as well as their deficits and impairments may prove useful in designing interventions and in improving self-concept. In the
present study we are reporting our assessment and comparison of the coping resources in subjects in a wide age range with a common denominator that is a chronic respiratory disease necessitating hospitalization. Respiratory diseases are common in all age groups in this geographical area accounting for a large number of out patient consultation and hospitalization. Patients admitted to a referral hospital with chronic respiratory disease were arbitrarily divided into three age groups.

Materials and methods

One hundred consecutive patients hospitalized to medical wards of tertiary care hospital were subjects of the study. The sole inclusion criterion for the study was presence of a chronic respiratory disease present for at least six months. Patients with lung cancer were excluded from the study along with critically ill patients, or those having confusion, delirium or dementia.

Patients were interviewed through a pre-tested, semi-structured protocol for information on demographic details, family structure, family support and family crises (financial, social, bereavement) in the preceding year. The diagnosis was confirmed by clinical evaluation and laboratory investigations. Patients were administered the questionnaire (Coping Resource Inventory; Hammer and Marting, 1988) for evaluation of their ability to cope with the disease. This particular scale was adopted as it had been translated to local dialect (Hindi) and the translated version had been validated by earlier workers.

The inventory comprised of 60 items to be answered on a 4 point scale, namely: never/rarely, sometimes, often and always/almost always, to indicate how often they engaged in the behavior described in the item. The responses were supposed to have been experienced in the preceding six months.

Coping resource inventory measured coping resources in five domains namely:

1. Cognitive - that is the extent to which an individual maintained a positive sense of self worth, positive attitude towards others and optimism about life in general, (9 items);
2. Social - that is the degree to which an individual was embedded in social networks that are able to provide support at times of stress, (13 items);
3. Emotional - that is the degree to which an individual was able to accept and express a range of affect, based on the premise that a range of emotional responses aids in ameliorating long term negative consequences of stress, (16 items);
4. Spiritual or Philosophical - that is the degree to which action of an individual was guided by stable and consistent values derived from religious, familial or cultural tradition or from personal philosophy such values might serve to define the meaning, of potentially stressful events to prescribe strategies for responding effectively. The content domain for this scale is broader than traditional western religious definitions of spirituality (11 items); and
5. Physical - that is the degree to which an individual enacts health promoting behaviour believed to contribute to increased physical well being. Physical well being is thought to decrease the level of negative response to stress and to enable faster recovery. It may also help to attenuate potentially chronic stress-illness cycles resulting from negative physical responses to stressors that themselves become major stressors (11 items).

Analysis

Subjects were divided into three age groups: young-12-39 years, middle aged-40-69 years, and elderly-aged 60 years or more. The raw scores were converted to standard scores having a mean of 50 and standard deviation of 10 points, as direct comparison among scales based on raw scores is usually not possible. Statistical methods for comparison of data in different groups included Chi-square test for non-parametric variables and student’s t test and one way ANOVA for continuous variables.

Results

One hundred hospitalized patients (males: 56 and females: 44) suffering from a chronic respiratory illness were evaluated for their coping resources. The age and sex distribution and family structure are presented in table 1. One young and one middle age subject were living alone. Analysis of family structure of these subjects revealed existence of joint family system with more than eighty percent of elderly subjects cohabiting with their married

<table>
<thead>
<tr>
<th>Group(n)</th>
<th>Mean age</th>
<th>Sex</th>
<th>Family structure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Years)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I (43)</td>
<td>24.3(+7.5)</td>
<td>25</td>
<td>18</td>
</tr>
<tr>
<td>II (15)</td>
<td>44.9(+4.7)</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>III (42)</td>
<td>65.3(+5.8)</td>
<td>25</td>
<td>17</td>
</tr>
</tbody>
</table>
children, whereas most (70%) younger subjects were living in nuclear family system (p<0.05). All but two subjects (one middle age and one elderly) reported availability of family support at the time of illness. Family crises were reported by 16.5% younger patients, 20% of middle aged patient and 21.4% of the elderly, the difference were however not statistically significant. The distribution various diagnoses are present in table 2.

### Table 2: Chronic respiratory disease in different age groups.

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Young (n=43)</th>
<th>Middle age (n=15)</th>
<th>Elderly (n=42)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bronchial asthma</td>
<td>39</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Chronic obstructive airway disease</td>
<td>1</td>
<td>6</td>
<td>37</td>
</tr>
<tr>
<td>Bronchiectasis</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Interstitial lung disease</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

The coping resources of these subjects are presented in table 3. There was no significant statistical difference in total coping resources in different age bands (p=0.249), though the scores were highest in the age group of 40 to 59 years. There was significant difference in coping resources in the cognitive, physical and spiritual domains (p=0.023, 0.0002 and 0.003 respectively) in the three age bands. Young and elderly subjects showed significant difference in the cognitive (p=0.004), physical (p=0.002) and spiritual domains (p=0.003). Middle aged subjects had better coping resource in physical domain compared to young (p=0.020) and old (p=0.0001) but lower coping scores in spiritual domain compared to the elderly (p=0.049) and in cognitive domain compared to young (p=0.033). In other words younger individuals were able to cope with the stress of chronic ill health by a positive sense of self worth and optimism in general and health promoting attitude in particular. On the other hand the elderly subjects coped with the similar stress with philosophical attitude and consistent values derived from religious, familial or cultural tradition. The middle aged subjects had better health promoting attitude compared to other age groups though not in their sense of self worth and spirituality. The coping resources in social and emotional domains were similar in various age bands (p=0.300 and 0.305).

### Discussion

Chronic illness is a common situational crisis, affecting an individual with continuous or repetitive stress of physical pain and disability, low self-esteem and low self-image, disruption of the family and social life; and decline in financial resources over an extended time course. Coping with chronic illness is thus a continuous process of repeated adjustment with life\(^8\). Coping with specific disease process namely: myasthenia gravis\(^7\), and chronic low back pain\(^8\) among others have been studied in the past. In the present study the stressor selected is an uniform disease with accompanying disability and the general impact of illness. Intensity of stress was presumed as uniform in all the subjects. Thus it is likely that the process of learning and experiencing along with the changes in the environment through the process of ageing may alter the coping behavior and resources. The effect of ageing on different domains of coping resources was analyzed in the present study in detail. The quantitative expression of coping as indicated by total score in coping resource inventory was not different in different age groups. This is not a surprise as the individual would tend to cope with stress whatever may be its nature, though the ways of coping would differ in different age groups. Chronically ill children in spite of having greater vulnerability to various types of psychiatric disturbances, have better functional strengths and coping abilities, appreciably outweighing their weakness\(^10\). They view illness as restriction to freedom and disruption of education and are generally hopeful and show optimism regarding their illness. In another study on pre-adolescent and adolescent children with a chronic disease, significantly low levels of depression and anxiety were reported in the pre-adolescent children\(^20\). They were also detected to have more positive coping ability in their behavior than their older counter parts. This indicated general positivism towards life of youth declining with ageing. Similar observations were made in our study as indicated by significant higher scores in the cognitive domain in young patients compared to other age groups. Coping
styles in the elderly and the middle age patients were based on spirituality and positive health promoting attitude. The elderly resort to spirituality to manage the stress accompanying old age namely, bereavement, loneliness, economic decline and ill health. Freud had conceptualized coping as a more or less unconscious personality process determined by childhood experiences whereas stress is an external condition, the environment. The environment is perceived and interpreted leading to adaptive coping processes arising out of the person’s own agenda. A transition through the ages was observed in our study in the domain of positivism which declined with age; and spirituality and philosophical attitude towards life improved with the experience and learning associated with the process of ageing. On the other hand, health promoting attitude peaked in the middle age to decline with ageing.

The role of family in coping with stress is well documented. Social network interactions have been considered as a potential source of both stress and support for individual coping with a chronic illness. Supports from family and carers around patient are an important factor against the stress of the disease. The impact of social factors namely; family support and family crises on coping abilities were not evident in the present study. However, the presence of a joint family structure providing the company of off springs may have had a positive impact on the coping abilities of the elderly.

Coping ability to adapt to the stress of chronic disease is not lower in the old. The younger subjects adapt to stress with optimism, social interaction and health promoting behavior while the elderly derive strength from their stable, spiritual and cultural values and being philosophical about the inevitable.

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References