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LEARNED HELPLESSNESS AND ASTHMA RELATED MORBIDITY: EXPLORING THE GENDER DIFFERENCES

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Abstract: Gender as a variable in experiencing psychological capabilities and deficiencies has shown varied results, it is ambiguous. This study investigates the relationship between learned helplessness and asthma related morbidity in relation to the gender variable. The objective was to study the impact of psychological factor like learned helplessness on asthmatics and non-asthmatics and understand the gender differences if any. The study adopted a 2(asthmatics v/s non-asthmatics) X 2(males' v/s females) factorial design. Two hundred and forty adults (120 with asthma and 120 without asthma) participated in the study. Out of 120 asthmatics there were 60 males and 60 females. Further 60 males and 60 females not suffering from asthma were taken All the participants were compared with respect to learned helplessness. Three aspects of learned helplessness that is internality, stability and globality were studied. The results indicated that asthmatics scored more in all the three negative aspects of learned helplessness. As far as gender difference is concerned females viewed negative events to be more internal, stable and global compared to males. Males viewed positive events to be more internal, stable and global.
Keywords: learned helplessness, asthma, gender difference

Introduction:

A chronic lung condition that affects people of all ages is asthma. Inflammation and tightness in the muscles surrounding the airways are the causes. This makes breathing more difficult. Underdiagnoses and under treatment of asthma are common, especially in low- and middle-income nations. It is a psycho-physiological condition with real physical symptoms that can be exacerbated by emotional causes or are itself caused by them. Anxiety, tension from irritation, rage, melancholy, and the expectation of pleasant thrill through emotionality all disrupt the respiratory system's normal functioning and can lead to an asthma attack. Individuals who have untreated asthma may experience difficulty sleeping, fatigue during the day, and difficulty focusing. People with asthma may miss work and school, which has an economic impact on the family and the larger community. If symptoms are severe, people with asthma may need to receive emergency health care and they may be admitted to hospital for treatment and monitoring. In the most severe cases, asthma can lead to death.

The fast-paced nature of modern life, coupled with professional success, personal goals, social demands, environmental toxins, and a tendency toward sedentary mental work, leaves nearly

everyone feeling hopeless and powerless. Reactions to uncontrollable situations brought on by the belief and understanding that actions and results are separate from one another are known as learned helplessness. There may be a connection between asthma and learned helplessness, according to new research. Reactions to uncontrollable situations brought on by the belief and understanding that actions and results are separate from one another are known as learned helplessness.

The Correlates of helplessness:

Perception of control: The construct of control is believed to be a core construct for the prediction of helplessness (Langer,1983). Coping with a stressful event can be greatly enhanced by a sense of control (Thompson,1981). Thoughts of cognitive control are generally referred to as cognitive control which focuses on whether the individual believes that he or she guided or is guided by the events in life.

Locus of control: The concept developed by Rotter (1966) refers to the extent to which people believe that events are shaped by forces over which they excise some control. People with an internal locus of control believes that they play a role in determining the events that impinge upon them .Thus they suffer less threats and fewer adverse consequences than the externally oriented individuals who tend to believe in luck or fate .Persons with external locus of control believe that they have little influence upon situations and outcomes .Mc Naughton et al.,(1995) studied the relationship among stress, depression, locus of control, irrational beliefs, social support and health in Alzheimer's disease caregivers .Resulted suggested that overall the experience of marked adversity, increased externality and the endorsement of irrational beliefs were related to depression and poor health. Satisfaction with social support and diminished adherence to irrational beliefs were related to improved ratings of subjective health over time. These findings indicate that psychosocial interventions designed to modify cognitive reactions to stress might improve the quality of life and the physical well-being of a population at a risk for poor health as a result of their age and life circumstances.

Attributional style: Attribution is the process through which individuals seek to determine the causes behind others behaviour. People commonly attribute their illness to heredity, the actions of other people, the environment, fate and their own character (Michela and Wood,1986). Creswell and Chalder (2010) examined the relationship between illness attributions and general attributional style in chronic fatigue syndrome (CFS). In the study participants with CFS answered questions on their explanation for their illness and completed the Attributional Style Questionnaire. Results indicated that 58.3% of the participants attributed their illness to predominately physical factors.

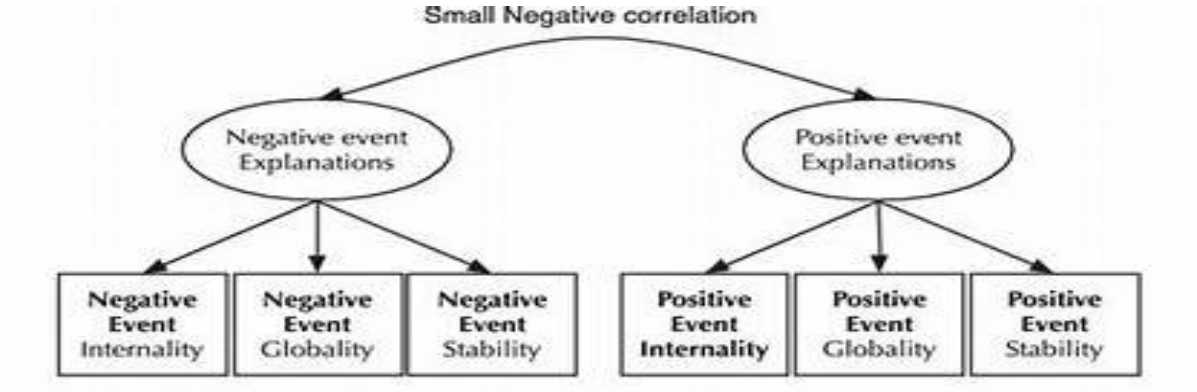

Fig 1: LHAS Model

The notion that a certain outcome exclusively affects the subject or that it affects everyone at both ends of the internal-external dimension anchors the continuum at either end. Stable-unstable is a continuum with beliefs at each end indicating that the current challenges leading to the current result are transient and will pass or that they are unsurmountable and will remain forever. The term "global-specific" refers to a spectrum that is defined by two contrasting ideas: either a more general sense of helplessness toward all tasks, or the belief that a task's inherent helplessness causes a particular experience of helplessness. Determining a person's attributional style based on these three factors may provide information for forecasting results and recommending helpful intervention techniques.

Theoretical Frameworks:

Learned Helplessness and Disease Susceptibility:

Hommela et al. (2005) used an experimental approach that included behavior outcome contingent and non-contingent feedback to explore the learned helplessness conceptualization of psychological consequence in children and adolescents with juvenile rheumatic disease (JRD). Before and right after a computerized learned helplessness induction technique, researchers collected data from thirty-eight children and adolescents with JRD. They then completed measures of transitory affect, self-efficacy for functional ability, and casual attributions. The findings showed that children's positive affect declined in both contingent and non-contingent feedback circumstances, with the non-contingent condition showing a somewhat more marked reduction. When given non-contingent feedback, problem solvers internalized achievement less effectively than when given contingent feedback, which led to a higher degree of internalization. Additionally, there was a considerable increase in post-treatment control self-efficacy which was significantly greater for children in the contingent that initially endorsed higher levels of internal task attributions.

Learned helplessness and Asthma:

In their 2001 study, Mullins et al. examined the relationship between psychological adjustment, attributional style, and illness uncertainty in older adolescents and young adults with asthma. They looked at the psychological adjustment in a group of 49 college students who had experienced childhood asthma as older teens and young adults. A considerable proportion of participants had clinically noteworthy levels of general distress. Furthermore, even after adjusting for demographic and disease-related characteristics, there was a significant correlation between worse psychological adjustment and higher levels of perceived asthma uncertainty and more stable attributions for unpleasant occurrences. Subsequent examinations uncovered a moderating impact of uncertainty on the links between attribution and adjustment. These results offer preliminary backing for the cognitive diathesis-stress theory of asthmatic long-term adjustment. The findings also corroborate an increasing amount of data indicating that the focus These findings provide initial support for a cognitive diathesis-stress view of adjustment in long standing asthma. Results also support a growing body of evidence suggesting that the focus of efforts to enhance adjustment to asthma need to be expanded beyond childhood and early adolescence.

Learned helplessness and Gender:

Gender differences are found in many psychological variables although some researchers opined that sex differences show a gradual trend of abridging with the increase of age. On the other hand, many research studies indicated no sex differences in several psychological aspects. Sahoo and Rath (1989) conducted a study to analyse sex difference as in helplessness across boys and girls. Results indicated no significant indication of sex differences. Radloff (1975) studied the sex differences in depression, focusing on the effects of occupational and marital status. From his study he found that both housewives and working wives are significantly more depressed than working husbands. Although working wives report that they do more household than husbands, this factor is not significantly related to depression for either wives or husbands. It was suggested that the risk factors for depression including marriage for women may be better understood in the context of clinical theories of depression, especially the “Learned Helplessness Model”.

Objective of the study:

The present Study aims to

1. To measure the impact of learned helplessness on Asthma Morbidity
2. To identify the factors of learned helplessness which have an impact on asthma patients
3. To explore the role of gender in experiencing Learned helplessness and asthma morbidity
4. To experiment the scale on both Asthmatic and non-Asthmatic patients to compare experiences in dealing with disease morbidity

Method:

The participants of the present study comprised of two hundred and forty participants (120 with asthma and 120 without asthma). The participants were selected from urban areas of Odisha. Out of 120 asthmatics there were 60 males and 60 females. Similarly, in case of 120 non-asthmatics

individuals there were 60 males and 60 females. All the participants were educated and their minimum qualification was fixed at graduation. The age range of respondents varied from 30 to 50 and the average age was 42.41 years (SD=3.39). All there participants had middle socio-economic status.

Instruments:

Measure of helplessness. Attributional style Questionnaire (ASQ)developed by Seligman and adopted by Sahoo to the Indian version was employed. It has twenty four items .In each item an event is indicated and two causes are mentioned .Participants are asked to imagine each event happening to him and her and decide the cause that appears appropriate in his or her case .It takes into account three aspects of helplessness that is internality, stability and globality .the questionnaire included information regarding the participants age, health status ,sex, education ,socio-economic status ,year of onset of the disease and duration of treatment.

Procedure:

The study involved a 2(asthmatics versus non-asthmatic) X 2(males versus females) factorial design. The participants of these four quasi experimental groups were compared with respect to learned helplessness.

Results:

The helplessness variables include analysis of attributional style for positive and negative events. The summary of analysis of variances performed on attributional scores of participants for positive events are presented in table 1. The mean ratings and standard deviations on attributional scores of positive events are presented in Table 2.

Table 1: Analysis of variance performed on Attributional Scores for Positive Events of Participants.

Scores	df	MS	F
Status	1	1135.35	404.63**
Sex	1	36.82	13.12**
Status x Sex	1	2.82	1.00
Error	236	2.81	

Note: *P < 0.01

Table 2: Mean Ratings on Attributional Scores for Positive Events of Participants.

Groups	Males		Females		Combined
	M	SD	M	SD	M
Asthmatics	5.22	1.76	4.22	1.72	4.72
Non-asthmatics	4.35	1.69	8.78	1.52	9.07
Combined	7.29		6.5		

The analysis of variance (ANOVA) performed on attributional scores of positive events shows significant effect for status,

F (1,236)=404.63,P<0.01.The mean scores shows that non-asthmatics revealed less attributional scores for positive events compared to asthmatics (M=9.07 4.72,respectively).The result also shows significant effects for sex F(1,236)=13.12,P<0.01.As depicted in Table 2 ,the attributional scores of males for positive events are more compared to females (M=7.29 and 6.5,respectively).Further analysis shows non -significant interaction effect for status x sex ,F(1,236)=1.00,n.s.That shows asthma and sex combinedly do not have an impact on total attributional scores of participants for positive events .

Table 3: Analysis of variance performed on Attributional Scores for Negative Events of Participants.

Scores	df	MS	F
Status	1	728.02	162.79**
Sex	1	58.02	12.97**
Status x Sex	1	3.27	.73
Error	236		

Note: *P < 0.01

Table 4: Mean Ratings on Attributional Scores for Negative Events of Participants.

Groups	Males		Females		Combined
	M	SD	M	SD	M

Asthmatics	7.42	1.97	8.63	2.77	8.03
Non-asthmatics	4.17	1.71	4.92	1.84	4.55
Combined	5.79		6.77		

The analysis of variance performed on the attributional scores of participants for negative events shows significant main effect for status ,F(1,236)=162.79,P,0.01.As shown in Table 4.non-asthmatics showed greater attributional scores for negative events compared to asthmatics (M=4.55 and 8.03,respectively).The result also shows significant effect for sex ,F(1,236)=12.97,P<0.01.As depicted in Table4.the attributional scores of participants for negative events of males are less compared to females (M=5.79 and 6.77,respectively).Further, analysis shows nonsignificant interaction effect for status x sex ,F(1,236)=.730,n.s.That shows asthma and sex combinedly do not have an impact on attributional scores of participants for negative events

Discussion and Conclusion:

Helplessness imprisons people in the cell of passivity. These people display gloom and demonstrate inactivity. Helplessness syndrome not only creates a condition of immobility for the individual, it also brings in various forms of collective impoverishment. Asthma is an illness of major public health concern. Asthma has historically been categorised as a psychosomatic illness. Genetic vulnerability, allergic sensitivity, immunological compromise and psychological stressor all contribute to the onset and severity of asthma. The present findings showed that asthmatics possessed greater maladaptive attributional style than non-asthmatics .It was found that asthmatics possessed greater learned helplessness for positive events which included internality, stability and global dimensions compared to non-asthmatics .From the findings it was also found that the scores of asthmatics were high for negative events compared to non-asthmatics .Asthmatics felt that they themselves were responsible for all the negative events that occurred in their life. They even felt that those negative events would be stable, permanent and would even have an impact on all aspects of their life. Studies have pointed out that relationship exists between asthma and learned helplessness. Calfee et al., (2006) studied the impact of psychological factors in asthma outcomes. Results pointed out that greater perceived control was associated with better physical health status, fewer days of restricted activity due to asthma and lower asthma severity scores. Results also showed improved asthma related health status as well as with a decreased prospective risk of severe asthma attacks resulting in emergency health care utilization. Chaney et al., (1999) examined the effects of experimentally induced learned helplessness in older adolescents and young adults with long standing asthma. Asthma is included in the WHO Global Action Plan for the Prevention and Control of NCDs and the United Nations 2030 Agenda for Sustainable Development. WHO is taking action to extend diagnosis of and treatment for asthma in a number of ways.

The WHO Package of Essential Noncommunicable Disease Interventions (PEN) was developed to help improve NCD management in primary health care in low-resource settings. PEN includes protocols for the assessment, diagnosis and management of chronic respiratory diseases (asthma and chronic obstructive pulmonary disease), and modules on healthy lifestyle counselling, including tobacco cessation and self-care. Reducing tobacco smoke exposure is important for both primary preventions of asthma and disease management.

The Global Alliance against Chronic Respiratory Diseases (GARD) contributes to WHO's work to prevent and control chronic respiratory diseases. GARD is a voluntary alliance of national and international organizations and agencies from many countries committed to the vision of a world where all people breathe freely.

Results indicated that participants with long standing asthma demonstrated significantly greater problem-solving deficits following response non-contingent feedback compared to the healthy cohort group and were at increased risk for depression and learned helplessness.

The present study also reveals that the overall (positive)scores of males are more compared to females. Gender differences are mainly due to social experience. Gender differences in personality mainly results from the contrasting roles of females and males .In most cultures around the world, females have less power and status than males have and they control fewer resources (Wood,2001).Compared with men ,women perform more domestic work, spend fewer hours in paid employment ,receive lower pay and are more thinly represented in the highest levels of organizations .The social hierarchy and division of labour are important causes of gender differences in power ,assertiveness and nurture(Eagly & Diekman,2003).

Learned helplessness has tremendous intuitive appeal .Overgeneralisations and arbitrary inferences found in depressives (Beck,1967)seem to stem from global and stable explanation of causes .Therefore, firstly therapy needs to be geared -up to change the estimated probability of the outcome .This can be done by changing the environment in such a way as to reduce the likelihood of aversive events and increasing the likelihood of desirable events .Secondly treatment needs to be directed towards changing expectation of uncontrollability to controllability .If the patient does not possess skill ,skill training is necessary and awareness has to be strengthened .Finally changing attribution from unrealistic to realistic ones is crucial. Reattribution training would aim at changing internal, global and stable explanations of causes for bad events to external, unstable and specific explanation of causes. The reattribution training is not only useful at the time of treatment programme; it is effective as a preventive strategy.

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