

Suggested New Scoring Index for Diagnosis of Stressfulness Life's Events Among Adult's People within related effectiveness of Chronic Diseases.

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Abstract

Background: The relationship between stress and illness is complex. The susceptibility to stress varies from person to person. An event that causes an illness in a person may not cause illness in other person. Events must interact with a wide variety of background factors to manifest as an illness. Hypertension, Heart diseases including Ischaemic heart disease was associated with personal stress (e.g. relationship breakdown) and but not with work-related stress (e.g. job loss) in middle-aged men. Personal stress being negatively associated with asthma.

Objective: To assess negative and positive association of stress fullness of life's events on adult's people according to new scoring scales for classification chronic diseases.

Patients and Methods: Cross sectional study done among patients who had chronic diseases, of size (100) patients in Baghdad city from two sectors in Al- karkh and Rusafa during the period from 15th December 2015 till 30th March 2016. It was taking into account the views of experts on the scoping study stage (Validity) agreement, which came experts support the redistribution of the paragraphs of the proposed measure of stressfulness of life's events. The reliability coefficient index results came under the scale (alpha-kronor Bach) for internal consistency of a very high degree of reliability, which reflects the validity of the circulating current research on all members of the community the results of the study. Using statistical analysis of the relationship (arithmetic mean, standard deviation, and relative sufficiency, chi square test).

Results: Showed that a meaningful non linear regression model tested in two tailed alternative of statistical hypothesis between the two factors, chronic diseases problems concerning stressfulness of life's events. The slop value indicating that with increasing one unit of (chronic diseases problems factor) throughout reverse scoring scales, a negative decrement should be occurred in the unit of stressfulness of life's events factor, and estimated with (-0.15824) by the Logarithmic -Shape mode, and that decrement recorded a highly significant impact at $P < 0.01$.

Conclusion: The incidence of chronic diseases can put people in a position not to scorn or attention to detail from the painful life compared with people who do not have chronic diseases accidents, which was accomplished through the study of the stressfulness of life's events with increased diseases problems there found an inverse relationship, which has been achieved through the use of simple logarithmic regression mode.

Key words: Demographical Characteristics, Stressfulness of Life's Events, Chronic Diseases Problems.

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Introduction

Chronic diseases tend to become more common with age. Chronic diseases such as arthritis, heart disease and vascular (heart attacks and stroke), cancer (breast and colon), diabetes, epilepsy, seizures, obesity, and oral health problems. A disease that persists for a long time, chronic diseases in general cannot be prevented by vaccines or treatment by drugs, nor do they disappear completely [1].

Stress models are relevant; social, environmental, psychology (emotional) and biological stress [2]. Follow-up biological, psychological, and social issues relating to the relationship between stressful life events and physical health, and their implications important for the prevention and treatment of the physical diseases [3].

Stress is defined as a process in which environmental demands strain an organism's adaptive capacity resulting in both psychological demands as well as biological changes that could place at risk for illness [4]. Things that cause us stress are called stressors. Stress affects everyone, young and old, rich and poor. Life is full of stress. Stress is an every fact of life that we must all deal with. It comes in all shapes and sizes; even our thoughts can cause us stress and make the human body more susceptible to illness. There are three theories or perspectives regarding stress; environmental stress, psychological (emotional) stress and biological stress [4].

The environmental stress perspective emphasizes assessment of environmental situations or experiences that are objectively related to substantial adaptive demands. The psychological stress perspective emphasizes people's subjective evaluations of their ability to cope with demands presented to them by certain situations and experiences. Finally, the biological stress perspective emphasizes the function of certain physiological systems in the body that are

regulated by both psychologically and physically demanding conditions[2].

The relationship between stress and illness is complex. The susceptibility to stress varies from person to person. An event that causes an illness in a person may not cause illness in other person. Events must interact with a wide variety of background factors to manifest as an illness. Among the factors that influenced the susceptibility to stress are genetic vulnerability, coping style, type of personality and social support[2].

Previous studies indicated that acute and chronic stressful life events (SLEs) are associated with a whole range of health problems including psychological and physical impairments, cardiovascular diseases, gastrointestinal diseases, hypertension, diabetes, emphysema, asthma, and cancer. A variety of pathways linking LEs to health problems have been proposed: a) stress derived from LEs plays an essential role in development, continuation and exacerbation of various moods and mental abnormalities; b) LEs activate the sympathetic nervous system and the hypothalamic-pituitary-adrenal axis which in turn cause comprised or dysfunctional immunity, elevated inflammation, reduced telomere length, and latent herpes virus reactivation; c) LEs induce health problems via behaviors of health significances, e.g., smoking, drug using, suicide, loosed protection against job and environment hazards, low compliance with curative and preventive interventions [6].

Stressful of life's events have been found to be positively associated with chronic diseases, including ischaemic heart disease [10][11]. Type 1 diabetes[12]. And depression [13][14]. And obesity-related diseases [15][16]. Work or finance-related stressful events had increased odds for metabolic syndrome[16].

The aims of the present study to assess negative and positive association between the

stressfulness of life's events and chronic diseases.

Materials and Methods

Descriptive analytical study was carried out from 15th December 2015 conducted to 30th March 2016, on patients who had chronic illness. Cross sectional design of convenient of sampling technique among who had chronic diseases, of size (100) patients in Ibn Al-Nafis Teaching Hospital for diseases and surgery of blood vessels and heart attack and Iraqi Centre of Cardiology in the martyr Ghazi al-Hariri Teaching Hospital in Baghdad city from two sectors in Al- karkh and Rusafa. It was taking into account the views of experts on the scoping study stage (Validity) agreement, which came experts support the redistribution of the paragraphs of the proposed measure of Stressfulness of life's events . The reliability coefficient index results came under the scale

(alpha-kronor Bach) for internal consistency of a very high degree of reliability, which reflects the validity of the circulating current research on all members of the community the results of the study..Using statistical analysis of the relationship (arithmetic mean, standard deviation, and relative sufficiency, chi square test).

This study aimed to assess negative and positive association of stressfulness of life's events on adults people according to new scoring scales for classification chronic diseases.

1. Pilot Study – Reliability: A convenient sample of (10) individuals were selected cross sectional and shows the estimation of the reliability of the pilot study, this results shows that intra examiner (test & pretest), and inter examiners recorded highly and adequate reliability coefficients.

Table (1): Reliability coefficients of pilot study.

Reliability Coefficients	Actual values
Inter Examiners	0.93 (19:270)
Intra Examiner	0.96 (11:270)

Internal consistency was calculated by using: alpha cronbach, the internal consistency in light of responses is successful, all these means that designed

questionnaire were valid to study the phenomenon of the "suggested new scoring index for diagnosis stressfulness of life's events among adult's people chronic diseases.

Table (2): Reliability coefficients of the Studied questionnaire's items concerning psychological aspect.

Reliability Coefficients	Questionnaire	Standard lower bound	Actual values	Assessment
Methods of Reliability	Alpha (Cronbach)	0.70	0.9407	Excellent

Statistical analysis

1- Descriptive statistics: The following statistical data analysis approaches were used in order to analyze and assess the results of the study when using tables (frequencies, percentages), summary statistic tables (Mean of score, standard deviation, relative sufficiency, and ordered of the affected assess),graphical presentation by (Bar Charts, and long term trend of simple regression analysis model).

2- Inferential statistics: These were used to accept or reject the statistical hypotheses, which included the simple Linear and non-Linear regression models, such that (logarithmic, inverse, quadratic, cubic, power, compound, S-Shape, exponential, Growth and Logistic), for estimating unknown parameters of the function stressfulness of life's events, factor impacted by chronic diseases problems factor after selection an optimal unique model through

regression analysis of variance technique[7][8].

Result

The study sample consisted of patients with chronic diseases defined by the WHO-based Manual of Death according to the reason of the 11 sections and their branches [8].

Table (3) shows distribution of the studied sample "Socio-Demographical Characteristics" variables, with comparisons significant in order to exploring behavior elementary parameters either they are convenient or non- convenient distributed

comparing with their an expected outcomes, which shows significant differences in at least at $P < 0.05$ among different levels of that parameters. This table shows that males represent the largest group in the study and that the majority of the age group, including 23% with a married 76% and most of them high school by 33% and work by 31% and confirmed the study represents the economic and social situation of 50%, and those were moderate.

Table (3): Distribution of the studied sample according to Socio-Demographical Characteristics variables with comparisons significant.(N=100).

(*)SDCv.	Groups	No. & %	Cum. %	C.S. (*) P-value
Gender	Male	61	61	Bin. test P=0.036 (S)
	Female	39	100	
Age Groups	< 30	5	5	$\chi^2 = 28.52$ P=0.000 (HS)
	30 _ 39	7	12	
	40 _ 49	20	32	
	50 _ 59	23	55	
	60 _ 69	22	77	
	60 _ 69	18	95	
	70 _ 79	5	100	
Marital Status	Single	7	7	$\chi^2 = 143.28$ P=0.000 (HS)
	Married	76	83	
	Divorced	1	84	
	Widow	16	100	
Educational level	Illiterate	19	19	$\chi^2 = 13.00$ P=0.011 (S)
	Read & Write	17	36	
	Primary	11	47	
	Intermediate	20	67	
	Secondary	33	100	
Occupational level	Employee	31	31	$\chi^2 = 28.70$ P=0.000 (HS)
	Retired	26	57	
	Earners	12	69	
	Jobless	3	72	
	Housewife	28	100	
Socio-Economical Status	Low	45	45	$\chi^2 = 36.50$ P=0.000 (HS)
	Moderate	50	95	
	High	5	100	

(*)SDCv: Socio-Demographical Characteristics variables; Cum %:Relative Cumulation; C.S: Comparative significant; HS: Highly Sig. at $P < 0.01$; S: Sig. at $P < 0.05$; Testing based on One-Sample Chi-Square test, as well as Binomial test.

Table (4) shows observed frequencies, and percent of who had taking drugs for chronic diseases, with comparisons significant. Results indicating that rather than most of studied sample's responding are registered of having no chronic diseases with highly

significant differences at $P < 0.01$ compared with who had, except of who taken "anti-hypertension", and for "diabetic mellitus" drugs, since they are accounted a 86% , and 68% respectively, but it doesn't mean that studied sample are not with health

problems, such that with "anti-peptic ulcer", since who unpleasant incidents are accounted 26% , then followed with "thyroid gland" problems, since who unpleasant incidents are accounted 25% , then followed with "anti-hyperlipidemia" problems, and are accounted for 12% . Incidence of "Migraine" disorders", are recorded 5% , then followed with cerebral vascular accident , since accounted 4% . Using

"cardiac" drugs are accounted 33% , antithrombotic, rheumatoid, and abnormal inherited characters are accounted 16% , abnormal inherited characters are brain are accounted 2% , and finally, followed with who had unpleasant incidents to "asthma, psychiatric illness, and renal" they are accounted 1%.

Table (4): Distribution of (Taking Drugs for Chronic Diseases) with Comparison Significant(N=100).

<i>Drugs for diseased problems</i>	Resp.	No.	%	C.S. (*) P-value
Anti- Hypertension	No	14	14	P<0.001 (HS)
	Yes	86	86	
For Diabetic Mellitus	No	32	32	
	Yes	68	68	
Anti-Peptic Ulcer	No	74	74	
	Yes	26	26	
Anti-Thrombotic	No	98	98	
	Yes	2	2	
For Migraine	No	95	95	
	Yes	5	5	
For Cardiac	No	97	97	
	Yes	3	3	
For Thyroid gland	No	75	75	
	Yes	25	25	
* For CVA	No	96	96	
	Yes	4	4	
For Rheumatoid arthritis	No	98	98	
	Yes	2	2	
Anti-Hyperlipidemia	No	88	88	
	Yes	12	12	
For Asthma	No	99	99	
	Yes	1	1	
For Psychiatric Illness	No	99	99	
	Yes	1	1	
For Colon	No	98	98	
	Yes	2	2	
For Brain	No	98	98	
	Yes	2	2	
For Renal	No	99	99	
	Yes	1	1	

(*) HS: Highly Sig. at P<0.01; Testing based on Binomial test ; CVA : Cerebral vascular accident .

Table (5) shows number of applicable individuals to studied items concerning studied stressfulness of life's events, mean of score, standard deviation, and relative sufficiency for assessing "stressfulness of life's events". Regarding to this part measured of assessment are applicable

throughout scoring scales (high effect, mild effect, and no effect) in contrasts of scales (3, 2, and 1) respectively. In addition to that, three sequential intervals for assessing relative sufficiency's estimates in light of preceding scoring scales (77.77 – 100, 55.55 – 77.77, 33.33 – 55.55), are assessed by

(high, moderate, and low) respectively. As well as included of an initial assessment related to this part consists of (27) items, distributed in five domains, family and social, health, security criminal and legal, work and school, and financial.

Results shows that all of the studied questionnaire's items regarding of this part are assigned high effects, except two of them are assigned moderate, such that "spinster, and unemployment" items. For summarizing

of preceding results, it could be conclude that "stressfulness of life's events" faced high effects feeling with studied sample, high effects in light of family and social, high effects in view of health status, high effects with regards to security criminal and legal, high effects given to work and school and a high effects in consideration of financial affairs.

Table (5): Distribution of (Stressfulness of life's events) responding for adult's people with chronic diseases.(N=100).

Domain	Stressfulness of life's events	Non App.	MS	SD	RS %	Descending Ordered Scales	Assessments
A	Death of spouse	15	3.00	0.00	100	7	H
	Marital separation or brawl	32	2.91	0.30	97.0	13	H
	Marriage	71	2.83	0.45	94.3	14	H
	Pregnancy	9	2.78	0.44	92.7	4	H
	Spinster	7	2.14	1.07	71.3	3	M
	Failed romantic relation	87	2.48	0.78	82.7	16	H
	Son or daughter leaving home	87	2.78	0.52	92.7	17	H
	Trouble with relative of spouse	91	2.45	0.69	81.7	18	H
	Streets crowding	99	2.51	0.64	83.7	20	H
B	Personal illness	100	2.85	0.39	95.0	25	H
	Illness of one family member	100	2.73	0.51	91.0	24	H
	Sexual difficulties	99	2.38	0.78	79.3	19	H
	Change in sleeping habits	100	2.52	0.56	84.0	23	H
	Change in eating habits	100	2.51	0.58	83.7	21	H
C	Unsafe feeling	100	2.89	0.35	96.3	26	H
	Bombing accident in front you	100	2.90	0.33	96.7	27	H
	Listen bombing sound or gunshots sound	100	2.51	0.63	83.7	22	H
	Arrest of one family member	14	2.64	0.74	88.0	6	H
D	Unemployment	19	2.21	0.92	73.7	9	M
	Trouble with boss or co-work	32	2.59	0.56	86.3	12	H
	Change in work hours or prerequisites	32	2.34	0.55	78.0	11	H
	Change in occupation	25	2.40	0.58	80.0	10	H
	Spouse stopping work	9	3.00	0.00	100	5	H
	Change in place of school	-	-	-	-	1	-
	Examination	2	2.50	0.71	83.3	2	H
E	Change in financial status	85	2.98	0.15	99.3	15	H
	Taking out big loan for house or car purchase	18	2.89	0.32	96.3	8	H

*A: Family and Social: (3); B: Health: (2); C: Security criminal and legal: (1); D: Work and School: (5); E: Financial: (4). RS : Relative sufficiency.H :Highly Effect ,M: Moderate Effect , N :No Effect .

Table (6) shows the number of applicable individuals to studied items concerning

historical diseased problems, frequencies, percent , and comparisons significant.

Regarding to this part consists of (40) items, distributed in eleven domains, "Blood and circulatory system (Heart)", consists of the first (5) items, then followed with "Nervous system", consists of the next (5) items, then followed with "Urinary and genital system", consists of the next (5) items, then followed with "Digestive system", consists of the next (4) items, then followed with "Respiratory system", consists of the next (4) items, then followed with "Eyes", consists of the next (4) items, then followed with "Ears", consists of the next (3) items, then followed with "Muscles and skeleton", consists of the next

(3) items, then followed with "diabetes , goiter, anemia", consists of the next (3) items, then followed with "skin", consists of the next (2) items, then followed with "teeth and gums", consists of the next (2) items. The preceding classifications of historical diseased are dependent on the short classification's table which were issued by the international health organization WHO regarding the classification of deaths by (Cause-Specific Deaths Rates) in the manual index and mentioned in [8].

Table (6): Suggested distribution of "chronic diseases problems" with comparison significant(N=100).

Diseases/Disorders	R.	No.	%	CS	Diseases/Disorders	R.	No.	%	CS
Heart Failure	No	78	78	HS	Difficulty Breathing	No	75	75	HS
	Yes	22	22			Yes	25	25	
Arteriosclerosis	No	61	61	S	Tuberculosis	No	98	98	HS
	Yes	39	39			Yes	2	2	
Myocardial Infarction	No	47	47	NS	Asthma	No	87	87	HS
	Yes	53	53			Yes	13	13	
Hypertension	No	19	19	HS	Debility of Vision	No	51	51	NS
	Yes	81	81			Yes	49	49	
Hypotension	No	100	100	HS	Loss of vision	No	98	98	HS
	Yes	0	0			Yes	2	2	
Shaking Paralysis (Parkinsonism)	No	99	99	HS	Cataract	No	93	93	HS
	Yes	1	1			Yes	7	7	
Relaxation Paralysis	No	97	97	HS	Glaucoma	No	77	77	HS
	Yes	3	3			Yes	23	23	
Spastic Paralysis	No	91	91	HS	Debility of Hearing	No	75	75	HS
	Yes	9	9			Yes	25	25	
Chronic Headache	No	83	83	HS	Loss of Hearing	No	99	99	HS
	Yes	17	17			Yes	1	1	
Epilepsy	No	95	95	HS	Chronic Inflammation	No	100	100	HS
	Yes	5	5			Yes	0	0	
Chronic Inflammation	No	80	80	HS	Osteoporosis	No	96	96	HS
	Yes	20	20			Yes	4	4	
Retention of Urine	No	90	90	HS	Chronic Arthritis	No	63	63	S
	Yes	10	10			Yes	37	37	
Incontinence	No	98	98	HS	Back and Neck Chronic Pain	No	56	56	NS
	Yes	2	2			Yes	44	44	
Kidney Failure	No	97	97	HS	Diabetes	No	65	65	HS
	Yes	3	3			Yes	35	35	
Enlarged Prostate	No	93	93	HS	Goiter	No	94	94	HS
	Yes	7	7			Yes	6	6	
Chronic colon Inflammation	No	76	76	HS	Anemia	No	97	97	HS
	Yes	24	24			Yes	3	3	
Peptic Ulcer	No	88	88	HS	Eczema or Allergies	No	91	91	HS
	Yes	12	12			Yes	9	9	
Chronic Constipation	No	88	88	HS	Skin Ulcers	No	97	97	HS
	Yes	12	12			Yes	3	3	
Chronic Diarrhea	No	93	93	HS	Loss of Teeth and use Denture	No	63	63	S
	Yes	7	7			Yes	37	37	
Chronic Inflammation	No	86	86	HS	Gingivitis	No	75	75	HS
	Yes	14	14			Yes	25	25	

Table (7) shows according to the results of analysis of variance, regression analysis for several models, such that (linear, logarithmic, inverse, quadratic, cubic, power, compound, S-Shape, logistic, growth and exponential) are suggested for studying

impact of historical diseased on their stressfulness of life's events. The results shows that all studied models are registered high levels of fitness, since significant results are obtained in the regression analysis of

variance, and among that, logarithmic regression model seems to be the best.

Contenting required estimates of studying the nature of mentioned cause's correlation ship between chronic diseases problems concerning stressfulness of life's events.

Results showed that a meaningful nonlinear regression model tested in two tailed alternative of statistical hypothesis between the two factors, historical diseased problems concerning stressfulness of life's events. The slop value indicating that with increasing one unit of chronic diseases problems factor, throughout reverse scoring

scales, a negative decrement should be occurred in the unit of stressfulness of life's events factor, and estimated with (-0.15824) by the logarithmic -Shape mode, and that decrement recorded a highly significant impact at $P < 0.01$, as well as, strong correlation coefficient had reported between studied factors, and accounted (0.32566) with highly significant at $P < 0.01$. In addition to that, a constant term in the studying model shows initial impact in light of non-assignable factors that not included in the regression analysis model had a highly significant effects at $P < 0.01$.

Table (7): Impact of chronic diseases upon adult's people concerning stressfulness of life's events.(N=100).

Logarithmic Equation					
Correlation Coefficient	0.32566	Meaningful Linear regression Tested in two tailed alternative Statistical hypothesis			
F =	11.62598	Sign. F	0.0009 ^(*)		
Variables in the Equation					
Parameters	β	SE of β	Beta	(t)	Sig. of (t)
Health Problems	-0.15824	0.046408	-0.32566	-3.410	<0.001
(Constant)	2.92467	0.086347	-	33.871	<0.001

(*) HS: Highly Sig. at $P < 0.01$

Figure (1) show long term trend of the cause's problems factor and stressfulness of life's events. correlation ship between chronic diseases

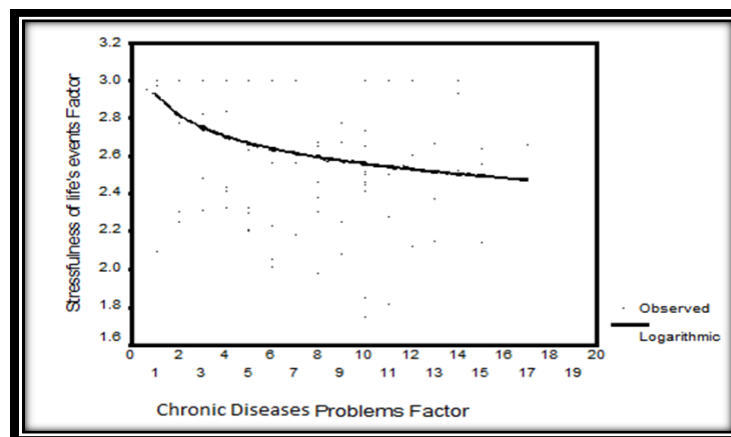


Figure (1): Long term trend plot of scatter diagram Impact of chronic diseases upon Adult's people concerning Stressfulness of life's events.

Discussion

Socio-demographical characteristics variables which shows significant differences in at least at $P < 0.05$ among different levels.

Patients age in this study is ranged from < 30 to 79 years. Old adult's people, more than any other age groups, suffer in their needs. Socio-

economic status moderate 50% and the other have low 45%, high 5% with bad financial situations. Over the years, health status and overall performance deteriorates, which affects their life situation and social position. which is connected with the social situation, deteriorates with age. Also a physical condition gradually gets worse with age.

Results indicating that rather than most of studied sample's responding are registered of having no chronic diseases with highly significant differences at $P < 0.01$ compared with who had, except of who taken anti-hypertension and for diabetic mellitus drugs, since they are accounted a 86%, and 68% respectively, but it doesn't mean that studied sample are not with health problems, such that with anti-peptic ulcer, since who unpleasant incidents are accounted 26% , then followed with thyroid gland problems, since who unpleasant incidents are accounted 25%, then followed with anti hyperlipidemia problems, and are accounted for 12%. Incidence of migraine disorders are recorded 5%, then followed with cerebral vascular accident, since accounted 4%. using cardiac drugs are accounted 3%, antithrombotic, rheumatoid, and abnormal inherited characters are accounted 16% , abnormal inherited characters are brain are accounted 2%, and finally, followed with who had unpleasant incidents to "Asthma, psychiatric illness, and renal" they are accounted 1%.

This study revealed negative association between the stressfulness of life's events and chronic diseases. Some studies have found a relationship between stressful life events and mental illness, whereas others have not.

Gastrointestinal diseases such as peptic ulcer and ulcerative colitis are known to be greatly influenced by stress. peptic ulcer occurs twice as often in air traffic controllers as in civilian copilots, and occurs more frequently among air traffic controllers at

high-stress centers Chicago O'Hare, La Guardia, JFK and Los Angeles International Airport) than low-stress centers (airports in less-populated cities in Virginia, Ohio, Texas and Michigan). Although stress is a risk factor in PU, more than 20 other factors are thought to be associated as well: blood type, sex, HLA antigen type, alcoholic cirrhosis, hypertension, chronic obstructive pulmonary disease, cigarette smoking, and even consumption of coffee, carbonated beverage or milk during college .Certain stressful life events have been associated with the onset or symptom exacerbation in other common chronic disorders of the digestive system such as functional gastrointestinal disorders (FGD), inflammatory bowel disease (IBD) and gastro-esophageal reflux disease (GERD). Early life stress in the form of abuse also plays a major role in the susceptibility to develop FGD as well as IBD later in life [2].

Ulcers are caused by excessive stomach acid, and studies of patients with gastric fistulas have shown that anger and hostility increase stomach acidity, while depression and withdrawal decrease it. Other theory correlating the effects of stress on the development of ulcers linked to the mucous coating that lines the stomach[2].

Specific work related stressful life events seem to be potential triggers of the onset of myocardial infarction [17].

Asthma is a disorder of the airways in which chronic inflammation is associated with airway hyper responsiveness that leads to recurrent episodes of wheezing, breathlessness, chest tightness, and coughing. It is one of the most common chronic diseases worldwide, especially in industrialized countries The status of stressful life events as a risk factor for asthma is unclear and may be dependent on pre-existing allergic rhinitis[18].

Family-related stress was not associated with the onset of asthma [19]. Stressful family events such as illness of a family member, marital problems, divorce or separation predicted the onset of asthma in adults using a large prospective population-based cohort before and after adjusting for demographic factors, smoking status and exposure to pets. The biopsychosocial model of stress, which suggests that stressful life events may alter the psychological, immunological and endocrine systems and contribute to the onset of asthma[20].

This study indicated that two third of studied sample's individuals having chronic diseases are taken anti-hypertension drugs, and for treated diabetic mellitus, while quarter of others having chronic diseases taken drugs for anti-peptic ulcer, and anti-hyper lipidemia, and the leftover are distributed for taken drugs for others chronic diseases, such that anti-hyper lipidemia, migraine, cerebral vascular accident , cardiac, antithrombotic, rheumatoid, abnormal inherited characters are brain, asthma, psychiatric illness, and renal .

Incidence with chronic diseases could be putting a person in a position not to scorn or attention to the details of life painful incidents compared with a person who haven't chronic diseases, and that are achieved throughout studied the impact of stressfulness of life's events with increasing chronic diseases problems in reversed relationship, and that has been achieved through the logarithmic of simple regression model.

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