

# Psycho-Social Stressors and Life Events in Patients Presenting with Heroin Dependence

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## ABSTRACT

**Objective:** To know the number and nature of stressful life events in Heroin Dependent patients and to compare them with the stressors prior to the Substance Dependence.

**Materials and methods:** This descriptive study was conducted in the Department of Psychiatry & Behavioural Sciences, Nishtar Hospital, Multan from September, 2012 to December, 2012. A total of 50 consecutive in-patients with Heroin Dependence.

**Results:** Stressors were clearly identified in 50 patients. In all patients, we found more than one stressor. Results showed that nature of stressful events prior to Heroin Dependence were different than those after developing it. Before the development of Dependence, the major stressors identified were failure in love affair (34%), disturbed relationship with family (30%), for sexual difficulty (24%) and disturbed home environment (22%). After developing Dependence, major stressors were stigmatization (80%), business loss / financial difficulties (68%), major changes in sleeping habits (46%), disturbed relationship with family (42%), changes in eating habits (40%), changes in social activities (34%) & conflict with in-laws (30%). However some of the stressors were common both before and after the Dependence.

**Conclusions:** We concluded that stressors and adverse life events were present in all the patients with heroin Dependence. The pattern and nature of stressors prior to Dependence were different from the stressors after the Dependence in most of the cases.

**Keywords:** Psychosocial stressors, Life events, Heroin Dependence

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## INTRODUCTION

Addiction is characterized by inability to consistently abstain, impairment in behavioural control and craving, diminished recognition of significant problems with one's behaviours and interpersonal relationships, and a dysfunctional emotional response<sup>1</sup>. In the Diagnostic and Statistical Manual of Mental Disorders of the American Psychiatric Association, 4<sup>th</sup> edition (DSM-IV-TR), Heroin Addiction is included under the category substance used disorders and is classified as substance dependence<sup>2</sup>. Heroin (diacetylmorphine or morphine diacetate) also known as diamorphine<sup>3</sup>. In Pakistan Half-Million people are hooked on hard core heroin addicts & consume at \$1.2 billion every year<sup>4</sup>. In medical terms psychosocial stress is described as, "a physical or psychological stimulus that can produce mental tension or physiological reactions that may lead to illness<sup>5</sup>. Psychosocial stressors include, but are not limited to, exposure to adverse environments and life experiences such as natural disasters, crowding or isolation, relative position in a social hierarchy, stigma and discrimination, catastrophic/traumatic events (e.g., war, terrorism), loss of job, disease, family violence,

deprivation, child abuse, adverse social environments or situations (e.g. being a chronic caregiver to an ailing family member), and detrimental parental behaviors<sup>6</sup>.

Most major theories of addiction postulate that acute and chronic stress plays an important role in the motivation to abuse addictive substances. For example, the stress coping model of addiction proposes that use of addictive substances serves to both reduce negative affect and increase positive effect, thereby reinforcing drug taking as an effective, albeit maladaptive and coping strategy<sup>7</sup>. The popular tension reduction<sup>8</sup> and self-medication hypotheses<sup>9</sup> have proposed that people use drugs to enhance mood and alleviate emotional distress. The both negative reinforcement / relief from stress or positive reinforcement/mood enhancement can increase the vulnerability to drug abuse<sup>8,9</sup>. Higher levels of stress and maladaptive coping, along with low parental support, environmental stimuli are important factors to continue drug taking behavior and relapses<sup>10</sup>. It is essential to know the nature of various stressors faced by the patients before developing the Dependence as well as after it, so that we should be able to identify predisposing, precipitating and maintaining factors. This will help us to formulate better management strategies according to Bio-Psycho-Social model<sup>11</sup>.

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## MATERIALS AND METHODS

Present study was conducted on the 50 consecutive in-patients of Heroin Dependence, admitted in Department of Psychiatry & Behavioural Sciences from September, 2012 to December, 2012. All the patients were diagnosed according to the criteria of Diagnostic and Statistical Manual (DSM-IV) laid down by American Psychiatric Association 1994<sup>2</sup>. Written informed consent was taken from the patients. Confidentiality was also ensured. The Presumptive Stressful Life Events Scale (PSLES)<sup>12</sup> was administered by an open ended interview to elicit major life events & psychosocial stressors, both before the Dependence (addiction) and after developing the Substance Dependence.

## RESULTS

All patients were male. Out of 50 subjects, majority of patients 27(54%) were married, 24(48%) were of 21-30 years age group, 31(62%) belonged to urban area, 14(28%) were uneducated, 15(30%) were unemployed (Table 1). Out of 50 patients, 16(32%) were using heroin for 1-3 years (Table 2). According to table 3, we found more than one stressor in all patients. Results showed that nature of stressful events prior to the Heroin Dependence were different than those after developing it. Before the development of dependence, the major stress identified were failure in love affair (34%), disturbed home environment (22%) and suffering from some physical illness/ pain (12%). After developing Dependence, major stressors were stigmatization (80%), major changes in their sleeping habits (46%), major changes in their eating habits (40%), major changes in social activities (34%), conflict with in-laws (30%), major changes in living conditions (30%), loan (28%), change in work hours (26%), fired from work / trouble with boss (20%), various Academic Problems (18%), violation of law (14%), jail term (8%). However some of the stressors were common both before and after the Substance Dependence. Before dependence 30% had disturbed relationship with family and it increased to 42% after Dependence, 24% patients started to use heroin for sexual enhancement and later on 38% reported sexual difficulties after developing Dependence, 22% patients started to use heroin due to marriage against will and after Dependence that 22% had to face marital

separation, 16% had business loss and financial difficulties before Dependence and it increased to 68% after Dependence, 10% reported disturbed relationship with spouse and involvement with others before Dependence and after the Dependence it increased to 38%.

Table 1: Demographic subject characteristics (n=50)

Age (years)	No.	%
16-20	04	08
21-30	24	48
31-40	14	28
41-50	08	16
<b>Marital status</b>		
Single	21	42
Married	27	54
Widow	02	04
Locality		
Rural	19	38
Urban	31	62
<b>Educational status</b>		
Uneducated	15	30
Primary	06	12
Middle	10	20
Matric	07	14
FA	04	08
BA	04	08
MA	05	10
<b>Income</b>		
Unemployed	15	30
Upto 5000	03	06
6000-10000	15	30
11000-150000	09	18
16000-20000	04	08
21000-25000	01	02
> 250000	03	06

Table 2: Duration of heroin dependence

Duration	No.	%
6 months or >	06	12
1-3	16	32
4-6	12	24
7-9	02	04
10-12	04	08
13-15	06	12
16-18	01	02
19-21	02	04
28-30	01	02

Table 3: Psychosocial stressors / stressful life events

Stressor	Before heroin addiction	After heroin addiction
<b>Family and Social</b>		
Conflict with In-laws	-	30%
Disturbed relationship with family	30 %	42%
Son/ daughter leaving house	-	18%
Parental separation	4%	-
Disturbed home environment	22%	-
Major changes in living conditions	-	30%
Major changes in social activities	-	34%
Conflict with In-laws	-	30%
28-30	01	02
<b>Work</b>		
Fired from work/trouble with boss	-	20%
Change in work hours	-	26%
<b>Financial</b>		
Property issues	18%	-
Business loss/financial difficulties	16%	68%
Loan	-	28%
<b>Marital and sexual</b>		
Disturbed relationship with spouse / Involvement with others	10%	38%
Marriage against will	22%	-
Marital Separation	-	22%
Sexual difficulties	24 %	38%
<b>Health</b>		
Physical illness / Pain	12%	-
Major changes in sleeping habits	-	46%
Increase physical energy as sport man	4%	-
Major changes in eating habits	-	40%
<b>Bereavement</b>		
Parents Death	8%	-
<b>Education</b>		
Academic Problems (Stopping study / Ignoring school & college work / Not Preparation for exam, lack of concentration etc)	-	18%
<b>Legal</b>		
Violation of Law	-	14%
Jail term	-	8%
<b>Courtship and cohabitation</b>		
Breakup of Love Affair	34%	-
Marriage cancelled/ Postponed	-	6%
2 <sup>nd</sup> marriage	10 %	-
<b>Others</b>		
Stigmatization	-	80%

## DISCUSSION

In our research, majority of the patients 48% were presented with heroin addiction at 21-30 years of age group. This is in accordance with Maremmani et al in their study most subjects belonged to 16-50 years<sup>13</sup>. According to Aga et al most subjects from 16-25 years of age group presented with heroin Dependence.<sup>14</sup> In our study, 62% subjects belonged to urban area. According to another previous research done in the past, 43% patients were from urban area<sup>15</sup>. The difference may be due to increasing urban population and gradually weakening authority of the state to control the availability of drugs in urban centre. In this study, 42% subjects were single. Other researchers showed that 69.5%<sup>16</sup> and 64.8%<sup>13</sup> of the participants were single. The difference may be explained due to early marriage in our culture.

In this study, 30% subjects were unemployed and 70% were employed or had any other earning source. Various previous researches revealed the frequency of unemployment as 37.8%<sup>16</sup>, 46.6%<sup>13</sup> and 21%<sup>15</sup> respectively. In this study, 32% of the patients were having heroin addiction for 1-3 years and 24% for 4-6 years. This is in accordance with other researches. One study by Khan et al showed 100% subjects were using heroin for 4 years<sup>15</sup>, and according to Rugani et al 100% subjects using heroin for five years.<sup>16</sup> Present research revealed that all the subjects (100%) reported more than one stressor before and after Dependence. In this study, 22% patients were started to use heroin due to disturbed home environment. This is confirmed by other researches. According to one Pakistani study by Aga et al., reported important risk factors for heroin Dependence were problem in anger control, emotional distress and family dysfunctions & conflicts<sup>14</sup>. According to Coyer, social factors that affect early development within the family, such as a lack of mutual attachment, ineffective parenting and a chaotic home environment have been shown to be crucially important indicators of risk<sup>17</sup>.

In this study, 34% patients started to using heroin due to failure in love affair and 12% patient reported due to physical illness or for the relief of pain. It is in keeping with various other researches which reported that 47.6% subjects had problem in romantic relationship and 4.9% started addiction due to pain, surgery or medical procedure.<sup>16</sup> Bell T, also indicates there are precipitating events that may result in dependence, e.g. moving away from old friends and breakup of relationship with boyfriend or girlfriend.<sup>18</sup> In the present research, subjects reported that they had to face a lot of other stressors and adverse life events related to family,

work, financial matters, health, law, Marital and sexual matters and matters related to cohabitation / courtship after the heroin dependence. One survey of Chinese heroin-dependent 139 patients was asked to answer a battery of self-reported questionnaires. A total of 76.26% of heroin-dependent patients reported the occurrence of major lifestyle pattern (dietary and sleep) changes as negative life events as well as financial problems in the family, unemployment and poor interpersonal relationships. Heroin-dependent patients experienced overwhelmingly more negative life events than positive life events<sup>19</sup>.

In this study, 30% patients reported conflict with in-laws, 34% patients reported major changes in social activities and 30% reported major changes in living conditions after the heroin Dependence. According to various other researches, 47.6% subject showed social inhibition<sup>16</sup>, 60.6% reported unsatisfactory social & leisure activities and 50% patients revealed household problems after developing addiction.<sup>13</sup> In the present study, 26% patients reported change in work hours, 20% were fired from work or had trouble with boss and 28% had loan problem after Dependence. Our finding was confirmed by another research which stated the Substance Dependence can affect job performance, resulting in absenteeism, reduced productivity, and tiredness/ sleeping on the job, poor decision making, loss of efficiency, having trouble with co-workers or supervisors and facing disciplinary procedures<sup>20</sup>. In present study, 46% subjects reported major changes in their sleeping habits and 40% in eating habits. According to one previous study, 16.4% patients showed disturbance in eating habits due to heroin use<sup>13</sup> and 36.6% patients reported physical disturbance due to heroin use<sup>16</sup>.

In our study, 18% patients reported various Academic Problems including stopping their study, ignoring school & college work, not preparation for the exam & lack of concentration etc due to Dependence. One previous study by Rugani et al showed 3.7% patients having academic problems<sup>16</sup>. This difference in two studies may be due to poor education facilities and poor availability of medical and psychological support in the school in our setting. In this study, 14% patient reported violation of law and 8% had faced jail term after the development of Dependence. It is in keeping with other researches which showed that 53.7% and 14.8% subjects had to face legal problems or crime after Dependence<sup>16</sup>. The difference may be due to poor policing system and problems related to implementation of law in our setting. In other stressors, 80% subjects were facing critical remarks

& stigmatization after addiction. This is confirmed by other researches. According to Nace et al some psychological factors that affect the dependents and their family include the stigma associated with drug Dependence, emotional withdrawal, guilt and craving<sup>21</sup>.

In this study, it was observed that some of the stressors were common both before and after the Substance Dependence. Before dependence 30% had disturbed relationship with family and it increased to 42% after dependence? Another previous study also reported that 1.2% subjects had disturbed relationship with family before Dependence while 6.2% after it<sup>16</sup>. The difference may be due to extended family system in our culture and greater involvement of the family members in personal matters. Hadeley et al also reported that the degree of family dysfunction was significantly related to internalized shame, object relation deficits, presence of addiction and emotional problems. It therefore appears that dysfunction in the family of origin may affect several domains of individual's life, two of which are problem solving communication and global distress in intimate relationships<sup>22</sup>. In this study, 16% reported business loss and other financial difficulties before the dependence and it increased to 68% after it. According to various other studies 37.8%<sup>16</sup>, and 54.2% reported employment issues and financial difficulties after dependence<sup>13</sup>. In present study, 24% patients started to use heroin for sexual enhancement and later on 38% reported sexual difficulties after dependence, 10% reported disturbed relationship with spouse and involvement with others before dependence and after the dependence it increased to 38%. Moreover 22% patients started to use heroin due to marriage against will and after dependence that 22% had to face marital separation. One previous study showed 36% patients used heroin for sex sexual enhancement<sup>23</sup>. According to one study, Heroin tends to reduce sex drive and the ability to have an orgasm, although on a physical level, it can increase sexual arousal<sup>24</sup>. Addiction is also major factors in marriage separation<sup>25</sup>, an extramarital affair is usually a signal that there is trouble in a relationship, and it can then lead to more problems between the partners<sup>26</sup>.

## CONCLUSION

Stressors and adverse life events were present in all the patients with heroin dependence. The pattern and nature of stressors prior to the dependence were different from the stressors after the dependence in most of the cases.

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