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Editorial

Psychoanalysis and its place in modern day clinical practice

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Johann Christian Reil, a German physician, coined the term psychiatry in 1808 which meant 'medical treatment of the soul'. Until the early 20th century, when Sir Sigmund Freud introduced psychoanalysis; psychiatry was restricted to the treatment of severely psychotic spectrum disorders [1]. Psychoanalysis was the mode of treatment for psychoneurotic spectrum disorders in the outpatient department whereas psychiatry was reserved only for the in-patients. However, after World War II, by the phase during 1950s and 1960s, psychiatry adapted into the psychoanalytical model, abandoning its roots in biology and experimental medicine [2]. This shift was reasoned with the growing popularity of psychoanalysis and a restricted maturation of the biological sciences. Psychoanalytical psychotherapy was not only being used to treat psychoneurotic disorders but was equally applied to purely psychotic spectrum mental illnesses and to some medical illnesses such as- hypertension, asthma, gastric ulcers, and ulcerative colitis as well [3-4]. The unconscious conflicts and other psychoanalytical explanations of the human mind sparked an alternative understanding of the human mind and processes. This added to the clinical insight that psychoanalytical psychiatrists could garner. Psychoanalysis strengthened the explanatory power of descriptive psychiatry.

Incorporating the deep concern of psychoanalysis for the integrity of an individual's personal history, psychoanalytic psychiatry helped develop direct and respectful ways for physicians to interact with mentally ill patients, and it led to a less stigmatized social perspective on mental illness. Psychoanalysis and psychiatry were closely knit for 50 years till Biological Psychiatry stepped back with advanced and technologically equipped understanding of the brain.

Psychoanalysis is now a bleakly practiced art in psychotherapy [4]. The present status of its theory and therapy is challenged by the lack of empirical evidence, abstractedness and several limitations that have been challenged by some schools of thoughts and their professionals. However, it is essential to know that though psychoanalysis has little empirical and more anecdotal evidence, it is one of the most in-depth psychotherapeutic approaches in order to understand a holistic personality and emotional organization of the patient. Every practice of medicine or psychotherapy must revive in order to incorporate the temporal requirements of understanding the human framework of development. There have been several adjuncts that grew out of psychoanalysis. Some of them include attachment theory, object relations theory, ego psychology, self-psychology along with modern psychoanalysis that include brief psychoanalytic therapy and an amalgamated approach of psychoanalysis with cognitive behavior therapy and other models of psychotherapies.

The growth of biology and neurobiology has ushered the emergence of Neuropsychoanalysis- a possible merger of psychoanalysis and biological psychiatry. Its key idea is that subjective experience and the unconscious mind can be observed through neuroimaging. It is one of the fewer branches that regards the mind and brain on an equal footing and seeks to understand the human mind, especially as it relates to first-person experience [5]. Neuroplasticity, now known as neurogenesis is another facet of psychiatry that brings the two schools of practice in mental health together. The change in neural connections as a result of psychoanalysis and psychiatric treatment is the common standing, however, the evidence in favour of psychoanalytic approach remains constricted [6].

Clinic based mental health practice is an edge upper with a combined understanding of psychoanalysis and psychiatry. A psychoanalytic understanding helps map the underlying desires and conflicts that shape personality and emotional organization of an individual. Psychiatric underpinnings unravel the biological

make up and dysfunction in an individual. A bio-psycho-social approach to treatment is quintessential in a practice where the patient's vulnerabilities are understood in the constitution of nature versus nurture. Psychiatry is a heteronomous discipline; it is directed largely by forces outside of the individual. In contrast, psychoanalysis is an autonomous discipline; it is directed largely by the individual [7]. This may bring us to one conclusion that the approach of a psychoanalyst may differ from that of a psychiatrist- where a psychoanalyst may have a cooperative relationship with the patient and a psychiatrist may have a paternalistic one. However, the beauty of challenge is to look at juxtaposing the two disciplines and integrating the two. It would be interesting to rejuvenate the psychoanalytic psychiatry of the 1950s and 1960s with the ocean of research and theoretical development in the last 60 years. The intertwining of both discipline has the possibility to rekindle holistic life history of the patient, listening attentively to what the patient says and developing treatment plans beyond diagnostic checklists and psychopharmacology. In the age moving towards domination of neuroscience, there is a need to retain psychotherapeutic alliance with our patients.

Today we are in an era where brains are scanned and various multimodal neuroimaging techniques are available. We are in a position where various psychoanalytical concepts are now being translated into their probable neural correlates. There is also a scene where neurobiologists and psychoanalytic practitioners are engaged in healthy dialogue and there is a feeling that the two bodies can have an intersecting point. It is important to realize that neurobiology and psychology or psychoanalysis are inseparable. There is a need for inseparable dialogue between the two branches so that patients may be understood from a holistic perspective. The interface of neurobiology and psychoanalysis is interesting as many psychological problems while may be explained from biological perspective also has deeper psychoanalytical and psychological connotations. There is a need for integration rather than segregation and a need for a newer theory that embraces neurobiology and psychoanalysis in the same gamut.

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Review Paper

The Altruism Framework, Bystander Effect and A-Rules: A New Perspective

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ABSTRACT

This paper reviews the Bystander Effect, and its componential phenomena, namely, Diffusion of Responsibility, Pluralistic Ignorance, Deindividuation, Self-Categorization Theory, Group Size, Group Cohesiveness, Self-Efficacy, Ringelmann Effect, Social Exchange Theory, and Altruism. The aim of the analysis presented in this paper is to, propose a hypothetical framework, called "The Altruism Framework" that maps the decision-making process leading up to not only the Bystander Effect but other related phenomena such as the Martyrdom Effect and various forms of Altruism bringing everything together into one Helping Behavior Framework. An additional concept of A-rules, is also introduced to further consolidate the framework.

Keywords: Bystander effect, Altruism, Cognitive.

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INTRODUCTION

The Bystander Effect was spawned as a result of the murder of Catherine 'Kitty' Genovese in 1964 [1] (Gansberg, 1964), wherein 38 neighbours were present at the time of the crime who heard the crime taking place and also the screams of the victim, begging for help but no one intervened. This led to the milestone research of John Darley and Bibb Latané, called the The Bystander Apathy Experiment [2]. They attributed the presence of the Bystander Effect to two factors: Diffusion of Responsibility and Pluralistic Ignorance [2].

Diffusion of Responsibility implies that the individuals don't intervene and initiate helping behaviour in case of emergency because they believe and expect that the others present will administer the required assistance [2-4] irrespective of the situation being an emergency in nature or not [5]. An interesting example of this was seen in the Tipping Experiment wherein the tip size was an inverse function of the number of people eating at the restaurant [6]. In fact, research has found evidence of the capability of the Diffusion of Responsibility not only to counteract the effects of the Escalation Tendency in High-Risk environments [7], but also decrease response rates in e-mails when it is addressed to more number of individuals [8]. Pluralistic Ignorance refers to an individual deciding to not intervene and initiate helping behaviour because others present are not doing anything either [2, 9-10].

One would be able to see how both of them feed into each other in an endless vicious cycle. Because of the Diffusion of Responsibility an individual Z would refrain from taking a step towards helping an individual Y in need assuming that one of the the others present, say P, Q, R, S and T, would intervene. However, simultaneously, the individuals P, Q, R, S and T are also, theoretically, thinking the same thing, therefore no one amongst them, also, decides to intervene assuming and expecting that the others will. At this point,

no one amongst the individuals present is taking the initiative, including P, Q, R, S, T and Z. This is where the Pluralistic Ignorance aspect comes into play. Since, no one is intervening, it now becomes all the more difficult for an individual to be the odd one out, and actually intervene, because of various reasons that could range around conformity and a fear of being ostracised later, for breaking the invisible-misinterpreted-rule, or an *a-rule*. This paper would like to define an *a-rule* as a distorted cognitive assumption based on misinterpretation, or in simpler words, a rule, that is not really a rule. In this case, this misinterpreted rule would be, *"We are not supposed to intervene."*

It is now understood that during the bystander effect, there is also an aspect of Deindividuation that comes into place, or a certain anonymity, wherein an individual lose their sense of self and instead assume the collective identity of the larger group [11-12] which allows actions that would otherwise not be initiated or condoned, to go on. This deindividuation is also what forms the basis of riots and mobs, as it allows the individual to be known by the identity of the group and it becomes almost natural to uphold any and all actions to preserve not only the sanctity and purpose of the group but also conform to the norms of that group [13-14]. Now, one would be able to see how it would be so necessary and important to conform to the *a-rule* being seen as a norm in that situation with respect to the group present, but which in reality is merely a cognitive distortion.

Since that time, a lot of new perspectives have come up. Over time people have realised that a lot of variables are consequential in the culmination of the bystander effect. But at the same time, the Bystander Effect has proven to be extremely resilient and consistent across cultures, setting and other factors [15-16]. The aim of this paper is to formulate a model that describes the componential framework consisting of all variables and logical combinations that lead to an individual showing bystander effect.

One of the factors that greatly impacts the bystander effect is whether there are similarities between the helping individual and the victim such as shared interests, leading to a reduction in bystander effect [17]. This reduction can be explained when one takes into consideration, the concept of deindividuation mentioned above. According to Self-Categorization Theory [18-19], the self goes through levels of abstraction ranging from the personal self ("I") to the collective self ("We"). However, it must be noted that these are not the only levels of abstractions, as there can be an endless number of levels may go through and combinations that the self may take while going through a day. These interests can be as simple in nature as liking for the same football team, or as far reaching and complex as religion. One can understand how a similar interest being shared would be seen as an instantaneous in-group formation and therefore the individual would then be expected to follow the unsaid norms of this in-group. For instance, an individual B is in need of help, and there is an out-group composed of five individuals, who also happen to be bike enthusiasts. According to what we now know, if these individuals are suddenly made aware of the possibility of B being a "motorist" the bystander effect would decline, however, after that if they are made aware that B is primarily a car enthusiast, the helping behaviour again declines [17]. But at the same time, it must also be noted that, since there is an instantaneous in-group formation, the norms of that in-group might also motivate the helping individual to *not* intervene. For instance, if the in-group consists of individuals who believe that suicide is an honourable act and it is up to an individual to choose whether to take their own life or not, then it is unlikely that the spike in helping behaviour would be seen or be considered to be helping in the traditional way.

The other important factor is the group size of the out-group, with there being a significant negative correlation between group size and helping behaviour such that, as group size increases, helping behaviour decreases. This particular aspect gives a lot of back-confirmation to the original idea of Pluralistic Ignorance by Latané and Darley [2], as larger the group, larger would be the expectation on the individual to conform. At the same time, there is evidence that increasing group size can also increase or decrease helping behaviour by interacting with context dependent factors, such as extremely high group cohesiveness, or the presence of a strong social category [20].

Another factor that effects the bystander effect is whether the helping individual and the victim share a social category membership, with helping behaviour increasing with the significance of the social group that is in question [21]. This understanding is further corroborated with what we know of the Self Categorisation Theory [19]. What this means to say is that there is a higher probability of a female helping individual actually helping a female victim than a male victim, or an individual from a specific cultural

community willing to be more helpful if the other individual is from their community as well. However, there is also a combination effect when gender identity is made salient with helping behaviour increasing for a female victim, with female onlookers, when the group size is increased, but the same has not been observed for males [20].

Talking about social groups, another factor that makes a significant impact on the expression of Bystander Effect is the extent of Group Cohesiveness. In a breakthrough study by Rutkowski and others [22], it was found that the more cohesive a group is, the more likely it is that helping behaviour would be demonstrated by the members of that group, but it is also important to note that is only the case, when a social-responsibility norm is made salient beforehand. This can also be seen to be quite synchronous with what the paper proposes about instantaneous in-group formations, as discussed above. Another observation was that, high group cohesiveness can also decrease bystander effect, possibly because it somewhat reduces Pluralistic Ignorance, and the prevalence of the a-rule, because an individual is less likely to feel the fear of a possible ostracization later on because he/ she has done something the group doesn't agree to, on one occasion [23].

Another very significant aspect that modulates the Bystander Effect is how capable the individual feels, about being able to administer the help required in a certain situation [9]. For instance, while walking on the road the individual witnesses a gruesome accident. The victim is still alive but is bleeding heavily. Therefore, in this situation what is needed is for someone to help the victim by reducing the blood flow by some first aid measure. However, if the helping individual is not aware of any such measures in the first place, then it is unlikely that any helping behaviour will be shown [9, 24]. The impact of self-efficacy in bullying has also been seen to the extent that self-efficacy is positively correlated with the decision to intervene, meaning someone with a high defender self-efficacy is more likely to intervene when other parameters are kept constant [25]. However, that being said, it must be noted that with increase in group size, the individual self-efficacy levels consistently decline [26].

At this point, it is important that the Ringelmann Effect [27-29] be discussed as well, which essentially states that the addition of coworkers in a task leads to a linear decrement in the performance levels, per individual. This effect is also referred to as Social Loafing [30-31]. However, according to a recent study, where coworkers were added one by one, it was seen that the performance per individual dropped significantly up till the addition of two, three, and four people, but the decrements in performance on the addition of the fifth and sixth coworkers, was negligible, thereby telling us that that relationship is not linear, but curvilinear [32]. This is significant because it tells us that as other individuals are added in the equation, the amount of responsibility on one individual also decreases, finally reaching an equilibrium, wherein the individual is no longer underperforming or over-performing.

However, this is all the more meaningful because it tells us how the individual processes and balances the concepts of cost to self, performance required, and the profit to self. The Social Exchange Theory suggests that altruistic behaviour, or true helping behaviour, takes place only when the costs to the self, outweighs the profits to the self [33]. But another way of looking at it is that when an individual has the sole responsibility of performing, the performance is much higher than their equilibrium level, because they are responsible for the entire weight of the outcome, therefore, an individual is ready to perform at a higher level, which can be considered a higher cost to self, because the profit at the end of the process, could be something like respect from his/ her peers, avoiding embarrassment, or a sense of fulfilment of having done something more-than-ordinary, thereby drawing solace and satisfaction from cultural ideas of sacrifice, also called, the Martyrdom Effect [34]. According to Batson [35-36], there are four basic types of altruism: ultimately benefitting the self (egosim), ultimately benefitting the other (altruism), ultimately benefitting a group (collectivism), for upholding a principle (principalism), therefore in cases one, three and four, it is essentially the self that is benefitted, either directly or indirectly [37-38] and it is only the second case where one can say that selfless altruism has taken place [39-40]. To a large extent the Social Exchange Theory and the Martyrdom Effect can be seen as being in harmony, once we take an indirect perspective to Bystander Effect and Helping. At this point, this paper would like to propose the concept of the Cost Calculator, as a meta-structure in the cognitive model which functions as the final weighing scale, and its functioning is explained later. The following model attempts to delineate all of these factors into a comprehensive model.

DISCUSSION

The current model which houses the Bystander Effect is composed of various sub-factors that ultimately feed into whether a helping behaviour occurs or not. When an individual is presented with a situation where such a decision needs to be taken, all these sub-factors are activated simultaneously, so the individual starts analysing all these variables in that particular situation, i.e., what is the group size like, can I defy the people present here, how close am I to this group, what is my relationship to the individual in need of help, what are the unsaid norms currently in play, would I be able to successfully help this individual even if I decided to, what do I get if I help the individual, and so on and so forth. Once the processing of the sub-factor or the variable is initiated, it yields a positive or a negative response for that particular sub-factor. It can be said, that the individual enters into a dialogue with himself or herself, with respect to his/ her sub-factors. For instance, an individual who is strongly cohesive to the group and shares similarities to the victims, might get positive responses for those two sub-factors but a strongly negative score for self-efficacy. Needless to say, the responses are most likely to be along a dimension of Very Negative to Very Positive, with every possible combination in between, and not in a yes/ no manner. Once the responses for each sub-factor are generated, they are then sent to the Cost Calculator, which is essentially as the name suggests, a calculator whose primary function is to generate a cumulative score by addition of the sub-factor responses.

Once the final response is generated by the Cost Calculator, the individual proceeds to act in the way that is synergistic with the decision making process that has just taken place. Thus, one would be able to see how the Bystander Effect is truly an *effect* of various considerations, that have together been termed as the *Altruism Framework* by this paper, which is the bigger decision-making process that an individual engages in during helping behaviour and wherein, the Bystander Effect is only one of the results of this Framework's functioning. For instance, taking a hypothetical example, an individual is presented with a scenario wherein he/ she sees another individual getting mugged on the street. The people present there are only the perpetrator, the victim and the individual we are interested in observing. Instantaneously, the individual starts evaluating the situation in terms of all the possible parameters.

In this current example, Group Cohesiveness, Pluralistic Ignorance and Diffusion of Responsibility are unlikely to play a role. The aspect of Similarities and Social Categories, if they happen to become known or are made salient in some manner, then it is likely that they would play a role. However, assuming the case that none of these factors are playing a major role, the primary input to the Cost Calculator is from the Ethical Code that an individual holds, which therefore explains the highly documented absence of the Bystander Effect when the individual is alone with the victim in a certain scenario. Needless to say, in this case, the aspect of Ethical Code may go in both directions, positive and negative, or prosocial and antisocial (see figure below).

IMPLICATIONS FOR RESEARCH

The paper implicates the need for a complete overhaul on the outlook and understanding we have on not only the Bystander Effect but also of Altruism as a whole, seeing Bystander Effect or Altruistic actions as merely end products of a larger and much more complicated decision-making process that all individuals engage in. This would as a result impact everything from Donation drives, to interpersonal dynamics in terms of group-goal participation and compromise of personal viewpoints.

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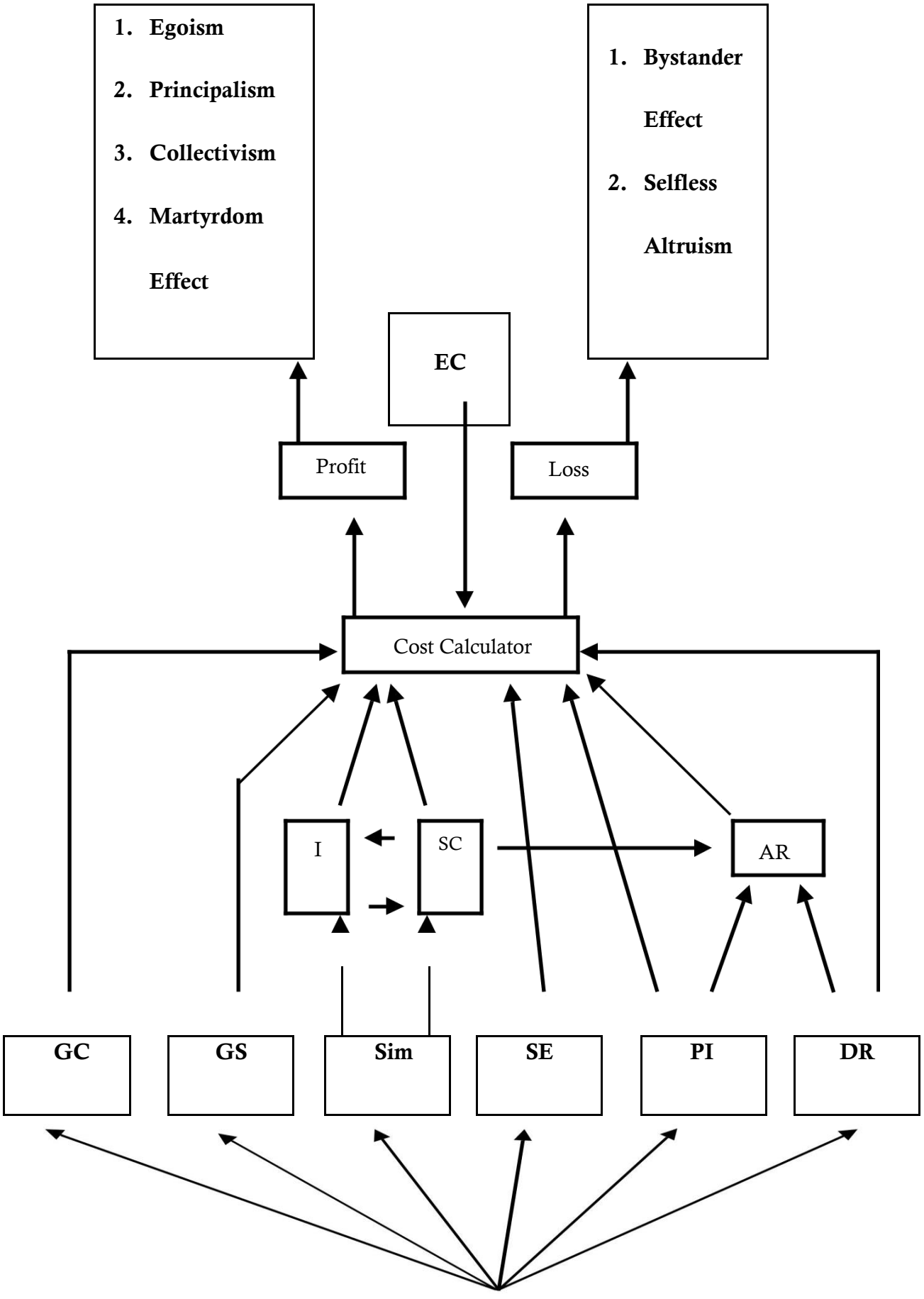
1. Egoism
2. Principalism
3. Collectivism
4. Martyrdom Effect
1. Bystander Effect
2. Selfless Altruism
EC
Profit
Loss
Cost Calculator
I
SC
AR
GC
GS
Sim
SE
PI
DR

GC: Group Cohesiveness, GS: Group Size, Sim: Similarities, I: Interests, SC: Social Category, SE: Self Efficacy, AR: A- Rule, PI: Pluralistic Ignorance, DR: Diffusion of Responsibility, EC: Ethical Code

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Original Research Article

Extent of bullying among school students

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ABSTRACT

Background: Bullying is a repeated pattern of harmful verbal, physical or social behavior which involves the misuse of power. Bullying of any form or for any reason can have long -term effects on those involved, including bystanders. The main objective of the study is to find out the extent to which bullying behavior prevails among the school students.
Methods: The sample for the present study was selected from different schools which consist of 300 boys & 300 girls with a total sample of 600 school students. The main research tool used for the study was the Bullying Questionnaire constructed for the present study, which was given along with the personal data sheet. Data was collected from the students in their respective classrooms, which were then scored, coded, and then analyzed. The statistical techniques used are descriptive statistics namely frequency and percentage.
Results: 10 percent of the students reported that they not safe in their school. It was found that 53.5% of the students in the study have experienced bullying during the past four weeks.
Conclusion: There is prevalence of bullying behavior among school students in Kerala. There are also differences in the place and time of bullying.

Keywords: Extent, Type, Bullying, School students.

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INTRODUCTION

Bullying in schools has become a widespread problem that can have lifelong negative consequences for both the bully and victim. Bullying can be defined as unwanted negative behaviour, verbal, psychological or physical, conducted by an individual or group against another person or persons and which is repeated over time. Bullying is a repeated pattern of harmful verbal, physical or social behaviour which involves the misuse of power. Bullying of any form or for any reason can have long -term effects on those involved, including bystanders [1].

Tattum and Tattum [2] proposed that "Bullying is the wilful conscious desire to hurt another and put him/her under stress". Dan Olweus defined Bullying as "negative behaviour" by which he meant behaviour intended to inflict" injury or discomfort" [3]. According to Ken Rigby "bullying involves an initial desire to hurt, this desire is expressed in action, someone is hurt, the action is directed by a more powerful person or group, it is without justification, it is typically repeated, and it is done so with evident enjoyment" [4].

Bullying has two key components: repeated harmful acts and an imbalance of power. It involves repeated physical, verbal or psychological attacks or intimidation directed against a victim who cannot properly define him or herself because of size or strength, or because the victim is out-numbered or less psychologically resilient. Bullying includes assault, tripping, intimidation, rumour spreading and isolation,

demands for money, destruction of property, theft of valued possession of another's work, and name calling. Bullying can be done in individual or in group and it can be physical or emotional. There can also be different target groups based on disability, religion, race etc.

The psychology behind the school bullying is a simple construct that those who indulge in bullying desire to dominate and gain power over fellow students. People who bully others are often motivated by the status and social power they can achieve through bullying. Students are victims of a spectrum of problem behaviours at school, ranging from minor disciplinary problems to criminal victimization [3]. Bullying is one form of these problem behaviours that concerns students, educators and parents because of its potential detriment to the student's well - being [5-6].

In an Indian study by Kshirsagar, Agarwal and Bavdekar [7], involving interviews of 500 students aged 8 to 12 at rural schools in Maharashtra, bullying was reported by 31.4 percent of the children surveyed. Teasing and calling names where the commonest forms. Seen, according to the study published in a 2007 issue of Indian paediatrics other forms of bullying – in descending order of incidence –include the use of bad words, spreading rumours, threatening, and causing isolation. Causing physical hurt was reported by 16 percent of the students who were bullied. In another study of 500 children from five randomly selected schools, as many as 60.4 percent of the students experienced similar forms of bullying, but only 39 percent of the victim's parents were aware of it. According to the national centre for educational statistics, nearly a third of all students aged 12-18 reported having been bullied at school in 2007, some almost daily [8].

Bullying in schools is an issue that continues to receive attention from researchers, educators, parents and students. Despite the common assumption that bullying is a normal part of childhood and encompasses minor teasing and harassment [9], some may bully others to compensate for what is happening to them and their own feelings of powerlessness. Bullying in school involve psychological, emotional, cyber, social or physical harassment of one student by another at school or within the school community. It can involve actual or threatened physical violence, verbal abuse or intimidation, written abuse or threats, including graffiti, name calling and teasing, sometimes of a racist, sexist or sexual nature, black mail or other forms of extortion, including theft of students work, exclusion for no good reason.

Bullying affects everyone involved, even people who witness it. It can have serious and long term emotional or psychological consequences in addition to the immediate harmful effects. Communities that condone or ignore bullying may create an environment where more serious anti-social behaviour is condoned. Bullying undermines key values that schools aim to promote in students -respect, trust and honesty. Thus, it is a psychological, social, educational, moral, developmental and cultural problem which demands early identification. This interdisciplinary relevance adds to the importance of the study.

As established by studies in Scandinavian countries, a strong correlation appears to exist between bullying other students during the school years and experiencing legal or criminal troubles. Students who were engaged in bullying in grades 6-9 had at least one criminal conviction by age 24. Chronic bullies seem to maintain positive relationships with antisocial behaviours in the future [10].

Victims often fear school and consider school to be an unhappy place. Almost 7% of Americans experience low self-esteem which is said to be mainly due to bullying [10]. Many eighth-graders stay home at least once a month because of bullies. The act of being bullied tends to increase some students' isolation because their peers do not want to increase the risks of being bullied themselves. Being bullied can lead to depression and low self-esteem and such problems can also carry themselves in to adulthood [10].

Considering the paucity of data from India and taking in to account the potential of this phenomenon to cause damage to the well-being of young children, a study to determine the prevalence and type of bullying amongst school children is to be undertaken. It has to be noted that no study has been done in Kerala regarding this issue. Every child has the right to a safe, protected school environment. The agony that so many children endure as a result of bullying cannot be ignored. With the ultimate aim of preventing bullying, the following objectives have been set for the conduct of the present study. The main objective of the study is to find out the extent to which bullying behaviour prevails among the school students and to find out when and where bullying mostly happens.

Based on these objectives, the following hypotheses were formulated.

- There will be prevalence of bullying behaviour among school students.
- There will be differences in the place and time of bullying.

METHODOLOGY

Sample

The sample for the present study included school students. The sample was selected from schools in Trivandrum district. The sample consists of 300 boys and 300 girls with a total of 600 school students studying in fifth standard to plus two. Certain socio - demographic factors like age, religion, place of residence, occupation of both father and mother were also considered while collecting the data.

Tools

The present study was mainly intended to find out the extent to which bullying behaviour prevails among the school students. Therefore, the study required tools to measure the extent of bullying and the personal details of the sample.

The following are the tools used for the study.

- Personal data sheet
- Bullying questionnaire

Personal data sheet: The personal data sheet was prepared to be used in the present study and it consists of 14 items. These 14 items include personal details and family details. The 6 items deal with personal information of the subject. The family details consist of 8 items.

Bullying Questionnaire: The bullying questionnaire was constructed by Sonia George and Reshma S (2016) in connection with the present study to assess the prevalence of bullying among school students. It consists of 44 items measuring 15 different aspects of bullying. Most of the items ask the students about their experiences of bullying at school in the past four weeks. The variables measured include:

- the extent to which students feel safe at school(safety)
- the extent to which students have become victims of bullying (extent of victim)
- the type of bullying experienced as a victim (victim type)
- extent to which bullying has led to the absence of students in school (absence)
- the extent to which bullying in schools bothers them (bothering)
- the type of bullying they have engaged in (bullying type self)
- the type of bullying they have seen or heard being given to others (bullying type others)
- the extent to which they have helped the bullying victims (victim help)
- the extent to which they have been left out or treated badly (bad treatment)
- the place in which bullying happens in school (place of bullying)
- time in school when bullying happens (the bullying time)
- the extent to which they have given help to the bullying victims (bullying help)
- the reason for not providing help to the victims (non- help reason)
- what was their reaction to bullying (bullying reaction)
- the reason for not reacting to bullying (non-reacting reason)
- attitude towards bullying.

The items for the questionnaire were written after consultation with psychologists and school teachers. For this, two focus group discussions were done, one which included psychologists and other which included teachers from different schools. The groups comprised of ten participants.

After item writing, the draft scale was administered to 100 school students. The items were scored and were subjected to item analysis. Items with good discriminatory index and moderate difficulty were included in the final questionnaire.

Administration

The questionnaire thus constructed was administered to a total of 600 students to get the data for the study. Before distributing the questionnaire, the students need to be given an idea or awareness regarding what bullying is. This required an average of 10 minutes. Then the questionnaire is distributed among the students and instructed as following. "This questionnaire consists of several items related to bullying in schools. Read each item carefully and mark your responses in the space given against each item. You need to think about

your experiences and answer to the items accordingly". The purpose and confidentiality of the study is also explained. They are requested to mark the preferences honestly. Cooperative participants take 30 minutes for the completion of the questionnaire.

Scoring

The bullying questionnaire consists of 44 items which measure 15 different variables of bullying. The items from 1 to 6 consist of personal information about the participant. The items 7-9 correspond to the extent to which students feel safe at school (safety). The scoring system for the items will remain the same throughout the test, namely, 0, 1, 2, 3, 4 as given in the response pattern. The summated score of the items provide the total score for that particular variable.

Before moving on to the next items, descriptions of the types of bullying are given in detail. The items 10-15 correspond to the extent to which students have become victims of bullying (extent of victim). The scoring system for the items is the same 0, 1, 2, 3, 4. The summated score of the items provide a total score of the extent of victim. The items till 15 have a scoring pattern of 0, 1, 2, 3, and 4 which stands for NO, no, some, yes, YES respectively.

In the item16 the type of bullying experienced as a victim (victim type) is dealt with. It includes 4 sub items each on are scored in 0, 1, 2, 3, 4. Each type of bullying is scored separately. For the items 16, 17, 19, 20, 21, and 22, a scoring pattern of Never in 4 weeks, Once or twice every week, many times a week, and Don't know is given which stands for 0, 1, 2, 3 respectively.

The item number 17 deals with the extent to which bullying have led to the absence of students in school (absence). Item number 18 refers to the extent to the extent to which bullying in schools bothers the student (bothering). Four options are given, from which the student has to select the appropriate one. Next item, which is 19, asks the subject for the type of bullying they have been engaged in (bullying type self). There also 4 options are given which deals with the type of bullying. The item number 20 asks the students for the type of bullying they have seen or heard as being given to others (bullying type others). Her also the type of bullying is taken into account in the responses.

The next item deals with the extent to which they have helped the bullying victims (victim help). Item number 22 measures the extent to which the students have been left out or treated badly (bad treatment). This item has 14 sub items dealing with the reasons for the bad treatment, if any. The place in which bullying happens in school (place of bullying) is the theme of the next item (23). It gives 14 options for the respondent from which they have to choose the place where bulling mostly happens.

The item 24 asks the respondents about the time in school when bullying happens (the bullying time). It gives 6 options for the students to respond. The next item, i. e., 25 asks for the extent to which they have given help to the bullying victims (bullying help). It gives 13 options to the respondent which deals with the ways they have helped the victims. The reason for not providing help to the victims (non- help reason) was asked in the 26th item. Seven options were given to the students to choose the reason for not helping. The 27th item asked the students what was their reaction to bullying when they were bullied (bullying reaction). It gave 12 options for response. The next item deals with the reason felt by the students for not reacting to bullying (non-reacting reason). Here the number of options given is 5.

The final section in the questionnaire deals with the attitude of the students towards bullying. The items from 29 to 44 are included in this section. The response options are like NO, no, some, yes, YES which are given a score of 0, 1, 2, 3, and 4 respectively. Here, a low score indicates a negative attitude towards bullying, where the students do not support any form of bullying in schools. A high score, on the other hand indicates a positive attitude towards bullying, where the students support bullying in schools.

Data collection procedure

The data for the present study was collected from schools in Trivandrum District. The first step in collection of data was to identify and select educational institutions. Then the permission of the principal of the schools was sought. Data collection was fixed on a particular day in accordance with the permission of the principal. The schools which gave permissions were again visited on the day of appointment and data collection was done. The researcher met the students in their respective classes.

The researcher introduced the topic 'bullying' to the students of the class. Then the questionnaires were distributed to students and they were told to read the instructions and fill the questionnaires. Even though a specific time limit was not given, the students were asked to fill in the questionnaires as fast as they can. After completion, the questionnaires were collected back.

STATISTICAL ANALYSIS

The collected data were scored, coded and analysed. The analysis was done using the statistical package for social sciences (SPSS). Descriptive statistics were used for the analysis of the data. In this study, descriptive statistics, namely, frequency and percentage were used to explore the extent and type of bullying prevailing among the selected sample. Each item of the Bullying Questionnaire was analysed according to the number and percentage of students who have responded to each option. This would give a clear idea about the prevalence of bullying in this particular group.

Frequency: In statistics the frequency (or absolute frequency) of an event is the number of times the event occurred in an experiment or study.

Percentage: A percentage is a number of ratio expressed as a function of 100. It is often denoted using the percent sign, ''%", or the abbreviations- "pct.'', "pct''; sometimes the abbreviation "pc'' is also used. A percent is a dimension less number (pure number)

RESULTS & DISCUSSION

The first objective of the study is to find out the extent to which bullying behaviour prevails among the school students. Many sets of questions were asked to get an idea about the prevalence of bullying among schools. The first set of questions deal with safety of the student. Table no. 1 gives the number and percentage of students with regard to how safe they feel at school.

The questionnaire had three items asking about the extent to which students feel safe at school. From the table, it may be noted that 90 percent of the children reported that they are safe in the school. But, at the same time 10 percent of the children reported that they not safe. It indicates that this 10 percent of the children i.e., 60 out of the total 600 students are experiencing bullying at their school. It means that even though the number and percentage of students may be small, there is a small group of children who are not feeling comfortable at their school and are always worried about something bad that could happen to them. School has to be a home away from home and students should feel the same level of safety and security they feel when they are at home. When that is not the case, it points out to some negative things happening in the school, something that should have to be taken seriously. Here, bullying might play a role and this doubt is explored in the coming sections.

Further items in the bullying questionnaire explore the extent and type of bullying experienced by the students. Items from 10 to 15 ask whether bullying is happening in the school during the past four weeks. A score more than six indicates that bullying has happened during the past four weeks.

It was noted that 321 students scored above 6 compared to the 279 students who scored below 6. This comes to a percentage of 53.5 who have experienced bullying during the past four weeks. The rest 46.5% of students report not to have had any experiences with regard to bullying. The main objective of the study is to find out the extent of bullying. The result in the table indicates that among the total sample, more than half report to have been experiencing bullying in their school. This is something to be taken very seriously as this might affect the overall happiness and the productivity of the students. Earlier studies have also been in this line.

Bullying occurs in schools more frequently than one might expect, Paruult, and Pellegrini [11] found that bullying occurred every seven minutes within the school setting. Smokowaski and Kopaz [12] stated that bullying affects approximately one in three children. Bullying seemed to impact every type of students there was no bias as to whom it affects. Bullying occurred equally to boys and girls who had reported being victims. The institute of education sciences stated that the overall rate of violent incidents for all public schools in the United States was 32 incidents per 1000 students [13]. The rate of violent incidents was significantly higher in middle schools (52 incidents per 1,000 students) than in primary schools (25 incidents per 1,000 students). The institute also reported a 21% weekly reporting of students bullying [13]. The finding of the study by

Black [14] is that the prevalence of bullying, cyber bullying & victimization in his sample of adolescents was high. Over half of the students had taken part in bullying in their lifetime.

Thus, the first two results are an indication regarding the prevalence of bullying in schools and it urges us to be part of some bullying prevention programs that would lead to a better school environment and a happy group of students.

The next section asks the students whether they have stayed away from school in order to avoid being bullied. The results show that 459 students did not stay home to avoid bullying. It indicates that 76.5% of the children are not victims of bullying. But at the same time, 141 out of the 600 students stay away from school in order to avoid bullying. 23.5 percent of the students are reported to stay home to avoid bullying. This absence from the school is merely because they are victims of bullying. This shows that bullying in schools is an issue that needs immense attention on the part of the authorities.

213 students out of the 600 students reported that they don't really mind about bullying. When it is converted into percentage value, it is found that 35 percent of children are not at all bothered when students get bullied. 23 percent of children who constitute 138 students out of the 600 are bothered a little bit about the bullying incidents. 25.5 percent of children, which come up to 153 among the 600 students, are bothered about bullying some of the time and 16 percent of them, that is, 96 students out of the 600 are bothered to a lot when students get bullied. This is an alarming thing to know that 65% of the students are concerned about such adverse happenings in the school.

366 children reported that they have not tried to help the victim who was being bullied. This indicates that 61 percent of children have not tried to help the children being bullied. 18.5 of them reported that they have tried to help others once or twice every week, 7 percent of them have reported many times a week and 13.5 of them did not know about it. The result shows that 29 percent of the children have tried to help the other students when they were being bullied.

It may be noted that out of the 600 students included in the study, 486 children reported that bullying occurs in the classrooms. This shows that classrooms are the place where bullying happens the most. It indicates that 81 percent of bullying happens in the classrooms. 33 percent of students reported lunch or eating area as the place where bullying occurs. 15.5 percent of students reported outdoor area around the school as the place where bullying happens. 12.5 percent students reported school bus or ferry as the place where bullying occurs. 10 percent students reported that bullying occurs on the way to and from school. 8.5 percent students reported washrooms to be the place where bullying happens. 7 percent students reported hall ways and library, 4.5 percent students reported Gym, 4 percent students reported computer room and change rooms, 2.5 percent students reported other areas like bus stop or train, 2 percent students reported malls or stores, and 2 percent students reported coat rooms as the place where bullying happen.

It may be noted that 300 students reported that bullying happens during break, lunch or at recess. This place can be considered as the bullying place as it indicates that 50 percent of students felt bullying happens most in break or lunch time. 24 percent reported bullying to happen during classes, 21 percent reported it after school, 17 percent reported it between classes, 13.5 percent reported it before school and 1.5 percent reported it on the weekends. The result shows that most of the bullying happens at the time of break.

CONCLUSION

It is concluded that there is prevalence of bullying in our schools. Bullying can threaten students' physical and emotional safety at school and can negatively impact their ability to learn. Bullying has to be taken seriously as it has been associated with certain immediate unfavourable consequences for the victims and several victims carry the scars of this victimization through their adult life. Bullying is not just a school problem. It also happens in the community and it requires community support and solutions. Every school exists within a wider community and developing community partnerships to prevent and reduce bullying is an excellent strategy for many reasons.

The outcomes for people who bully others are also not good in the long-term. Children and young people who bully others may come to see bullying as a normal and acceptable way to behave. Those who bully others need support to learn more appropriate ways of behaving and of resolving conflict to prepare them for adulthood and to reduce the likelihood of developing even more serious anti-social behaviours.

Bullying can be one of the biggest problems for our youth. We need to take responsibility to put an end to this growing dilemma. Our films, entertainers, TV, website, chat rooms etc. all encourage darkened behavior. The statistics of suicide of innocent people who have been the victims of bullying is staggering and alarming. We need to make this issue a priority, whether at home, in school, in the government, or at work. We cannot afford to lose another beautiful soul. There is so much written now concerning this subject. We need to get to the people who bully as quickly as possible. We need to get to them before someone gets hurt.

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Original Research Article

A Study to assess Depression levels in MBBS Students

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ABSTRACT

Background and Objectives: Medical education can be quite stressful and studies all over the world have consistently shown a high prevalence of depression in medical students. In India, the prevalence of depression was around 39%. It was observed that the prevalence of provisionally diagnosed depressive disorder and major depressive disorder in medical students was 21.5% and 7.6%, respectively. Our plan is to assess the depression level in the students and according treatment will be given
Methods: The study duration of this project was 18 months. The data for this study has been collected from I year, II year and III year medical students of MIMER Medical College and B.S.T.R.H, Talegaon Dabhade. The Study design and Set-up was a cross-sectional, questionnaire-based study. Using stratified random sampling, 200 students were selected who agreed to volunteer in the project.
Results: In our study, the prevalence of depression was found to be more in 1st year than the 2nd and 3rd year. This finding could be due to students' just entering medical college after high school. The other causes maybe language problem, vast syllabus, fear of failure, tight schedule and tough topics.
Conclusion: Interaction between students and faculties should be encouraged so that the signs of stress can be detected and addressed at the earliest. Prevention strategies should take into considerations the wide variety of factors that are inducing stress among students.

Keywords: Depression, stress, MBBS students.

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INTRODUCTION

Depression is one of the four major diseases in the world and is the most common cause of disability from diseases [1]. It causes severe symptoms that affect how you feel, think and handle daily activities, such as sleeping, eating, or working. To be diagnosed as depression, the symptoms must be present for at least two weeks. Some forms of depression are slightly different, or they may develop under unique circumstances, such as:

1. **Persistent depressive disorder** is a depressed mood that lasts for at least 2 years
2. **Perinatal depression** is characterized by relatively mild depressive and anxiety symptoms that typically clear within two weeks after the delivery.
3. **Seasonal affective disorder** is onset of depression with seasonal variation.
4. **Bipolar disorder** is characterized by episodes of extremely low moods followed by extreme high-euphoric state called "mania" [2].

Depression has been varied from 1.7 to 74 per thousand population, and widespread problem across the country [3]. College students are exclusive group of people that are enduring a critical transitory period in which they're going from adolescence to adulthood and can be one of the most stressful times in a person's life [4]. The major cause of anxiety can be due to reasons such as trying to fit in, maintain good grades,

plan, and being away from home [5]. As a reaction to this stress, some students get depressed. They find that they cannot get themselves together. They may cry all the time, skip classes, or isolate themselves without realizing they're depressed [6].

The report on Global Burden of Disease estimates the point prevalence of the unipolar depressive episodes to be 1.9% for men and 3.2% for women and the one-year prevalence is estimated to be 5.8% for men and 9.5% for women. It estimated that by the year 2020 the burden of depression will increase to 5.7% of the total burden of the disease if the current trends for demographic and epidemiological transition continue. It would then be the 2nd leading cause of disability- adjusted life years (DALYs), second only to ischemic heart disease [7].

Depression among medical students is extremely prevalent. Medical students are confronted with significant academic, psychological and existential stressors [8]. Consequently, prevalence of depression is higher in medical students compared to general population. It has been observed that mental health worsens after students begin medical school and remain poor throughout training. On a personal level, this distress can contribute to substance abuse, broken relationships, suicide and attrition from the profession. On a professional level, study suggests that student distress contributes to cynicism and subsequently may affect students' care of patients, relationship with faculty and ultimately the culture of medical profession [9].

Medical education can be quite stressful and studies all over the world have consistently shown a high prevalence of depression in medical students [10]. In India, the prevalence of depression was around 39%. It was observed that the prevalence of provisionally diagnosed depressive disorder and major depressive disorder in medical students was 21.5% and 7.6%, respectively [11].

Academic performance had a significant association with depression in medical students. The stigma associated with poor academic performance may be a contributing factor. On the other hand, students with excellent academic performance maybe facing pressures due to the competitive nature of medical education [12].

It is also seen that Medical students are reluctant to seek help from mental health services. Although 14.7% students admitted having experienced depressive symptoms, only 4.7% had ever consulted a counselor [13]. In a prior study to find prevalence of depression and use of mental health services amongst medical students, it was seen that only 22% of depressed students were using mental health counseling services. The most frequently cited barriers to using these services were lack of time, lack of confidentiality, stigma associated with using mental health services, cost, fear of documentation on academic record, and fear of unwanted intervention. Our plan is to assess the depression level in the students and according treatment will be given [13].

METHODOLOGY

This Observational Question based Cross-Sectional Study was approved by institutional ethical committee (IEC). The study duration of this project was 18 months. The data for this study has been collected from I year, II year and III year medical students of MIMER Medical College and B.S.T.R.H, Talegaon Dabhade. The Study design and Set-up was a cross-sectional, questionnaire-based study. Using stratified random sampling, 200 students were selected who agreed to volunteer in the project.

Patient Health Questionnaire – 9 (PHQ-9)

This scale is used to measure the severity of depression along with the diagnosis of depression. It is a self-administered tool. Patient Health Questionnaire 9 is widely used in research and clinical practice to assess depression. It was derived from the original instrument viz., Primary Care Evaluation of Mental Disorders (PRIME-MD) The PHQ-9 contains 9 items. Each item has score ranging from 0 to 3 on the LIKERT scale. The TOTAL score is 27 [14]. The PHQ-9 has a sensitivity of 88% and a specificity of 88% for major depression when the cut-off score of 10 is taken [15].

Patient Health Questionnaire (PHQ-9), was used to make a provisional diagnosis of depression. It is a self-administered questionnaire which will assist in screening, evaluating and provisionally diagnosing depression. Based on the PHQ-9 Depression Score of each student, Mild depressive students were given

assisted counseling. Moderate to Severely depressive students were given treatment by the Department of Psychiatry, MIMER Medical College and B.S.T.R.H Talegaon (D)

Interpretation of Total Score

TOTAL SCORE	DEPRESSION SEVERITY
5-9	Mild depression
10-14	Moderate depression
15-19	Moderately Severe depression
20-27	Severe depression

The total Study population was 200, out of which:
1st year medical students; between age group 17-19 years Total – 72.
2nd year medical students; between age group 18-20 years Total – 82.
3rd year medical students, between age group 21-22 years. Total – 46.

RESULTS

Table 1 – Gender wise distribution of students

Year	Male	Female	Total
1st	32	40	72
2nd	33	49	82
3rd	18	28	46

Table 2 – Prevalence of Depression amongst MBBS students

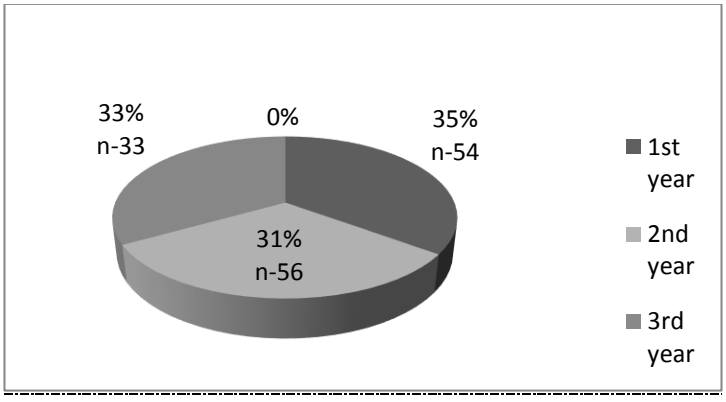

Table 3 – Depression severity amongst 1st, 2nd and 3rd year MBBS students

Year	Mild	Moderate	Moderate Severe	Severe
1st Year	26 (32.5%)	14 (31.11%)	5 (50%)	4 (50%)
2nd Year	41 (51.25%)	16 (35.56%)	3 (30%)	2 (25%)
3rd Year	13 (16.25%)	15 (33.33%)	2 (20%)	2 (25%)
Total	80	45	10	8
Percentage	40%	22.5%	5%	4%

DISCUSSION

Medical Education renders significant amount of stress to the students. The proportion of stress among MBBS students is different for different year. In this study also 31.5% of the medical students had substantial amount of stress which is comparable to the other studies conducted at Brazil (40.2%), Iran (44%) and Malaysia (41.9%) [16]. The substantial stress is estimated in those students whose PHQ-9 score is above 10. The severe stress was just 4%. Medical Students go through not only the stress imposed by medical education but also routine everyday life stressors which may explain the level of severe stress noted among medical students. This increased level of stress and consequently depression indicates a decrease of psychological health in our students which may impair students' behavior, diminish learning and ultimately affect patient care [17].

In our study prevalence of depression in 1st year versus 2nd year versus 3rd year is as following1st year:24.5%, 2nd year:31%, 3rd year:16%. In our study, the prevalence of depression was found to be more in 1st year than the 2nd and 3rd year. This finding could be due to students' just entering medical college after high school. The other causes maybe language problem, vast syllabus, fear of failure, tight schedule and tough topics. Medical Council of India also suggests foundation course of 2 months duration after admission to prepare a student to study medicine effectively. [18]. Also, it is seen that the prevalence of depression is lowest for 2nd year students. This is probably due to long span of the 2nd year and ample time for studies and to adjust with the surroundings. The prevalence of depression is 71% for 3rd year students which is more than 3rd year but less than 1st year. Generally, it is seen that as the prevalence of depression to be found less in the clinical years than the non-clinical years [19]. Both the first and third year students reported academic stress and hectic life cycle as their principal stress inducing factors. Even studies from India and Pakistan reported academic stress and exam as the most troublesome stressors. But in the done in the Britain, students did not report of overload as their major source of stress [20].

In our study prevalence of Depression in Male versus Female students is as following - Depressed females - 76%, Depressed male - 65%. Another finding of our study is that a gender difference regarding the association with depression was noted where female students reported a marginally higher prevalence of depression than in men. Other similar studies done by Davidson also report depression to be more in female students [21]. This gender Variation in depressive status in medical students could be reflection of usual trend of high prevalence of depression in females as in general population [22]. The finding of similar female: male prevalence ratios in developed countries and globally suggests that the differential risk may primarily stem from biological sex differences and depend less on race, culture, diet, education and numerous other potential social and economic factors [23].

In our study the prevalence of Depression in Hostelite versus Localite is as following i.e. Hostelite - 70% and Localite - 73%. Hostelite**-** The students residing in the hostel and Localite – The students residing in the nearby locality in rented apartments or those living in their respective homes. It is noted that localities have slightly higher prevalence of depression than that of the hostelites. The probable reason maybe the transport through local trains which is very hectic and tiresome. They miss out the jolly life of the hostelites which can be the major reason of the higher prevalence of stress in them.

CONCLUSION

Interaction between students and faculties should be encouraged so that the signs of stress can be detected and addressed at the earliest. Prevention strategies should take into considerations the wide variety of factors that are inducing stress among students. Allowing flexible learning options in the curriculum may offer a variety of options including clinical electives, laboratory posting or community exposure in areas that students are not normally exposed as a part of regular curriculum. This can be the reason of low prevalence of depression in 2nd year students. This will also provide opportunity for students to do project, enhance self-directed learning, critical thinking and research abilities.it is possible that few students have already an inherent tendency of taking stress and their entry in MBBS course maybe be aggravating it. Such students should be identified by psychological screening tests at the time of their entry only. Compulsory recreation facilities should be provided within the campus for the students as it is proved that

inadequate social activity and impaired psychological health are interlinked and that leisure activities can reduce stress among students. Relaxing exercises, yoga and meditation should be studied to relieve stress among medical students

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Original Research Article

Impact of Parental Acceptance-Rejection on Anxiety among Metropolitan Adolescents

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ABSTRACT

Background and Objectives: The present study was planned and executed with the aim to investigate the effect of parental acceptance- rejection (both mother and father) as perceived by adolescents on their anxiety level. The sample comprised of 300 students studying in ninth and tenth standard in private schools in Delhi.
Methods: In order to study parental acceptance- rejection, Parental Acceptance-Rejection Questionnaire (PARQ) which consists of four dimensions (coldness, aggression, neglect and rejection) developed by Rohner was used separately for mother and father and for measuring anxiety, Mental Healthy Inventory (MHI-38) by Davies, Sherbourne, Peterson and Ware (1998) was administered. Correlation analysis and step wise regression analysis were carried out in order to study the effect of parental acceptance- rejection (both mother and father) on anxiety among adolescents.
Results: The results revealed that: as adolescent's perception of maternal and paternal coldness, aggression, neglect and rejection increases, adolescents become more anxious in nature and that mother's aggression emerged as significant predictor variables for anxiety among adolescents.
Conclusion: Parental warmth and nurturance acts as a buffer against the anxiety level of these adolescents. It may thus also be concluded that adolescents in metropolitan cities who do not perceive their parents as caring, affectionate or nurturing will experience higher level of anxiety.

Keywords: Adolescents, coldness, aggression, neglect, rejection, anxiety.

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INTRODUCTION

Adolescence is considered as a period of transition from childhood to adulthood and it is important because many developmental changes occur during this time as has been mentioned in the previous sections. These changes include physical growth, new peer relationship with both the gender, emotional detachment from parents, enhancement of intellectual skills and so on. As a part of one's overall health, mental and emotional health or well-being is a necessary condition to enable one to manage one's life successfully. The adaptive experience, expression and regulation of emotion is increasingly being recognized as core feature of healthy intra and inter personal functioning across the lifespan. A critical aspect of child and adolescent development involves the ability to experience and express both positive and negative emotions [1]. Mental health is the emotional and spiritual resilience that allows one to enjoy life and to survive pain, suffering and

disappointment [2]. Anxiety is one of the most common psychological disorders in school-aged children and adolescents worldwide [3].

Anxiety is associated with substantial negative effects on children's social, emotional and academic success [4]. Specific effects include poor social and coping skills, often leading to avoidance of social interactions [5], loneliness, low self-esteem, perceptions of social rejection, and difficulty forming friendships [6,7].

Adolescents of today's world are living in a world of competition where there is a cut throat competition in every sphere of life. "The theory of survival of the fittest" applies to each and every walk of the society. Adolescents today are living in an increasingly anxiety ridden atmosphere [8]. The adolescent period is often accompanied by new stress, behavioural changes and relationship problems and this affects psycho social development. Parental involvement in the lives of adolescent children facilitates young people to cope with stressors and do maintain physical and mental health [9].

Children experience anxiety as part of their normal development in daily life. However, sometimes, in some children, anxiety symptoms get exaggerated and become worse [10]. Research has suggested a connection between certain anxiety disorders and parental child-rearing styles. Arrindell and others [11] found that children with social phobias perceive rejection from their parents as compared to persons without an anxiety disorder. In a study by Grüner, Mûris, and Merckelbach [12], the researchers examined the association between parenting style and the development of anxiety symptoms in children with anxiety disorder. The researchers assessed emotional rejection involved in the development of childhood anxiety symptoms. They found significant and positive associations between parental rejection and severity of anxiety symptoms.

Mishra and Sharma [13] further demonstrated that perceived relationship with father, mother's love and one's appearance were associated with depression and anxiety among girls aged 12 to18. In general, girls tended to report higher adjustment difficulties than boys, but also more prosocial behaviour. McLeod, Wood and Weisz [14] revealed that higher levels of parental control were associated with more anxiety in children. The same has been witnessed in a sample of students aged 11to16 going to urban schools in Bangalore [15]. Asselmann and others [16] found that anxious adolescents reported low maternal autonomy support during childhood. Cooper-Vince, Pincus and Comer [17] found that intrusiveness, over involvement and high demandingness from parents were correlated with lack of confidence and lack of coping mechanisms which contributed to anxiety. Lungarini [18] found that more responsive fathers have children with low anxiety.

METHODOLOGY

The aim of the present research was to evaluate whether parental acceptance-rejection effects the anxiety among adolescents. For this purpose, Parental Acceptance Rejection Questionniare (PARQ) developed by Rohner [19] was used to measure the adolescent's perception about their parental acceptance and rejection, i.e., coldness, aggression, neglect and rejection and for evaluating anxiety among the selected sample of adolescents, Mental Health Inventory (MHI-38) developed by Davies, Sherbourne, Peterson and Ware [20] was administered.

Sample

A stratified random sampling approach was employed to select a total sample of 300 school children from ninth and tenth standard studying in private school in Delhi. The data from students were taken after obtaining permission from the school principal to conduct the study in their respective schools. The goal was to choose 150 students each from ninth and tenth class from two private schools in Delhi. The scales were administered on the students during their regular school time in their classes.

Tools

Parental Acceptance-Rejection Questionnaire

The Parental Acceptance-Rejection Questionnaire (PARQ) [19], is a self-report questionnaire designed to assess individuals' - both children's and adults' - perceptions of parental acceptance and rejection. The PARQ is characterized by its phenomenological orientation - that is, it asks children to interpret caregiver behaviour through their own personal and cultural lenses on four dimensions i.e. coldness, aggression, neglect and rejection.

For the present study, a short form prepared by Rohner and Khaleque [21] was administered. It consists of 24 statements, that cover the four variables mentioned above and their scoring key is presented in Table 1. Individuals respond to statements on a 4-point Likert-type scale ranging from *almost always true* to *almost never true*. Higher scores indicated a higher level of perceived parental acceptance and lower scores indicate higher parental rejection. The reliability of the PARQ has been found to be remarkable in a variety of studies. Rohner [22] revealed a median coefficient of 0.91 (range = 0.83-0.96) for the standard PARQ form. Validity studies on the PARQ have also been conducted and demonstrate remarkable results. Convergent and discriminant validity was shown with the PARQ scales correlating significantly with its respective validation scale [21]. The PARQ has been both utilized and cross-validated across several cultures, including transgender women of colour [23], Korean American adolescents [24], Turkish adults [25] and adolescents from Bangladesh, Estonia, India, Kuwait, Turkey, and the United States [26-27].

Table 1: Possible extremes and midpoints of Scale and Total-Test Scores of the PARQ

Scales/Total Test	**Lowest Possible Scores**	**Highest possible Scores**	**Component Items**
Coldness	8	32	1,3,9,12,17,19,22,24
Aggression/Hostility (AH)	6	24	4,6,10,14,18,20
Neglect/Indifference (NI)	6	24	2,7, 11, 13*, 15, 23
Rejection (Undifferentiated) (RU)	4	16	5, 8, 16, 21
Total (Composite) Test (TC) (a)	24	96 (b)	

(a) Includes Warmth/Affection scale reverse scored

(b) 96 means maximum rejection (not maximum acceptance).

* Reverse scoring

Mental Health Inventory (MHI-38)

The Mental Health Inventory (MHI-38) was designed by Davies, Sherbourne, Peterson and Ware in 1998 and is a 38 item measure designed to assess the multi dimension nature of psychological well-being, including: anxiety, depression, loss of behavioural/ emotional control, general positive affect, emotional ties and life satisfaction [20]. The mental health inventory has a reported 0.93 Cronbach's alpha rating whereas its abbreviated version has 0.82.

STATISTICAL ANALYSIS

The data obtained was entered using Microsoft Excel 2013 and analyzed using SPSS 16.0 Software. The Pearson chi square correlation test was used to find out the association of few of the personal factors with the levels of depression, anxiety and stress amongst the respondents.

RESULTS

For the purpose of analysing the results correlation and regression analysis were carried out. In order to look at the anxiety among adolescents mean and standard deviation were carried out and are presented in Table 2.

Table 2: Representing Distribution of Scores for Adolescent's Anxiety

Variable	n(%)	Mean	S.D.	Min.	Max.
Anxiety		30.95	7.98	9	54
Low Scorer (<_ 31)	170(56.7)				
High Scorer (>31)	130(43.3)				

As can be seen from that Table 2 that approximately 43.3 per cent adolescents report to have high level of anxiety, whereas, 56.7 per cent report low anxiousness. It is evident from Table 3 there exists a significant and positive correlation between all the four variables of mother's acceptance-rejection*, i.e.,* mother's coldness ($r = 0.168$, $p < 0.01$), mother's aggression ($r = 0.318$, $p < 0.01$), mother's neglect ($r = 0.233$, $p< 0.01$) and mother's rejection ($r = 0.247$, $p < 0.01$) and anxiety dimension of mental health. This indicates that as mother's coldness, aggression, neglect and rejection as perceived by adolescents increases, their anxiety level also increases.

Table 3: Representing Inter-Correlations of PARQ and Anxiety among Adolescents

Parental Acceptance-Rejection	Anxiety
Mother's Warmth	0.168**
Mother's Aggression	0.318**
Mother's Neglect	0.233**
Mother's Rejection	0.247**
Father's Warmth	0.124*
Father's Aggression	0.222**
Father's Neglect	0.170**
Father's Rejection	0.231**

*$p < 0.05$, $p < 0.01$

It is further visible from Table 3 that there also exists a positive and significant correlation between all the four variables of father's acceptance-rejection, which includes father's coldness ($r = 0.124$, $p < 0.05$), father's aggression ($r = 0.222$, $p < 0.01$), father's neglect ($r = 0.170$, $p < 0.01$) and father's rejection ($r = 0.231$, $p < 0.01$) and anxiety among adolescents. Thus, higher the father's coldness, aggression, neglect and rejection, higher is the anxiety level of adolescents. Thus, it can be concluded that as adolescent's perception of parental rejection in terms of coldness, aggression, neglect and rejection increases, adolescents' anxiety also increases.

Table 4: Stepwise Multiple Regression Analyses of Parental Acceptance-Rejection as Predictors of Anxiety among Adolescents

Independent Variable	r	Beta Coefficient	t	R^2	R^2 Change	F- Value (R^2 Change)
Mother's Aggression	0.318**	0.318	5.781**	0.101	0.101	33.418**

As is evident from Table 4, the only significant predictor variable for anxiety among the domains of parental acceptance-rejection is mother's aggression ($\beta = 0.318$, $t= 5.781$, $p < 0.01$). Thus, as adolescent's perception of their mother's aggression towards them increases, their anxiety also increases. Mother's aggression ($F= 33.418$, $p < 0.01$) accounted for 10.1 per cent of variance among anxiety variable.

DISCUSSION

From the above presented results, it is apparent that the parental acceptance-rejection in terms of coldness, aggression, neglect and rejection both from mother and father has a positive correlation with anxiety among adolescents. Thus, if adolescents perceive both their parents to be cold, aggressive, neglecting and rejecting then they have significantly higher level of anxiousness. Furthermore, it is apparent from the results of regression analysis that of all the variables of parental acceptance-rejection only mothers aggression has emerged as a significant predictor of anxiety among adolescents.

The results of the study are incongruence with the mediation model as proposed by Rohner [19]. Gruner, Muris and Merckelback [12] examined the association between parenting style and the development of anxiety symptoms in children. The researchers assessed emotional rejection involved in the development of childhood anxiety symptoms. They found significant and positive association between parental rejection and severity of anxiety symptoms. Additionally, Shafi and Bhutto [28] found that adolescents high on parental rejection had higher level of anxiety.

Thergaonkar and Wadkar [29] found that democratic style of parenting and greater acceptance of parents among children may prevent anxiety. McLeod, Wood and Weisz [14] revealed that higher levels of parental control were associated with more anxiety among children.

Cooper-Vince and others [17] found that intrusiveness, over involvement and high demandingness from parents were correlated with lack of confidence and lack of coping mechanisms, which contributed to anxiety. Thus, it can be stated that both parental rejection and personality traits of an adolescent are important for his predisposition towards development of anxious behaviour. Mishra and Sharma [13] in their study demonstrated that mother's love is associated with anxiety among adolescents especially girls. Kaushik and Rani [30] have stated that perfectionist attitude of mothers is positively related with anxiety among adolescents. Asselmann and others [16] found that anxious adolescents reported low maternal autonomy support during adolescence. Even though, not much research has focused on direct role of maternal aggression on anxiety among adolescents, but from these studies it can be stated that if mothers are rejecting or aggressive then adolescents are anxious as they spend much of their time with mother at home, thus, aggression from mothers makes them fearful which leads to anxiety.

Waite and Cresswell [31] have further commented that parent who are critical or hostile towards their child, or the relationship is characterized by a lack of warmth, involvement, emotional support or reciprocity may lead to increase in child's sensitivity towards anxiety by undermining his or her ability to regulate emotions.

CONCLUSION

From the above discussed results of the present research work it can be concluded that adolescents in metropolitan cities who do not perceive their parents as caring, affectionate or nurturing will experience higher level of anxiety. Therefore, parental warmth and nurturance acts as a buffer against the anxiety level of these adolescents.

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Original Research Article

Study of Depression and Anxiety in Endoscopically Diagnosed Cases of Gastro- Oesophageal Reflux Disease (GERD)

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ABSTRACT

Background and Objectives: To study the Depression and Anxiety in diagnosed esophageal reflux disease cases and to compare it with the age and sex matched controls
Methods: Study conducted in the gastro-enterology unit of Sri Aurobindo Medical College and Post-Graduate Institute, Indore. After taking an informed consent in their local language (Hindi), we recruited 100 patients with symptoms and endoscopic evidence of GERD along with 100 age and sex matched controls. Patients diagnosed to have GERD on the basis of either frequent complaints of heartburn and/or acid regurgitation for the last 3 months and the presence of endoscopic evidence of GERD. Following instruments were administered: A semi-structured socio-demographic pro-forma, Mini International Neuropsychiatric interview, Hamilton Rating Scale for Depression, Hamilton Rating Scale for Anxiety and Diagnostic and Statistical Manual of Mental Disorders – 5.
Results: The present study revealed that significantly higher number of GERD patients suffered from depression (46%) and anxiety (31%) as compared to their matched controls. Also, both HAM-D and HAM-A scores showed higher numbers of GERD patients to be having 'severe' or 'very severe' forms of psychological morbidity than the controls. Patients with GERD used tobacco, in smoking or chewing form, in significantly higher numbers than the controls, while alcohol users were underrepresented in both groups.
Conclusion: In summary, among the 100 GERD cases 56 were found to have psychiatric morbidity in form of either anxiety or depression.

Keywords: GERD, Depression, Anxiety,

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INTRODUCTION

GERD is characterised by complex relationship between acid production and symptoms, where stomach content flowing back through lower oesophagus sphincter causes heartburn, subjective feeling of regurgitation and other complications [1-2]. GERD is frequently seen in Gastroenterology out patients across the world with prevalence estimates of 18.1% - 27.8% in North America, 8.8% - 25.9% in Europe, 2.5% - 7.8% in East Asia, 8.7% - 33.1% in the Middle East, 11.6% in Australia and 23.0% in South America. Researchers showed prevalence of GERD in an urban adult population from northern India is 16.2% which

is similar to other industrialized countries. Higher body mass index, current smoking, and presence of asthma or hypertension predisposes to GERD in our population [3].

A prospective, multi-centric study involving 3224 subjects regarding the frequency, severity and duration of heartburn, regurgitation and other symptoms of GERD by the Indian Society of Gastroenterology showed 7.6% of Indian subjects had significant GERD symptoms. Consumption of non-vegetarian foods was an independent predictor of GERD. Patient seeking treatments for GERD in Gastroenterology OPD are often referred to psychiatrists for problems like mood, anxiety and sleep disturbances. GERD and mental well-being have been examined in both gastrointestinal and psychiatric-based clinical care settings with reports of increased likelihood of GERD amongst depressed individuals and vice-versa [4-5] and increased risk of anxiety [6], neuroticism in temperament [7] and general psychological distress amongst GERD sufferers [8].

We are well aware of psychosomatics, which is based on the belief that psychic stimuli can produce a response in somatic structures via direct and indirect means. While there is an extensive evidence base suggesting an association between irritable bowel syndrome and psychiatric disorders [9], relationship between GERD and psychological disorders although has been recognized in the literature, but there are very few studies that attempt to define the exact relationship between the two abnormalities and the proper management of GERD patients with psychological co morbidity.

METHODOLOGY

The study was initiated after the approval of the institutional ethics committee. Data was collected over a period of 18 months with the co-operation and assistance of the department of the gastro-enterology unit of Sri Aurobindo Medical College and Post-Graduate Institute, Indore. During this time 100 cases with symptoms and endoscopic evidence of GERD along with 100 age and sex matched controls were studied. Non consenting individuals were excluded. The subjects for the study was selected from the clinically diagnosed patients of Gastro-esophageal reflux disease and their caregivers

Patients diagnosed to have GERD Subjects fulfilling the inclusion criteria were identified. They were informed in detail regarding the study and written informed consent was taken in their local language. Socio-demographic data and clinical information were collected on a semi-structured pro-forma.

Inclusion Criteria

- Patients of either gender
- Aged 16 to 70 years.
- Patients diagnosed with GERD

Exclusion Criteria

- H/o mental retardation, any major psychotic illness, any chronic medical illness (other than acid peptic disease).
- Patients with complications of GERD like oesophageal stricture, Barrett's oesophagus and adenocarcinoma.
- Patients who refused to give informed consent.

RESULTS

Demographic Characteristics

The study was conducted over six months and included 100 adult patients and 100 controls. The study group consisted of total of 100 cases of GERD and their 100 age and sex matched controls (relatives and attendants) visiting the Gastroenterology OPD. Out of 100 cases 38 were male, comprising and the rest 62 were female. Among the control 34 were males and 66 females. The age of subjects enrolled in study range between 16 to 70 years. In both cases and control the highest numbers were in the bracket 30 to 39 years (33% cases and 31 % control). Mean age among cases was 37.47 and among controls was 35.76.

Table 1: Socio-demographic Characteristics of the study population

	Case N=100	Control N=100	Statistics
Age			
16-29	28	34	$X^2 = 4.637$
30-39	33	31	df= 4
40-49	19	23	p= 0.32
50-69	20	11	
>70	0	1	
Sex			$X^2 = 0.3472$
Male	38	34	df= 1
Female	62	66	p= 0.55
Education			
Illiterate	22	9	$X^2 = 8.425$
Primary	18	16	df= 5
Secondary	17	20	p= 0.13
Higher secondary	21	21	
Graduation	19	30	
Post-graduation	3	4	
Residence			
Rural	48	52	$X^2 = 0.32$
Urban	52	48	df= 1
			p= 0.57
Religion			
Hindu	94	95	$X^2 = 0.096$
Muslim	6	5	df= 1
			p= 0.75
Marital status			
Married	91	82	$X^2 = 3.46$
Unmarried	9	18	df= 1
			p= 0.06
Occupation			
Housewife	29	24	
Farmer	24	26	X2 = 1.244
Professional	6	8	df = 7
Skilled worker	7	8	p = 0.98
Semi-skilled job	16	18	
Unskilled worker	5	4	
Student	8	8	
Unemployed/ retired	5	4	

A higher number of subjects were married (91% of the cases and 82% of the controls). The subjects were comparable on the basis of age and marital status in both the groups. The p-values were above 0.05 and therefore not significant. Most of the patients (n=94) interviewed were Hindu and the rest were Muslim. 18% had received primary education, 60% had received education up to the secondary level or higher, while 22 percent were illiterate. Majority of the subjects were farmers (24%) while 29 percent were housewives, 16% were semi-skilled workers. Among the rest 7% percent worked as skilled workers, and unskilled worker category, 6% were professionals and 5 % were either retired or unemployed.

Table 2: Alcohol Use, Tobacco Use, BMI and Spicy Food: Relation with GERD

	Case	Control	
Alcohol			
Yes	9	11	X^2= 0.22
No	91	89	df= 1
			p= 0.6374
Tobacco			
Yes	69	26	X^2 = 37
No	31	74	df= 1
			p < 0.0000001
BMI			
>18.5 (Underweight)	29	16	X^2 = 11.01
18.5-24.9 (Healthy)	57	74	df= 3
25-29.9 (Overweight)	9	10	p < 0.01165
>30 (Obese)	5	0	
Spicy/Non Spicy Food			X^2 = 4.33
Spicy	63	49	df = 1
Non-Spicy	36	51	p = 0.03266

Substance use

91 patients and 89 controls were not using alcohol regularly with 9 patients and 11 controls were using it on daily bases. Tobacco was used by 69 patients and only 26 controls. On applying Chi square test. p value was noted to be significant (p value=< 0.0000001)

Body Mass Index

74 controls and 57 patients were healthy (BMI 18.5- 24.9) and 5 cases were obese as compared to none among controls. Difference between BMI valve between cases and control was significant (p value 0.01165). Food preference did not seem to affect GERD.

Table 3: Prevalence of psychiatric morbidity in Patients of GERD

	Cases	Control	
MINI-D			
Negative	54	81	X^2 = 16.62
Positive	46	19	df= 1
			p= 0.00004
MINI-A			
Negative	69	89	X^2 = 12.06
Positive	31	11	df = 1
			p= 0.0005

Forty-six patients with GERD were diagnosed as having major depressive disorder and 31 had anxiety Disorder. In the control group, 19 patients had depression and 11 had anxiety disorder. The difference between the patient group and the control was statistically highly significant, p = 0.00004 for major depressive disorder, and p= 0.0005 for anxiety disorder.

Table 4: Severity of Depression in Patients of GERD

	Case	Control	
HAM-D			
8-13 Mild	4	0	$X^2 = 1.8$
14-18 Moderate	15	6	df=3
19-22 Severe	12	6	p = 0.5989
>22 Very Severe	15	7	

For measuring the severity of major depressive disorder, the Hamilton Depression Rating Scale (HDRS), abbreviated HAM-D was used. The questionnaire is designed for adults and is used to rate the severity of their depression by probing mood, feelings of guilt, suicide ideation, insomnia, agitation or retardation, anxiety, weight loss, and somatic symptoms. Out of a total of 100 patients, 46 were diagnosed of having depression. Four had 'mild' depression (i.e. scores 8-13), 15 had 'moderate' (scores 14-18), 12 had severe (scores 19-22) and 15 had very severe (score > 22). Among the controls, 19% had depression most of whom had moderate to severe depression.

Table 5: Severity of Anxiety in Patients with GERD

	Cases	Control	
HAM-A			
<14 Normal	2	0	$X^2 = 3.2$
14-17 Mild	3	0	df = 3
18-24 Moderate	14	8	p = 0.3547
25-30 Severe	12	3	

Out of a total of 100 patients 31 who were positive for Anxiety, only 3 had 'mild Anxiety (i.e. scores 14-17), 14 had moderate Anxiety symptoms (scores 18 – 24). 12 patients had severe Anxiety symptoms (score 25-30).

Demographic Characteristics in Psychiatric Morbidity in GERD

When cases of GERD with psychiatric morbidity were compared with GERD patients without psychiatric morbidity following demographic and other characteristics were similar: age, marital status, gender, education level, occupation, religion, place of living, consumption of alcohol or tobacco. No statistically significant difference was observed in both the groups.

DISCUSSION

Socio-demographic characteristics

The demographic characteristics of the patient and the control groups were not found to be significantly different on the lines of education, residence, religion, marital status and occupation but numerically very high number of subjects were married in both case and control populations. This can be explained by under-representation of unmarried subjects in both groups. Since, the mean ages of the cases and controls were 37.47 and 35.76 years, culturally considered beyond the age of marriage – majority of the subjects could be expected to be married. Overall the demographic characteristics were well matched and comparable, which also reflects in the fact that mostly family members, friends or neighbors of the patients, who did not have gastroenterology related symptoms were taken as controls.

Table 6: Comparison of demographical characteristics in GERD Patients and Controls.

Variable	**Psychiatric morbidity Present (N=56)**	**%**	**Psychiatric morbidity Absent (N=56)**	**%**	**Statistics**
Age					$X^2 = 3.561$
Range	18-66		14-70		df = 4
Mean	30.03		39.29		p = 0.468
(SD)	(11.18)		(14.11)		
Sex					$X^2 = 0.501$
Male	23	41.1	15	34.1	df= 1
Female	33	58.9	29	65.9	p = 0.47
Marital Status					$X^2 = .127$
Married	52	92.9	40	90.9	df= 1
Unmarried	4	7.15	4	9.1	p = 0.72
Education					
Illiterate	13	23.2	9	20.5	$X^2 = 1.36$
Primary	9	16.4	9	20.5	df= 5
Secondary	9	16.4	8	18.2	p = 0.928
Higher Secondary	13	23.4	8	18.2	
Graduation	11	19.6	8	18.2	
Post-Graduation	1	1.8	2	4.5	
Residence					$X^2 = 0.002$
Rural	27	48.2	21	47.7	df= 1
Urban	29	51.8	33	52.2	p = 0.96
Religion					$X^2 = 1.331$
Hindu	54	96.4	40	40.9	df=1
Muslim	2	3.6	4	9.1	p = 0.24
Occupation					
House wife	16	28.5	13	29.5	$X^2 = 5.077$
Farmer	13	23.2	11	25	df= 7
Professional	3	5.3	3	6.8	p = 0.65
Skilled worker	1	1.7	3	6.8	
Semi- skilled	9	16.0	9	20.4	
Unskilled worker	5	8.9	1	2.3	
Student	5	8.9	3	6.8	
Unemployed/ retired	4	7.1	1	2.3	
Alcohol					$X^2 = 1.904$
Yes	49	87.5	42	95.5	df= 1
No	7	12.5	2	4.5	p = 0.16
Tobacco					$X^2 = 0.07$
Yes	38	67.9	31	70.5	df= 1
No	18	32.4	13	29.5	p 0.78

GERD and Alcohol Use

A large majority of subjects in this study (both cases and controls) denied alcohol use. Only 9% of cases and 11% of controls had either regular or occasional alcohol use. The difference was not significant. It can also be argued that the number of alcohol drinkers were under-represented in both groups. Many studies

regarding amount of alcohol use and types of GERD (erosive, non-erosive, symptomatic and asymptomatic) have revealed contradictory results. Researchers in Taiwan conducted a prospective study over 5 months in which 778 subjects underwent esophago-gastro-duodenoscopic examinations. The study concluded that erosive esophagitis was directly related to alcohol consumption [10].

A study involving 205 patients with GERD and 200 controls [11] compared the risk factors and clinical responses to proton pump inhibitors in patients with erosive oesophagitis and non-erosive reflux disease. They found that patients suffering from erosive type of oesophagitis are at higher odds of being regular alcohol users than patients suffering from non-erosive oesophagitis (OR=2.9, 95% CI: 1.0–8.3) [19].

Though there are fewer studies that have quantified the amount of alcohol intake and compared it with GERD symptoms, one large study from Japan stands out. They studied the relationship between quantity of alcohol consumption and the severity of oesophagitis in 463 men, the odds ratios/grams (alcohol)/day of dose response trends for erosive oesophagitis and Barrett's epithelium were 1.015 (95% CI: 1.004-1.026, p = 0.0066) and 1.012 (95% CI: 1.003-1.021, p = 0.0079), respectively. Alcohol consumption is also associated with an increased risk of erosive oesophagitis and Barrett's epithelium in Japanese men [12].

GERD and Tobacco use

Sixty nine percent of cases, in contrast to 26% of controls, agreed that they consumed tobacco in some form or the other. This difference was highly significant ($p < 0.0000001$) which is in agreement with multiple studies. Smoking seems to be associated with a spectrum of gastroesophageal diseases ranging from erosive gastritis and Barrett's esophagus to esophageal adenocarcinoma [11].

A longitudinal cohort study with nested case–control analysis was performed using data from the GPRD (General Practice Research Database) in the UK. The study included 7451 subjects and found that there were significantly more ex-smokers (OR 1.2 (95% CI 1.1–1.4)) and slightly more current smokers (OR 1.1 (95% CI 1.0–1.2) in patients with a new diagnosis of GORD than in the control cohort [13]. Studies measuring physiological parameters such as lower esophageal pH and cardiac sphincter tone have suggested biologically plausible evidences that smoking indeed has an effect sphincter tone and acid reflux [14].

Kharilas and Gupta [15] evaluated the esophageal sphincter function of chronic smokers compared with non-smokers and to ascertain the acute effects of smoking on the sphincter and the occurrence of acid reflux. As a group, the cigarette smokers had significantly lower oesophageal sphincter pressure compared with non-smokers but the sphincter was not further compromised by acutely smoking cigarettes. Cigarette smoking did, however, acutely increase the rate at which acid reflux events occurred [16].

GERD, Smoking and Depression

The current study found no significant difference in tobacco use among the patients of GERD with regard to presence or absence of psychiatric morbidity. A study from Taiwan that included 23,698 subjects who were investigated for GERD and also assessed for psychosocial stress and depression using Brief Encounter Psychosocial Instrument and Beck's Depression Inventory, reported that subjects with depression had a higher incidence of current smoking (29.3% in depression group vs. 24.8% in reference group; $p<0.01$) [24]. Subjects in depression group were also younger and had female predominance, which again was not the case in our study [17].

GERD and Obesity

A higher percentage of cases (29%) were underweight according to their BMIs than the controls (16%), but none of the controls were obese (as opposed to 5% among the cases). Fifty seven percent of cases and 74% of controls fell under the 'healthy' category. The difference is significant but this is not enough establish the trend or direction of association of body weight and GERD in this study.

More detailed studies concerning the association of BMI and GERD have shown significant association. Singh and others undertook a prospective study that included 332 adult subjects with gerd in a weight reduction intervention. majority of the subjects (97%) lost weight (average weight loss: 13 ± 7.7 kg) and as compared with baseline, there was a significant decrease in the overall prevalence of GERD. Overall, 81% of the subjects had reduction in GERD symptom scores; 65% had complete resolution and 15% had partial resolution of reflux symptoms [18].

El-Serag and others [19] in their study of 453 volunteers had found a linear relationship between frequency of heartburn and higher BMI. Obese participants were 2.5 times as likely as those with normal BMI (<25) to have reflux symptoms or esophageal erosions. The association between BMI and GERD symptoms persisted in this direction and magnitude after adjustment for potential confounders [19].

GERD: Body weight dissatisfaction and Depression

More than body mass index, body weight dissatisfaction may lead to depression independent of GERD. Richard and researchers [20] analysed the data of 15,975 Swiss individuals from 2012 Swiss Health Survey. BMI was calculated using the self reported data on height and weight and PHQ-9 (Patient Health Questionnaire) was used to ascertain depression. The stratification by age groups showed significant associations of BWD with depression in young, middle-aged and old individuals in dependent of BMI. Stratification by BMI categories resulted in statistically significant positive associations of body weight dissatisfaction and depression in underweight, normal weight, overweight and obese individuals [21].

Unfortunately, in the present study specific questions regarding weight satisfaction, GERD and depression were not explored, but WHOQoL-BREF included domain questions regarding body image (domain-2), the responses to which showed significantly higher scores among the controls compared to GERD patients ($t = 3.44$, $df = 198$; $p = 0.0007$).

Prevalence of Depression and Anxiety in GERD

Mini international neuropsychiatric interview was conducted on both, cases and controls, and revealed that 46% of the cases of GERD met the diagnosis of depression and 31% met the diagnosis of anxiety disorder, while among the controls the prevalence was 19% and 11% respectively. The difference in the prevalence rates of both groups was statistically highly significant with a p-value for both MINI-D as well as for MINI-A. A study from China [22] used Zung Self-Rating scales for anxiety (ZSAS) and depression (ZSDS) along with SF-36 (Short Form Survey) on 279 patients of GERD and 100 controls to assess psychological morbidity and quality of life. Both anxiety and depression were found to be significantly higher in the patient group. And within the patient group, patients diagnosed with non-erosive reflux disease (NERD) showed significantly higher scores than patients having Reflux Oesophagitis. Similar findings were observed for ZSDS scores.

This could mean either that patients with NERD might have higher GERD symptom perception owing to their anxious/depressed status or that patients with RE might be relatively less sensitive to pain owing to mucosal changes. Literature on robust physiological studies needs to be explored to understand this difference, but good evidence is available to psychosocial stress and acid reflux, which may partially explain higher prevalence of depression/anxiety in these patients.

A study of 6,834 Korean subjects who underwent regular medical check-up (including upper GI endoscopy) found that 13.2 % were in the high-stress group, and reflux oesophagitis was found in 6.0 %. After adjustment for confounders, reflux oesophagitis was significantly associated with high stress [23].

GERD and Severity of Depression

In this study, the severity of the depression and/or anxiety disorder was measured among the ones who screened positive in MINI interview. Hamilton rating scales for depression and anxiety were applied for this purpose. Among the cases 15 out of 46 subjects had scores indicating 'very severe' depression and 27 fell in the brackets of either 'moderate' or 'severe' illness. By contrast, only 7 subjects among the controls had 'very severe' depression. Similarly, 12 out of a total of 31 GERD cases who had anxiety had scores indicating 'severe' symptoms, while only 3 subjects among the control group fell in this severity group.

CONCLUSION

In summary, among the 100 GERD cases 56 were found to have psychiatric morbidity in form of either anxiety or depression. Demographic characteristics of the GERD patients were compared with regard to presence or absence of psychiatric morbidity. The numerical differences in different demographic indices

like age, sex, marital status, education, place of residence, religion or occupation did not show statistical significance. Tobacco and/or alcohol use too did not seem to significantly affect the prevalence of depression or anxiety among the patients of GERD.

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Original Research Article

Gender Differences in Terms of Life Stressors in Adolescence

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ABSTRACT

Background: Adolescence denotes an eventful period, during which a growing individual makes the transition from a child to an adult. During adolescents there are forces that work against each other. There are conditions that push the youth forward and others that hold them back. A growing body of evidence points to the importance of life stressors and social resources in affecting adolescent functioning. This will help in the understanding the sources of stress and how they can cope with stress. The present study investigated gender differences in terms of life stressors of adolescents.
Methods: The total of 205 adolescents from South Goa, in the age range of 10 to 19 years, confining to World Health Organization standards as to the period of adolescence were the respondents to the questionnaires. In the attempt to study the extent of stress experienced by adolescents the Life Stressors and Social Resources Inventory (LISRES- Youth) and Mental Health Inventory (MHI-38) were used.
Results: Significant gender differences were obtained for the dimensions of school as a stressor and friends as a source of life stress, with male adolescents obtaining a higher score.
Conclusion: Gender differences in stress amongst adolescents needs further research and study.

Keywords: Adolescents, Gender differences, Life stressors, Negative Life Events.

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INTRODUCTION

Adolescence is a time of significant developmental transition which results in numerous developmental challenges at varying pace, including: increasing need for independence; evolving sexuality; transitioning through education and beginning employment; consolidating advanced cognitive abilities; negotiating changing relationships with family, peers and broader social connections; assuming legal responsibilities; and developing personal ethics and a healthy identity [1]. The adolescent period is marked by increased involvement in risk behaviours. While these risk behaviours can predispose young people to poor long-term out comes, they are also seen as a normal part of adolescent development and are usually resolved by the beginning of adulthood [2].

While adolescence is a period of increased risk for problems, it also represents an important window of opportunity for change through intervention [3]. Behavioural changes that occur in the transition to adolescence maybe explained by the significant hormonal and physical changes (puberty) during adolescence as well as changes in brain function.

Stressors in Adolescence

The situations and pressures as discussed above, that causes stress are known as *stressors*. Although S. Hall and others overdramatized the extent of "storm and stress" in adolescence, many adolescents today experience numerous potential stressors throughout the process of growth and development [4]. Stressors of both an acute and chronic nature are important in the course of normal development during adolescence.

The types of stressors experienced in adolescence can broadly be divided into three categories. These categories are *normative events*, *non-normative* events and *daily hassles* [5]. Normative events refer to events that are experienced by most adolescents, but usually within a relatively predictable timescale. One important aspect here is that these are events which all young people have to confront, but usually within a relatively predictable timescale [5, 6]. Non-normative events are different in the way that they are events affecting one adolescent or only a smaller group of adolescents and can occur at less predictable points in the life course [7]. Such events can include for example divorce, illness, injury or natural disasters.

Daily hassles differ from major life events in that they are defined as minor, irritating, and frustrating events that are typical of daily interactions between individuals and their environments. Even though these events are minor in scale, the sum and duration of these events may result in negative impact on adolescents' well-being [8]. Research has established that overall number of stressors tend to increase from preadolescence to adolescence. Girls tend to perceive higher levels of stress than boys, especially in relation to interpersonal stressors, e.g. peers, romantic partners, and family relationship [9-10].

The Impact of Stress on Adolescence

Although exposure to some stressful negative events is considered a normal part of development, stressors remain central as a potential threat to the well-being and healthy development of children into adolescents. A number of models may be relevant in explaining the association between stress and different negative psychological outcomes through the life span, for instance diathesis-stress models and differential sensitivity models [11]. Models of cumulative and simultaneous events are central for the present research when individuals experience major stressful events or transitions given the nature of adolescent development (e.g. academic demands or change in social relationships) either in close sequence (cumulatively) or simultaneously, they are more likely to have negative behavioural and emotional outcomes as a result of the confluence of events [10-11]. Cumulative events may also be characterized by increasing numbers of stressful events that occur for adolescents commensurate with changes in peer groups, friendships, parental relationships, and school demands. Coping resources may be overwhelmed by the experience of multiple changes in close proximity, which lead to negative health outcomes. In essence, the individual's assessments of the importance of the stressful events and their timing, and whether the event is controllable or not are all factors affecting whether stressful events impact negative health outcomes [11].

METHODOLOGY

Sample Design

This research was undertaken among adolescents in South Goa. The state of Goa being small has only two districts, North and South. The present study was carried out only in the Southern district. The district is further divided into five talukas, which are further divided into villages, each village is then divided into waddos. The five talukas are Canacona, Mormugao, Quepem, Salcete, Sanguem and has a total of 163 villages.

The population for this research included individuals in the age range of 10 to 19 years thus, confirming to World Health Organization (1997) standards as to the period of adolescence. The criteria for inclusion were that of any individual who was within the age range of 10 to 19 years and who had a working knowledge of English as the standardized questionnaires used in the research were in English.

A questionnaire survey was adopted for this research. Both descriptive and analytical approach was used for the study. For the collection of data, a stratified sampling technique was used. In the first phase a list of all the talukas and the villages of each taluka was obtained. Based on the number of villages, from each taluka 50% of the villages were selected to obtain data. The researchers choose a representative sample of villages from each taluka. A total sample of 205 respondents of which 99 male and 106 female respondents were used in this research.

Tools Used

In the attempt to study the extent of stress experienced by adolescents the following psychological tests were used:

1. Personal data questionnaire
2. Life Stressors and Social Resources Inventory (LISRES- Youth) [12]

Procedure

A questionnaire survey was adopted for this research. For the collection of data, a stratified sampling technique was used. In the first phase a list of all the talukas and the villages of each taluka was obtained. Based on the number of villages, from each taluka 50% of the villages were selected to obtain data. The researchers choose a representative sample of villages from each taluka. The next step involved contacting higher secondary schools and colleges in the area and after obtaining permission for the respective authorities, the questionnaires were administered.

RESULTS AND DISCUSSION

Hypothesis

There will be a significant difference in the scores of the sub-scales of LISRES-Y among adolescents with respect to their gender.

Table 1 - Mean scores, SD and t-value of the LISRES-Y scale in terms of gender

Dimension	Gender	Mean	T-score	Interpretation	SD	t-value
Physical Health	Male (n=99)	1.33	44	Somewhat below average	2.08	0.585
	Female (n=106)	1.54	49	Average	1.74	
Home and Money	Male (n=99)	7.80	53	Average	5.72	0.941
	Female (n=106)	8.55	55	Somewhat above average	5.34	
Parents Stressor	Male (n=99)	8.86	47	Average	5.19	0.858
	Female (n=106)	8.19	45	Somewhat below average	5.08	
Siblings Stressor	Male (n=99)	8.38	45	Somewhat below average	5.60	0.038
	Female (n=106)	8.23	45	Somewhat below average	6.00	
Extended Family Stressor	Male (n=99)	5.34	51	Average	4.23	0.949
	Female (n=106)	4.77	51	Average	4.14	
School Stressor	Male (n=99)	12.28	48	Average	7.62	6.49**
	Female (n=106)	9.71	45	Average	6.85	
Friends Stressor	Male (n=99)	6.54	53	Average	4.27	5.11**
	Female (n=106)	5.22	47	Average	4.14	
Boyfriend/ Girlfriend	Male (n=99)	1.98	40	Well below average	3.87	0.092
	Female (n=106)	2.15	42	Somewhat below average	4.18	
Negative Life Events	Male (n=99)	6.46	50	Average	5.27	0.009
	Female (n=106)	6.54	53	Average	6.18	

**Significant at the 0.01 level (2-tailed)

Table 1 indicates the mean scores, SD and t-value of the LISRES-Y scale in terms of gender. The total sample consisted of 99 male adolescent respondents and 106 female adolescent respondents, across the age groups from 10 to 19 years. Gender is an important biological determinant of vulnerability to psychosocial stress. The prevalence of depression in women is approximately twice that of men [12-14]. Adolescence marks a period of vast physical and mental changes and the emergence of many sex differences, including a female-biased prevalence of depression [15-17]. Significant stress exposure during adolescence is particularly associated with emergence of the increased prevalence of depression in females [15, 18-19] suggesting that females may be more susceptible to stress-induced depression than men [20-21].

Middle adolescence, which spans the ages of 13 to 17 [22], is a developmental period marked by the emergence and escalation of risk behaviour, including substance use, unsafe sexual behaviour and delinquency [23-24]. Although some degree of risk taking is considered developmentally appropriate, a subset of youth will experience serious negative consequences or progress to more problematic involvement in risk behaviour, increasing their risk of morbidity and mortality over the course of adolescence and adulthood [23, 25].

Gender is one factor that may influence engagement in risk behaviour in the context of affective distress. Moreover, the influence of gender may be particularly salient in adolescence given the increased frequency of psychological stress experienced during this developmental period [26-28]. Although boys and girls report comparable subjective stress levels during adolescence [29], evidence suggests that there may be important gender differences in response to stress. For instance, adolescent girls' response to stress is characterized by negative self-evaluation, rumination, and withdrawal [16; 30-31], whereas adolescent boys' response to stress most frequently takes the form of risk behaviour such as substance use, delinquency, and disagreeable, aggressive or antagonistic behaviour [16, 33]. In other words, adolescent girls seem to be more internalizing when experiencing stress, whereas adolescent boys become disinhibited.

The present study indicates that there were no significant differences in terms of gender except in terms of school and due to friends. Male adolescent children experienced school to be more stressful as compared to their female counterparts, with a mean score of 12.28 and 9.71 respectively. The raw score when converted to the T- score, males obtained a T- score of 48 and females a T- score of 45. Both the scores were interpreted as average stress. The t-value was calculated to be 6.499 which was significant at 0.01 level of significance. Similarly, males reported more stress due to their friends as compared to females with a mean score of 6.54 and 5.22 respectively. The converted T- score was 53 and 47 respectively for male sand females respectively. The calculated t-value was 5.11 which was significant at 0.01 level of significance. Indicating that though the T- score can be interpreted as average, there were significant gender differences.

In terms of the other dimensions of the LISRES-Y scale no significant differences were found between genders. Nonetheless, at second glance it is clear that the myth of healthy adolescents cannot be sustained and that this age group, too, is characterized by specific health problems [34-35]. This is surprising, since it is precisely in the period of adolescence that the health-related relationship between the genders undergoes a marked change [36] while boys are the "weaker sex" in health terms up to puberty, this situation is reversed in adolescence. From puberty onwards, girls are more dissatisfied with their health and take up medical care more frequently. In addition, gender specific health profiles become more clear-cut: while girls suffer more frequently from psychosomatic complaints and emotional disturbances, for boys the main health problems are injuries caused by traffic accidents [37]. In the present research adolescent girls had more stress due to their physical health with a mean score of 1.54 and a T- score of 49 which is interpreted as average. Males had a mean score of 1.33 and a T- score of 44 which is interpreted as somewhat below average. The t-value was .585 which was not statistically significant.

With regard to the dimension of home and money since males and females are raised differently by their parents [38], gender roles may affect the saving and spending behaviours of male and female teenagers. Parents are usually stricter with daughters than sons. Daughters are more expected to take on household chores than sons [39]. Edwards and others [40] indicate that daughters were more open with their parents about their spending behaviours, more dependent on their parents for support, and more likely to talk with their parents about their own financial situations. In the present sample, female respondents experienced slightly higher amounts of stress with a mean score of 8.55 and a SD score of 7.80. The raw scores are converted to 55 and 53 for female and male respondents, wherein female scores are interpreted as somewhat above average and male scores as average. The t-value was calculated to be .941 which indicates that statistically there was no difference between the groups.

Similarly, adolescent girls reported more stress in their romantic relationships with boys, with a mean score of 2.15 as compared to males with a mean score of 1.98. The raw scores when converted to T- scores indicate that females obtained a T- score of 42 which can be interpreted as somewhat below average and males obtained a T- score of 40 which can be interpreted as well below average. Indicating that male adolescents were not stressed or affected by being in a relationship. The calculated t-value was .092 which was not statistically significant. Child rearing practices differ in the case of boys and girls. Girls are granted limited

freedom and independence by their parents, especially in the case of romantic relationships. Due to more restrictions placed on the adolescent girls, they also experience more pressure culminating in higher levels of stress.

During adolescents, young people are experiencing tremendous physical, intellectual, social and emotional growth. This growth includes the physical growth related to puberty as well as a range of psychosocial changes associated with developing an increasingly refined identity; discovering individual talents, interests, and skills; forming meaningful peer and intimate relationships; and taking responsibility for more independent and adult decisions about risks, health, and the future [41]. Although this exciting period of development is characterized by exploration, discovery, and rapidly expanding capacities, it is also accompanied by a number of factors that make people particularly vulnerable. Exposure to negative life events represents one pathway to risk for adolescents. A large number of studies support the relationship between negative life events and internalizing symptoms such as depression and anxiety [42-44], while an equally large number of studies support the relationship between negative life events and externalizing symptoms related to anger, delinquency, and substance abuse [45-47]. Adolescent girls experienced negative life events and their effects more frequently and intensely than did boys. Numerous studies have described girls experiencing a comparatively higher number of cumulative negative life events than boys. Girls consistently experienced negative life events more frequently than boys, these findings remain stable throughout adolescent development. While girls are more susceptible to the emotional influences of NLEs, they also tend to outperform boys academically, are less likely than boys to engage in delinquency. In the present research, in accordance with other research mentioned above, girls experienced slightly more stress due to negative life events, with a mean score of 6.54, and boys obtained a mean score of 6.46. The converted score was 50 and 53 for both boys and girls respectively both of which can be interpreted as average.

A family and its members continue to provide valuable role models for a range of behaviours, including effective communication, relationship skills, and socially acceptable behaviours. adolescents and their families have some ups and downs during the adolescent years, but things usually improve by late adolescence as children become more mature**.** For adolescents, parents and families are a source of care and emotional support. However, sometimes the family and the extended family tend to be a source of stress to the adolescent. In the present research, males experienced more stress from the family in the dimensions of parental stress, sibling stress and extended family as compared to females. Males obtained a mean score of 8.86 with regard to parents as a source of stress to them, whereas females obtained a score of 8.19. The T-score was 47 and 45 which can be interpreted as average and somewhat below average for males and females respectively. In terms of siblings as a source of stress, males obtained a mean score of 8.38 and females, a marginally lower mean score of 8.23, with a T- score of 45 each which can be interpreted as somewhat below average for both males and females. Extended family causes males to experience more stress with a mean score of 5.34 and for females a score of 4.77 the T- score of both was the same of 51 which can be interpreted as average for both males and females. The t-value was not statistically significant in all the three dimensions.

Limitations

An objective critical insight into the research conducted has brought out the following limitations:-

1. The present research was conducted mostly on college adolescents, though an attempt was made to obtain data from adolescents who were not studying, this was not equally distributed.
2. The study was conducted only among educated adolescents and could not reach out to the general masses given the complexity of the administered questionnaires and the obvious requirement of literacy to complete the same.
3. Only the questionnaire method was used, due to paucity of time and non-availability of funds the researchers were unable to conduct any in-depth interview or personal interaction with the subjects on each of the stressors.
4. Therefore, the data obtained from the adolescents, is based on their self-assessment and the rate of socially desirable responses may have had its impact on the data so obtained.

CONCLUSION

In summary, a perusal of Table I indicates that overall scores when converted to T- scores indicate that the adolescents in the present sample obtained slightly different scores in all the dimensions. Home and money caused adolescents the most amount of stress with an average and a somewhat average score for males and females. This was followed by negative life events, extended family, school, and friends with an average score. The remaining dimensions of physical health, parents, siblings, boyfriend and girlfriend obtained a somewhat below average score. Thus, the hypothesis which states that there will be a significant difference in the scores of the sub-scales of LISRES-Y among adolescents with respect to their gender is partially accepted since in two factors namely school stressors and friends' stressors there were significant differences between males and females and for the remaining factors, there was a difference but the difference was not statistically significant.

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Original Research Article

Assessing the Mental Health And Quality Of Life Of Transgenders: The Role Of Perceived Discrimination And Harassment

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ABSTRACT

Background: The social response towards transgenders in India is very discriminatory and prejudiced in general. They are experiencing discrimination in all domains of their personal and social life. They are even deprived of in their own families. Discrimination is believed to be associated with worse quality of life. The aim of this study was to explore the relationship between perceived discrimination and harassment with mental health and further quality of life in transgenders population.
Methods: The sample consists 60 transgenders (30 'Gurus' or Leaders and 30 are the 'Chellas' or Student)) belongs to Varanasi (U.P.) and Chhapra (Bihar). A non-random purposive sampling including the snowball technique was used to collect the data. The age range of the respondents are 18 to 55 years. A questionnaire consists of self-developed scale of mental health, quality of life, discrimination and harassment were administered. A consent form was filled from participants before the administration of the questionnaire.
Results: The results show that (a) 'Guru' (Leaders) were perceived more discrimination and less harassment in comparison to their 'Chellas' (Students). Further, it was also found that (b) 'Guru' (Leaders) have perceived poor mental health (more negative affect, anxiety, depression and stress) and quality of life (less life satisfaction, and but more social acceptance) in comparison to their 'Chellas' (Students). (c) Perceived discrimination and harassment were negatively related to mental health status and quality of life. (d) Perceived discrimination was accounted for maximum variation in mental health (61.80%) while, component wise, perceived discrimination was accounted for maximum variation in anxiety (75.20%) and depression (68.50%) whereas, perceived harassment was accounted for maximum variation in negative affect or feelings (67.20 %) and stress (70.30 %). On the other hand, perceived discrimination was accounted for maximum variation in predicting quality of life (63.70%). Component wise, perceived discrimination was accounted for maximum variation in life satisfaction (84.20%) and socio-economic status (57.50%) whereas, perceived harassment was accounted for maximum variation in social acceptance (55.30 %) and (e) Mental health partially mediated in the relationship between perceived discrimination and harassment and quality of life. Results were discussed in light of previous researches and theories of this field.
Conclusion: Since, transgenders are regarded as the most disgraceful creature in this world. They are denied due to their status. The contribution of the study is important for understanding the pain and psychology of transgenders and aware others to include them in the mainstream society.

Keywords: Discrimination; Harassment, Mental Health, Quality of Life, Transgenders Individuals.

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INTRODUCTION

A growing body of evidence suggests that experiences with discrimination have implications for mental health and that these associations may vary by social status [1]. Perceived discrimination is consistently, positively associated with impaired mental health across a vast array of cross-sectional and longitudinal data and has been linked to multiple mental health outcomes, including depressive symptoms, psychological distress, anxiety, and psychiatric disorders [2-4].

Transgenders people are facing discrimination, harassment and violence throughout society, from their family growing up, in school, at work, by homeless shelters, by doctors, in emergency rooms, before judges, by landlords, and even police officers [5]. Every day, transgenders and gender non-conforming people bear the brunt of social and economic marginalization due to discrimination based on their gender identity or expression. However, little is known about variation in the association between perceived discrimination and mental health across social status groups such as Transgenders people- a socially marginalized and deprived group.

The problems being faced by the Transgenders community have been brought to the notice of the Government in the recent past. In this regard, a meeting was organized by the Ministry of Social Justice & Empowerment on 23rd August, 2013 to discuss the issues relating to Transgenders community such as social stigma, discrimination, lack of education, public health care, employment opportunities, issue of various government documents, etc.

The social response towards transgenders in India is seen very discriminatory and prejudiced in general. This study was an attempt to explore the relationship between perceived discrimination and harassment with mental health and quality of life of transgenders population.

Transgenders

Today, the term transgenders or in Indian notion 'Hijras' have a recorded history of more than 4,000 years. In India, the total population of transgenders is around 4.88 Lakh as per 2011 census but the majority of them are invisible in mainstream society.

Transgenders is the state of one's gender identity or gender expression which does not match with ones assigned sex [6] and globally considered physically and psychologically ambivalent and because of ambivalence characteristics. They can encompass multiple labels or titles of people who do not fit the binary definitions of male or female. Some titles include transvestite, transsexual, cross-dresser, gender queer, non-gendered, and drag king/queen.

Transgenders are quite often made to live on the fringe of the society and are referred with derogatory labels like 'hijras' [7-8]. The societal outlook, as well as acceptance of transgenders has been quite different in India than the western cultures. Ancient myths bestow them with special powers to bring luck and fertility. Yet, despite this supposedly sanctioned place in Indian culture, they are subjected to many social adversities. They often face discrimination in education, housing, health, employment and official bureaucratic dealings [9-10]. They are often required to tend to jobs below their intellectual capacity. Many generate income from petty extortion, performing at ceremonies, through begging and sex work [11].

Violence against transgenders, especially towards sex workers, is common and occurs in a variety of settings [12-13]. Many transgenders have experienced abuse during childhood, and the rates of sexual abuse has been reported to be higher in transgenders than those with other gender orientations [14]. These adverse life circumstances are likely to have adverse psychological impact on transgenders. Moreover, access to health care services are reported to be more adversarial towards transgenders, which may result in their health concerns not being addressed fairly [15].

Perceived Discrimination, Harassment and Mental Health

The World Health Organization (2004) defines the concept of mental health status as, "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community." [16]

Sen Gupta and gave six indices of mentally healthy person namely, adjustment, emotional stability, intelligence, autonomy, security-insecurity, activity-level [17]. Mental health thus involves a continuous

process of adjustment through optimum use of one's potentialities rather than a static condition. Mental health of police employees may be influenced by a number of work environmental factors such as sexual harassment, leadership style, stressful condition of the work, peer group support, family influence, and accessibility of coping mechanism.

Discrimination in general is classically defined as a phenomenon that involves 'deny(ing) to individual or groups of people equality of treatment which they may wish' [18]. Recognized as a worldwide experience, discrimination in terms of gender and sexuality is no exception [19]. India is not known for being a LGBTIQ - friendly place at a macro level, that is, in social arenas. There is little protection under the recent provision made by the Supreme Court of India discrimination on the basis of sexual orientation and gender identity.

Though the 'Hijras' are tolerated by the Indian society. They are not accepted and are discriminated against in various settings, first because of their transgenders status–their cross-dressing or feminine appearance–which is often ridiculed and second, because of their presumed occupation, sex work [20].

Previous studies consistently reported the link between perceived discrimination and mental health, namely more individual experiences of discrimination are associated with poor mental health and mental diseases [21-22]. Discrimination was also reported to be associated with many physical health measures, including high blood pressure [23-24], respiratory problems [25], self-rated health [26-27] and chronic health conditions [28-29]. Mental health may be affected by perceived discrimination more than physical health [30].

Grant and others released a comprehensive study on discrimination with 6,450 transgenders and gender non-conforming study participants for the National Centre for Transgenders Equality and National Gay and Lesbian Task Force [31]. Discrimination was found to be pervasive throughout the entire sample. Respondents lived in extreme poverty. A staggering 41% of respondents reported attempting suicide compared to 1.6% of the general population, with rates rising for those who lost a job due to bias (55%), were harassed /bullied in school (51%), had low household income, or were the victims of physical assault (61%) or sexual assault (64%). Ninety percent of transgenders individuals have encountered some form of harassment or mistreatment on the job. Respondents reported various forms of direct housing discrimination. Almost half of the respondents (46%) reported being uncomfortable seeking police assistance. Nineteen percent of the sample reported being refused medical care due to their transgenders or gender non-conforming status, with even higher numbers among people of color in the survey.

Mustanski, Garofalo and Emerson sought to address some of the gaps in past research by conducting structured diagnostic interviews in a community-sample of 246 LGBT youth [32]. Participants in the study were very diverse in terms of ethnicity and were between the ages of 16-20 years old, with an average age of 18. It was found that nearly 10% of study participants met criteria for post-traumatic stress disorder (PTSD) and about 15% met criteria for major depression. A third of the participants had made a suicide attempt at some point in their life.

Transgenders individuals are particularly vulnerable to mental health concerns and psychological distress [32]. Regarding specific psychological distress, research has shown that transgenders individuals report higher levels of both anxiety and depression than the population as a whole. Depression has been reported to affect 16.6% of the total population, and combined anxiety disorders affect 28.8% of the United States population [33].

Within the literature, rates of depression for transgenders individuals range from 48% to 62% [31-33]. Anxiety and overall distress rates for transgenders individuals range from 26% to 38% [30, 34].

Although the rates of depression, anxiety, and overall distress indicate above-average rates for the transgenders population, there are only several studies that examine potential explanations for these findings. Nuttbrock and others report that there is a significant positive relationship between gender-related abuse and depression in transgenders women. The authors note that social stressors and/or ostracism from peers can explain a large amount of the depression that is reported by the individuals in their study [35].

Budge and others in their qualitative study indicate that distress varies on the basis of several factors, including the individual's transition process, coping mechanisms used, and level of social support. Although both of these studies provide insight into possible explanations for contributing factors to transgenders individuals' distress, there continues to be a lack of generalizable information regarding the actual process through which individuals cope with and experience depression and anxiety [36].

Social anxiety is possibly the most prevalent disorder found among transgenders people, with studies in 2005 and 2010 showing that 55% of transgenders people experience high levels of anxiety, compared to only 6.8% of the cisgender (non-transgenders) population [37].

Transgender people may find themselves living in constant fear of verbal harassment or physical violence. While a healthy mind can deal with this kind of pressure for short periods, over time a perpetual sense of danger may develop into debilitating forms of anxiety and/or depression. Tragically, this also leads to an increased rate of suicide attempts in the transgender community (as compared with cisgender individuals).

Grossman and D'Augelli [38] studied the risk factor of suicide among transgenders youth. Nearly half of the sample reported having seriously thought about taking their lives and one quarter reported suicide attempts. Factors significantly related to having made a suicide attempt included suicidal ideation related to transgenders identity; experiences of past parental verbal and physical abuse; and lower body esteem, especially weight satisfaction and thoughts of how others evaluate the youths' bodies.

Pascoe and Smart Richman [39] found that perceived discrimination has negative physical and mental health outcomes, and that it also heightens perceived stress. Harris and others associated discrimination with poor or fair self-rated health, lower physical functioning, lower mental health, smoking, and cardiovascular disease [40].

Perceived Discrimination, Harassment and Quality of Life

Quality of Life (QoL) is a broader concept than personal health status. Lindström defines QoL as the total essence of existence of an individual, a group, or a society, as measured objectively and perceived subjectively [40].

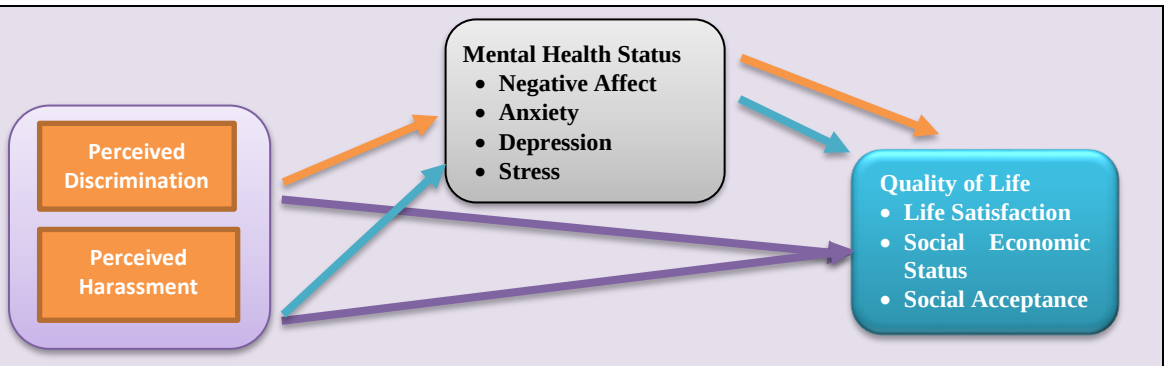
Sex discrimination harassment can also occur, in which unwelcome sexual advances or non-sexual offensive comments are made about a person's sex (Equal Employment Opportunity Commission).

Discrimination has found deleterious influences on health and quality of life in previous researches. *Discrimination* is believed to be associated with worse *quality of life* (QoL) in study done by Başar and others [41]. In India, a study done by Aneesh M.S. (2017) has reported that 13% of transgenders of Kerala positively rated that they have good quality of life. The overall perception of their quality of life shows that 16% rated very good quality of life, 30% rated as neither poor nor good, 35% are negatively rated that they have very poor quality of life and remaining 6% have poor quality of life. It is understood that majority of the respondents believes that they possess poor quality of life [42].

Further, in India there has not been much academic interest in studying, understanding, and debating the transgenders issues. Much of the studies concern were in field of legal perspectives, discrimination in uses of health care systems, understanding their social and economic problems,

This study was an attempt to understand the problems faced by transgenders in terms of psychological consequences of perceived discrimination and harassment in their personal and professional domain of life. How these perceptions of discriminations and harassment are affecting their mental health and further quality of life.

On the basis of aforementioned literatures in the field of transgenders researches around the world and India, researcher has proposed following model explaining the relationships between the variables of the research.



Diagrammatic frame work of the study illustrating the relationships between variables

The following research hypothesis were formulated to establishing the link between the objectives of the research.

- H_1: (a) 'Guru' (Leaders) will have more perceived discrimination and less harassment in comparison to their 'Chellas' (Students). (b) 'Guru' (Leaders) will have poor mental health and quality of life in comparison to their 'Chellas' (Students).
- H_2: Perceived discrimination will negatively affect the mental health & quality of life of transgenders people in terms of more negative affect, low level of life satisfaction, more anxiety and depression.
- H_3: Perceived harassment in social and profession life will negatively affect the mental health & quality of life of transgenders people in terms of more negative affect, low level of life satisfaction, more anxiety and depression.
- H_4: Mental health status will mediate the relationship between perceived discrimination and quality of life (life satisfaction, socio-economic status, acceptance) of transgenders.
- H_5: Mental health status will mediate the relationship between perceived harassment and quality of life (life satisfaction, socio-economic status, acceptance) of transgenders.

METHODOLOGY

Participants

The sample consists 60 transgenders (30 'Gurus' or leaders and 30 are the 'Chellas' or Student)) belongs to Varanasi (U.P.) and Chhapra (Bihar). A non-random purposive sampling including the snowball technique was used to collect the data. The age range of the respondents are 18 to 55 years with a mean scores of 38.3 years.

A questionnaire consists of self-developed measures of mental health status, quality of life, perceived discrimination and harassment were administered. A consent form was filled from participants before the administration of the questionnaire.

Criteria for selecting the sample

- Only transgenders having by birth and castrated were selected for the study confirmed by 'Guru' (Leader)
- Age of the 'Chellas' (students) are restricted between 18 to 35 years and for Gurus 40 to 55+ Years.
- Their economic sources are: private jobs in company, begging money during travelling in trains and crossing.
- They were taken from urban background i.e. city location.
- For members of the community, at least 6 months of membership in the group was compulsory for 'Chellas' (students).

Study Measures

Perceived discrimination: In this study, perceived discrimination was operationalized in terms of transgenders's experiences of day-to-day discriminations at school (discouraged from continuing education, denied a scholarship), work (not hired or promoted, fired), receiving financial and other services (denied a bank loan, prevented from renting or buying a home, given inferior services), and experiences with social hostility (forced out of a neighborhood, hassled by the police). The scale consists of 9 items indicating their experience of discrimination on five point rating scale (where '0' indicates no discrimination and '4' indicates maximum level of perceived discrimination).

Respondents were asked to indicate how frequently they experienced each of 9 types of discrimination on a day-to-day basis. For each, respondents chose between 0 to 4 descriptors ("never," "rarely," "sometimes," "often" and "always"). Because we were interested in the prevalence of relatively common experiences with discrimination. The Cronbach's Alpha coefficient of this self-developed scale is 0.728 on 9 items.

Perceived Harassment: In this study, perceived harassment was operationalized in terms of transgenders's experiences of being harassed or mistreatment by police, people, colleagues etc. while begging in trains and at crossing or workplace. The scale consists of 9 items indicating their experience of discrimination on five point rating scale (where '0' indicates no discrimination and '4' indicates maximum level of perceived discrimination). Respondents were asked to indicate how frequently they experienced each of 9 types of discrimination on a day-to-day basis. For each, respondents chose between 0 to 4 descriptors ("never," "rarely," "sometimes," "often" and "always"). Because we were also interested in the prevalence of relatively common experiences with harassment. The Cronbach's Alpha coefficient of this self-developed scale is 0.681 on 3 items. Most of them were reported high rate of physical harassment by police (62%) followed by public (45%) and colleagues (23%).

Mental Health Status: Mental health status was operationalized in terms of positive and negative affect, anxiety, depression, and stress. The index consists of 30 items was the combinations of four measures which was adopted by researcher for this study. Hindi adaptation of PANAS scale (Pandey, Manoj Kumar), and self-developed items for anxiety, depression and stress were used for assessing mental health status of transgenders. Items were rated on a five point rating scale where respondents had to choose between 0 to 4 descriptors ("never," "rarely," "sometimes," "often" and "always"). The Cronbach's Alpha coefficient of his index is 0.833 on 30 items.

Quality of Life (QoL): Quality of life was operationalized in terms of life satisfaction, socio-economic status, and social acceptance as perceived by transgenders. Hindi adaptation of life satisfaction scale (Diener, E. et.al. 1985) and self-developed items were used for assessing perceived socio-economic-status and social acceptance by transgenders [42]. Items were rated on a five point rating scale where respondents has chosen between 1 to 5 descriptors ("very less", "less", "neutral", "much" and "very much"). The Cronbach's Alpha coefficient of this scale is 0.774 on 24 items.

Data Collection

The first ten minutes of initial talk involved reading and discussing the informed consent form. The form contains information about the purpose of the study, the participant's rights, the risks and benefits of the study and contact information for the researcher. The consent form also asks for the participant to give consent to be re-contacted so that researcher can get feedback during the analysis process. This study is a part of previously done project work [43] which included semi-structured interviews with participants and questionnaires. As a part of that project, participants were asked to filled the form or give their responses of booklet of questionnaire (those who are unable to read the form). Before starting the data collection, a written informed consent was obtained from the participants and confidentiality of the information were assured. They were also assured that the information collected was used only for the purpose of the research.

STATISTICAL ANALYSIS

The data obtained from this study was analyzed for testing the hypotheses and understand the patterns of relationships among the variables understudy. For which ANOVA, inter-correlations among variables and stepwise regression analysis were used with the help of IBM SPSS 23 version

RESULTS AND DISCUSSION

This study was an attempt to understand the problems faced by transgenders in terms of psychological consequences of discrimination and harassment in their personal and professional domain of life. In other word, how these perceived discriminations and harassment are affecting their mental health and quality of life.

Differences in Perception of Discrimination and Harassment

It was hypothesized that (a) 'Guru' (Leaders) will have more perceived discrimination and less harassment in comparison to their 'Chellas' (Students). (b) 'Guru' (Leaders) will have poor mental health and quality of life in comparison to their 'Chellas' (Students).

Table 1

One-way ANOVA for finding the significance of the mean difference between 'Guru' and 'Chellas' on perception of discrimination, harassment, mental health and quality of life

Discrimination			Harassment		Mental Health Status										Quality of Life Index							
					Mental Health		Negative Affect		Anxiety		Depression		Stress		Quality of Life		Life Satisfaction		Socio-Econ		Social Acceptance	
	G	C	G	C	G	C	G	C	G	C	G	C	G	C	G	C	G	C	G	C	G	C
N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
M	3.95	2.65	2.86	3.78	4.23	3.21	3.68	4.43	4.54	3.65	3.43	2.14	3.89	2.32	2.25	4.32	2.54	3.86	3.32	3.43	3.98	2.21
SD	.674	.497	4.12	.567	.674	.564	.543	.675	.345	.653	.653	.543	.432	.552	.412	.45	.456	.553	.432	.342	.342	.435
F	4.432**		3.432**		5.321**		3.126*		3.198*		4.231**		3.982**		5.124**		3.894**		1.986		4.345**	

***p< .001 level, **p< .01 level, *p<.05 level (2-tailed test)

Higher scores on perceived discrimination & harassment indicates higher level discrimination and harassment.

Higher scores on Mental Health Status Index indicates higher level negative affects, anxiety, depression, and stress

Higher scores on quality of life index indicates high level of quality of life.

The one-way ANOVA was computed for examining the significance of the differences of the mean scores (a) 'Guru' (Leaders) and 'Chellas' (Students) on perception discrimination and less harassment, mental health and quality of life in comparison to their 'Chellas' (Students). Results revealed that (a) 'Guru' (Leaders) were perceived more discrimination and less harassment in comparison to their 'Chellas' (Students). Further, it was also found that (b) 'Guru' (Leaders) have perceived poor mental health (more negative affect, anxiety, depression and stress) and quality of life (less life satisfaction, and but more social acceptance) in comparison to their 'Chellas' (Students). There is no significant difference was found on socio-economic status of both groups. Thus, the results support the hypothesis H_1.

'Guru' (Leaders) were reported poor mental health related issues and quality of life because of they are now dependent on their 'Chellas' in terms of economic support, care, love and affection. Although, they are living in a group of same people but sometimes they are ignored by their 'Chellas' like an old tiger. They are just spending their time to seek a peaceful end of life.

Relationships between Perceived Discrimination and Harassment with Mental Health Status and Quality of Life in Transgenders

It was hypothesized that (a) perceived discrimination will negatively affect the mental health & quality of life of transgenders people. (b) Perceived harassment in social and profession life will negatively affect the mental health & quality of life of transgenders people.

Table 2

Coefficient of correlation between perceived discrimination and harassment with mental health status and quality of life among transgenders.

	Mental Health Status Index				Quality of Life Index (QoL)		
	Positive Affect	Anxiety	Depression	Stress	Life Satisfaction	Socio-Economic Status	Social Acceptance
Perceived discrimination	- 0.621**	0.430**	0.451**	0.474**	-0.144	-0.305**	0.405**
Perceived harassment	-0.572**	0.501**	0.327**	0.542**	-0.220*	-0.317**	0.242*

**Note: ****p<0.05* level (2-tailed), ***p*<0.01 level (2-tailed).

Higher scores on perceived discrimination & harassment indicates higher level discrimination and harassment. Higher scores on Mental Health Status Index indicates higher level negative affects, anxiety, depression, and stress. Higher scores on quality of life index indicates high level of quality of life.

On the basis of the results presented in Table-2 we can say that (a) perceived discrimination is significantly negatively correlated with mental health and quality of life. (b) Perceived harassment was also found significant negatively correlated with mental health and quality of life among transgenders. The obtained results supports the true hypothesis H_2 & H_3.

Further on the basis of this result, it can be said that discriminations and harassments (physical and psychological) in social and professional life are found responsible for creating more negative affect or feelings, anxiety, depression and stress among transgenders. It can be also said that discriminations and harassments (physical and psychological) in social and professional life are accountable for poor quality of life in terms of less life satisfaction, low socio-economic-status (respect, economic crisis, love etc.), and less social acceptance (inclusion of main stream society, social participation etc.) among transgenders.

Previous studies consistently reported the link between perceived discrimination and mental health, namely more individual experiences of discrimination are associated with poor mental health and mental diseases [2-3, 20]. Discrimination was also reported to be associated with many physical health measures, including high blood pressure [22-23], respiratory problems [24], self-rated health [25-26] and chronic health conditions [27-28]. Mental health may be affected by perceived discrimination more than physical health [29].

Transgender people may find themselves living in constant fear of verbal harassment or physical violence. Grossman and D'Augelli [40] studied the risk factor of suicide among transgenders youth [39, 48-50]. Factors significantly related to having made a suicide attempt included suicidal ideation related to transgenders identity; experiences of past parental verbal and physical abuse; and lower body esteem, especially weight satisfaction and thoughts of how others evaluate the youths' bodies.

Pascoe and Smart Richman found that perceived discrimination has negative physical and mental health outcomes, and that it also heightens perceived stress [39]. Discrimination has found harmful influences on health and quality of life in previous researches [40-44].

On the basis of bivariate correlation analysis, it is not sure that which one is the best predictors for the outcome variables or to know which one among discrimination and harassment is responsible for assessing poor mental health (negative affect or feelings, anxiety, depression and stress) and quality of life (life satisfaction, socio-economic-status and social acceptance) among transgenders, stepwise regression analysis was done for predicting the outcome variable more accurately and presented in Table No-3.

Predicting mental health and quality of life along with their dimensions from perceived discrimination and harassment at social and professional life

Higher scores on perceived discrimination & harassment indicates higher level discrimination and harassment. Higher scores on Mental Health Status Index indicates higher level negative affects, anxiety, depression, and stress. Higher scores on quality of life index indicates high level of quality of life.

Stepwise regression analysis was done to find out the best predictors among perceived discrimination and harassment to determine the maximum contribution in assessing the negative impact on mental health status and quality of life of transgenders.

The predictor variables, which were found to be most significantly predicting the criterion variable are presenting here. (a) Perceived discrimination was accounted for maximum variation in mental health (61.80%). Component wise perceived discrimination was accounted for maximum variation in anxiety (75.20%) and depression (68.50%) while perceived harassment was accounted for maximum variation in negative affect or feelings (67.20 %) and stress (70.30 %).

On the other hand, (b) Perceived discrimination was accounted for maximum variation in predicting quality of life (63.70%). Component wise perceived discrimination was accounted for maximum variation in life satisfaction (84.20%) and socio-economic status (57.50%) while perceived harassment was accounted for maximum variation in social acceptance (55.30 %).

Table No. 3

Showing the stepwise regression analysis to determine the best predictors of (a) mental health (negative affect or feelings, anxiety, depression and stress) and (b) quality of life (life satisfaction, socio-economic-status and social acceptance) from perceived discrimination and harassment.

Predictor Variable	Dependent Variables	R	Adjusted R Square	R Square Change	Standardized Coefficients (β)	t-value	Sig.
Mental Health Status and Components							
Discrimination	Mental Health	0.618	0.617	0.618	0.856	11.150 ***	0.000
Harassment	Negative Affect	0.673	0.672	0.673	0.761	9.216***	0.000
Discrimination	Anxiety	0.752	0.751	0.752	0.733	8.783***	0.000
Discrimination	Depression	0.685	0.684	0.685	0.794	6.743***	0.000
Harassment	Stress	0.703	0.702	0.703	0.643	8.956***	0.000
Quality of Life and Components							
Discrimination	Quality of Life	0.637	0.636	0.637	0.672	7.0124***	0.000
Discrimination	Life Satisfaction	0.842	0.841	0.842	0.690	7.674**	0.008
Discrimination	Socio-Economic Status	0.575	0.574	0.575	0.581	6.893**	0.006
Harassment	Social Acceptance	0.553	0.552	0.553	0.632	6.121**	0.005

***p< 0.001 level, **p< 0.01 level, *p < 0.05 level (2-tailed test)

In sort, perceived discrimination was found more accountable or predicting maximum in assessing the impact on mental health and quality of life. Since, transgender people are confronted at every turn with discrimination—in school, at work, on the streets, in the doctor's office, in the line for public assistance, in the restroom, in the boardroom, and many more places. Even in their own homes. It is exhausting, it is frightening, and it is, for far too many people, almost continuous [45-46].

Mediating role of mental health in the relationship between perceived discrimination and harassment and quality of life of transgenders

It was hypothesized that mental health status will mediate the relationship between (a) perceived discrimination and quality of life (life satisfaction, socio-economic status, acceptance) of transgenders & (b) perceived harassment and quality of life (life satisfaction, socio-economic status, acceptance) of transgenders.

Mediation analysis was carried out to assess the mediating role of mental health on the relationship between perceived discrimination and harassment and quality of life. To test the mediation, the procedure suggested by Baron and Kenny was adopted; the steps have been stated below:

- The independent and dependent variable must be significantly related
- The independent and mediating variable must be significantly related
- The mediator and dependent variable must be significantly related and
- The independent variable must have no effect on the dependent variable when the mediator is held constant (full mediation) or should become significantly smaller (partial mediation).

The hierarchical linear regression analyses for exploring the mediating role of mental health are demonstrated in Table 4.

Higher scores on perceived discrimination & harassment indicates higher level discrimination and harassment. Higher scores on Mental Health Status Index indicates higher level negative affects, anxiety, depression, and stress. Higher scores on quality of life index indicates high level of quality of life.

Table 4

Mediation Steps		Non-Standardized Coefficients (β)		Std. Error		Standardized Coefficients (β)		t-value		Sig.	
1		0.681	0.781	0.060	0.069	0.625	0.712	10.483	13.423	.000	.000
2		0.587	0.653	0.078	0.079	0.476	0.567	6.825	8.655	.000	.000
3		0.402	0.589	0.048	0.053	0.484	0.653	7.624	7.224	.000	.000
Sobel Test Results											
Mediation Type		Z Score		Direct Effect		Indirect Effect		Total Effect		Sig.	
Partial	Partial	3.64	3.79	0.542	.654	0.133	.234	0.675	.888	.000	.000

Results indicate perceived discrimination and harassment was negatively and significantly related to the quality of life ($b = 0.625$, $p < 0.001$; $b = 0.712$, $p < 0.001$), perceived discrimination was negatively and significantly related to the mental health ($b = 0.476$, $p < 0.001$; $b = 0.567$, $p < 0.001$) and mental health was negatively and significantly related to the quality of life ($b = 0.253$, $p < 0.001$; $b = 0.312$, $p < 0.001$). Thus, the steps one, two, three of the mediation analysis were supported. Furthermore, results show that after mental health was taken into account in first condition, the beta weight for perceived discrimination dropped from the initial level of 0.625 to 0.511 & .712 to .653, although still significant ($b = 0.487$, $p < 0.001$; $b = 0.653$, $p < 0.001$). Thus, mental health satisfied the requirements of a partial mediator in the relationship between perceived discrimination and harassment and quality of life. To further assess the significance of the mediation, a Sobel test ($z = 3.64$ $p < 0.001$; $z = 3.79$ $p < 0.001$) was obtained. Thus, our hypothesis H_4 & H_5 were partially supported.

Implication of the Research and Future Direction

Living with the identity of transgender is very difficult in India as they are facing discrimination in every step in their life starting from their own family to the society. They are suffering from their birth to till death and after death also. Multiple problems are faced by transgenders, which necessitate a variety of solutions and actions. While some actions require immediate implementation such as introducing transgender's specific social welfare schemes, some actions need to be taken on a long-term basis changing the negative attitude of the general public and increasing accurate knowledge about transgender's communities. The required changes need to be reflected in policies and laws; attitude of the government, general public and health care providers; and health care systems and practice. One of his own effort, researcher has tried to aware people, academician and government about the inclusion of these socially excluded group in to the mainstream society try to understand their pain of being transgender [44].

CONCLUSION

It is suggested that still we need to address their problems on a large scale. Although, government and law have made some provisions on paper, but still it need to be implemented on ground level. People need to understand that they are the part of our society not a person to be hate, discriminate, harass and treat them in a different way. They can contribute our society or even our nation like us.

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Original Research Article

Perceived Stress as a Predisposing Factor in Suicidality among Adolescents

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ABSTRACT

Background and Objectives: This paper deals with the suicidality among adolescents in relation to perceived stress in life. It has been estimated that over one million people kill themselves in our country and suicidality is one of the important psychological variables leading to suicidal deaths and the younger generation happens to be a very vulnerable group to suicide.
Methods: It was hypothesized that higher the perceived stress by the participants, higher the suicidal tendency among the adolescents and vice-versa. In all, 290 randomly selected adolescents (Male= 140; Female= 150) of higher secondary classes participated in this study. They were administered the Global Perceived Stress Scale (Singh & Pathak, 2016) and the TS Suicidal Ideation scale (2004).
Results: The descriptive and inferential statistics were used to analyze the data. It was found that perceived stress is a potential cause of suicidality
Conclusion: The results suggest that the higher the level of perceived stress, higher the chances of indulging in suicidal thoughts. The proposed hypotheses were approved. The results are thoroughly discussed and interpreted and the implications of the finding are properly underlined. Besides, limitations and suggestions of the present study are also indicated.

Keywords: Global perceived stress, HSG, MSG, LSG, Suicidality, Adolescents.

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INTRODUCTION

Suicide is a serious health problem for the person concerned as well as the related families and the country. According to estimates, over one lac people kill themselves in India every year [1-2]. Suicide can be considered as a silent enemy of the people. There is a common public misperception that only those who are diagnosed with depression are at risk of committing suicide or being in the grip of suicidality. However, almost 40% of the people who commit complete suicide are not clinically depressed; this indicates that various other psychological conditions could also potentially increase the risk of suicide and suicidality.

Stress

Stress is a term often used synonymously with negative life experiences, or life events [3]. The long persistence of an overloading condition, in this case, stress, ultimately leads to mental health disturbances or the appearance of disease [4]. The increasing pace of life, rushed and competitive lifestyles mean that stress is an integral part of human life. A person in a state of adapting to stress shows behavioural defenses. This leads to changes in one's cognitive processes and emotional landscape.

The **diathesis-stress model** suggests that people have in different degrees, predispositions for developing depressive symptoms [5]. Such vulnerabilities are referred to as diatheses. People having more of these diatheses are more likely to develop depressive symptoms than other people. The impact of particular stressors varies across different people. The **"fight or flight" model**, describes how animals and people react to stress or danger (McCann). He noted that a sequence of actions occurs in the nerves and glands, preparing the body to defend and fight, or escape to a safe place [6].

Suicidality

Suicidality refers to the thoughts in the minds of people that life isn't worth living. It is also known as suicidal ideation. It may range in intensity from fleeting thoughts to plans for killing oneself, or a complete preoccupation with self-destruction or self-harm. It is characterized as a personality disorder or with the character of emotional blackmail [7]. It is one of the dimensions of suicidal behaviour which includes suicidal ideation, suicide planning, and suicide attempt that may lead to suicide. It is a useful indicator of identifying the people being at risk for suicide [8].

Background

The factors assumed to be associated with suicidal behaviour and deaths may be conceptualized as the risk or vulnerable factors and resiliency or protective factors. There may be some precipitating factors also. According to Gutierrez and Osman, the risk factors may be classified into individual risk factors and family risk factors, and protective factors into personal protective factors and environmental protective factors [9]. Besides, the psychological factors also play a very important role in understanding the psychological wellbeing of those who have the potential to be involved in suicide and suicidal ideation [10]. A deeper understanding of such factors would be highly helpful in dealing with this epidemic [11-13].

Rosiek and others [14] found that chronic exposure to stressful conditions may lead to psychological discomfort, mental health problems, depression and anxiety symptoms which might increase risk for suicidal thinking. We should be aware of the need to combat stress and suicidal thinking and of the fact that it can protect us against the development of illnesses such as depression, and other psychological problems. Negative occupational and academic events also increase risk for suicidal behaviour and suicidal thinking, so it is important to know how people can be trained to cope with stress [15-16]. It has been reported that coping plays a central role in dealing with stressors of life [10].

Ibrahim, Amit and Suen [17] examined psychological factors (i.e., depression, anxiety and stress) as predictors for suicidal ideation among Malaysian adolescents. The results show that 11.10%, 10.00%, and 9.50% of the students reported that they were experiencing severe depression, anxiety and stress, respectively. There were significant correlations between depression, anxiety, and stress with suicidal ideation. However, only depression was identified as a predictor for suicidal ideation.

In some other studies also, stress was found to be positively associated with suicidal ideation [18-19]. There are various work-and-life related stressors, such as stressful life events, loss, unemployment, and other environmental stressors, which could be associated with suicidal ideation [11, 20]. The interactions of various aspects of stressors have the potential to make stress management difficult and have the potential to lead to suicidal ideation [21]. Therefore, stress management requires the integration of a good quality of life, coping skills, and problem-solving skills. The way people cope with stress may indicate the extent to which stress may affect their psychological well-being, how far stress may lead them to feeling a sense of hopelessness or of not being supported, and how they may define stress as a potential contributor to suicidality.

Present study

As the review shows, researchers in general are of the view that stress and suicidal behaviour are considerably related and in many cases, stress requires attention of health experts and care givers [12-13, 22]. Like depression and anxiety and other mental health problems, stress is also a contributor to suicidal ideation among people in general and the adolescents in particular. In the case of experiencing negative events, stress and suicidal behaviour may be triggered. It, therefore, becomes imperative to identify the factors which contribute to suicidal behaviour and develop the programmes for enhancing resilience among people to cope

with the negative experiences in life and ensuring their well-being. In our country, there is a dearth of researches on suicidality and suicide. The reason behind it may be, among other factors, the taboo about suicide. In our country, like many other countries, suicide is treated as an undesirable behaviour and people often avoid talking about suicide and suicidality.

Objective: To examine the stress and its effects on suicidality among adolescents

Hypotheses: Keeping in view the studies conducted in this area and the objective of the present study, following hypotheses were framed for empirical examination.

H1. High and moderate stress groups of adolescents would differ significantly in suicidality.

H2. High and low stress groups of adolescents would differ significantly in suicidality

H3. Moderate and low stress groups of adolescents would differ significantly in suicidality

METHODOLOGY

Sample

290 adolescents (Male= 140; Female= 150) enrolled in higher secondary schools of Jaunpur district (U.P., India) were randomly selected for testing. Their age ranged between 12 and 19 years, with mean age being 14.85 years. They were divided into high stress group (HSG; N=86), moderate stress group (MSG; N=145) and low stress group (LSG; N=119) on the basis of their scores on Global Perceived Stress Scale (GPSS).

Design

The present study tapped perceived stress as the independent variable and the suicidality was measured as the dependent variable. The stress was measured in terms of high, moderate and low stress levels.

Tools

Global Perceived Stress Scale (GPSS)

The Hindi version of perceived stress scale by Cohen, Kamarck and Mermelstein [23], adapted by Singh and Pathak [24], was used to assess the degree to which situations in one's life are viewed as being stressful. It is a Likert type scale having 14- items with 5 alternative responses (0 = never; 1 = almost never; 2 = sometimes; 3 = fairly often; 4 = very often). PSS scores are obtained by reversing the scores on the seven positive items, e.g., 0=4, 1=3, 2=2, etc., and then summing across all 14 items. Items 4, 5, 6, 7, 9, 10, and 13 are the positively stated items. The scores on different items are averaged for the total score which may be between 0 and 56, with higher scores indicating greater levels of perceived stress. Internal consistency of the GPSS was found to be .79 and it suggests a high level of internal consistency about the Hindi version of GPPS.

T-S Suicidal Ideation Scale

This scale has been developed by Singh and Thakur [25]. This is a Likert type scale and measures suicidal tendency among respondents. This scale consists of 20 items accompanied by 5 alternative responses. Its reliability by odd-even method is 0.78 and by spilt-half method is 0.82, whereas the validity is 0.78. Higher scores on it indicate greater tendency of suicidal ideation and vice -versa.

Procedure

All the participants were seated comfortably and the procedure of responding to the items was properly explained to them. The participants were clearly told about the task they had to do and good rapport was established before starting the testing. They were taken in full confidence that their responses are being taken for research purpose only and will be kept fully confidential. The scale was collected from them after getting their responses and they were thankfully relieved from the testing.

RESULTS

The results obtained in the present study are recorded in tables 1, 2 and 3. A perusal of table 1 makes it obvious that the group of adolescents scoring high on stress scale (HSG) has also scored higher mean (40.25) than the other two groups (MSG= 36.40; LSG= 29.82). It suggests that stress is an important predictor of

suicidality among adolescents. It interferes with the coping skills and thus may instigate the adolescents to opt the extreme step like committing suicide. The higher the level of stress, higher the probability on the part of the person concerned to indulge in suicidal thoughts.

Table-1: Descriptive statistics for three stress groups on Suicidal Ideation Scale

Levels of stress	N	Mean	S.D.	SEm
High stress group (HSG)	56	40.25	6.39	0.12
Moderate stress group (MSG)	164	36.41	5.92	0.04
Low stress group (LSG)	70	29.82	5.73	0.08

The significance of difference in suicidality among the three stress groups was examined by computing F-ratio. Table 2 shows that F-ratio (F=8.35 is significant at .01 level. This suggests that the difference between the three groups is real, not attributable to chance variable. In other words, stress has been found to exert differential effects on suicidality among adolescent participants.

Table-2: Summary of ANOVA among three stress groups on Suicidal Ideation scale

Source of variation	Df	Sum of squire	Mean squire	F
Between groups	2	1976.62	988.31	8.35**
Within groups	287	34106.28	118.83	
Total	289			

*p= 0.01

Table 3: t-ratios for three stress groups on suicidality scale

Stress Groups	df	t-ratio	P
High vs Moderate	218	4.43	0.01
High vs Low	124	10.03	0.01
Moderate vs Low	232	8.04	0.01

The significance of difference, between the mean scores of three stress groups in suicidality, was further examined by computing t-ratios. Table 3 shows that the t-ratios obtained between HSG vs MSG (t= 4.43), HSG vs LSG (t=10.03) and MSG vs LSG (8.04) are significant at 0.01 level. This very clearly suggests that perceived stress exerts differential effects on suicidality among the adolescents. The proposed hypotheses are, therefore, approved.

DISCUSSION

It was hypothesized that perceived stress would exert differential effects on suicidality among adolescents. The findings revealed that higher the level of stress, higher the probability of indulging in suicidal thoughts. This indicates that stress is a serious threat to the life and well-being of people in general and the adolescents in particular. The stress negatively influences their cognition, feeling and behaviour which may lead to serious problems such as depression and suicidal thinking. Many studies indicate that depressive symptoms beginning at an early age can have serious developmental and functional consequences, such as academic failure in future. Stress causes negative emotional states such as depressive symptoms, chronic stress, especially in young people, which are connected with susceptibility to alcohol addiction, drug abuse, crime, and a range of other adverse phenomena [26-29].

The findings of this study extend empirical support to Zhang and others [30] and Bender and others [31] who reported positive relationship between stress and suicidal ideation. In some other studies also stress and stressful life events were found to be strongly associated with increased risk of suicide [32-34]. Rosiek and

others [14] also reported significant positive relationship between stress and suicide. Since stress is often considered as a negative experience, it may disrupt the normal functioning of the affected person and may ultimately cause the feeling of frustration, hopelessness and meaninglessness in life. Such feelings may induce suicidality, hence must be given due attention for preventing suicide and managing the suicidal thoughts [35].

In our country as also in many other developing countries, there is general dearth of studies on suicidality and the reason behind it is the taboo about suicide prevailing in the society even today. In our society suicide is tabooed and talking about it is not desirable, but because of the increase in suicide in India, now it has become a focal theme of discussion at various platforms. The rate of suicide is rising and thus causing concern for the families and the administration as well. There may be several causal factors of suicide and suicidality and such factors may be classified into family factors, personal factors, psychological factors and so on. The predictive factors of suicidality need to be identified to protect the precious life of our people not only for their own well-being but also for the well-being of family and society [12, 16]. Stress causes emotional upheaval which can easily take the people in its grip in general and the adolescents in particular, as the adolescence is the age of stress and storm, which may be instrumental in predisposing the affected persons for suicidal actions. The psychological factors thus need to be given due attention for ensuring optimal well-being among our people and preventing suicides.

CONCLUSION

The results obtained in this study revealed that stress is a potential factor in determining and predicting the suicidality among the adolescents. The risk of suicidality and suicide increases with the increasing level of stress, i.e., higher the level of stress, greater the risk of indulging in suicidal thoughts by the affected persons. The findings also suggest that stress is an important psychological factor in suicidality and it must be taken seriously in developing any programme to control suicide and suicidality.

Implications

The findings of the present study make it obvious that suicidality is a major risk factor for our adolescents and psychological factors are more vital in predicting suicide and suicidality among them. The adolescent group seems to be more vulnerable to suicidal behaviour. It is felt that the adolescents be assessed and screened with suitable measures for counselling and enhancing their well-being. The affectionate social support and counselling for restructuring their cognitive thoughts are supposed to be of high instrumental value to control suicide and protect the precious life of our people in general and the adolescents in particular.

Limitations and Suggestions

This study was conducted on adolescents selected from a particular district of eastern U.P. and it limits the generalizability of the findings. So, selecting a sample representing broader geographic area is expected to provide more useful findings. Besides, the people from other age groups and belonging to varied locales should be covered for more generalizable results. It is also felt that other psychological factors (i.e., depression& anxiety, life events), family and economic factors should also be tapped in future studies and correlational approach is expected to provide more intensive picture of the relationship between suicidality and its predictive factors.

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Original Research Article

Are Depression and Anger Two Sides of the Same Coin? Exploration through the ISTDP Model

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ABSTRACT

Background and Objectives: The research paper explores the Intensive Short-term Dynamic Psychotherapy (ISTDP) model developed by Davanloo in treating depression of a 28-year-old engineering graduate. Her presenting problem was low self-confidence and difficulty making decisions. She was caught in the crossfire between her boyfriend and her disapproving parents. She suffered somatic complaints of insomnia, low energy, lack of focus on her daily activities, and social withdrawal for the previous 6 months. She showed symptoms of depression and sought help to take control of her life. In 7 sessions, she showed marked improvement, her symptoms significantly reduced, and she was able to focus on her activities. Her dependency on her boyfriend decreased, and during this change she was able to experience anger and rage (bottled up against her parents since her childhood). She realized what her relationship pattern was: punishing herself by escaping into unhealthy relationships with men.
Results: The ISTDP model was useful in understanding the complex feelings toward her parents, especially her father. Her somatic symptoms reduced after the session discussed in the paper.
Conclusion: This model of addressing treatment resistant depression holds great promise for developing more effective case formulation and more effective treatment strategies. Evidence for its effectiveness with treatment resistant depression can be seen in several recent studies.

Keywords: Depression, ISTDP, anxiety and somatic complaints.

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INTRODUCTION

In Mourning and Melancholia, Freud [1] writes his famous description of the phenomenology of depression: "The distinguishing mental features of melancholia are profoundly painful dejection, abrogation of interest in the outside world, loss of the capacity to love, inhibition of all activity, and a lowering of self - regarding feelings that finds utterance in self - reproaches and self - reviling's and culminates in a delusional expectation of punishment". Using Freud's theory of structural conflict [2], Davanloo [3] grounds his formulation of the dynamics of depression in terms of the triangle of conflict: feelings, anxiety, and defense. The patient's forbidden aggressive feelings trigger anxiety, which in turn triggers the defense of turning of anger against the self (self-reproach, self-punishment), which creates the symptoms of depression, withdrawal, inhibition, and lowered self-regard.
Davanloo's technique of the "unlocking of the unconscious" [4-5] demonstrates that central to certain depressive disorders is the reliance on repression and internalization to deal with powerful aggressive impulses. Thus, Davanloo [3-5], conceptualizes the phenomenological hallmarks of depression (withdrawal,

self-reproach, passivity, helplessness, and the sense of inferiority and inadequacy) as either defenses, or the result of defenses which ward off not only sadistic impulses but also associated painful feelings, such as guilt and grief.

Chronic reliance on depressive mechanisms creates ego-syntonic characteristic traits, such as passivity, helplessness, a tendency to assume a paralyzed, victimized stance, which lend to the individual's entire personality organization an air of defeat; he/she comes across as a beaten, crippled individual who gives every indication of being resourceless and depleted.

To work with the regressed, weakened ego organization characteristic of patients suffering from depressive disorders, Davanloo [6] developed a technique for restructuring the ego. These patients need help to identify, tolerate, and express their aggressive feelings without excessive anxiety and without turning the aggression upon themselves. In order to do this, they must be able to regulate their anxiety, develop their affect tolerance, and learn to see and let go of defenses which turn anger upon the self. Then, exploring feelings can be safely done without causing the use of self-attacking defenses that would otherwise trigger more depression.

The technique of restructuring aims to build the depressed person's affect tolerance to the level where the standard Short-Term Dynamic Psychotherapy techniques of inviting feelings and challenging defenses can be applied. It is for this reason that, prior to the application of challenge and pressure, the ego of the depressed patient must be restructured [3].

The goal of restructuring is the direct experiencing of the aggressive impulse. Implicit in that capacity is a psychic organization, Fosha (1988) characterized it by (1) an ego that can withstand the pressure of heightened impulse, (2) sadistic impulses which are not channeled against the self, and (3) sufficient energy available for therapeutic work [7].

As the therapist focuses on problem areas in the patient's life, she helps the patient observe, experience and let go of the defenses she uses to avoid feeling. Then the therapist helps the patient see the price she pays for using those defense (the symptoms). Then the patient can let go of the defense and face the feelings and issues she usually avoids. Through this repeated process, the patient is able to experience the feelings she formerly avoided and channel them into effective action rather than avoid them through defenses and suffer the resulting symptoms.

We see three primary systems of resistance that lead to depression:

1) Isolation of affect,
2) Repression, and
3) Projection.

Isolation of Affect: In isolation of affect, patients avoid the experience of mixed feelings in therapy by detaching from feelings and from people who trigger those feelings. Patients feel depressed because their use of detachment leaves them feeling lonely and isolated in relationships.

Repression: Patients who use repression cannot detach from their feelings. Instead, when they experience mixed feelings of love and rage, they protect other people by feeling love toward others and turning the rage back upon themselves. They feel depressed due to self-attack, weepiness, which covers their anger, character defense by which they treat themselves badly as others treated them, conversion, and somatization.

Projection: Patients who use the resistance system of projection cannot tolerate mixed feelings inside themselves, so they project those feelings outside onto others. "Oh, no I'm not angry with you; I'm afraid you are angry with me!" "I don't want to get closer to you; I'm afraid you are trying to get closer to me." "I don't have questions about my inner life. I'm afraid of the questions you want to ask!" These patients project their inner feelings and desires onto others, and then they fear other people as potential judges, critics, or attackers. As a result, they feel anxious, depressed, and hopeless, imagining they will never be loved (by these projections) [8].

Depression can be caused by detaching from mixed feelings, by loving the other and turning rage upon the self, or by avoiding mixed feelings by projecting feelings, especially anger, upon others. Thus, effective treatment of depression must target the cause---the patient's specific unconscious strategy for handling mixed

feelings: 1) isolation of affect: helping the patient see and let go of defense, so she no longer detaches from her feelings and no longer detaches from the people who trigger those feelings; 2) repression: helping the patient see and let go defense, so she no longer turns rage upon herself and, instead, allows herself to feel mixed feelings toward others; and 3) projection: helping the patient bear mixed feelings *inside* herself without projecting them outside herself onto others.

Since most depressive disorders begin as anxiety disorders, attention to anxiety must be a central aspect of assessing treatment resistant depression. Anxiety, as is well known to any psychiatrist, is not a thought in the head, but a bio-physiological discharge pattern in the body mediated by the somatic and autonomic nervous systems [9]. Therefore, to assess anxiety we must pay close attention to physical symptoms in the body. These symptom patterns have distinct implications for the patient's capacity for affect tolerance, and they are correlated with specific patterns of resistance.

Once the amygdala is activated, messages are sent to the somatic and autonomic nervous systems, which activate the body and generate the physical symptoms we call anxiety. These symptoms of anxiety are correlated with specific patterns of activation of the somatic and autonomic nervous systems (ANS).

The somatic nervous system governs the striated muscles, known popularly as the voluntary muscles. When anxiety is discharged into these muscles we see the following symptoms: sighing, tension in the body (e.g., tension in the neck, feet, hands, and back), tension headaches, and clenching of the hands. Patients whose anxiety is discharged exclusively in the striated muscles have a very high tolerance for affect, and their resistance almost always takes the form of isolation of affect.

If the patient's anxiety tolerance is lower, anxiety shifts out of the striated muscles into the smooth muscles, i.e., out of the somatic nervous system into the parasympathetic branch of the ANS. Smooth muscles are in the linings of the digestive tract and blood vessels. Thus, when anxiety is discharged into the smooth muscles, we will see the following symptoms: stomach ache, nausea, diarrhoea, sudden urination, and migraine headaches. When these symptoms occur, anxiety is too high and requires immediate regulation. And when the patient's anxiety shifts into the parasympathetic nervous system, the resistance also shifts out of isolation of affect into repression.

If the patient's anxiety tolerance is even lower, anxiety continues to be discharged in the parasympathetic branch, but even more severely. With the continued drop in blood pressure, pulse, and breathing rate, Arnsten [10] proposed that we start to see hypo-perfusion of the prefrontal cortex, release of neurohormones to the prefrontal cortex and hippocampus [11-12], resulting in cognitive/perceptual disruption. Researchers say that now anxiety is so high that the patient's capacity to think and reflect are severely compromised. Signs of cognitive/perceptual disruption include: blurry vision, ringing in the ears, problems thinking or concentrating, delusions, hallucinations, projections with loss of reality testing. Anxiety at this level makes the patient unable to think, and the projections prevent any conscious alliance from forming.

"How much longer do your tears have to suffer out in the cold before you let them back in?"
"Don't worry mom. I know I should not let my feelings out. I will behave." [6-9]

Treatment

In the following vignette, the client DB, the oldest daughter of 3 children, is an engineering graduate, aged 28 years, who has always protected her father from her rage and turned it inwards. As a result, she experienced depression and stayed in abusive and punitive relationships.

She becomes overly dependent on men who victimize her while she complies with their desires. This was her presenting problem. How can she either convince her parents that she wants to marry her boyfriend or convince him to breakup? Either way, she found it difficult to exercise her choice. Both ways she chose to be unhappy, as her source of happiness came from outside.

She grew up being very idealistic, compliant, and controlled by her mother. Her mother had a rough marriage in which she complied with all her husband's desires but then asked the patient to comply with hers. She wanted to tame her daughter from the start to avoid discord with men. The daughter, suffocated in this role with her mother, enacted it with her boyfriends. Having been her father's pet, she felt dethroned when her sister was born at age 4. As a result, she felt in constant need of her father's attention.

She completed her engineering degree but did not practice. After studying for her master's degree in the U.S., she returned, unable to decide what to study. This inability to commit showed up as well in four broken relationships and a broken engagement. She did not feel that she belonged and felt inadequate in all her relationships. Placing her desires onto others, she then believed that relationships were burdensome and draining. As a result, she took a passive position, waiting for others to make her decisions for her.

She came into therapy confused about the present relationship that started as a casual fling but became serious. The boy proposed marriage but she wanted to back out as it was just not in her 'plan' to get married to this boy. Totally confused, she found it difficult to make a decision. In therapy, when sharing her problems, she did so in a very clinical, detached manner, devoid of feelings. This was how she resisted emotional closeness in the session and remained detached from the therapist.

In subsequent sessions, she began to experience her anger toward both her parents. At first, due to her inability to recognize her anger, she felt low and depressed. She sought closeness with boyfriends, but then would feel trapped and would break off with them, only to feel depressed, missing their presence in her life. Rejecting her feelings and men, she became a recluse. In therapy, I helped her look at the anger she had covered up since childhood under the guise of compliance. As she began to face her anger toward her parents, relationships with them and her siblings improved.

Her use of compliance as a resistance against emotional closeness made it difficult to reach her true feelings. She needed to break away from her 'good girl' image and face her true feelings in therapy and toward her mother and father.

The following excerpts from a recent session shows her exploring feelings towards the father.

Client: "As I grew up, my dad became distant. There was no connection, or bond that is continuing."

Therapist: "How do you feel about your father's detachment?"

Client: "I thought I was comfortable so far, (*denia*l) but now it makes me feel incomplete. Our relationship died the day my sister was born."

Therapist: "And, as your relation with dad slowly died, all your relationship slowly die."

Client: (*Pause and silence*). "I don't know what to do? I am confused whether I should focus on my relationship with my parents or my current boyfriend?" (*Helplessness and confusion*)

Therapist: "Is it your will to look at your feelings towards your father? What are the feelings towards your dad as you sit here and recall how he grew distant from you?"

Client: "I felt angry that I am not special any more. I have to accomplish and prove myself to get his attention. I achieved academically for him!"

Therapist: "Can we look at what feelings come up towards your father for abandoning you?"

Client: I feel angry, I feel it in my throat (*sighing*)." (*Anxiety in striated muscles: dry mouth, sigh, tension in the chest).*

Therapist: "Can we together look at what feelings come up that choke you and make you breathless?"

Client: "Now, I am angry with myself for…." (*Anger turned inward – defense)*

Therapist: "Notice how your anger turns inward. Yet there are feelings towards your father. And if you did not take the anger inside and allowed yourself to express anger towards him. How do you feel the anger rising towards him?"

Client: "I really want to scream."

Therapist: "How do you feel the anger in your body?"

Client: "Hands are restless. I want to punch up things and scream at him. I deserve my worthiness. I don't need to prove myself."

Therapist: "And can you see your anger building up? How do you experience the power of the anger within you?"

Client: "My hands and shoulders are really tensing up." (*Striated muscle anxiety*)

Therapist: "So as we keep taking a look at this anxiety, so we can understand this crippling force that has been sabotaging you where else in your body do you notice this anxiety? As you experience the anger in your body and you hold on to the intense feeling inside. (*Anger building up.*) Anger sabotages you, heaviness in your breath and your body. Would you like to feel powerful with your anger?"

Client: "Yes, but I hold back still when I feel angry. Am I trying to protect him?" (*Defense)*

Therapist: "Only you would know whether you are doing so. Notice how you hide behind your passivity to protect him? Could that be the reason of feeling low and depressed? How about being kind to yourself? If you did not protect him and allowed the anger to come out from the body to the expression of expressing anger – How do you feel the anger towards him? (*Her energy seemed to go down and she appeared passive and looked away*) Notice how you look away and look away from your anger."
Client: "I feel weak, passive and confused. And allow the anger to push me." (*Looks down, tension in the hands- straited muscles*).
Therapist: "Holding on the power of anger. Can we look at how you experience your anger in your body?" (*Shallow breath, choking sensation in the chest – striated muscles)*
Client: "I really want to use my hands – push him and hit him scream at him. I want to blast him."
Therapist: "On a 10-point scale how angry you are now?"
Client: "8."
Therapist: "What do you want to do with the anger?"
Client: "I want to take it out. But don't know how to do so. (*Helplessness*) My chest and neck feel heavy."
Therapist: "Notice, you feel anger but push it back into your body and feel passive. How long would you want to keep the anger inside you? What are the feelings that come up towards me that does not allow you to experience it? You feel the anger in all your body. And then like a soda bottle you lose the fizz and get placid. The feelings come up towards me that make you put up the wall of helplessness and passivity. That keeps your anger under covers. The feelings?" (*Pressure to feelings.)*
Client: "Confused! If it's anger with me or with him?" (*Helplessness*)
Therapist: "Who would know? Do you notice how you turn the anger towards yourself? Is it your feeling or defense?"
Client: "My defense."
Therapist: "How is it helping you? That must be very frustrating to you. You would like my help today and you would like to take yourself seriously today, but this anxiety comes in sabotaging you at the very moment you want to look at your feeling. Right?"
Client: (*Looks confused*) "I have got comfortable with it. How will it help?" (*Identification with resistance*)
Therapist: "Yeah! That's your choice. Why feel powerful? Why respect your feelings? Why treat yourself well? You are joining him to get angry and disappointed with yourself. And he is right in getting angry with you. Why be kind to yourself, why listen to your body?"
The patient got mobilized–she straightened up bodily, felt powerful from within, and in five minutes she got into a portrayal.
Therapist: "Notice how you keep your eyes closed as you hit him."
(*She looked up and in pain…..More anger, more and more experience of anger*).
Therapist: "If you did not hold back this compliant girl from expressing her anger, what would you do to him?" (*She went into deeper portrayal and kept hitting continuously in her fantasy*.)
Client: "Even if I didn't feel like studying I still did it. Just because I could be the star of your eyes.
It was an f* burden on me."
(It went on for almost 10 minutes until her hands ached. But, she was overwhelmed with her anger and went on and on).
Therapist: "What would you do to him…. now? Pause. What's happening to him?"
Client: "He is dead. His face, skull and body are bleeding and bashed up. He is still breathing." (*Thoughtfully*)
(*She started beating him again with both full strength in both her arms*.)
Therapist: "Now what happening to him?"
Client: "Now he is dead."
Therapist: "What do you want to do with him now?"
Client: "I feel lighter in my chest and head. Though my hands ache."
Therapist: "What do you wish to do with him? How will you part from him?"
Client: "I want to burn him up. He deserves to go so, I have a break up with others as I had with my father."
Therapist: "What would you like to do with this intellectual understanding? What is happening physically in the body?"

(Breath is shallow, gathering her breath)
Client: "I will punch him."
Therapist: "Where?"
Client: "His face."
(Grief. Then moved her hands very animatedly).
Client: "I have been protecting you from my own anger. But not anymore*."(Grief).* Ignoring me and just caring about my marks. You reduced me to a medal child. How I hate you. All love and attention got divided. I did not like it. I got scared….. Didn't understand."
(*Closed her eyes and kept hitting him. Anger kept building up and getting released*).
Client: "He is bleeding." (*Body started going limp. After a brief lapse of silence).*
Therapist: "Can you see that it's difficult to look up again and express your anger? Do you notice your body is going limp and passive? As if to say you don't give yourself more permission to get angry. Can you be kind to yourself? You have suffered enough."
Client: "I don't want to keep it within me anymore."
Therapist: "You want to be kind to yourself. Right?"
Client: "I want to hit him."
(*And she went into another portrayal. She had released herself to a large extent. Slowly, she calmed down bodily. She tried reflecting on her relationship with her father in the present*). *Long silence*
Client: "I say very little to my father – so he feels that everything is fine. I pretend to be calm and easy." (*Soon guilt took over and she felt that he was not all bad. She realized that after the sister's birth she grew distant and did not take the liberties that her sister took.)*
Client: "He was the same person and yet was so available to my sister and not to me."
Therapist: "What are the pros and cons of staying quiet?"
Client: "Cons are - I suffer. Pros – I am seen as a good girl. I have always yearned for his attention, and treated myself as unworthy if he doesn't endorse me. I hate him. I gave him all the power of my worthiness. Until it comes from there, it's still not good enough. I can't continue living like that. I need to cut my umbilical cord attached to my father. It's time I free myself." *(She calmed down and came back into the present time).*
Client: "Damn! I want to marry this boy I love, but my parents don't approve of him. And now I really don't know whether I want to marry him."
Therapist: "Hum! Can we look at the reason you are here? Thus, can you see any connection between your past and present relationships? Does it affect your relationships with other men?"
Client: "Yeah! I am always seeking their attention and approval. This makes me lose my dignity in the relationship. I feel that the boyfriend will abandon me and instead of the boyfriend abandoning me, I do so. That is the reason, I have lost out on many relationships. I understand clearly how my unfulfilled relationship with my father has led to many incomplete relationships with my boy friends. I seem to have a difficulty committing to a relationship. I have given my father reasons to be proud – and now that I am in love with a boy not of my caste, I am not good to be his daughter. I want him to accept my relationship. That's when I realized love is conditional. Now I am not 'sanskari' (*cultured*) and he has given up on me. He will not accept my choice. I feel free and now I don't need to protect him from my anger. I don't need to avoid him. A part of me wants to stand for myself and value myself and a part of me is angry with him." (*She struggles between being the compliant and the confident girl).*
Therapist: "What other thoughts come to your mind?"
Client: "Now I can be the real me with him. Like …. tell him how it is …. How I feel." I am not ecstatic but I can express and show I am angry… or I love it! I can choose my feelings. I never knew how to deal with him. I was defiant and defensive. I didn't want to work it through and tried pushing him and in turn ended up being so. And now, I am open to a new relationship. Now, I am not going to wear a mask of compliance any more. No more punishing myself. It feels really good taking anger out, than taking it in. I am still angry, but I am open to talking to him."

(Her body was calm, eyes bright, yet she moved slowly. In this session, she felt deep rage four times toward her parents. Though sapped and fatigued, her clarity about her anger allowed her to free herself from her passive, depressed state.

Outcomes

The above case highlighted important principles for working with treating resistant depression:

1) The therapist identified the resistance system creating the symptoms.
2) Identified the pathway of anxiety regulation; (*Straited, smooth, cognitive – perceptual pathways*)
3) Regulated anxiety if it is not discharged into the striated muscles; and
4) Blocked, identified, and clarified defenses that caused depression immediately in order to prevent regression. She started showing signs of improvement after this session. Her symptoms markedly improved and she was able to open up with her father. Her focus on her work improved and she was at ease with herself.

CONCLUSION

This model of addressing treatment resistant depression holds great promise for developing more effective case formulation and more effective treatment strategies. Evidence for its effectiveness with treatment resistant depression can be seen in several recent studies [10].

The transcripts reveal that defenses, which cause depression, do not occur once or twice a session but constantly every minute. On an average 300 defenses per 60 minutes. Unless these defenses are addressed immediately, they create depression in session. Thus, an active strategy is necessary.

The therapist communicates the utmost care and respect for the patient as a human being, while maintaining an attitude of disrespect and intolerance for the defenses that cripple the patient's functioning and perpetuates her suffering. [11]

If defenses operate automatically in session without constant interruption by the therapist, the patient will continue to be held hostage by unconscious defenses she cannot see or respond to.

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Original Research Article

A Study of Resilience amongst people who have lost their relatives in a natural calamity: a study from Uttarakhand in Northern India

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ABSTRACT

Background and Objectives: Natural disasters can be a devastating experience for anyone. Mental disorders are common amongst survivors of natural disasters. Resilience is a significant factor that helps these survivors overcome this traumatic episode. In this study, we attempt to examine whether the level of resilience differs with nature of loss, in this case a natural calamity. Resilience is one attribute that helps an individual recover from a disastrous event and allows them to bounce back. It may determine the level of psychological stress in an individual because resilience is in fact a protective factor and individual with high resilience may have lesser degree of psychological stress. Resilience's has a strong neurobiological basis and also independent psychobiological construct.
Methods: Trained research officers in mental health from Mumbai went and stayed in the affected region and arranged for local psychiatric help prior to starting the study. Consenting subjects participated. Clinical details, level of resilience; psychological stress, life events and effect of trauma were assessed between two groups of subjects.
Results: The level of resilience was low and closely related to psychopathology in both the group of survivors. Individuals who had lost their relatives showed relatively very poor resilience, (CD-RISK 20.61 (SD 8.33) vs. 40.57 (SD 13), p=>0.01); had high levels of stress (GHQ, 27.44 (SD 3.82) vs. 23.36 (SD 5.44), p=0.001). Need for high social support (11 (SD 30.5) vs. 2 (SD 7.1) p=0.021) did not express any significantly higher requirement for financial support. Level of resilience was negatively correlated with experience of adverse life event in previous year and number of relatives lost.
Conclusion: Resilience is a personal characteristic, which is severely affected with experience of disaster. Individuals who were already vulnerable suffered the most. People who had lost relatives showed very poor level of personal strength and need for better social support and specific psychological intervention.

Keywords: Resilience, trauma, disaster, death, relatives.

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INTRODUCTION

Resilience is defined as the ability of individuals to bounce back after trauma and return to their previous psychological selves [1]. Resilience is a construct that has huge ramifications and has biological and psychological factors that affect it [2]. It is also a marker of psychopathology in various disorders and plays a role in the recovery from trauma and stressful events [3]. Cohesive communities, family systems, social support and religious faith and spirituality are factors that help survivors cope during a disaster but the loss of a family member has grave implications for recovery from trauma [4]. It is well known that resilience differs from recover in trauma and that there are multiple pathways that leads to resilience and recovery in trauma. A number of factors affect the development of resilience which includes displacement of the family or home, financial losses, death of a loved one, culture, religion, defenses at play and pessimism in the wake of trauma.

Sudden death of a loved one can be emotionally devastating, unexpected deaths provoke especially strong responses, as there is less time to prepare for and adapt to the death [5]. The unexpected death of a loved one is associated with the development of depression and anxiety symptoms, substance use, and other psychiatric disorders and with heightened risk for prolonged grief reactions [6]. The impact of unexpected death in the general population in the wake of trauma remains understudied. There are unresolved issues regarding the association between unexpected death and psychiatric morbidity and whether certain disorders are more likely than others to occur in the wake of a loved one's death [7]. It is also unknown whether death has associations with mental disorders at different points across the life course, and whether a greater number of unexpected death experiences is associated with more episodes of psychiatric disorders. This when complicated by the wake of trauma has far reaching implications [8].

Context of the Paper

The combination of cloud bursts, floods, and landslides triggered on 16 and 17 June 2013 affected most of the 13 districts in Uttarakhand. Magnitude of the disaster prompted people to coin the term Himalayan tsunami for this disaster. Worst hit places were very important Hindu pilgrimage districts namely Rudraprayag, Chamoli, Uttarakashi, and Pithoragarh. We at the Department of Psychiatry, Lokmanya Tilak Municipal Medical College, Mumbai decided to coordinate some psychosocial relief in this Himalayan tsunami affected region. Accordingly, a multidisciplinary team was deputed to Uttarakhand with the mandate of identifying and treating persons needing immediate interventions and for assessing psychiatric/psychosocial morbidity. The data presented in this study is a part of the assessment and intervention during the emergency relief work. Ethical clearance was obtained for the manuscript from the Ethics Committee at our hospital.

METHODOLOGY

The disaster management team undertook observation mainly in the worst affected two districts (Rudraprayag and Uttarakashi). The team worked for nearly 4 weeks providing mental health care. Assessments were done considering accessibility and representation ability of the affected population. The assessed population included pilgrims visiting the holy places of Uttarakhand from various parts of India and local population who lived in these areas.

This disaster was unique as substantial proportions of the affected population were pilgrims. The team visited the affected district hospital, primary health centers (PHCs), evacuation centers, relief camps, schools and also communities (visiting the affected villages, which were inaccessible by road). The team used to approach the medical officer in charge with the request to make an announcement to availability of mental health professionals and that the needy could avail clinical services. The community leaders and local staff announced the availability of mental health professionals. While doing so, they used to give descriptions of common symptoms of psychopathology. During the consultations with the survivors, attempts were also made to identify other cases using the snowball technique.

Qualified psychiatrists diagnosed the patients using the International Classification of Diseases-10 criteria (WHO, 1992) [9]. Informed oral consent was obtained from all the subjects. They also interviewed all

subjects and were supported by psychologists and social workers. Workers from local NGOs helped the psychiatrists where language was an issue. Two groups of subjects were chosen for the study. One was a group that went through the trauma and did not lose a family. The second was a group that lost a family member and loved one in the trauma. Both these groups were assessed using clinical assessment for psychopathology and they were then administered the following scales to assess the impact of trauma –

1. **General Health Questionnaire-30 (GHQ-30)** – It is a screening device for identifying minor psychiatric disorders in the general population and within community or non-psychiatric clinical settings such as primary care or general medical out-patients. Suitable for all ages from adolescent upwards and not children, it assesses the respondent's current state and asks if that differs from his or her usual state. It is therefore sensitive to short-term psychiatric disorders but not long-standing attributes of the respondent. The scale is made up of 30 items where issues related to physical illness are not assessed [10].
2. **The Connor-Davidson Resilience Scale (CDRS)** – The scale comprises of 25 items, each rated on a 5-point scale (0–4), with higher scores reflecting greater resilience. The scale has been administered to subjects in community samples, primary care outpatients, general psychiatric outpatients, clinical trials of generalized anxiety disorder and PTSD. The scale has demonstrated good psychometric properties [11].
3. **The Impact of Events Scale (IES)** - The Impact of Events Scale has become one of the most widely used instruments in the assessment of post-traumatic stress reactions in adults. The original IES comprised two subscales: intrusion (the sum of seven items), and avoidance (the sum of eight items) that mapped on to what was described in the B and C criteria of the diagnosis of PTSD, the signs and symptoms of intrusive cognitions and affects together or oscillating with periods of avoidance, denial, or blocking of thoughts and images. The scale used a somewhat unusual response format: Not at all = 0, Rarely = 1, Sometimes = 3, and Often = 5 [12].

STATISTICAL ANALYSIS

The data was analyzed using computerized statistical software SPSS Version 18.0. The categorical data was analyzed using the unpaired t test, Chi square test and one-way ANOVA where appropriate and Pearson's correlation was used to assess the correlation between different scales used in the study.

RESULTS

Table 1 – Sociodemographic Parameters

Parameters		Index	Control	p Value
Age		38.89 (11.6)	43.2 (12.8)	0.16
Male		10 (27.7%)	16 (57.1%)	0.018
Female		28 (72.2%)	12 (42.8%)	
Education (years of study)		5.0 (5.3)	7.6 (5.6)	0.065
Marital status-married		21 (58.3%)	20 (71.4%)	0.121
Living alone		1 (2.7%)	2 (7.1%)	
With spouse		20 (55.5%)	20 (71.4%)	0.121
Socioeconomic class-lower		27 (75%)	20 (71.4%)	0.74
Presence of addiction		5 (13.8%)	8 (28.5%)	0.148
Alcohol		3 (8.33)	3 (10.7)	0.378
Needs assessment				
	Financial	30 (83.3%)	26 (92.8%)	0.253
	Social	11 (30.5)	2 (7.1	0.021

	Medical rehabilitation	27 (75%)	18 (64.2)	0.352
	Basic	2 (5.56)	7 (25%)	0.026
GHQ scores		27.44 (3.82)	23.36 (5.44)	0.001
LEQ-last year		4.4 (1.59)	4.11 (2.14)	0.473
CD-RISK		20.61 (8.33)	40.57 (13)	<0.01

Table 2 – Correlation Tables

Parameters (n=64)	**GHQ**		**LEQ**		**CD-RISK**		**Number of relatives lost**	
	R	**P**	**R**	**P**	**R**	**P**	**R**	P
GHQ	1		0.342	0.006	-625	0	0.381**	0.002
LEQ	0.342**	0.006	1		-0.266*	0.033	0.05	0.692
CD-RISK	-0.625**	0	-0.266*	0.033	1		-0.73	0
Number of relatives lost	0.381	0.002	0.05	0.692	-0.672**	0	1	0

As expected the victims had high level of stress and much more among people who lost their relative. Significantly more victims who had lost their relatives due to death expressed need for help for basic requirements of life and for social support. Financial requirement for rehabilitation were not a priority. Though level of resilience was very poor in both group of sufferers, people who lost their relatives showed very poor resilience, almost half than people who had not lost their relatives.

DISCUSSION

There is no person or place immune from disasters or disaster-related losses. In addition to natural hazards, disease outbreaks, acts of terrorism, social unrest, or financial disasters- they all can lead to large-scale consequences and psychological stress for affected people and the nation, overall. Psychological stress is inversely proportional to resilience [13-14]. Greater the resilience, lower is the psychological stress and vice versa.

The Himalayan tsunami that struck the state of Uttarakhand was marked as the worst form of natural disaster in our country after the Tsunami of 2004. The present research was conducted to study the level of resilience amongst the people who were affected by this calamity- comparing the levels of resilience among people who had lost their relatives and those who had not. It was hypothesized that that people who have lost their relatives may have much lower resilience than those who have not. It was further hypothesized that the level of resilience among people who have faced the natural calamity will have more severe psychological stress after considerable period of time [15].

The team providing emergency relief work studied a sample of 80 people- under this the GHQ-30, CDRS and IES were administered. The assessed population included pilgrims visiting the holy places of Uttarakhand- Rudraprayag and Uttarakashi. These people came from various parts of India and the local population who lived in these areas. Of these 80, 16 people did not complete the questionnaires. Consequently, 64 people were retained to study. 36 samples were retained in the control group (people those who did not lose their relatives) & 28 samples were remaining in the study (index) group (people who lost their relatives). The data was analysed using unpaired t test, Chi square test and one-way ANOVA and Pearson's correlation, relevant to derive results. The findings were in line with the hypotheses as the victims who had lost their relatives to the landslide, had higher levels of stress- almost half than people who had not lost their relatives; as compared to those who had not lost their relatives. The basis for this finding being the scores on GHQ-30. Furthermore, the needs assessment showed that significantly more number of people who had lost their relatives due to death expressed need for help for basic requirements of life and for social support, over financial reimbursement [16].

The most important finding of the study was that no difference was found on the Impact of Events Scale. Additionally, it was also observed that the symptoms patterns for PTSD remained the same for both- study (index) and control groups-as reflected in the PTSD Symptom Questionnaire. No difference among the two groups was reported on the MADRS scale as well. Thus, no psychopathology was evidenced, however, psychological stress was identified in both groups, with implicated low resilience levels. Resilience is a strong psycho-biological marker in determining the ability to cope with stressors and recover for psychopathological conditions. The team discussed that it appeared that the resilience of the people could not become normal. Therefore, the need for social support was a natural expectation besides other factors also being responsible for such requirements. Research claims that low level of resilience is closely related to psychopathology for mental disorders, and this may possibly persist among these individuals. Mere management of mental disorders or symptoms of psychological distress is not enough and the individuals who had lost their relatives would require psychological intervention focused to re-gain their capacities of adaptations [17].

CONCLUSION

Stress is a reality of our lives however the short term and long-term effects of stress vary with the nature of trauma attached with the stressor. The level of resilience in an individual, determines the ability to withstand and cope with the stress. Resilience, where at one hand is predisposed, can largely also be developed in individuals. This can further help individuals manage psychological stress and also reduce vulnerability to possible psychopathology in the face of stress and trauma.

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Original Research Article

Inclusive Approach: Hijra/Transgender Community

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ABSTRACT

Background and Objectives: The present study was undertaken to analyze the relationship between Social Support and the Six dimensions of Psychological Well Being of the 'Hijra'/transgender community, based in Mumbai.
Methods: A sample of 59 Transgender participants residing in Mumbai were selected randomly from Railway stations and Traffic signals. Their age range was from early adulthood (20yrs-40yrs) to middle adulthood (40yrs-60yrs). They were administered the Sarason Social Support Questionnaire and the Ryff's Scales of Psychological Well-Being. In Ryff's Scales of Psychological Well-Being they were assessed along six dimensions: i) Autonomy ii) Environmental Mastery iii) Personal Growth iv) Positive Relations v) Purpose in Life vi) Self-Acceptance. Data was analysed using Correlation Analysis and Scatter Plot.
Results: The results indicated that the participants were in the category- 'Below Average' in Social Support and in the category 'Moderate' on all the six dimensions of Psychological Well-Being. The relationship between Social Support and Psychological Well-being was found to be insignificant. Both the variables were independent of each other.
Conclusion: The results indicated that the *Hijra* community received below average Social Support. The participants of the Hijra community scored moderately on the six dimensions of Psychological Wellbeing.

Keywords: Hijra, Transgender, Eunuchs, Intersex people, Social Support, Psychological Well-Being, Autonomy, Environmental Mastery, Personal Growth, Positive Relations, Purpose in Life, Self-Acceptance.

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INTRODUCTION

Hijras, as members of the eunuch, intersex or transgender community, are known to be a part of the Asian culture with historical evidence dating back to over 4,000 years. They are included in what is now commonly known as the 'third sex' and the LGBTQ spectrum. Despite finding a place in Indian mythology and history over ages, they find themselves at the receiving end of ridicule, abuse and discrimination in the society. They are found living at the fringes of society, with very low status, recognition and acceptance and often in inhuman conditions. This community is deprived of basic facilities integral to the human experience like healthcare, housing, education, employment, and legal/social rights. As regards their occupation and economic sustainability, they are known to make a living by ritualised ceremonies on occasions like childbirth and marriages in families, begging for alms on roads and in local trains, as sex workers and are considered deviant within the community [1].
The *Hijras* in India live within the 'guru-chela' (teacher-disciple) tradition, where the relationship is modelled on the construct of a teacher and disciple. The guru is expected to take care of the chela's needs, while the

chela is expected to show respect and obedience to the guru and give the guru whatever they earn. Every Hijra joins the community under a guru, who ideally remains so for life. Gurus and *chelas* belong to the same "house," a nonlocalized symbolic descent group similar to a clan. The Hijra community is divided into approximately seven of these named houses (with some variation according to region). The heads of these houses within a particular city or geographical region form a council of elders, or *jamat.* This group makes important decisions for the community, is present at the initiation of new members, and resolves whatever disputes arise within the community. Hijra houses are not ranked and there are no meaningful cultural or social distinctions among them, but each house has its own origin story and certain rules of behaviour special to itself [2].

In India, the *Hijra* population is a staggering 4.88 lakh as per the 2011 census, with Maharashtra accounting for around 10% of the national whole.

Hijra Lives: Negotiating Social Exclusion and Identities - Mrinalini Mazumdar [3]

This research explores the lived realities of transgenders who enter the *Hijra* community and the various forms of social exclusion that these individuals face and the ways in which they respond, thereby shaping their identity. It focuses on the lives of the transgenders that helps construct their identity as a '*Hijra*'. The symbolic interactionist perspective and labelling theory are used as theoretical anchors. Some of the main forms of exclusion that the respondents spoke of are familial ostracisation, physical and verbal abuse, forced sex, extortion of money and materials by the police and arrests on false allegations; restricted access to education, health services and public spaces and a severe curtailment of livelihood options. One of the significant coping mechanisms is the process of becoming members of a *Hijra* community and enrolling in a 'guru-chela' relationship. In exploring the nuances of this turn and the experience of exclusion, the study contributes to a discussion on the implementation of affirmative action by the state.

Sexuality as a Human Right: Body, Desire and the State - Dr Pranta Patnaik [4]

Bodies have always been a site of contestations, caught between realms of public laws and private desires. There have been studies focusing on the life of concealment by the LGBT community due to the laws made by the state, especially Sec.377 of Indian Penal Code. In recent times, the government has recognised the protection of the rights of transgenders, which surprisingly contradicts their fundamental rights. Employing Foucault's concept of the panoptic on, the paper engages with the laws related to the LGBT community. It reveals how the state makes a distinction between acceptable bodies and unacceptable desires with an attempt to regulate the bodies of its citizens. The sexual state tries to demean their existence and control their destiny by making their private sexual conduct a crime. The paper argues that the realm of individual desires should not be subject to scrutiny by the public laws under the garb of morality and desirability. The article ends with possible strategies that need to be identified and undertaken by each stakeholder to ensure a life of dignity for people belonging to LGBT community.

Families They Choose: Examining the _Hijra_ Family and Relations [5]

Challenging the dominant definitions of hetero-normative families, the paper throws light on families epitomised by *Hijras*, who, often as a result of rejection by their natal families, come to form their own kinship networks and so far have not been covered in the existing body of scholarship on alternative family arrangements. Based on ethnographic data and narratives collected from *Hijra Deras* of Delhi, this paper seeks to discuss the nuances of families outside of a 'monolithic understanding' of family. The broad argument of the paper revolves around the role played by families of choice in the building of the *Hijra* identity and also deepening and enriching the existing discourse on families in India.

Understanding the Mental Health of the _Hijra_ Women of India [6]

LGBT populations like the Hijra have a higher prevalence of mental health issues compared to their heterosexual counterparts. They are also more vulnerable to alcohol and substance use disorders. According to a study, 48% of Hijra participants suffered from psychiatric disorders ranging from alcohol abuse and dependence to depressive spectrum disorders to gender identity disorders. Despite this presence, none have ever had psychiatric consultation for these issues due to perceived and real stigma from health professionals.

***Hijras*/Transgender Women In India: HIV, Human Rights and Social Exclusion [7]**

Social Exclusion Framework is increasingly used in highlighting the issues and problems faced by disadvantaged and disenfranchised groups. Adapting the SEF to *Hijras*, once can understand how these communities have been excluded from effectively participating in social and cultural life, economy, politics and decision-making processes. It assumes the following forms:

- Exclusion from social and cultural participation:
  - Exclusion from family and society
  - Lack of protection from violence
  - Restricted access to education, health services and public spaces.
- Exclusion from economy
  - Exclusion from all levels of the economy
  - Exclusion from employment and livelihood opportunities.
- Exclusion from politics and citizen participation
  - Restricted access to collectivization
  - Restricted rights of citizenship
  - Restricted participation in decision-making processes

Let Us Live: Social Exclusion of *Hijra* Community [8]

Hijras face multiple forms of oppression across all areas of life. Due to their predominantly feminine behaviours they are ousted from home. They are harassed verbally, physically, sexually and mentally, in private and the public spaces. As a result, their human dignity and self-esteem is diminished and they report feeling worthless and unfit to live in society. This was especially so in the case of middle-aged *Hijras*. They also reported no hope for survival. This research reported no safe socio-political space where they can lead their lives with basic dignity.

The Invisible Ones: Sexual Minorities [9]

Sexual minorities recognize that they are different from the 'majority others', during their adolescence. Many of them end up in marital/heterosexual relationships against their will because of family and societal pressure. These marriages end up in marital disharmony, divorce or continue with poor quality of life. Legal inheritance is often denied by their family members. They are not allowed inside the premises of the educational institutions. Hence, illiteracy is very common among this sexual minority. They are not considered for government jobs. Even if they have a job, they are suspended from the job once their gender identity/sexual orientation is revealed. Discrimination and non-friendly environment at work place force them to take up begging and prostitution for their livelihood.

To Be Some Other Name: The Naming Games that *Hijras* Play [10]

There are multiple names that *Hijras* take during their life course: index changes in bodies, kinship status, and position within their social milieu. These name-changing practices also encode the erosion of relationships and the hopes for new and different futures. But as subjects of the state, *Hijras* multiple names create problem for both them and others.

Trajectories of the Transgender: Need to Move from Sex to Sexuality [11]

The unifocal attention on HIV/AIDS and the targeting of the transgender people have further marginalized and excluded these populations by branding them as repositories of the virus and as high-risk groups. The *Hijras* are trapped in a vicious cycle of market and medicine and it is here that the state needs to intervene with policies for welfare and programs for inclusion.

Narrating Identity: The Employment of Mythological and Literary Narratives in Identity Formation Among the *Hijras* of India

This research explores how the *Hijras* and *Kinnars* of India use mythological narratives in identity-formation. Mythological and literary narratives play a significant role in explaining and legitimising behavioural patterns, ritual practices, and anatomical forms that are specific to *Hijras*. This paper focuses on certain narratives that *Hijras* employ to make sense of and giving meaning to their lives, including mythological stories concerning people of ambiguous gender and myths associated with *Bahuchara Mata*.

METHODOLOGY

Aim

To study the relationship between social support and psychological well-being of the *Hijra*/transgender community.

Hypotheses

H1 - The *Hijra* community is receiving low level of Social Support.

H2 - The *Hijra* community is experiencing low level of Psychological Well-Being.

H3 - Social Support will enhance the Psychological Well-Being of the *Hijra* community as there exist positive correlation between them.

Variables

Independent Variable: Psychological Well-Being

Dependent Variable: Six dimensions of Psychological Well-Being

Operational Definitions of Variables

1. Social Support: Support from kith and kin, associates and society at large
2. Six Dimensions of Psychological Well-Being:

i. Autonomy: self-determination and independence
ii. Environmental Mastery: competence in managing external activities
iii. Personal Growth: continued development and openness to new experiences
iv. Positive Relationship: satisfying and trusting relations with others
v. Purpose in life: sense of direction and goals in life
vi. Self-Acceptance: acknowledgement of the self and positive attitude

Sample

Inclusive Criteria

- Sample: 59 members of the *Hijra*/transgender community, sourced informally from railway stations and traffic signals.
- Age range of participants was from Early Adulthood (20yrs-40yrs) and Middle Adulthood (40yrs-60yrs)
- All the participants were residing in all-*hijra* communities

Exclusion Criteria

- *Hijras* staying with their biological families
- *Hijras* who were part of formal organizations like, NGOs
- *Hijras* who were younger than 20 yrs and older than 60 yrs

Design

Primary data collected will be collected by Snowball sampling method. Repeated Measures Design will be used where all the participants will be administered the two Psychological tests

Tools

i) Sarason Social Support Questionnaire (Short Form) [12]

ii) Ryff's Scales of Psychological Well-Being (SPWB) [13]

Procedure

All the participants were contacted at different railway signals and traffic signals. Maintaining research ethics, they were assured that their response and identities will be kept confidential. After rapport formation they were personally and individually administered Sarason Social Support Questionnaire and Ryff's Scales of Psychological Well-Being. After data collection each participant was debriefed and thanked.

RESULTS AND DISCUSSION

Table 1: Mean, SD & Level of Social Support and Psychological Well-Being (N=59)

	MEAN	SD	LEVEL
Social Support	2.68	0.76	Below Average
DIMENSIONS OF PSYCHOLOGICAL WELL-BEING			
Autonomy	12.305	2.793	Moderate
Environmental Mastery	13.305	1.734	Moderate
Personal Growth	12.966	1.434	Moderate
Positive Relationship	13.169	3.547	Moderate
Purpose in Life	9.694	3.119	Moderate
Self Acceptance	11.779	3.119	Moderate

This leads to the acceptance of H1 as it was predicted that Social Support being received by the *Hijra* community from the family and society would be low. However, H2 is rejected as it was predicted that *Hijra* Community would be experiencing low level of Psychological wellbeing. The sample is experiencing Moderate level of Psychological wellbeing, as assessed along its six dimensions. This leads to the conclusion that Social Support is having negligible effect on Psychological Wellbeing. Further, the in-group support which Hijra Community offers each other is ensuring that they experience. Moderate level of Psychological Wellbeing.

Social Support is not correlated with any of the six dimensions of Psychological Well-Being. Hence, for the participants there is insignificant effect of Social Support on their Psychological Well-being. This leads to the rejection of H3 as it was proposed that Social Support will have positive correlation with Psychological Wellbeing.

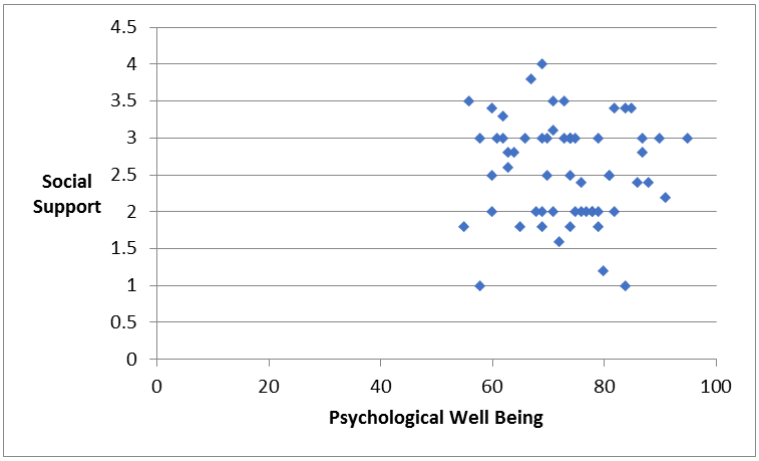
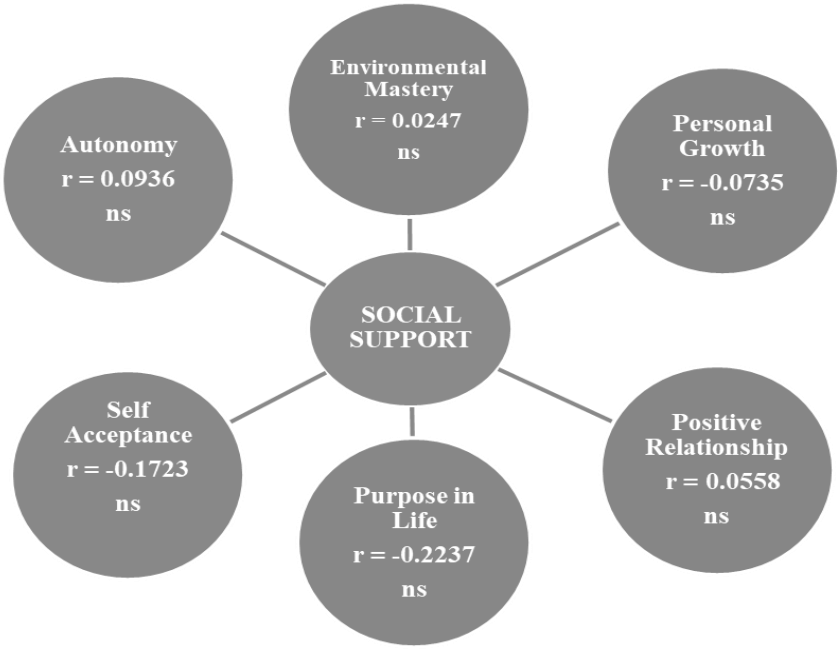


Figure 1: Scatter Plot showing relationship between Social Support and Psychological Well-Being (N=59)

Social Support is independent of Psychological Well-Being. So, Social Support cannot predict Psychological Well-Being.



CONCLUSION

- The results indicated that the *Hijra* community received below average Social Support. The participants of the Hijra community scored moderately on the six dimensions of Psychological Wellbeing.
- The Social Support does not significantly correlate with Psychological Wellbeing of the *Hijra* community. This could be the reason for the *Hijra* Community participants getting below average Social Support, but are still able to experience moderate levels, on all the six dimensions, of Psychological Well-being.
- These were in line with the observations made by past research in the area. While the *Hijra* community are getting adequate support from their in-group members, there is a lack of acceptance and support from society in general.
- To bring the marginalized *Hijra* community to the manifold of the society, just extending them social support might not be enough.

Future Implications and Applications

- Destigmatization and humanization should be a norm now while dealing with the *Hijra* community
- Other variables like Life Satisfaction, Self-Esteem, Intelligence and Emotional Intelligence can also be investigated to understand the *Hijra* community better.
- Adequate assistance must come from out-group members and the society via:
  - Legal cover
  - Government policies and regulations
  - Equal opportunities for personal growth and development
  - Financial empowerment by providing jobs in mainstream workforce
  - Education and enlightenment of the masses

Scope for Future Research

- To study if variables like, discrimination, job opportunities correlate with the Psychological Wellbeing of the *Hijra* community.
- To conduct the research on *Hijras* in other metropolitan cities and small towns.
- To compare the Social Support received by the *Hijra* community in different states of India.
- To study the prevalence of Psychological disorders like, Substance Abuse, Sexual Disorders, Depression, Anxiety, Life Skills, in the *Hijra* community and assess the frequency of interventions and treatment sought by them.

Limitations

- Limited sample size
- Restricted to Mumbai city
- Limited variables explored
- No interaction with family or friends
- *Hijras* staying in formalized institutions and with biological families were not studied
- *Hijras* who were adolescents or senior citizens were not studied

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Original Research Article

Perceived stress among nurses working in tertiary care hospital: A cross-sectional study

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ABSTRACT

Background and Objectives: Nursing profession involves spending a great deal of mental, emotional and physical energy on caring for others. This study was done to assess perceived stress among nurses working in tertiary care hospital. The objective of this study was to study perceived stress among nurses working in tertiary care hospital.
Methods: A cross sectional study was done on nursing staff of a government -medical college. 178 participants were included by systematic random sampling method. Perceived stress scale (PSS 10) questionnaire was used to assess stress scores. MS Excel sheet and SPSS were used for data entering and statistical analysis.
Results: The mean PSS score was 20.01 (± 4.45 SD). 12 (6.7%) were under low stress, 152 (85.4%) were under moderate stress and 14 (7.9%) were under severe stress.
Conclusion: This study identified that doctors and nurses do face considerable amount of stress at workplace. Appropriate coping strategies must be adopted by them to cope up with this stress.

Keywords: Perceived stress, nurses, tertiary care hospital.

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INTRODUCTION

Stress in humans results from interactions between persons and their environment that are perceived as straining or exceeding their adaptive capacities or threatening their well-being [1]. Hospital workers often deal with life-threatening injuries and illnesses complicated by under staffing, tight work schedules, overwork, paper-work, malfunctioning medical equipment, dependent and demanding patients and patient deaths, all of which are significant contributors to stress. Nursing profession involves spending a great deal of mental, emotional and physical energy on caring for others. They are often caught between complex hierarchy of authority of doctors, matrons, families or caretakers and administrators. Unpredictable and distant postings, paperwork, interpersonal conflict within the health care team, dependant and demanding patients, patient deaths, reduced time for family are compounding the stress of a nurse working in a transferable job in a government setup [2].

High exposure to stressful events among medical personnel may manifest itself in several different outcomes including depression, anxiety, self-doubt, post-traumatic stress disorder, loss of sleep, impairing immune function, elevation of cardiovascular risk factors, burn out and disturbed relationships with family. Knowledge about presence of stress is therefore important, and if found, should be given attention for timely intervention [3]. Hence, this study was designed with an objective of assessing perceived stress and its sources among nurses.

METHODOLOGY

A cross sectional study was conducted in Dr. Shankarrao Chavan Government Medical College and Hospital, Nanded from April 2017 to June 2017. Registered nurses who had worked at least three months in various wards of the hospital were included in this study. Those who working on temporary basis or newly appointed, and those on leave or not available at the time of study were excluded. It was decided to include 50% of nursing staff working in this hospital in the study. The list of nursing staff was procured from the matron office and the participants were included by systematic random sampling. The interview was conducted in private room after obtaining informed consent. The assurance was given to every participant about confidentiality of data. The predesigned questionnaire was included sociodemographic factors such as age, gender, residence, religion, marital status, education and occupation of life partner etc.

The perceived stress was assessed using Perceived Stress Scale [4] the PSS – 10 had 10 questions/statements and the respondents were asked to indicate their level of agreement with a given statement by way of an ordinal scale (0 = Never; 1 = Almost; 2 = Sometimes; 3 = Fairly Often 4 = Very Often). The level of stress were arbitrarily divided as: low perceived stress: 0-13, moderate perceived stress: 14-26 and high perceived stress: 27-40. The advantage of PSS is that it can be applied to a wide range of settings, to different subject types and includes items measuring reactions to stressful situations as well as measures of stress. The information thus collected was entered on a Microsoft Excel spread sheet. Statistical analysis of the data was done using SPSS trial version 20. Chi square test was used to compare proportions.

RESULTS

Table No. 1: Distribution of study subjects according to sociodemographic factors

VARIABLE	LOW	MODERATE	SEVERE	Total	X^2, p, df
Age (Years)					
20-30	8 (7.1%)	93 (83.0%)	11(9.8%)	112 (100%)	$X^2 = 2.772$
31-40	2 (4.5%)	40 (90.9%)	2 (4.5%)	44 (100%)	p = 0.837
41-50	1(7.1%)	12 (85.7%)	1 (7.1%)	14 (100%)	df= 6
>50	1 (12.5%)	7 (87.5%)	0 (0%)	8 (100%)	
Sex					$X^2 = 1.446$
Male	3 (7.3%)	33(80.5%)	5 (12.2%)	41 (100%)	p = 0.485
Female	9 (6.6)	119 (86.9%)	9 (6.6%)	137 (100%)	df= 2
Residence					$X^2 = 0.063$
Rural	4 (6.2%)	56 (86.2%)	5 (7.7%)	65 (100%)	p = 0.969
Urban	8 (7.1%)	96 (85.0%)	9 (8.0%)	113 (100%)	df= 2
Religion					
Buddha	0 (0%)	20 (87.0%)	3 (13.0%)	23 (100%)	$X^2 = 0.3834$
Christian	2 (6.7%)	26 (86.7%)	2 (6.7%)	30 (100%)	p = 0.699
Hindu	9 (7.6%)	101 (85.6%)	8 (6.8%)	118 (100%)	df= 6
Muslim	1 (14.3%)	5 (71.4%)	1 (14.3%)	7 (100%)	
Marital status					
Married	8(6.8%)	102 (87.2%)	7 (6.0%)	117 (100%)	$X^2 = 2.227$
Separated	0 (0.0%)	1 (100%)	0 (0.0%)	1 (100%)	p = 0.898
Unmarried	4 (6.8%)	48 (81.4%)	7 (11.9%)	59 (100%)	df= 6
Widow	0 (0.0%)	1 (100.0%)	0 (0.0%)	1 (100%)	
Family type					
Joint	9 (6.6%)	115 (84.6%)	12 (8.8%)	136 (100%)	$X^2 = 0.733$
Nuclear	3 (7.1%)	37 (88.1%)	2 (4.8%)	42 (100%)	p = 0.693
					df= 2
Experience (Years)					
<10	10 (7.1%)	117 (83.6%)	13 (9.3%)	140 (100%)	$X^2 = 9.687$
11-20	1 (4.3%)	22 (95.7%)	0 (0%)	23 (100%)	p = 0.138
21-30	0 (0%)	12 (92.3%)	1 (7.7%)	13 (100%)	df= 6
>30	1 (50.0%)	1 (50.0%)	0 (0.0%)	2 (100%)	
Family size					
2-4 Members	5 (5.9%)	74 (87.1%)	6 (7.1%)	85 (100%)	$X^2 = 1.327$
5-7 Members	6 (7.0%)	73 (84.9%)	7 (8.1%)	86 (100%)	p = 0.857
8-10 Members	1 (14.3%)	5 (71.4%)	1 (14.3%)	7 (100%)	df= 4

Table No. 2: Distribution of study subjects according severity of perceived stress scale.

Question	Never	Almost never	Sometimes	Fairly often	Very often
In the last month, how often have you been upset because of something that happened unexpectedly?	16 (9.0%)	31 (17.4%)	60(33.7%)	58(32.6%)	13(7.3%)
In the last month, how often have you felt that you were unable to control the important things in your life?	17 (9.6%)	42(23.6%)	72(40.4%)	31(17.4%)	16(9.0%)
In the last month, how often have you felt nervous and stressed?	13(7.3%)	22(12.4%)	68(38.2%)	55(30.9%)	20(11.2%)
In the last month, how often have you felt confident about your ability to handle your personal problems?	25(14.0%)	47(26.4%)	61(34.3%)	33(18.5)	12(6.7%)
In the last month, how often have you felt that things were going your way?	25(14.0%)	38(21.3%)	64(36.0%)	37(20.8%)	14(7.9%)
In the last month, how often have you found that you could not cope with all the things that you had to do?	11(6.2%)	44(24.7%)	58(32.6%)	46(25.8%)	19(10.7%)
In the last month, how often have you been able to control irritations in your life?	24(13.5%)	52(29.2%)	63(35.4%)	25(14.0%)	14(7.9%)
In the last month, how often have you felt that you were on top of things?	37(20.8%)	47(26.4%)	62(34.8%)	21(11.8%)	11(6.2%)
In the last month, how often have you been angered because of things that happened that were outside of your control?	8(4.5%)	15(8.4%)	72(40.4%)	49(27.5%)	34(19.1%)
In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?	9(5.1%)	45(25.3%)	60(33.7%)	43(24.2%)	21(11.8%)

Of the 178 respondents, 12 (6.74%) were under low stress, 152 (85.39%) were under moderate stress and 14 (7.86%) were under severe stress. The mean PSS score was 20.01 (+ 4.45 SD)

Out of 178 participants, majority (112) were from age group 20-30 years and most of were females. In age group 20-30 years, majority (83.0%) were having moderate perceived stress. Females are more than male in study subjects. Among 137 females most of (86.9%) were having moderate perceived stress. 113 study subjects were living in urban area among them, 85.0% were having moderate perceived stress. Most of i.e. 118 were Hindu by religion; out of this 101 (85.6%) study subjects were having moderate perceived stress. While considering the marital status, most of (117) were married while only one was unmarried and 1 was widow, among 117 married study subjects 102 (87.2%) were having moderate perceived stress.

Majority of study subjects (136) were belongs to joint family, among these 115 (84.6%) were having moderate perceived stress. While considering the experience of work, most of (140) were having experience less than 10 years and among this 140 study subjects 117 (83.6%) were having moderate perceived stress (Table 1). Above all, no any sociodemographic factor comes statistically significant with stress. (Table 1). Responses given by subjects to Perceived stress scale are depicted in Table 2

DISCUSSION

The lives of healthcare professionals are often stressful. This study evaluated perceived stress among important group of health care professionals i.e. nurses. We chose the perceived stress scale (PSS-10) for evaluating stress, since this instrument has been documented for its reliability and validity [4-6].

Of the 178 respondents, 12 (6.74%) were under low stress, 152 (85.39%) were under moderate stress and 14 (7.86%) were under severe stress. The mean (± SD) PSS score among our study subjects was 20.01 (± 4.45 SD). Similar findings from study done in Kancheepuram, Tamil Nadu revealed mean perceived stress score among nursing staff was 17.16 (± 5.5 SD)[2]. Another study done in thirty government hospitals of central India [7] found that the mean perceived stress score among nursing staff was 15.98 (± 6.22 SD). Study done in Karnataka have reported 60.38% nurses experienced lower stress, 38.46% had moderate stress while 1.15% had severe stress [8]. Another study on the other side, studies done in other countries have reported higher prevalence of stress among nurses. A Study in the United States among nurses found that the mean perceived stress was 25.5 (± 5.98 SD) [9]. This variation in the mean perceived stress score among nursing staff may be due to different work environment in different hospitals.

In the present study, majority of the participants were females. But, the difference in mean PSS scores between females and males was not statistically significant. In this study, nurses of age group 20-40 years and females were found to be at a higher risk of developing perceived stress. While a study among nurses in Sri Lanka revealed that high stress levels were significantly associated with 40-49 years age group [10]. However, in a study conducted at Delhi, there was no significant association found between occupational stress and selected demographic variable namely age and sex [11].

CONCLUSION

Nursing staff experiences a considerable amount of stress at their workplace due to various causes which leads to diminish in nursing care quality. Stress management activities such as yoga and meditation should be practiced and whenever needed specialist care should be provided. Tertiary care government hospitals have tremendous patient load. However, measures to decrease the workload by increasing the staff, better infrastructure, healthy work environment, reducing non-nursing activities and proper planning of duty schedules are required. Focus should be laid on stress management and coping strategies of nurses. Younger nurses are at a greater risk of developing stress. Hence, it is recommended that duties should be allocated such that there is a senior nurse to supervise and support a younger nurse to deal with such stressful situations.

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Viewpoint Article

Suicide among medical students: The need for an Ignaz Semmelweiss insight

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The medical education system in India is currently one of the largest in the world and houses a rapidly expanding private medical education consortium [1]. While the number of medical educational institutions in the public sector grew by only 36% from 1970 to 2005, the number of private colleges multiplied by a staggering 1,120% [2]. As per the Medical Council of India, there are now 194 private medical colleges and 161 government medical colleges offering medical undergraduate courses [3]. Undergraduate medical education comprises of strenuous study and training for 5.5 years. The rigorous demands of training might adversely affect the student's physical and mental health. The subject matter of depression and burnout among medical students is now well known and gaining traction. At an individual and institutional level, the medical fraternity has been trying to face up to this issue for some time now. Medical students encounter multiple psychological changes in their metamorphosis from young insecure students to proficient doctors and somewhere along the way, some of these brightest minds- our future doctors, are somehow lost in translation.

The Million Deaths Study reports that suicide is the second most common cause of death in people aged 15-29 years [4]. Studies further report that suicide rate amongst medical students is considerably higher compared to the general population or other academic groups [5-6] A meta-analysis found that the prevalence of depression in medical students was 27.2%, with only 15.7% seeking psychiatric help. Furthermore, suicidal ideation was found in 11.1% [7]. To the best of our knowledge, similar studies in the Indian context are lacking, but it is possible that the rates may be comparable or higher, considering that India has significantly higher suicide rates compared to the rest of the world [8]. These sobering statistics raise concerns as to why this particular population subset appears to be more susceptible, than what the common denominators which predispose them to depression and suicide are.

The embryology of the problem is multifactorial and there are a few established risk factors, such as how entering the medical profession can itself be extremely stressful. The highly competitive entrance exams call for a great deal of dedication, with lakhs competing for just a few thousand seats. These students invariably undergo a long grind to qualify in these exams, and it is not at all uncommon to see that some of them are likely to be perfectionists and are extremely vulnerable to become discouraged if the lofty expectations they ascribe to are not met. Owing to the tense competition among peers, the bulk of academic material and amount of clinical skills that need to be acquired in a short time frame, they may feel that everyone else is better, and if others are able to cope, they should be able to too. The stress of being around illness and death on a daily basis can be overwhelming, especially in the first few months of clinical posting. In addition, the high workloads, lack of sleep, along with decreased leisure or down-time can take a severe emotional toll, increase anxiety, depression and burnout [9]. Burnout soon descends into despair and some may even turn to suicide. Sources of support that they could rely upon previously might not be available now as many

medical students are in a medical school which is not in the same city as their families and for some, it might even be the question of exhaustive travel schedules to regions that have poor connectivity. Medical education conditions students to push themselves to their limits; "I should be capable of handling everything" is the motto every student imbibes by default. This mindset, although enabling students to manage difficult situations in clinical settings, can prove counter-productive when it comes to their own well-being. Left inadequately addressed, this can contribute to detrimental psychological and physical conditions even later in their careers [10-11]. These are all, for most parts student related and extrinsic factors, but there just might be one intrinsic problem that often slips under the radar and that problem might be us-the medical professional and the medical education system as a whole.

A comparable situation arose around 300 years ago, when doctors refused to acknowledge their implicit responsibility in causing a problem. The 18th and 19th century's puerperal fever affected on an average, 6 to 9 women in every 1000 deliveries, killing 2 to 3 of them with peritonitis or septicaemia. It was the single most common cause of maternal mortality, accounting for about half of all deaths related to childbirth, and was second only to tuberculosis in killing women of childbearing age. It was described as an aspect of the natural world that felt almost deliberately evil. What caused it? Some thought "a failure of uterine discharge"; others called it "milk metastasis," noting that the internal organs of the women who died seemed covered in 'milk'. Eventually it was accepted that this fluid was pus. But how did the pus come? In the meantime, doctors were puzzled, blaming puerperal fever on a host of different causes: mists, sewage, poor ventilation, cold, ethnicity, or vague putrid tendencies. Lot of money, time and manpower was spent in investigating these possible environmental aetiologies.

The breakthrough, when it eventually came in 1847, came from essential introspection rather than adventurous projections. Ignaz Semmelweis brought attention to how doctors at the time did not have the habit of sterilizing their hands prior to delivering. While working at the Vienna Lying-in Hospital, he demonstrated that the incidence of puerperal fever could be drastically reduced by appropriate hand washing by medical care-givers. Semmelweiss' hypothesis, that there was only one cause; that all that mattered was cleanliness, and that somehow the doctors themselves were responsible for all those maternal deaths was extreme at the time, and was largely rejected and ridiculed. After all, doctors were the Gods on earth who could do no wrong, weren't they? He was dismissed from the hospital, his contemporaries, including his wife, believed he was losing his mind, and in 1865, nearly twenty years after his breakthrough, he was admitted to an asylum where he died of septicaemia. More than twenty years later, Louis Pasteur's work subsequently offered a theoretical explanation for Semmelweiss' observations. For nearly 50 years we refused to accept the possibility that we might be a possible contributor to the problem that had killed many and instead adopted a stubborn futile dissection of several extrinsic causes. It would not do to repeat history, like the persecution of Semmelweiss. Instead, we need to sternly examine the medical curriculum and system that we have built for these students. Yes, undoubtedly the personality factors of the medical student, competence, his genetic vulnerability to develop depression might all be strong risk factors, but it is high time that we, the medical fraternity, acknowledged that we may not only be part of this problem, we might just be the problem itself. It is the elephant in the room that we can no longer ignore and must quickly triage.

At the very core of this intramural problem is our notion of what constitutes good medical education. We live in an era where the councils that accredit medical colleges are all placing increasing emphasis on standardization. The implicit assumption is that excellence is defined by blind allegiance to a guideline, from which every deviation becomes defined as an outlier. On finally making it to a medical college; the student has realized a lifelong dream. The harsh reality of the medical college's albatross ecology then slowly kicks in; before this, they were highly unique and considered to be the cream of the crop but now, they are joined by more than a hundred individuals as talented, as intelligent and as ambitious as them. They become devoid of the distinctiveness that once gave them so much meaning; that intrinsic drive that galvanized their academic approach is thwarted, they no longer stand out like they once did and this can lead to an acute loss of individuality and belonging. This is reinforced by our medical education system, with its narrow repertoire of marks, grades, pass and fail to define the competency of our students. Some teaching staff may even inadvertently supplement this ideal by rewarding those individuals who are most suited to this

suboptimal system and ignoring those who have a completely different set of strengths that the system does not even test for. Rote learning is most emphasised, with OSCEs (objective structured clinical examination) and clinical scenarios taking a back seat. Use of E-learning and digital technology is rarely encouraged even though the use could overcome logistical limitations and help reduce workload [12]. Competencies are usually defined by medical boards in an ad hoc manner that is easiest to evaluate, and such definitions have the potential to distort outcomes, such that only those that can be objectively measured are included for assessment. The net result is that these students feel out of place and their coping mechanism involves an attempt to be 'just like' the topper in a class, or an 'overachieving senior' or that 'perfect clinician' in the hospital that everyone talks about. They are constantly trying to be more like somebody else rather than nurturing their own uniqueness. They become pawns trying to blend in to this glitch in this didactic system. The failure to meet these demands can itself be the genesis for embarrassment, resentment and sometimes even a maintaining or an aggravating factor for depression. No case of depression is the same and no suicide is the same, but these deeply ingrained stressors of the medical milieu are probably the generic motif.

Medical students are not all cut from the same cloth, and neither are the patients they tend to. Medical education at its very best should never make students feel as though they must all fit into the same mould. In India nearly 60,000 students take up MBBS every year [13] and imagine if we had 60,000 cloned replicas each year. Medical colleges should not be akin to manufacturing plants spawning out stereotypical gizmos. Instead, they should be encouraged to draw on and develop fully their own distinctive life experiences, interests and abilities. We as doctors cater to a very diverse population, a world filled with variety and this deems a wide array of clinicians with distinct personalities and unique skill sets that can meet the divergent needs of disparate population groups. Standardization should not be the focus; instead self-growth should be an epitome. Most medical aspirants are usually under the impression that the hardest part of their professional career is entering it, and that the rest is mere formality. A few years into the course dawns the startling realisation that an MBBS degree without an MS/MD has only a modest value. This adds to the feeling of hopelessness, exacerbated by the already high academic and emotional burdens. As a coping mechanism, students then adopt a utilitarian view of medical school analogous to passengers on a shuttle service to the 'postgraduate destination'. A means to an end rather than an end in itself, they are physically in school but constantly feel disengaged from it as though they are enduring medical under-graduation rather than enjoying it.

Medicine as a science is self-sustaining with all its specialities, sub specialities and super specialities. There is sufficient space for everyone and we can find a place for all the 'underachievers' and the 'overachievers'. But it is we who need to stop labelling and mislabelling such distinctions in medical school. Plural specialities like sports medicine, nuclear medicine, emergency medicine, hospital administration, radiotherapy, infectious diseases, transfusion medicine, clinical haematology, reproductive medicine, geriatric medicine, allergy and immunology, medical genetics, sleep medicine have now emerged [14]. None of these were in existence 20 years before, so imagine the possibilities a few decades further on. This is testament to how medical science is updating itself to sync with the evolution of medical knowledge, but the platform to all science is education. So, is medical education also updating itself concurrently or merely playing catch up? Are students encouraged to explore possibilities that stray away from conventional subjects? Medical ethos must keep pace with these winds of change and react in a flexible fashion to ensure student customization with value based motives instead of conformity. Systematic definitions of student competency should recede to the background and medical ergonomics should transcend to the forefront. Medical students share so much in common, yet they are so magnificently different; they think differently, they have contrasting and sometimes competing ideals, ambitions and motivations. If we see each of them as fundamentally adequate then we can expand the definition of scholarship beyond just stereotypical academic marks, laying the groundwork for a more humane approach to medical education, one that encourages students to become the best human beings they can be. This approach can breed a flexibility that can adsorb the intense pressure these students feel in meeting curricular norms, nurture student engagement and optimize their psychological wellbeing.

The modern era epitomizes how the medical profession has thrived over the last 200 years but at the same time we must be mindful that as a species, humans have thrived for more than 2000 years. If we long to believe that being a doctor is equivalent to a demi god status, that we are a cut above, then that is an illusion of medical science that is inflating our conceits, an illusion that should not be a lure for young students joining the course. The concept of medical celestial reflects a mistaken pipe dream of medicine. The notion here is that nature heals disease, as well as causes it, and the role of the doctor is to not fight nature to cure the disease but to assist nature in the healing process. We do not have complete control over the way a medication works or whether a diagnosis is terminal, so instead of control, we must focus on influence. We must acknowledge our role as a 'Doctor' for the privilege it brings as well as recognize its limitations. This acceptance at a vanguard can help relieve that constant pressure that pushes us towards a burnout, it is to simply state that a 'God complex' does not always imply that doctors are omniscient beings, instead it symbolizes humility, that we are not larger than life. This godhead concept is a learned and conditioned perception which students imbibe in medical colleges from the doctors they are around. Positive role modelling can have a visceral impact during the student years but it cannot occur in a vacuum, it calls for medical professionals at all levels to abandon their own 'Messiah complex' and be open to learning as a continuous lifelong process not limited by the constraints of a MD or DM. The message should be reinforced at every opportunity; be it at the bedside, lecture halls or practical labs that medical science in all its glory is still an impotent science without humility, and finding a way to foster this attitude can underscore the unrealistic absolutistic self-expectations that weigh down on these students.

It is interesting to brainstorm what expectations these students harbour before joining medical school. They have at most times outscored those students who have taken up professions such as engineering, military service, business management but yet the rates of depression and suicide in these industries are much lower than that of medicine [15]. So, is this to say that the culture of medical education itself is a standard lower than the modules in other vocations? Medical training is more rigorous than any other industry? Or could it probably be a case of faulty expectations of the students? It is difficult to imagine a person joining the army voluntarily without the expectation of rigorous training schedules, hazardous situations and the pressure of making split second decisions on the battlefront. This normalization of expectations can itself blanket them during stressful circumstances. Yes, perhaps our students may not have toned their forecasts of a life in medicine prior to joining medical school, but what barricades us from implementing a workshop/module to pigeonhole the reality once they have joined college? Instead the first week is less about this and more about the kaleidoscopic colours that a benedict reagent can make or the surface marking of the palmar carpal branch of the radial artery

While focusing on mental health issues in these students, we must also be mindful of the undercurrents of depression. Imagine the plight of that medical student whose friend is depressed, not willing to seek help or worse still if they are a suicide survivor. It must be an agonizing experience and the dilemma they must struggle with every day, what could they have done to prevent it? If they can't save their colleagues how will they save their patients in the future? Aren't they at risk for developing depression too? These are the ripples of depression in this critical population. Today hospitals have dedicated burns wards, septic wards, so imagine ten years from now where hospitals have a dedicated ward for depressed medical students /doctors. Imagine twenty years further on where the rates of depression have increased so much that policy makers find it more productive to use AI (Artificial intelligence) programmed bots to diagnose and cure rather than make room for a human doctor, who has to cope with burnout and depression and yet deliver reliable patient care. This might longitudinally just be a hyperbolic nightmare but it is also a 'gentle' reminder that if we keep doing what we are doing then we will continue to get what we are currently getting. We need to act quickly at an individual level, at an institutional level, at a national level and at a global level or the future might just arrive even before we expect it to.

Let's look at a few models from medical schools in different parts of the world designed to break monotony and enhance student engagement. The Flipped Classroom model is a design in which the tasks completed inside and outside of the classroom are opposite to what traditionally occurs in classroom. Here constitutional knowledge is gained by students through self- paced learning before the scheduled class.

Knowledge application and problem solving then occur inside the classroom through mentor- facilitated learner- centred activities, in contrast to a conventional classroom, where foundational knowledge is passively transferred to students through the medium of a lecture [16]. This broad general definition, allows for a disparate implementation of activities inside and outside the classroom. Some schools have explored "peer coaching" methods utilizing one-on-one relationships, which might provide a forum for students to discuss personal issues that they would otherwise be hesitant to disclose or seek help for [17]. Mindfulness training is still an amorphous neoteric practice at medical schools and is still largely confined to the external milieu and optional space. Amalgamating it into the medical curriculum can promote positive changes in attitudes towards self-care skills and enhance well-being [18]. The utility of remediation training for students who are consistently falling short of academic cut offs can also be piloted. Such an individualized learning module that outlines generating personalized solutions with external support could hypothetically benefit but would however require extensive resources that currently don't exist.

Most of these intervention programs are nascent, maybe their success is even serendipitous but they show early potential, and because of the length of time required for the impact of a curriculum to be felt, it cannot be expected to yield decisive results that would be universally accepted in the near future. The fact that we lack evidence today doesn't mean that we can't have the evidence required to make the policy changes necessary 10 or 20 years later. But we need to start today if we want answers then. Evidence based practices might take a decade or more to be consolidated into core medical curricula but educational programmes must take a leap into unchartered territory and explore new horizons to assist in the transposition. Despite medical education's fountainhead role in sculpting professionals that delivers care to the world's second largest population, funding for medical education research itself is conspicuously absent. As a result, we lack evidence that is essential for guiding improvements in the health and sustainability of this workforce.

Just a couple of decades back, Nokia was synonymous with mobile phones and Kodak was synonymous with photographs. Today there are more number of mobile phones than people and more number of photographs taken than we could keep track of; yet ironically both these pioneer companies are now in bankruptcy and their products obsolete. Change is inevitable and therefore adaptability to the needs of the population is critical. Diseases are evolving, needs of the patients and their caregivers are constantly changing but are medical educators teaching students to become doctors who treat the patient and not just the disease? Medical education in India is at its crossroads. The time has come to reflect whether we should still adhere to the rigid archaic curricula established over a hundred years ago or to take a fundamentally different course, guided by sovereign innovation. When the medical system is organized along these lines then in the due process we will also be serving all the patients that our students will one day serve. With depression and suicide among medical students being in the spotlight recently there is a danger of genesis of an illusion that suffering and burnout is status quo, a necessary pre-requisite to complete medical school. Imagine a popular label where being a medical student is considered a risk factor for depression; wouldn't that be a forced parody of our medical system? We must remember that these medical students are our future doctors and if issues of depression are not adequately addressed at the very 'beginning of the pipeline', we might be left with a chicken or the egg conundrum not knowing whether we are looking at a de novo depression in a doctor or a depressed student who has now become a depressed doctor. Thousands of lives were lost before Ignaz Semmelweiss's introspection, but post this logical self-examination thousands of lives was also saved. If we are a part of the problem, then there lies an opportunity to be a part of the solution too. Medical education aspires to help medical students learn to care for others as best as possible. So can't we learn to care for them too? This is a paradox we must quickly resolve; after all every doctor was once a student. Isn't this what we would have also wanted?

Definitely individual student related factors like resilience and coping skills play a more predominant role in the etiopathogenesis of depression compared to faults in the system. The insight offered here is therefore not a panacea to depression among medical students but only a subtle innuendo of our collective responsibility to accelerate the change that our medical culture warrants. Institutional changes are often in the end a summation of changes in individual attitudes and hence the onus is on each and every medical professional to facilitate this transformation. Burnout can be curbed, depression can be managed and suicide

can be prevented. Reformations in the medical education system need not be an 'antidote' or a 'vaccine' to the problem but it can still be therapeutic.

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Case Report

Clozapine withdrawal in catatonia: a case report

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ABSTRACT

Catatonia following clozapine withdrawal is a phenomenon with rare documentation in medical literature. We present a case of a 50-year-old female with a history of paranoid schizophrenia who presented with catatonic features on discontinuation of clozapine and subsequently showed rapid improvement on reinitiating the drug. It is imperative that clinicians be aware of this occurrence so that clozapine maybe restarted without delay.

Key words: Clozapine, catatonia, discontinuation.

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INTRODUCTION

Clozapine is an atypical antipsychotic with actions on Dopaminergic D2 receptors as well as serotonin HT2A receptors. It also has actions on muscarinic, histaminic and noradrenergic receptors. It is effective in treating both positive and negative symptoms of schizophrenia, suicidal ideation and is the drug of choice for treatment resistant schizophrenia. Since it has a multi-receptor profile a multitude of withdrawal symptoms are seen [1]. Abrupt withdrawal of clozapine is often known to precipitate psychosis and rebound cholinergic symptoms like nausea, diaphoresis, diarrhoea, and agitation [2]. Catatonia following clozapine withdrawal is a rare phenomenon and is only available as case reports in literature.

CASE REPORT

A 50-year-old female was brought to the emergency room with complaints of slowing of activities, decreased movements, not speaking, withdrawn behaviour, maintaining odd postures, urinary incontinence, staring spells and sleep disturbances since 5 days.

The patient had the first episode of altered behaviour in 1987 when she presented with delusions of reference and persecution, auditory hallucinations. She was diagnosed with paranoid schizophrenia and treated for the same. She was compliant on treatment, however, had multiple similar exacerbations in later years, which were triggered by interpersonal conflicts within the family. Her last exacerbation was 8 years back and since then she had been well maintained on 50mg of clozapine. 20 days prior to her visiting the emergency room, following a conflict in the family, she again started having complaints of suspiciousness and hearing of voices. Her doses were increased to 125mg of clozapine and 20mg of olanzapine. She complained of excessive drowsiness and discontinued her medication 10 days back without medical supervision.

On examination in the emergency room, she had psychomotor retardation, mutism, negativism and posturing, which were suggestive of catatonia.
She was advised admission and investigated for medical causes of catatonia since this was the first time she was presenting with catatonic symptoms. However, her blood investigations (including CPK levels), Electroencephalogram (EEG) and computed tomography (CT) of the brain were all within normal limits. She was initially started on lorazepam 8mg and risperidone 3mg but there was minimal improvement.
In the absence of any improvement, a diagnosis of clozapine withdrawal induced catatonia was considered. On the 8th day of her admission, clozapine was restarted at the dose of 25mg. By the next day, there was slight improvement in her symptoms. The dose of clozapine was gradually increased to 200mg over the next week and there was corresponding improvement in her symptoms with her achieving near normal levels of functioning over the next 10 days.

DISCUSSION

It is widely known that stopping an antipsychotic can have a variety of withdrawal symptoms. However pre-clinical data regarding prevalence and presentation of withdrawal is scarce. Up to 50% of patients on clozapine become non-compliant due to the side effects or the need for regular monitoring [3,4].
Abrupt withdrawal can lead to clinical relapse or withdrawal syndromes within 1-11 days. The onset of withdrawal symptoms with clozapine is 5 times greater than that of other antipsychotics partly due to the rapid displacement of clozapine from its receptors by endogenous neurotransmitters or other compound [5]. While rebound psychosis is well documented, even rare presentations have been seen like catatonia [6-10], delirium [11], serotonin syndrome [12] and movement disorders [8,13]. Following the discontinuation of medication, the presentation maybe unrelated to the original episode [3,9].
These varied presentations of a common etiology are likely due to vast pharmacological action of clozapine. Studies have shown that clozapine increases GABA mediated inhibitory transmission [11]. One of the postulated theories for catatonia is alteration in the reactivity of GABA receptors especially in the right orbito-frontal, motor and parietal cortices [14]. Sudden withdrawal of clozapine leads to GABA super sensitivity causing sudden decrease in receptor activity subsequently leading to catatonia [1,6-8]. Most patients who develop catatonia subsequent to clozapine withdrawal have been seen to be on treatment with clozapine for duration of over 3 years. The response to other modalities of treatment including high dose lorazepam and ECTs, is poor. However, symptoms resolve rapidly on reinitiating clozapine therapy [10].
The study of withdrawal phenomenon has clinical implications in the tapering of doses of clozapine. It is suggested that clozapine be gradually tapered preferably at 50mg/week after another antipsychotic is started at therapeutic doses. When immediate withdrawal is mandated, e.g. in case of severe side effects like agranulocytosis, it is recommended that the patient be admitted and cholinergics may be started for preventing cholinergic rebound phenomenon [12, 15].

CONCLUSION

Sudden and abrupt withdrawal of antipsychotic medication can lead to a wide range of symptoms including psychosis. It is important to remember that the presentation of psychosis following abrupt cessation of antipsychotics could be completely different from the original presentation. The diagnosis of clozapine withdrawal induced catatonia is a diagnosis of exclusion but should be kept in mind in such a clinical scenario.

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Case Report

'Chain snatching' a manifestation of Kleptomania: An Impulse Control Disorder: Legal implications

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ABSTRACT

Impulse control disorders (ICDs) present significant public health concern. Researchers and clinicians have paid little attention to it. The exact cause for the development of an impulse control disorder is difficult to be determined. Kleptomania is an impulse control disorder is poorly understood and that can cause significant impairment and serious consequences. A case of kleptomania, where the manifestation was an urge to snatch gold chains of women pedestrians which was potentially exacerbated by multiple predisposing factors, will be reviewed. The legal implications will be discussed.

Key words: kleptomania, impulse control disorder, legal implication.

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INTRODUCTION

'Chain snatching' robberies are on the rise in every State in India. Similar to a Purse-Snatch, a robber approaches a woman walking along a sidewalk, a park, or deserted street. Women who are alone, old or with small kids are frequently targeted. The robber will pull the gold chain off the woman's neck and flee to a waiting vehicle. The robber may attack the woman from behind, the front, or distract her by asking a question just before the robbery. The suspect may or may not be armed and threaten the victim during the attack. These robberies occur at all times of the day.

In many cases, police register a theft case under Section 379 or "use of criminal force for attempt to steal" under Section 356 of Indian Penal Code (IPC). The punishment for these charges is imprisonment up to two years. In many cases, the accused come out on bail in one or two months. And after lying low for some time, they resort to the same offences again.

The main reason behind chain snatching is that they can gain a loot at one go, unlike dacoity and robbery that needs planning. Another matter of concern for police is that 90 percent of cases of chain snatching end in acquittal.

In IPC section 392, the court punishment may range between six months and 10 years, but no chain snatcher has been convicted for so long. In IPC section 397, however, the punishment is a mandatory period of seven years."

Interestingly, there is no separate section for chain snatching in IPC. So most states like Maharashtra, Tamil Nadu, Andhra Pradesh and others register these cases under IPC section 378 (theft). Karnataka police, especially Bengaluru police, was the first to treat chain snatching as a case of robbery. Technically, the punishment for IPC section 397 is lesser than 392, the police have decided to impose section 397- as the muggers can cause grievous injury or death while committing robbery or dacoity. The sections are booked based on complaints. If a woman says the miscreant used a weapon, then it will be booked under IPC section 397.

Kleptomania is an impulse control disorder characterized by a recurrent failure to resist stealing. Kleptomania is a complex disorder characterized by repeated, failed attempts to stop stealing. It is often seen in patients who are chemically dependent or who have a coexisting mood, anxiety, or eating disorder.

People with this disorder have an overwhelming urge to steal and get a thrill from doing so. The recurrent act of stealing may be restricted to specific objects and settings, but the affected person may or may not describe these special preferences. Detection of kleptomania, even by significant others, is difficult and the disorder often proceeds undetected. There may be preferred objects and environments where theft occurs. This paper intends to describe a case of kleptomania that clearly fits this latter category in an effort to clarify the psychodynamic and forensic implications of this legal, social, and psychological phenomenon.

CASE REPORT

Mr. T, a 49 years old male, Christian, educated up till 9th std., assisting his brother in the interlock tiles factory, married, from a middle-class family, urban background was referred by an old beneficiary and the informants were his wife and elder brother brought with the complaints (as reported by informants) of repeated (7 times) snatching of gold chain and hoarding it for 2 years and imprisonment thereof. According to the patient, his complaints were forgetting; urge to snatch chains and fear.

It was gathered from the patient that, around 45 yr. of age he began to consume alcohol (beer) as part of experimentation prior to which he was only a social drinker. The frequency of his drinking pattern was once a month or sometimes once a week and the quantity being 150 ml Over a period of 2 years, the frequency of his alcohol consumption and quantity increased to once a week to almost daily- 650 ml of beer as reported by the patient. It was during this time, one fine day after reaching home from work, he went out to a bar bought a bottle of beer and consumed it on the street side all alone. Reportedly, on his way back home, he saw a woman walking by who wore a gold chain and had an urge to pull the chain off her neck and impulsively committed the act after which he reported that he felt really scared and tensed hence escaped the scene at once with that gold chain. On reaching his house, he was afraid about his act of snatching the chain but never revealed it to anyone for the fear of being punished and kept the chain in his cupboard locker. Thereafter, he reported that, similar such acts of snatching chain from women occurred amounting to 7 times in a span of 2 years (47 yr. to 49 yr. of age) with a gap of at least 3 or 4 months (approximately) between each act in which 4 times the acts were committed under intoxication and the rest not under intoxication. Between episodes of these acts, he reported feelings of guilt, remorse and fear of punishment. Reportedly, he was abstinent in the month of February (2015) due to religious reasons. Although craving was admitted by patient, withdrawal symptoms could not be elicited during this abstinence. From March till May (2015) his alcohol (beer- more than 4 pints) consumption increased i.e., it was on a daily basis (noon and evenings) and the reason being "tension due to the acts of chain snatching", as reported by him. During the 7th time (April, 2015) when he snatched the chain from a woman on a street, a CCTV in the vicinity recorded the scene, which revealed to the police about the incident for which he was litigated. He reported that he was not sure if he was intoxicated at that time and added he does not remember certain things these days. Further investigations by the police personnel brought to light that he had a few more gold chains kept in his cupboard locker which was admitted by the patient upon probing. He was imprisoned for two and a half months and released on bail on the 27th of June, 2015.

Informants reported that they were not aware of these events until the police personnel brought it to their notice. According to his wife, she was doubtful about his alcohol consumption in the last one and a half

months but never confronted him and she never knew he consumed it so frequently in that much quantity. Relatives were also unaware of the fact that he had committed dissocial acts repeatedly for 2 years.

It was further elicited that his wife had noticed changes in his behaviour in the last 2 years for example, he would get angry easily (short lasting) most often at family members and memory disturbances and friends reported of his rude behaviour in the recent past.

Past history of fracture in the leg (ankle) in 2011 was in bed rest for almost 6 months to 1 year (periods of sad mood, decreased talk during this time reported); diagnosed with hypertension and high cholesterol levels around the same time and he is on regular medication as prescribed by the physician: hypertension kept under control according to patient and informants.

Family history of mental retardation in elder sister, alcohol abuse and ischemic heart disease in father. Pre-morbid personality revealed introvert by nature; less social interaction; prevailing mood: sad; poor in expressive speech, fear of rejection and shame, inferiority feelings about his inadequacies in work compared to his brother and others in their family, decreased self-esteem.

He was referred for a psychological assessment and the following scales were administered and the test findings are summarized

PGI Memory Scale (PGIMS) (an Indian adaptation of the Wechsler Memory Scale) the findings was Total dysfunction rating score is 16. The maximum dysfunction rating is 30.

Beck Depression Inventory-II (BDI-II) Developed for the assessment of symptoms corresponding to criteria for diagnosing depressive disorders listed in the ... DSM IV. The total score obtained was 35 which indicated severe depression.

Michigan Alcohol Screening Test (MAST) to provide a consistent, quantifiable, structured interview instrument to detect alcoholism. On which the total score obtained was 2 which indicated no apparent problem.

Severity of Alcohol Dependence Questionnaire (SAD-Q) a short, easily administered scale used to measure the degree of dependence experienced by users of different types of drugs. The total score obtained was 10 which indicated mild dependence.

Mini Mental Status Examination measures global cognitive performance and is often used as a screening test for dementia. On this the total score obtained was 29 which indicated normal cognition.

Raven's Standard Progressive Matrices (SPM) a well-validated measure of basic cognitive functioning for different cultural, ethnic, and socioeconomic groups- On SPM, the total score was 26, percentile point being 5 and grade V which indicated intellectually impaired. Discrepancy was within expected range. Corresponding IQ being 76.

Based on the history, clinical examination and psychological testing a diagnosis of Mild dependence of alcohol + Borderline level of intellectual functioning + Mood symptoms and memory dysfunction was made and a differential diagnosis of Pathological stealing/Kleptomania considered.

Psychoeducation was carried out with the patient and his relatives. Four sessions of counselling were carried out with the patient addressing his concerns. At 9 months follow up there was no further episodes of chain snatching and patient had been abstinent from alcohol and relatives had a close watch on his movements.

DISCUSSION

Kleptomania, also referred to as compulsive shoplifting, may be a fairly common disorder that results in significant personal distress and legal consequences. Kleptomania and other impulse control disorders seem to be more prevalent among those with psychiatric disorders.

Kleptomania is rarely brought to medical attention voluntarily. Patients usually present for treatment by legal mandate due to repeated shoplifting. Men are more likely to be sent to prison instead of being referred to treatment [1].

For both men and women with kleptomania, lifetime psychiatric comorbidity with other impulse control (20-46%), [2-3]; substance use (23-50%) [4-5] and mood (45-100%) [6-7] disorders are common. Personality disorders are also common in kleptomania.

It is evident in this case of chain snatching the stolen items were of no personal use, though it was made of gold the patient had just kept it aside without bothering to dispose it off. It was also noteworthy that the acts

of stealing were not premeditated. Rather, he experienced an urge and tension or anxiety prior to the act of stealing, followed by the feeling of satisfaction and gratification after committing theft. Mr.T also stated that he felt ashamed or guilty after committing theft.

He was prosecuted when he was caught of stealing the seventh time and spent in jail for two and a half months and released on bail with an advice to consult a psychiatrist. As the assessments revealed he had mood symptoms he was prescribed a mood stabilizer Lithium XR 400mg ½ -0-1 and Arip 5mg ½- 0-0 with which he became better. There were no further instances of chain snatching, completely abstinent from alcohol and no mood symptoms. His brother was monitoring his medication and was reported to be working well. He is on continual follow up till date. There was no further summons from the court.

Legal defenses for shoplifting by claiming kleptomania are difficult to establish. First a defense lawyer must maintain that the accused indulged in such an act as stealing for no financial benefit, revenge or such other motive. Next, a rigorous psychiatric evaluation be conducted, and the criteria for the actual diagnosis should be stringent.

With impulse-control disorders such as kleptomania and pyromania now being categorized officially in the Diagnostic and Statistical Manual 5, crimes committed by those with these conditions can also be said to be done with a/an "unsound" or "insane" mind.

In most jurisdictions, a person may defend criminal charges against him/herself on the grounds of insanity. The insanity defense comes in two forms: cognitive and volitional. Cognitive insanity relates to an individual who cannot distinguish from right from wrong. Volitional insanity relates to an individual who is unable to resist impulses, due to mental impairment, making him/her unable to act in conformance with the law. In the current case the dishonest intention is not apparent and hence the punishment should not be as prescribed in penal code but the one in need of treatment.

CONCLUSION

Clinicians should routinely inquire about urges to steal during the general psychiatric interviews with their patients. It is essential to approach kleptomania in a non-judgmental manner and to reinforce confidentiality due to patients' fear of legal consequences. Increased awareness and screening by clinicians may increase the number of patients seeking help. Individuals who suffer from this condition can reasonably expect a reduction and possible remission of symptoms with a combination of psychopharmacology and psychotherapy.

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SECTIONS OF INDIAN PENAL CODE, 1860 MENTIONED IN THIS REPORT

Section 356 in The Indian Penal Code- Assault or criminal force in attempt to commit theft of property carried by a person. Whoever assaults or uses criminal force to any person, in attempting to commit theft on

any property which that person is then wearing or carrying, shall be punished with imprisonment of either description for a term which may extend to two years, or with fine, or with both.

Section 378 in The Indian Penal Code- Theft. Whoever, intending to take dishonestly any moveable property out of the possession of any person without that person's consent, moves that property in order to such taking, is said to commit theft.

Section 379 in The Indian Penal Code- Punishment for theft. Whoever commits theft shall be punished with imprisonment of either description for a term which may extend to three years, or with fine, or with both.

Section 392 in The Indian Penal Code- Punishment for robbery. Whoever commits robbery shall be punished with rigorous imprisonment for a term which may extend to ten years, and shall also be liable to fine; and, if the robbery be committed on the highway between sunset and sunrise, the imprisonment may be extended to fourteen years.

Section 397 in The Indian Penal Code- Robbery, or dacoity, with attempt to cause death or grievous hurt. If, at the time of committing robbery or dacoity, the offender uses any deadly weapon, or causes grievous hurt to any person, or attempts to cause death or grievous hurt to any person, the imprisonment with which such offender shall be punished shall not be less than seven years.

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