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## From the Editor



### **Abdulrazak Abyad**

(Chief Editor)

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This is the last issue of the journal this year. It has four papers from the region.

A study from Oman aimed to determine the predictors of the length of inpatient hospital admission following deliberate self-harm (DSH).

There was a retrospective study of medical notes for all patients admitted from Jan 20012 to Jan 2014 with DSH who were reviewed for sociodemographic information, clinical diagnosis and length of hospital admission.

The total number of records reported during the three-year period was 117 patients, 102 (87%) were Omani, and 15 (12.8%) were non-Omani. The mean age was 23.5, and the rate of DSH was the highest in the age group 15-24 (65.8%) and the lowest in the age group <15 (1.7%). The pharmacological method was commonly used (82.9%), and analgesics accounted for 36.1% of this. Of the total sample, 28% had previous self-harm. More than half of the cases were admitted for 1-2 days. There was a significant association between the short hospital stay and pharmacological method. In contrast, psychiatric diagnosis was found to be a predictor for longer stay of more than four days.

They concluded the rate of self-harm is increasing in Oman with the analgesic use remaining the commonest method of self-harm. The predictors of longer inpatient stay should be considered in the DSH prevention programs to reduce the avoidable burden.

A review from Iran looked at the high regional rates of self immolation. It suggests that each case of self-immolation reflects a voice that has not been heard or a demand that has not been fulfilled. As a result, each case of self-immolation mirrors that we as human beings have already hugely disappointed one of our fellow human beings for various reasons.

A second paper from Oman, provides a cautionary case study about steroid induced psychosis. The article discusses the case of a 21 years old female patient, without any previous psychiatric history. She was admitted with psychosis a week after the administration of 60 mg/day of prednisolone for ulcerative colitis. The sudden onset of the symptoms, their quick response to the discontinuation of prednisolone and antipsychotic therapy and the complete recovery of the patient support the diagnosis of corticosteroid-induced psychosis. The patient's medical history and the lab findings excluded other etiological factors. She was treated with olanzapine, an atypical antipsychotic, because of her distinct psychotic symptoms, and she showed significant improvement.

Finally an opinion piece from Lebanon discusses the issues of war and peace – a seemingly perpetual cycle of humanity.

### **Ethics Editor and Publisher**

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# Predictors of duration of admission following an act of deliberate self-harm , a cross section study from Oman

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## Abstract

**Objective:** This study aims to determine the predictors of the length of inpatient hospital admission following deliberate self-harm (DSH).

**Method:** This is a retrospective study; medical notes for all patients admitted from Jan 20012 to Jan 2014 with DSH were reviewed for sociodemographic information, clinical diagnosis and length of hospital admission.

**Results:** The total number of records reported during the three-year period was 117 patients, 102 (87%) were Omani, and 15 (12.8%) were non-Omani. The mean age was 23.5, and the rate of DSH was the highest in the age group 15-24 (65.8%) and the lowest in the age group <15 (1.7%). The pharmacological method was commonly used (82.9%), and analgesics accounted for 36.1% of this. Of the total sample, 28% had previous self-harm. More than half of the cases were admitted for 1-2 days. There was a significant association between the short hospital stay and pharmacological method. In contrast, psychiatric diagnosis was found to be a predictor for longer stay of more than four days.

**Conclusion:** The rate of self-harm is increasing in Oman with the analgesic use remaining the commonest method of self-harm. The predictors of longer inpatient stay should be considered in the DSH prevention programs to reduce the avoidable burden.

**Key words:** self-harm, Mental health, Duration of admission, Oman

## Introduction

"Deliberate self-harm is defined as the deliberate, direct, self-inflicted destruction of body tissue without suicidal intent and for purposes not socially sanctioned "(1). People who self-harm often do so by taking medication overdose, ingesting household material or by inflicting direct injury to their bodies ." These acts are usually aimed at bringing about change, which the subject desires via the actual or expressed consequences of the DSH escaping an intolerable situation(2).

Many descriptive studies conducted in different parts of the world have shown a substantial increase in the rate of DSH leading to high levels of health care utilization in the form of frequent visits to the emergency departments and admission to inpatients units. A study by Carr et al. from the UK reported annual incidence rates of DSH to be 12.3 and 17.9 per 10,000 male and female patients, respectively. The estimated annual rates of presentation were 18.5 for males and 28.9 for females. Over time, the rates were consistently higher for female patients(3).

There is very limited research on DSH from Islamic countries, and the incidence of DSH is expected to be relatively small because harming oneself is condemned in Islam(4).

However, DSH has become an emerging problem in the Arab- Islamic world. In Jordan, self-poisoning was reported by 8% of the cases attended by the accident and emergency department, and a significant number of these cases were with deliberate self-harm(5).

In 2002 Zaidan. Z.A. et al found an increase in the incidence of DSH in Oman from 1.9 in 1993 per 100,000 to 12.8 in 1998. 78% of the cases were female and 77.2% were of Omani nationality. Conflict with family preceded 31% of the cases. Psychiatric diagnosis was found among 19.3% of the study sample while 12% had previous self-harm history. In spite of such a rise, the figure in Oman was small compared to other countries. The highest rates came from developed countries like France 462/100,000, Finland 314/100,000 and 45/100,000 in Spain.

The risk of suicide among DSH patient is much greater than in the general population and among those who commit suicide, 20-30% have had an episode of DSH within the year before their death(6). Approximately 1% of those who attended hospital after self-harm die within one year and 2-3 % over the next five years (Royal College of Psychiatry, 1994).

Therefore, it is of great significance to analyze the characteristics of the group at risk for DSH and to assess the predictors of duration of hospital stay to develop optimal care and to target this group in suicide strategy prevention.

There is a lack of studies investigating the predictors of hospital length of stay following DSH. In England, Gunnell. D. et al. found that people who self-harm tended to have shorter lengths of hospital stay than those who did not self-harm across all diagnostic groups(7).

## Method

This is a retrospective study of patients admitted to Sultan Qaboos University Hospital following an act of deliberate self-harm. All patients admitted to the medical or psychiatry wards from 1st of January 2012 to 30 December 2014 following an overdose, self-poisoning and self-mutilation were included. Patients admitted with an accidental drug overdose, and poisoning were excluded. Patients with recreational drug abuse were also excluded unless the intention of the overdose was to self-harm.

The information about each patient was collected from the electronic medical records. The data collected included patient's gender, age, marital state, employment, method of self-harm, psychiatric and medical diagnosis, date of admission and discharge, and the precipitating factors. The psychiatric diagnosis was recorded using ICD10, and it covered psychiatric diagnosis before the self-harm and those determined at the time of assessment for the episode of self-harm.

Data was analyzed using SPSS 16. The ethical committee at the college of medicine and health sciences at Sultan Qaboos University approved this study.

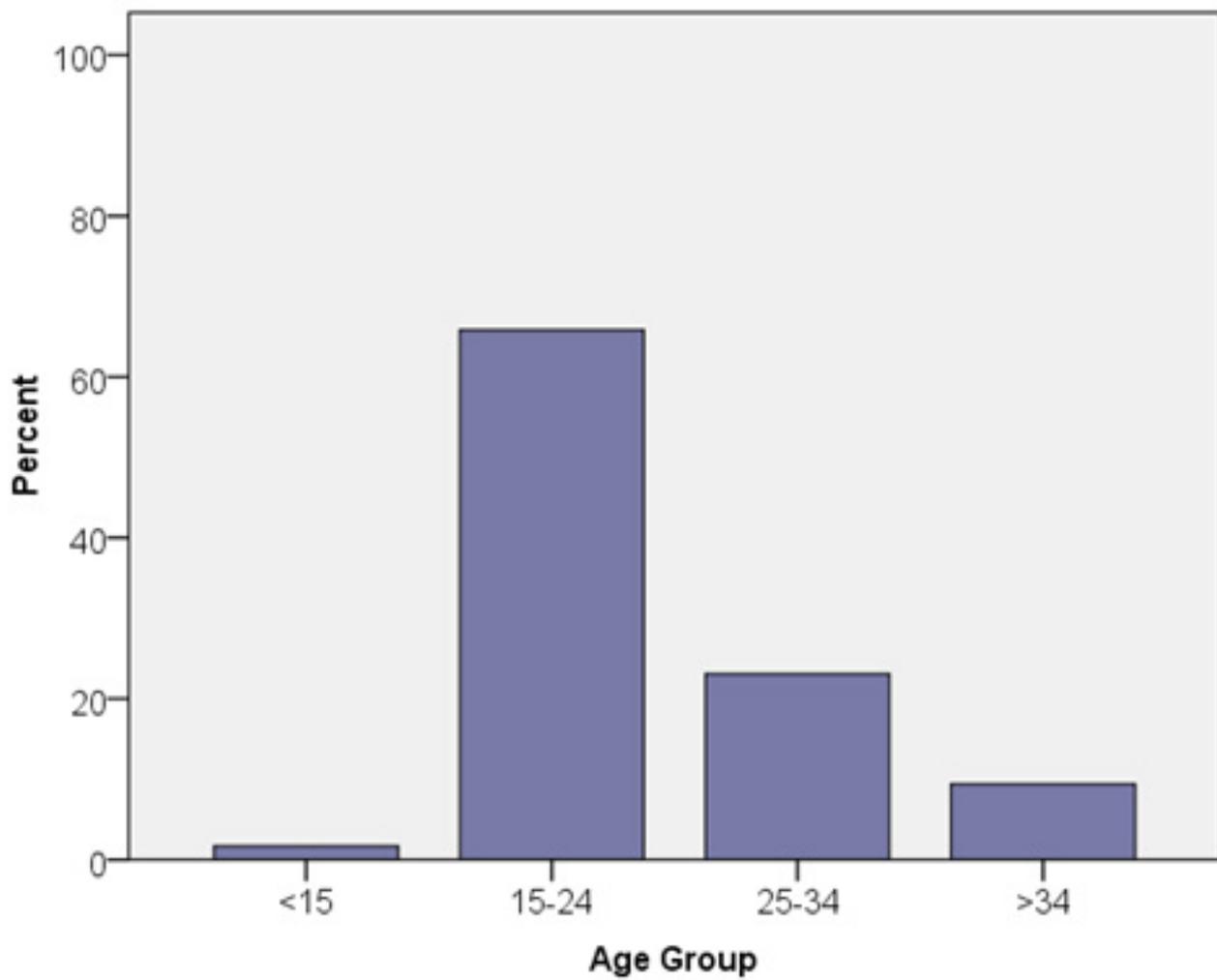
## Results

A total number of 117 patients met the inclusion criteria; 82% were females, 66 % were single, 29% married, 5 % divorced. Regarding nationalities, 87% were Omani while 13% were non-Omani. The mean age was 23.5, the median 22 with (SD 6.56). As illustrated in Figure 1 the rate of DSH was the highest in the age group 15-24(65.8%) and the lowest in the age group <15 (1.7%).

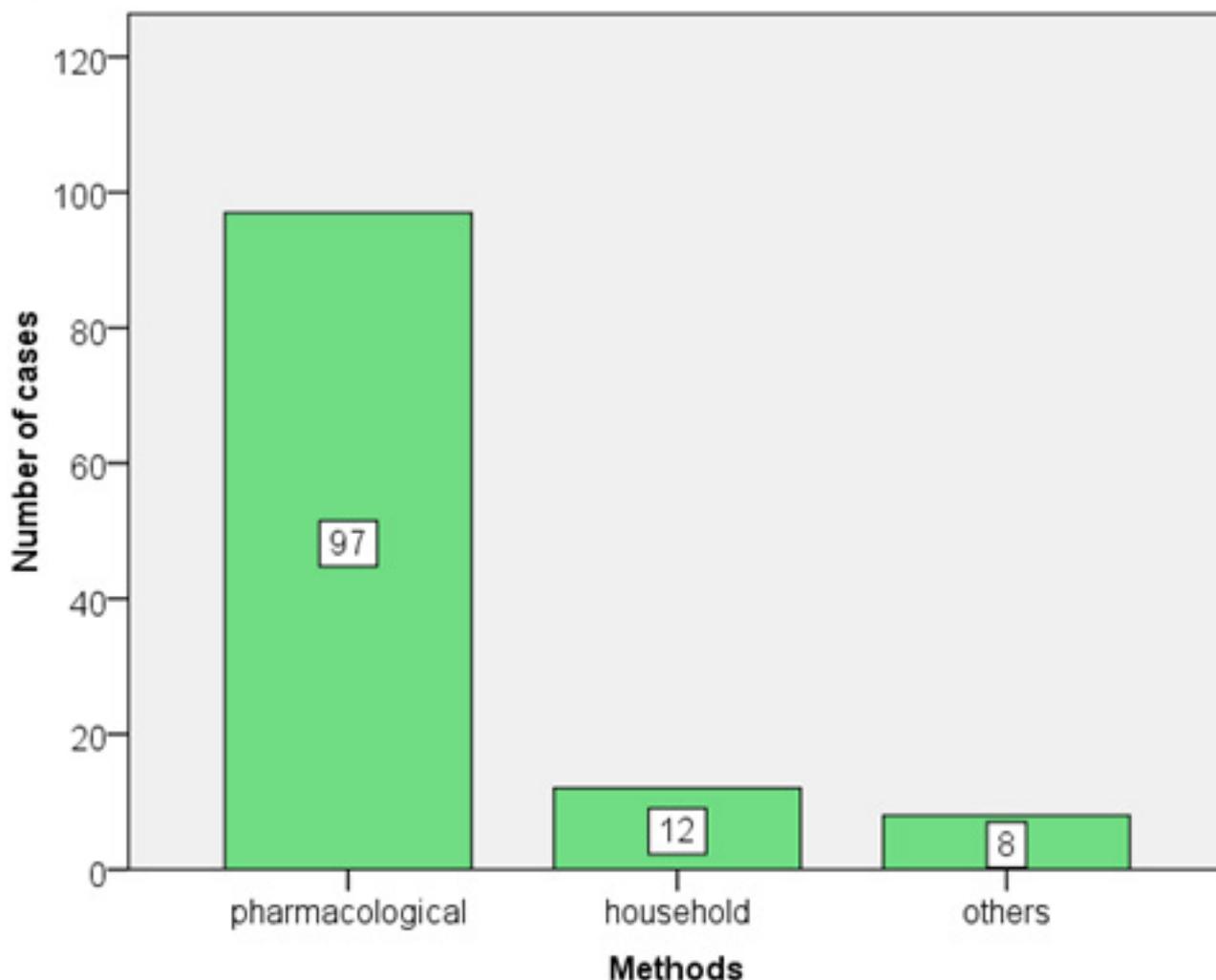
The highest rate of DSH was among the unemployed (44%), followed by students (28%). Those who were employed were 27% of the total sample.

As depicted in Figure 2, (page 6) 83% of the study sample used the pharmacological method to self-harm while 17% used non-pharmacological methods such as injections of chemical detergents reported by 10% of the sample while 7% used self-mutilation.

Four patients self-harm by cutting their wrists. One patient tried jumping from a multi-storey building while four patients were admitted for DSH with misused substances and these involved 3 cases of ethanol and one of heroin.

**Results****Figure 1: Percentage of patients by age group**

**Figure 2: Distribution of patients by methods used for self-harm**



As seen in Figure 3, 36.% overdosed with analgesics such as paracetamol and non-steroidal anti-inflammatory drugs (NSAIDs), 31% used Paracetamol while 33% used mixed methods such as antihistamine and antibiotics, oral hypoglycemic agents.

Psychotropic and other single drugs were used by 16% and 15 % of the patients respectively

With regards to co-morbidities, 78% had no comorbid medical illness.,while 41% had a psychiatric diagnosis of whom 50% had Depression. The remaining percentage was distributed equally between personality disorder, substance misuse and hypomania.

Of the total sample, 32 % had previous deliberate self-harm while 68% presented for the first time. Data was missing for 13 patients. 61.0% of the DSH incidents were preceded by conflicts with family members. 27% had Social stressor, 11% due to work related problems while 4.5% occurred after bereavement; 9% were due to poor school achievement.

With regards to progress after admission, six patients (5%) were admitted to the intensive care unit while 33 patients (27%) left the hospital against medical advice .

Figure 4 (page 8) reveals that 53 % had a very short inpatient stay (1-2 days) and 26 % had a short stay (3-4 days). Long stay ( $\geq 5$ ) was found in 20.5% of patients. The mean is 3.75, and the median is 2. The longest admission followed overdoses with Amitriptyline (10 days in ICU followed by 23 days in the medical ward).

Table 1 demonstrates the duration of admission among the different age groups. The shortest period of admission occurred in the age group 15-25 (66.7%) and the longest period in age group  $<15$  (30.8%). There is no significant association ( $p$ - value= 0.347).

The short admission occurred in 79% of the females and 75% of males whereas long admission was 25% in males and 19.6% in females. The association was not statistically significant ( $p$  value .479).

Similar results were obtained from analyzing the association between a longer hospital stay and the following characteristics: marital state (Table 2), employment, type of medication used, medical illness, precipitating factors and previous DSH.

Figure 3: Percentage of patients by pharmacological agents involved

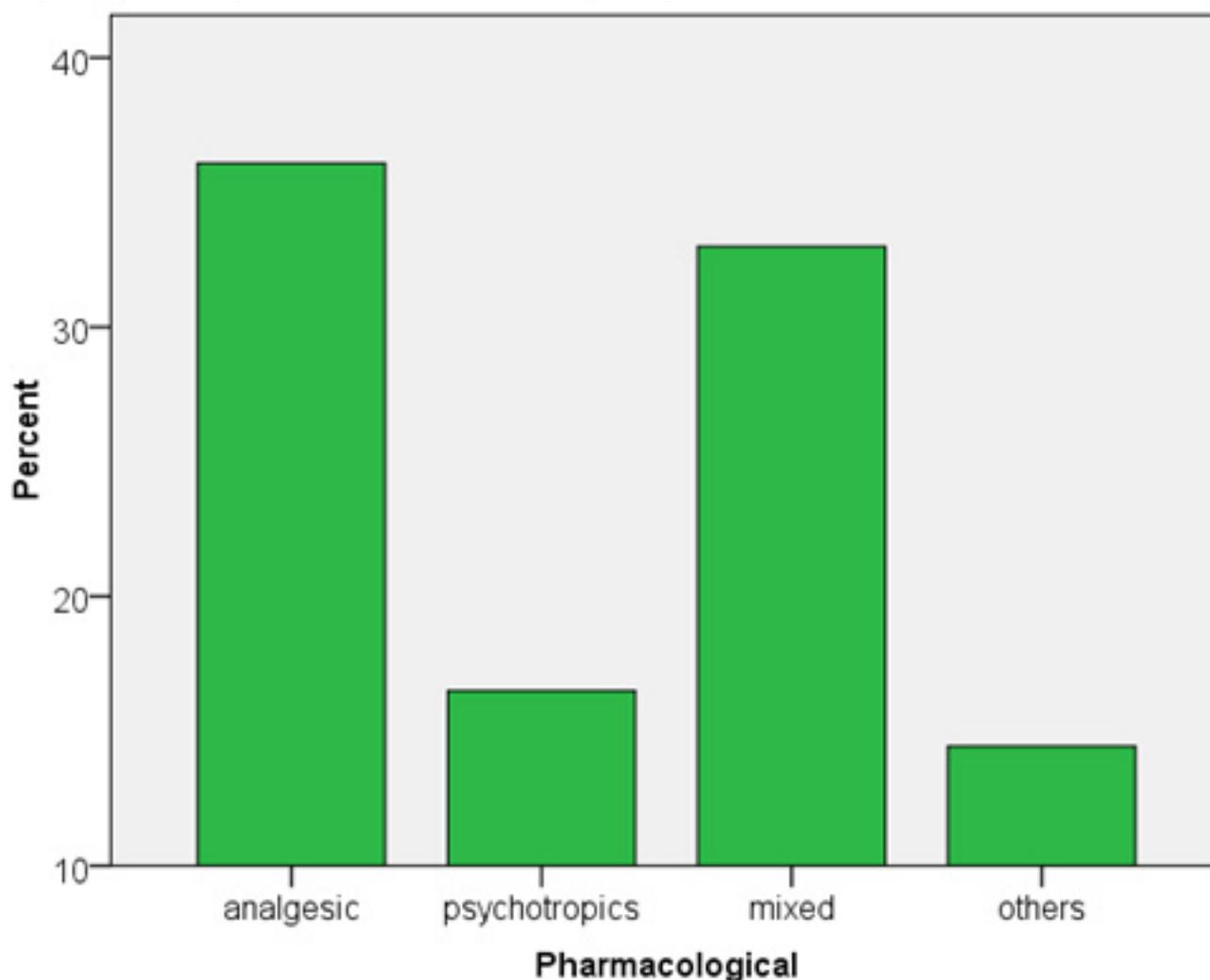


Table 1: Admission duration of groups \* Age group

Duration of Admission	Age group				%	Total
	<15	15-25	26-30	>30		
1-2 days	43.6%	66.7%	55.6%	47.6%	53.8%	63
3-4 days	25.6%	23.1%	27.8%	28.6%	25.6%	30
>=5 days	30.8%	10.3%	16.7%	23.8%	20.5%	24
Total	100.0%	100.0%	100.0%	100.0%	100.0%	117

Table 2: Admission duration groups marital state

Admission duration group	Marital status			
	Married	Single	Divorced	Total
1-2 days	63.6%	53.3%	20.0%	54.9%
3-4 days	25.6%	23.1%	27.8%	25.6%
>=5 days	25.3%	40.0%	25.7%	20.5%
Total	100.0%	100.0%	100.0%	100.0%

Figure 4: Distribution of patients by length of hospital stay

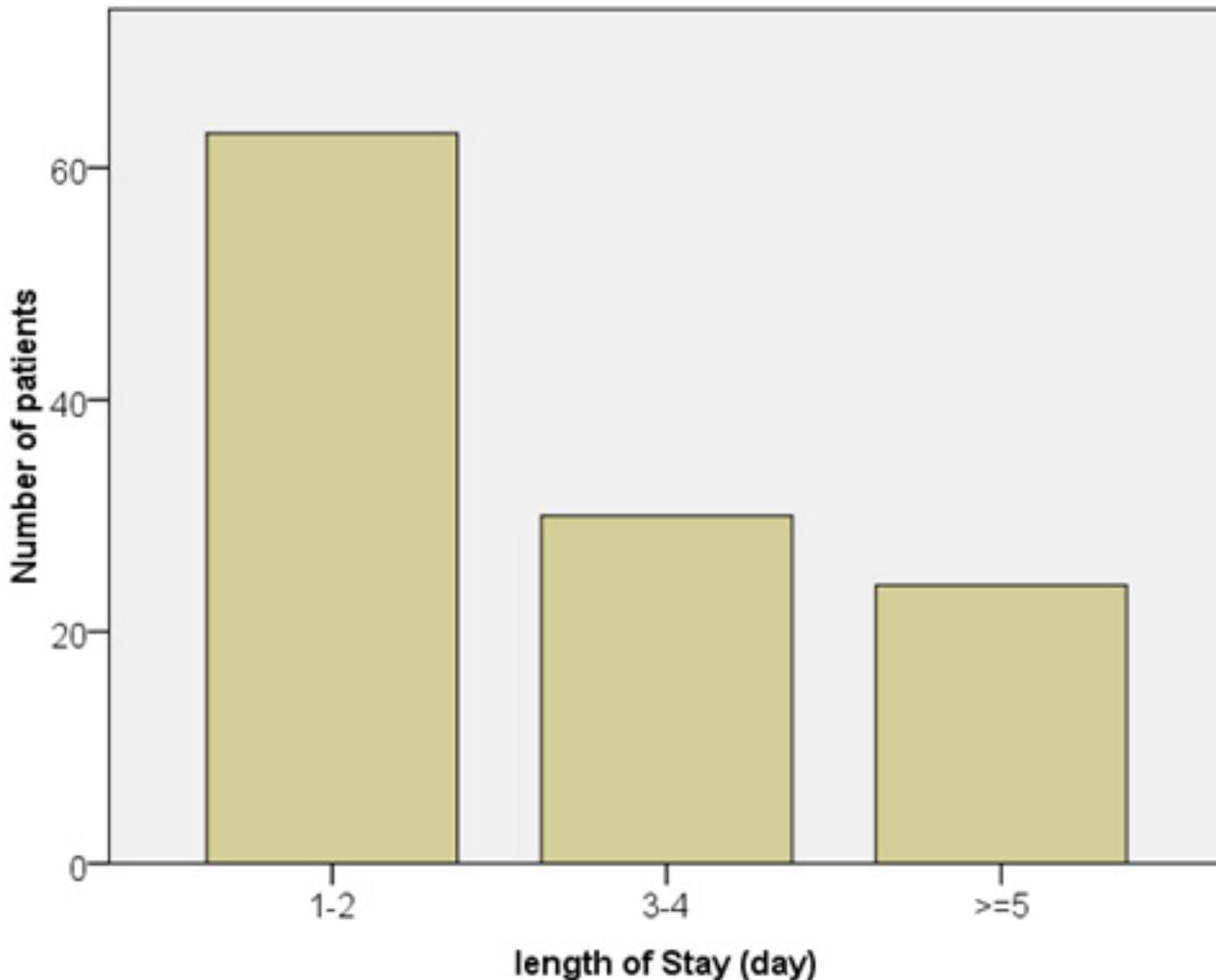


Table 3: Admission duration groups and Method of self-harm

Admission duration group	Method			
	Pharmacological	Household Material	Others	Total
1-2 days	57.3%	25.0%	62.5%	54.3%
3-4 days	25.0%	41.7%	.0%	25.0%
>=5 days	25.3%	40.0%	25.7%	20.5%
Total	100.0%	100.0%	100.0%	100.0%

**Table 3.** The pharmacological method was significantly associated with shorter length of hospital stay (82.3%) while 57.3% had a very short stay. Other methods of self-harm were associated with longer stay (37.5%) compared to other groups ( p-value 0 .043) although the majority of patients in this group had a very short stay (62.5%).

The longer stay was reported to be higher in those with a psychiatric diagnosis (31%). The association was significant with a p-value of .032.

## Discussion

This study aimed to examine factors related to the length of hospital admission following DSH. The numbers of females presenting with self-harm was over-representative which is consistent with studies worldwide. This might be because females are more emotional and at higher risk of self-harm when experiencing the higher level of stress.

The mean age for DSH in this study was 23.5 which is almost the same finding in the previous study carried in Oman by Zaidan et al(8). It is more in those aged 15-24 years. Youth problems including difficulties with school or college and choice of the spouse are common during this age. After the age of 24, there are more stable social relationships and work. This is similar to the finding in a study by Wilkinson et al. which reported the highest rate among those aged 16-24 years (9).

In the current study, more than half of the patients who presented with DSH were single, and this was expected since marriage provides more stability in life. Employment is a protective factor for DSH as 44% of the patients were unemployed. Being unemployed is stressful and has a detrimental effect on the person and the community as this might put the person at pressure from his family to get work and as a result may increase family conflicts.

Self-poisoning was reported in 93% of the cases, and this figure was similar to that in England in 1995-2000 (10) (94.9% in 1995/1996, 93.8% in 1999/2000). The pharmacological methods were used by 83 % of the sample which is higher than the previous report in Oman, 50% in 200 (11) and 74% in 2002(8). Overdosing with analgesics is the commonly used method, and paracetamol was predominating. This can be due to availability of paracetamol as over the counter medication.

Psychotropic use in this study was 16.3% which is lower than that in other studies conducted in Oman. This might be because there is more awareness about the lethal effect of these drugs. Therefore, people are keeping them away from everyone's reach. In comparison, an Iranian study found that psychoactive agents, mainly benzodiazepine were common 72%, compared to analgesics 18% (11)

Despite the widespread use of serotonin reuptake inhibitor prescription (SSRIs), tricyclic antidepressants are still widely prescribed to patients in Oman. This could be explained by the lack of SSRI in some local health centers. Four patients were admitted for DSH with comorbid substance misuse (3 Alcohol & 1 Heroin use). The use of these methods is expected to increase due to the growth in the number of addicted adolescents and the availability of these substances.

In this study, the number of patients with depression doubled those with a personality disorder. This can be because people with adjustment disorder are diagnosed to have depression because of difficulties in distinguishing adjustment disorder from mild or subclinical depression(12).

Further support for this view is that 25% of adolescents with a diagnosis of adjustment disorder engage in this behavior, and this rises to 60% among adults(12). Another possibility is that patients with personality disorder are often under-diagnosed due to cultural variation in the presentation of these patient groups. Moreover, those diagnosed with personality disorder need more evaluation unless the diagnosis was made in previous visits.

The short hospital stay occurred among 79 % of the patients, possibly because the attempts were not lethal and most of the medical overdoses were with analgesics (36%). Our analysis was negative for any significant association between age group, gender, marital state, employment, particular psychiatric diagnosis, medical illness, precipitating factors and previous self-harm.

The pharmacological method was significantly associated with shorter length of hospital stay (82.3%); 57.3% had a very short stay. Another method of harm was associated with longer stay (37.5%) compared to other groups (p-value 0 .043) although the majority of patients in this group had a very short stay (62.5%).

The longer period of stay was found among those who used other methods followed by patients who used household products with a small difference between the two. This is because non-pharmacological methods are more lethal and have an important effect on the body systems. The longer stay was reported in patients with psychiatry diagnosis (31.2%). In fact, this group of patients need more observation and management. Therefore, further assessment and management are usually required in the psychiatry ward.

These groups of patients should be the target for programs of deliberate self-harm and suicide prevention as this will reduce the hospital burden especially the ones related to bed occupancy and care provided by staff. It also reduces the family sufferings which resulted from a longer stay in the hospital.

## Limitations

This study has a few limitations. First, the sample was collected from one tertiary care center. The findings might be different if the study included the peripheral hospitals.

Secondly, surgical ward admissions were not included as most of them are serious since they necessitate admission and therefore are transferred to a psychiatry ward after stability.

## Conclusion

Deliberate self harm is a preventable health problem which has a burden on the health care system. Identifying the groups who are at risk of self-harm can reduce the load in the health care system. Further multicenter studies are needed to explore predictors of length of hospital admission.

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# We should learn to listen and act before we watch in sorrow

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## Abstract

As human beings we should think carefully whenever we are informed that a case of self-immolation occurs. Self-immolation is a gruesome method of suicide and highlights the dark and dull side of human life. It is because each case of self-immolation reflects a voice that has not been heard or a demand that has not been fulfilled. Therefore, we should learn how to listen to the voice of vulnerable people, how to care about them, how to negotiate and how to act properly in order to stop a case of self-immolation.

**Key words:** Self-immolation, vulnerable people, prevention

## Introduction

As human beings we should think carefully whenever we are informed that a case of self-immolation occurs. Self-immolation is a gruesome method of suicide (1) with a high fatality rate (2) and overwhelming consequences for survivors (3) and highlights the dark and dull side of human life. Within the present article I am going to very briefly discuss what each case of self-immolation reflects and what can we do to prevent such cases.

## What each case of self-immolation reflects

Each case of self-immolation reflects a voice that has not been heard or a demand that has not been fulfilled. As a result, each case of self-immolation mirrors that we as human beings have already hugely disappointed one of our fellow human beings for various reasons (4 & 5).

It is shameful that within the 21st century we still observe that the trend of self-immolation is increasing especially among the most vulnerable people. They mainly include young uneducated married females especially in some Asian countries (6).

To a lesser extent the vulnerable people might also include those in unbearable financial conditions in different parts of the world especially in Arabic countries in recent years (7). They might also include those in horrendous political situations especially in Far-East countries and especially Buddhists (8).

The vulnerable people apply self-immolation as a strong way to protest against the unfair family, financial or political situations surrounding them. For example, it has been documented that five cases of female self-immolation occurs per day only within the Kurdish region of Northern Iraq (9). The women's primary reason for this act would be to escape from the "gender-based violence" which is prevalent in their communities (10).

A similar phenomenon is occurring in different parts of Sri Lanka (11), India (12), Bangladesh (13), Pakistan (14), Iran (15) and Afghanistan (16). Unfortunately, all these happen whilst evidence suggests that some of the victims unsuccessfully struggle to articulate their troubles before attempting self-burning (17).

### What can we do to stop a case of self-immolation?

For stopping a case of self-immolation we should learn how to listen to the voice of vulnerable people, how to care about them, how to negotiate and how to act properly in order to fulfill their rightful demands. We do need to support and promote the position of women and those in unbearable financial or in horrendous political situations in our societies.

Evidence suggests that among the vulnerable people the more social support one observes the lower one is in danger of self-immolation (18). Therefore, providing social support based on the sense of equality and equity is the key concepts for self-immolation prevention strategies.

We also need to act quickly. It means that we need to screen and identify at-risk individuals as soon as we can (19). Instead of repressing vulnerable people and being continuously shameful watching their self-immolation we need to empower them.

Moreover, we need to act collectively (20) no matter if we work in governmental departments or other non-governmental organizations and/or charities. We also need to share and disseminate our success prevention strategies with each other.

And above all, we should always bear in mind that every human being is born free and deserves to be free in his/her remaining life.

### Discussion

It is appalling that in our current world we witness the increasing rate of self-immolation among vulnerable people. This trend implies that we let down our human fellows either by not listening to them and/or by ignoring their rightful demands.

Therefore, we should learn how to listen to the voice of vulnerable people and how to act properly in order to meet their demands. Otherwise, we ought to watch a horrific event in which one of our fellows sets herself/himself ablaze and remain in deep sorrow for the rest of our lives.

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# Steroid induced psychosis: a case report

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## Abstract

Since the early 1950s, corticosteroids have been a commonly used class of medication to suppress the immune system and decrease inflammation. They have been used as an effective treatment for a wide variety of medical conditions including allergies, rheumatic diseases, gastrointestinal disorders, ophthalmic conditions, dermatological conditions, asthma, back pain, chronic obstructive pulmonary disease, systemic lupus erythematosus, and cancer. Adverse psychological side effects including psychotic symptoms have been associated with different types of corticosteroids and with various forms of use, either oral, inhaled or intravenous. These can occur at any stage of treatment including rapid discontinuation (withdrawal). The incidence of steroid-induced severe psychiatric symptoms in adults is about 5-6%, and mild to moderate reactions occurred in about 28%. (1) Other studies showed that it can be up to 60%, and recent studies show an increased rate of psychopathologies in this population. (2)

In this paper, we discuss the case of a 21 years old female patient, without any previous psychiatric history. She was admitted with psychosis a week after the administration of 60 mg/day of prednisolone for ulcerative colitis. The sudden onset of the symptoms,

their quick response to the discontinuation of prednisolone and antipsychotic therapy and the complete recovery of the patient support the diagnosis of corticosteroid-induced psychosis. The patient's medical history and the lab findings excluded other etiological factors. She was treated with olanzapine, an atypical antipsychotic, because of her distinct psychotic symptoms, and she showed significant improvement.

**Key words:** Steroids, psychosis, ulcerative colitis, side effect

## Case Description

Ms. M, is a single 21 -year-old university student with no previous psychiatric history or family history. She was recently diagnosed with ulcerative colitis and started on prednisolone at a dose of 60 mg daily. Three days later, she developed poor sleep and rapid pressured speech. She was extremely anxious and fearful about her future. She was suspicious and irritable. She believed that Satan was controlling her mood and her behavior. There were repeated suicidal attempts that were prevented by her family. Psychiatry consultation was requested after one week for assistance in evaluating and managing of her acute behavioral changes. She was assessed and transferred to our tertiary psychiatric Hospital in the capital. There was no history of drug or alcohol abuse. She had no known drug allergy. There was no known family history of mood or psychotic disorder. On examination, she was detached, sometimes agitated, easily distracted and talkative. Her mood was irritable without moments of euphoria. She was showing passivity-(made action) - "believed Satan was controlling her behavior ". She was partially cooperative for the physical exam which revealed an anorexic lady with BMI of 16.

Laboratory examinations including complete blood cell count with differentials, comprehensive metabolic profile and thyroid function, lipid profile, liver function, bone profile and kidney function tests were within normal limits. Her fasting blood sugar was 8mmol/l, but HBA1C was 5.7%. Serology tests for HIV, hepatitis, and syphilis, were negative. Her CT- brain and EEG were normal.

During her admission at the psychiatric hospital, prednisolone was tapered off as advised by the gastroenterologist at the regional hospital. She was asymptomatic regarding her ulcerative colitis. The patient was extremely disturbed and was given intramuscular injections of haloperidol 5mg and promethazine 25mg to calm her down. She was started on Clonazepam 0.5mg bid, Procyclidine 5mg bid and Risperidone 2mg, increased to 4mg at bed. Risperidone was then switched to Olanzapine as she developed extrapyramidal side effects (rigidity and tremor).

She was stabilized and discharged on prednisolone 10mg /day, olanzapine 10 mg/bedtime and clonazepam 0.5 mg bid when needed. Two weeks later she remained well. She denied psychotic, elated or depressed mood and suicidality. Clonazepam was discontinued, and Olanzapine was gradually decreased. In the following two months, her mood remained stable, and she resumed social activities. There were no signs of relapse while gradually discontinuing olanzapine. Six months after stopping Olanzapine there was no evidence of relapse, and she remained asymptomatic.

## Discussion

Since the introduction of corticosteroids in the early 1950s; they have been associated with neurobehavioral effects that are common, complex, unpredictable and often severe and sometimes potentially life-threatening. (3, 4) About 10% of inpatients receive steroids, and up to 3% of the general population is on long-term glucocorticoid treatment (5). Lewis and Smith reviewed 13 studies comprising 2,555 patients who were treated with corticosteroids. They found the prevalence of severe psychiatric syndromes ranged from 1.6% to 50 % (6). In another study, it is estimated that about 20% of patients who receive corticosteroids of greater than 40 mg of prednisone or its equivalent will develop a severe psychiatric disorder that will require intervention (7).

Corticosteroid induced neuropsychiatric disorders vary from mild mood disturbances to severe psychotic symptoms (1, 8). "Two large meta-analyses found that severe reactions occurred in nearly 6% of patients and mild to moderate reactions occurred in about 28%" (1). Steroid-induced psychosis has been described in 1.8% to 57% of steroid-treated patients (1). The association and mechanisms of corticosteroids induced neurobehavioral problems are not clear. A widely utilized classification index, first proposed in a 1,952 case series and review, consisted of four grades of symptom severity: The first grade consists of mild euphoria, lessened fatigue while the second consists of heightened euphoria and appearing hypomanic. Various responses including anxiety, phobia, obsession, or depression are symptoms of third grade, and grossly psychotic comes under the fourth grade.

Hypomania or mania is the most common psychiatric adverse effect of corticosteroid treatment. Some studies showed that hypomania or mania is associated with short term use of corticosteroids, however, prolonged and chronic use of corticosteroid can increase risk of depression. Patients who experience corticosteroid-induced depression during one treatment course may experience drug-induced mania in a subsequent course and vice versa (7, 9). Psychiatric disturbances do not appear to be associated with an underlying disease either, with the exception of systemic lupus erythematosus which increases the risk by a factor of two or more (10, 11).

Psychiatric disturbances can occur at any time during corticosteroid treatment; they may occur immediately after starting and even after treatment discontinuation. However, most of the mental disturbances occur early in the therapeutic course. The majority of cases occur during the first two weeks; Smith (1983) reported about 39% of cases with onset during the first week and 62% within 2 weeks. Hall et al. (1979) found that 86% of patients developed corticosteroid-induced psychiatric disorders within 1 week of starting treatment (12, 13). Bhangle et al. (2013) found 60 to 85% of patients will develop symptoms within the first week of treatment and about 90% within six weeks of initiating treatment. Symptoms usually resolve within 3-11 months after discontinuation; however, in

some cases, psychosis may persist even after tapering has been completed. (8)

Even after discontinuation of treatment corticosteroids can cause neuropsychiatric disturbance usually termed "withdrawal syndrome". It can result in anorexia, depression, fatigue, poor concentration, depersonalization, and psychosis with additional symptoms including lability, somatic concerns such as paresthesia, faintness, poor memory and focus, depersonalization and in some cases suicide. It usually lasts about 2 to 8 weeks after stopping treatment (1, 14, 15).

Corticosteroid dose is the strongest predictor of psychiatric disorder with a reported incidence of 1.3% at < 40 mg/day (prednisone equivalents), 4.6% at 41-80 mg/day and up to 18.4% at > 80 mg/day (16). However, corticosteroid dose does not predict the onset, severity or type of psychiatric symptoms seen.

Previous corticosteroid induced psychiatric disturbances or previous history of psychiatric illness does not predict the occurrence of corticosteroid induced psychiatric disturbances (1, 17, 18). It is more common in females, but no particular age group appears to be at increased risk; however, Fardet et al. (2012) found that the risk increased with age and those with previous psychiatric history are at greater risk for cognitive impairment (19).

Currently, there are no clinical guidelines on the most efficient treatment of corticosteroid induced neuropsychiatric disorders. There are no FDA-approved medications to manage steroid induced neuropsychiatric disorders. One of the important steps to reduce the side effect of corticosteroids' treatment is to educate patients about potential adverse effects. The first step in managing any steroid-induced psychiatric symptom is to taper or discontinue if possible (tapering as necessary to reduce the risk of hypothalamic-pituitary-adrenal axis suppression). Also, evaluate for suicidal ideation or intractable agitation and consider hospitalization if either is present. Palliative pharmacotherapy is usually indicated in case the patient cannot tolerate corticosteroid cessation or dose reduction or develops psychosis, severe agitation, aggressive behavior, or other intolerable symptom complexes. Approximately 90% of patients treated with a taper only achieved recovery. (6)

Literature has shown that use of psychotropic drugs for corticosteroid-induced psychiatric disturbances vary significantly. Previous studies reported that typical antipsychotics like chlorpromazine and haloperidol are effective agents. (20). A recent review by Kusljic et al. 2015 showed that use of risperidone, aripiprazole, olanzapine, valproate and lamotrigine in managing corticosteroid-induced psychiatric disturbances are the most active agents in controlling corticosteroid-induced psychiatric disorder. (2).

In our case, we tapered the steroid therapy slowly for almost six weeks and administered antipsychotic medications because of her marked psychotic symptoms; risperidone was started then switched to olanzapine due to side effects. Also, benzodiazepines are used in steroid psychosis especially when managing corticosteroid-induced anxiety, panic, and insomnia. (21) In our patient clonazepam was used during admission to calm her down and reduce agitation.

In conclusion, our case is one of the several case reports that document steroid-induced psychosis. Corticosteroids are beneficial in autoimmune illness but have many serious side effects. Acute psychotic episodes are one of the serious complications. The patient and family must be educated about the risks of adverse psychiatric side effects of corticosteroids. They should be discontinued if possible and psychotropic treatment started to hasten recovery.

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# Qui desiderat pacem praeparet bellum

*Let he who desires peace prepare for war*

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It is known that Rome rose and fell, but what few aspire to know is why that came to be. The story of Rome began in the blood of a brother, it ended with the blood of an Empire. Why, asks the crude man, was Rome far greater, when it had no materialistic advantage over its many rivals? The answer, lies in the culture of the Roman Mind. For it was both ruthless and yet civilized in a way alien to the earth at the time. From the chaos known as war, was born the Roman war machine, that sought not to reave and destroy, but to incorporate and expand. And so the empire stretched from the British isles to the deserts of the levant, conquering not only with fire and blood, but with ideas and vision. But as unforgiving hands of time forged on, the great visionaries and empire builders that once ruled over these vast lands were replaced by those who lacked the ambition, temperament, and the bravery for war. So ended the peace. So began the end of Rome. The lack of wars brought stagnation to the once amorphous empire and enforced congruence upon an empire that once bathed and flourished in its diverse peoples. The end of war and conquest brought about the end of the empire.

Today people speak of peace as though it were a divine force that will bring prosperity to man's world. But from their graves, the Romans of old jeer and watch the world as it prepares for its funeral pyre.

Understand fellow reader, war and peace must co-exist, for one serves no purpose without the other. They are like fire and water, different in essence, but defined by the other. And so all lovers of war are lovers of peace. You may see no point in preparing for war; but understand that doing so is the only path to peace. You may not be interested in chaos, but chaos is always interested in you. After all, it was the barbarian chaos, combined with weakened resolve, that brought about the fall of Rome.

You will only find peace when you know, that should war ever cross your path, you will be able to control both the enemy's chaos and your own.

The Art of War.

That is your peace. That is your inner peace.





