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# Suicidal behaviour during the COVID-19 pandemic in Iraq: an excerpt from newspaper reports

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#### Abstract

**Objective:** Suicide is a major public health issue that has been under-researched in Iraq, particularly during the COVID-19 pandemic.

Aims: The study aimed to assess the characteristics, methods and risk factors of suicidal behaviour in Iraq during the COVID-19 pandemic.

**Methods:** We searched the news reports between April and May 2021 on Google using the term "suicide news in Iraq". We included online newspaper reports of suicidal behaviour in Iraq published from January 2020 to April 2021.

**Results:** A total of 156 reports were studied. The majority of reports were published in the Arabic language (59%). Among the newspapers, the majority of the reports were published in Nalia Radio and Television (NRT) and the shafaqnews (11.5% each). The mean age of the suicidal attempts was 27.69 years ( $\pm$ 13.78) ranging from 10-65 years old. The majority were male (57.7%), married (18%), student (9.6%), and urban habitant (64.74%). Hanging (31.4%), firearms (22.4%), and fall from a height were the leading methods of suicide. Familial disharmony (12.8%), a mental disorder (9.6%), financial constraints (5.1%), marital discord (3.2%), COVID-19-related factors (like being infected, quarantined) (3.2%) were the leading cause of proximally related factors of suicidal attempts.

**Conclusion:** The present study suggests that of all suicides during the COVID-19 pandemic in Iraq, the majority were young, married, employed males. Furthermore, interpersonal and financial stressors are possible risk factors for suicide in this period.

#### Keywords

Suicide, Iraq, COVID-19, pandemic, media report, Asia

#### INTRODUCTION

Suicide is a big public health issue that affects people all over the world, including Iraq. Mental health problems and conditions are the leading cause of suicide throughout the world and they contribute to mortality and morbidity (Zalsman et al., 2016). Mental health issues have arisen as a consequence of the COVID-19 pandemic and associated mitigating measures (eg, lockdown, social distancing). The prevalence of common mental illnesses and suicide could increase due to the pandemic. However, in Iraq there have been few suicide cases linked to COVID-19. The level of anxiety and fear of COVID-19 among the Iraqi population is increasing as the number of cases rises, posing a number of mental health issues (Othman, 2020; Kizilhan & Noll-Hussong, 2020).

During pandemics, quarantine and other critical steps such as social distancing and isolation, as well as the resulting social and economic breakdowns, can result in the appearance and precipitation of a variety of psychological issues (Gunnell et al., 2020; Reger et al., 2020). These problems are normal in the aftermath of any pandemic, and they can often lead to increased suicidal activity, such as suicidal thoughts, attempts or suicide. It has been observed in past epidemics like the SARS virus that pandemics could raise the risk of suicidal behaviour (Chang et al., 2020). Furthermore, the stigma associated with COVID-19 may increase the risk of suicide (Peprah & Gyasi, 2020). Iraq is a Muslim country in the Middle East with a lack of studies on suicidal behaviour, especially during the COVID-19 pandemic (El Halabi et al., 2020). There hasn't been a comprehensive study of the sociodemographic, risk factors, and clinical features of suicides during the COVID-19 pandemic yet. This may be because a pandemic is a complex and dynamic catastrophe in which to conduct research, and mitigating measures like social distancing or lockdown reduce the amount of data that can be collected. Many cases of suicide have been reported in newspapers in Iraq since the COVID-19 cases began to escalate. Fear and anxiety about contracting COVID-19, as well as loneliness brought on by isolation and quarantine, can be overwhelming. Inadequate attention to these mental health problems can lead to suicide in people who have or have had a mental or physical disorder in the past (Puig-Amores et al., 2021). Based on this background, we aimed to assess the characteristics, methods, and risk factors of suicidal behaviour in Iraq during the COVID-19 pandemic by scrutinising the available media reports. In the absence of the epidemiological primary data, we thought newspaper reports would be a potential source of information covering the sociodemographic variables and identification of potential risk factors.

#### **MATERIALS & METHODS**

# Data collection

We searched the news reports between April and May 2021 on Google using the term "suicide news in Iraq". We included online newspaper reports of suicidal behaviour in Iraq that were published in Kurdish, Arabic, and English from January 2020 to April 2021. We collected the reports, removed the duplications, and scrutinised the news report contents to extract the outcome variables.

#### Inclusion and exclusion criteria

We included news of Iraqi citizens living in Iraq who have attempted either a fatal or non-fatal suicidal attempt. We excluded the reports of suicide bombings, suicide terror attacks, or reports that have ambiguity regarding the nature of death (homicidal/suicidal/accidental).

# **Extracted variables**

We extracted the demographic variables such as age, sex, habitant, marital status, occupation; methods of and risk factors for suicidal attempts.

#### Statistical analysis

Data was analysed by the Statistical Program for the Social

Science (SPSS) version 22 and the Microsoft Excel 2010 version. The data was presented using descriptive statistics (frequency and percentage).

# **Ethical statement**

We reviewed publicly available newspaper reports. Therefore, no formal ethical approval was obtained for this study. While conducting the study, we conformed to Helsinki's declaration (1964).

#### RESULTS

#### Distribution of the news reports

A total of 156 reports were collected from the search in April and May 2021. Among the reports, 107 (68.6%) were published in January-December 2020 and the rest of the reports were published in January-April 2021.

Table 1. Distribution of new reports (n=156).
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Variable	n	%
Name of the paper		
NRT	18	11.54
shafaqnews	18	11.54
rudaw	16	10.26
xendan	15	9.62
somarianews	15	9.62
ninanews	14	8.97
mawazin.net	11	7.05
aynaliraqnews	10	6.41
alhurra	9	5.77
kirkuknow	9	5.77
iraqakhbar	8	5.13
nasnews	8	5.13
zamenpress	3	1.92
Kurdistan24	2	1.28
Language		
Kurdish	54	34.62
Arabic	92	58.97
English	10	6.41
Year		
2020	107	68.59
2021	49	31.41
Total	156	100

Variable	n	%
Sex		
Male	90	57.69
Female	66	42.31
Education		
Primary	2	1.28
Secondary	6	3.85
SSC (completed grade 10)	3	1.92
HSC (completed grade 12)	1	0.64
Graduate	1	0.64
Postgraduate	1	0.64
No mentioned	142	91.03
Marital Status		
Married	28	17.95
Unmarried	14	8.97
Divorced	2	1.28
Not mentioned	112	71.80
Occupation		
Businessperson	3	1.92
Labourer	5	3.21
Teacher	2	1.28
Student	15	9.62
Housewife	6	3.85
Law force	1	0.64
Retired	3	1.92
Not mentioned	106	67.95
Employee	14	8.97
Musician	1	0.64
Habitat		
Urban	101	64.74
Rural	55	35.26
Total	156	100

 Table 2. Demographic variables of suicidal behaviours (n=156).

The majority of reports were published in Arabic (59%), followed by Kurdish (34.6%), and English (6.4%). Among the newspapers, the majority of the reports were published on the Nalia Radio and Television (NRT) and in the shafaqnews (11.5% each) (Table 1).

#### **Demographic variables**

The mean age of the suicidal attempts was 27.69 (±13.78)

Variable	n	%
Type of behaviou	r	
Suicide	122	78.21
Incomplete	34	21.79
Method		
Hanging	49	31.41
Poisoning	2	1.28
Fall from height	27	17.31
Jump under train	2	1.28
Firearm	35	22.44
Drowning	2	1.28
Not mentioned	14	8.97
Burning	18	11.54
Cutting injury	3	1.92
Electric shock	3	1.92
Eating pieces of glass	1	0.64
Place of suicide		
Home	83	53.21
Garden	4	2.56
At tree beside the home	1	0.64
Bridge	20	12.82
Hospital	3	1.92
Road	5	3.21
Community centre	2	1.28
Jail	4	2.56
School	1	0.64
Workplace	6	3.85
Not mentioned	18	11.54
River	2	1.28
Cafe	3	1.92
Inside car	1	0.64
Camp	3	1.92

years ranging from 10-65 years old. Among the 156 reports, the majority were male (57.7%), married (18%), student (9.6%), and urban habitant (64.74%) (Table 1). However, the data was collected from news reports and demographic variables were not always mentioned in the reports (Table 2).

Total

156

#### Table 3. Suicide variables (n=156).

100

Risk factors	n	%
Familial disharmony	20	12.82
Mental disorders	15	9.61
Financial constraints	8	5.13
Marital discord	5	3.21
COVID-19	5	3.21
Fail in exam	3	1.92
Domestic violence	3	1.92
Forced marriage	3	1.92
Sexual harassment	2	1.28
Unemployment	2	1.28
Disappointment	3	1.92
Problem in workplace	1	0.64
Affair	1	0.64
Early marriage	1	0.64
Rejected asylum requested	1	0.64
Death of lover	1	0.64
Not mentioned/unknown	82	52.56
Total	156	100

Table 4. Risk factors of suicide (n=156).

#### Suicide variables

Among the 156 reports, 122 (78.2%) mentioned a fatal outcome and the rest covered non-fatal outcomes (Table 3). Hanging (31.4%), firearms (22.4%), and a fall from height were the leading methods of suicide and the majority of the attempts (53.2%) happened in home (Table 3).

# **Risk factors of suicide**

Familial disharmony (12.8%), mental disorders (9.6%), financial constraints (5.1%), marital discord (3.2%), COVID-19 related factors (like being infected, quarantined) (3.2%) were the leading cause of proximally related factors of suicidal attempts. More than half of the reports (52.6%) didn't mention the risk factors (Table 4).

# DISCUSSION

The current study is based on news reports of suicide and attempted suicide during the period from January 2020 to April 2021 in Iraq. Suicide reports of males outnumbered that of females during the study period. Married, employed individuals from urban backgrounds constituted the largest fraction of reports where such information was available. Suicide was reported more frequently than other forms of suicidal behaviour; the preferred method was hanging, and the majority of suicides took place at the deceased's house. Based on these findings, a typical profile of a person who indulged in suicidal behaviour during the COVID-19 pandemic in Iraq is that of a young, married, employed male, coming from urban area, and with either a psychiatric illness or issues such as familial, marital or financial strife, and the common method was death by hanging at home.

There are justifiable concerns about rising suicidal behaviour amid the COVID-19 pandemic. The ongoing pandemic has engendered a range of public health interventions that, while necessary for pandemic containment, have potential for worsening suicide risk in the community (Reger et al., 2020). Containment measures such as lockdown and social distancing have led to job loss, economic stress, feelings of isolation, and apprehension about the future. For people with pre-existing physical and mental illness, it has adversely impacted their continuity of treatment (Raman et al., 2021; Valença et al., 2020). These factors have the potential to change suicide demographics as shown in a recent comparative analysis of suicidal behaviour before and after pandemic restrictions from two Asian nations (Kar et al., 2021).

Of those who demonstrated suicidal behaviour, the single largest group comprised of married and employed young adult males. Prior Asian studies on demographics of individuals who demonstrated suicidal behaviour have shown conflicting findings; while some authors found an increase in suicides among older, employed men (Pathare et al., 2020), other authors found more suicides among housewives and the unemployed (Kar et al., 2021). These differences point to the need for generating country specific data on suicides during the pandemic in order to direct resource allocation and planning. Our findings suggest that the economic fallout of the pandemic and possible job loss may have triggered suicides in Iraq; such concerns are more likely to pre-occupy young, employed men who have families to support. A rapid assessment of the impact of COVID-19 on family households and business enterprises in Iraq, completed last year, pointed to a considerable impact on small-scale businesses, workers and their households (International Labor Organization, 2020); this supports our findings and assertions.

Hanging was the common method of suicide and most suicide acts were carried out in the home.. These findings align with prior observations of a dominance in suicides by hanging during the pandemic (Sripad et al., 2021; Panigrahi et al., 2021). The next most common method of suicide was firearms, fall from a height, and selfimmolation. Findings from the Iraqi national suicide study show that hanging, firearms, and self-burning, in that order were the most common methods of suicide in Iraq before the pandemic and suicide by poisoning was less common (Abbas et al., 2018). Juxtaposing our findings with these observations, it appears that pandemic and its associated restrictions have not impacted suicide methods in Iraq. A potential suicide prevention opportunity may lie in restricting the sale of firearms during the pandemic; some nations have reported a surge in gun sales (Khubchandani & Price, 2021; Perkel, 2020). Since methods restriction is an evidence-based method of suicide prevention, suicide prevention efforts in Iraq should consider this step. That most people performed the suicide acts in their homes should not be surprising because of frequent lockdowns during the pandemic.

Major risk factors for suicidal behaviour during the pandemic were presence of psychiatric illness and familial, financial, and marital strife. Nearly one-tenth of all reports mentioned psychiatric illness as a contributory factor among suicide decedents; among reports which mentioned at least one contributory factor, the figure increased to 20.2% (15 out of 74 reports). A study assessing the suicide during COVID-19 in the UK revealed a similar distribution of risk factors (Vinnakota et al., 2021). These figures are also in concurrence with those from the Iraqi national suicide study where the prevalence of psychiatric disorders among those who died by suicide was 24.1%. Nevertheless, given that evidence from low resource settings points to numerous challenges in ensuring continuity of mental healthcare service delivery (Kwobah et al., 2021; Byrne et al., 2021) and because prior studies point to a considerable treatment gap for mental illness in Iraq (Alhasnawi et al., 2009), it may be prudent on the part of the authorities to formally study the impact of pandemic on service delivery for people with physical and mental health illness and adopt telemedicine-based approaches. The latter would help to address the treatment gap and ensure continuity of services (Kopelovich et al., 2021). Many studies have highlighted the role of relationship issues and domestic violence as contributors to suicidal behaviour during the pandemic and lockdown; this may be a consequence of physical restrictions and spending more time at home (Shrestha et al., 2021). During the COVID-19 epidemic, keeping one' mind occupied with work and communicating with family members were coping methods employed to maintain mental health (Ogueji et al., 2021).

#### Strengths of the study

This is an initial study assessing the characteristics,

methods, and risk factors of suicide in Iraq during the COVID-19 pandemic.

#### Limitations

Comparatively a sample size, the online collection of media reports by Google search, and the shorter duration of study are the major limitations of the study. The quality of data extracted from media reports could be questionable specially in Iraq where one study reveled a lower compliance of newspapers reports while reporting suicide (Arafat et al., 2021). We didn't compare the data with pre-COVID-19 or post-COVID-19 suicides. A portion of variables were not mentioned in all reports. However, previous studies following the same methods unveiled a similar pattern of missing data (Shah et al., 2017; Arafat et al., 2018). Therefore, interpretations should be cautiously made.

#### CONCLUSIONS

The present study suggests that, of all suicides during the COVID-19 pandemic in Iraq, the majority were that of young, married, employed males. Further, interpersonal and financial stressors and pre-existing psychiatric illness are possible risk factors for suicide in this period. Because we have not compared this study with pre-pandemic suicide patterns, it is not possible to say if these findings represent a change in the suicide demographics in Iraq. Nevertheless, these results have important implications for suicide prevention efforts in Iraq including resource allocation and evolving public health approaches to the curb the problem such as restricting firearm sales. We also recommend that concerned governmental authorities should collect and release official suicide data during this period for scrutiny by the public as well as researchers; this will further aid in prioritising areas for suicide prevention efforts.

#### **AUTHORS' CONTRIBUTION**

Conception & design: AR Ahmad, AK Saeed, SMY Arafat.

Acquisition of data: AR Ahmad, AK Saeed

Data analysis: SMY Arafat.

**Drafting of the manuscript:** SMY Arafat, V Menon, S Shoib.

**Critical revision and final approval of the manuscript:** All authors.

# **DECLARATION OF ETHICS**

The study was conducted complying with the declaration of Helsinki (1964). As we included the publicly available published articles, no formal ethical approval was sought for this study.

## **DECLARATION OF INFORMED CONSENT**

Not applicable.

# **CONFLICT OF INTEREST**

The authors declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

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#### REGISTRATION

Not applicable.

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