Impact of internal displacement on psychosocial and health status of students residing in the hostel of Anbar University, Iraq

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Abstract

Background: Displacement in Iraq has been widespread and for frequent periods. Education was one of the most prominent victims of displacement at all levels, including higher education. This study aims to assess the impact of displacement on the psychosocial and health status of undergraduate students living in student accommodation of Anbar University, Iraq.

Methods: A retrospective cross-sectional study was conducted from 3rd to 17th April 2017. Data was collected using a universal sampling technique. A total of 355 students (Response Rate: 82.1%) completed a self-administered questionnaire consisting of 26 close-ended questions related to the socio-demographic and economic characteristics of students. Data were analyzed using SPSS version 16. Descriptive data presented as the mean and standard deviation (±SD).

Results: The mean age (±SD) was 22.1 (±1.7) years (range 18-29). About two-third (240, 67.6%) of students experienced some mental disorders. Moreover, 25.1% of students confirmed that the mental disorders were negatively related to their level of performance in college, and the treatment was not available for 31.0% of them. Because of ID, about 45.4% of surveyed students had lost at least one academic year, and 17.5% began to smoke tobacco during the ID period. However, the social and psychological support was absent for about 57.4% of respondents.

Conclusion: Our results suggest an urgent and strategic plane to improve the quality of logistics, health, and infrastructure of student accommodation.

Keywords: Internal Displacement, Students, Conflict, Psychosocial, Health, Anbar, Iraq.

Background

Seventeen years have passed since the unjustified US-led invasion of Iraq in 2003. The consequences of occupation were catastrophic at all levels, including political, economic, health, education, and cultural. Most of the Iraqi infrastructures were the target of systematic looting and sabotage, including educational institutions [1]. Destruction in Iraq has evolved into an unprecedented administrative corruption and wealth-sharing among ruling sectarian parties [1,2]. Two worst pages of the US-led invasion of Iraq was the fabricated sectarian war in 2006 and when the Islamic State in Iraq and Syria (ISIS) has storming most of the central and western of Iraq in mid-2014 [1-3]. Murder, kidnapping, destruction, and displacement were the prominent features during these two historical pages. The consequences of displacement were as disastrous as the impact of internal fighting. More than three million people have left their homes and displaced to safer areas in northern and central Iraq, including the Baghdad city (Capital of Iraq) [4]. Unfortunately, events of 2014 have greatly affected education. Hundreds of thousands of students and their families were victims of indiscriminate attacks. Three of Iraq’s most prestigious universities (Mosul University, Tikrit University, and Anbar University) were a battlefield and severely damaged in most of its facilities, causing the educational process to stop for at least one academic year [3]. A marked drop in the level of education was reported among most of the displaced students who were either forced to live in student accommodation or residents with their families in camps or emergency housing, and in any case, they do not have the appropriate environment.

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for study [5]. As the period of displacement increased with absent or insufficient plans to manage the crisis, many problems have arisen, such as reduced health services and the discontinuity of education at all levels [2]. This study aims to assess the effect of post-conflict and displacement on the health and psychological state of a sample of undergraduate students residing in the student hostel at Anbar University, Iraq.

Methods
Study design
A cross-sectional study was recruiting retrospective data to describe the post-conflict social and health status of undergraduate students residing in the student hostels of Anbar University, Anbar province, Iraq. This study is part of a larger initiative project by Anbar University [3] to assess the impact of internal displacement on the social, economic, and health status among the displaced families in the Anbar Governorate, Iraq.

Sampling methods
In the current analysis, a list of all residents in the student hostel was obtained from the university registration office and confirmed with hostel administration before contacting the students. Two separated student accommodations belong to Anbar University were detected; the first hostel was for the male student with a total of 154 residents, and the second was for female students, which included 278 residents.

Inclusion and exclusion criteria
At the time of the study, all the resident students of whatever gender who were studying (full-time) in any faculty of Anbar University, available and willing to participate were included. The absent students, post-graduate students, and those who were not willing to participate were excluded. Responses were received from 355 students, given a response rate of 82.2%. The excluded students were as follows; forty-nine students were from unexposed to ID governorates; twelve students were not willing to participate; Five students were post-graduate, and eleven students reported incomplete responses.

Data collection process
Data was collected from 3rd April to 17th, 2017. Each eligible student received a copy of a self-administered questionnaire manually via a well-trained team of data collectors. For further inquiries, telephone numbers and e-mail of data collators were written on the first page of the survey. Students asked to fill in and submit the questionnaire to the administration office of the hostel in a period of one week.

Study tool
A semi-structured questionnaire designed by local experts from the Faculty of Medicine (department of family and community medicine) and the Faculty of Education (Department of Psychology), the University of Anbar in collaboration with an external expert from faculty of medicine (department of public health), Bezmialem Vakif University, Istanbul, Turkey. The study tool included questions about the socio-demographic factors and the health and psychological aspects of students and their families, in addition to one open-ended question; what are the most critical problems faced during the ID period?

Content validity
Three experts in public health were recruited to examine the content validity rate (CVR) [16]. The questionnaire presented in Arabic language and test-piloted among a sample of 15 students not included in the study, however, for publication, the Arabic version was forward-backward translated into English language.

Statistical analysis
Descriptive analysis performed using SPSS version 16.0. The data presented using descriptive and inferential statistics, such as the Chi-square test. The level of less than 0.05 considered statistically significant.

Results
Descriptive analyses
The mean age (±SD) was 22.1 (±1.7) years (range 18-29). More than half of the respondents (215, 60.6%) were females, and the female to male ratio was 3:2. Frequency distribution of participants according to their faculty shown in Table 1.

Table 1 Distribution of students according to their faculty (n=355).

| No. | Name of faculty | Male (%) | Female (%) | Total (%) |
|-----|-----------------|----------|------------|-----------|
|     | Sample of study | 140 (39.4) | 215 (60.6) | 355       |
| 1   | Education       | 51 (14.3) | 60 (17.0)  | 111 (31.5) |
| 2   | Medicine        | 24 (6.8)  | 44 (12.4)  | 68 (19.2)  |
| 3   | Science         | 10 (2.8)  | 38 (10.7)  | 48 (13.5)  |
| 4   | Pharmacy        | 13 (3.6)  | 29 (8.2)   | 42 (11.2)  |
| 5   | Dentistry       | 6 (1.7)   | 17 (4.7)   | 23 (6.5)   |
| 6   | Agriculture     | 5 (1.4)   | 12 (3.4)   | 17 (4.7)   |
| 7   | Computer        | 9 (2.5)   | 7 (2.0)    | 16 (4.5)   |
| 8   | Engineering     | 7 (2.0)   | 8 (2.2)    | 15 (4.2)   |
| 9   | Law             | 7 (2.0)   | 0          | 7 (2.0)    |
| 10  | Arts            | 4 (1.1)   | 0          | 4 (1.1)    |
| 11  | Islamic science | 4 (1.1)   | 0          | 4 (1.1)    |

Health status of students
About 27 (6.7%) experienced some illness during the ID period and mostly developed DM and gastric ulcers compared to 240, 67.6% who experienced some psychological disorders. About 25.1% of students confirmed that the psychological problems were negatively related to their level of performance in college, and the treatment was not available for 31.0% of them. More than half (55.2%) described their nutrition level during the ID period as acceptable; however, the student accommodation services (SAS) were terrible in about 47.3% of respondents (Table 2).

Because of ID, about 45.4% of surveyed students had lost at least one academic year, and 17.5% began to smoke tobacco during the ID period. The vast majority of 89.6 either strongly agreed or agreed that their thinking and perception have changed after the ID. Social and psychological support for ID residents was absent for about 57.4% of respondents, and 29.3% of them tend to use social media (internet) in most of their free time. However, one third (35.5%) of students have a positive attitude toward mixing with strangers, and the possibility of accruing bad habits when mixing in a new ID environment was weak. One-third of students declared that either they behave as tension and emotion or being in fear and hesitation status when facing the problems. ID has no impact on the degree of religious commitment in about 69.3% of participants; however, more than half of them lost the feeling of belonging to their original city with a look of pessimism for the future in 46.5%. There
was a positive attitude in 52.7% towards others who were different in terms of nationalism and sectarianism (table 3).

Table 2 Factors affecting the health status of students (n=355)

| Factors affecting the health status of students | N | % |
|-----------------------------------------------|---|---|
| Diseases that you have suffered during the period of displacement | 27 | 7.6 |
| What type of disease? (n=27) | | |
| Gastric ulcer | 4 | 14.8 |
| DM | 4 | 14.8 |
| HT | 3 | 11.1 |
| Disc prolapse | 3 | 11.1 |
| Asthma | 2 | 7.4 |
| Pneumonia | 2 | 7.4 |
| others | 8 | 29.6 |
| I suffered from psychological disorders during the ID period. | | |
| No | 115 | 32.4 |
| Yes | 240 | 67.6 |
| What kind of psychological disorders? (N=240) | | |
| Depression | 61 | 25.3 |
| Anxiety and tension | 87 | 36.3 |
| Fear and hesitation | 63 | 26.3 |
| Insomnia | 29 | 12.1 |
| My psychological condition affected my level of performance | | |
| Always | 89 | 25.1 |
| sometimes | 218 | 61.4 |
| not | 48 | 13.5 |
| Treatment services are available when I need them | | |
| Always | 53 | 14.9 |
| Sometimes | 192 | 54.1 |
| not available | 110 | 31.0 |
| My assessment of the level of nutrition in the period of displacement | | |
| Good | 98 | 27.6 |
| Acceptable | 196 | 55.2 |
| Bad | 61 | 17.2 |
| My assessment of the general services for housing in the internal departments | | |
| Good | 13 | 3.7 |
| Acceptable | 174 | 49.0 |
| Bad | 168 | 47.3 |

Table 3 Factors affecting the social status of students (n=355)

| Factors affecting the social status of students | N | % |
|-----------------------------------------------|---|---|
| I lost one year due to displacement | | |
| Yes | 161 | 45.4 |
| No | 194 | 54.6 |
| I started smoking during the period of displacement | | |
| Yes | 62 | 17.5 |
| No | | |
| My thinking and outlook changed after the period of displacement. | | |
| Strongly Agree | 146 | 41.1 |
| Agree | 172 | 48.5 |
| Disagree | 37 | 10.4 |
| I Use social networking sites in this period | | |
| Most of the time | 104 | 29.3 |
| Sometimes | 159 | 44.8 |
| I do not | 92 | 25.9 |
| Support and psychological care in the current environment are available | | |
| Strongly Agree | 34 | 9.6 |
| Agree | 117 | 33.0 |
| Disagree | 204 | 57.4 |
| Effect of mixing with strangers in housing on habits and ideas | | |
| Positive | 126 | 35.5 |
| Negative | 80 | 22.5 |
| I do not know | 149 | 42.0 |
| Acquired bad habits because of mixing with strangers in an environment of displacement | | |
| Strongly Agree | 34 | 9.6 |
| Agree | 73 | 20.6 |
| Disagree | 248 | 69.8 |
| I am dealing with problems that I face: | | |
| Tension and emotion | 127 | 35.8 |
| fear and hesitation | 97 | 27.3 |
| do not know | 131 | 36.9 |
| The impact of displacement on the degree of religious commitment | | |
| Strongly Agree | 26 | 7.3 |
| Agree | 83 | 23.4 |
| Disagree | 246 | 69.3 |
| I no longer feel significant belonging to my city and its people because of the displacement | | |
| Strongly Agree | 86 | 24.2 |
| Agree | 104 | 29.3 |
| Disagree | 165 | 46.5 |
| Look to the future with pessimism | | |
| Yes | 165 | 46.5 |
| No | 190 | 53.5 |
| I changed my view to others who disagree with me in nationalism and sectarianism | | |
| Strongly Agree | 48 | 13.5 |
| Agree | 120 | 33.8 |
| Disagree | 187 | 52.7 |

About 162 (45.6%) students participated in response to an open-ended question about “the most important problems that they faced during the ID period?”. The reactions can be summarized in four main points as follows: first, about 77 (21.6%) of students reported psychological problems such as staying away from parents (common among females). Second; 39 (11.0%) of them focused on the weak student accommodation services such as hygiene problems. Third, economic issues, such as inadequate financial resources, were reported among 37 (10.4%) of students. Fourth, social problems such as the difficulty of coping with new situations reported in about 32(9.0%) of students.
Discussion

In this study, mental disorders such as anxiety and depression were common among the surveyed students compared to chronic diseases such as DM and Gastric ulcers. The high prevalence of mental disorders (67.6%) among the ID students confirms the severe impact of displacement on their physical and psychological health. The results of this study are approaching the global upper limit for depression (5–80%), and anxiety disorders (1–81%) reported in a systematic review conducted by Morina et al. [7]. Several factors, such as weak academic performance, psychological situation, lack of treatment, and moral support when needed and the invalidity of the student accommodation; constitute the most determinants of health among the ID students.

Previous studies [8-10] have shown that the hostel positively affects academic performance. The hostel gives students self-confidence, emotional strength, ambition, cooperation with others, and intellectual maturity [8,9]. The student accommodation services (SAS) such as “food facilities, inmate cooperation, library facilities and safety, security and Wi-Fi” significantly affect the student’s satisfaction and the level of academic performance [10]. In comparison to our current study, the hostel did not help improve academic performance because about 34 percent had lost at least one academic year, most of them forced to stay in the hostel due to displacement, in addition to the hostel lacking essential services such as water, electricity, sewage, sterilization, waste disposal, and security. In its 2008 report, the Iraqi Ministry of Displacement and Migration indicated that displacement forced many students to drop out, which negatively affected their academic performance. Moreover, most of the students have difficulty acclimatizing to the new educational climate of the host [11]. The effect of displacement was apparent on the way students thinking and perception. The students tried to find ways to reduce the pressure on them, using social media most of the time; however, it was not available for 25.9% of them. Most of the students were dissatisfied with the level of provided care and psychological support. The Iraqi Ministry of displacement and Migration stressed on the necessity of returning the ID students to their school seats as soon as possible [11].

The social interaction with outsiders positively reflected in 126 students, and the vast majority (69.7%) maintained their habits and traditions, and they did not acquire any of the bad habits of the host. However, 17.5% of students started tobacco smoking during the displacement period.

The vast majority of IDPs were moving within a similar geographical environment and homogeneous in terms of climate and population composition; therefore, they did not influence much. However, on the contrary, they have acquired new friends and relations with the host population, and some have been married and stable in the host’s place. Similarly, Sward and Codjoe [12] indicated that there is evidence that migration may lead to positive development and can help to build adaptive capacity through diversification of income sources.

It was not surprising that the ID did not affect the religious commitment among the majority (70.0%) of students, because the religious identity and adherence to the teachings of the law of Islam is a prominent feature of the province of Anbar. It is interesting to note that more than half of the students in this study were no longer feel that they have a considerable affiliation with their city. When comparing these results with those of pessimistic students, the two factors may be closely related, and perhaps the severity of the suffering and the long-time displacement produced such results [5]. One of the issues that require long-term follow-up and treatment is the significant adverse change in the students’ perception towards others who differ from them in nationalism and religion.

In reviewing the most serious problems students faced during their displacement, students’ observations were limited in four areas: psychological, service, economic and social. As for the psychological problem, Seventy seven students expressed their comments in this regard; however, the researchers noted that the students’ suffering is much higher, but they are not ready to express their opinions due to the predominance of apathy and perhaps despair over their thinking. However, despite the diversity of the answers, they were concentrated in two tracks: the first is the absence of the family, which is particularly noticeable among the female students [13], and the second is the state of boredom due to the long period of displacement which was common to both sexes. Similarly, Mimrot [14] mentioned that most of the students in the hostel suffer from different difficulties such as homesickness, financial issues, and adaptation to unknown people; however, they become more sympathetic, friendly, emotionally, and socially stable. The lack of services in the hostel reflects the amount of student hardship, mainly due to deficiencies in the hostel infrastructure, which can be addressed and resolved by the university administration.

The unfortunate economic situation reflected in the students’ perception. The lack of fixed income for students and their families has had negative impacts on the student’s life, and hence his ability to study and the scientific direction. However, half of these students did not agree to pursue any profession outside their specialty. Last but not least, the social problem, the answers of 32 students, are summarized in the difficulty of mixing with a relatively strange environment preferring loneliness.

Conclusion

Most students suffer from anxiety, depression, lack of treatment, and moral support when needed, which negatively affects academic performance. Internal displacement was the primary determinant of student suffering. The psychological, economic, service, and social aspects were influencing students’ behavior. The hostel lacked many essential services, adding another burden to students. Acceptance of the new situation after displacement was not smooth for most students. The impact of the host community on students ranged from integration to a preference for the loneliness. The search for alternatives to previous social life, such as relying on the internet, pushed students to prefer isolation and non-mixing, yet a large part of them accepted the new climate and tried to settle in it. However, the chances of employment were slight, and many students preferred not to take occupations outside their specialization.

Abbreviations

IDPs: Internally Displaced People; ID: Internally Displaced; ISIS: the Islamic State of Iraq and Syria HT: Hypertensive Blood Pressure; DM: Diabetes mellitus; SD: Standard Deviation
Declarations
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Availability of data and materials
Data will be available by emailing drsaadalezzi@gmail.com

Authors’ contributions
SAAJ and MAM are the principal investigators of the study who designed the study and coordinated all aspects of the research including all steps of the manuscript preparation. MAM, BNA, AKS and BTY contributed to data collection and drafting the work. SAAJ contributed to the study design, analysis, and interpretation of data, drafting the work, writing the manuscript, and reviewed and approved the manuscript. All authors read and approved the final manuscript.

Ethics approval and consent to participate
We conducted the research following the Declaration of Helsinki, and the protocol was approved by the Ethics Committee of the Scientific Issues and Postgraduate Studies Unit (PSU), College of Medicine, University of Anbar (Ref: SR/2841 at 05-December –2016). Moreover, written informed consent obtained from each participant after explanation of the study objectives and the guarantee of secrecy.

Consent for publication
Not applicable

Competing interest
The authors declare that they have no competing interests.

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