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Quality of life of Syrian refugees living in camps in the Kurdistan Region of Iraq

The current study explores the perceived quality of life of Syrian refugees who have entered the Kurdistan Region of Iraq. Two hundred and seventy participants residing in refugee camps in the Erbil region in Kurdistan completed the WHOQOL-BREF, which measures quality of life (QoL) within four domains; physical, psychological, social relationships and environment. Syrian refugees in Kurdistan scored significantly lower for general population norms on physical health, psychological and environment QoL, and score significantly lower for physical health and psychological QOL for refugees in the Gaza strip. However, respondents in the current sample scored significantly higher on environment QoL to refugees in the Gaza strip, and significantly higher on all the QoL domains than those reported for refugees in West Africa. Finally, Syrian refugees in Kurdistan scored significantly higher than general population norms for environment-related QoL. The current findings provide the first report of QoL domain scores among Syrian refugees, and position the QoL scores among this sample, for the most part, within the range mean scores for QoL domains of other samples, and may, for environment-related QoL, be higher than for other refugee samples.
Quality of life of Syrian refugees living in camps in the Kurdistan Region of Iraq.

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Abstract

The current study explores the perceived quality of life of Syrian refugees who have entered the Kurdistan Region of Iraq. Two hundred and seventy participants residing in refugee camps in the Erbil region in Kurdistan completed the WHOQOL-BREF, which measures quality of life (QoL) within four domains; physical, psychological, social relationships and environment. Syrian refugees in Kurdistan scored significantly lower for general population norms on physical health, psychological and environment QoL, and score significantly lower for physical health and psychological QOL for refugees in the Gaza strip. However, respondents in the current sample scored significantly higher on environment QoL to refugees in the Gaza strip, and significantly higher on all the QoL domains than those reported for refugees in West Africa. Finally, Syrian refugees in Kurdistan scored significantly higher than general population norms for environment-related QoL. The current findings provide the first report of QoL domain scores among Syrian refugees, and position the QoL scores among this sample, for the most part, within the range mean scores for QoL domains of other samples, and may, for environment-related QoL, be higher than for other refugee samples.

KEY WORDS: Quality of Life, Refugees, Psychological, Physical, Environment, Social
Introduction

The war in Syria has led to the worst humanitarian crisis of the 21st century. According to United Nations Refugee Agency figures, over 2.5 million people have fled the Syrian conflict, entering as refugees neighboring countries of Turkey, Egypt, Lebanon, Jordan and Iraq. The United Nations Refugee Agency (UNHCR) recorded that by the end of July 2012, 9,503 Syrians had registered as refugees in Iraq who have left Syria for a number of political, economic and social reasons. By the end of February 2013, this number had increased over 10-fold to 102,447 (UNHCR, 2013). By February 2014, the figure stood at 225,548 (UNHCR, 2014a) and continues to increase. As of 5th March 2014, 226,934 people had registered as refugees in Iraq. The majority (around 97%) are registered in the Kurdistan Region in Northern Iraq, in and around the cities of Duhok, Erbil and Suleimaniyah where there are 109,979, 84,881 and 25,134 registered refugees, respectively (UNHCR, 2014b). Around 60% of Syrian refugees are hosted within communities across Kurdistan and the remaining 40% live in refugee camps (UNHCR, 2014a).

When Syrian refugees first began arriving in 2012, most registered in the Directorate of Duhok, near the Peshkhabour border with Syria. This led to the opening of the Domiz camp on 01 April 2012. It remains the largest permanent camp with a population of 58,500, as of 28 February 2014. In 2013, as the number of refugees seeking asylum increased, a further four permanent camps were opened in the Directorate of Erbil: Kawergosk (15 August 2013), Qushtapa (19 August 2013), Basirma (26 August 2013) and Darashakran (29 Sept 2013), with a combined population of 28,208, as of 28th February 2014 (United Nations Refugee Agency Information Management Unit, 2014).

International Aid Agencies are working in collaboration with The Kurdistan Regional Government (KRG) to provide shelter, food, water, healthcare, education and employment for Syrian refugees (UNHCR, 2014c). However, given the sheer numbers of people in need, it is an extremely, and increasingly, difficult situation to manage. Attending, for example, to the complex
healthcare needs of such a large population represents a major challenge. The UN Refugee Agency records information from refugees about their physical health complaints and clinical mental health problems at the point of registration but this is almost impossible to monitor on a follow-up basis, given the many challenges and constraints posed by the current crisis. As a result, many psychological issues facing those who live in refugee camps are very unlikely to be addressed or detected.

Despite the profound effect of war and forced migration on people’s living conditions, surprisingly little attention has been given to the psychological impact of being a refugee. Studies that have investigated this issue have found that the prevalence of psychological illness is relatively high in refugee groups (Gerritsen, et al., 2006). Research suggests that poor perceived present quality of life (QoL) may be the most significant factor in psychological illness in refugee populations (Akinyemi, Owoaje, Ige, & Popoola, 2012; Carlsson, Olsen, & Mortensen, 2006; Fazel, Wheeler, & Danesh, 2005; Matanov, et al., 2013; Tang & Fox, 2001). These findings support the World Health Organization’s position concerning the importance of subjective quality of life as a measure of how an individual perceives "their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns" (p.1, World Health Organization, 1997).

At present, there is, at least to our knowledge, no data concerning the known perceived QoL of Syrian refugees who have entered the Kurdistan Region of Iraq. These are important issues that, given the sheer scale of the Syrian refugee crisis, have fundamental implications for the future health and well-being of a large number of people. In the present study, we report on the World Health Organization Quality of Life Assessment (WHOQOL-Bref) scores among Syrian refugees living in refugee camps in The Directorate of Erbil, Iraqi-Kurdistan. To provide context to our findings were compare WHOQOL-Bref scores among the current sample to other reports of WHOQOL-Bref scores among other refugee reports.
Method

Sample

Two hundred and seventy refugees (135 males, 135 females), aged 18 to 60 ($M = 29.26$ years, $SD = 9.7$) from Syria, residing in refugee camps located in Kurdistan took part in the study. The sample used in this study was residing in the Erbil Governorate camps located on four sites: Qushtpa, Kawrgosk, Basirma and Darashakran in January 2014. Thirty forms were distributed in each camp, with equal numbers of respondents sought from each gender. Of these respondents, the most dominant demographic statistics were that 42.6% reported having completed secondary education (with the next highest frequency being that 31.5% had achieved a tertiary level of education) and that 58.1% reported being married.

Measures

The WHOQOL-BREF is the short 26-item form of the larger WHOQOL-100 assessment (The WHOQOL Group, 1995) that yields four QoL domains: physical health (7 items; e.g. "How much do you need medical treatment to function in your daily life?"), psychological QoL (6 items; e.g. "To what extent do you feel life to be meaningful?"), social QoL (3 items; e.g. "How satisfied are you with your personal relationships?"), and environmental QoL (8 items; e.g. "How safe do you feel in your daily life?"). Responses are scored via five-point response scales with various anchor statements (e.g. from 1 [Very dissatisfied] or [Very poor] to 5 [Very satisfied] or [Very good]).

The WHOQOL-BREF can be scored in three ways; through raw scores and two transformation methods; the first that creates domain scores within the range of 4-20, and the second that creates domain scores within the range of 0-100.

The WHOQOL-BREF's psychometric properties have been analyzed using cross-sectional data from 11,830 adults from 23 countries (Sevington, Lofty, & O’Connell, 2004) and is a valid assessment across cultures and socioeconomic status (Hawthorne, Herrman, & Murphy, 2006; Sevington, et al., 2004). Syrian refugees tend to speak the Kurdish language, but have
different dialects from the Iraqi Kurdish. However, they are also able to speak the Arabic language. Therefore they were given the Arabic version of the *World Health Organization Quality of Life Scale - Brief* (WHOQOL-BREF) (Sevington, et al., 2004; WHOQOL group, 1998). The reliability and validity of Arabic versions of the WHOQOL-BREF have been demonstrated among large Arabic-speaking samples (Ohaeri & Awadalla, 2009). On this occasion, we removed one of the social relationships QoL items ("How satisfied are you with your sex life?") due to concerns over the respondents' potential sensitivity to the question. According to the WHOQOL-BREF manual the transformational methods for scoring of the scale allows for missing items.

*Ethics*

The study received ethical approval from the University's School Ethics Board whose ethical procedures conform to those of the British Psychological Society (http://www.bps.org.uk/sites/default/files/documents/code_of_human_research_ethics.pdf). The Ethics Reference for the Ethics Board was jm148-851fa. All participants were 18 years of age or over and provided free and informed consent to take part in the study. Formal procedures and permission to visit the camps were given by the General Director of Academic Missions and Cultural Relations and the Democracy and Human Rights Research Institute.

*Results*

We found three reported non-clinical based samples that provided enough information to allow statistical mean score comparisons between the current sample and these samples. The first sample was the overall norm data from 11,830 adults from 23 countries (Sevington, et al., 2004). The other two samples comprised samples from refugee populations residing in West Africa (Akinyemi, et al., 2012) and the Gaza Strip (Eljed, Mikolajcyk, Kramer, & Laaser, 2006).
Table 1 shows a set of mean comparisons between Syrian refugees in Kurdistan and overall norm data for the WHOQOL-BREF. This comparison uses transformed domain scores within a range 4–20. As our sample data has a missing item, we recomputed the mean/SD score for social relationships QOL for the general population norm data using the frequency responses that have been provided for these two social relationship items (Sevington, et al., 2004). In this table, we also provide effect sizes for the comparisons computed for unequal sample sizes, for which $d \geq .8$ represents a large effect size, $.5 \leq d < .8$ represents a moderate effect size, and $0.2 \leq d < .5$ represents a small effect size (Cohen, 1988). In terms of the comparison with the norm data, the refugees residing in Kurdistan scored significantly lower on physical health, psychology and environment QoL, but significantly higher on social relationships QoL. In terms of effect size the differences, the differences for physical health and psychological QOL are of a large effect size, the differences for the environment QoL are of a moderate effect size, but the difference reported for social relationships QOL does not even meet the criteria of a small effect size.

Table 2 shows the comparison with the first of the two refugee samples, refugees resident in West Africa (Akinyemi, et al., 2012). For this sample, mean scores were presented as raw scores. Therefore, we have presented mean scores for the Syrian refugees in accordance with this. Across all domains of the QoL scale, the refugees residing in Kurdistan scored significantly higher than those reported in West Africa, with these differences ranging from a moderate effect size (social relationships QoL) to a large effect size (physical health, psychological and environment QoL).

Table 3 shows a comparison with a second refugee sample, resident in the Gaza Strip (Eljed, et al. 2006). For this study, mean scores were presented as transformed domain scores with a range 0–100. Therefore, we have presented the mean scores for the Syrian refugees in
accordance with this. For the physical and psychological domains, the refugees residing in Kurdistan scored significantly lower than for those refugees in the Gaza Strip, with these differences being of a large effect size. For the environment QoL domain refugees residing in Kurdistan scored higher than for those refugees in the Gaza Strip with this different being of a moderate effect size. No significant difference was found between Syrian refugees in Kurdistan and refugees residing in the Gaza strip for social relationships QoL.

Discussion

The current findings outline the QoL among Syrian refugees in Kurdistan. For the physical, psychological and environment domains of QoL, Syrian refugees score significantly lower (to a large effect size) that population norms for these domains. This is, for the most part, what would be expected, with the exception being that Syrian refugees in Kurdistan score significantly higher than population norms for the social relationships domain. However, the effect size of this finding is negligible as its magnitude is less than small ($d = .2$) and therefore any statistical significant difference can be attributed to sample size. There may be some concern about the omission of one of the items from the scale, but given that the WHOQOL-BREF allows for the omission of items, and we have made a comparable alteration to the population mean scores, the current findings suggest that social relationships QoL compare favorably to reported population means.

In terms of other refugee samples, the current findings principally locate the means within the mean scores located for other refugee samples. Syrian refugees scoring significantly lower (to a large effect size) for two of four domains (physical and psychological) than refugees in the Gaza strip, significantly higher (to a moderate effect size) for the environment domain than refugees in the Gaza strip and significantly higher (from a moderate to large effect size) on all the QoL domains than those reported for refugees in West Africa.

Seeking any exacting social or policy analysis in these comparisons is mostly redundant to the immeasurable variance in the nations, context and time periods considered. However, the
study contributes new knowledge by reassuring us that the positioning of the means for Syrian refugees, given the nature and scale of conflict, the scores among the other sample largely falls within, if not above in terms of environmental QoL, those QoL scores reported for other refugee samples. Moreover, there is some equivalence in terms of social relationships QoL against general populations, though this comes with the caveat that this may be a function of the number of questions asked, and therefore needs careful consideration before extrapolating from this finding. Notwithstanding, our current data suggests that for a large number of Syrian refugees in Kurdistan QoL, though below that of general population of norms, QoL does not largely fall outside the levels of QoL reported for other refugee samples, and may, for environment-related QoL, be higher than reported in other refugee samples.
References


**Table 1** (on next page)

Tables reporting mean scores
### Tables

**Mean (SD) score comparisons for WHOQOL-BREF domain scores (range 4–20) between Kurdistan refugees and adults across 23 countries (n = 11,830) from Skevington et al. (2004).**

<table>
<thead>
<tr>
<th></th>
<th>Syrian Refugees in Kurdistan (n = 270)</th>
<th>Adults across 23 countries (n = 11,830)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Transformed Scores (4-20)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Physical Health</td>
<td>13.26</td>
<td>2.45</td>
</tr>
<tr>
<td>Psychological</td>
<td>12.62</td>
<td>2.45</td>
</tr>
<tr>
<td>Social Relationships</td>
<td>15.23</td>
<td>2.82</td>
</tr>
<tr>
<td>Environment</td>
<td>11.66</td>
<td>2.39</td>
</tr>
</tbody>
</table>

* * p < .05; ** p < .01; *** p < .001

*Original mean (SD) scores provided by Skevington et al. (2004) in brackets.*
Table 2

Mean (SD) score comparisons for WHOQOL-BREF raw scores between Syrian refugees residing in Kurdistan and Refugees residing in West Africa.

<table>
<thead>
<tr>
<th></th>
<th>Refugees in Kurdistan (n =270)</th>
<th>Refugees in West Africa Akinyemi et al.(2012) (n= 444)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean SD</td>
<td>Raw Scores Mean SD t</td>
</tr>
<tr>
<td>Physical Health</td>
<td>23.21 4.29</td>
<td>19.45 4.18 11.47*** 0.89</td>
</tr>
<tr>
<td>Psychological</td>
<td>20.30 3.62</td>
<td>16.86 4.04 11.78*** 0.91</td>
</tr>
<tr>
<td>Social Relationships</td>
<td>10.10a 2.25</td>
<td>8.66 2.59 7.83*** 0.60</td>
</tr>
<tr>
<td>Environment</td>
<td>22.85 4.62</td>
<td>18.88 5.03 10.76*** 0.83</td>
</tr>
</tbody>
</table>

* p < .05; ** p < .01; *** p < .001

*a Raw score for 2 items is weighted for comparison against a 3 item score.
Table 3

Mean (SD) score comparisons for WHOQOL-BREF transformed Scores (0-100) between Syrian refugees residing in Kurdistan and Refugees residing in the Gaza strip

<table>
<thead>
<tr>
<th></th>
<th>Refugees in Kurdistan</th>
<th>Refugees in the Gaza strip</th>
<th>Eljedi et al. (2006)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(n =270)</td>
<td>(n=197)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Physical Health</td>
<td>58.12</td>
<td>15.45</td>
<td>75.9</td>
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<tr>
<td>Psychological</td>
<td>53.82</td>
<td>15.35</td>
<td>70.0</td>
</tr>
<tr>
<td>Social Relationships</td>
<td>70.41</td>
<td>17.61</td>
<td>71.4</td>
</tr>
<tr>
<td>Environment</td>
<td>46.58</td>
<td>15.15</td>
<td>36.2</td>
</tr>
</tbody>
</table>

* p < .05; ** p < .01; *** p < .001