

# Depressive Symptoms Among Arab Bedouin Women Whose Houses are Under Threat of Demolition in Southern Israel: A Right to Housing Issue

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## Abstract

Housing is a fundamental human right and a social determinant of health. According to international law, indigenous peoples are entitled to special housing and health rights and protections. In Israel, land disputes between the government and Arab Bedouins, an indigenous minority, have resulted in ongoing demolitions of Arab Bedouin homes, with thousands more homes threatened. While demolitions could expose this population to mental health problems, research linking house demolition and health is scarce. In this paper, we draw on a human rights perspective to describe this housing instability and examine the association between the threat of house demolition and depressive symptoms (DS) among 464 Arab Bedouin women. We conclude that having their house under threat of demolition is an important determinant of poor mental health among Bedouin women. Any efforts to decrease DS among these women will have to take place alongside efforts to stop this practice.

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## Introduction

Housing is a fundamental human right and a major social determinant of health.<sup>1</sup> The World Health Organization (WHO) has deemed housing a preexisting condition of health.<sup>2</sup> Given the importance of housing and recognizing their relative disadvantage, minorities and indigenous peoples are entitled to a special set of health and housing rights and protections under international law.<sup>3</sup> In Israel, land disputes between successive governments and economically disadvantaged indigenous Arab Bedouin citizens have resulted in hundreds of house demolitions every year. Furthermore, thousands of other structures (houses and other buildings) are under threat of demolition.<sup>4</sup> The government does not recognize Arab Bedouin ownership of many lands, does not allow Arab Bedouins to erect new structures on what are deemed state lands, and demolishes structures erected without official permits. Demolitions have increased dramatically over the past decade. In 2001, 45 homes were taken down in villages not legally recognized by the Israeli government.<sup>5</sup> In 2011 there were more than 1000 demolitions, with thousands more structures currently at risk.<sup>6</sup>

The association between house demolition and mental health has received little attention. However, previous studies have linked displacement and relocation due to political conflict with high psychological distress and adverse mental health.<sup>7</sup> In this paper, we first adopt a human rights lens to describe demolitions in Arab Bedouin communities in Israel. We then draw on place attachment theory to discuss the link between living in a house under threat of demolition and depressive symptoms among Bedouin women.

### *The rights of minorities and indigenous groups to health and housing*

The Universal Declaration of Human Rights (UDHR) serves as the basis for human rights legal instruments. Article 25 links housing to health: “Everyone has the right to a standard of living adequate

for the health and well-being of himself and of his family, including food, clothing, housing, medical care and necessary social services...”<sup>8</sup> Minorities and indigenous peoples enjoy a special set of rights and protections as laid out in the Declaration on the Rights of Persons Belonging to National or Ethnic, Religious and Linguistic Minorities, adopted in 1992. This was the first international document dedicated solely to minority rights. General Comment 4 to the International Covenant on Civil and Political Rights (ICCPR), adopted in 1966, addresses issues frequently encountered by minorities and disadvantaged groups, including the need to protect their rights to housing and health.<sup>9</sup>

Recognizing the unique disadvantage faced by indigenous groups, the international community later developed an additional document addressing the needs and group-defining characteristics of these peoples.<sup>10</sup> The Declaration on the Rights of Indigenous Peoples, adopted in 2007, outlines key collective rights, such as self-determination and land rights.<sup>11</sup> Article 21.1 specifies the rights relevant to this paper: “[i]ndigenous peoples have the right, without discrimination, to the improvement of their economic and social conditions, including, inter alia, in the areas of education, employment, vocational training and retraining, housing, sanitation, health and social security.” Building on these basic rights, Article 23 states that “[i]ndigenous peoples have the right to determine and develop priorities and strategies for exercising their right to development. In particular, indigenous peoples have the right to be actively involved in developing and determining health, housing and other economic and social programs affecting them and, as far as possible, to administer such programs through their own institutions.” This Article emphasizes the right of indigenous groups to participate in determining their housing situation.

Specifically in relation to health, Article 24.2 declares that “[i]ndigenous individuals have an equal right to the enjoyment of the highest attainable

standard of physical and mental health. States shall take the necessary steps with a view to achieving progressively the full realization of this right.” Together, these Articles create a basis for understanding the special housing and health rights granted to indigenous peoples.

The right to housing is integrally related to the right to land. Importantly, the 2007 Declaration also addresses indigenous land rights—a particularly contentious issue. Article 27 of the Declaration outlines obligations in relation to these rights, while Article 28 confirms the right of indigenous peoples “(1) [t]o redress, which can include restitution or, when this is not possible, just, fair and equitable compensation, for the lands, territories and resources which they have traditionally owned or otherwise occupied or used, and which have been confiscated, taken, occupied, used or damaged without their free, prior and informed consent.” It also states that “(2) [u]nless otherwise freely agreed upon by the peoples concerned, compensation shall take the form of lands, territories and resources equal in quality, size and legal status or of monetary compensation or other appropriate redress.” Therefore, not only are the basic rights to housing and health guaranteed; the Declaration goes much further by recognizing the land rights of indigenous peoples and outlining state obligations in this regard.

The land, housing, and health rights detailed in the Declaration on the Rights of Indigenous Peoples are relevant to Arab Bedouins in Israel, who are an indigenous minority. Below, we examine demolition of Arab Bedouin houses by the Israeli governments in relation to these rights.

*The right to housing and health: The case of the Arab Bedouins in the Negev*

The Arab Bedouins have lived in the Negev (Naqab), now part of Israel’s southern region, since long before the establishment of the state of Israel in 1948.<sup>12</sup> The Arab Bedouins, who number about 200,000, are now Arab-minority citizens of Israel. They make up about 25% of the population of the Negev, yet they have jurisdiction over less than 3% of the land.<sup>13</sup> Arab Bedouins are also among the poorest and most disadvantaged groups in Israel.<sup>14</sup>

Although the Arab Bedouins are indigenous to the region, not all of their current towns and villages predate Israel’s establishment. Seven townships and villages were established in the early 1950s and 1960s following forced population evictions and transfers to a specific part of Negev called the Siyag (Arabic for fence).<sup>15</sup> During this period, the Israeli government sought to concentrate Arab Bedouins in the Siyag, informing them that the transfer was temporary; however, they were never allowed to return to their lands.<sup>16</sup> While about half of the Arab Bedouin population moved to these seven new villages, the other half remained in about 47 villages. The Israeli government did not legally recognize these original villages, and today, Israeli authorities consider the Arab Bedouins residing in these villages to be squatters on state land. In 1965, Israel enacted the Planning and Building Law, followed by a national building master plan. Though Arab Bedouin villages predate this process, they were not recognized in official state documents or legislation. According to the Planning and Building Law, structures built in these communities are illegal and the settlements are deemed “unrecognized.” As such, state authorities refuse to provide people living in these areas with infrastructure, depriving them of connections to national electrical and telecommunications grids, water and sewage systems, and paved roads.<sup>17</sup> The unrecognized villages also lack education, welfare, health, and employment services.<sup>18</sup> Despite these conditions, Arab Bedouins continue to reside there. They are reluctant to leave because of their historical, cultural, and emotional connections to the land, and because they know their departure would result in land loss. Thus, about half of the Arab Bedouins - some 90,000 people - now live in shacks and other temporary dwellings without access to basic infrastructure.<sup>19</sup>

The Israeli government has attempted to deal with land claims from the Arab Bedouins, but the state’s plans fail to recognize the basic land rights of the Arab Bedouins and conflict with the express desires of the community.<sup>20</sup> In fact, due to a history of broken promises, lack of follow-through, and inconsistent policy, the Arab Bedouins do not consider the government a credible partner.<sup>21</sup> Consequent-

ly, the problem of the unrecognized villages remains unresolved.

In the absence of official planning, and because Arab Bedouins are unable to gain legal recognition and ownership of their lands, construction in unrecognized villages is carried out without permits. According to a report by Human Rights Watch, in recent years most Arab Bedouins have given up appealing house demolition orders in court, because Israeli judges have historically failed to nullify demolition orders in unrecognized villages.<sup>22</sup> As a result, residents live with the constant knowledge that their homes might be destroyed. This is a tangible threat; since the 1970s, there have been thousands of such demolitions, though accurate numbers have not been published by the Israeli authorities.<sup>23</sup> In one village, Al-Aarkib, houses have been demolished more than 65 times since 2010; the villagers rebuilt after each demolition.<sup>24</sup>

#### *Study methodology*

Our study postulates that the frequency of house demolitions, and living with the constant threat of demolition, might expose the entire Arab Bedouin community to poor mental health. Women may be particularly impacted since they are a more vulnerable group in this community: Arab Bedouin women act as the main caregivers in their families, and a constant threat of house demolition might elevate stress due to the jeopardy this places their children in, leading to detrimental mental health effects.<sup>25</sup> Drawing on place attachment theory, research has shown direct associations between detachment from place, displacement due to conflict, and political violence, and adverse mental health effects and psychological distress.<sup>26</sup> For example, long-term trauma-related illnesses were found among displaced Vietnamese refugees in Australia, and forced displacements in World War II were associated with mental health disorders and poor quality of life among elderly persons in Germany.<sup>27</sup> Palestinian Arabs who were internally displaced from their lands and homes following the establishment of the state of Israel suffered from poorer self-rated health and higher chronic illnesses compared to non-displaced persons.<sup>28</sup> There might also be indi-

rect associations between displacement and poor mental health, and low socioeconomic position of displaced persons.<sup>29</sup> Research shows that displaced persons tend to live in poor housing conditions and to have low income, since they lose all of their belongings and social standing when they are displaced.<sup>30</sup> While not all Arab Bedouins in Israel have been displaced, this study addresses whether the ongoing threat of demolition contributes to poor mental health in the same way that physical displacement does.

While we hypothesize a direct association between housing instability and depressive symptoms (DS) among Arab Bedouin women living in southern Israel, we also acknowledge the possibility of an indirect association mediated by women's socioeconomic positions and the physical features of their houses. Living in unrecognized villages might be another factor in DS, as these villages lack basic infrastructure and access to proper health and education services. To examine the contribution of houses under threat of demolition to DS, we first examined the direct associations between these variables. Employing different multivariable models, we then took into consideration the women's socioeconomic position (education, income, and literacy), as well as physical features of their houses (type of building, connection to water and electricity, house crowding, and access to public of transportation) and the location of the house (in legally recognized and unrecognized localities).

## Method

#### *Sample and data collection*

Data for the study were obtained from a cross-sectional survey of Arab Bedouin women aged 18-49 years. Between July 2008 and January 2009, trained female interviewers approached all 1,175 women who visited 14 Mother and Child Health (MCH) clinics in southern Israel. Eligible women (n=540) who had given birth to a full-term baby and whose child was 9-15 months age at the time were asked to participate in the study. Women who agreed (n=464) were interviewed using a structured, Ar-

abic-language questionnaire after signing an informed consent form. The response rate was 86%. The study was approved by the Institutional Ethics Committee of the Soroka University Medical Center.

### *Measures*

We measured DS using the Center for Epidemiologic Studies Depression Scale (CES-D) short form, which includes seven item-screening questions on DS experienced in the past week.<sup>31</sup> This scale has been translated and validated in Arab populations.<sup>32</sup> The internal consistency of the scale in the Arab population in Israel was 0.86, and in the current study. The internal consistency of the scale measured by Cronbach's alpha was 0.805.<sup>33</sup> The mean score of DS was 7.11 (SD=.54), the median score was six, and range was zero to 21. We dichotomized DS into two groups using the median as the cutoff point: low DS (zero to six symptoms per week) and high DS (more than six symptoms per week). We then measured the independent variable of having a house under threat of demolition using participants' answer to the question: Is your house designated for demolition? (Answer categories: yes or no.)

We determined women's socioeconomic position by three measures:

- a) Women's education: the highest level of education the woman had achieved. We grouped responses into two categories: (1) less than high school and (2) high school and above.
- b) Family source of income: whether the family's main income came from work or social security allowances. A family is eligible for social security allowances if they are unemployed or their income is less than the minimum wage.
- c) Ability to read and write in Arabic: whether the participant had the ability or not to read and write in her mother tongue (Arabic).

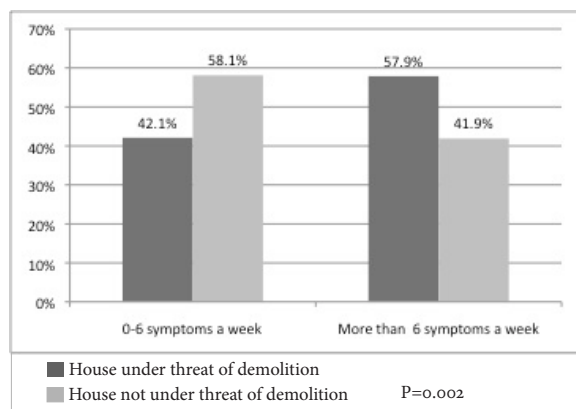
We assessed physical features of the house using women's answers to six questions:

1. Type of building: whether the house is (1) a temporary structure, such as a tent (which is less stable housing), or (2) a permanent building.
2. House crowding: derived from other variables by dividing the total number of persons living in one household by the number of rooms in the house. This revealed a continuous variable that was dichotomized into less-crowded houses (with one or two persons per room) and high degree of crowding (with three to 12 persons per room).
3. House connected to electricity: Answer categories were (1) yes, always connected, and (2) no, not connected, or not always connected.
4. House connected to water supply: Answer categories were (1) yes, always connected and (2) no, not connected or not always connected.
5. House in a village with access to public transportation: Answer categories were (1) yes and (2) no.
6. House location: whether the house was located in a legally recognized or unrecognized village. Answer categories were (1) yes and (2) no.

### *Statistical analysis*

We first conducted univariate analysis for the associations between independent variables and house under threat of demolition. We then used multivariable logistic regression analysis to examine the association between house under threat of demolition and DS in different models, while adjusting for groups of independent variables. The multivariable models were as follows: model 1 was unadjusted, model 2 was adjusted for the women's SEP (women's education, family source of income, and literacy), model 3 was adjusted for women's SEP and the physical features of the house (type of building, connection to water and electricity, house crowding, and house in a village with access to public transportation), and the final model (model 4) was adjusted for all of the variables in model 3, in addition to the location of the house (in legally recognized versus unrecognized village). Variables in the models were considered significant at the level of 5% (p-value).

FIGURE 1 Association between depressive symptoms and house under threat of demolition among Arab Bedouin women (n=460)



Results

27.2% of the study participants reported that their house is under threat of demolition. Women living in a house under threat of demolition had significantly higher DS (more than six symptoms a week) compared to women who do not live in such a house; 57.9% and 41.9%, respectively (Figure 1).

Women living in a house under threat of demolition had poorer SEP compared to those in stable housing (Table 1); 68% of these women had fewer

than 12 years education compared to 44.6% in the other group; half of their families relied on social security allowances as their main source of income, compared to 35.3% among women whose houses were not under threat of demolition; and close to 42% were not able to read and write, compared to 15% of the women not living in a house under threat of demolition.

Eighty five percent of the women living under threat of demolition also lived in poor housing conditions, while only 15% of women whose homes were not under threat of demolition lived in poor conditions. Sixty four percent of the women who lived in a house under threat of demolition reported that their house was not connected to the electrical grid (never or inconsistently), compared to 22.4% of women not under this threat. Seventy four percent of women living in a house under threat of demolition reported that their house was not connected to a water supply, compared to only 2.4% of women in houses not under this threat. House crowding was greater in houses under threat of demolition (58.7% vs 34.8%). About 70% of the houses under threat of demolition are located in villages that lack public transportation, and 76.2% of the houses under threat of demolition were in unrecognized villages.

	N=	House under threat of demolition		P-value*
		Yes (n=126) (27.2%)	No (n=344) (72.5%)	
<b>Age of participants</b>				0.159
18-27 years	251	58.9	54.1	
28-37 years	166	37.1	36.5	
38-50 years	36	4.0	9.4	
<b>Education level</b>				
Less than 12 years	234	68.0	44.6	<0.001
More than 12 years	225	32.0	55.4	
<b>Family source of income</b>				0.004
Social allowances	181	50.0	35.3	
Work	279	50.0	64.7	
<b>Ability to read and write Arabic</b>				0.007
Able	146	41.6	28.5	
Unable	307	58.4	71.5	

TABLE 1 Socio-demographic characteristics, women’s socioeconomic position, housing features and location of houses under and not under threat of demolition among Arab Bedouin women

	N=	House under threat of demolition		P-value*
<b>Type of house</b>				<0.001
Temporary/tent	158	84.9	15.4	
Permanent/regular	300	15.1	84.6	
<b>House crowding</b>				0.001
3-12 persons per room	186	58.7	34.8	
1-2 persons per room	262	41.3	65.2	
<b>House connected to electrical grid</b>				<0.001
No/not always	154	64.0	22.4	
Always	302	36.0	77.6	
<b>House connected to water supply</b>				0.002
No/not always connected	41	73.6	2.4	
Always connected	415	26.4	97.6	
<b>House in village with access to public transportation</b>				.0001
No	197	69.1	34.4	
Yes	252	30.9	65.6	
<b>House located in legally recognized village</b>				<0.001
No	153	76.2	17.1	
Yes	307	23.8	82.9	
*x <sup>2</sup> test				

TABLE 1 (CONTINUED) Socio-demographic characteristics, women's socioeconomic position, housing features and location of houses under and not under threat of demolition among Arab Bedouin women

The multivariate logistic regression results revealed a robust association between house under threat of demolition and DS among Arab Bedouin women, even after accounting for the women's SEP, the physical features of the house, and the house location in legally recognized or unrecognized villages (Table 2). The unadjusted model (Model 1) showed that women who live in a house under threat of demolition had significantly ( $P < 0.003$ ) higher DS (Odds Ratio (OR)=1.92, 95% confidence interval (CI)=1.25-2.96). The magnitude (OR) of this association was almost unchanged in all the

following models; that is, after adjusting for women's SEP in Model 2 (OR= 1.88, 95%CI=1.18-2.98), accounting for the physical features of the house in Model 3 (OR=1.96, 95%CI=1.04-3.70), and in Model 4 when adjusting for house location in addition to all the other variables (OR=1.99, 95%CI=1.03-3.82).

Notably, women's SEP (education, family source of income, and ability to read and write) remained significant in all adjusted models. However, the variables related to physical features of the house and the house location were not significant in Models 3 and 4.

TABLE 2 Multivariate logistic regression models (odds ratios and 95% confidence intervals) of depressive symptoms\* adjusted for house under threat of demolition in different models,\*\* (n=424)

	Model 1		Model 2		Model 3		Model 4	
	OR (95%CI)	P-value	OR (95%CI)	P-value	OR (95%CI)	P-value	OR (95%CI)	P-value
<b>House under threat of demolition</b>								
Yes	1.92 (1.25, 2.96)	0.003	1.88 (1.18, 2.98)	0.007	1.96 (1.04, 3.70)	0.040	1.99 (1.03, 3.82)	0.037
No	1.00		1.00		1.00		1.00	
<b>Education level</b>								
Less than 12 years			0.40 (0.27, 0.62)	<0.000	0.42 (0.27, 0.64)	<0.000	0.42 (0.27, 0.64)	<0.000
More than 12 years			1.00		1.00		1.00	
<b>Family source of income</b>								
From social allowances			1.87 (1.23, 2.86)	0.004	1.82 (1.17, 2.84)	0.008	1.82 (1.17, 2.84)	0.008
From work			1.00		1.00		1.00	
<b>Ability to read and write Arabic</b>								
Able			1.58 (1.02, 2.46)	0.042	1.56 (1.00, 2.44)	0.051	1.56 (0.99, 2.44)	0.053
Unable			1.00		1.00		1.00	
<b>Type of house</b>								
Temporary/tent					1.23 (0.68, 2.25)	0.494	1.21 (0.64, 2.29)	0.548
Permanent/regular					1.00		1.00	
<b>House connected to electrical grid</b>								
No/not always					1.00 (0.61, 1.64)	0.997	0.97 (0.50, 1.85)	0.920
Always					1.00		1.00	
<b>House connected to water supply</b>								
No/not always					1.09 (0.50, 2.40)	0.827	1.09 (0.50, 2.39)	0.827
Always connected					1.00		1.00	
<b>House crowding</b>								
3-12 persons per room					0.67 (0.44, 1.04)	0.072	0.68 (0.44, 1.04)	0.075
1-2 persons per room					1.00		1.00	
<b>House located in a village with public transportation</b>								
No					0.90 (0.57, 1.41)	0.646	0.90 (0.57, 1.41)	0.651
Yes					1.00		1.00	
<b>House located in a legally recognized village</b>								
No							0.94 (0.43, 2.06)	0.879
Yes							1.00	

\* Depressive symptoms (DS) - high versus low DS (six or more symptoms compared to zero to six symptoms)

\*\*Model 1 - unadjusted

Model 2 - Adjusted for women's SEP (women's education, family source of income, and ability to read and write)

Model 3 - Adjusted for variables in Model 2 and physical features of the house (type of house, house crowding, house connected to electricity, house connected to water supply, public transportation)

Model 4 - Adjusted for all variables in Model 2 and in Model 3, as well as for house location (in recognized or unrecognized locality)



## Discussion

The context of this study is complex and includes legal and political aspects rooted in Israel's refusal to recognize the land rights of the Arab Bedouin indigenous minority. The human rights perspective we adopt provides a suitable framework to describe this complexity. According to Abu-Rabia and others, house demolitions amount to a violation of the basic human right to housing and living with dignity, as well as other rights, such as that of self-determination.<sup>34</sup>

Official organs of the Israeli government currently do not regard the Arab Bedouin as an indigenous minority, although the international community does.<sup>35</sup> Historians agree that the Arab Bedouins have inhabited the Negev since the seventh century and were the only inhabitants of the desert until the mid-twentieth century. Most of the Negev Bedouin are related to Sinai and Arabian Peninsula Bedouin tribes. While the Bedouin were traditionally a nomadic people who raised livestock through grazing, they adopted a largely sedentary way of life prior to the establishment of the state of Israel in 1948. Accordingly, they settled in distinct villages with well-defined and traditional systems of communal and individual land ownership.<sup>36</sup> Indeed, the way of life and difficulties the Arab Bedouin face in maintaining their cultural identity and connections to their traditional lands have been similar to the problems faced by indigenous peoples worldwide.<sup>37</sup> The Committee on the Elimination of Racial Discrimination (CERD) has also addressed this issue.<sup>38</sup> In June 2007, CERD recommended that the Israeli government officially recognizes the unrecognized villages and, in the event that they refuse, that they consult the residents before any further relocations.<sup>39</sup> In 2012, CERD expressed its concerns about the housing and planning conditions of the Arab Bedouin community.<sup>40</sup> The UN Human Rights Committee (HRC) highlighted allegations of forced evictions of Arab Bedouins and referred to the inadequate consideration of Arab Bedouins' needs.<sup>41</sup>

Despite the condemnation by UN monitoring committees, and assorted plans initiated over the years, Israel's policy toward the Arab Bedouin citizens and their unrecognized villages remains

largely unchanged. For example, while the 2008 Goldberg Commission called on the government to "recognize as many villages as possible," in 2012 the government temporarily embraced a different proposal, the Praver Plan. The Praver Plan (put forth in September 2011) would have forcibly evacuated and transferred over 40,000 citizens from their villages and concentrated them in planned towns.<sup>42</sup> It failed to recognize the rights of some 70,000 Arab Bedouins in unrecognized villages and denied them their status and rights as an indigenous minority, despite their historical ties to the land. This is in direct conflict with the Declaration of the Rights of Indigenous Peoples.<sup>43</sup> The Praver Plan was greeted with both international and local opposition, and was withdrawn in December 2013.<sup>44</sup>

Our findings suggest that in the case of Arab Bedouin women in Israel, threat of housing demolition creates higher DS, even after adjusting for women's SEP, physical features of the house, and house location. Previous studies have shown that the actual act of displacement or of losing a house is associated with poor mental health.<sup>45</sup> In the current study, we show that the threat of displacement alone is enough to create DS.

The strength of the association between house under threat of demolition and DS can be viewed through the lens of place attachment theory, which has examined the connection between place and health.<sup>46</sup> While our study sample had not all been displaced, we suggest they may as well have been, since the threat of house demolition severed their secure connection to place.<sup>47</sup> The place attachment theory presupposes that people have attachments to the places they inhabit and that they develop and maintain spatial identity based on their experiences with particular places. For indigenous people, prolonged residence in one place and attachment to their land are significant elements of collective identities.<sup>48</sup> When this spatial identity is interrupted by conflict or forced displacement, communities can become dysfunctional, and this can have serious impacts, including psychological disruption.<sup>49</sup> Health research has shown that being forcibly displaced is trauma-inducing.<sup>50</sup> Such displacement has been related to both short- and long-term mental

illness.<sup>52</sup> Forced displacement and threat of home loss may prompt fear of identity loss, and might be related to high stress levels and post-trauma. A small qualitative study among Arab Bedouin children in the Negev and a study on internal displacement among Palestinian Arabs in Israel found high levels of stress among those who had been displaced, which may be correlated with mental illness. While we did not measure stress levels in the current study, we pose that this finding might be an important area of study for future research with this community.

While Brown and Perkins argue that communities experiencing displacement subsequently undergo a coping phase during which they develop an attachment to their new location, we postulate this is not the case in our study, as the threat of demolition is both real and open-ended; there are no immediate alternative homes available, and Arab Bedouins, unable to rely on their current dwelling, do not have the privilege of coping and developing an attachment to a new place.<sup>53</sup> Many families are left homeless after their house is demolished. Under the Building and Planning Law, villagers are not entitled to alternative shelter—temporary or permanent—nor are they compensated for their losses.<sup>54</sup> After suffering the psychological and financial losses that accompany destruction of their residence, many people revert to living in tents and other impermanent structures to prevent repeat demolition and further trauma. Although other villagers may help them to rebuild, the new house is, once again, under constant threat of demolition. This might be another source of stress in this community.

Human Rights Watch reports have outlined other factors that can elevate stress and expose Arab Bedouin women and the entire Arab Bedouin community to depression. For example, it has been reported that there is often no advance warning of demolitions, and consequently families cannot prepare for them.<sup>55</sup> In addition, while in the past Israeli authorities destroyed a few structures at a time, they have increasingly carried out mass demolitions, targeting entire neighborhoods or villages.<sup>56</sup> Some villages have been destroyed many times.<sup>57</sup> Advanced warning of a demolition is sometimes used as a

pressure tactic; the demolitions are not necessarily carried out. Conversely, in most cases, as there is no warning, the community lives with fear of the unknown, which we speculate would generate tremendous stress and could increase mental health concerns.<sup>58</sup> Furthermore, the process of issuing warnings and carrying out demolitions is often accompanied by violence. When issuing demolition orders, it is common for law-enforcement officials to appear in a large show of force. Meanwhile, villagers attempt to physically impede the demolitions.<sup>59</sup> At times, residents are able to salvage some of their belongings; in other cases, their personal property is destroyed or confiscated. To prevent the loss of their belongings, some villagers destroy their homes with their own hands, an action that again we speculate would elevate stress and expose them to adverse mental health effects.<sup>60</sup>

The association between house under threat of demolition and DS might also relate to the social determinants of health in the displaced populations acting as mediating factors. Displaced persons tend to experience unstable housing and live in poor housing conditions, due to their relative poor SEP and low income.<sup>61</sup> Emerging health research has found that poor quality or substandard housing (dampness, mold, overcrowding, lack of safe drinking water and hot water, etc.) and financial insecurity are linked to poor physical health and to psychological distress.<sup>62</sup> While in this study poor physical features of the house (type of building, house crowding, house connection to water supply and electricity, and house access to public transportation) were higher in houses under threat of demolition, this factor was not significant in explaining DS in the multivariate models. A possible explanation could be that most of the Arab Bedouin population lives in poor housing conditions and poverty; it is the unstable housing situation that creates high levels of stress, especially for women. In a Human Rights Watch study, women whose houses were demolished stated that they did not have a room in which to bathe their children or store their belongings.<sup>63</sup> In a previous focus group study, Arab Bedouin women mentioned that their living conditions and the threat of house demolition were major

obstacles to infant care and were a source of stress.<sup>64</sup>

Our finding that women's SEP was significant even after adjusting for housing features indicates the importance of these variables in explaining DS among Arab Bedouin women. Generally, Arab Bedouin women have low SEP.<sup>65</sup> Our results reveal that women whose houses are under threat of demolition have poorer SEP compared to those whose houses are not under such threat. In all likelihood, the granting of full rights to access health care, education, and employment, as outlined in various human rights instruments, would improve these women's SEP, improve their health, and help to reduce DS among them. However, it cannot eliminate the adverse effects of having a house under threat of demolition on their DS.

Interviewing women who visit MCH clinics may have created a selection bias, since more women from recognized villages and towns visit the MCH clinics than from unrecognized villages, while house demolitions occur more frequently in the unrecognized villages. However, the demographic distribution of our study variables shows that the education, family sources of income, and ability to read and write of our participants are similar to those of Arab Bedouin women in southern Israel in general. While our study found that having a house under threat of demolition is linked with higher DS among Arab Bedouin women, future studies could examine other adverse psychological effects of actual demolition, including post-trauma, stress, anxiety, and other mental health problems.

## Conclusion

The current study demonstrates that the threat of house demolition is associated with higher DS among Arab Bedouin women. The Arab Bedouins are an indigenous minority entitled to housing and health rights, as specified in various international legal human rights instruments, including those ratified by Israel. Until the Israeli government respects the rights of its indigenous people to housing, and stops house demolitions and threats of house demolitions, Arab Bedouins will remain exposed to increased depressive symptoms.

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