Article

Contributing Factors in Whether Displaced Households Want to Receive Humanitarian Information from Humanitarian Actors: Iraq Multi-Cluster Needs Assessment

Jin-Won Noh 1,†, Jooyoung Cheon 2,†, Kyoung-Beom Kim 3, Si Eun Song 3,4, Jiho Cha 5 and Young Dae Kwon 6,*

1 Division of Health Administration, College of Software and Digital Healthcare Convergence, Yonsei University, Wonju 26493, Korea
2 Department of Nursing Science, Sungshin Women’s University, Seoul 02844, Korea
3 Department of Health University, Dankook University, Cheonan 31116, Korea
4 Industry-University Cooperation Foundation, Soochunhyang University, Asan 31538, Korea
5 Moon Soul Graduate School of Future Strategy, Korea Advanced Institute of Science and Technology, Daejeon 34141, Korea
6 Department of Humanities and Social Medicine, College of Medicine and Catholic Institute for Healthcare Management, The Catholic University of Korea, Seoul 06591, Korea

* Correspondence: snukyd1@naver.com; Tel.: +82-2-2258-8251; Fax: +82-2258-8257
† These authors contributed equally to this work.

Abstract: Due to political conflict, insurgency, and the COVID-19, the number of displaced households in need of humanitarian support in Iraq has increased. This study investigated factors related to desire of displaced households to receive humanitarian information. Data from the eighth round of the Iraq Multi-Cluster Needs Assessment was used. We classified the household displacement status, identifying levels and types of humanitarian information that the households sought, together with whether the households were impacted by COVID-19. We identified safety and security, housing, water and electricity services, education, health care, and levels of humanitarian assistance resulted in significant differences between internally displaced person (IDP) and returnee households in terms of interest in receiving humanitarian information. The desire to receive humanitarian information was related to whether household members were unemployed due to COVID-19, displacement status, and walking time to reach the nearest health care facility and marketplace. Returnees and IDPs in Iraq are facing a new crisis. Their individual, structural, and environmental vulnerabilities are increasing commensurately. New strategies such as strategies using online or mobile communication that provide humanitarian information are needed to provide humanitarian information to vulnerable groups such as those who have lost jobs due to COVID-19, female heads of households, and those with health problems. In addition to traditional cash and voucher support, the use of the latest technologies such as smartphones and mobile clinics in humanitarian settings would be new strategies.

Keywords: Coronavirus disease 2019 (COVID-19); internally displaced persons; returnees; humanitarian information; humanitarian assistance

1. Introduction

As COVID-19 continues to spread around the world, various aspects of our daily lives have been seriously disrupted. In particular, the Middle East, which has long experienced ongoing conflict and wars, has been severely damaged by this pandemic. The combined consequences of war, conflict, and crisis in public health are too burdensome for the country to overcome [1–3]. Iraq, which suffers uniquely from recurring wars and conflicts, has been affected by the pandemic just like every other region of the world [3–6]. Due to the Iraq conflict and COVID-19 pandemic, the number of displaced households in need of national humanitarian support has increased [4,5,7]. According to previous studies, forcibly
displaced people have been economically disadvantaged since before the COVID-19 pandemic, but they may have been seriously affected in terms of economics due to measures to prevent the spread of the virus [8]. It has become more difficult for refugees to access the labor market, social safety nets, and supports provided by humanitarian organizations due to COVID-19 pandemic, further worsening the economic situation of forcibly displaced people, thereby exacerbating their livelihood difficulties and poverty.

According to a recent report, about 2.4 million people in Iraq are in acute need, including internally displaced persons (IDPs) and returnees. Two-thirds of people in need have described their humanitarian conditions as severe, extreme, and catastrophic [3]. Infectious disease outbreaks exacerbate these humanitarian conditions. The proportion of IDPs and returnees has increased due to loss of employment and relatively high prices of food [3]. In many countries, including Iraq, mental health, women’s health, and communicable diseases are the main health needs of refugees. Specifically, many refugees report suffering from health problems, such as injuries, posttraumatic stress disorder (PTSD), depression, anxiety, hypertension, diabetes, cardiovascular diseases, respiratory diseases, gynecological problems, communicable diseases, or musculoskeletal conditions [2,3,9–11]. Nevertheless, most refugees have barriers to accessing health care, including geographic barriers, lack of awareness, and lack of education [9,12].

Humanitarian agencies can establish and provide support in various areas, such as health care, camp management, or shelter for displaced households. Unfortunately, most humanitarian agencies have been adversely impacted by the COVID-19 pandemic and have had to curtail their activities due to reduced funding [1–3]. Challenges to humanitarian aid could remain ongoing for the foreseeable future. To adequately provide limited humanitarian resources to the places and people most in need, it is important to identify levels of information and assistance needed according to specific conditions of displaced households.

Even though the need for information on the most urgent and important humanitarian aid due to the pandemic situation and limited resources, there is little research on this [12,13]. Since the majority of IDPs do not live in camps, research on them is not easy, so there are few studies, particularly regarding the health of IDPs [12]. Few studies have been conducted on the characteristics of displaced people who want to receive humanitarian information. Identifying vulnerable groups helps develop new strategies to deliver humanitarian information to displaced populations as efficiently as possible within the constraints of limited resources. Accordingly, the present study investigates what types of information are reported as being top priority among displaced households and determines which factors are related to whether or not displaced households want to receive humanitarian information from humanitarian actors.

2. Materials and Methods

2.1. Design and Data Collection

The REACH Initiative, which endeavours to provide data and analysis from contexts of crisis to inform humanitarian strategies, conducted the eighth round of the Iraq Multi-Cluster Needs Assessment (MCNA) to identify multiple sectors of need in conflict-affected populations across Iraq, together with the Assessment Working Group (AWG), United Nations Office for the Coordination of Humanitarian Affairs (OCHA), and the Inter-Cluster Coordination Group (ICCG). The MCNA VIII conducted phone-based household surveys in consideration of governmental restrictions on movement and access due to COVID-19. Interviewees were individual representatives of whole households. The MCNA VIII data were based on a non-probabilistic approach driven by quota-based sampling. The survey was conducted from 14 July to 23 September 2020. A total of 3872 households participated, comprising households represented by IDPs and returnees. After excluding 198 households with incomplete information from household heads, 3674 households were included in the analysis.
2.2. Variables

The variables contained the demographic characteristics of displaced households (number of family members) and specific vulnerabilities of each head of household (HOH), including features such as being elderly, being female, and/or being an HOH with health problems which were contributing factors to vulnerabilities that were reported in prior literature [14]. Employment status (working status of HOH) and household total income were included as socioeconomic factors. We identified household displacement status. We asked what kind of humanitarian information each household would like to receive from humanitarian actors. We also asked households whether they had had insufficient food anytime in the last 30 days. To assess the impact of COVID-19, we asked households whether they had experienced movement restrictions due to COVID-19 and whether any household members had lost their jobs because of the COVID-19 pandemic. To evaluate accessibility to health care facilities, the walking time of respondents to nearest health care facilities was investigated. We also investigated respondents’ walking time to nearest marketplaces to evaluate their accessibility.

2.3. Ethical Consideration

This study was conducted with ethics approval by the Institutional Review Board of Dankook University (IRB No. DKU-IRB-NON2020-006) in the category of human-subject database research.

2.4. Statistical Analysis

Descriptive analyses were conducted to summarize the humanitarian needs, COVID-19 impacts, vulnerabilities, and demographic characteristics of Iraqi displaced households. We performed inter-population subgroup comparisons using Rao-Scott corrected chi-squared analyses for categorical data and design-weighted univariable linear regression for numerical data. Results are presented as sample frequencies and weighted proportion estimates with 95% confidence intervals (CIs) where appropriate. Multivariable binary logistic regression analysis was performed to explore the factors associated with humanitarian needs among Iraqi displaced households. Adjusted odds ratios (ORs) with 95% CI estimates were reported. Statistical software Stata/MP version 16.1 (Stata Corp LP, College Station, TX, USA) was used for data processing and statistical analyses.

3. Results

Among a total of 3674 representative samples of displaced households in Iraq, 1513 were returnee households originating from regions other than those where the interviews were conducted. The type of humanitarian information most desired by respondents was options for livelihood. It was identified that desires for safety and security, status of housing, water services, electricity services, education, health care, and levels of humanitarian assistance were significantly different between IDP and returnee households (p < 0.001). Internally displaced person households indicated a desire for information about livelihoods (64.8%), humanitarian support (63.7%), and health care (40.4%). In comparison, returnee households indicated interest in humanitarian information about livelihoods (68.2%), status of housing (36.6%), and safety and security (35.5%). In terms of governmental restrictions on movement due to COVID-19, requirements to show identity documents (p = 0.002) and requirements to provide a specific reason for movement (p < 0.001) differed significantly between IDP and returnee households. Also of note, 40.2% of IDP households and 10.4% of returnee households experienced job loss among household members due to COVID-19, indicating a statistically significant difference between the groups (p < 0.001).

Related to heads of IDP households, 8.0% had an elderly-headed household and 12.4% had a female-headed household. Again, in IDP households, 34.9% reported household heads with health problems (injury, chronic/communicable disease, and other examples). At 68.3%, the majority of IDP HOHs reported being employed (working), and the IDP household mean total monthly income was 455,000 Iraqi dinar (IQD). Walking time to reach
the nearest health care facility was less than 15 min for 59.5% of IDP households. As for walking time to reach the nearest marketplace, 83.4% of IDP households were within 15 min. Regarding heads of returnee households, 5.0% were elderly-headed and 9.7% were female-headed. In returnee households, 34.9% reported heads of household with health problems. In terms of employment status and income levels, 81.4% of returnee HOHs reported being employed (working), with a mean total income of 495,000 IQD. Regarding walking time to reach the nearest health care facility, 54.8% of returnee households were within 15 min. As for walking time to reach the nearest marketplace, 75.9% of returnee households reported being within 15 min. In identifying household demographic differences and vulnerability covariate differences between IDP households and returnee households, all factors of mean number of family members (\( p < 0.001 \)), elderly-headed households (\( p < 0.05 \)), HOH working status (\( p < 0.001 \)), walking time to reach the nearest health care facility (\( p < 0.001 \)), and walking time to reach the nearest marketplace (\( p < 0.005 \)) were significantly different between the groups (Table 1).

Table 2 summarizes factors associated with humanitarian information needs among Iraqi displaced households. Households with members who had lost jobs due to COVID-19 (total: OR = 2.061, \( p < 0.001 \), 95% CI = 1.569 to 2.708; returnees: OR = 2.661, \( p < 0.001 \), 95% CI = 1.805 to 3.922) and IDP households (returnees: OR = 0.325, \( p < 0.001 \), 95% CI = 0.255 to 0.414) showed significantly higher needs for humanitarian information. Female HOHs (OR = 1.971, \( p = 0.005 \), 95% CI = 1.228 to 3.164) and households with lower total monthly income (OR = 0.953, \( p = 0.008 \), 95% CI = 0.920 to 0.987) were significantly associated with a higher need for humanitarian information only among IDP households. Heads of household with health problems (OR = 0.666, \( p = 0.044 \), 95% CI = 0.449 to 0.988) were significantly associated with a lower need for humanitarian information only among guest households. Households that were able to reach the nearest health care facility in 30 to 59 min by walking had lower humanitarian information needs than households that were able to reach the nearest health care facility in less than 15 min (total: OR = 0.454, \( p = 0.003 \), 95% CI = 0.272 to 0.759; returnees: OR = 0.308, \( p = 0.002 \), 95% CI = 0.146 to 0.649).

Households that were able to reach the nearest marketplace in more than 15 min by walking had significantly higher humanitarian information needs than households that were able to walk to the nearest marketplace in less than 15 min (internally displaced persons/one to two hours: OR = 11.569, \( p = 0.003 \), 95% CI = 2.358 to 56.769; internally displaced persons/more than two hours: OR = 2.789, \( p = 0.023 \), 95% CI = 1.153 to 6.747; returnees/one to two hours: OR = 17.106, \( p = 0.004 \), 95% CI = 2.476 to 120.500; returnees/more than two hours: OR = 3.070, \( p = 0.027 \), 95% CI = 1.138 to 8.281) (Table 2) (Figure 1).
Table 1. Humanitarian needs, COVID-19 impacts, vulnerabilities, and demographic characteristics of Iraqi displaced households.

| Domain | Variable | Response | IDPs (n = 2161) | Returnees (n = 1513) | Total (n = 3674) | Statistic † | p-Value |
|--------|----------|----------|----------------|----------------------|----------------|-------------|---------|
|        |          |          | n   | Weighted% | n   | Weighted% | n   | Weighted% |
|        |          |          |     |           |     |           |     |           |
| **Humanitarian needs** |          |          |     |           |     |           |     |           |
|        | Safety and security | No | 1570 | 76.8 | 1001 | 64.5 | 2571 | 67.0 | 21.9 | <0.001 |
|        |          | Yes | 591 | 23.2 | 512 | 35.5 | 1103 | 33.0 | 72.4 | <0.001 |
|        | Status of housing | No | 1650 | 84.2 | 1126 | 63.4 | 2776 | 67.6 | 1.7 | 0.195 |
|        |          | Yes | 511 | 15.9 | 387 | 36.6 | 898 | 32.4 | 96.1 | <0.001 |
|        | Livelihoods | No | 809 | 35.2 | 587 | 31.8 | 1396 | 32.5 | 372.7 | <0.001 |
|        |          | Yes | 1352 | 64.8 | 926 | 68.2 | 2278 | 67.5 | 17.2 | <0.001 |
|        | Water services | No | 1859 | 92.2 | 1194 | 71.0 | 3053 | 75.3 | 57.5 | <0.001 |
|        |          | Yes | 302 | 7.8 | 319 | 29.0 | 621 | 24.7 | 0.8 | 0.386 |
|        | Electricity services | No | 1769 | 92.9 | 1037 | 64.6 | 2806 | 70.3 | 144.6 | <0.001 |
|        |          | Yes | 392 | 7.1 | 476 | 35.4 | 868 | 29.7 | 0.8 | 0.369 |
|        | Education | No | 2063 | 96.3 | 1413 | 90.0 | 3476 | 91.2 | 57.5 | <0.001 |
|        |          | Yes | 98 | 3.7 | 100 | 10.1 | 198 | 8.8 | 0.1 | 0.788 |
|        | Health care | No | 1426 | 59.6 | 1052 | 78.2 | 2478 | 74.4 | 0.1 | 0.788 |
|        |          | Yes | 735 | 40.4 | 461 | 21.8 | 1196 | 25.6 | 0.1 | 0.788 |
|        | Humanitarian assistance | No | 940 | 36.3 | 944 | 68.2 | 1884 | 61.8 | 274.2 | <0.001 |
|        |          | Yes | 1221 | 63.7 | 569 | 31.8 | 1790 | 38.2 | 0.8 | 0.386 |
|        | Legal services | No | 2059 | 93.2 | 1400 | 94.3 | 3459 | 94.1 | 0.8 | 0.386 |
|        |          | Yes | 102 | 6.8 | 113 | 5.7 | 215 | 5.9 | 1.7 | 0.195 |
|        | House, land, and property services | No | 2119 | 98.6 | 1469 | 97.9 | 3588 | 98.1 | 192 | 9.7 |
|        |          | Yes | 42 | 1.5 | 44 | 2.1 | 86 | 2.0 | 9.5 | 0.002 |
|        | Insufficient food (past 30 days) | No | 1874 | 80.1 | 1432 | 97.8 | 3306 | 94.2 | 274.2 | <0.001 |
|        |          | Yes | 287 | 19.9 | 81 | 2.2 | 368 | 5.8 | 0.1 | 0.788 |
|        | Need to obtain security clearance/coupons | No | 2046 | 95.0 | 1363 | 89.1 | 3409 | 90.3 | 0.1 | 0.788 |
|        |          | Yes | 83 | 5.0 | 109 | 10.9 | 192 | 9.7 | 9.5 | 0.002 |
|        | Need to show ID documents | No | 1993 | 89.7 | 1377 | 87.2 | 3370 | 87.7 | 1.4 | 0.242 |
|        |          | Yes | 146 | 10.3 | 100 | 12.8 | 246 | 12.3 | 28.6 | <0.001 |
|        | Time restrictions on when to leave and return | No | 2084 | 92.1 | 1409 | 97.5 | 3493 | 96.4 | 0.1 | 0.788 |
|        |          | Yes | 53 | 7.9 | 69 | 2.5 | 122 | 3.6 | 9.5 | 0.002 |
|        | Need to provide a specific reason for movement | No | 2046 | 95.0 | 1363 | 89.1 | 3409 | 90.3 | 0.1 | 0.788 |
|        |          | Yes | 83 | 5.0 | 109 | 10.9 | 192 | 9.7 | 9.5 | 0.002 |
|        | Movement restrictions by government | No | 1993 | 89.7 | 1377 | 87.2 | 3370 | 87.7 | 1.4 | 0.242 |
|        |          | Yes | 146 | 10.3 | 100 | 12.8 | 246 | 12.3 | 28.6 | <0.001 |
Table 1. Cont.

| Domain                                      | Variable                                                     | Response | IDPs \((n = 2161)\) | Returnees \((n = 1513)\) | Total \((n = 3674)\) | Statistic \(\dagger\) | \(p\)-Value |
|---------------------------------------------|--------------------------------------------------------------|----------|----------------------|-------------------------|-----------------------|-------------------------|-------------|
| Physical roadblocks                         |                                                              |          |                      |                         |                       |                         |             |
|                                              | No                                                           | 2069     | 95.9                 | 1390                    | 96.8                  | 3459                    | 96.6        |
|                                              | Yes                                                          | 59       | 2.7                  | 130                    | 8.6                   | 143                     | 4.1         |
|                                              | Missing                                                      | 33       | 0.0                  | 39                      | 0.0                   | 72                      | 0.0         |
|                                              |                                                              |          |                      |                         |                       |                         |             |
| COVID-19 impacts                            |                                                              |          |                      |                         |                       |                         |             |
|                                              | Unemployment of household members due to COVID-19             |          |                      |                         |                       |                         |             |
|                                              | No                                                           | 1443     | 95.8                 | 1192                    | 89.6                  | 2635                    | 83.6        |
|                                              | Yes                                                          | 705      | 4.2                  | 292                     | 10.4                  | 997                     | 16.4        |
|                                              | Missing                                                      | 13       | 0.0                  | 29                      | 0.0                   | 42                      | 0.0         |
|                                              |                                                              |          |                      |                         |                       |                         |             |
|                                              | Number of family members *                                   |          |                      |                         |                       |                         |             |
|                                              | No                                                           | 1989     | 92.0                 | 1418                    | 95.0                  | 3407                    | 94.4        |
|                                              | Yes                                                          | 172      | 8.0                  | 95                      | 5.0                   | 267                     | 5.6         |
|                                              | Missing                                                      | 1901     | 87.7                 | 1339                    | 90.3                  | 3240                    | 89.8        |
|                                              |                                                              | 260      | 12.4                 | 174                     | 9.7                   | 434                     | 10.2        |
|                                              |                                                              |          |                      |                         |                       |                         |             |
|                                              | Elderly-headed household (65 or older)                       |          |                      |                         |                       |                         |             |
|                                              | No                                                           | 1392     | 65.1                 | 1005                    | 65.1                  | 2397                    | 65.1        |
|                                              | Yes                                                          | 769      | 34.9                 | 508                     | 34.9                  | 1277                    | 34.9        |
|                                              |                                                              | 655      | 31.7                 | 347                     | 18.6                  | 1002                    | 21.2        |
|                                              |                                                              |          |                      |                         |                       |                         |             |
|                                              | Female-headed household                                      |          |                      |                         |                       |                         |             |
|                                              | No                                                           | 1901     | 87.7                 | 1339                    | 90.3                  | 3240                    | 89.8        |
|                                              | Yes                                                          | 260      | 12.4                 | 174                     | 9.7                   | 434                     | 10.2        |
|                                              |                                                              |          |                      |                         |                       |                         |             |
|                                              | HOH with health problems (injury, chronic/communicable disease, etc.) |          |                      |                         |                       |                         |             |
|                                              | No                                                           | 1392     | 65.1                 | 1005                    | 65.1                  | 2397                    | 65.1        |
|                                              | Yes                                                          | 769      | 34.9                 | 508                     | 34.9                  | 1277                    | 34.9        |
|                                              |                                                              | 655      | 31.7                 | 347                     | 18.6                  | 1002                    | 21.2        |
|                                              |                                                              |          |                      |                         |                       |                         |             |
|                                              | Employment status of HOH                                      |          |                      |                         |                       |                         |             |
|                                              | No                                                           | 1399     | 92.0                 | 1418                    | 95.0                  | 3407                    | 94.4        |
|                                              | Yes                                                          | 769      | 34.9                 | 508                     | 34.9                  | 1277                    | 34.9        |
|                                              |                                                              | 655      | 31.7                 | 347                     | 18.6                  | 1002                    | 21.2        |
|                                              |                                                              |          |                      |                         |                       |                         |             |
| Household demographic/vulnerability covariates | Household’s total monthly income (per 100,000 IQD) |          |                      |                         |                       |                         |             |
|                                              | No                                                           | 1399     | 92.0                 | 1418                    | 95.0                  | 3407                    | 94.4        |
|                                              | Yes                                                          | 769      | 34.9                 | 508                     | 34.9                  | 1277                    | 34.9        |
|                                              |                                                              | 655      | 31.7                 | 347                     | 18.6                  | 1002                    | 21.2        |
|                                              |                                                              |          |                      |                         |                       |                         |             |
|                                              | Walking time to reach the nearest health care facility       |          |                      |                         |                       |                         |             |
|                                              | No                                                           | 1399     | 92.0                 | 1418                    | 95.0                  | 3407                    | 94.4        |
|                                              | Yes                                                          | 769      | 34.9                 | 508                     | 34.9                  | 1277                    | 34.9        |
|                                              |                                                              | 655      | 31.7                 | 347                     | 18.6                  | 1002                    | 21.2        |
|                                              |                                                              |          |                      |                         |                       |                         |             |
|                                              | Walking time to reach the nearest marketplace                |          |                      |                         |                       |                         |             |
|                                              | No                                                           | 1399     | 92.0                 | 1418                    | 95.0                  | 3407                    | 94.4        |
|                                              | Yes                                                          | 769      | 34.9                 | 508                     | 34.9                  | 1277                    | 34.9        |
|                                              |                                                              | 655      | 31.7                 | 347                     | 18.6                  | 1002                    | 21.2        |

IDP, internally displaced person; HOH, head of household; IQD, Iraqi dinar. * Weighted mean estimates and 95% confidence intervals are presented. † Inter-population subgroup comparisons were performed using Rao-Scott corrected chi-square tests for categorical data and sampling design weighted univariable linear regression for numerical data. Strata with single sampling unit centered at overall mean.
Table 2. Factors associated with humanitarian information needs among Iraqi displaced households.

| Variable                                      | Total | IDPs | Returnees |
|-----------------------------------------------|-------|------|-----------|
|                                               | OR    | Robust SE | p-Value | LL | UL | OR | Robust SE | p-Value | LL | UL | OR | Robust SE | p-Value | LL | UL |
| Unemployment of household members due to COVID-19 |       |         |          |    |    |     |         |          |    |    |     |         |          |    |    |
| No                                            | 1.000 | ref    |          | 1.000 | ref | 1.000 | ref    |          | 1.000 | ref | 1.000 | ref |
| Yes                                           | 2.061 | 0.287  | <0.001   | 2.708 | 1.307 | 0.227 | 0.124 | 0.929 | 1.839 | 2.661 | 0.526 | <0.001 | 1.805 | 3.922 |
| Displacement status                            |       |         |          |    |    |     |         |          |    |    |     |         |          |    |    |
| IDPs                                          | 1.000 | ref    |          | 1.000 | ref | N/A |
| Returnees                                     | 0.325 | 0.040  | <0.001   | 0.255 | 0.414 |
| Number of family members                      |       |         |          |    |    |     |         |          |    |    |     |         |          |    |    |
| No                                            | 0.996 | 0.024  | 0.865    | 0.949 | 1.045 | 1.009 | 0.027 | 0.749 | 0.956 | 1.064 | 0.988 | 0.033 | 0.726 | 0.926 | 1.055 |
| Yes                                           | 1.434 | 0.336  | 0.124    | 0.906 | 2.271 | 1.971 | 0.476 | 0.005 | 1.228 | 3.164 | 1.333 | 0.432 | 0.376 | 0.706 | 2.516 |
| Female HOH                                     |       |         |          |    |    |     |         |          |    |    |     |         |          |    |    |
| No                                            | 1.000 | ref    |          | 1.000 | ref | 1.000 | ref |
| Yes                                           | 1.411 | 0.445  | 0.275    | 0.760 | 2.620 | 0.747 | 0.214 | 0.310 | 0.426 | 1.311 | 1.833 | 0.783 | 0.156 | 0.793 | 4.239 |
| Elderly HOH                                    |       |         |          |    |    |     |         |          |    |    |     |         |          |    |    |
| No                                            | 1.000 | ref    |          | 1.000 | ref | 1.000 | ref |
| Yes                                           | 1.411 | 0.445  | 0.275    | 0.760 | 2.620 | 0.747 | 0.214 | 0.310 | 0.426 | 1.311 | 1.833 | 0.783 | 0.156 | 0.793 | 4.239 |
| HOH with health problems                       |       |         |          |    |    |     |         |          |    |    |     |         |          |    |    |
| No                                            | 1.000 | ref    |          | 1.000 | ref | 1.000 | ref |
| Yes                                           | 1.411 | 0.445  | 0.275    | 0.760 | 2.620 | 0.747 | 0.214 | 0.310 | 0.426 | 1.311 | 1.833 | 0.783 | 0.156 | 0.793 | 4.239 |
| Employment status of HOH                       |       |         |          |    |    |     |         |          |    |    |     |         |          |    |    |
| No                                            | 1.000 | ref    |          | 1.000 | ref | 1.000 | ref |
| Yes                                           | 0.759 | 0.119  | 0.077    | 0.558 | 1.031 | 0.993 | 0.180 | 0.968 | 0.695 | 1.418 | 0.666 | 0.134 | 0.044 | 0.449 | 0.988 |
| Household’s total monthly income (per 100,000 IQD) |       |         |          |    |    |     |         |          |    |    |     |         |          |    |    |
| No                                            | 1.000 | ref    |          | 1.000 | ref | 1.000 | ref |
| Yes                                           | 0.931 | 0.181  | 0.712    | 0.635 | 1.364 | 1.121 | 0.226 | 0.571 | 0.755 | 1.666 | 0.887 | 0.247 | 0.666 | 0.514 | 1.530 |
| Walking time to reach the nearest health care facility |       |         |          |    |    |     |         |          |    |    |     |         |          |    |    |
| <15 min                                       | 1.000 | ref    |          | 1.000 | ref | 1.000 | ref |
| 15–29 min                                     | 1.315 | 0.231  | 0.120    | 0.931 | 1.857 | 1.189 | 0.224 | 0.359 | 0.822 | 1.720 | 1.334 | 0.291 | 0.187 | 0.869 | 2.046 |
| 30–59 min                                     | 0.454 | 0.119  | 0.003    | 0.272 | 0.759 | 1.329 | 0.410 | 0.356 | 0.726 | 2.433 | 0.308 | 0.117 | 0.002 | 0.146 | 0.649 |
| 1–3 h                                         | 1.370 | 0.404  | 0.286    | 0.768 | 2.444 | 1.022 | 0.394 | 0.954 | 0.480 | 2.176 | 1.385 | 0.507 | 0.374 | 0.675 | 2.841 |
| 3 h<                                          | 0.910 | 0.461  | 0.852    | 0.337 | 2.455 | 1.246 | 0.658 | 0.678 | 0.442 | 3.510 | 0.839 | 0.879 | 0.867 | 0.107 | 6.554 |
Table 2. Cont.

| Variable | Total | IDPs | Returnees |
|----------|-------|------|-----------|
|          | OR    | Robust SE | p-Value | LL | UL | OR    | Robust SE | p-Value | LL | UN | OR    | Robust SE | p-Value | LL | UL |
| Walking time to reach the nearest marketplace |
| <15 min | 1.000 | ref | 1.000 | ref | 1.000 | ref | 1.000 | ref | 1.000 | ref | 1.000 | ref | 1.000 | ref | 1.000 | ref | 1.000 | ref |
| 15–29 min | 0.939 | 0.209 | 0.776 | 0.607 | 1.451 | 0.634 | 0.166 | 0.082 | 0.380 | 1.059 | 1.046 | 0.277 | 0.864 | 0.623 | 1.758 |
| 30–59 min | 0.988 | 0.389 | 0.975 | 0.456 | 2.140 | 1.072 | 0.373 | 0.842 | 0.542 | 2.120 | 1.030 | 0.516 | 0.953 | 0.386 | 2.752 |
| 1–2 h | 11.569 | 9.386 | 0.003 | 2.358 | 56.769 | 1.217 | 0.798 | 0.765 | 0.336 | 4.402 | 17.275 | 17.106 | 0.004 | 2.476 | 120.500 |
| 2 h < | 2.789 | 1.257 | 0.023 | 1.153 | 6.747 | 0.331 | 0.342 | 0.285 | 0.043 | 2.519 | 3.070 | 1.553 | 0.027 | 1.138 | 8.281 |

IDP, internally displaced person; HOH, head of household; IQD, Iraqi dinar; OR, odds ratio; SE, standard error; CI, confidence interval; LL, lower limit of 95% CI; UL, upper limit of 95% CI; ref, reference; N/A, not applicable.
4. Discussion

Due to political conflict and insurgency and the COVID-19 pandemic, the number of displaced households in need of national humanitarian support has increased in Iraq [5–7]. Because humanitarian resources are limited, however, it is important to identify types of information and levels of assistance needed based on the specific conditions of displaced households. Accordingly, the present study performs multivariate binomial logistic regression analysis with MCNA VIII data to investigate factors related to desire for humanitarian information from humanitarian actors in displaced households.

Our findings highlight that information about livelihoods was the top priority in both IDP and returnee households. The next most important types of information were humanitarian support and health care for IDPs and housing status and safety/security for returnees. These results are similar to those of a previous study conducted on refugees from six African countries [15]. According to the study, refugees were struggling with economic difficulties, limited livelihoods, lack of access to services, and health-related and security risks due to COVID-19 pandemic. IDPs receive more protection than returnees from the government because IDPs remain in their home countries and become refugees. Nevertheless, IDPs often move to areas where humanitarian aid is difficult, making them a
Returnees have been subject to strict restrictions on movement by the government in the context of the COVID-19 pandemic. They report needing humanitarian aid in more basic and general areas such as housing, safety, electricity services, and water supply. High levels of unemployment and the high price of food have increased the proportion of IDPs and returnees with acute needs [3]. Regardless, humanitarian aid is likely to remain limited for a while insofar as most humanitarian agencies have decreased their activities due to reduced funding caused by the COVID-19 pandemic [1–3].

In this study, unemployment in returnee households due to COVID-19 is shown to be related to increased demand for humanitarian information in Iraq. The fragile and weakened socioeconomic state has led to widespread unemployment and food insecurity, causing a higher demand for humanitarian aid in displaced households than in the past [3–6]. Refugees report that they have had difficulties finding jobs due to discrimination and other physical/financial barriers [3,10]. Previous research has shown that forcibly displaced people who have been economically affected by the COVID-19 pandemic coped with their income loss by reducing their food consumption [8]. Refugees in low-income countries might not have sufficient financial resources to buffer against the shocks created by the COVID-19 pandemic in combination with a drop in oil prices dating to early 2020 [2,3,5]. As revealed in this study, many existing IDPs in Iraq are currently losing their jobs due to extended complications of the COVID-19 pandemic. In particular, information on humanitarian assistance for returnees who have lost jobs due to COVID-19 has become more urgent. As the results of this study suggest, in order to effectively meet the humanitarian needs of displaced households in unexpected situations such as the COVID-19 pandemic, it is necessary for humanitarians and governments to cooperate to identify what humanitarian information they want according to their characteristics [17].

The status of being a female HOH is shown to be a factor in wanting to receive humanitarian information in IDP households. Previous studies have reported that females in the Middle East are more likely to be food-insecure than males. In existing literature, females show lower educational attainment, higher unemployment status, and lower household incomes in comparison to males [18,19]. The proportion of female HOHs in IDP households was higher than the proportion of female HOHs in returnee households in 2020 in Iraq [20]. Female HOHs perceive higher threats than male HOHs to livelihood and are likely to be edged out from competition for employment [3–6]. Therefore, females are a more vulnerable population in terms of health care needs [9,11]. Most IDPs do not live in camps [12], so some strategies are needed to help female HOHs settle and adapt in camps. A case study in Northern Nigeria on IDPs stressed the supportive communal relationships, seeking alternative means of income, and healthcare services in camp-like settings [13]. Female not having a male HOH who can protect them from threats should be given the opportunity to participate as a member of camps and obtain appropriate health information about themselves and their children within a safe environment [13].

In this study, returnee households with HOHs with health problems were less likely to want information about humanitarian assistance. Despite suffering from physical and/or mental illness, many refugees reported being not able to receive care for their health problems due to long distances from home to health care facilities, lack of adequate health care providers and equipment/medications, and/or long waiting time [2,9–11]. Also, in Iraq, private services have been shown to be preferable to refugee camp clinics for primary health care [11]. This might explain why returnees were less likely to want information about humanitarian assistance, such as health care, even in instances of HOHs with health problems. Further research should be conducted among IDPs in camps, IDPs out of camps, and returnees to examine factors associated with decisions to select types of health care in cases of HOHs with health problems.

In this study, returnees who reported being able to walk to the nearest health care facility within 30–59 min had lower humanitarian information requirements than returnees with a walking time of less than 15 min to the nearest health care facility. The distance that people with health problems can walk (which might be no more than 30 min) and
the availability of transportation seem to have influenced this finding. Previous studies have shown that IDPs in gathered settings, such as camps, were more likely to receive assistance and protection from humanitarian actors in comparison to refugees in dispersed settings including returnees [21]. Barriers to access to health care facilities reported by refugees include health problems, costs, lack of knowledge about available health care services, and/or inability to get an appointment [9,11]. Also, displaced persons have been shown to have difficulties in accessing health care services due to financial burdens or the absence of key individual documentation [3]. Tailored solutions to provide humanitarian information depending on distance from health care facilities and displacement status will be a challenge, but such solutions have the potential to meaningfully improve the health problems of returnees [21]. In terms of geospatial analyses based on health care facilities, the establishment of temporary, mobile clinics by the Ministry of Health of Iraq and other governmental organizations and non-governmental organizations can help provide humanitarian assistance to returnees [22]. A recent systematic review supported the use of mobile clinics which can provide multiple primary health care services in humanitarian settings [23].

In returnees, greater walking distances from the nearest marketplace were shown to correlate to a greater desire to receive humanitarian information. Most returnees reported needing humanitarian information because of their reduced ability to purchase or access food through markets, resulting in increased nutrition-based health problems [4,5]. Restrictions on movement, disruption of public services, and other measures to contain the spread of COVID-19 have made these issues even more devastating for returnees [3]. Fortunately, overall restrictions on marketplace access have been improved since August 2020 in Iraq [4]. Nevertheless, further research is needed to investigate the extent to which governmental restrictions on the movement of returnees have eased.

The findings of this study will serve as a valuable and comprehensive reference point for international and local policymakers and stakeholders in providing humanitarian assistance. In this study, factors contributing to the desire of displaced people to benefit from humanitarian assistance programs varied among displaced groups. Technology, including online and mobile communications, can be used to provide displaced households with information about jobs, health care services, and transportation to health care facilities or marketplaces by humanitarian actors [5,7]. Most IDP and returnee households have at least one member with access to a smartphone. Accordingly, humanitarian organizations have begun to use mobile technologies and other new technologies to provide humanitarian assistance [24]. As the best example, the Iraq IDPs Information Center offers free, multilingual services for IDPs and refugees to obtain relevant, up-to-date information on a variety of issues [25]. Mobile asset replacement, cash-for-work programs, and legal assistance provided by the government are emerging as priorities to assist displaced persons [3]. Many women have fewer opportunities than men to use technology to receive humanitarian assistance. Married women tend to use the mobile phones of their husbands, and some more conservative women are not willing to provide their own personal information online [24]. Traditional cash and voucher assistance remains a key component of humanitarian assistance for female HOHs to meet their basic needs and access health care services [3].

Regardless, the study has some limitations to interpret. First, the quality of data may differ between face-to-face interview samples and phone-based interview samples. Phone-based interview samples had a relatively high health risk associated with COVID-19 and access restrictions compared to face-to-face interview samples [3]. Interviews using mobile phones have certain challenges with ensuring comprehensive communication and collecting answers to sensitive questions. Therefore, the questionnaire for phone-based interviews should include more specific situations in which humanitarian aid is needed and additional questions about poor health problems. Second, because no distinction was made between displaced households in camps and those out of camps, the differences in characteristics between these two groups are not reflected in the results. Accordingly,
caution is needed in generalizing the findings of the analysis. Third, the researcher should be cautious about generalizing the study findings because this study does not adjust the geographical aspects, such as the regional characteristics or areas of origin where displaced people currently live [3]. Finally, some questions related to government services or safety issues might be underestimated or overestimated due to displacement status (i.e., social desirability bias).

5. Conclusions

This study investigates factors contributing to whether displaced households want to receive humanitarian information from humanitarian actors during the COVID-19 pandemic in Iraq. Both IDP and returnee households were desirous of receiving information about livelihoods as their top priority. Unemployment in members of returnee households due to COVID-19, being a female HOH, and IDP heads of household with health problems were shown to be urgent issues in Iraq. Under these circumstances, displaced households report needing more humanitarian aid than before. In aspects of humanitarian aid and policy support, financial support (i.e., traditional cash, voucher assistance, job expansion, and other types of financial aid), relief of movement restrictions, transportation support, establishment of temporary clinics, and technology support are needed for displaced populations. The findings of this study are a valuable and inclusive point of reference for international and local policymakers and stakeholders to provide humanitarian assistance for displaced households in Iraq.

**Author Contributions:** Conceptualization, J.-W.N., J.C. (Jooyoung Cheon), J.C. (Jiho Cha) and Y.D.K.; methodology, K.-B.K.; formal analysis, K.-B.K.; project administration, S.E.S.; supervision, Y.D.K.; writing-original draft, J.-W.N., J.C. (Jooyoung Cheon), K.-B.K., and S.E.S.; writing-review & editing, J.-W.N., J.C. (Jiho Cha) and Y.D.K. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research received no external funding.

**Institutional Review Board Statement:** The human-subject database research was conducted according to the guidelines of the Declaration of Helsinki and approved by the Institutional Review Board of Dankook University (IRB No. DKU-IRB-NON2020-006, 23 September 2020).

**Informed Consent Statement:** Requirement for individual patient consent was waived because the data were obtained from a public data depository freely accessible.

**Data Availability Statement:** Data was obtained from REACH Initiative and is available with the permission of REACH Initiative.

**Conflicts of Interest:** The authors declare no conflict of interest.

**References**

1. Bradley, S.; The Immediate Impact of the Pandemic on Geneva-Based Non-Governmental Organisations has been Restrained, a Survey Reveals. But NGOs Fear Tough Times Ahead Linked to Funding. *Geneva: SWI*. 2020. Available online: https://www.swissinfo.ch/eng/covid-19_geneva-ngos-face-uncertain-future-due-to-covid-19-funding-impact/45791450 (accessed on 8 April 2022).

2. Hajjar, M.S.; Abu-Sittah, G.S. The multidimensional burden of COVID-19 on Syrian refugees in Lebanon. *J. Glob. Health* **2021**, *1*, 05003. [CrossRef]

3. OCHA. Humanitarian Needs Overview Iraq 2021. Available online: https://hum-insight.info/plan/1035 (accessed on 8 April 2022).

4. World Bank Group. Iraq High Frequency Phone Survey (IHFPS) to Monitor Socioeconomic Trends during COVID-19. Available online: https://www.worldbank.org/en/country/iraq/publication/iraq-high-frequency-phone-survey-ihfps-to-monitor-impacts-of-covid-19-january-2021 (accessed on 9 April 2022).

5. Dodd, W.; Kipp, A.; Bustos, M.; McNeil, A.; Little, M.; Lau, L.L. Humanitarian food security interventions during the COVID-19 pandemic in low-and middle-income countries: A review of actions among non-state actors. *Nutrients* **2021**, *13*, 2333. [CrossRef] [PubMed]

6. Bizri, N.A.; Alam, W.; Mobayed, T.; Tamim, H.; Makki, M.; Mushrafiieh, U. COVID-19 in conflict region: The Arab levant response. *BMC Public Health* **2021**, *21*, 1590. [CrossRef] [PubMed]
7. Durrance-Bagale, A.; Salman, O.M.; Omar, M.; Alhaffar, M.; Ferdaus, M.; Newaz, S.; Krishnan, S.; Howard, N. Lessons from humanitarian clusters to strengthen health system responses to mass displacement in low and middle-income countries: A scoping review. *J. Migr. Health* 2020, 1, 100028. [CrossRef] [PubMed]

8. Rohwerder, B. The Socioeconomic Impacts of the COVID-19 Pandemic on Forcibly Displaced Persons. In *Covid Collective Helpdesk Report 6*: Foreign, Commonwealth and Development Office, Institute of Development Studies: Brighton, UK, 2021.

9. El Arnaout, N.; Rutherford, S.; Zreik, T.; Nabulsi, D.; Yassin, N.; Saleh, S. Assessment of the health needs of Syrian refugees in Lebanon and Syria’s neighboring countries. *Confl. Health* 2019, 13, 31. [CrossRef] [PubMed]

10. Dhalimi, A.; Wright, A.M.; Jami, H.; Arnetz, B.B. Perception of discrimination in employment and health in refugees and immigrants. *Stigma Health* 2018, 3, 325–329. [CrossRef] [PubMed]

11. El Arnaout, N.; Rutherford, S.; Zreik, T.; Nabulsi, D.; Yassin, N.; Saleh, S. Assessment of the health needs of Syrian refugees in Lebanon and Syria’s neighboring countries. *Confl. Health* 2019, 13, 31. [CrossRef] [PubMed]

12. Cantor, D.J.; Swartz, J.; Roberts, B.; Abbara, A.; Ager, A.; Bhutta, Z.A.; Blanchet, K.; Bunte, D.M.; Chukwuorji, J.C.; Daoud, N.; et al. Understanding the health needs of internally displaced persons: A scoping review. *J. Migr. Health* 2021, 4, 100071. [CrossRef] [PubMed]

13. Ekezie, W. Resilience actions of Internally Displaced Persons (IDPs) living in camp-like settings: A Northern Nigeria case study. *J. Migr. Health* 2022, 6, 100115. [CrossRef] [PubMed]

14. REACH Initiative. *Refugee Vulnerability Profiles, Maban, Country, Upper Nile, South Sudan*. 2013. Available online: https://data.unhcr.org/fr/documents/download/28967 (accessed on 5 August 2022).

15. Segadlo, N.; Krause, U.; Zanker, F.; Edler, H. Effects of the COVID-19 Pandemic on Refugees and Their Protection in Kenya, Uganda, Ghana, Nigeria, South Africa and Zimbabwe; Arnold Bergstraesser Institut: Freiburg im Breisgau, Germany, 2021.

16. The UN Refugee Agency (UNHCR). *Internally Displaced People. UNHCR (Asia Pacific)*. 2021. Available online: https://www.unhcr.org/internally-displaced-people.html (accessed on 8 April 2022).

17. Abdoul-Azize, H.T. Social protection for refugees in the COVID-19 pandemic era: Insights from Turkey, Colombia and Uganda. *Nat. Volatiles Essent. Oils* 2021, 8, 14778–14798.

18. Kharroubi, S.; Naja, F.; Diab-El-Harake, M.; Jomaa, L. Food insecurity pre- and post the COVID-19 pandemic and economic crisis in Lebanon: Prevalence and projections. *Nutrients* 2021, 13, 2976. [CrossRef] [PubMed]

19. Omidvar, N.; Ahmadi, D.; Sinclair, K.; Melgar-Quinonez, H. Food security in selected Middle East and North Africa (MENA) countries: An inter-country comparison. *Food Secur.* 2019, 11, 531–540. [CrossRef]

20. REACH. *Iraq: Multi-Cluster Needs Assessment (MCNA)—Round VIII, December 2020*. Iraq: OCHA. 2021. Available online: https://reliefweb.int/report/iraq/iraq-multi-cluster-needs-assessment-mcna-round-viii-december-2020 (accessed on 8 April 2022).

21. Pham, P.N.; Fozouni, L.; Al-Saiedi, A.; Coughlin, K.; Vinck, P. Association between distress and displacement settings: A cross-sectional survey among displaced Yazidis in Northern Iraq. *BMC Public Health* 2021, 21, 679. [CrossRef] [PubMed]

22. Lami, F.; Ali, A.A.; Fathullah, K.; Abdullatif, H. Assessment of temporary medical clinics during the Arbaeenia mass gathering at Al-Karkh, Baghdad, Iraq, in 2014. Cross-sectional study. *JMR Public Health Surveill.* 2019, 5, e10903. [CrossRef] [PubMed]

23. McGowan, C.R.; Baxter, L.; Deola, C.; Gayford, M.; Marston, C.; Cummings, R.; Checchi, F. Mobile clinics in humanitarian emergencies: A systematic review. *Confl. Health* 2020, 14, 4. [CrossRef] [PubMed]

24. Robehmed, S. Designing user-centered humanitarian technologies with displaced people in Iraq: Lessons from Refunite’s mobile family tracing platform. *Int. Migr.* 2019, 57, 109–120. [CrossRef]

25. Woods, G.; Mace, S. Connecting Humanitarian Actors and Displaced Communities: The IDP Call Centre in Iraq 2015. Available online: https://odihpn.org/publication/connecting-humanitarian-actors-and-displaced-communities-the-idp-call-centre-in-iraq/ (accessed on 8 April 2022).