This is the third of our brief statistical reports on the daily life, health and environmental conditions of families living under curfew and in fear and danger, during the latest Israeli invasion of the town of Jenin. This report excludes Jenin Refugee Camp which deserves an investigation on its own. These reports form a series covering life events during Israel’s April 2000 re-occupation of the cities of Ramallah/Bireh, Nablus, Jenin, Tulkarem and Bethlehem. Although we are dispatching each of the reports separately, ideally, they should be considered together. A final report will follow the individual town reports and will focus on the summary results for all the towns combined.

General conditions have been documented rather well by journalists, researchers and institutions. However, this statistical report focuses on households and individuals, instead of communities, offering quantitative indicators generalizable to all of the population, and confirming or negating impressions and observations made in rapid appraisal through interviews. The invasion of Jenin began on the 2nd of April and ended 21 days later, on the 22nd of 2002. Then again, since the partial withdrawal of the Israeli army, Jenin town has been reinvaded more than once, usually for a period of several hours, where the Israeli army enters the town, destroys homes and infrastructure, arrests or kills selected individuals then leaves. The local population believes that this will become one of the routines of daily life.

In a recently completed report, international donors estimated the damage caused by the Israeli military offensive that commenced 29 March 2002 through April 2002 at 361 million US dollars. The damage assessment was carried out by the World Bank, United Nations agencies, the European Union, the U.S. Agency for International Development as well as other countries and donors and breaks down losses at 97 million dollars incurred by businesses, consisting of damage to building, equipment and spoilage/loss of investory, and termed as the heaviest toll, 64 million US dollars for damaged or destroyed roads, 66 million for damaged or destroyed houses, and 48 million US dollars for damaged or destroyed cultural heritage sites. This estimate of losses, however, does not cover the losses of income during the extended curfews and siege, which are likely to exceed the estimates for physical damage. This damage report also does not include the social and humanitarian costs of such an onslaught, which these quick statistical reports address to some extent.

While the donor report indicates that it was the Nablus region that was the hardest-hit in terms of physical / inventory damage alone, available reports indicate that Jenin witnessed by far the worst humanitarian crisis of all, mainly because of the tragic events that took place in Jenin Refugee Camp, where war crimes appear to have been committed by the Israeli army, including grave breaches of the Fourth Geneva Convention and the laws of war, as attested in the reports of Human Rights Watch and Amnesty International, reports which also call for an international inquiry. Losses in Jenin city and camp together were estimated at 83 million US Dollars, with 800 families left homeless, primarily in Jenin camp, and with damage to housing there amounting to 27 million US Dollars. In Jenin camp, other than estimating the physical
destruction and financial damage incurred, the level of destruction and human suffering has been described as ‘unimaginable’.

**Survey Methodology**

This house to house survey was conducted during the first 10 days of May, 2002, just after the lifting of the curfew and the partial withdrawal of the Israeli army to the outskirts of town. A stratified random sample of households was chosen, primarily based on locale, and representative of all of the households in the city.

A sample of 154 households was selected utilizing stratified cluster sampling techniques. The city was divided into 5 strata, whereby 2-3 random starting points were selected. From each starting point a systematic sample of every 10th household was selected. In this survey, the expected maximum margin of error at the city level is:

\[
E = 1.96*DE*\sqrt{(P)*(Q)/(n))}
\]

\[
P = \text{the percentage of a certain attribute.}
\]

\[
Q = 1 - P
\]

\[
DE = \text{Design Effect due to clustering.}
\]

The estimated value of \(DE = 1.1\).

\[
E = 1.96*\sqrt{(0.5)(0.5)(1.1)/(150)) = 8.8%}
\]

**Data Entry**

Data entry was completed using the ACCESS database. Proper control structure was defined on closed questions. Data was transferred to SPSS using "StatTransfer" software. Double entry was conducted for a sample of the questionnaire to check for errors that could not be detected by the control structure defined in ACCESS. One out of 50 questionnaires experienced swapping values like 1 entered instead of 2 or visa versa.

**The Results**

One hundred and fifty-one household heads or adult family members were interviewed. The mean age of respondents was 40 years, comparable to the mean age in the other towns that were surveyed. Of those, 48% were females and the rest males.

Of the total respondents, 6% were illiterate, 13% with elementary schooling, 26% with secondary schooling, 20% with up to Bachelors degrees, and 3% with Masters Degrees or above, perhaps denoting bias towards educated respondents. The educational picture for the town as a whole and for those above the age of 10 years produced by PCBS for 1997 include 9% illiterates, 15% able to read and write, 64% with secondary schooling or below, 7% with associate diplomas, 6% with Bachelors or above. Given that the PCBS figures pertain to the population over 10 years old, we need to be cautious in making a direct comparison with our data.

The average household size in this survey was found to be 6.3 persons per household, with the smallest household composed of 2 persons and the largest of 17. The household reported here is higher than the 1997 PCBS report of 5.4 persons per household again pointing to a probably shift in household composition, as people sought shelter away from dangerous areas with a heavy presence of the Israeli army and moved to perceived less dangerous areas during the period of re-invasion. This is consistent with reports obtained in Ramallah and Nablus. Of the total household, 64% were of the nuclear variety, and an unexpectedly high 36% were of the extended one, compared to a low of 17% for Jenin in 1977 (PCBS), again denoting important shifts in household composition found in this survey.
Family composition: change during exceptional circumstances

Of the total respondents 37% reported housing other family members and friends during the re-invasion, a pattern that is consistent with our findings for Ramallah/Bireh and Nablus, although at a higher rate (30% for Ramallah/Bireh and 29% for Nablus). Why Jenin witnessed a higher rate of families seeking shelter is beyond the scope of this quick survey. However, it may well be that the Israeli army’s indiscriminate assault on Jenin Camp and the accompanying relentless shelling and destruction of homes is determinant. Of those taking in families for shelter, over half reported them as relatives, a quarter neighbors and friends, and the rest, almost a fifth, reported Sheltering strangers who needed help during trying times.

When asked why these guest arrived to stay in their home during the re-invasion, a high of over half reported that these guests came to live in their house because their homes were destroyed by Israeli army activities in their areas, while Ramallah and Nablus respondents reported almost negligible results for this particular response; a quarter reported that the guests came from the camp nearby, obviously indicating the need to have moved out, a fifth denoted fear of heavy fighting nearby and the rest provided a range of answers as usual, with army using their home as barracks, and the presence of a pregnant woman at home. The people with destroyed homes may well be people who lived in or on the outskirts of the camp, an assumption that is probably rational to make as home destruction took place largely, although not exclusively in the camp. If such an assumption is true, however, then it seems that Jenin town inhabitants responded to the humanitarian crisis next door in the camp by housing people who have lost their homes, a reaction that can only be deemed natural in these circumstances. It will be interesting to see the impact of this type of heavy and ‘unimaginable’ destruction on the rest of the responses.

Already, though, we can begin to delineate a pattern of difference between Jenin on the one hand, because of what happened in the camp, and Nablus and Ramallah on the other, where the physical destruction was severe, but where the humanitarian and social consequences of this onslaught were certainly with less profound effects.

Once again, given the generalizability of the results to the population of the town as a whole, these findings are important in that they indicate an even more major shift in family composition, although temporarily, than in Nablus and Ramallah, with internal migration from one area to another in search of safety, or even shelter. One can only speculate about the impact of these events on the family, especially in this case, on children.

Loss of work

Of the female respondents a low of 63% denoted themselves as being housewives, with the remaining 37% reporting that they are working, a rate that is significantly higher than the reports of female respondents for both Ramallah/Bireh (at 25% in the labor force) and Nablus (at 24%). It is not clear why this large discrepancy among the towns, especially that PCBS statistics for 1997 do not corroborate this higher rate of working women in Jenin compared to the other towns, and also compared to PCBS 97 census figures on economically active females over 10 years old having been placed at 13% in Jenin town. These observations point to the possibly strong bias of respondents, in favor of educated and working women in this survey. About half of the working women were largely employed in white collar positions. The remaining data is too small to discern definitive patterns in relation to women’s employment.

As for the male respondents, 18% reported either owning a shop, or running another form of private enterprise, (a low of 7% were professionals (academics, teachers, nurses, doctors and lawyers) lower than Ramallah 22% worked white collar jobs, with 38% working in semi-skilled or unskilled work; only 3% reported themselves as farmers in a once buzzing farming
community (the impact of social transformations, land fragmentation combined with land confiscation probably) and a low of 8% reported themselves as unemployed.

Of those working just prior to the re-invasion, 76% stated that they still held their job after the re-invasion, and 24% reported that they had lost their job since that time. A third of those who lost their jobs reported this as a consequence of the closure and siege, over a quarter blamed the collapsed market; an unexplained fifth said injury was the case and another sixth reported that their place of work was destroyed during the reinvasion. These results are quite comparable to those obtained in Ramallah and Nablus, pointing to the additional loss of livelihood of families beyond what was reported by PCBS for the first few months of this current uprising. The also point out the need to look into the issue of spiraling poverty further, in an attempt to better understand the consequences of the re-invasion on income, poverty and family life.

Unavailability of basic services

Jenin suffered serious electrical shortages during the re-invasion. Reports from the electricity company there indicate that the electricity problem continued for 15 whole days, in addition to 5 scattered other days and affected not only the population of Jenin town, but an estimated population of an additional 35,000 people of at least five villages in the immediate vicinity served by the Jenin Town electrical company.

In this survey 65% of the respondents reported the electricity having been cut off practically all of the time, 31% most of the time, and the rest (2%) some of the time or (2%) none at all. Judging by these results alone, Jenin was more affected by electrical shortages than Ramallah/Bireh (20% most or all of the time) or Nablus (at 47%), again increasing the suspicion that, although in terms of physical damage assessment, Nablus was most hard hit, in fact, Jenin residents seemed to have suffered most. The running drinking water situation seems to confirm this emerging picture, with 58% of respondents reporting the lack of tubed water supply all the time, and an additional 34% most of the time, leaving very few (5%) with only occasional shortages, and only 3% who were in fact spared this misery. Likewise with telephone, 77% of those with telephone lines reported telephone lines being cut all of the time, 5% most of the time, 16% some of the time, and 3% not at all. Clearly, we are beginning to identify a new definition for ‘hardest hit’ that goes beyond the physical damage and includes the impact of the re-invasion on people and the daily life of families, a point that cannot be over-emphasized.

With the majority of households reporting no problems faced with sewage disposal during this period at 82%, the remaining households faced troubles either with blown up water pipes or the usual emptying of cesspits at 9% each. The garbage problem was serious, with 95% facing a problem getting rid of household garbage, with 91% explaining the problem in terms of the municipal services coming to a halt during the curfew and 9% reporting the inability of even dumping the garbage outside the home, as the curfew was very strict; in these households, garbage piled up inside the home during the extended curfew.

Low on food and cash

Of the total respondents, a high of 64% reported facing a food availability problem during the curfew/re-invasion, a rate that surpasses the rates obtained for Ramallah (43%) and Nablus (37%), again denoting severity of hardship at higher levels in Jenin town compared to the other towns that we have reviewed so far. Likewise, when the curfew was lifted for short periods so that people could buy basic supplies, Jenin residents faced a higher level of food unavailability in
the market with 89% reporting foot shortages in stores and markets, compared to considerably lower rates for Ramallah (69%) and Nablus (43%).

Yet, in contrast, a lower 34% reported cash availability problems at home during the curfew and re-invasion, compared to 54% for Ramallah and closer to the 33% reported for Nablus. These results may be related to a lesser reliance on banks and banking, with consequent more cash at home, to more advance warning of the invasion, or to lesser availability of products to buy, but these observations are merely speculative, with explanations of these results prompting us to think of further field investigations of the matter.

In response to the food and cash availability problem, a high of over two thirds reported borrowing cash from friends and relatives, and another 25% did nothing and lived with what was available; the rest relied on food aid, and tried to spend less. It is curious to note that only one of the respondents reported taking food on account from food stores, in contrast to Ramallah (at 18%). In terms of managing the food supply at home, only 1% reported baking bread at home as a method of coping, perhaps because baking bread is an ordinary occurrence in Jenin compared to Ramallah; 33% reported living with what was available and eating less, 18% substituted one type of food with another, especially relying on canned foods, 17% relied on the Union of Medical Relief Committees and others for food aid, and the rest reported cooperating with neighbors and family on this matter. Overall, then, while families survived, the main issue now pertains to the nutritional consequences of these events, especially as the state of siege continues in full force, leading on to strongly suspect the presence of increasing malnutrition in this community, especially among children.

Shooting, explosion and destruction of property and institutions

Reports on living with the sounds of shooting, explosions and destruction are also revealing of evident horror and fear: of the total respondents, 36% reported having lived with these events all of the time, and 56% most of the time, bringing the total to 91% of respondents. In response to these attacks, 36% of households hid in fear, and suffered lack of sleep and mental distress and 28% reported the family hiding in one room quietly so as not to draw the attention of the army. Fourteen percent of respondents specified children’s fear and crying, urinating on themselves, and the rest gave various answers such as did nothing, no fear, this is normal, escaping to the neighbors, and taking sedatives.

Witnessing or hearing considerable destruction in the neighborhood was reported by 78% of the respondents, higher than the 52% reported for Ramallah and Nablus (67%), again pointing to the greater severity of events that people lived in Jenin. Here, 56% reported rampant destruction of retaining walls, telephone and electrical poles, shops, pavements, cars and even traffic signs; 16% reported the destruction of doors, the breaking of furniture and windows as well as water pipes and an addition 18% the total destruction of homes and neighboring shops, using people as human shields sometimes; 5% reported the destruction of cars; and the rest provided scattered answers such as bullets coming into homes, the destruction of public institutions and the like. Of the total, 17% reported the exposure of their cars to shooting, including total destruction in some cases. Evidently, in comparison with Ramallah and Nablus, home destruction was more of a major event in people’s lives in Jenin, contrasted to the greater institutional infrastructure destruction reported in Ramallah for instance.

A majority of 59%, much higher than Ramallah (28%) and Nablus (34%), reported direct exposure to shooting at their home, again pointing to families and households having been harder hit than the other towns. Of those, over two thirds reported shooting being directed to their home’s walls, glass, home entrances and retaining walls, one tenth reporting the occupation of their building, destruction of property and acquisitions, cupboards, furniture, food supplies and...
the dirtying of their homes, and another tenth reported gun shots entering homes. As for the IDF searching homes, 30% reported that their homes were searched by the army, lower than in Ramallah (40%) and Nablus (50%). Twenty one percent reported the arrest of at least one family member during the period; it is probable that many of these arrests were temporary detentions.

Asking about the workplaces of household members who were working prior to the re-invasion, 29% reported their work place as having been exposed to shooting, bombing and destruction, a rate lower than in Ramallah at 41% and higher than Nablus at a very low of 12%. Most answers here pertained to reports of shelling and or shooting. On the whole, the impact of the Israeli invasion was felt at higher levels at the household level in Jenin, and at the public level in Ramallah and Nablus. These results press the issue of assistance and actions directed to the household level, and not only to the rehabilitation of the physical infrastructure variety.

Medications

Of the total respondents, 34% reported medication shortages during the period of re-invasion, lower than the 49% registered for Ramallah but higher than the 22% reported for Nablus. An explanation of these differences is beyond the scope of this investigation, but may be related to the higher dependence of Ramallah inhabitants on medications as a way of life as well as the fact that Ramallah residents suffered the first assault and thus were less prepared. On the other hand, a comparison of Jenin’s responses to those of Nablus remains unexplained. Of those who reported medication shortages in Jenin, over one-third reported going back to indigenous medical practices, and the rest substituted one medication with another, reduced the dose of their medication so that the medicine would last, borrowed similar medications from the neighbors or did without the medications altogether, all pointing to a possible problem of untoward effects for these actions. The rest were able to reach hospitals or pharmacies for their medications.

Of those facing medication shortages, about a quarter reported the deterioration of the condition for which the medication was needed, one tenth of those specifically mentioning deteriorating diabetic conditions, again raising the issue of the need to investigate the impact of the re-invasion on the control of chronic diseases, where lack of control can lead to more serious problems; the rest pointed to living with pain until the curfew was lifted, or ‘putting it out on the children’, or no effects at all.

Mental Health

Reviewing responses to mental health problems observed during the re-invasion in their household, we find that 89% of the respondents reporting various types of problems affecting different groups, a rate that is slightly lower than that of Ramallah (93%) but higher than that of Nablus(70%). The reasons for these differences are not clear but may be due to the severity of experience combined with consciousness and awareness of mental health as an important category of family health.

When asked about what they did with such problems at home, a high of 21% each, resorted to praying or doing nothing, 13% reported packing the family in one room and waiting, perhaps an indication that being together may have been of help, 15% focused on soothing and helping the children at home who were presumably traumatized, 10% played cards and watched television, read and tried to entertain themselves with neighbors and embroidery or cleaning house; and the rest reported that they called family to ensure their safety, or sitting down doing nothing, inability to sleep, waiting in expectation, or taking turns sleeping to keep a watch on the events. Suffice it to say here that the results demonstrate that trauma and trauma management should very much become a priority action for health care providers and institutions, as so far, we are witnessing a situation where the majority of households in all three towns reporting mental
health problems that require immediate intervention, in the hope of minimizing longer-term effects on people, especially children.

**Views on current conditions**

In response to the question of how they felt about the events taking place in their lives, a very high 93% reported feelings of despair and misery over what is happening to their lives, compared to 71% for Ramallah and 74% for Nablus, once again pointing to personal despair as being a major issue to address as a priority for action.

**Conclusion**

The Jenin case may well be a case in point, demonstrating the need to not only pay attention to the damages that took place during the re-invasion of the West Bank by the Israeli Army in terms of physical infrastructure or loss of income or both, but also in terms of the social, medical, and humanitarian costs to households and people. To this end, this report indicates that, given a people-oriented definition of severity of attack, the population of Jenin, by far, has been the hardest hit, certainly more than Ramallah/Bireh and even more than Nablus which suffered the most in terms of physical damage, according to the assessment of the World Bank and other donors. What happened in Jenin Camp, what the population of Jenin witnessed and lived, and the results of this quick survey not only point to Jenin as a priority for people-oriented action which assists households in picking up the pieces, finding employment and dealing with the medical and mental health consequences of the re-invasion, but also point to the need to re-define our terminology of damage to focus on the damage incurred to people and their needs. This is especially important in view of the fact that infrastructure without healthy and optimistic people to re-build, operate and push this nation back into action, without people that have hope that can restart the engine of development is like placing a band aid on a seriously infected wound.

To estimate the number of households and people that were affected by specific serious difficulties in dealing with daily life as a consequence of this re-invasion; we are using PCBS’s census report of Jenin’s population of 26,681 persons and 4880 households:

1- Family Composition Change during Exceptional Circumstances
   a- 37% reported housing other families and friends during the re-invasion, that is 9,872 individuals or 1,806 households.

2- Unavailability of Basic services
   a- 65% of the respondents reported the electricity having been cut off practically all of the time, that is 17,343 individuals or 3,172 households.
   b- 58% of respondent reporting the lack of tubed water supply all the time that is 15,475 individuals or 2,830 households.
   c- 95% facing a problem getting rid of household garbage that is 25,347 individuals or 4,636 households.

3- Low on Food and Cash
   a- 64% reported facing a food availability problem during the curfew/re-invasion that is 17,076 individuals or 3,123 households.
   b- 34% reported cash availability problems at home during the curfew and re-invasion that is, 9,072 individuals or 1,659 households.

4- Shooting, Explosion and Destruction of Property and Institutions
a- 36% reported having lived with the sounds of shooting, explosions and destruction all of the time, that is 9,605 individuals or 1,757 households.
b- Witnessing or hearing considerable destruction in the neighborhood was reported by 78% of the respondents that is 20,811 individuals or 3,806 households.

5- Medications
34% reported medication shortages during the period of re-invasion that is 9,072 individuals or 1,659 households.

6- Mental Health
a- 89% of the respondents reported various types of problems affecting different groups, that is 23,746 individuals or 4,343 households.

References