Monitoring Net of Human Rights in Iraq
MHRI

Conservation Center of Environmental & Reserves in Fallujah
CCERF

Prohibited weapons Crisis

The effects of pollution on the public health in Fallujah

Presented to 7th session of the Human Rights Council
(Geneva, 3 - 28 March 2008)

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Miss Luiza Arbour
High Commissioner for human Rights of United Nations
Geneva

4th March, 2008

Excellency

After a long period of cooperation between civil society organizations (Conservation Center of Environmental and Reserves in Fallujah - CCERF and Monitoring net of Human Rights in Iraq – MHRI) and medical authorities in Fallujah, We have the honor to submit with this letter its report on the effects of an American prohibited weapons used in Fallujah attacks (March - November 2004).

Both security and political reasons played significant role in making this task almost impossible. Nevertheless, the report is in your hand now with vast evidence and documentations on this catastrophic and continuous pollution in Iraq without any real action for help the victims or clean up or treating the polluted places.

Therefore, we are kindly asking the High Commissioner for Human Rights to look at the content of the report in accordance with the General Assembly's resolution 48/141 (paragraph 4) of 20 December 1993, to investigate the serious threatens of health right in Fallujah and Iraq, and to relay the results of this investigation to the Commission on Human Rights to take the suitable decisions.

Excellency

We believe that the situation of health right in Iraq, since the last report (E/CN.4/2005/4) prepared by the High Commissioner in June 2004, has severely deteriorated and has reached a point where the Commissioner on Human Rights should give serious consideration to the re-appointment of a Special Rapporteur on the situation of human rights in Iraq and send delegation from WHO with Special Rapporteur on health rights to visit Fallujah, Najaf and Basrah in order to study and monitor all the polluted places and to encourage the establishing of the real role of international support with Environmental issues in Iraq.

Our people are looking forward to your help to ensure the protection of the life and health rights of all Iraqi and to put an end to the continues suffering.

Sincerely

Muhamad Al-Darraji

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President of Conservation Center of Environmental and Reserves in Fallujah (CCERF)

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• Introduction:

This report focuses on the effects caused by pollution on the health of Fallujah population two years after the use of forbidden weapons by the American troops in its major attacks on the city in 2004. Fallujah has a population of almost 650,000 inhabitants. After an American attacks at March – November 2004 in Fallujah and using prohibited weapons like Chemical weapons and Cluster mentions. (RAI news 24, 2005; CCERF, 2006). Three years after the devastating US assault, Fallujah city left without clean water, electricity and medicine (Patrick Cockburn, 2008, Independent).

We are trying knowing the world the effects of pollution on health impact in another place in Iraq after new report of Muslim Peacemaker Teams (MPT) about Depleted Uranium Crisis (December 2007), which referred to effects of use DU on health impact of Najaf, a city of over one million people, and the rural areas in the governate (The area is about 180 miles from where DU was use in the 1991 and 2003 wars), while Fallujah situation is difference not only with type of prohibited weapons used in March and November 2004 but also these weapons used inside the city, not out city like Najaf).

MPT report refer Starting in 2004 when the political situation and devastation of the health care infrastructure were at their worst, there were 251 reported cases of cancer. By 2006, when the numbers more accurately reflected the real situation, that figure had risen to 688. Already in 2007, 801 cancer cases have been reported. Those figures portray an incidence rate of 28.21 by 2006, even after screening out cases that came into the Najaf Hospital from outside the governate, a number which contrasts with the normal rate of 8-12 cases of cancer per 100,000 people.

Fallujah health impact report is interviewing victims and gathering evidence and facts so that the international community may help to stop their ongoing pain.

This study is the result of two-year cooperation and coordinating between civil society organizations (Conservation Center of Environmental and Reserves in Fallujah (CCERF) and Monitoring Net of Human Rights in Iraq (MHRI)) and the administration of Fallujah General Hospital. All the data originate from official reports of Fallujah General Hospital.

We found in one year like 2006 there are 5928 (∼6000) new illnesses cases that unknown before in Fallujah, more than 70% were of the cancers and abnormalities reported occurred in the 1 day – 12 years age range.

While in the first six months of 2007 were 2447 cases, more than 50% of their cases were children. Simply, this mean that most of victims are children and this will lead to threaten the new generation in this city.
• First Section: Comparative analysis:

This section will focus on doing comparative analysis between the data of same month (February) at differs years 2003 and 2006 as well as to 2007 to concentrate on the changes in illnesses rates and numbers as well as to appearing new and danger illnesses had been related of pollution and leading of genetic devolution, genetic drift.

• The Health Report of February 2003:

According to the General Hospital in Fallujah the medical records of the health situation in Fallujah of 2003, have been damaged as a direct result of the military operations on the hospital and other health centers in the city since 2003. Therefore the information in this report of February month was compiled from private records of doctors, and statistics from other medical staff and employees.

This report clearly shows many types of common type of illnesses in 2003 like Epidemic diarrhea (200 cases), acute renal failure (42 cases), lack of low growth hormones (47) and diabetes mellitus illnesses (10), While the danger illnesses were very few numbers like congenital heart disease (5 cases). Some illnesses were with female gender only like Breast cancer (10). The total illness cases of February month in 2003 were 344 cases. See table No. 1

• The health situation of February 2006:

This report shows very different types and terrible amounts of illnesses, two years after major military operations in Fallujah (March and November 2004). In these battles many types of forbidden weapons especially Cluster bombs, Chemical weapons like white phosphorus. Huge bombs of 300-500 Kilos as well as unknown types of unconventional weapons according to strong evidence with many pictures & movies proved this evidences collected after these operations.

Any simple comparative analysis between the months of February in 2003 and 2006 will reveal new evidence and indicators about seriousness of the effects of pollution problem in this town now.

In February 2006 we found continue of same illnesses like Leukemia (7 cases), but there are another dangerous types started appear with huge numbers like Meningitis 80 cases, Thalassemia 17 cases, Septicemia 135 cases, Congenital Spinal cord abnormalities 114 cases, Congenital Renal abnormalities 87 cases with undiagnosed cases 22 cases. The total number of illnesses was 542 cases while in same month in 2003 were 344 cases with clearly difference in illness types.

There are some diseases concentrated with Male gender more than with Female gender in this month like Meningitis 55 M., 25 F., Thalassemia 14 M, 3 F. and Septicemia
93 M, 42 F. while another illnesses concentrated with Female gender more than Male like Congenital Renal abnormalities 13 M, 74 F. and undiagnosed cases 22M, 85 F. See table No. 2.

- **Second Section: Analysis of Illness data of 2006:**
  - **First half of 2006:**

    The illnesses number during the first six months of 2006 (January, February, March, April, May and June), we found there are 2942 illness cases (~3000). They were distributed to 475 of Meningitis, 198 of Thalassemia, 952 Septicemia, 45 of Brain tumor, 365 of Congenital Spinal cord abnormalities, 299 of Congenital Renal abnormalities, 574 undiagnosed cases and 40 cases of Leukemia.

    The illness cases were have nearly numbers between male (M) and female (F) genders, Meningitis 295 M. – 180 F. (474), Thalassemia 103 M. – 95 F. (198), Septicemia 506 M. – 446 F. (952), Brain Tumor 19 M. – 26 F. (45), Congenital Spinal cord abnormalities 178 M. – 184 F. (362), Leukemia 23 M. – 17 F. (40), while the female numbers were more double than male gender in Congenital Renal abnormalities 77 M. – 222 F. (299) and Undiagnosed cases 181 M. – 383 F. (564).

    The children numbers were most of victim's numbers, 2371 from 2942 (80%). The age range of children was between 6 months – 6 years of Meningitis, 2 – 11 years of Thalassemia, 1 – 40 days of Septicemia, 1 month – 12 years of Brain Tumor, 1 month – 6 years of Congenital Spinal cord abnormalities, 1 month – 7 years of Congenital Renal abnormalities, 1 month – 12 years, as well as there are some of children cases with undiagnosed cases rate (574 cases) which had been average between 3 – 35 years. See table No. 3.

  - **Second half of 2006:**

    We noticed from the data of second half of 2006 year (July, August, September, October, November and December) that there are 2993 illness cases (~3000). The illness numbers have distributed among 360 of Meningitis, 118 of Thalassemia, 1255 of Septicemia, 46 of Brain tumor, 40 of Congenital Spinal cord abnormalities, 38 of Congenital Renal abnormalities, 1104 of undiagnosed cases and 32 cases of Leukemia. See table No. 4.

Also the children numbers have been most the illness cases, 1889 from total number 2993 (63%). The age range of children was among 2 months – 9 years of Meningitis, 1 – 11 years of Thalassemia, 1 – 40 days of Septicemia, 2 month – 9 years of Brain Tumor, 1 month – 9 years of Congenital Spinal cord abnormalities, 1 month – 8 years of Congenital Renal abnormalities, 2 month – 9 years of Leukemia, as well as there are some of children cases with undiagnosed cases rate (1104 cases) which had been average between 1 – 45 years.

There are some signals of size and type any pollution or contamination depending on the results after some years like speed of appearance any danger illness as well as we find many types have correlations leading of undiagnosed cases, therefore we think that the speed of starting like these diseases after one year of using prohibited weapons during March – November 2004.

The amount any dangerous illnesses referred to very clear evidence about the importance of study all pollution elements and start strategy plans for treatment all pollution sources to decrease if we can not prevent new illness cases.

Total numbers of illness cases of 2006 were 835 of Meningitis (2 months – 9 years as age range), 316 of Thalassemia (1 – 11 years as age range), 2207 of Septicemia (1 – 40 days), 91 of Brain tumor (1 month – 12 years), 402 of Congenital Spinal cord abnormalities (1 month – 9 years), 337 of Congenital Renal abnormalities (1 month – 8 years), 1668 of undiagnosed cases (1 45 years) and 72 cases of Leukemia (1 month – 12 years).

The main important point in illnesses data of 2006 that 72% of total illness victims were children among 1 Day – 12 years, which referred to unclear threaten for health people and especially with new generations. See table No. 5.
Third Section: Analysis of Illness data of first half to 2007:

The beginning and middle of 2007 years (January, February, March, April, June), there are many victims families started do not go to hospital in Fallujah after they found inabilities of health instructions in city, therefore many of them started go to Jordan or Syria to search about any medical assistance, as well as half numbers of Fallujah people (350,000) living around the city in three big village called Saqlawia, Karma and Ammeria.

Most of the civilians around Fallujah city preferred go to another city or Syria or Jordan than enter Fallujah because there are many check points prevent them to enter or go out without take more time with many difficulties arrived many times to violation of human rights.

These reasons were main effects to decrease the numbers of some dangerous illness cases in first six months report of 2007. The total number of illness cases continues be high, which arrived to 2448 illness cases, distributed to 73 cases of Congenital heart diseases, 192 cases of Congenital Spiral cord defects, 1636 cases of Acute Diarrheas diseases, 56 of undiagnosed cases, 37 cases of Leukemia, 26 cases of Mediastinal tumor, 1 case of Brain hydatid cyst, 9 cases of Liposarcoma mediastnum, 109 cases of Thalassemia, 46 cases of Breast cancer, 116 of Bronchogenic carcinoma, and 147 cases of Failure of thrive. See table No. 6.

The medical report of 2007 was explain there are some illnesses had been double numbers in male than female gender like congenital heart diseases (70% Male – 30% Female) with 1 month – 4 years age range, Congenital Spiral cord defects (65% Male – 35% Female) with 1 month – 4 years age range, Mediastinal tumor (62% Male – 38% Female) with 1 – 55 years age range, Leukemia (65% Male – 35% Female) with 1-10 years age range and Failure of thrive (61% Male – 39% Female) with 6 months – 2 years age range while another illness like Bronchogenic carcinoma had been most cases with male gender (85%) comparatively with female (15%) with 25 – 55 years age range.

All Liposarcoma mediastnum cases were in male (100%) with 98% death rate. Most of Breast cancer (46 cases) caused 85% death rate while in 2006 was 22% death rate. Another terrible fact that 116 cases of Bronchogenic carcinoma were with 100% death rate for civilians had been 25 – 55 years age.

We are notice that some common illnesses were appear in 2003 but it did not appear with reports of 2006 and 2007 for tow reason, firstly, our focus was concentrated on dangerous diseases. Secondly, many common illnesses started appear with abnormal signals of these illnesses figures; therefore we classified it with undiagnosed cases.
• **Fourth Section: Conclusion:**

The importance of this information is confirmed there is a big disaster in this city under worst situation try many sides prevent any information released about these facts.

The main civilian victims of most illnesses were the children, and the rate of them represents 72% of total illness cases of 2006, most of them between the ages of 1 month and 12 years. While in 2007 was not very difference because many illnesses accounted the children with another ages.

Many new types and terrible amounts of illnesses started to appear since 2006 until now, such as Congenital Spinal cord abnormalities, Congenital Renal abnormalities, Septicemia, Meningitis, Thalassemia, as well as a significant number of undiagnosed cases at different ages.

The speed of the appearance these signals of pollution after one year of military operations refer to the use of a great amount and different of prohibited weapons used in 2004 battles.

The continued pollution may be will lead to a genetic drift, starting to appear with many abnormalities in children, because the problems were related to exposure of the child’s parents to pollution sources and this may lead to more new abnormalities in the future.

According to security situation with many check points and irregular cards to allow the civilians to enter or exit the city until now, all this help to continue the terrible situation for this time. Therefore we think that all these data is only 50% of real numbers of illnesses.
• **Testimony of one doctor of Fallujah hospital:**

Dr. Ahmed S. M. had seen many cases in his office were affected by pollution or contamination of environment. He was explaining the health situation by take some examples of children cases as he said in his testimony:

- Mohammed Hasan Jasim:

  Patient presented with Sever Cyanosis. After deriving, Echocardiography showed that the child with transposition of great arteries. The child died after 3 hours, because no facility for surgery or even palliative surgery, as well as no Cardiac center in Al-Anbar governorate.

- Ali Kamal Zaid:

  Two years old male child with history of tetralogy of Fallot the child need urgent Surgery because he is with recurrent chest infections and frequent cyanotic spells. He is in need for urgent corrective Surgery before reading to the Eizenminger State where the Surgery of no role.

  I have more than 10 registered Cases in my private clinic only. And this is just an example of late presentation of congenital heart disease.

- Zina Abdullah Omar:

  She had been case of DORV (double Outlet Right Ventricle).

  I have more than 45 registered cases of ventricular Septa defect where the children is younger than three years old – 10 cases of Atrial Septa defect and five cases with congenital aortic Stenosis.

  I have registered 140 deaths registered as congenital heart-disease during last 2 years (2006-2007). I saw more than 85 cases of low growth hormone in 2006 only.

  A lot of cases died without definite diagnosis. Because lack the Angiogram and perfect echocardiography.

  The unregistered cases are much higher because those cases usually missed. A lot of cases had been discovered and the cause for it is multifactor's pollutions, radiations, unknown war weapons and others.
Some samples of pollution victims in Fallujah (2005-2006):

This is a male child born to an Iraqi family with Scaly Skin Syndrome and this syndrome and others are congenital Syndromes become more frequent after what happened in Fallujah.
You can notice the effect of white phosphorus apparently on the newborn. These abnormal babies have very short life; the risk of death is great because there are associated congenital heart diseases and other C. N. S. abnormalities.

This is an example of another female child, who survived the disaster, showing with such a severe burning involving the whole body.
This male child is a victim of cluster munitions. His mother died at the time of explosion and he has suffered from amputation of the left leg (disarticulation). With another shell injury to the abdomen and multiple small & large Bowel injuries, so you can see that there is a Colostomy and very ugly scars.
Some others had a more chronic effect because of the use of forbidden weapons. This man shows such a large tumor, caused by white phosphorus, checked with poor techniques and poor facilities in diagnosis and treatment in such a poor City. This is an example, and there are a lot of other cases to be exposed to sunlight to show the real size of the disaster that has occurred in our City.

Most of the victims of illnesses are children !!!!
Recommendations

1. UN agencies like WHO and UNEP should do their responsibilities toward this disaster in Fallujah depending on the mission of their agencies with this pollution.

2. US army must stop all irregular instructions like using marine's card to Fallujah people for entrance or exiting city and stop all the military actions against civilians to allow a freedom to arrive to hospital after succeed of Fallujah police to return the security in city.

3. The important of considering a Fallujah city with all 650.000 habitants are under disaster situation and as catastrophic city like Japan's cities (Hiroshima and Nagasaki) to allow of international sides to participating for clean up the city from all pollution sources and providing hospitals with all their needs as first step and to continue this steps with another Iraqi cities suffering from huge pollution.

4. The children were main victims of these pollution, therefore international community should start new campaign to help the children illnesses until return the assistance ability of Iraqi medical hospitals to treatment these cases.

5. The international community should help to return the normal life of this city to help civilians for reconstructions all the necessary needs for motivation the economy sides as second step after clean up all pollution sources and help the victims.

Finally, Fallujah is one example of many polluted places in Iraq now as we referred to another city like Najaf. That is part of the American gift to the Iraqi people. It is more than shocking when it comes to the silence of the international community, especially the United Nations.

We are very sorry to see the absence of any real actions of any international bodies of human rights towards this tragedy, which threaten the future by exposure the children and new generation of continue risks leading of death most the time…….
### Tables and Diagrams Section:

<table>
<thead>
<tr>
<th>No</th>
<th>Type of illness</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Epidemic diarrhea</td>
<td>120</td>
<td>80</td>
<td>200</td>
</tr>
<tr>
<td>2</td>
<td>A cute renal failure</td>
<td>25</td>
<td>17</td>
<td>42</td>
</tr>
<tr>
<td>3</td>
<td>Breast cancer</td>
<td>0</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>leukemia's</td>
<td>4</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>Hydatid cyst brain</td>
<td>13</td>
<td>7</td>
<td>20</td>
</tr>
<tr>
<td>6</td>
<td>Congenital heart disease</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>Low growth hormones</td>
<td>33</td>
<td>14</td>
<td>47</td>
</tr>
<tr>
<td>8</td>
<td>Diabetes mellitus</td>
<td>4</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>202</td>
<td>142</td>
<td>344</td>
</tr>
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**Table No. 1 Illnesses' cases of February 2003**

![Bar chart showing illness cases by gender and type]
<table>
<thead>
<tr>
<th>No</th>
<th>Type of illness</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
<th>Age</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Meningitis</td>
<td>55</td>
<td>25</td>
<td>80</td>
<td>6m.-2y.</td>
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<tr>
<td>2</td>
<td>Thalassemia</td>
<td>14</td>
<td>3</td>
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<td>3</td>
<td>Septicemia</td>
<td>93</td>
<td>42</td>
<td>135</td>
<td>1-40 days</td>
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<tr>
<td>4</td>
<td>Brain tumors</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>2m.-9y.</td>
</tr>
<tr>
<td>5</td>
<td>Congenital Spinal cord abnormalities</td>
<td>61</td>
<td>53</td>
<td>114</td>
<td>1m.-6y.</td>
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<tr>
<td>6</td>
<td>Congenital Renal abnormalities</td>
<td>13</td>
<td>74</td>
<td>87</td>
<td>1m.-6y.</td>
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<tr>
<td>7</td>
<td>Undiagnosed Cases</td>
<td>22</td>
<td>85</td>
<td>97</td>
<td>3-33y.</td>
</tr>
<tr>
<td>8</td>
<td>Leukemia</td>
<td>4</td>
<td>3</td>
<td>7</td>
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Table No. 2: Illnesses' cases in February 2006
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<tr>
<th>Type of illness</th>
<th>Jan.</th>
<th>Feb.</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>Total</th>
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<tbody>
<tr>
<td>Meningitis</td>
<td>60</td>
<td>80</td>
<td>97</td>
<td>105</td>
<td>64</td>
<td>69</td>
<td>475</td>
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<td>Thalasemia</td>
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<td>32</td>
<td>45</td>
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<td>198</td>
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<td>Septicemia</td>
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<td>135</td>
<td>142</td>
<td>130</td>
<td>178</td>
<td>167</td>
<td>952</td>
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<td>5</td>
<td>12</td>
<td>6</td>
<td>3</td>
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<td>45</td>
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<tr>
<td>Congenital Spinal cord abnormalities</td>
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<td>114</td>
<td>125</td>
<td>60</td>
<td>25</td>
<td>12</td>
<td>365</td>
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<td>Congenital Renal abnormalities</td>
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<td>88</td>
<td>49</td>
<td>39</td>
<td>17</td>
<td>299</td>
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<tr>
<td>Undiagnosed Cases</td>
<td>50</td>
<td>107</td>
<td>119</td>
<td>105</td>
<td>77</td>
<td>116</td>
<td>574</td>
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<tr>
<td>Leukemia</td>
<td>10</td>
<td>7</td>
<td>9</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>40</td>
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<tr>
<td>Total</td>
<td>388</td>
<td>552</td>
<td>622</td>
<td>492</td>
<td>436</td>
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Table No. 3 Illness cases of first half of 2006
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<tr>
<td>Meningitis</td>
<td>50</td>
<td>57</td>
<td>59</td>
<td>74</td>
<td>61</td>
<td>59</td>
<td>360</td>
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<td>Thalassemia</td>
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<td>23</td>
<td>21</td>
<td>16</td>
<td>8</td>
<td>9</td>
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<tr>
<td>Septicemia</td>
<td>181</td>
<td>171</td>
<td>205</td>
<td>202</td>
<td>189</td>
<td>307</td>
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<td>11</td>
<td>7</td>
<td>6</td>
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<td>38</td>
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<tr>
<td>Undiagnosed Cases</td>
<td>115</td>
<td>185</td>
<td>206</td>
<td>106</td>
<td>229</td>
<td>263</td>
<td>1104</td>
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<tr>
<td>Leukemia</td>
<td>5</td>
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<td>5</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>32</td>
</tr>
<tr>
<td>Total</td>
<td>420</td>
<td>464</td>
<td>524</td>
<td>419</td>
<td>507</td>
<td>659</td>
<td>2993</td>
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</table>

Table No. 4 of second half of 2006

![Bar chart showing the distribution of different types of illnesses by month]

- July
- Aug.
- Sep.
- Oct.
- Nov.
- Dec.

Meningitis, Thalassemia, Septicemia, Brain tumors, Congenital Spinal cord abnormalities, Congenital Renal abnormalities, Undiagnosed Cases, Leukemia.
<table>
<thead>
<tr>
<th>Type of illness</th>
<th>No. Cases</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meningitis</td>
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<td>Thalassemia</td>
<td>316</td>
<td>1 – 11 Y.</td>
</tr>
<tr>
<td>Septicemia</td>
<td>2207</td>
<td>1 – 40 Days</td>
</tr>
<tr>
<td>Brain tumors</td>
<td>91</td>
<td>1M. - 12Y.</td>
</tr>
<tr>
<td>Congenital Spinal cord abnormalities</td>
<td>402</td>
<td>1M. - 9 Y.</td>
</tr>
<tr>
<td>Congenital Renal abnormalities</td>
<td>337</td>
<td>1 M. - 8 Y.</td>
</tr>
<tr>
<td>Undiagnosed Cases</td>
<td>1668</td>
<td>1 – 45 Y.</td>
</tr>
<tr>
<td>Leukemia</td>
<td>72</td>
<td>1 M. - 12Y.</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5928</strong></td>
<td></td>
</tr>
</tbody>
</table>

- Table No. 5 Age and Cases of Illnesses of 2006
<table>
<thead>
<tr>
<th>Type of illness</th>
<th>Jan.</th>
<th>Feb.</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Congenital heart disease</td>
<td>11</td>
<td>10</td>
<td>13</td>
<td>11</td>
<td>15</td>
<td>13</td>
<td>73</td>
</tr>
<tr>
<td>Congenital Spiral cord defects</td>
<td>13</td>
<td>70</td>
<td>62</td>
<td>23</td>
<td>14</td>
<td>10</td>
<td>192</td>
</tr>
<tr>
<td>Acute Diarrhea diseases</td>
<td>132</td>
<td>342</td>
<td>453</td>
<td>127</td>
<td>326</td>
<td>256</td>
<td>1636</td>
</tr>
<tr>
<td>Undiagnosed cases</td>
<td>12</td>
<td>8</td>
<td>9</td>
<td>12</td>
<td>7</td>
<td>8</td>
<td>56</td>
</tr>
<tr>
<td>Mediastinal tumor</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td>6</td>
<td>3</td>
<td>7</td>
<td>26</td>
</tr>
<tr>
<td>Brain Hydatid cyst</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Liposarcoma mediastnum</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Thalassemia</td>
<td>14</td>
<td>22</td>
<td>16</td>
<td>18</td>
<td>17</td>
<td>22</td>
<td>109</td>
</tr>
<tr>
<td>Leukemia</td>
<td>9</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>13</td>
<td>37</td>
</tr>
<tr>
<td>Breast Cancer</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>6</td>
<td>6</td>
<td>7</td>
<td>46</td>
</tr>
<tr>
<td>Bronchogenic carcinoma</td>
<td>24</td>
<td>17</td>
<td>22</td>
<td>13</td>
<td>21</td>
<td>19</td>
<td>116</td>
</tr>
<tr>
<td>Failure to thrive</td>
<td>17</td>
<td>26</td>
<td>21</td>
<td>19</td>
<td>33</td>
<td>31</td>
<td>147</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>245</td>
<td>517</td>
<td>612</td>
<td>237</td>
<td>450</td>
<td>387</td>
<td>2448</td>
</tr>
</tbody>
</table>

- Table No. 6 Illnesses data of first half of 2007
<table>
<thead>
<tr>
<th>Type of illness</th>
<th>Male % 2007</th>
<th>Female % 2007</th>
<th>Age Rate</th>
<th>Death rate 2007</th>
<th>Death rate 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Congenital heart disease</td>
<td>70</td>
<td>30</td>
<td>1m. – 4y.</td>
<td>30%</td>
<td>-</td>
</tr>
<tr>
<td>Congenital Spiral cord defects</td>
<td>65</td>
<td>35</td>
<td>1m. – 4y.</td>
<td>50%</td>
<td>-</td>
</tr>
<tr>
<td>Acute Diarrhea diseases</td>
<td>78</td>
<td>22</td>
<td>1 – 55y.</td>
<td>20%</td>
<td>-</td>
</tr>
<tr>
<td>Undiagnosed cases</td>
<td>45</td>
<td>55</td>
<td>1 – 55y.</td>
<td>30%</td>
<td>65%</td>
</tr>
<tr>
<td>Mediastinal tumor</td>
<td>62</td>
<td>38</td>
<td>1 – 55y.</td>
<td>15%</td>
<td>32%</td>
</tr>
<tr>
<td>Brain Hydatid cyst</td>
<td>1</td>
<td>-</td>
<td>1 y.</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Liposarcoma mediastnum</td>
<td>100</td>
<td>-</td>
<td>28 y.</td>
<td>98%</td>
<td>-</td>
</tr>
<tr>
<td>Thalassemia</td>
<td>52</td>
<td>48</td>
<td>1 – 10y.</td>
<td>22%</td>
<td>67%</td>
</tr>
<tr>
<td>Leukemia</td>
<td>65</td>
<td>35</td>
<td>1 – 10y.</td>
<td>37%</td>
<td>67%</td>
</tr>
<tr>
<td>Breast Cancer</td>
<td>34</td>
<td>46</td>
<td>35 – 50 y</td>
<td>85%</td>
<td>22%</td>
</tr>
<tr>
<td>Bronchogenic carcinoma</td>
<td>85</td>
<td>15</td>
<td>25 – 55y.</td>
<td>100%</td>
<td>11%</td>
</tr>
<tr>
<td>Failure to thrive</td>
<td>61</td>
<td>39</td>
<td>6m. - 2y.</td>
<td>11%</td>
<td>-</td>
</tr>
</tbody>
</table>

- Table No. 7 of Comparison between the death rate of 2006 and 2007
• References:


• Estimation Report of Health Situation in Fallujah During First Half of Year 2007, Fallujah Hospital Directorate.

• Medical Monthly Reports of 2006, Fallujah Hospital Directorate.


1. Muslim Peacemaker Teams: Depleted Uranium Crisis

Najaf - December 2007

Sami Rasouli, Dr. Najim Askouri and Dr. Assad Al-Janabi, members of Muslim Peacemaker Teams (MPT) in Najaf, visited with Christian Peacemaker Teams (CPT) in Suleimaniya, Kurdish Iraq, on December 10 and 11. The visit was an opportunity to report the recent activities of the respective peacemaker groups and learn to know new people. But the primary activity was a forum on depleted uranium (DU) presented by Drs. Assad and Najim.

Dr. Assad is the director of the Pathology Department at the 400-bed public hospital in Najaf. Dr. Najim is a nuclear physicist, trained in Britain, and one of the leading nuclear researchers in Iraq until his departure in 1998. They have worked as an MPT team documenting information about the health impact on Najaf of depleted uranium weapons used during the 1991 and 2003 Gulf wars.

This was not an exhaustive study because of the limits of personnel, resources and equipment. But it did rely on accumulated public data, thorough research, and a major contribution of time and energy. The focus was Najaf, a city of over one million people, and the rural areas in the governate. The area is about 180 miles from where DU was used in the First Gulf War.

Starting in 2004 when the political situation and devastation of the health care infrastructure were at their worst, there were 251 reported cases of cancer. By 2006, when the numbers more accurately reflected the real situation, that figure had risen to 688. Already in 2007, 801 cancer cases have been reported. Those figures portray an incidence rate of 28.21 by 2006, even after screening out cases that came into the Najaf Hospital from outside the governate, a number which contrasts with the normal rate of 8-12 cases of cancer per 100,000 people.

Two observations are striking. One, there has been a dramatic increase in the cancers that are related to radiation exposure, especially the very rare soft tissue sarcoma and leukemia. Two, the age at which cancer begins in an individual has been dropping rapidly, with incidents of breast cancer at 16, colon cancer at 8, and liposarcoma at 1.5 years. Dr. Assad noted that 6% of the cancers reported occurred in the 11-20 age range and another 18% in ages 21-30.

There were three locations in Najaf that received special attention from the researchers. Al-Ansar Square is an L-shaped street less than 50 meters long. There were 13 cases in that small area. The individuals were not related, were of different ages and genders and did not have a family history of cancer. Another, Al-Fathi, is a one kilometer rural stretch along both sides of a river. There were 37 cases reported, all varied types of cancer. The third was Hay Al-Mu'alameen, a very well-to-do sector of the city. Twenty cases were documented there, mostly among teachers.

Dr. Najim began his report by noting that Coalition Forces, mostly U.S., used 350 tons of DU weapons in about 45 days in 1991, primarily in the stretch of Iraq northwest of Kuwait where Iraqi troops were on their retreat. Then in 2003, during the Shock and Awe bombing of Baghdad, the U.S. used another 150 tons of DU.
When DU hits a target it aerosolizes and oxidizes forming a uranium oxide that is two parts UO3 and one part UO2. The first is water soluble and filters down into the water aquifers and also becomes part of the food chain as plants take up the UO3 dissolved in water. The UO2 is insoluble and settles as dust on the surface of the earth and is blown by the winds to other locations.

As aerosolized dust it can enter the lungs and there begins to cause problems as it can cross cell walls and even impact the genetic system. Dr. Najim shared that one of his grandsons was born with congenital heart problems, Downs Syndrome, an underdeveloped liver and leukemia. He assumes that the problems were related to exposure of the child’s parents to DU. He said, “Cancer is spreading from the conflict area as a health epidemic and will only get worse.” The cancer rate has more than tripled over the last 16 years in Najaf, similarly to Kuwait, Basra and Saudi Arabia.

There are nine DU production sites in the U.S., though, at this point, several (like National Lead in Colonie, NY, and Starmet in Concord, MA) have closed because of environmental contamination. Also, there are 14 testing sites for DU weapons in the U.S., though, again, some (like Jefferson Proving Grounds in Indiana) have closed because the military says they cannot be cleaned up.

Using a simple Geiger counter the research team discovered radiation levels of 30 counts per minute in Najaf and 40 counts per minute in the rural areas around Najaf. This compared to 10-15 counts per minute in Suleimaniya and at the Tawaitha nuclear research reactor outside Baghdad.

He concluded his talk by asking, “Would it be just to ask for equipment to continue the testing to locate contaminated sites, a hospital to care for children born with a DU-impacted genetic system, a center for study and decontamination of affected areas, and support for a special environmental department at the local university?” He assumed the U.S. would not respond to a total compensation request, but did assume it was appropriate to make these requests for compensation, to clean the environment and care for those exposed to the DU.

It was a rather diverse audience in Suleimaniya that participated in this DU forum. A local physician who had earlier in his career been the director at the Najaf Public Hospital, students, a local political leader, recently returned Kurds from other countries, and a local UN worker were among those who had questions and responses for the doctors. An important benefit of the forum was to provide a model that any small group of people can duplicate in their own communities as a way to spread awareness of the serious problems as DU blows into neighborhoods across Iraq.

**Muslim Peacemaker Teams**

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Three years after the devastating US assault, our correspondent enters besieged Iraqi city left without clean water, electricity and medicine

Fallujah is more difficult to enter than any city in the world. On the road from Baghdad I counted 27 checkpoints, all manned by well-armed soldiers and police. "The siege is total," says Dr Kamal in Fallujah Hospital as he grimly lists his needs, which include everything from drugs and oxygen to electricity and clean water.

The last time I tried to drive to Fallujah, several years ago, I was caught in the ambush of an American fuel convoy and had to crawl out of the car and lie beside the road while US soldiers and guerrillas exchanged gunfire. The road is now much safer but nobody is allowed to enter Fallujah who does not come from there and can prove it through elaborate identity documents. The city has been sealed off since November 2004 when United States Marines stormed it in an attack that left much of the city in ruins.

Its streets, with walls pock-marked with bullets and buildings reduced to a heap of concrete slabs, still look as if the fighting had finished only a few weeks ago. I went to look at the old bridge over the Euphrates from whose steel girders Fallujans had hanged the burnt bodies of two American private security men killed by guerrillas – the incident that sparked the first battle of Fallujah. The single-lane bridge is still there, overlooked by the remains of a bombed or shelled building whose smashed roof overhangs the street and concrete slabs are held in place by rusty iron mesh.

The police chief of Fallujah, Colonel Feisal Ismail Hassan al-Zubai, was trying to show that his city was on the mend. As we looked at the bridge a small crowd gathered and an elderly man in a brown coat shouted: "We have no electricity, we have no water." Others confirmed that Fallujah was getting one hour's electricity a day. Colonel Feisal said there was not much he could do about the water or electricity though he did promise a man that a fence of razor wire outside his restaurant would be removed.

Fallujah may be better than it was, but it still has a very long way to go. Hospital doctors confirm that they are receiving few gunshot or bomb blast victims since the Awakening movement drove al-Qaeda from the city over the past six months, but people still walk warily in the streets as if they expected firing to break out at any minute.

Colonel Feisal, a former officer in Saddam Hussein's Special Forces, cheerfully admits that before he was chief of police, "I was fighting the Americans". His brother Abu Marouf, a former guerrilla commander, controls 13,000 fighters of the anti-al-Qaeda Awakening movement in and around Fallujah. The colonel stressed that the streets of Fallujah were now wholly safe but his convoy drove at speed and was led by a policeman, his face hidden by a white balaclava, on top of a vehicle holding a machine gun and frantically gesturing oncoming vehicles out of the way.

The police station is large and protected by concrete and earth barriers. Just as we reached the inner courtyard we saw signs that the battle against al-Qaeda may be over but arrests go on. From another part of the police station there emerged a line of 20 prisoners, each with his eyes covered by a white blindfold, gripping the back of the clothes of the prisoner in front of him. The prisoners
reminded me of photographs of men blinded by gas in the First World War stumbling along behind a single man who could see and who, in this case, was a prison guard.

There are new buildings in the main street. I used to eat at a kebab restaurant called Haji Hussein, which was one of the best in Iraq. Then, as the occupation went on, I started attracting a lot of hostile stares. The manager suggested it might be safer if I ate upstairs in an empty room, and soon after it was destroyed by an American bomb. It has now been rebuilt in gaudy colours and seemed to be doing good business.

At one time Fallujah had a population of 600,000, but none of the officials in the city seemed to know how many there are now. Col Feisal is hopeful of investment and took us to a white, new building called the Fallujah Business Development Centre, which had been partly funded by a branch of the US State Department. Tall American soldiers were guarding a business development conference. "It has attracted one American investor so far," said a uniformed American adviser hopefully. "My name is Sarah and I am in psychological operations," said another US officer and proudly showed us around a newly established radio Fallujah.

At the other end of the city we crossed over the iron bridge built in about 1930 and now the only link with the far side of the Euphrates. There is a modern bridge half a mile down river but it has been taken over by the American army and, say locals, used as a vehicle park. On the far side of the bridge, past beds of tall bullrushes where people escaping the city during the sieges of 2004 tried to hide, there is a building eviscerated by bombs on one side of the road. On the other side is the hospital whose officials US commanders used to accuse of systematically exaggerating the number of those killed by American bombing.

When I asked what the hospital lacked Dr Kamal said wearily: "Drugs, fuel, electricity, generators, a water treatment system, oxygen and medical equipment." It was difficult not to think that American assistance might have gone to the hospital rather than the business development centre. Colonel Feisal said things were getting better but he was mobbed by black-clad women shouting that their children had not been treated. "Every day 20 children die here," said one. "Seven in this very room."

The doctors said that they were tending their patients as best they could. "The Americans provide us with nothing," said one mother who was cradling a child. "They bring us only destruction."