BIRZEIT UNIVERSITY

COMMUNITY HEALTH UNIT

A Review of Health Standards and Services in the

West Bank and Gaza Strip

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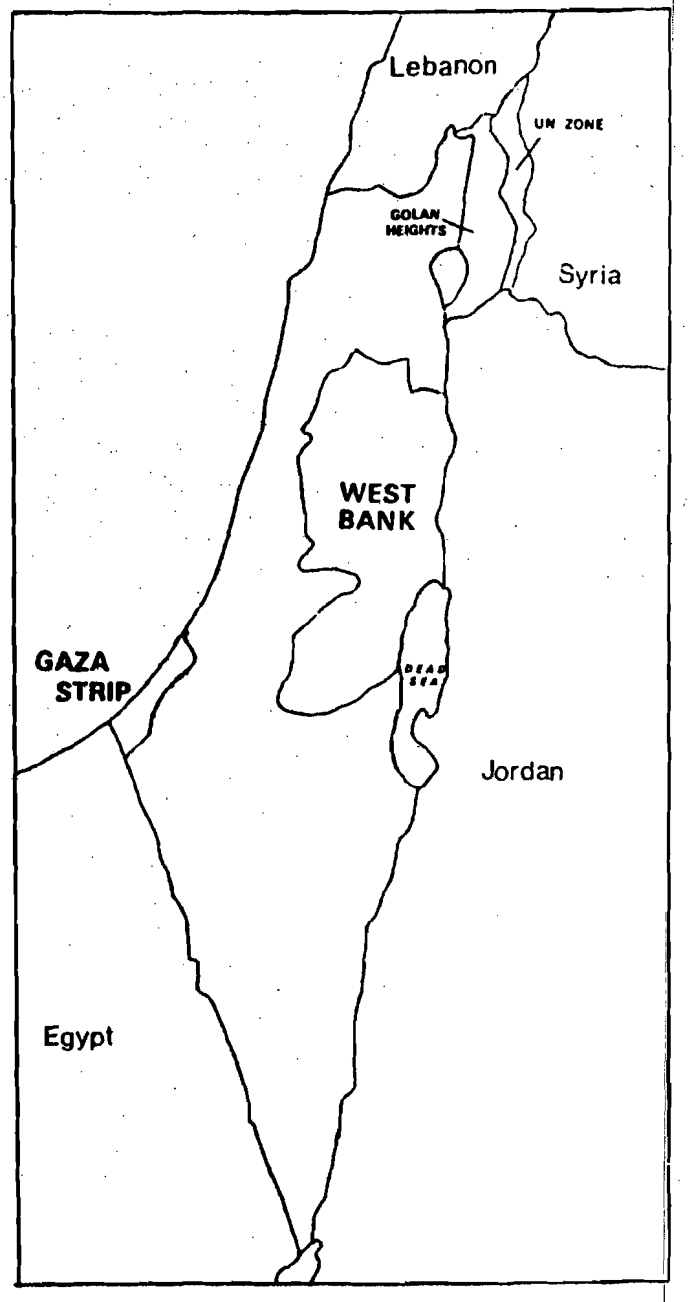
Contents

Preamble.

The Community Health Unit of Birzeit University is a community health research and development group working in the West Bank and Gaza Strip. The purpose of producing this review is to provide interested parties with a general document on health in the Israeli Occupied Territories where results of health research in the area can be disseminated and in which issues concerning health policy and planning can be raised.

The Review will be regularly updated to include new information as it becomes available, and new issues as they are raised. In this way it is hoped that the Review will provide a useful reference for researchers and planners interested in health and its promotion in the area.

The West Bank And Gaza Strip



1. Introduction.

The arrangement of the material contained in this report reflects a conceptual framework of community health that places the health status of a population (section 2) firmly in its social, economic and environmental context (section 3) without underrating the importance of curative and preventative health services as health determinants (section 4).

Section 2, Health Status Indicators reviews some of the published data available describing the health status of the population of the area. Infant mortality, infant nutritional status, parasitic infestation, blindness and other communicable and infectious diseases are discussed.

Section 3, Selected Determinants of Health Status attempts to place the health status data in context by reviewing factors likely to influence the health of the population. Household income, overcrowding, water supply, sanitation, education and infant feeding practices are some of the variables discussed which are believed to influence health status.

Section 4, Health Care summarises available data concerning the health care services which are provided to the population.

Section 5, Conclusions: Directions for Health Development proposes some guidelines for the adoption of a health development strategy for the West Bank and Gaza.

2.Health Status Indicators.

Comprehensive and exact data for the whole area do not exist. The following reviews some of the published information which is available to the public.

a. Infant Mortality Rate.

Infant Mortality Rate (I.M.R.) refers to the number of infants who die in the first year of their life per 1000 live births (D.T.L.B.). I.M.R. is one of the most sensitive indicators of the health status of a population. The exact rate for the whole population of the West Bank and Gaza Strip is not known, and would require a large scale, properly conducted demographic survey.

The annual I.M.R. figures which are released by the Israeli Military Authorities are based only on registered births and deaths, a method known to be inaccurate because not all deaths are registered (1). In the 1981 report of the Israeli Ministry of Health to the W.H.O. an infant mortality rate for the Gaza Strip of 43 is quoted. Widespread criticism of this approach has resulted in a more cautious approach in their 1986 report in which reported I.M.R. for the area is quoted while it is acknowledged that the Israeli Central Bureau of Statistics uses a working estimate of 70 D.T.L.B. for the population of the West Bank and Gaza Strip (2).

There have been few properly conducted demographic surveys in the Occupied Territories. In 1981 Birzeit University Community Health Unit conducted a village health survey where indirect demographic techniques were used to measure infant mortality, and in 1986 a second survey was conducted jointly by the Community Health Unit and the Union of Palestinian Medical Relief Committees. In both surveys the Brass method was applied which is intended to correct data for possible reporting biases which render direct calculation of I.M.R. from reported births and deaths less reliable (3).

The first survey was conducted in the villages of Kobar, Abu Shkheidem and Burham in the Ramallah area in 1981 on a total population of 2188, 272 of whom were married women of child-bearing age. The study reported an I.M.R. of 91 D.T.L.B. from a total of 1578 births (4).

The second survey was conducted in the village of Biddu in the Ramallah area in 1986. The total sample population was 2750, with 311 married women of child-bearing age and 1835 reported births. The study reported an infant mortality of 49 D.T.L.B. (5).

These two pocket studies are in no sense representative of the area as a whole. Indeed the Ramallah area is one of the more wealthy regions in the West Bank, and the village of Biddu is fairly well off by Ramallah standards. It is noteworthy that these findings are not inconsistent with the Israeli Central Bureau of Statistics' estimates of 70 D.T.L.B. for the whole area.

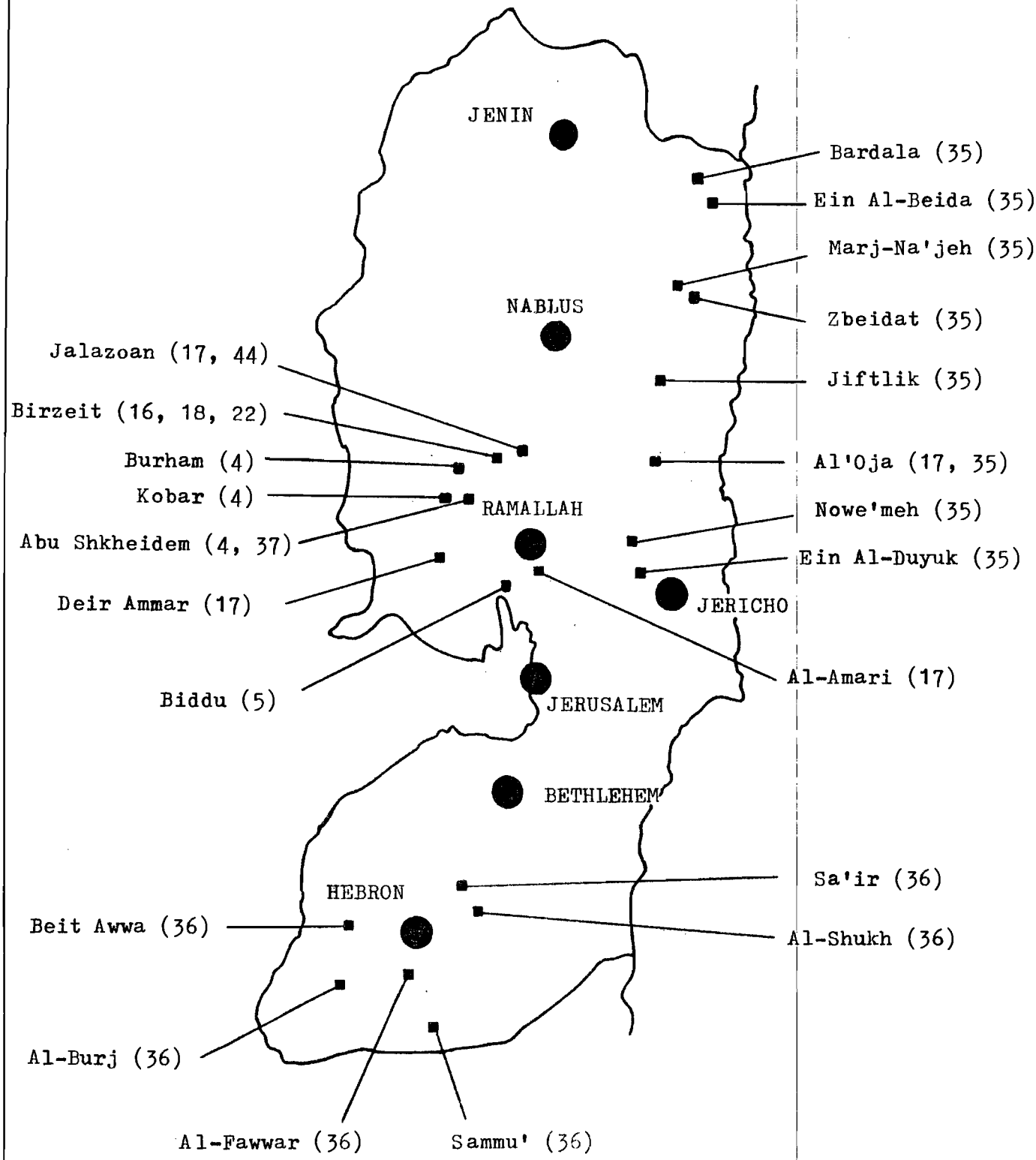
Given the current lack of generalizable data on infant mortality, the most reasonable estimate for the West Bank and Gaza Strip is that I.M.R. is in the range 50-100 D.T.L.B.

Cause of Infant Death.

Existing data on causes of infant death in the area are based mainly on hospital and clinical records with the accompanying problems of accuracy and bias. Most available reports state that around half of notified infant deaths are a result of respiratory or intestinal infection. An Israeli Health Ministry report stated that in 1984 30% of reported infant deaths in the West Bank were attributable to respiratory infections and 11% to intestinal infections (6). UNRWA reported that in 1985 25% of reported refugee infant deaths in the West Bank were attributable to respiratory infections and 17% to intestinal infections (7).

Map Showing Locations Of Health Study Areas Reported in the Review

(Reference numbers in brackets)



A study of the refugee camp population in Gaza reported that the main causes of infant death in the Gaza camps were gastro-intestinal (46%) and respiratory (28%) infections (8).

A second, hospital based study reported that in 1979 43% of infant deaths in the 1 month to 3 years age group were caused by gastro-intestinal infections (9).

The precise extent to which respiratory and gastro-intestinal infections are responsible for infant deaths cannot be deduced from this data. It is clear, however, that they constitute the main causes of infant mortality at the present time.

b. Nutritional Status.

Infant malnourishment is an important contributary factor to infant mortality in most developing countries. The nutritional status of a child is normally determined by comparing its anthropometric characteristics (height/weight for age) with a reference standard, as an indication of the level of protein/calorie malnutrition. Hematocrit or haemoglobinometer determination of blood haemoglobin provides a measure of anaemia levels.

Comprehensive data on the nutritional status of the population as a whole are not available. However a clinic based survey of the refugee camp population of the West Bank and Gaza Strip has recently been published (10). The study involved the examination of a sample of under 5 year olds who are registered with UNRWA (5% in the Gaza Strip, 10% in the West Bank). Using standard W.H.O. definitions of undernourishment, the results showed that 15% of the West Bank sample and 20% of the Gaza sample were malnourished by height for weight standards (stunting) indicating a serious problem of chronic malnutrition in both areas.

Baby Being Weighed in a Community Health Research Project

The study reported that of all the UNRWA administered areas, Gaza has the highest rate of malnutrition within its refugee population, and that while levels of acute malnutrition had decreased among the West Bank and Jordan refugees since 1974, there had been no improvement in Gaza (11).

Regional results for anaemia were not reported, but approximately 50% of the total sample (including Jordan) were reported as anaemic.

A second nutrition study, carried out by Birzeit University Community Health Unit in the West Bank refugee camp Jalazoan, reported that 18% of a sample of 319 children between the ages of 6 and 11 years were anaemic(haemoglobin less than 12g/100ml). The results showed a higher rate of anaemia for girls compared with boys (22% and 15% respectively) (ref. 44).

For the non-refugee camp population of the Occupied Territories there is a lack of generalizable information. However, the results of the Kobar and Biddu pocket studies provide accurate data for these two areas.

In the 1981 Kobar survey 41% of a sample of 209 children under three years of age were classified as undernourished. McKlaren and Read standards for nutritional status classification were used. The female infant population was significantly more malnourished than the male (52% and 32% respectively) (12).

In the 1986 Biddu study 26% of under-3s were classified as undernourished using the same reference standards as in the Kobar study (13).

Thus existing data indicate that protein/calorie infant and child malnutrition continues to be a substantial health problem in both the West Bank and the Gaza Strip.

c. Parasitic Infestation.

Levels of parasitic infestation provide a good indication of the extent of environmental contamination within the community. The following reviews several pocket studies of intestinal parasitic infestation which have been conducted in the West Bank and Gaza Strip.

In the 1981 Kobar survey 32% of a sample of 195 under 3 year olds were contaminated with one or more intestinal parasites. (Main parasites were Giardia lamblia (26%), Entamoeba histolytica (3%), Entamoeba coli (3%) and others (4%)). There was a strong relationship between crowding and parasitic infestation (14). (Entamoeba coli was included as an indicator of fecal oral contamination although it is not considered to be a pathogenic parasite).

The 1986 joint Biddu study reported that 40% of under 3s tested had one or more intestinal parasites. Similar species to those in Kobar were found (15).

The Community Health Unit has also conducted two school based parasite surveys. The first, in Birzeit village, reported that 23% of a sample of 193 children between the ages of 6 and 12 years had one or more intestinal parasites (14% Giardia lamblia, 8% Entamoeba coli, 2% others) (16). Birzeit is a relatively wealthy and hygienic village by West Bank standards.

The second school based survey sampled grade 1 (6-7 yrs.) and grade 6 (11-12 yrs.) pupils in four West Bank schools. From a total sample of 455 children, 48% were found to be infected with one or more intestinal parasites (21% Entamoeba coli, 16% Giardia lamblia, 11% Hymenolopis nana, 6% Trichiura, 4% Entamoeba histolytica, 2% Ascaris, 3% others) (17).

Data from the Birzeit village clinic laboratory show that in the two years of 1985 and 1986 27% of a total of 1402 stools examined were positive for one or more intestinal parasites. Main parasites were Giardia lamblia, Entamoeba coli and Entamoeba histolytica (18).

Jalazoan Refugee Camp (Above) and Al-'Oja Village (Below): Two of the Study Areas for the Community Health Unit Parasite Research.

For the Gaza Strip the Israeli Ministry of Health has reported two school based studies: in Deir Al-Balah (1976, 2,500 children) and Jabalia village (1979, 411 children). In the Deir Al-Balah study 50% of the children were reported positive for one or more intestinal parasites with 9.5% positive for Ankylostoma (19). In the Jabalia study 62% of the children were positive for one or more intestinal parasites (Ascaris 62%, Giardia lamblia 17%, Ankylostoma 7.5%) (20).

Thus existing data for the West Bank suggest that Giardia lamblia, Entamoeba coli and Entamoeba histolytica infestation is prevalent in the area indicating the existence of a basic environmental hygiene problem. It should be emphasized, however, that further research is needed before it can be concluded that the patterns found in the preceeding studies can be generalized for the whole West Bank. It is noteworthy that existing data suggest that Ascaris is not a major public health problem in the areas of the West Bank which have been studied. This observation invites the hypothesis that outdoor defecation may be less of a health problem in the West Bank than in the Gaza Strip where Ascaris is common. Such a hypothesis requires further research. The relationship between crowding and infestation reported in the Kobar study points to the importance of intra-familiar transmission in that population.

Data from the Gaza Strip indicate prevalence of Ascaris and Ankylostoma. Although the data are from pocket surveys it is noteworthy that conditions in the overcrowded camps of the Gaza Strip are no better than those villages where the surveys were conducted. The prevalence of these parasites in Gaza points to a severe environmental contamination problem in the area.

d. Blindness.

A random sample survey of visual acuity of 9548 residents of the Occupied Territories reported a 1.7% rate of binocular blindness. The principal causes were reported as cataract, trachoma and corneal leucoma, all of which are preventable disorders. The authors stated that the rate of blindness was 8 times that of England and Wales, and that the West Bank and Gaza belong to the category of areas where there is a high prevalence of eye disease which overburdens existing services (21).

e. Other Communicable and Infectious Diseases.

Most studies of clinical records in the Occupied Territories indicate that gastro-intestinal and respiratory infections are the main diagnostic categories. For example according to one year's data from the Birzeit village clinic, 35% of total diagnoses were respiratory infections and 12% gastro-intestinal infections (22). The Kobar study, which surveyed reported diseases in the previous week, also showed that respiratory and intestinal infections were the main categories reported (23).

The Israeli Ministry of Health publishes the annual numbers of reported infectious diseases in the West Bank and Gaza Strip. These figures should not be interpreted as reflecting incidence within the population, but at least they give an indication of some of the diseases which are present. For 1985, main infectious diseases in the West Bank were reported as mumps (1046 cases), chicken pox (785), measles (609), infectious hepatitis (270), dysentry, paratyphoid and typhoid (267), brucellosis (250), rubella (164), and meningitis (60) (24). In Gaza the following were predominant: infectious hepatitis (523), measles (367), perusis (372), meningitis (42) and typhoid (11) (25).

Selected Health Status Indicators: a Summary.

Despite the lack of comprehensive and exact data for the population of the West Bank and Gaza Strip as a whole, the preceeding review of literature suggests the following general outlines of health patterns within the population:

Infant Mortality between 50 - 100 D.T.L.B., partially attributable to preventable infectious diseases.

Widespread infant malnutrition.

Common parasitic infestation, particularly serious in Gaza where Ascaris and Ankylostoma are a problem.

High levels of preventable blindness.

A health profile of this kind, similar in some ways to "developing countries", points towards the need for primary health care approaches to health service provision, through which strategies for disease prevention can be combined with accessible and affordable curative services.

3. Selected Determinants of Health Status.

The purpose of this section is to review available information related to some of the factors which influence the health of the population of the Occupied Territories. From the variety of social, economic and environmental factors which interact to influence the health of any population the following will be discussed:

- # income
- # gender
- # overcrowding
- # water supply
- # environmental sanitation
- # health awareness

The list is not exhaustive but is intended to cover some of the main factors. The health status of a population is also clearly related to health service provision. This area will be discussed in section 4.

a. Income.

Household income is normally considered to be highly significantly related to health status indicators, as it is likely to be associated with various other factors which influence health, such as crowding, diet, water supply, sanitation and education. It should be emphasized, however, that within a particular income group there will be significant fluctuations in health status. Income is only one of a variety of factors involved.

The results of the Kobar study are illustrative. Households were classified into one of three wealth status categories. The percentage of anaemic mothers in the high, medium and low wealth status households was 13, 16 and 21% respectively, suggesting a link between the nutritional status of the mother and her family's income. The study did not, however, show significant associations between wealth status and parasitic infestation or infant nutritional status (26).

If the relationship between income and health status is complex on the local scale, it is more so at the national level. Generalizations linking economic development with health improvements at the national level should be treated with extreme caution. In particular, aggregate figures often do not accurately describe the distribution of income. This information is essential if the sector where poverty related diseases are likely to occur is to be identified.

In the West Bank and Gaza Strip the details of the size and distribution of income are not known. The subject is complex and problematic, and the details are beyond the scope of this paper. A major problem with estimates of income is the important role which (undeclared) remittances play in the economy.

It is generally agreed, however, that the 1970s saw a substantial increase in per capita income in the West Bank and Gaza, when employment in Israel was plentiful (if low paid) and Gulf economy was booming. By the mid 1980s, however, employment opportunities in both Israel and the Gulf had been severely reduced, and it is probable that the real per capita income began to fall in this period.

The agricultural sector saw a boom in productivity during the 1970s, as high yield varieties and techniques were adopted. The extent, however, to which these new techniques have resulted in increased income for the farming community is not clear. Problems of overproduction and market domination have followed the "green revolution" of the 1970s. While yields have increased, losses in years when the market price falls have also increased. The overall effect on the income of the farming community is not known.

In summary, general figures about economic growth of agricultural productivity should not be used simplistically in order to argue that the health status of a population has improved. The detailed relationship between economic changes and health requires a more rigorous analysis which is not possible given the existing data.

b. Gender.

The Kobar and Biddu studies both demonstrated relationships between gender and health. In the Kobar study 52% of girls under three years old were malnourished compared with 32% for boys of that age (27). In the Biddu study the infant mortality was higher for female babies than for male babies (28). Thus there is some evidence that cultural factors related to child care and gender relations may influence the health of infants.

For the adult population the sexual division of wealth and labour may well have important consequences for the health of the population. More research is required into this area. In particular the health consequences of closely-spaced multiple pregnancies are likely to be adverse. The Kobar study showed an association between pregnancy and anaemia. More detailed research into this area would be useful (29).

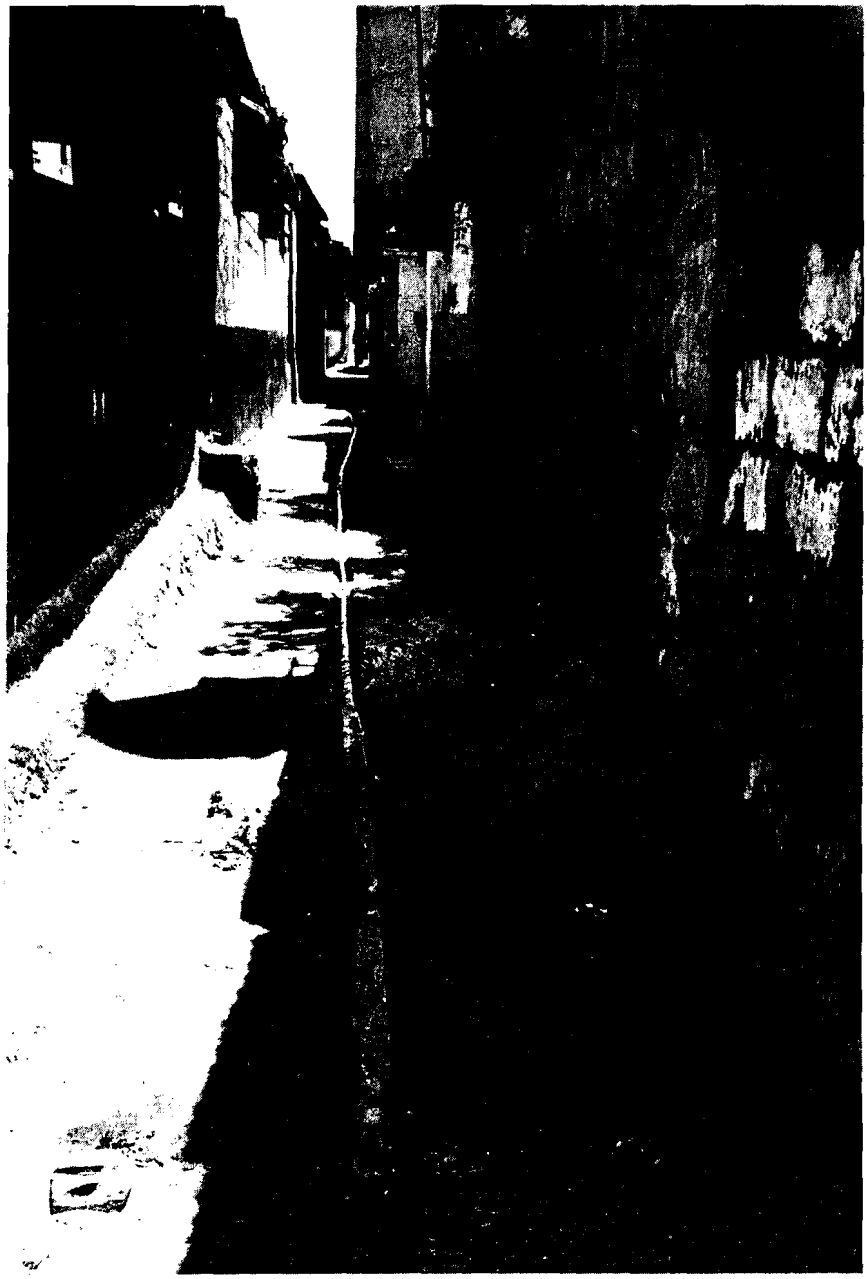
According to a recent report, in 1984 13% of males and 38% of females in the Occupied Territories were illiterate (30). Accordingly, a substantial section of the female population do not have access to written information, a fact which has important consequences for their health and life.

c. Overcrowding.

Two kinds of crowding are of interest from the health point of view: crowding within households and crowding between households. Within household crowding is normally estimated by the number of persons per room. According to the Israeli Central Bureau of Statistics the median housing density in both the West Bank and Gaza in 1982 was 2.6 persons per room. This compared with 1.1 persons per room for Israeli Jews in the same year (31).

Approximately 50% of the households in the Occupied Territories have either 1 or 2 rooms (32) in which the whole family lives. The same rooms are used for sleeping, working, cooking and eating. Young children routinely share mattresses for sleeping. This kind of living situation creates prime conditions for intra-familial disease transmission. (The Kobar study showed a relationship between crowding and parasitic infestation.)

Jabalia Camp, Gaza. Narrow Alleys Between Dense Housing With Open Drains Where Children Play.



The second kind of overcrowding is between households. This problem is most pronounced in the Gaza Strip, a very densely populated area of more than 1450 persons per square kilometre. The refugee camps have grown into almost wall to wall housing with only narrow paths and streets between the walls. These narrow streets are the playground of the camp children where open wastewater channels, standing pools of wastewater, and outdoor defecation by the very young are commonplace.

This combination of dense housing and inadequate environmental sanitation may be a partial explanation for the prevalence of Ascaris in the Strip.

d. Water Supply.

According to the Israeli Central Bureau of Statistics, in 1981 31% of the West Bank households were without a piped water supply. The proportion was 50% for West Bank rural households (33). Those not connected to a water network drink either from rainfed cisterns, collect from the village spring, or buy water from water tankers.

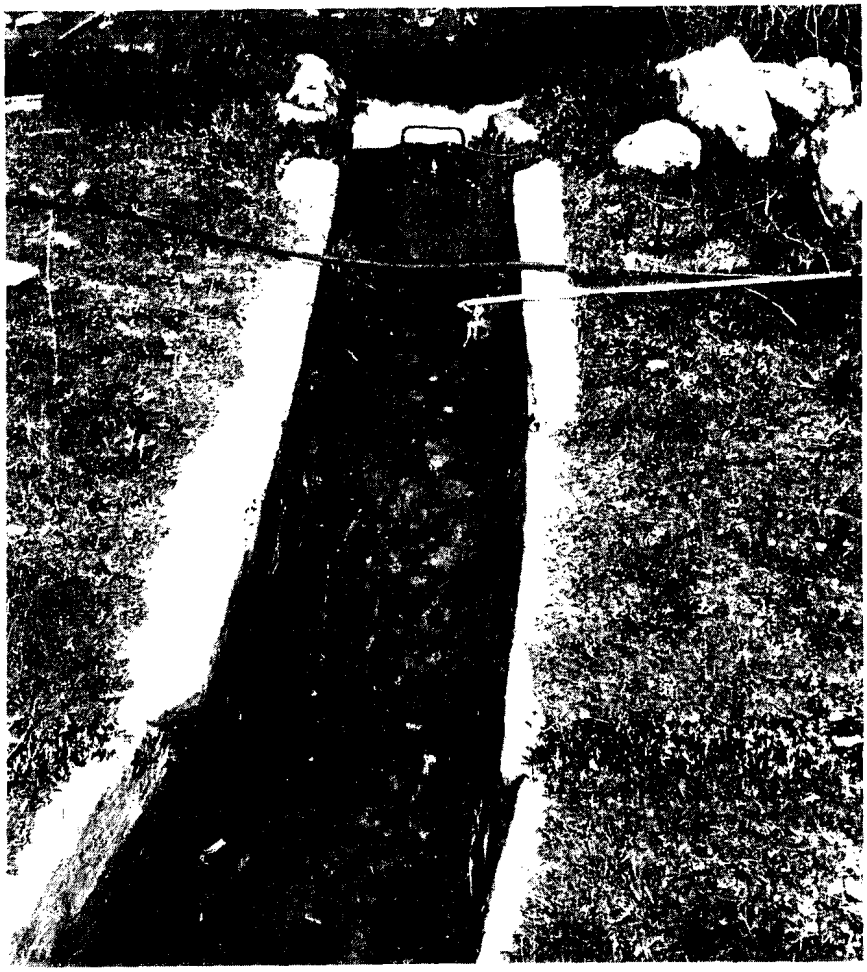
The health impact of a piped water supply is, in general, a complex and controversial subject (34). Care should be taken when generalizing about the health consequences of the absence of a piped system.

The table below summarizes the results of 4 water quality studies carried out by Birzeit University Community Health Unit in co-operation with the Union of Palestinian Medical Relief Committees (35,36,37,38). The index measured, fecal coliform concentration, provides an index of the magnitude of fecal pollution of the water. A value of 0 FC/100 ml is ideal, but there is no clear value above which water pollution is a definite hazard. For the purposes of these studies 100 FC/100 ml was taken to be the level above which the drinking water constituted a substantial health risk.

Summary of Results of Water Quality Studies

Area	Water Description	Result
8 villages in the Jordan Valley	Stored water mainly from irrigation canals (88 samples)	76% of samples more than 100 FC/100 ml.
7 villages in the Hebron Area	Rainfed Cisterns (69 samples)	21% of samples more than 100 FC/100 ml.
	Piped water (51 samples)	90% of samples = 0 FC/100 ml Mean = 0.1 FC/100 ml
Abu Shkheidem village in the Ramallah Area	Rainfed Cisterns (75 samples)	0% of samples more than 100 FC/100 ml Mean = 5 FC/100 ml
Springs used for drinking in the Ramallah Region	9 Springs (5 samples taken per spring at intervals throughout the year)	7 out of the 9 springs had one or more samples of 100 FC/100 ml or more at least once in the year.

Open Irrigation Canals in the Jordan Valley are Still Used For Drinking Water.



A review of these studies concluded that while open irrigation canals and polluted springs should be considered a potential health hazard, it was not possible to conclude that the quality of rainfed cistern water presented a danger to health. In general the more probable influence of the use of rainfed cisterns on health is to reduce the amount of water available for personal and domestic hygiene compared with a piped supply. This effect is particularly pronounced in the summer months when cisterns run dry (39).

The Israeli Central Bureau of Statistics reports that in Gaza 95% of households have piped connections (40). The salinity of the drinking water supply in this area, however, is known to be a problem and may be associated with problems of fluorosis and hypertension.

e. Sanitation.

According to the Israeli Central Bureau of Statistics, in 1981 15% of West Bank households and 21% of West Bank rural households were without a latrine of any kind, while only 1% of the Gaza households were reported without latrines (41). Most latrines are either of the direct drop or pour flush type. Few families have automatic flushing latrines. A recent Birzeit University Community Health Unit report argued that if every West Bank household had a hygienic latrine which was used for all excreta disposal, a considerable contribution to reducing environmental contamination and the associated intestinal infections would be achieved (42).

Another problem is encountered in villages where piped water is supplied. Household soakage pits frequently become clogged, and act as collecting vaults which have to be emptied by vacuum trucks. This procedure is very expensive and, if not implemented leads to overflowing pits and the associated environmental contamination. Piped sewage is clearly a desirable future option in such a situation as vacuum truck evacuation systems are expensive and often unhygienic.

Sanitation in Jabalia Camp, Gaza.

Sewage Overflows into the Streets and Finally Collects in a Large Open Pool Where Disease Vectors Can Breed.

In the refugee camps of the Gaza Strip household wastewater is collected by a network of open channel sewers which convey the sewage water to open pools and percolation pits. In practice this results in large standing pools of wastewater in and around the camps, which provide a potential breeding ground for disease vectors.

Most refugee households also have latrine pits for household excreta disposal, but in practice these often overflow or are pumped out into the open channels.

f.Health Awareness.

A discussion of determinants of health status in the West Bank and Gaza would not be complete without raising the subject of health awareness. A variety of behaviour patterns which are harmful to the health of the population are present in the Occupied Territories. In some cases people do not know that these practices are harmful. In others they believe that they are harmful and nevertheless continue to behave in the same way.

Examples of the first category might include areas such as inappropriate diet, the dangers of bottle feeding infants, inappropriate use of medicines and medical facilities. In the West Bank and Gaza many new kinds of technologies have been introduced over the past two decades (for example: new foods, new medicines). The potentially harmful effects of these new technologies may not be understood by the community. The high illiteracy rates among women mentioned previously (38%) play an important role in this process.

Examples of the second category might include smoking, hand washing and food washing.

There can be no doubt that an increased health awareness in the population could have an important impact on the health status. Mother and child health must be a priority area in this respect, with the potential to dramatically reduce infant mortality and morbidity. In other spheres, such as environmental sanitation, the resources of other sectors of the community could be mobilized.

There is a need for more practically orientated research and pilot study projects to explore in more detail existing belief systems related to health and their potentially beneficial and harmful consequences: the Kobar and Biddu studies have provided a starting point in this area. Such studies can help to map out more effective health education strategies which go beyond the reciting of biomedical paradigms.

4. Health Care.

The disparity between health services in the Occupied Territories and Israel has been adequately documented elsewhere and will not be explored in detail in this report (43). The approach adopted will be to examine whether, in light of the problems presented in sections 2 and 3, the existing health services are meeting the needs of the population. The discussion will concentrate on the primary health care (P.H.C.) sector as the health problems described previously all point to the need for the primary health care approach as a priority in the area. At present there are four main categories of P.H.C. providers: the Israeli Military Government, UNRWA, other Non-governmental organizations (N.G.O.s) and the private sector. These will be discussed in turn.

a. The Military Government Sector.

The Israeli "Adler Report" for planning health services in the West Bank described the government clinic sector as follows:

In the major urban clinics there are still only one to two clinics in the towns while in the rural areas there are 180 clinics to provide for 450 villages ... The present state of the health insurance scheme is that some 40% of the population has enroled in the insurance plan, however only 55% of these regularly pay the premium. The number of those joining the program is equal to the number of those who are leaving it (45).

The realities of the government's rural clinics in the West Bank are well known. In most of them a doctor is only present for a few hours a week, when medicines can be prescribed if they are available. The minimal quality of the service explains the population's lack of interest in the insurance scheme. Those who participate in it voluntarily do so primarily to gain access to government hospital facilities and to referrals to Israel hospitals.

In the Gaza Strip the situation in the 25 government clinics is similar. A Harvard researcher recently described these clinics as follows:

The majority of clinics possess few if any medicines and lack laboratory equipment; many have no emergency facilities ... clinics are extremely limited in the quality of services they can deliver and are often used by the population as a channel through which to obtain hospital services (46).

The rate at which patients are treated in these clinics provides an indication of the quality of service provided: in 1985 an average of 110 patients were treated per day at each government clinic. Most of the clinics have only one physician (47).

b. UNRWA.

UNRWA spends an estimated 16 dollars per capita per year on health care, which places severe financial limitations on the quality of services which it can offer (48). In 1985 UNRWA clinics in the West Bank and Gaza Strip examined a reported 1,001,071 patients with a staff of 55 doctors. This is an average workload per doctor of about 70 patients per day (49). UNRWA centres are reported to be of higher quality than government clinics but suffer from lack of equipment, staff and space, and regularly run out of their monthly supply of medicines by the middle of the month, forcing patients to procure medicines from private sources (50).

Patients Waiting to be Treated at a Medical Relief Committee Mobile Clinic.

c. Other N.G.O.s.

The Israeli Ministry of Health reported that in 1985 there were 47 non-governmental clinics (excluding UNRWA) in the West Bank (51). In Gaza there are 6 private charitable organizations working in health (52). In both regions these N.G.O.s include organizations which are currently providing the best quality P.H.C. care in the country. It is within this sector that the most creative developments in P.H.C. are currently possible.

In recent years the Union of Palestinian Medical Relief Committees has emerged as a new force for health development in the area. The Union channels the voluntary energies of its membership into health related activities including the provision of mobile clinics, health education programs and the establishment of health centres. In 1985 a reported 40,000 patients were treated in their mobile clinics. Through their permanent centres they aim to develop a new model for primary health care provision in the area. The Union forms part of the local popular movement, and in this it differs from the more charitable orientation of other local health N.G.O.s (58).

d. Private Clinics.

There are a large number of private clinics in the area. This sector is utilized by those sections of the population who can afford to pay for it. The Kobar study showed that families from more wealthy backgrounds were more likely to approach a doctor when sick compared with the poorer families (53). The private sector provides an important backup and specialist referral system, but is not a suitable alternative to a properly organized primary health care system.

5. Conclusions: Directions for Health Development.

The preceeding has attempted to show that the health problems faced by the population of the West Bank and Gaza require an integrated primary health care approach which is currently not available in most areas. It is unrealistic to expect the Military Government to take a useful role in this sector, UNRWA suffers from severe financial constraints, and the private sector cannot be afforded by the most needy sectors of the population. This leaves the Non-Governmental Organizations working in health, who offer the most hopeful possibilities for development of the P.H.C. sector.

Within this sphere there is a need for an approach which goes beyond simply offering curative services, although quality curative medicine provides the all important basis for the P.H.C. strategy. Mother and Child Health clinics have the potential to have a significant impact on the patterns of infant mortality and morbidity reported in section 2. Community education campaigns could, if properly organized, help to encourage the organization of a more healthy environment.

Implicit within this approach to health development is the issue of the distribution of health resources. The majority of facilities in the West Bank are located in the towns, and a large proportion of health resources are invested in hospital services. While hospital based health care remains an important part of an overall health development strategy, the preceeding has attempted to show that the priority for the area is the P.H.C. sector.

Part of the P.H.C. paradigm is that the participation of a community in their own health schemes is essential if the full benefits of the intervention are to be achieved. The task ahead is for independent local organizations to work in partnership with local communities in the struggle for improved health.

Appendix 1: Health and Occupation.

Official Israeli documents describing health and health services in the West Bank and Gaza tend to emphasize the following points:

a. The health status of the West Bank and Gaza populations is better than in many countries in the Arab world.

b. The standard of living of the population of the West Bank and Gaza has increased substantially since 1967 contributing to an improvement in the health status of the population.

c. The government health sector has been progressively expanded and upgraded since 1967.

These themes run throughout the 1986 report of the Israeli Ministry of Health to the World Health Organization General Assembly.

First it should be stressed that even if these three propositions were true, this would in no way be a justification for the Israeli Military Occupation. The issue of the Occupation is essentially a political and ethical one: the right to self-determination cannot be withdrawn because the standard of living has improved.

In reality, however, the propositions are inaccurate and misleading. The following is intended to explain and correct some of these distributions:

a. Existing data do not demonstrate that the health status of the West Bank and Gaza population is higher than in surrounding countries. Infant mortality is probably the most sensitive indicator of the health status of a population. Official Israeli reports have used registered births and deaths to calculate what is known to be an inaccurate estimate of I.M.R. (see section 2). Using Israeli Central Bureau of Statistics' estimate of 70 deaths per 1000 live births places the infant mortality of the Occupied Territories in the same range as that reported for other Arab countries.

Below are the same figures which the Israeli Ministry of Health uses for its comparisons, with the correct figure for the West Bank and Gaza Strip inserted:

	Infant Mortality (1983) Deaths/1000 Live Births
Yemen (PDR)	135
Egypt	100
Algeria	90
Saudi Arabia	65
Iraq	75
Jordan	55
Syria	60
Kuwait	23
West Bank and Gaza	70

(ref. Israeli Ministry of Health. 1986 Report to WHO. p. 8)

It is noteworthy that in its reports on living conditions in the Occupied Territories, Israel systematically omits to include its own country from the list of "selected Middle Eastern countries" which is normally presented. That the Israeli government does not feel that Israeli citizens are comparable with the Arabs of the Occupied Territories is also revealed by their health sector policy: in 1982 the public expenditure per capita on health was reported 12.5 times higher for Israelis compared with the Palestinians of the West Bank and Gaza Strip (54).

b. The changes in the standard of living since 1967 in the West Bank and Gaza were recently summarized in the following way by Meron Benvenisti:

Standard of living, measured in private consumption per capita, nutritional value of daily diet, ownership of appliances, construction of houses and motorisation rate, showed marked improvement until 1981. Since then, most indicators have remained constant. Private consumption per capita has shown no change since 1981, caloric value remained unchanged; completed private construction declined from 716,700 sq. meters in 1981 to 630,800 in 1984 ... the standard of living of Palestinians in the West Bank remained ... lower than the Israeli standard of living by a ratio of 1:4. Moreover the newly attained relative prosperity is based on total dependence on external factors over which the West Bankers have no control. This vulnerability has intensified rather than diminished during the occupation years (55).

c. Israeli Ministry of Health reports to W.H.O. are usually filled with descriptions of expansion and innovation in the Government health sector. These same reports usually fail to explain how this has been achieved when at the same time the Government health budget has been systematically reduced. For example the total public expenditure of the Military Government decreased from a reported 105 million dollars in 1983/84 to 70 million dollars in 1984/85 with 16% in both years being allocated to health (56). A systematic decline in the health sector budget has been documented since the mid-70s (57).

The explanation is to be found in the semantics of expansion. For example the number of hospital beds in in the West Bank has remained constant since 1967. The authorities rename existing wards as being specialist sections and then announce an expansion although the number of beds and the quality of service have remained more or less the same. The reported program to create mother and child health centres has, by and large, been a similar semantic tool whereby existing clinics have been re-classified, while continuing to provide the same, inadequate service (see section 4).

Thus while improved health status, an improved standard of living and an improved Government health sector would in no way legitimize occupation, in fact the reality is significantly different from that which is presented by the Israeli Government. Health status remains low, standards of living have stopped rising and the Military Government health sector is barely maintaining existing low standards.

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ملخـــــص

يستعرض هذا التقرير المعلـومات المتوفرة عن المستوى الصحي والخدمات الصحية المـوجودة في الضفة الغـربية وقطـاع غـزة · كمـا يناقش الاوضاع الصحية العـامة للسكان ويخرج باستنتاج يبين أنه على الرغم من ندرة المعلـومات الشاملة والدقيقة حول الموضوع الا انه بالامكان تلخيـص الوضع الصحي بالنقاط التاليـة :-

أ) نسبة وفيات الاطفال عالية وتقدر ما بين ٥٠ - ١٠٠ وفاة لكل ١٠٠٠ ولادة · وتعزى هذه الوفيات بشكل رئيسي الى امراض واصابات بالامكان اتقـاء حدوثهـا ·

ب) انتشار سـوء التغذية بشكل واسـع ·

ج) نسبة عالية من الاصابة بالطفيليات وخاصة في منطقة قطاع غـزة حيث تنتشر الاصابة بالاسكارس وتتـواجد اصابات بالانكيلوستـوما فيـه ·

د) نسبة عاليـة من الاصابة بالعمـى وهي من النوع الذى يمكن اتقـاء حـدوثـه ·

هـ) تزايد مشكلة الامراض المزمنـة وخاصة مـرض السكرى ومرض السمنة (الثدن) وامراض القلب ·

ويناقش التقرير مجموعة من العوامل التي تـؤثر على الاوضاع الصحية للسكان مثل : الدخل والجنس (من حيث الذكورة او الانـوثة) والاكتظاظ السكاني والتـزود بالمـاء والتصحـاح وأخيرا الوعي الصحي · ثـم يستعرض الخـدمات الصحية المتـوفرة في المنطقة ويطرح جدلا حـول فعـالية وجـدوى الخدمات التي تقـدمهـا السلطات العسكرية الاسرائيلية في مجال الرعاية الصحية الاولية · ويستنـتج بأن اكثر الجهات المعـول عليها في تطـوير الرعاية الصحية الاولية هي المنظمـات غير الحكومية والتي تعمل في مجال الصحة ·

ويُختتـم التقرير بتقديم توصيات حول كيفية حل المشاكل الصحية في الاراضي المحتلة عن طريق توفير الخدمات العلاجية والوقائية للسكان بتكلفة معقـولة وذلك من خلال عمل المـؤسسات الصحية الفلسـطينيـة المستقلـة ·