

Progress Report

Progress Report –of the research project: Designing an ideal

Primary Care Service Area: for provision of quality primary health care services,

Benghazi Libya 2017 (“RPPH 16-99”)

SECTION A. GENERAL INFORMATION:

Project Name	Designing an ideal Primary Care Service Area: for provision of quality primary health care services, Benghazi Libya 2017
Principal Investigator Name	Prof. Ameenah Alshakhtiriyah
Organization	Libyan International Medical University
Country	Libya
Project Duration	From: 15 /5/2017/ to 15/11/2017
TSA Number	RPPH 16-99
Reporting Period	Dates covered by report is from 15/5/2017 till 31/7/2017

Objectives of the Project

1.The aim is to improve the provision of health services to the population through well organized primary health care services.

2 Specific objectives:

1. To assess the health status of the population of Benghazi city by using some relevant indicators.
2. To evaluate the PHC facilities in Benghazi regarding staffing, availability of essential services, drugs and equipments .
3. To Evaluation the satisfaction of the external customers with the services provided to them by PHC facilities.
4. To Assess the extent of availability of dimensions of health care quality in the PHC facilities
5. To provide Ministry of Health with recommendations that help in designing ideal primary health services areas and restructuring primary health services to be at high quality and adequately accessible either socially or in distance.

SECTION B. TECHNICAL REPORT

Summary

During the period between the 15th. of May and 31st. of July, the majority of the data required to fulfil the first and second objectives was collected. Training of the data collection team was performed. Data regarding staffing, availability of essential services, drugs and equipments in the studied PHC f facility was analysed, and the primary results revealed that no declared catchment area and both a quantitative & qualitative inadequacy in all health resources at the studied primary health care facility. Other data regarding health status of Benghazi population was collected and final analysis of the results will be after collection of some secondary data from the Center of Information and Documentation in Tripoli.

Activities and Progress

The activities during the period between 15 of May and 31 of July were for fulfilling the first and the second objectives

1. To assess the health status of the population of Benghazi city by using some relevant indicators.
2. To evaluate the PHC facilities in Benghazi regarding staffing, availability of essential services, drugs and equipments .

The following activities were done:

- Meetings with the other main investigators to put the plan of action; Determining the tasks and who will accomplish them, determining the time and cost for every task, assigning the data collectors, and selection of the primary health care facility to be studied.
- 5 data collectors were assigned. All of them intern doctors (during the period of their training in community medicine).
- One person was assigned to act as an Accountant and Financial Auditor.
- One driver was assigned for data collectors transportation, for buying stationeries, for distributing the letters and for any other required non-technical tasks.

- For selection of a primary health care facility that will be studied, one district in Benghazi was selected randomly at first. The selected district was Al Fowayhat, in this district there is only one governmental primary health facility, which is known as Al Fowayhat health center (one out of the 8 working health centers in the city). Data regarding the services provided, the adequacy of health manpower and the availability of essential equipments & drugs was collected.

-Preparing and distributing formal letters needed for data collection: These letters were directed to the vice minister of health in Benghazi, head of public health department at local ministry of health (Benghazi), the head of civilian registry in Benghazi, and the manager of Al Fowayhat health center.

-Training the data collectors: The data collectors were trained for a period of 14 days in research methodology (short intensive course), in how to use the previously designed data collection form, also in how to use this data to evaluate the quantitative adequacy of; the services provided, the health manpower, the equipments and the drugs.

- Data collection from Department of documentation and statistics, Ministry of Health – Benghazi, and Civilian Registry- Benghazi: Secondary data was needed to calculate the health care provision and utilization indicators and data regarding the socio-demographic characteristics of Libyan population in general and Benghazi population in specific, also data regarding health status and health problems of Libyan population. As there was deficiency of a lot of data and information, there was a need to collect some data from the Center of information and documentation in Tripoli. Also some information and references will be collected from WHO office in Tripoli, and department of family and community medicine, University of Tripoli.

Preliminary Results:

I. Health status of Benghazi population:

Benghazi is Libya's second largest city, the area of Benghazi is 314 km² Also Benghazi is the second most populous city in the country, with a population of estimated to be 850,629 (2016)

Crude birth rate is 20.13 births/thousand midyear population (2012)

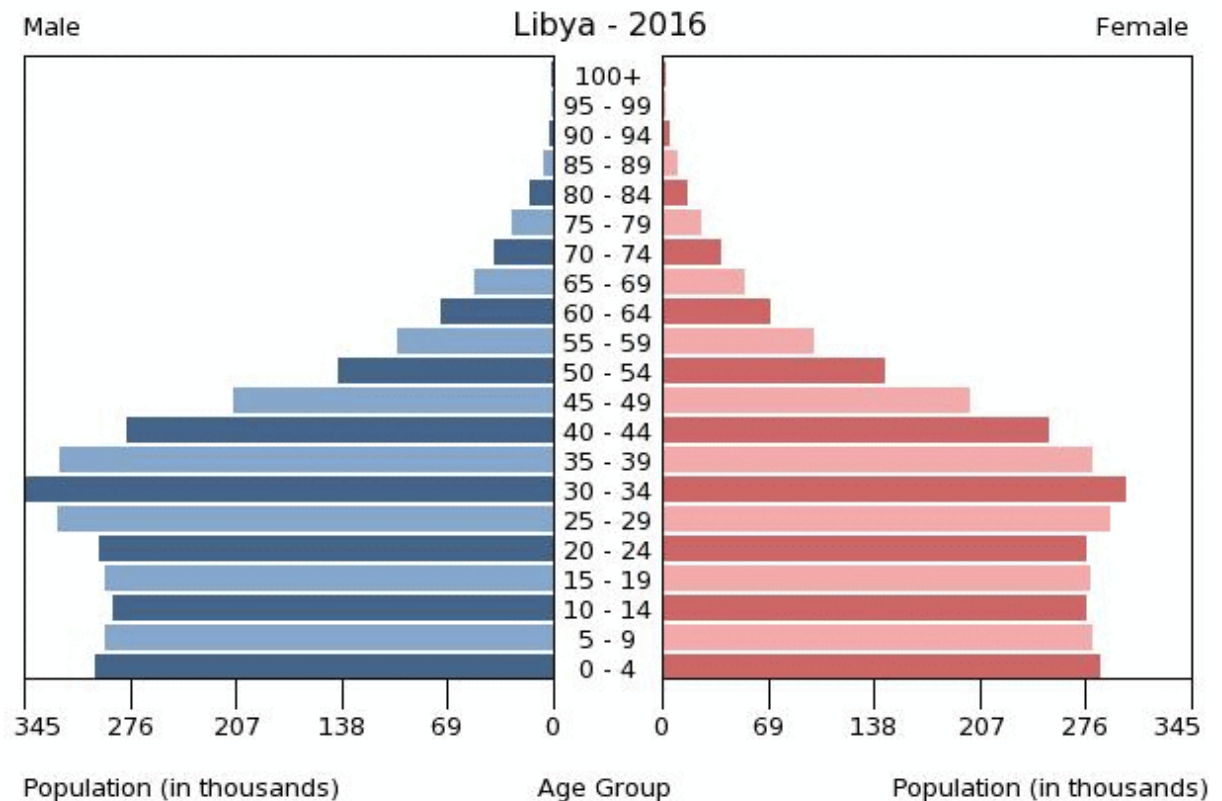
Growth rate is 1.9 % (2012)

Male to female ratio is 1.03 males per female

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Young population, median age is 28.5 years

Population structure (as population structure of Libya as a whole)



Source: <https://www.populationpyramid.net/libya/2016/> accessed on August- 3- 2017 at 10 am.

Health status indicators:

1. Mortality indicators

Indicator	
Crude death rate	7.1 deaths/thousand midyear population (2012)
Infant mortality rate	16 deaths/1,000 live births (2012)
Life expectancy at birth	72.1 years (Libya 2015)
Neonate mortality rate	11deaths / 1000 live birth (2012)
Under5 mortality rate	19.7 deaths/1000 live birth. (2012)
Child (1-4years) mortality rate	3.3 deaths/1000child(1-4 years). (2012)

Proportional mortality rate:

Non-communicable diseases 65% of all deaths

Communicable diseases 20% of all deaths

Injuries 15% of all deaths

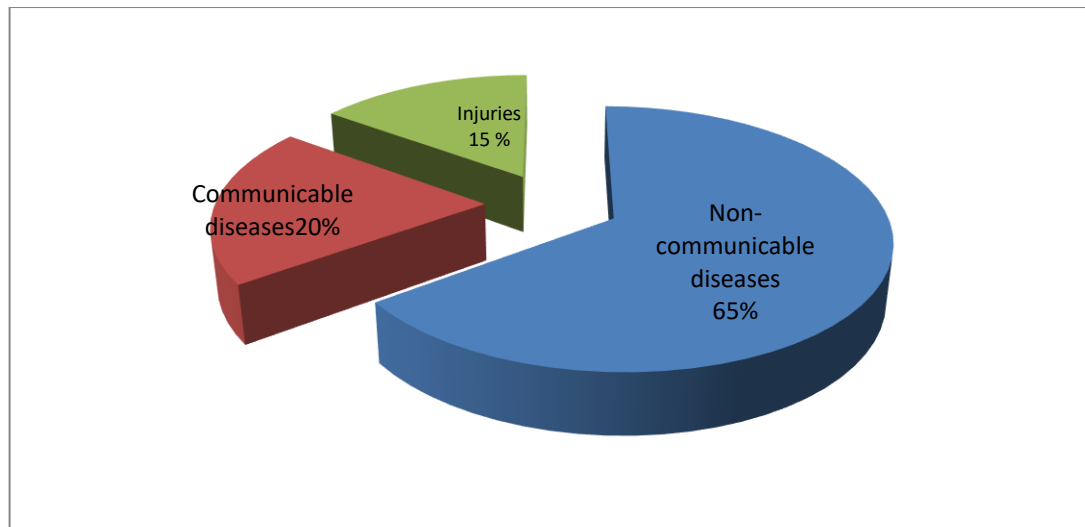


Fig 2: Causes of death for all ages and both sexes (Benghazi 2016)

2. Morbidity indicators:

- Regarding the adult population the most common causes for hospital admission and attending out-patient clinics : Non- communicable diseases: Diabetes –hypertension- stroke- ischemic heart diseases-malignancies- lung diseases.

Communicable diseases: Respiratory tract infection

Tuberculosis- viral hepatitis (A, B, and C)- hydrated disease.

Emergency : road traffic accidents- injuries due to the war in and around the city-other surgical conditions.

-The most common causes of admission to pediatric hospital are: chest infection- diarrheal diseases- congenital anomalies –nutritional problem –other infections.

*No recent data available in Benghazi about the incidence and prevalence of these diseases and conditions.

-Incidence of cancer (all types) was 75.1 per 100.000 (Libya 2015)

-incidence of tuberculosis (case notification) was 19 per 100.000 (Libya 2014)

-The prevalence of impaired glucose tolerance among population above age of 20 years in Benghazi was 23%, about two-third of them had impaired glucose tolerance and one third had diabetes mellitus.

-The prevalence of hypertension among adults was 42.6% (this is an old figure and the prevalence expected to be more as no preventive measures were undertaken)

3. Health care utilization indicators

-Proportion of infants who are "fully immunized" against the EPI (expanded program of immunization) diseases:

-For BCG the coverage is 99%, for other EPI diseases the coverage is more than 90%.

-Delay in the vaccination dates occur for more than 35% of the children as a result delay in vaccine supply.

-Percentage of pregnant women receiving antenatal care at public antenatal clinics is 34%

-Bed – occupancy rate& Bed turnover ratio: due to closure of several hospital in the city due to the war the bed occupancy rate in Benghazi medical center, some time more than 100%

4. Health care delivery indicators:

-Doctor – population ratio: in general 1.9/ 1000 population, the problem is in the distribution of the physicians, as the majority of physician work at the secondary and tertiary level of health care services.

-Due to the armed clashes in the city doctor – Nurse ratio and technical health personnel number is inverted (5:1) especially at hospitals as the majority of foreigner nurses had left.

-Population-bed ratio: due to the closure of several hospitals, the current situation of these hospitals cannot be assessed and this indicator cannot be calculated

5.Nutritional status indicators (Benghazi 2013)

Indicators	
Prevalence of low birth weight	4.5%
Underweight rate at age 5years	7 %
Stunting rate at age of 5 years	16.1%
Wasting rate age of 5 years	2%
Prevalence of nutritional anemia among pregnant women	48%

6.Environmental indicators

Data regarding pollution of air and water , radiation, and percentage of people having access to safe water in Benghazi is not available.

In adequate solid wastes disposal is clear in the city.

7.Social health indicators:

Although the exact figures regarding homicide rate, suicide rate and alcohol & drug addiction rates are not available, the number of the reported cases during the year 2016 are clearly in excess than that reported before 2011.

8.Socio – economic indicators: (Libya 2012)

Indicators	
Literacy rate	89.5%
Female literacy rate:	85.6%
Unemployment rate	30%
Family size	5.8

Major risk factors for morbidity and mortality:

Obesity – smoking –hyperlipidemia- inadequate health care resources - environmental and host risk factors for road traffic accidents in addition to armed clashes.

Summary:

Population of Benghazi is young population, their health problems is mainly due to non-communicable diseases and injuries, infectious diseases among children especially under 5 years of age is also common, in adequate social health especially after the armed conflict in the city. Most of the health problems and their risk factors can be solved at primary health care level.

Sources of data and information:

- Department of information and statistics – Ministry of Health, Benghazi, which depends mainly on UNICEF, WORLD BANK and WHO reports.
- Research projects conducted by University of Benghazi.

N.B

Because the Public Health Department located in a military area, there was missing of many data and information, these information and data will be collected from the center of documentation and information in the Tripoli.

II. Evaluation of Al Fowayhat health center

Number of healthcare facilities that provide primary healthcare services in Benghazi city is 31; 20 polyclinics and 11 health centers (No health units inside the city) . As a result of the armed clashes and closure of 4 large hospitals in the city, all the polyclinics provide secondary and to lower extent primary health care services. Out of the 11 health centers only 8 is working. Al Fowayhat district was selected and Al Fowayhat Health Center is the only primary health care facility in this district, and it was selected to be studied.

Al Fowayhat district has a population of 20311 and 4084 families. Services provided by the center is free of charge, and the center provide health services to all the population in Benghazi , i.e. no well defined catchment area. Patients attending the health center are seen on a walk-in basis: first come first served.

Working hours: From 8 am to 14 pm. Then from 15 pm. To 19 pm.

Clinics and services provided by the health center:

1-Maternal care clinic: (6 days / week, from 8am to 14 pm.)

The only service provided is the antenatal care.

2-Under -5 child care: (3 days /week, from 8am to 14 pm.)

The only service provided is vaccination

3-Dermatology clinic (2days/ week)

4-Gynecology clinic (2days/ week)

5-Pediatric clinic (daily from 8am to 14 pm)

6-General medicine clinic (daily, from 8 am to 14 pm. Then from 15 pm. To 19 pm)

7-Nutrition clinic: The services provided to the patients who are referred to the clinic from general medicine clinic –antenatal clinic –diabetic clinic. (2days/ week)

8-Diabetic clinic (2days/ week)

9-Dental clinic: Due to shortage of materials the services provided are very limited, mainly teeth extraction (daily)

10-First aid department: Due to unavailability of most of the materials, drugs and equipments the main services provided are wound dressing- giving injections. (daily, from 8 am to 14 pm. Then from 15 pm. To 19 pm)

11-Health education services: The services provided to the patients who are referred from general medicine clinic –antenatal clinic –diabetic clinic. (daily)

12-Diagnostic radiology services: One x-ray machine- (the x-ray films are not regularly available) (daily)

13-Laboratory services: Due to unavailability of most of the materials and equipments the tests provided; CBC (complete blood count-blood glucose), serum creatinine, and liver function tests). (daily)

14- Pharmacy: Severe shortage of essential drugs; the only drugs available some types of antibiotics and analgesic. (daily)

Services that should be provided at PHC level according to the national strategy for provision of health for all and by all.	Services provided by Al Fowayhat Health Center	Remarks
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- Maternal health care:		
Pre-mirage care	X	-
Preconception care	X	-
Antenatal care	√	
Perinatal care	X	-
Postnatal care	X	-
- Under 5-child care:		
Growth monitoring	X	-According to family's request only.
Vaccination	√	-Frequent delay in supply.
Care in illness*	X	-
Health education	X	-
Regular health appraisal	X	-
- Treatment of common diseases and conditions	√	-
- Prevention and control of locally endemic diseases	X	-
- Health education services	√	-
-Promotion of environmental health.	X	-
-Promotion of proper nutrition.	X	-
-Provision of essential drugs.	√	-
-Mental health services.	X	-
-Occupational health services	X	
-Health care for elderly	X	-Done regularly at the time of school entry
-School health services:		
-Appraisal Of health status.	√	-
-Vaccination		-
-Care in illness*	√	-
-Regular visits to school and kindergarten.	X	-
-Health education	X	-

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Health manpower:

Health care personnel 53

Distribution of health care personnel according to their profession

Profession	No	%
Physician (GP)	10	18.87
Gynecologist	3	5.66
Dermatologist	2	3.77
Pediatrician	2	3.77
Dentists	6	11.33
Nurse	12	22.64
Assistant nurse	4	7.55
Social worker	1	1.89
Health educator	1	1.89
Administrative staff	8	15.09
Lab. Technician	2	3.77
Radiology technician	2	3.77
Total	53	100

Non- technical workers 10 (cleaners- porters –security)

Doctor : Nurse = 1.9: 1

Equipments:

- Sphygmomanometer. 2
- Stethoscope. 2
- One x-ray machine.
- One ECG machine.
- 2 dental chair
- 1 autoclaves
- 1 refrigerator for vaccine storage
- 3 weighing machine
- 1 microscope
- 1 machine for CBC and blood chemistry.

- The health center has no ambulance car for urgent cases.

N.B:

All the equipments and instruments needed for clinical examinations are brought by the doctors themselves.

Documentation: Shortage in all types of forms including referral forms and health booklet for school students, also there is no formal method for documentation in all clinics, pharmacy or laboratory.

Summary: incomplete and inadequate primary health care services are provided by the center also there is inadequate documentation and lack of complete information. Clear deficiency of promotive and preventive services, most of the services provided is therapeutic.

Challenges and limitations:

- There was a problem in the accesses to complete data in one or two visits, which led to the need to several visits.
- There was deficiency of some data and information regarding health status of Benghazi population because the Department of public health located in a military area in Benghazi, these data will collected from the Center of information and documentation in Tripoli, WHO office in Tripoli and department of family and community medicine, University of Tripoli.
- Due to the military circumstances there was difficulty in travelling to Tripoli from Benghazi (closure of Benina Airport) with subsequent delay in writing complete answers to the first and second objectives.
- This delay will be compensated in the next period as no more secondary data will be needed and we expect that the project will be finished at the planned time.

Next Activates and Steps:

During the period 1/8/2017- 14/10/2017.

- Writing the results, discussion and conclusions (first and second objectives)
- Conducting the activities and tasks that needed for fulfilment the third and forth objective, including training of new group of data collectors –data collection data processing and analysis.
- Conducting scientific seminars regarding the results.

During the period 15/10/2017- 15/11/2017.

- Writing the final report
- Dissemination of the project finding by various approaches: workshops, scientific seminars,..etc.
- Submission of the final report.

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SECTION C. FINANCIAL REPORT

Budget Breakdown Items	Total Allocated (Amount in TSA)	Total Amount Received	Total Amount Spent
- Personnel	1800	450	450
- Equipments	0	0	0
- Field work include transport	500	125	125
- Material and supplies	800	200	200
- Local travel	3800	950	950
- Training	1500	375	375
- Dissemination of results	600	100.8	0
Total (\$)	9000	2200.8*	2100

* The amount allocated for this period is 25% of the total allocated amount in TSA, i.e 2250 \$, but we receive only 2200.8 \$. 49.2\$ **banking charge**.

Signature

Principle investigator
(Name)

Finance officer of the institute
(Name)



Date of submission of Report: Sept. 5. 2017