Assessment of Health Services Through Partial Study of Medical Prescription in Nalut area.

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Abstract:

  Background: Man needed to treat many diseases over the years from early days, he also has used many natural plants and herbal remedies to treat certain diseases these practices were developed to modern prescription.

  Objectives: This study was aimed at assessment of health services in Nalut and the surrounding area through investigating different and related prescription of medicine to ill patient issues.

Methods:

  This study was done through a survey study on different prescription, issues and patient medical examinations in Nalut Central hospital, Alharaba Hospital, Tigi Hospital and Kabaw Hospital. The study also involved assessment of 4350 different prescriptions given to ill patients in these hospitals over the period between   of October 2014-March 2015.

Results:

This study has shown reasonably unaccepted level of the adherence to the WHO prescription guide lines from the point of using generic name Instead of trade name reported at 41%. injection prescriptions demonstrated very low level at 0.2%. Patient examination time taken by the physician was recorded at 3 minutes for one case which is not accepted. 40% of medicines were issued from inside these hospitals which is an indication of short supply. Pharmaceuticals protocol list is not implemented and it is not more than 15%.

Conclusions:

  Practitioners and pharmacists should adhere to the International Guidelines and according to the WHO guidelines with regard to medical prescription and patient examination and should assure full and firm implementation of these guidelines to improve medical services.

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Key: Prescription, treatment remedies, Pharmaceuticals, International guidelines

Introduction:

Man needed medicine to treat many diseases from early days. Man, also prepared and used different treatment remedies since a thousand Years ago. These were prepared from natural and herbal plants. It was known that the first pharmacy which was known to man started back in the eight century B.C in Bagdad (Iraq) [1].

The prescription is considered as an indicator of the assessment of health services level in Libya, although the modern world has moved to an electronic prescription. Medical physician in the third world countries still use the conventional prescription where their prescription is far behind the guidelines laid down by the WHO [3]. International prescription guidelines in Libyan health services are not fully implemented. In many cases medicines were issued under the patient pressure. During this study it was noticed that there are cases where prescription was written on normal plain paper. Many foreign health workers working in Libya lack the communication with the local people due to the language barrier although some may manage to understand the language but the majority lack understanding the ill patient history, complains and previous taken medication. This study tried to highlight the prescription issues to improve the health services in Libya.

Methods:

This study was designed to investigate prescription issues through a survey study done in Nalut Central Hospital, Tigi Hospital, Alharaba and Kabaw Hospital between Oct.2014-Mar.2015. The surveillance study covered prescription to patients working polices, patients' medical examinations by medical professionals in the previously mentioned hospitals. The study was performed in cooperation with students which involved a daily visit to the health institution during working hours from. During these visits 4350 prescriptions were examined randomly using surveillance questionnaire. The surveillance questionnaires were designed to cover the mean number of medicines in one prescription, percentage of medicines issued by the generic name, level of antimicrobials in

the prescription , use of injection as a treatment regimen, use of the official prescription , implementation of pharmaceuticals formulary, local prescription policies , the mean patient medical examination time by the physician and the prescription time for patient treatment by the pharmacist .

Results:

This study has shown reasonably unaccepted level of the adherence to the prescription guidelines with regard to the use of generic naming of medicines instead of trade names which was at 41%. Injection   prescription to patients was reported very low at 0.2%. Patient medical examination time taken by the physician was reported at 3minutes for each patient. Only 40% of prescription's were issued from the hospital pharmacies. Libyan formulary for medicines and drugs were not implemented and was estimated at 15% according to the survey questionnaire. Antimicrobial prescriptions were recorded at 23%.

Table.1 Health services and community views on medical prescription issues

	Parameter	Indicator %
1	The mean no. of medicine in one prescription	4 medicines
2	Medicines issued by the generic name	41
3	Antimicrobials prescription	23
4	Injection on a single prescription	0.2
5	Use of official prescription	60
6	The medicines issued to patients from the hospital pharmacy	40
7	Libyan drugs formulary implementation	15
8	Local prescription guidelines protocol	40
9	Adherence of the transcription to scientific standards	66
10	Adherence of the prescription row material to standard	70

Table.2 Health service and community views on patient medical examination   and prescription time.

Category	Parameter	Indicator /Tim(min.)
1	The mean examination time for the patient	3
2	The mean prescription time by the pharmacists	1.3
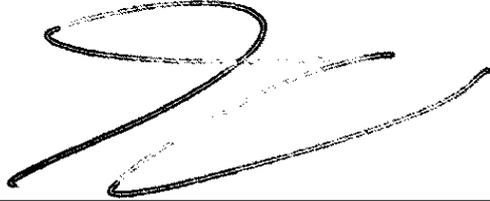
**Fig.1. Illegal prescription on plain white paper.**
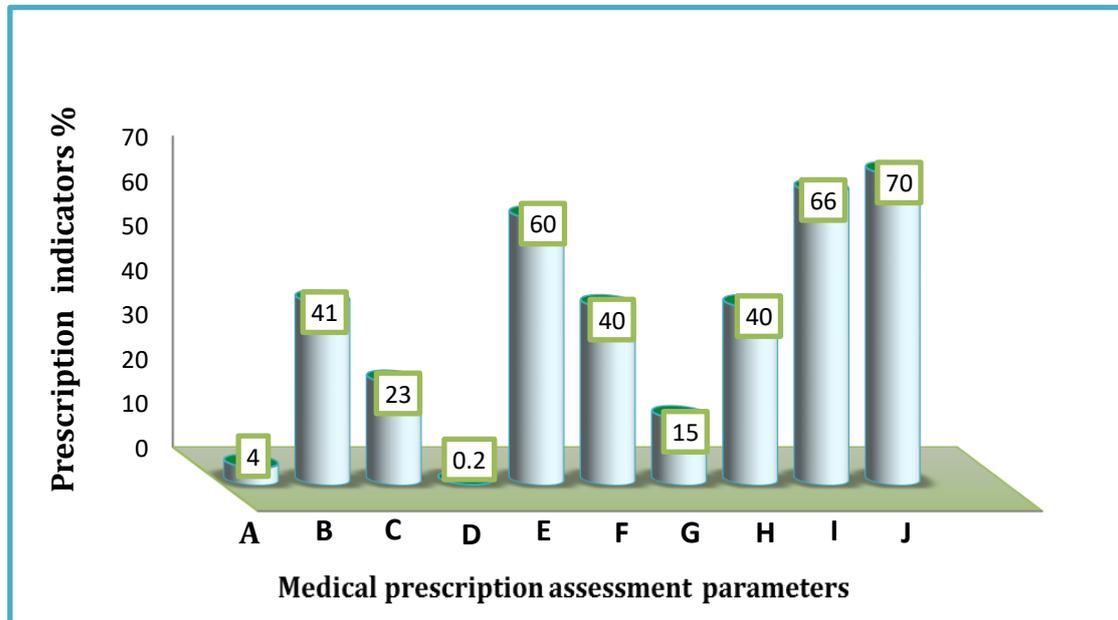
Fig.2. Assessment of health services through prescription indices

Key: **A**= the mean no. of medicine in one prescription

B= medicines issued by the generic name

C= antimicrobials prescription

D= injection on a single prescription

E= use of official prescription

F= the medicines issued to patients from the hospital pharmacy

G= Libyan drugs formulary implementation

H= local prescription guidelines protocol

I= adherence of the transcription to scientific standards

**J**= adherence of the prescription row material to standard
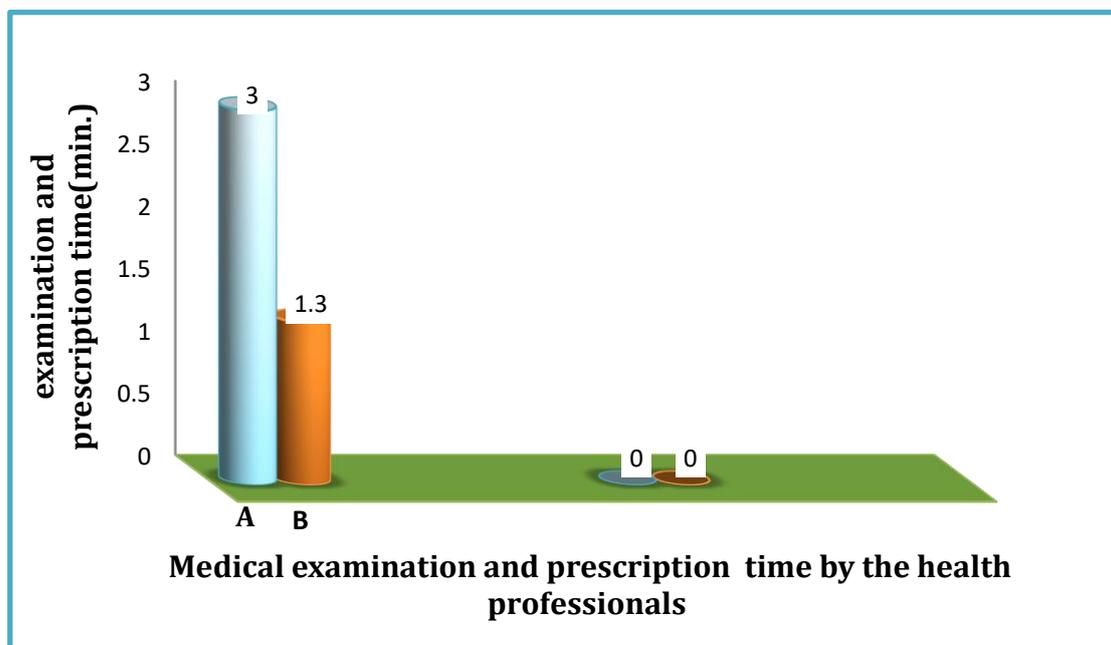
Fig.3. Assessment of health services through Patient medical examination and prescription time.

Key: A= the mean examination time for the patient

B= the mean prescription time by the pharmacists

Discussion:

This study has shown that the mean number of drugs prescribed in one medical prescription was four which is in line with another study done in Indonesia in 1988 which was 3.8 medicines and with the WHO policies [5]. This fact indicates that international guidelines and the WHO regulations were in force in this contest [6].

41% of medicines were prescribed with the generic naming which is quite low and does not agree with international standards and regulations[7] , also 0.2% of injection prescription is considered very low compared with others such as in Nigeria for example 37% of the prescriptions were injections which may due to the people awareness of the injections as

a quick means of better or quicker means of treatment [9]. For antimicrobial prescription it was reported at 23% and this level is accepted compared with other countries for example in Nigeria it was found that 48% of prescriptions issued from the out-patient hospital departments one or two antimicrobials were mentioned in a single prescription [8]. 60% of prescriptions were issued not on official prescriptions. It was estimated that only 3 minutes were given to patient examination by the practitioners which is very low compared with international regulations which is in the region of at least 10 minutes [9].34% of a given prescriptions does not contain patient relevant and important information such as age, full name, gender, date ,past history and possible diagnosis fig(2).

Conclusions:

We recommend that multi-study on these issues should be implemented for the health sector in Libya in order to improve the quality of health services. The health professionals should use the medicines generic names instead of trade names. Pharmacists/ and physicians should have more time when dealing with the ill patients. Full patient personal information should be indicated in the prescription. Firm implementations of international protocols and guidelines surely will improve the quality of public health services and for the benefit of the ill patient in the community.

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