

Achievements of Primary Healthcare Centers' Physicians in Home Visiting for Covid-19 Cases in Al-Karkh Health Directorate: A Cross-Sectional Survey

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Citation: Jaafar R. Achievements of Primary Healthcare Centers' Physicians in Home Visiting for Covid-19 Cases in Al-Karkh Health Directorate: A Cross-Sectional Survey. *Adv clin anest med.* 2022; 1(1): 1-4.**Abstract**

Introduction: The health system faced significant stress during COVID 19 pandemic with many challenges. Primary care physicians perform an essential tactical function in the public health crisis. Home visiting is a strategic measure introduced to overcome the rapid increase of cases with crowded hospitals by following up the mild and moderate cases at their homes and saving the severe cases for hospitals.

Aims of the study: The achievement of primary health care physicians during COVID19 pandemic, obstacles and challenges.

Subjects and Methods: It is a cross sectional study, included an electronic questionnaire that is introduced to primary health care physicians in all sectors of al-karkh health directorate from 1st to 31st of October, 2020.

Results: Highest percent of social challenges was the one; looking after an elderly person 59.5%, the financial challenges, the domain using of my own car and price of mobile calls for the visit were both 88.1%. The work challenges was the one; extra duties of paperwork for filling the case sheets 78.6%, while highest percent of psychological challenges was the domain; fear of transmit of the infection to his own family members 90.5% .

Discussions and conclusions: The current study revealed that highest satisfaction rate of physicians was the domain of team work with the healthcare personnel followed by the domain availability of diagnostic tests with a moderate positive relationship between cure rate and doctors' satisfaction about the home visits for COVID 19 cases.

Keywords: covid19, home visit, physicians, primary health care.**Introduction**

The health system faced significant stress during COVID 19 pandemic with many challenges included economic resources, health care personnel, social and community measures, in other hand, effective response to pandemic demands is achieved. (Centers for Disease Control and Prevention [CDC], 2019; Shigeno et al., 2020; World Health Organization [WHO], 2019) A strict quarantine measures, survey and surveillance of cases and contacts with update of treatment and follow up. Primary care physicians perform an essential tactical function in the public health crisis. Being the first point of contact of COVID19 cases at primary health care centers. Home visiting is a strategic measure introduced to overcome the rapid increase of cases with crowded hospitals by following up the mild and moderate cases at their homes and saving the severe cases for hospitals. Lee et al. (2020) and Shigeno et al. (2020) Primary health care physicians are examining the suspected cases, doing nasal smear (VTM) and following up the

confirmed cases at their homes with lab workers and medical staffs. Ameri (2020) At first part of COVID19 pandemic, the health system depended primarily on rapid test with checking temperature and other vital signs; but later on, it depended on VTM (virus transport media) which is more accurate. Ameri (2020) Many challenges faced primary health care physicians with increasing the numbers of confirmed cases, there have been 430, 678 confirmed cases of COVID-19 with 10,317 deaths from 3rd of January to 20th of October (CDC-Iraq, 2020; WHO, 2019).

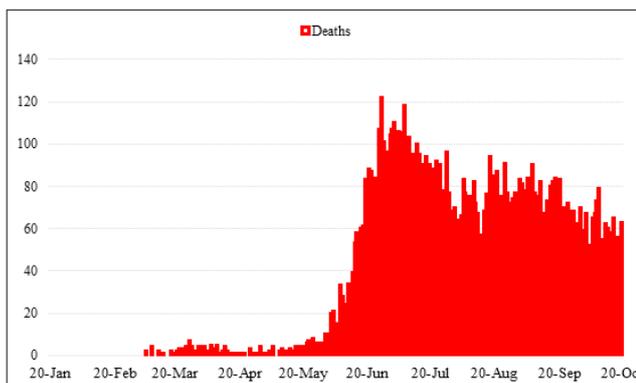


Figure1: COVID19 cases in Iraq during 2020

Environmental circumstances as extreme hot weather, infection of medical staff and their families in addition to social and economic challenges during doing home visit to COVID19 cases caused a constant pressure to family medical physicians. Studies mentioned the stress and anxiety and even depression, the physicians exposed to all over the world during pandemic (Kannampallil et al., 2020; Kisa, 2020; Mahmood et al., 2020).

Physicians stress lead to burnout and a reduced capacity to continue work. General practitioner and family medicine physicians form the first line of defense in health system therefore an efficient healthcare system will need a strong primary health care system to decrease the burden on secondary and tertiary centers, and reducing healthcare costs for the country (Jenkins et al., 2020; Lee et al., 2020). In addition to the close relationship between primary health care physicians and medical staff with neighbours families, making trust is easily obtainable by COVID 19 patients, as well as their role in achieving the society awareness of the disease.

Aims of the study

- The role of primary health care physicians and their achievement during COVID19 pandemic.
- The obstacles and challenges faced the physicians during home visits to COVID19 patients.

Subjects and Methods

It is a cross sectional study, included an electronic questionnaire that is introduced to primary health care physicians in all sectors of al-karkh health directorate from 1st to 31st of October, 2020. The study involved 98 physicians participated in the study. The questionnaire included questions about home visits to COVID19 patients, number of cases the physicians followed and the challenges they faced. The results were analyzed by SPSS-ver.26.

Results

Out of 98 physicians participated in the study, 84 physicians answered yes about doing home visits to COVID19 patients, 30 were males and 68 were females. Board family medicine physicians were 32(32.7%), diplomas were 4(4.1%), general practitioners were 18(18.4%) and other specialties were 44(44.9%) physicians.

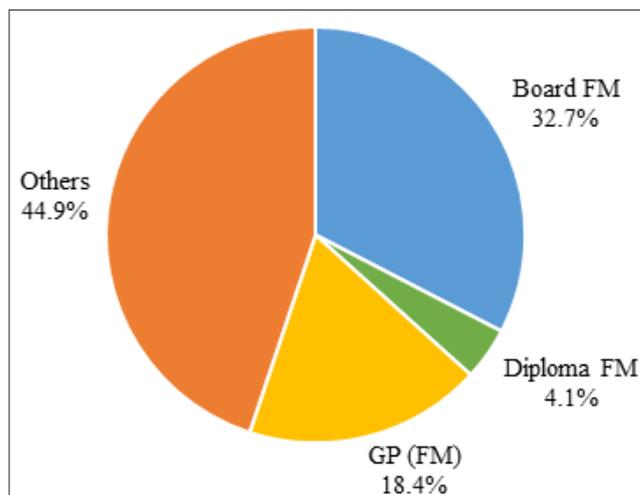


Figure2: pie chart shows respondents according to their job titles.

Physicians' experience in primary health care ranged from 2 years to 33 years. A median year of experience is 11.

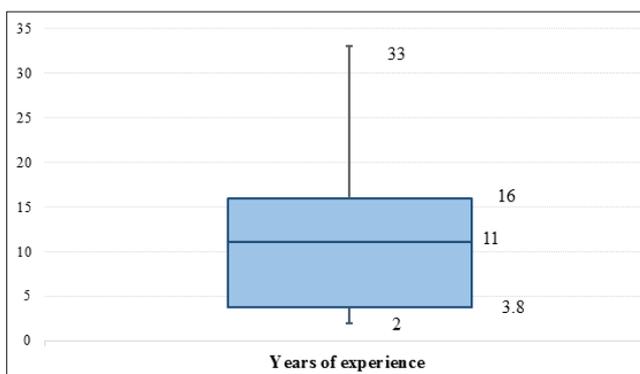


Figure 3: box-plot shows years of experience of participated physicians.

Highest number of home visited COVID19 cases were in Al-Karkh sector followed by AL-Adel sector, 3652 and 1422 cases from March to the end of October.

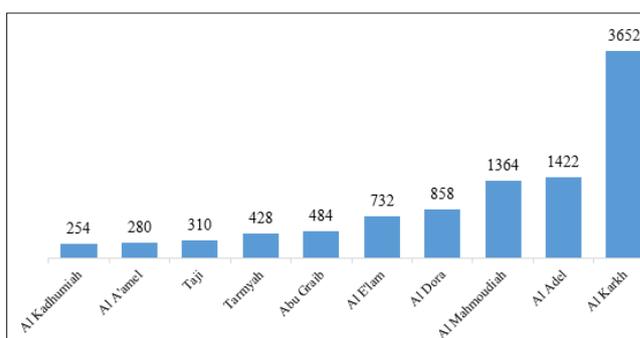


Figure 4: Number of Total home visited COVID 19 cases according to sectors.

Average cure rate per doctor was 96.2% ± 10.3%. Highest satisfaction rate of physicians was the domain of team work with the healthcare personnel followed by the domain availability of diagnostic tests.

| Domain | Very Unsatisfied | Unsatisfied | Neutral | Satisfied | Very Satisfied | Weighted % of satisfaction |
|---|------------------|-------------|-----------|-----------|----------------|----------------------------|
| Home visits | 30 | 22 | 20 | 6 | 6 | 44.8% |
| Availability of diagnostic tests | 4 | 24 | 24 | 26 | 6 | 61.4% |
| Time for receiving lists of confirmed cases | 14 | 10 | 36 | 20 | 4 | 57.6% |
| Treatment protocol | 12 | 28 | 32 | 12 | 0 | 50.5% |
| Availability of Medications | 24 | 26 | 22 | 10 | 2 | 45.7% |
| Availability of protective equipment | 18 | 16 | 40 | 10 | 0 | 50.0% |
| Team work with the healthcare personnel | 4 | 18 | 32 | 18 | 12 | 63.8% |
| Cooperation of the families with the visitor team | 6 | 30 | 24 | 22 | 2 | 56.2% |

Table 1: Satisfaction of respondents about home visits.

Many challenges faced physicians; highest percent of social challenges was the one; looking after an elderly person 59.5%, the financial challenges, the domain using of my own car and price of mobile calls for the visit were both 88.1%. The work challenges was the one; extra duties of paperwork for filling the case sheets 78.6%, while highest percent of psychological challenges was the domain; fear of transmit of the infection to his own family members 90.5%.

| Challenges | Number | Percent |
|---|-----------|--------------|
| Social | | |
| Looking after my children | 40 | 47.6% |
| Looking after an elderly person | 50 | 59.5% |
| Stigma for the visiting teams | 34 | 40.5% |
| Threatening | 2 | 2.4% |
| Financial | | |
| Using my own car in the visits (risk of roads) | 74 | 88.1% |
| Price of mobile calls for the visit | 74 | 88.1% |
| Price of protective equipment for the visits | 50 | 59.5% |
| Price of fuel for the car | 58 | 69.0% |
| Hiring cars or paying money for other staff to complete the daily mission | 2 | 2.4% |
| Medications cost after I got infected | 2 | 2.4% |
| Work | | |
| Long hours of work | 62 | 73.8% |
| Shortage of the staff | 44 | 52.4% |
| Delay in the updating of the treatment protocols | 32 | 38.1% |
| Uncooperative patients | 56 | 66.7% |
| Shortage of the diagnostic tests | 30 | 35.7% |
| Shortage of the medications | 58 | 69.0% |
| Extra duties of paperwork for filling the case sheets | 66 | 78.6% |
| Shortage of the protective equipment | 46 | 54.8% |
| Lack of focal point in the hospitals | 40 | 47.6% |
| Delay in the feedback after referral | 38 | 45.2% |
| Psychological | | |
| Fear of infection | 68 | 81.0% |

| | | |
|--|-----------|--------------|
| Fear of transmit of the infection to his own family members | 76 | 90.5% |
| Fear of transmit of the infection to the visited family | 46 | 54.8% |
| Fear of relocation due to unintended mistakes | 40 | 47.6% |
| Fear of transmit the infection to the companion team | 42 | 50.0% |

Table 2: Challenges that respondents faced during the period of home visits

The study showed a moderate positive relationship ($r=0.43$, $p<0.001$) between cure rate and doctors' satisfaction about the home visits for COVID 19 cases as the satisfaction was responsible about 18.5% of the cure rate ($r^2=0.185$). On the other hand, none of the other variables in the current study showed any significant effect on the cure rates. Table 3

| Variables | Correlation Coefficient of Cure percentage | P-value |
|--------------------------|--|--------------------|
| Gender | 0.009 | 0.935 |
| Job titles | 0.06 | 0.586 |
| Years of experience | 0.186 | 0.091 |
| Satisfaction | 0.43 | <0.001** |
| Social Challenges | - 0.204 | 0.063 |
| Financial Challenges | -0.032 | 0.772 |
| Work Challenges | 0.018 | 0.872 |
| Psychological Challenges | -0.039 | 0.726 |

**Significant at 0.01

Table 3: Spearman's correlation of cure percentage with other variables

Discussions and Conclusions

The current study revealed that highest satisfaction rate of physicians was the domain of team work with the healthcare personnel followed by the domain availability of diagnostic tests with a moderate positive relationship between cure rate and doctors' satisfaction about the home visits for COVID 19 cases. Team work is the leading factor for the success of home visits with availability of diagnostic tests which include rapid tests and nasopharyngeal swabs. Physicians' satisfaction will participate in some way in increasing cure rate. Highest percent of social challenges was the one; looking after an elderly person as the most concerning issue for every physician is to transmit infections to their families especially the elderly with chronic diseases and low immunity. The financial challenges, the domain using of own car and price of mobile calls for the visit strained most physicians due to extra expenses without compensation by ministry of health. Extra duties of paperwork for filling the case sheets cause additional stress, and it is required to stay longer hours after work. Fear of transmit of the infection to family members worried most physicians and caused extra pressure. These challenges may cause a burnout of physicians so health institutions could manage these difficulties to ensure healthy environment mentally and physically (Kisa, 2020). Many studies reported physicians stress during COVID19 with emotional effects and vulnerability in addition to their depression, anxiety to keep the professional satisfaction. Kannampallil et al. (2020) the study showed moderate positive relationship between cure rate and doctors' satisfaction about the home visits for COVID 19 cases. Physicians support during pandemic will cause better performance and satisfaction.

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