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Brief Report

Effect of COVID-19 lockdown on patients with chronic diseases

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ABSTRACT

Background and aims: We sought to measure the effect of lockdown, implemented to contain COVID-19 infection, on routine living and health of patients with chronic diseases and challenges faced by them.

Methods: A semi-structured online questionnaire was generated using “Google forms” and sent to the patients with chronic diseases using WhatsApp. Data were retrieved and analyzed using SPSS.

Results: Out of 181 participants, 98% reported effect of lockdown on their routine living while 45% reported an effect on their health. The key challenges due to lockdown were to do daily exercise, missed routine checkup/lab testing and daily health care.

Conclusion: It is important to strategize the plan for patients with chronic diseases during pandemic or lockdown.

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1. Introduction

The novel coronavirus 2019 appeared in China in December 2019 named as a severe acute respiratory syndrome (SARS)-CoV-2 and disease resulting due to this was declared as Corona Virus Disease 2019 (COVID-19) [1,2]. To contain the diseases, the lockdown and social distancing practices were implemented resulting in a change in daily living routines, reduced physical activities, imbalance diet, disruption in supplies etc. [3,4].

Patients with chronic diseases have to manage their daily activities, diet, exercise and need regular follow up. Coping with the existing disease would be a challenge especially due to issues in supplies and lack of access to health facility and health care providers. It is expected that lockdown might have affected their routine disease management. This might be truer in the developing countries with a high prevalence of chronic diseases and poor health care system. We planned this study to understand the effect

of lockdown on routine living and health of patients with chronic diseases and determine the challenges faced by them.

2. Methods

Study was conducted in accordance with the Declaration of Helsinki and was approved by the ethical review committee of Pakistan Institute of Medical Sciences, Islamabad. A semi-structured questionnaire was developed and questions were asked about the current status of their health and effect of lockdown on routine living, health and challenges faced by them including hurdles in daily exercise, availability of medicine, routine checkup etc. After pre-testing, an online link was generated using the “Google forms” which was shared using WhatsApp to potential participants. Data were retrieved in Excel and analyzed using SPSS (SPSS Inc. Chicago, Illinois, USA).

3. Results

Of the total of 181 participants, 60% were males and 41% were young adults (aged 18–35 years). Majority (86%) were highly educated (graduate or postgraduate). Except few, all of the

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Table 1
Demographic Characteristics of the participants and the effect of lockdown on their health during COVID-19 pandemic.

Characteristics	%	Effect on Health	
		Yes	No
Total	181	81 (45%)	100 (55%)
Age(Years)			
18–35	75 (41%)	41 (55%)	34 (45%)
36–55	52 (29%)	20 (38%)	32 (62%)
>55	54 (30%)	20 (37%)	34 (63%)
Gender			
Male	109 (60%)	61 (56%)	48 (44%)
Female	72 (40%)	39 (46%)	33 (54%)
Education			
Graduate or postgraduate	156 (86%)	68 (44%)	88 (56%)
Matric or Intermediate	18 (10%)	8 (44%)	10 (56%)
Primary or less	7 (4%)	5 (71%)	2 (29%)
Occupation			
Employed	83 (46%)	35 (42%)	48 (58%)
Student	47 (26%)	23 (49%)	24 (51%)
Retired	27 (15%)	11 (41%)	16 (59%)
Housewife	17 (9%)	7 (41%)	10 (59%)
Unemployed	7 (4%)	5 (71%)	2 (29%)
Marital Status			
Married	116 (64%)	47 (40%)	69 (60%)
Unmarried	62 (34%)	33 (53%)	29 (47%)
Divorced	3 (2%)	–	–
Chronic diseases			
Hypertension	75 (41%)	26 (37%)	49 (63%)
Mental Health Issue	35 (19%)	25 (71%)	10 (29%)
Diabetes	30 (17%)	10 (33%)	20 (67%)
More than one disease	41 (23%)	20 (49%)	21 (51%)
Self-reported overall health			
Fair	26 (14%)	15 (58%)	11 (42%)
Good	82 (45%)	41 (50%)	41 (50%)
Very Good	73 (40%)	25 (34%)	48 (66%)

participants (98%) stated that lockdown had effected their routine living while 45% reported effect on their health. No significant difference was noted between the various demographic characteristics. However, the majority (71%) of participants with mental health issues reported effect on their health (Table 1). More than half (53%) missed their routine medical checkup and 42% missed regular testing. Similarly, 66% could not continue their daily exercise (Fig. 1).

4. Discussion

Our study showed that the implementation of lockdown to contain the COVID-19 has affected the routine life and health of patients with chronic diseases like diabetes, mental health and

hypertension. These patients usually require regular follow up for diagnostic tests and physicians visits for their routine checkup. These findings are consistent with the previous study which reported change in routine care of the people suffering from chronic diseases [5]. Similarly, it was reported that glycemic control of diabetic patients was affected in the lockdown period [6]. Children suffering from gastrointestinal disorders also severely affected due to the lockdown [7]. It has been reported from Italy that patients suffering from chronic diseases were more at risk of developing sleep disturbances during the lockdown [4].

5. Limitations

There are some potential limitations of the current study

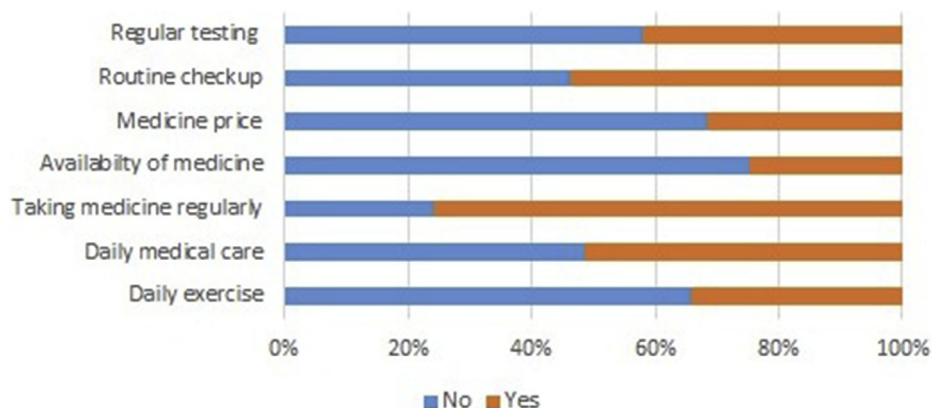


Fig. 1. Effect of Lockdown on routine living and disease management of the patients with chronic diseases.

including small sample size, uneven distribution of patients of various chronic diseases etc.

6. Conclusion

We conclude that people suffering from chronic diseases need special attention during pandemic and there should be some plan for them during lockdown to reduce the impact on their health. This will eventually help to prevent an increase in morbidity and mortality due to these diseases.

Conflicts of interest

The authors declare no conflict of interest.

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