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*Building a resilient health
system to ensure the quality of health
care during a public health emergency
July 2022*



Missed Resilience of health care during pandemic western Oromia: impact of COVID 19 pandemic on chronically ill patients having to follow up at public health facilities, Oromia, Western Ethiopia

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Introduction

- (COVID-19), is an emerging pandemic disease-causing respiratory syndrome that needs urgent attention (Bi Q, Wu Y. et al, 2020)
 - As always stressful, but specific stressors particular to COVID-19 outbreak affect the population (IASC,2020)
- COVID-19 infects people of all ages:
 - older people (that is people over 60 years old),
 - people with underlying medical conditions
 - people with weakened immune systems from a medical condition or treatment,
 - such as chemotherapy appear to be more susceptible to becoming severely ill and higher risk of death the virus
(WHO,2020, British Columbia ministry of health,2020, Pal R, Bhadada SK. Et al, 2020)



Introduction cont.....

- Patients with chronic diseases such:
 - as hypertension, diabetes, and coronary heart diseases is more likely to worsen, but with mixed results for COVID-19 severity (Yingyu C. et al 2020)
- Pre-existing cardiovascular disease seems to be linked with worse outcomes and an increased risk of death in patients with COVID-19 (Peng YD et al,2020, Masataka N.et al,2020)
- currently worldwide mortality from NCDs remains unacceptably huge and is increasing (WHO,2020)
- By 2030, non-communicable diseases will contribute to three-quarters of all deaths globally (Tirschwell DL. et al,2012)



Introduction Cont...

- common reactions to COVID-19 like :
 - concern that regular medical care or community services may be disrupted due to facility closures or reductions in services and public transport closure (CDC,2020)
- Non-communicable chronic diseases (NCCDs) multi-morbidity is becoming one of the public health problems in Ethiopia (Woldesemayat EM.et al,2018)
- Shortage of essential NCD drugs and diagnostic facilities and lack of treatment guidelines are major challenges (Shiferaw F. et al,2018)



- NCDs are complex conditions influenced by a range of individual, social and economic factors, including our perceptions and behavior.
- Thus, due to the silent nature of the diseases, NCDs tend to be easily overlooked by individuals and policymakers during pandemic situation like COVID-19 (Shiferaw F. et al,2018)
- The current COVID-19 pandemic is placing a huge strain on health systems worldwide(Kretchy IA. et al,2020)



Introduction Cont...

- Accurate, up-to-date information on the impact of COVID 19 on chronic illness patients is necessary for the development and evaluation of effective
 - as well as efficient preventative, acute care, and rehabilitation programs for these patients that may raise awareness of the challenges of chronic diseases in LMICs including Ethiopia.
- Given the high burden of chronic diseases and associated inadequately equipped health settings, identifying and mitigating the risk can be seen as a prominent public health approach.



Introduction Cont....

- Hence this study will generate evidence for improving the management of chronic patients and guide health authorities
 - to halt or reduce the global burden of chronic patients affected by the COVID-19 pandemic outbreak in different sectors of the community.
- The study will give evidence for governmental and non-governmental organizations
 - which work in the area of chronic disease and advocacy by providing basic information on the impacts of COVID-19 and would allow closer follow-up and more targeted interventions in high-risk patients.
- Finally, the result of this study will serve as an input for further investigation by voluntary researchers to carry out extensive studies to overcome the challenges and impacts of COVID 19 on chronic illness patients.



Objective

- General Objective
 - To identify the effect of COVID-19 on chronic follow during the early phase of the pandemic and associated factors in western Oromia, Western Ethiopia: Multi-center cross-sectional study
- Specific Objectives
 - To estimate the magnitude of the effect of COVID-19 on chronic follow during the early phase of the pandemic in western Oromia, Western Ethiopia: Multi-center cross-sectional study
 - To describe associated factors with the effect in western Oromia, Western Ethiopia: Multi-center cross-sectional study



Method

- **Study area and period** ((Nekemte specialized hospitals, sire P. hospital, Gida G. hospital, Arjo P. hospital, Shambu G. hospital, kombolcha P. hospital, Gimbi G. hospital and Nedjo G. hospital).)

June 10-August 10, 2020

- **Study design:**
- **Population:**
- **Eligibility criteria:**
- **Sample size and sampling procedure:** *single population proportion, 1.5 design effect, 15% NR n= 662*
- **Data collection tool and procedure :**
- **Data quality assurance:**
- **Data processing and analysis:**
- **Ethical consideration:**



Methods cont....

- **Eligibility criteria**
- *Inclusion criteria*
- All adult patients whose age is ≥ 15 years with one or more chronic illnesses and come for their regular appointment during the study period
- *Exclusion criteria*
- Patients who are unable to speak/hear due to physical impairment
- Patients who are critically ill and difficult to cooperate
- Patients who are not voluntary or willing to participate in the study
- **Sample size and sampling procedure**
- *Sample size determination, single population proportion , 1.5 design effect , 15% NR n= 662*

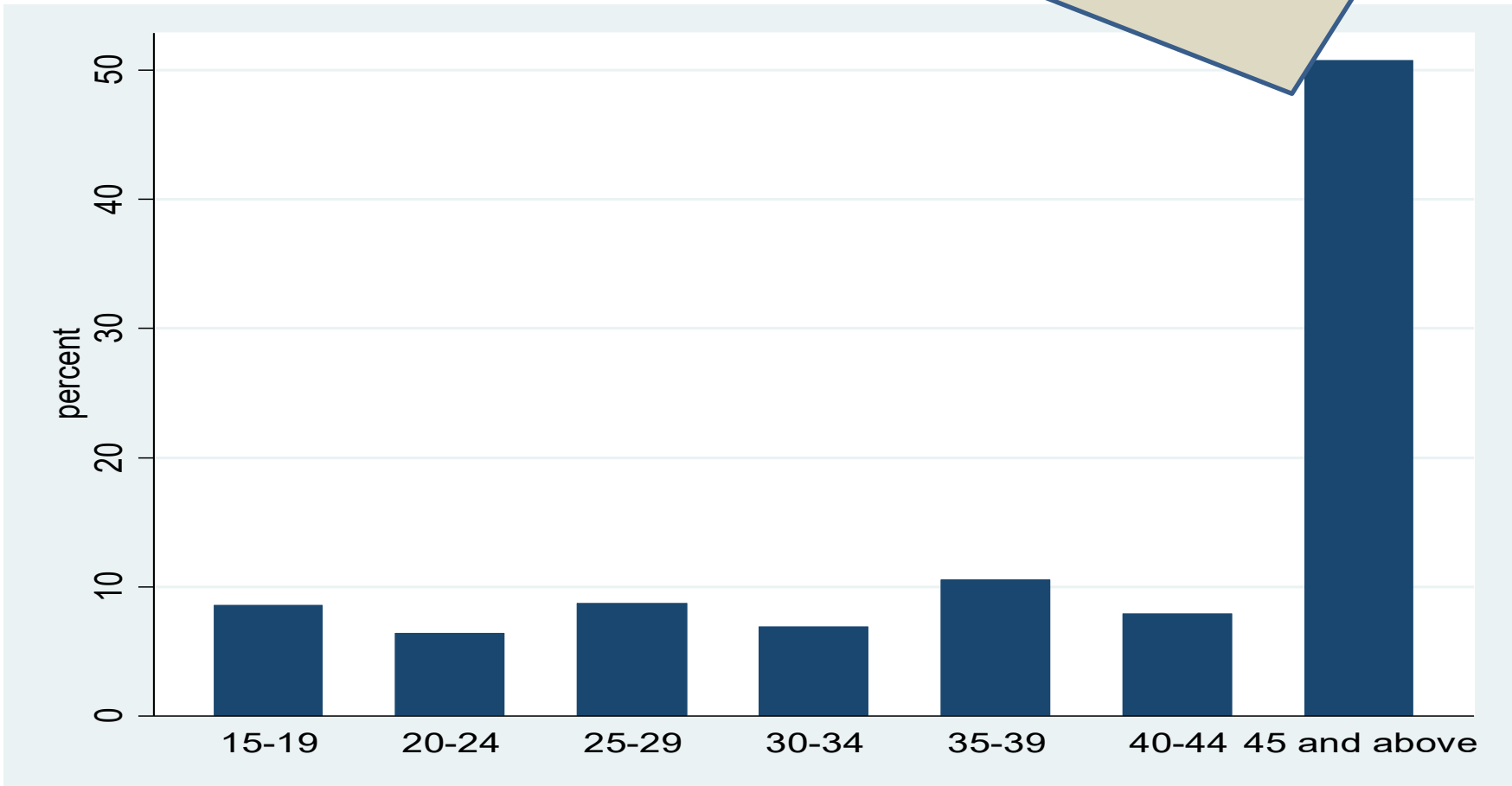


Result and Discussion

- A total of 605 with a response rate of 91.4%
- Oromo in Ethnicity (91.2%).
- urban area (58%) and
- 69% of respondents have married marital status.
- Around two, third (72.9%) of study respondents have less than five family members
- 71.6% have income less than 3000 ETB
- own money 62.8% for the drug during Covid-19



the major fear that many patients on chronic follow-up will be at risk of death and complication of the pandemic continues as COVID-19 infects people of all ages: older people (that is people over 60 years old)(WHO,2020)





Social support and behavior practice

- ✓ It is obvious that this pandemic has influenced a huge amount of social support during its occurrence.
- ✓ *This was mainly due to the fact that the government has set the direction for society; distancing first and later Physical without considering people in need.*
- ✓ The study figures out that 59.2 % (358) of patients on chronic follow-up have poor social support, 36.9 % (223) have moderate social support, while only four % (24) of respondents have responded as they have strong social support.



It in line with national analysis results from China(Wei-jie G. et al,2020)

This suggests that government and policymakers have to give special attention to Chronic disease as mortality of COVID-19 among cardiovascular is high.

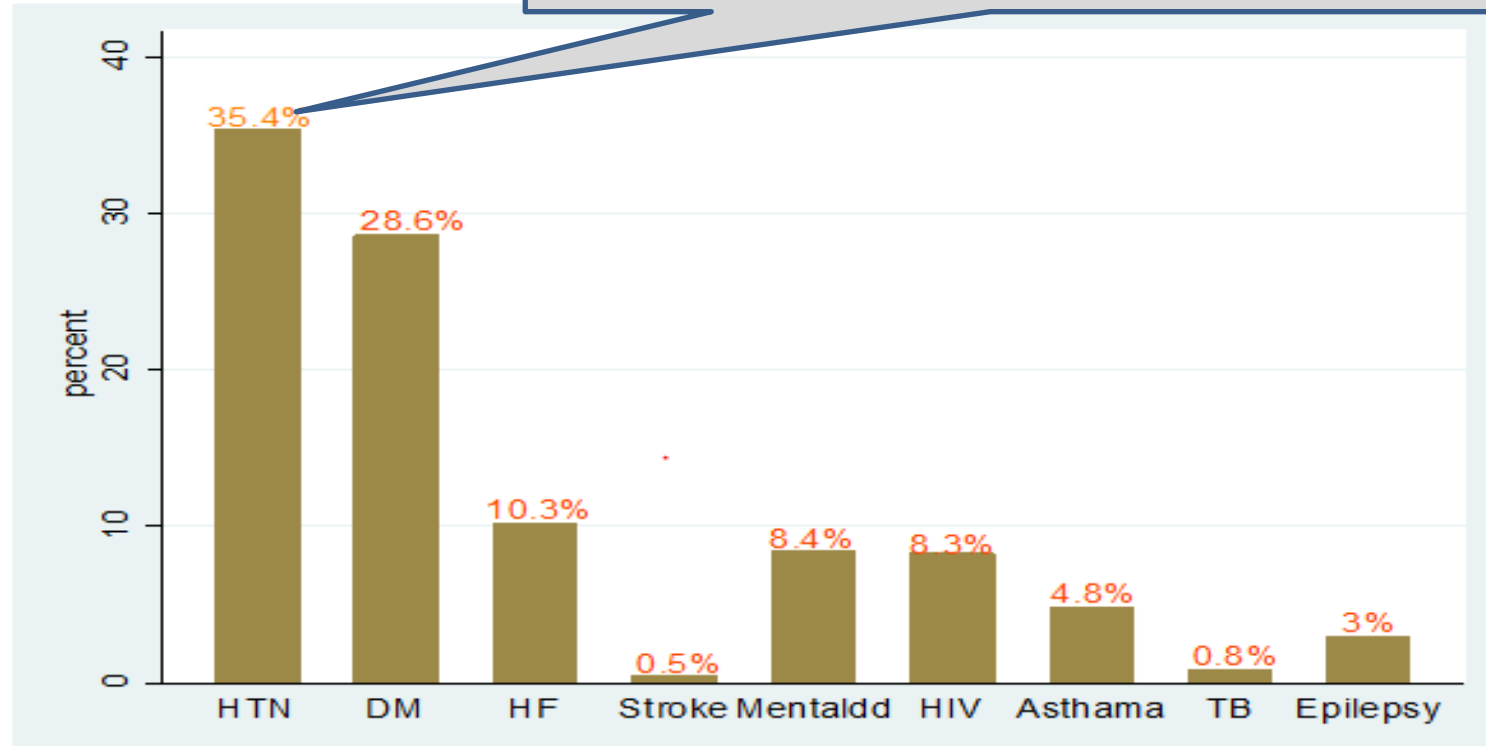
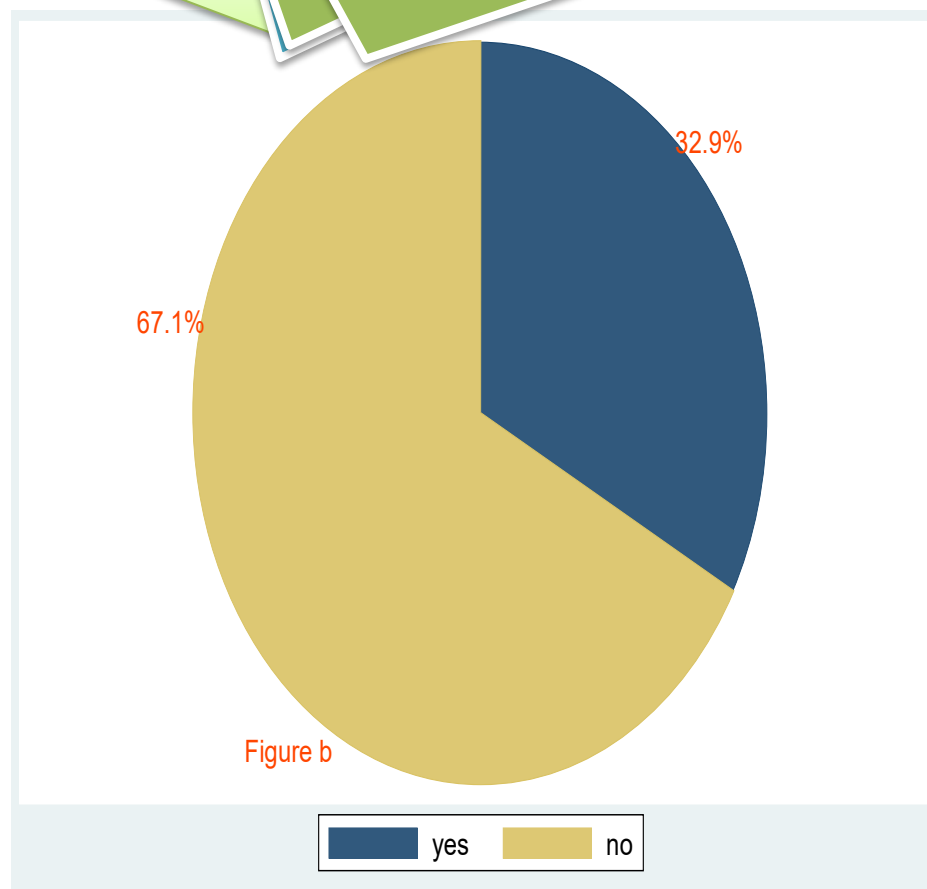
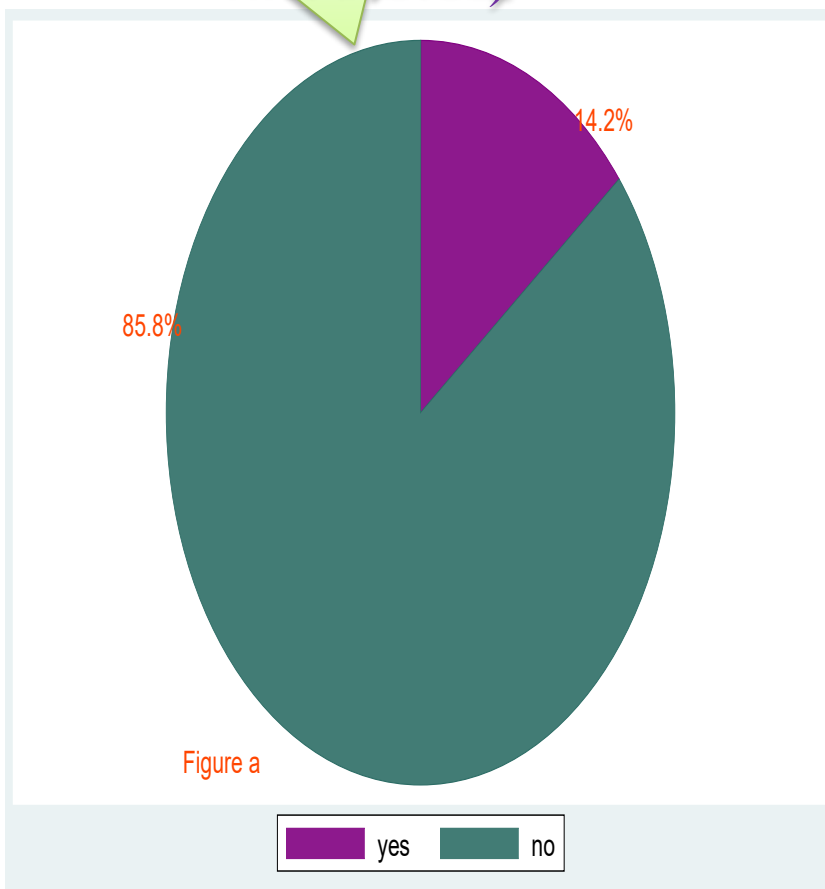


Figure 1 chronic disease distribution among study respondents Oromia, west Ethiopia, 2020



(Katrien D. et al, 2020).

- In It indicates that situational analysis of available resources and resource planning was not carried out for people with chronic diseases.
- This is in line with the study result from Wollo, of Ethiopia (Enbiale W.et al,2021) Lockdown (Katrien D. et





It implies that chronic disease treatment disruption could distort patient outcomes and lead to drug resistance for diseases like TB, HIV/AIDS, etc (*Efrem M. et al 2022*).

- The mean appointment date of patients with the chronic disease during the early phase of COVID-19 was 36.0% (32.6%, 39.8%) in the study area. This may leave patients without timely evaluation and treatment, predisposing them to different medical complications (*Enbiale W., 2021*).



This is consistent with the result from Jimma (Efrem M et al,2020).

The psychological impact of COVID-19 among chronic disease patients in Ethiopia was higher than international figures (Efrem M et al,2020).

al,2020)

				AOR at 95%	CI at 95%	
					Lower Limit	Upper Limit
is there a problem with transport after corona	Yes			2.263	1.063	4.820**
	No	234		Ref		
Have you received health education as before	Yes	344(62.3%)		3.239	1.154	9.095**
	No	43(76.8%)		Ref		
Have you encountered problems with prevention now	No	330(70.8%)		Ref		
	Yes	57(41.0%)		1.651	1.032	2.642**
Have you ever reduced your follow-up by fearing exposure to COVID-19	Yes	47(37.9%)	77(60.9%)	3.416	2.170	5.376**
	No	340(70.7%)	141(29.3%)	Ref		
is there a scarcity of drugs after a covid pandemic	Yes	27(39.1%)	42(60.9%)	0.160	0.070	0.367**
	No	360(67.2%)	176(32.8%)	Ref		
Perceived stress	Low score	392(62.2%)	214(37.8%)	5.965	3.454	10.302**
	High score	214(37.8%)	141(29.3%)	4.055	2.359	6.972**
				1.992	1.028	3.861**
				Ref		
				4.148	1.195	14.396**

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The implication of the study

- The future is uncertain for many pandemics.
- Ethiopia is one of sub-Saharan Africa has a huge number of clients with chronic non-communicable diseases.
- To the best of the researcher's knowledge still nothing is designed for this client.
- Creative solutions are needed to engage populations and promote resiliency among those who are disproportionately affected by COVID-19 is like a chronic disease.
- Efforts that need to be further developed and brought to scale include the following:
 - Leveraging technology to expand the reach of health care and health promotion (eg, telemedicine, virtual program delivery, wearables, mobile device applications).
 - Providing more services in community settings Using community health workers to assist in assessing current conditions and connecting to community resources.



Conclusion

- there was an excessive decline in the number of appointment schedules during the COVID-19 pandemic.
- chronic disease increase vulnerability to COVID-19, and COVID-19 increases chronic disease-related risk factors.
- Educational status, marital status, Residence, transportation, Health counseling, and ability to control covid were factors associated with missing appointment schedules.
- Even restrictions are avoided while the pandemic is ongoing, such findings are of high interest to clinicians and policymakers in their effort to improve the resilience of health systems and hospitals during pandemics or similar disruptive events, including internal conflicts that are arising here and there in Ethiopia to the need of patients with chronic disease.



Recommendation

- As far as there was no treatment and support morbidity and mortality from the chronic disease will increase.
 - Therefore, it is important to sustain routine care for patients with the chronic disease despite the pandemic
- Public restriction that contributes to dropout it is highly recommended to undertake selective public restrictions
- It is highly recommended that MOH
 - should evolve to address health inequities and drive toward health equity with a multipronged approach:
 - Like enhanced access to data at the local level;



Recommendation cont...

- We are not sure that the COVID-19 pandemic will be the final pandemic to the globe.
- Therefore, the impact could be mitigated by reducing the number of visits, rationing personal protective equipment as feasible, compensating travel expenses, providing health education and community-based chronic disease follow-up, and maintaining chronic disease service is very crucial.
- The health system must address not just one or some medical problems but ensure holistic care for those that need it, particularly people having a chronic disease.



Recommendation Cont....

- Care for people having a chronic disease, who are at most risk of COVID-19, must be included in national response frameworks and plans.
- Promoting self-care, alternative health-care services like home-based care, and phone clinics might be considered for patients with mild symptoms. Finally, we must learn how the response to the pandemic can inform policies to make care more accessible for patients on chronic follow-up.



Acknowledgment

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- Galatoomaa!
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- Thank You!



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