

DOPPS/ISN COVID-19 Questionnaire to be distributed jointly by
Arbor Research Collaborative for Health and ISN

December 2020

Consent

The International Society of Nephrology (ISN) and the Dialysis Outcomes and Practice Patterns Study (DOPPS) Program at Arbor Research Collaborative for Health (Ann Arbor, Michigan, United States) are inviting you to participate in this survey about the impact of the COVID-19 pandemic in the care of patients undergoing chronic dialysis for the treatment of kidney failure. With this survey, we aim to understand and better inform the dialysis community about international practices and challenges during the COVID-19 pandemic. The data will be used to create reports, articles, white papers, etc. toward better understanding the impact of the COVID-19 pandemic on dialysis care around the world.

The information collected for this survey is designed to be anonymous data but will cross multiple international borders. Arbor Research will not receive IP addresses or clinic or personal identifiers, but will store all electronically-submitted survey data on its servers in the United States. Survey Monkey will store the data according to its privacy policy. Standard analytical files will be shared by Arbor Research with ISN, which will store the data on its servers in Belgium. Please visit the respective links below for more information on data security and privacy practices:

- Arbor Research- <https://www.arborresearch.org/Privacy>
- ISN-<https://www.theisn.org/privacy-statement>
- Survey Monkey-<https://www.surveymonkey.com/mp/legal>

You will be asked to identify country in this web survey, and responses will be used to analyze data and publish aggregate findings at the country level. You may skip these questions, if you prefer. For publication purposes, countries will be identified except for the following: (1) low-income countries, according to World Bank definitions, and (2) countries with fewer than five dialysis clinics. For these countries, country-level data will be presented without identifiable information.

By completing this survey you are consenting to participate in this research. Your individual responses are confidential, and will never publicly be associated with your name or other personal identifier, or with clinic identifiers.

By selecting “YES”, I agree to enter and submit data into this survey. I consent to the collection, processing and storage of the data I submit and understand that this survey and the survey results are the proprietary property of Arbor Research and ISN and that any such data or information may be disclosed in publications or shared secondarily for future research. In connection with this survey, I understand that such data or information will not contain any information that identifies me, my employer, or associates me with the responses I have provided to this survey.

Note: There are several opportunities in the survey to add "free form" comments or "open-ended" answers. In these situations, responses should not include information that would enable identification of yourself, another person, or any entity, including any organization with which you are, or have been, affiliated. Any identifying personal information will be deleted.

Introduction

There are three sections to this survey:

Section	Number of questions	Approximate completion time (minutes)	Instructions
In-center hemodialysis/general	68	25	Completed by all
Low and middle income country (LMIC)	8	5	Skip if not LMIC (option provided)
Peritoneal dialysis (PD)	33	15	Skip if PD not used at your clinic (option provided)

Dialysis unit Characteristics		
1 (Q2)	Please indicate the country where this dialysis unit is located:	a. Expand on country list
Q124	Please indicate the income group of the country where this dialysis unit is located (World Bank classification):	<input type="checkbox"/> Low income <input type="checkbox"/> Lower-middle income <input type="checkbox"/> Upper-middle income <input type="checkbox"/> High income
Q125	Please indicate the ISN region where this dialysis unit is located:	a. List of the 10 ISN Regional Boards
2 (Q3)	Which healthcare sector is this dialysis unit in (choose one)?	<input type="radio"/> Public healthcare <input type="radio"/> Private healthcare <input type="radio"/> Academic/university hospital
3 (Q4)	Please indicate which area your dialysis clinic is located in (select one).	<input type="checkbox"/> Rural area <input type="checkbox"/> Urban area <input type="checkbox"/> Suburban area
4 (Q5)	Does this dialysis unit care for adults or children? (Select one).	<input type="checkbox"/> Adults only <input type="checkbox"/> Children only <input type="checkbox"/> Both
5 (Q6)	Please indicate which of the following dialysis modalities are provided in your clinic (select all that apply):	a. <input type="checkbox"/> In-center hemodialysis b. <input type="checkbox"/> Peritoneal dialysis

NOTE: Questions in this section refer to care for patients receiving in-center (outpatient) hemodialysis.

ISN/DOPPS Dialysis Survey

A	NUMBER OF COVID-19 CASES		
A-1 (Q7)	Approximately how many patients does your hemodialysis clinic have (across all shifts)?	<ul style="list-style-type: none"> <input type="radio"/> a. <10 <input type="radio"/> b. 10-24 <input type="radio"/> c. 25-49 <input type="radio"/> d. 50-74 <input type="radio"/> e. 75-99 <input type="radio"/> f. 100-149 <input type="radio"/> g. 150-199 <input type="radio"/> h. 200-299 <input type="radio"/> i. 300-399 <input type="radio"/> j. 400-499 <input type="radio"/> k. ≥500 	
A-2 (Q8)	Among patients in your hemodialysis clinic (across all shifts):	a. How many <u>confirmed</u> (positive test) COVID-19 cases? (If 0 cases, please skip b and c)	_____
		b. Of these confirmed cases, how many were hospitalized?	_____
		c. Of these confirmed cases, how many were fatal?	_____
A-3 (Q9)	Among patients in your hemodialysis clinic (across all shifts):	a. How many <u>suspected</u> (test not performed, or high suspicion of false negative test) COVID-19 cases? (If 0 cases, please skip b and c)	_____
		b. Of these suspected cases, how many were hospitalized?	_____
		c. Of these suspected cases, how many were fatal?	_____
A-4 (Q10)	How many staff working in your dialysis clinic have direct patient contact?	<ul style="list-style-type: none"> <input type="radio"/> a. <10 <input type="radio"/> b. 10-19 <input type="radio"/> c. 20-29 <input type="radio"/> d. 30-39 <input type="radio"/> e. 40-49 <input type="radio"/> f. 50-74 <input type="radio"/> g. 75-99 <input type="radio"/> h. ≥ 100 	
A-5 (Q11)	Among staff in your dialysis clinic:	a. How many <u>confirmed</u> (positive test) COVID-19 cases?	_____
		b. Of these confirmed cases, how many were hospitalized?	_____
		c. Of these confirmed cases, how many were fatal?	_____
A-6 (Q12)	Among staff in your dialysis clinic:	a. How many <u>suspected</u> (test not performed, or high suspicion of false negative test) COVID-19 cases?	_____
		b. Of these suspected cases, how many were hospitalized?	_____
		c. Of these suspected cases, how many were fatal?	_____

A		NUMBER OF COVID-19 CASES
A-7 (Q13)	What was the date of the first confirmed COVID-19 case among patients in your hemodialysis clinic?	<input type="radio"/> a. --/--/-- <input type="radio"/> b. No confirmed cases
A-9 (Q15)	In approximately what month was the peak of the COVID-19 pandemic in your local region? (peak month = highest number of new cases per day; select any day within the month)	<input type="radio"/> --/--/--

B		TESTING FOR SARS-CoV-2			
B-1 (Q16)	Please indicate availability of <u>diagnostic testing</u> for SARS-CoV-2 (e.g., RT-PCR from nose, throat, or sputum sample) for patients and staff in your dialysis clinic:				
	Not available	Limited availability (challenging to obtain even for symptomatic persons)	Moderate availability (readily obtained for symptomatic persons; broader use still restricted)	Widespread availability (readily obtained for persons with mild symptoms, contacts, etc.)	
In April/May 2020	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
In 3 to 6 months (anticipated)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

B-2 (Q17)	At the <u>current time</u> , is your dialysis clinic performing routine <u>diagnostic testing</u> of <u>asymptomatic</u> persons for SARS-CoV-2 infection (e.g., RT-PCR from nose, throat, or sputum sample)? Select one best answer.			
	For dialysis patients	For dialysis staff		
No, not planned	<input type="checkbox"/>	<input type="checkbox"/>		
No, but we are considering for the future (not soon)	<input type="checkbox"/>	<input type="checkbox"/>		
No, but we expect to implement soon	<input type="checkbox"/>	<input type="checkbox"/>		
Yes, less often than monthly	<input type="checkbox"/>	<input type="checkbox"/>		
Yes, monthly	<input type="checkbox"/>	<input type="checkbox"/>		
Yes, every two weeks	<input type="checkbox"/>	<input type="checkbox"/>		
Yes, every week	<input type="checkbox"/>	<input type="checkbox"/>		

B TESTING FOR SARS-CoV-2			
B-3 (Q18)	Please indicate availability of <u>antibody testing</u> for SARS-CoV-2 (blood) for patients and staff in your dialysis clinic:		
	Not available	Limited availability	Universal testing of patients and staff
In April/May 2020	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In 3 to 6 months (anticipated)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

B-4 (Q19)	At the <u>current time</u> , please indicate how long it takes to receive results for SARS-CoV-2 tests performed on your dialysis patients:	
	Diagnostic tests (e.g., RT-PCR from nose, throat, or sputum sample)	Antibody tests (blood)
On the day of testing	<input type="checkbox"/>	<input type="checkbox"/>
1-2 days	<input type="checkbox"/>	<input type="checkbox"/>
3-7 days	<input type="checkbox"/>	<input type="checkbox"/>
More than one week	<input type="checkbox"/>	<input type="checkbox"/>
Test not available	<input type="checkbox"/>	<input type="checkbox"/>

B-5 (Q20)	At the <u>current time</u> ," please indicate the payer for the majority of COVID-19 tests at your dialysis clinic:			
	Paid through health care system	Paid by patient's insurance	Paid by patient out-of-pocket	Test not available
Diagnostic tests (e.g., RT-PCR from nose, throat, or sputum sample)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Antibody tests (blood)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

B-6 (Q21)	For persons with COVID-19, please provide your impression about the extent to which <u>contact tracing</u> (interview of contacts, with diagnostic testing as indicated) is implemented through your local community health department**		
	Limited**	Moderate	Extensive
In April/May 2020	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In 3 to 6 months (anticipated)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

** If no health department resources are available, please select "limited"

C SCREENING FOR COVID-19 AT YOUR DIALYSIS CLINIC			
Please answer the following questions regarding practices at the <u>current time</u> .			
C-1 (Q22)	Does your dialysis clinic encourage <u>patients</u> with symptoms or exposure to COVID-19 to contact the clinic before coming in for a scheduled dialysis treatment?	<input type="radio"/> a. Yes <input type="radio"/> b. No	
C-2 (Q23)	Has your dialysis clinic implemented the following COVID-19 screening practices for <u>patients</u> when they arrive at the dialysis clinic? [check all that apply]	a. Screening interview for respiratory symptoms or exposures (in-person or online)	<input type="radio"/> a. Yes <input type="radio"/> b. No
		b. Temperature check	<input type="radio"/> a. Yes <input type="radio"/> b. No
C-3 (Q24)	For <u>patients</u> who screen positive for COVID-19 at the dialysis clinic and are clinically stable, where do you send for laboratory confirmation testing?	<input type="radio"/> a. We test at the dialysis clinic <input type="radio"/> b. We send to another outpatient site (e.g., primary care, hospital, other testing center) <input type="radio"/> c. We do not routinely obtain confirmation testing due to limited availability	
C-4 (Q25)	Has your dialysis clinic (or institution in which the dialysis clinic resides) implemented the following COVID-19 screening practices for <u>staff members</u> when arriving for work? [check all that apply]	a. Screening interview for respiratory symptoms or exposures (in-person or online)	<input type="radio"/> a. Yes <input type="radio"/> b. No
		b. Temperature check	<input type="radio"/> a. Yes <input type="radio"/> b. No
C-5 (Q26)	For <u>staff members</u> who screen positive for COVID-19 at the dialysis clinic and are clinically stable, where do you send for confirmation testing?	<input type="radio"/> a. We test at the dialysis clinic <input type="radio"/> b. We send to another outpatient site (e.g., primary care, hospital, other testing center) <input type="radio"/> c. We do not routinely obtain confirmation testing due to limited availability	

D		INFECTION CONTROL PRACTICES AT YOUR DIALYSIS CLINIC: <i>Personal Protective Equipment (PPE)</i>			
D-1 (Q27)	At the <u>current time</u> , please indicate which Personal Protective Equipment (PPE) are used by staff who participate in direct patient care at your dialysis clinic:				
	For direct contact – with all patients	For direct contact – only for patients with suspected/confirmed COVID-19	Not available in this dialysis unit	Available, but not used	
Particulate-air filter respirators (e.g., N95 masks)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Surgical mask	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Gloves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Eye protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Isolation gown	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Plastic apron	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

D-2 (Q28)	Please answer the following questions regarding shortages of PPE in your clinic <u>at any time</u> during the COVID-19 pandemic.			
	No shortage	Moderate shortage	Severe shortage	Not available (before or during pandemic)
Particulate-air filter respirators (e.g., N95 masks)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Surgical mask	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Isolation gown	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gloves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eye protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plastic apron	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

D INFECTION CONTROL PRACTICES AT YOUR DIALYSIS CLINIC: <i>General Practices</i>		
Please answer the following questions regarding practices at the <u>current time</u> .		
D-3 (Q29)	Does your hemodialysis clinic have a specific protocol for hand washing?	<input type="radio"/> a. Yes, with alcohol-based solutions (60-95%) or hand soap for at least 20 seconds, both before and after use of gloves <input type="radio"/> b. Yes, other protocol <input type="radio"/> c. No
D-4 (Q30)	What is the distance between hemodialysis machines in your clinic?	<input type="radio"/> a. Less than 1m (3ft) <input type="radio"/> b. 1m to less than 2m (3ft to less than 6ft) <input type="radio"/> c. 2m (6ft) or more
D-5 (Q31)	Have you increased the distance between dialysis machines since the start of the COVID-19 pandemic?	<input type="radio"/> a. Yes <input type="radio"/> b. No
D-6 (Q32)	Does your dialysis clinic use aerosol cleaning procedures (e.g., hydrogen peroxide, chlorine dioxide or peroxyacetic acid aerosols) for room disinfection?	<input type="radio"/> a. Yes, for all rooms <input type="radio"/> b. Yes, only for spaces used by suspected/confirmed COVID-19 cases <input type="radio"/> c. No

D INFECTION CONTROL PRACTICES AT YOUR DIALYSIS CLINIC: <i>Patients</i>		
Please answer the following questions regarding practices at the <u>current time</u> .		
D-7 (Q33)	Where do patients wait before starting their HD session?	<input type="radio"/> At the clinic, in usual waiting room with other patients <input type="radio"/> At the clinic, but we have opened additional rooms for patients to keep distant from each other <input type="radio"/> Outside the clinic (e.g., in car or elsewhere)
D-8 (Q34)	Are <u>patients</u> asked to wear a mask (surgical or other) when in your dialysis clinic?	<input type="radio"/> a. Yes – all patients <input type="radio"/> b. Yes – only patients with suspected or confirmed COVID-19 <input type="radio"/> c. No
D-9 (Q35)	Are patients with suspected/confirmed COVID-19 asked to wear particulate-air filter respirators (e.g., N95 masks)?	<input type="radio"/> a. Yes <input type="radio"/> b. No <input type="radio"/> c. Not applicable (COVID-19 patients not dialyzed at this clinic)
D-10 (Q36)	Are meals provided to patients while in your dialysis clinic?	<input type="radio"/> Meals were not provided before COVID-19 or now <input type="radio"/> Meals were provided before COVID-19, but are not now <input type="radio"/> Meals were provided before COVID-19, and they still are

D INFECTION CONTROL PRACTICES AT YOUR DIALYSIS CLINIC: STAFF		
Please answer the following questions regarding practices <u>at any time</u> during the COVID-19 pandemic.		
D-11 (Q37)	Are/were nursing staff expected to wear hospital clothing?	<input type="radio"/> a. Hospital clothing required <input type="radio"/> b. Hospital clothing offered, private clothing acceptable <input type="radio"/> c. Private clothing only
D-12 (Q38)	Did your dialysis clinic implement for <u>staff</u> an extended facemask use program (i.e., use of the same mask for direct contact with different patients)?	<input type="radio"/> a. Yes <input type="radio"/> b. No
D-13 (Q39)	Did your dialysis clinic implement for <u>staff</u> the use of facemasks beyond the manufacturer-stated shelf life ?	<input type="radio"/> a. Yes <input type="radio"/> b. No
D-14 (Q40)	Were any staff in you dialysis clinic redeployed to other healthcare areas outside of your dialysis clinic?	<input type="radio"/> a. Yes <input type="radio"/> b. No
D-15 (Q41)	Did your dialysis clinic have any shortage of staff?	<input type="radio"/> a. Severe shortage <input type="radio"/> b. Moderate shortage <input type="radio"/> c. No shortage

D INFECTION CONTROL PRACTICES AT YOUR DIALYSIS CLINIC: PATIENT TRANSPORTATION		
D-16 (Q42)	<u>At any time</u> during the COVID-19 pandemic, was transportation to/from the dialysis clinic more challenging?	<input type="radio"/> a. No or minimally <input type="radio"/> b. Yes – somewhat more challenging <input type="radio"/> c. Yes – much more challenging
D-17 (Q43)	Does the transportation staff routinely use PPE?	<input type="radio"/> a. Yes <input type="radio"/> b. No
D-18 (Q44)	Are patients with suspected or confirmed COVID-19 transported on a one patient per vehicle basis?	<input type="radio"/> a. Yes <input type="radio"/> b. No

F DIALYSIS PRACTICES: PATIENTS <u>WITHOUT</u> COVID-19		
Please answer the following questions regarding practices at the <u>current time</u> .		
The following questions relate to care for patients <u>without</u> known or suspected COVID-19. (Note: Home dialysis includes peritoneal dialysis, as well as home hemodialysis if available)		
F-1 (Q45)	For patients in your nephrology practice, are you more likely because of the COVID-19 pandemic to recommend kidney transplantation	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Kidney transplantation not available
F-2 (Q46)	For patients in your nephrology practice, are you more likely because of the COVID-19 pandemic to recommend starting home dialysis rather than in-center hemodialysis for patients who initiate chronic dialysis	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Home dialysis not available
F-3 (Q47)	For patients in your nephrology practice, are you more likely because of the COVID-19 pandemic to recommend transitioning your in-center hemodialysis patients to home dialysis?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Home dialysis not available

Please answer the following questions regarding practices at <u>any time</u> during the COVID-19 pandemic.		
At your dialysis unit, which of the following best describes effect of the COVID-19 pandemic on:		
F-4 (Q48)	At your dialysis unit, which of the following best describes effect of the COVID-19 pandemic on length of dialysis session (prescribed)	<input type="radio"/> a. Decreased session length for some ($\geq 25\%$) patients – for logistical reasons (limited slots, staff, or supplies) <input type="radio"/> b. Decreased session length for some ($\geq 25\%$) patients – to limit infection exposure <input type="radio"/> c. Both a and b <input type="radio"/> d. None of the above
F-5 (Q49)	At your dialysis unit, which of the following best describes effect of the COVID-19 pandemic on number of dialysis sessions per week (prescribed)	<input type="radio"/> a. Decreased session length for some ($\geq 25\%$) patients – for logistical reasons (limited slots, staff, or supplies) <input type="radio"/> b. Decreased session length for some ($\geq 25\%$) patients – to limit infection exposure <input type="radio"/> c. Both a and b <input type="radio"/> d. None of the above
F-6 (Q50)	Has the number of patients with missed dialysis treatments (excluding hospitalizations) increased during the COVID19 pandemic?	<input type="radio"/> No or minimally <input type="radio"/> Yes – some patients <input type="radio"/> Yes – many patients
F-7 (Q51)	Have urgent vascular access interventions (radiographic or surgical) become more challenging to obtain during the COVID19 pandemic?	<input type="radio"/> No or minimally <input type="radio"/> Yes – somewhat more challenging <input type="radio"/> Yes – much more challenging

F		DIALYSIS PRACTICES: PATIENTS <u>WITHOUT</u> COVID-19
At any time during the COVID-19 pandemic, were you more likely to prescribe the following drugs for your hemodialysis patients?		
F-8 (Q52)	Potassium binders	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Medication not available
	Loop diuretics	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Medication not available
	Oral bicarbonate	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Medication not available
	Mannitol	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Medication not available

G		CARE FOR YOUR PATIENTS <u>WITH</u> COVID-19
The following questions relate to care for patients <u>with</u> suspected or confirmed COVID-19 who normally receive outpatient dialysis at your clinic.		
<i>*Check here and skip section if none of your outpatient dialysis patients have had COVID-19. (Q53)</i>		
G-1 (Q54)	For patients with COVID-19 <u>not admitted</u> to hospital, do/did you commonly make the following changes in dialysis location?	<input type="radio"/> a. Yes. Check all that apply: <ol style="list-style-type: none"> 1. Transfer to another outpatient dialysis unit (a 'COVID unit') 2. Transfer to a hospital unit for outpatient dialysis 3. Transfer to home dialysis (until infection is resolved) <input type="radio"/> b. No – Patients who are clinically stable continue dialysis at our unit
G-2 (Q55)	For patients isolated due to confirmed COVID-19, how does/did your hemodialysis clinic identify when he/she is able to return to standard dialysis care? (Select best answer)	<input type="radio"/> a. Single negative COVID-19 test <input type="radio"/> b. Two sequentially negative COVID-19 tests <input type="radio"/> c. After certain number of days in isolation (not requiring negative test) <input type="radio"/> d. Two consecutive negative tests in addition to a certain number of days of isolation <input type="radio"/> e. Remission of symptoms (not requiring negative test)

Please answer the following questions regarding practices at any time during COVID-19 pandemic		
G-3		
For your chronic dialysis (ESKD) patients admitted to the hospital with COVID-19, please indicate whether the following medical interventions are/were restricted or prohibited:		If access is/was more restricted/prohibited, was this set by the hospital or the government?
Admission to the ICU (Q56)	<input type="radio"/> a) No change – no restrictions <input type="radio"/> b) No change – always some restrictions <input type="radio"/> c) Change – access is more restricted <input type="radio"/> d) Change – access is prohibited <input type="radio"/> e) ICU not available	<input type="radio"/> i. Hospital <input type="radio"/> ii. Government (Q57)
Mechanical ventilation (Q58)	<input type="radio"/> a) No change – no restrictions <input type="radio"/> b) No change – always some restrictions <input type="radio"/> c) Change – access is more restricted <input type="radio"/> d) Change – access is prohibited <input type="radio"/> e) Mechanical ventilation not available	<input type="radio"/> i. Hospital <input type="radio"/> ii. Government (Q59)

Dialysis while hospitalized (Q60)	a) No change – no restrictions b) No change – always some restrictions c) Change – access is more restricted d) Change – access is prohibited e) Inpatient dialysis not available	i. Hospital ii. Government (Q61)
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H DIALYSIS PRACTICES: PATIENTS WITH COVID-19	
The following questions relate to practices at your dialysis clinic for patients with suspected or confirmed COVID-19 who are clinically stable.	
Check here and skip section if no patients known to be infected with COVID-19 have received dialysis in our clinic. (Q62)	
H-1 (Q63)	Do/did a specific team of staff members provide clinical care (direct contact) to suspected/confirmed COVID-19 patients in your dialysis clinic? <input type="radio"/> a. Yes – specific team for patients with COVID-19 <input type="radio"/> b. No – any of our health care staff may care for patients with COVID-19
H-2 (Q64)	Do/did you place patients with suspected/confirmed COVID-19 on a separate dialysis shift (isolation shift)? <input type="radio"/> a. Yes – all cases <input type="radio"/> b. Yes – some cases <input type="radio"/> c. No
H-3 (Q65)	Does/did your hemodialysis clinic have an isolation room for suspected/confirmed cases of COVID-19? <input type="radio"/> a. Yes – all cases <input type="radio"/> b. Yes – some cases <input type="radio"/> c. No
H-4 (Q66)	If yes, is the room equipped with negative pressure ventilation? <input type="radio"/> a. Yes <input type="radio"/> b. No <input type="radio"/> c. Not applicable (no separate room)
H-5 (Q67)	If your clinic does not have a separate room for suspected/confirmed cases of COVID-19, do/did you treat COVID-19 patients in a separate location (e.g., end of row or separate pod) in the main room? <input type="radio"/> a. Yes <input type="radio"/> b. No <input type="radio"/> c. Not applicable (treated in separate room)
H-6 (Q68)	Do/did patients with suspected/confirmed COVID-19 use the same facilities (e.g., bathroom, waiting room) as other patients? <input type="radio"/> a. Yes <input type="radio"/> b. No
H-7 (Q69 to Q71)	a. Change from hemodialysis to hemodiafiltration (Q69) <input type="radio"/> 1. Yes <input type="radio"/> 2. No <input type="radio"/> 3. Not available
	b. Increase dialyzer pore size, from standard high flux to middle cut-off (Q70) <input type="radio"/> 1. Yes <input type="radio"/> 2. No <input type="radio"/> 3. Not available
	c. Change in total dialysis treatment time per week (session length x number of sessions)(Q71) <input type="radio"/> 1. Longer total time <input type="radio"/> 2. No change <input type="radio"/> 3. Shorter total Time

I		SUPPORT SERVICES FOR CLINIC STAFF	
I-1 (Q72)	Does your dialysis clinic provide resources for psychological support to staff during the COVID-19 pandemic?	<input type="radio"/> a. Yes – one-on-one (private) counseling <input type="radio"/> b. Yes – other resources (not one-on-one counseling) <input type="radio"/> c. No	
I-2 (Q73)	If yes:	1) Have staff been made widely aware of these resources?	<input type="radio"/> a. Yes <input type="radio"/> b. No
		2) Are these resources made available to staff free of charge?	<input type="radio"/> a. Yes <input type="radio"/> b. No

Specific Survey Questions for LMIC

(Q74) Check here and skip if not LMIC

1 (Q75-Q77)	Please indicate if you have been provided any training/guidance related to the following activities during the COVID-19 pandemic: (select all that apply)			
	Yes, from my workplace	Yes, from national/regional kidney organization(s)	Yes, from local or national governmental organizations (including Ministry of Health)	No, I obtain information mostly from public sources (e.g., ISN, CDC, WHO)
personal protective equipment use during contact with patients	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Infection-control measures for patients with suspected COVID-19	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Allocation of scarce medical resources (e.g., in the ICU or dialysis unit)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2 (Q78)	At <u>any time</u> during the COVID-19 pandemic, have you had to purchase your own personal protective equipment (PPE) for you to use at work?	<input type="radio"/> a. Yes <input type="radio"/> b. No
3 (Q79)	At <u>any time</u> during the COVID-19 pandemic, was personal protective equipment (PPE) for staff made available by any of the following? (Please tick all that apply)	<input type="radio"/> a. Patients <input type="radio"/> b. Local community <input type="radio"/> c. Other organizations (e.g., churches, local or international NGOs) <input type="radio"/> d. Donations not required (PPE supplied by the health care system)

4 (Q80)	At <u>any time</u> during the COVID-19 pandemic, please indicate whether there have been disruptions to the usual supply of the following dialysis consumables.			
	No disruption to supply	Minor supply chain disruption; <u>no impact</u> on quality of dialysis care	Major supply chain disruption, but alternative arrangements have been made; <u>little impact</u> on quality of dialysis care	Major supply chain disruption; <u>marked impact</u> on quality of dialysis care
HD consumables (e.g., dialyzer, tubing)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water processing consumables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DECISION MAKING		
1 (Q81)	Related to the COVID-19 pandemic, were healthcare professionals caring for patients with kidney disease involved in decisions about changes to dialysis services at your clinic?	<ul style="list-style-type: none"> a. Changes were made – with inputs from healthcare professionals looking after patients with kidney disease b. Changes were made - by the hospital director with no inputs from kidney care professionals c. Changes were made - by the Ministry of Health with no inputs from kidney care professionals d. No changes were made to the delivery of dialysis services
2 (Q82)	If answer (a) to above, which of the following groups were involved (select all that apply)	<ul style="list-style-type: none"> a. National Kidney Association b. Local/provincial/national lead for kidney services c. Local kidney doctors or nurses

Peritoneal Dialysis Survey

(Q83): Check here and skip section if PD is not practiced at your facility

A		NUMBER OF COVID-19 CASES	
A-1 (Q84)	Approximately how many patients does your peritoneal dialysis clinic have?	<ul style="list-style-type: none"> <input type="radio"/> a. <10 <input type="radio"/> b. 10-24 <input type="radio"/> c. 25-49 <input type="radio"/> d. 50-74 <input type="radio"/> e. 75-99 <input type="radio"/> f. 100-149 <input type="radio"/> g. 150-199 <input type="radio"/> h. 200-299 <input type="radio"/> i. 300-399 <input type="radio"/> j. 400-499 <input type="radio"/> k. ≥500 	
A-2 (Q85)	Among patients in your peritoneal dialysis clinic	a. How many <u>confirmed</u> (positive test) COVID-19 cases? (If 0 cases, please skip b and c)	_____
		b. Of these confirmed cases, how many were hospitalized?	_____
		c. Of these confirmed cases, how many were fatal?	_____
A-3 (Q86)	Among patients in your peritoneal dialysis clinic	a. How many <u>suspected</u> (test not performed, or high suspicion of false negative test) COVID-19 cases? (If 0 cases, please skip b and c)	_____
		b. Of these suspected cases, how many were hospitalized?	_____
		c. Of these suspected cases, how many were fatal?	_____

Unless noted otherwise, the remaining questions in the peritoneal dialysis (PD) section refer to patients receiving PD for chronic dialysis who **do not** have known or suspected COVID-19.

B Location and frequency of routine dialysis care for PD patients				
B-1 (Q87)	How often are most patients seen by your PD clinic for routine visits, whether <u>in-person</u> or <u>remotely</u> :			
	More often than monthly	Monthly	Every two months	Every three months
Before the COVID-19 pandemic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
At the Covid-19 pandemic's peak	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

B-2 (Q88)	How often are most patients seen <u>in-person</u> by your PD clinic for routine visits:			
	More often than monthly	Monthly	Every two months	Every three months
Before the COVID-19 pandemic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
At the Covid-19 pandemic's peak	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

B-3 (Q89)	How often do you obtain routine dialysis labs for most of your PD patients (whether drawn in clinic or at home):			
	More often than monthly	Monthly	Every two months	Every three months
Before the COVID-19 pandemic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
At the Covid-19 pandemic's peak	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

B-4 (Q90)	For your PD patients, which is the <u>most common location</u> for routine lab draws?			
	At your PD clinic	At outside laboratory or other clinical site	At home	
Before the COVID-19 pandemic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
At the Covid-19 pandemic's peak	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

B-6 (Q91)	For your PD patients, which is the <u>most common location</u> for erythropoietin stimulating agents (ESA) injections?			
	ESAs not available	At your PD clinic	At outside laboratory or other clinical site	At home
Before the COVID-19 pandemic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
At the Covid-19 pandemic's peak	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

C DIALYSIS PROCEDURES AT HOME			
C-1 (Q92)	Are your PD patients required to wear a mask when performing manual PD exchange or connecting to a cyclor?		
	Yes – always	Yes – only if symptomatic (e.g., upper respiratory tract infection symptoms)	No
Before the COVID-19 pandemic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
At the Covid-19 pandemic's peak	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

C-2 (Q93)	At <u>any time</u> during the COVID-19 pandemic, did your dialysis clinic develop a mask conservation (reuse) program for patients who use masks during routine PD exchanges?	<input type="radio"/> a. Yes – patients are asked to use fewer masks than before the pandemic <input type="radio"/> b. No	
C-3 (Q94)	At <u>any time</u> during the COVID-19 pandemic, did patients experience a reduction in the usual allocation of the following supplies for PD exchanges at home:	a. Masks	<input type="radio"/> a. Yes- supply shortage despite reduction in allocation <input type="radio"/> b. Yes – supply adequate with reduction in allocation <input type="radio"/> c. No reduction
		b. Sanitizer	<input type="radio"/> a. Yes- supply shortage despite reduction in allocation <input type="radio"/> b. Yes – supply adequate with reduction in allocation <input type="radio"/> c. No reduction
C-4 (Q95)	For PD patients <u>with confirmed COVID-19</u> , have you modified your instructions to them regarding handling and disposal of dialysis supplies and effluent at home?	<input type="radio"/> a. Yes <input type="radio"/> b. No	

The following questions relate to home visits from clinic staff:		
D-1 (Q96)	During the peak of the COVID-19 pandemic in your region, were home visits by a dialysis staff member more or less common?	<input type="radio"/> a. Less common <input type="radio"/> b. Same <input type="radio"/> c. More common <input type="radio"/> d. Home visits not routinely available (before or during the COVID-19 pandemic)

D	PERITONEAL DIALYSIS SUPPLIES	
D-2 (Q97)	How did your PD patients normally get their dialysis supplies before the COVID-19 pandemic?	<ul style="list-style-type: none"> <input type="radio"/> A. Supplies delivered to home <input type="radio"/> B. Patients or caregivers pick up supplies from clinic or distribution center (if yes, skip questions E-8-9)
D-3 (Q98)	At <u>any time</u> during the COVID-19 pandemic, was there a disruption to the delivery of PD fluids?	<ul style="list-style-type: none"> <input type="radio"/> No disruption <input type="radio"/> Some disruption, but little effect on quality of care <input type="radio"/> Major disruption <u>at the patient or clinic level</u>, with major impact on quality of care <input type="radio"/> Major disruption <u>at the country or regional level</u>, with major impact on quality of care
D-4 (Q99)	At <u>any time</u> during the COVID-19 pandemic, did you have to use makeshift/homemade PD fluid due to interruption of your supply chain?	<ul style="list-style-type: none"> <input type="radio"/> Yes <input type="radio"/> No

E PD TRAINING AND PROCEDURES		
Unless otherwise specified, questions in section E refer to practices <u>at the current time</u>, compared to before the COVID-19 pandemic		
E-1 (Q100)	What has happened to the number of new patients being trained for PD?	<ul style="list-style-type: none"> <input type="radio"/> a. Training has stopped <input type="radio"/> b. Number of patients has declined <input type="radio"/> c. Number of patients is roughly the same <input type="radio"/> d. Number of patients has increased
E-2 (Q101)	Before the COVID-19 pandemic, what was the location of training for your new PD patients?	<ul style="list-style-type: none"> <input type="radio"/> a. Most or all trained at home <input type="radio"/> b. Roughly the same trained at home as in the PD unit <input type="radio"/> c. Most or all trained in the PD unit
E-3 (Q102)	How has the location of training for your new PD patients changed?	<ul style="list-style-type: none"> <input type="radio"/> a. More trained at home <input type="radio"/> b. No substantial change <input type="radio"/> c. More trained in the PD unit
E-4 (Q103)	How has the total time for training of new PD patients changed?	<ul style="list-style-type: none"> <input type="radio"/> a. Shorter total training time on average <input type="radio"/> b. No/little change <input type="radio"/> c. Longer total training time on average
E-5 (Q104)	Before the COVID-19 pandemic, approximately what percentage of your PD patients used APD (versus CAPD)?	<ul style="list-style-type: none"> <input type="radio"/> 0% APD <input type="radio"/> 20% APD <input type="radio"/> 40% APD <input type="radio"/> 60% APD <input type="radio"/> 80% APD <input type="radio"/> 100% APD
E-6 (Q105)	Before the COVID-19 pandemic, were new PD patients at your clinic trained to use CAPD or APD?	<ul style="list-style-type: none"> <input type="radio"/> a. Mostly CAPD <input type="radio"/> b. Roughly same for CAPD and APD <input type="radio"/> c. Mostly APD <input type="radio"/> d. APD not available (before or during COVID-19 pandemic)
E-7 (Q106)	How has training of new patients for CAPD versus APD changed?	<ul style="list-style-type: none"> <input type="radio"/> A. Increase in patients trained for CAPD <input type="radio"/> B. No substantial change <input type="radio"/> C. Increase in patients trained for APD
For the next two questions, urgent-start PD is defined as in-unit intermittent PD for new patients within 48 hours of PD catheter insertion.		
E-8 (Q107)	Before the COVID-19 pandemic, approximately what percentage of your new PD patients used urgent-start PD?	<ul style="list-style-type: none"> <input type="radio"/> a0% <input type="radio"/> 20% <input type="radio"/> 40% <input type="radio"/> 60% <input type="radio"/> 80% <input type="radio"/> 100%
E-9 (Q108)	How has use of urgent-start PD changed?	<ul style="list-style-type: none"> <input type="radio"/> A. Increased <input type="radio"/> B. No substantial change <input type="radio"/> C. Decreased

E PD TRAINING AND PROCEDURES		
The following two questions refer to <u>laparoscopic surgical</u> PD catheter insertion/revision procedures:		
E-10 (Q109)	Prior to the COVID-19 pandemic, did your clinic utilize laparoscopic surgical procedures for some patients?	<input type="radio"/> a. Yes <input type="radio"/> b. No (skip next question)
E-11 (Q110)	How has use of laparoscopic surgical procedures changed?	<input type="radio"/> a. Use increased <input type="radio"/> b. Use unchanged <input type="radio"/> c. Use reduced <input type="radio"/> d. User reduced (no use at this time)

The following two questions refer to <u>non-surgical percutaneous</u> PD catheter insertion/revision procedures (either blind or ultrasound/fluoroscopic guided)		
E-12 (Q111)	Prior to the COVID-19 pandemic, did your clinic utilize non-surgical percutaneous procedures for some patients?	<input type="radio"/> a. Yes <input type="radio"/> b. No (skip next question)
E-13 (Q112)	How has use of non-surgical percutaneous procedures changed?	<input type="radio"/> a. Use increased <input type="radio"/> b. Use unchanged <input type="radio"/> c. Use reduced <input type="radio"/> d. Use reduced (no use at this time)

F		REMOTE TECHNOLOGY FOR COMMUNICATING WITH PD PATIENTS				
F-1 (Q113)	Please estimate the fraction of your clinic's PD patients <u>at the current time</u> who communicate with the clinic by the following remote technology.					
	0%, or not available	1-25%	26-50%	51-75%	>75%	
Text messaging to patient's smart phone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Direct email correspondence with patient	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Two-way video chat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Health system internet portal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Remote monitoring via APD cyclor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Telephone (audio only; none of above)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

F-2 (Q114)	Please estimate the fraction of your PD patients who use any of the above remote technology (other than telephone alone) to communicate with the clinic.				
	0%	1-25%	26-50%	51-75%	>75%
Before the COVID-19 pandemic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

F-3 (Q115)	How has the frequency of communicating with your PD patients changed since the COVID-19 pandemic?	<ul style="list-style-type: none"> <input type="radio"/> a. Increased greatly <input type="radio"/> b. Increased somewhat <input type="radio"/> c. No change <input type="radio"/> d. Decreased somewhat <input type="radio"/> e. Decreased greatly
F-4 (Q116)	Is your unit is trying to establish greater use of remote technology for communication with PD patients?	<ul style="list-style-type: none"> <input type="radio"/> a. Yes <input type="radio"/> b. No

Information about survey respondent-		
1 (Q117)	Please indicate who filled out this survey <u>primarily</u> :	<ul style="list-style-type: none"> a. Medical director b. Other physician (not medical director) c. Nurse manager
2 (Q118)	Please indicate any <u>other</u> contributors to completing this survey (select all that apply):	<ul style="list-style-type: none"> d. Medical director e. Other physician (not medical director) f. Nurse manager
The following questions refer to the person who filled out this survey primarily		
3 (Q119)	What is your age group (years)?	<ul style="list-style-type: none"> a. < 30 b. 31-40 c. 41-50 d. 51-60 e. 61-70 f. > 70
4 (Q120)	What is your sex?	<ul style="list-style-type: none"> a. Male b. Female c. Other
5 (Q121)	Are you an ISN member?	<ul style="list-style-type: none"> a. Yes b. No
6 (Q122)	Please indicate your clinical specialty and training:	<ul style="list-style-type: none"> a. Nephrologist (completed training) b. Other physician (completed training) c. Nephrologist (training ongoing) d. Other physician (training ongoing) e. Nurse
7 (Q123)	Please indicate the type of kidney patients you manage on a regular basis (select all that apply)	<ul style="list-style-type: none"> a. Chronic hemodialysis (HD) b. Chronic peritoneal dialysis (PD) c. Kidney transplant d. Non-dialysis chronic kidney disease e. Acute kidney injury (hospital consults)

The International Society of Nephrology (ISN) and Dialysis Outcomes and Practice Patterns Study (DOPPS) thank you very much for filling out this survey. Your responses will help inform care for dialysis patients through the remainder of the Covid-19 pandemic and beyond.

The COVID-19 pandemic identifies significant global inequities in hemodialysis care in Low and Lower Middle-Income countries - an ISN/DOPPS survey

SUPPLEMENTARY RESULTS

Supplemental Table S1: Survey returns by country and World Bank country income

Region/Country	All	World Bank Classification			
		Low Income	Lower middle income	Upper middle income	High income
Overall	412	15	111	145	141
Africa	76	11	53	11	1
Algeria		-	1	-	-
Cameroon		-	9	-	-
Congo, Democratic Republic of the		2	-	-	-
Congo, Republic of the		-	1	-	-
Côte d'Ivoire		-	6	-	-
Ghana		-	7	-	-
Guinea		1	-	-	-
Kenya		-	7	-	-
Malawi		1	-	-	-
Mali		1	-	-	-
Mauritania		-	1	-	-
Mauritius		-	-	-	1
Namibia		-	-	1	-
Nigeria		-	20	-	-
Somalia		1	-	-	-
South Africa		-	-	10	-
Sudan		5	-	-	-
Tunisia		-	1	-	-
Europe (Eastern/Central)	45	-	1	22	22
Albania		-	-	9	-
Croatia		-	-	-	5
Cyprus		-	-	-	1
Czech Republic		-	-	-	2
Estonia		-	-	-	2
Lithuania		-	-	-	8
Moldova		-	1	-	-
Montenegro		-	-	4	-
North Macedonia		-	-	1	-
Romania		-	-	-	1
Serbia		-	-	3	-
Slovenia		-	-	-	3
Turkey		-	-	5	-
Europe (Western)	59	-	-	-	59

Austria		-	-	-	1
Belgium		-	-	-	2
France		-	-	-	6
Germany		-	-	-	2
Greece		-	-	-	1
Israel		-	-	-	4
Italy		-	-	-	22
Norway		-	-	-	2
Portugal		-	-	-	2
Sweden		-	-	-	5
Switzerland		-	-	-	11
United Kingdom		-	-	-	1
Middle East	11	4	-	1	6
Iran		-	-	1	-
Kuwait		-	-	-	5
Oman		-	-	-	1
Syria		4	-	-	-
Newly independent states and Russia	20	-	2	18	-
Belarus		-	-	3	-
Georgia		-	-	2	-
Russia		-	-	13	-
Ukraine		-	2	-	-
Asia (South East and Oceania)	54	-	19	27	8
Australia		-	-	-	4
Indonesia		-	-	22	-
Malaysia		-	-	5	-
New Zealand		-	-	-	4
Philippines		-	19	-	-
Asia (South)	25	-	25	-	-
Bangladesh		-	2	-	-
India		-	6	-	-
Nepal		-	9	-	-
Pakistan		-	2	-	-
Sri Lanka		-	6	-	-
Asia (North and East)	60	-	-	45	15
China		-	-	45	-
Korea, South		-	-	-	15
N. America/Caribbean	28	-	-	-	28
Canada		-	-	-	8
The Bahamas		-	-	-	1
United States		-	-	-	19
Latin America	34	-	11	21	2
Argentina		-	-	2	-
Bolivia		-	4	-	-
Brazil		-	-	3	-
Chile		-	-	-	1

Colombia	-	-	1	-
El Salvador	-	7	-	-
Guatemala	-	-	4	-
Mexico	-	-	5	-
Paraguay	-	-	2	-
Peru	-	-	1	-
Uruguay	-	-	-	1
Venezuela	-	-	3	-

STROBE Statement—Checklist of items that should be included in reports of *cross-sectional studies*

	Item No	Recommendation	Page No
Title and abstract	1	(a) Indicate the study’s design with a commonly used term in the title or the abstract	3
		(b) Provide in the abstract an informative and balanced summary of what was done and what was found	3
Introduction			
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	4
Objectives	3	State specific objectives, including any prespecified hypotheses	4
Methods			
Study design	4	Present key elements of study design early in the paper	5
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	5
Participants	6	(a) Give the eligibility criteria, and the sources and methods of selection of participants	5
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	5
Data sources/measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group	5
Bias	9	Describe any efforts to address potential sources of bias	N/A
Study size	10	Explain how the study size was arrived at	N//A
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	6
Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding	6
		(b) Describe any methods used to examine subgroups and interactions	6
		(c) Explain how missing data were addressed	6
		(d) If applicable, describe analytical methods taking account of sampling strategy	6
		(e) Describe any sensitivity analyses	N/A
Results			
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed	6
		(b) Give reasons for non-participation at each stage	6
		(c) Consider use of a flow diagram	N/A
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	6
		(b) Indicate number of participants with missing data for each variable of interest	6
Outcome data	15*	Report numbers of outcome events or summary measures	6
Main results	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included	N/A

		(b) Report category boundaries when continuous variables were categorized	N/A
		(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	N/A
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	N/A
Discussion			
Key results	18	Summarise key results with reference to study objectives	8
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	10
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	9
Generalisability	21	Discuss the generalisability (external validity) of the study results	10
Other information			
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	11

*Give information separately for exposed and unexposed groups.

Note: An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at <http://www.plosmedicine.org/>, Annals of Internal Medicine at <http://www.annals.org/>, and Epidemiology at <http://www.epidem.com/>). Information on the STROBE Initiative is available at www.strobe-statement.org.