



Table S1. Physical activity pre and during lockdown.

Author and Year	PA type and units of measurement	PA Pre-Lockdown Mean (SD)	PA During Lock-down Mean (SD)	Change in PA	P value (if applicable)	Lockdown restrictions
Barone et al. (2020) [27]	<i>Change in PA - % participants</i>					
	High increase		2.29%			
	Low increase	N.A.	4.64%	N.A.	N.A.	“Decentralized (defined by states and municipalities) and delayed, the measures to contain the SARS-CoV-2 spread in Brazil, and reflected on mobility reduction, was experienced by 95.1% of this study’s respondents in different degrees (with 26.9% never going outside their homes)”
	No change		33.57%			
	Low reduction		14.70%			
	High reduction		44.8%			
Khader et al. (2020) [34]	<i>Change in PA - % participants</i>					
	Increased	N.A.	69%	N.A.	N.A.	“A series of lockdowns starting from March 24, 2020 were imposed on people in the country to break the chain of virus transmission [4]. Further, United Nations and WHO have praised India’s response to the pandemic as ‘comprehensive’ and ‘robust’. However, since the start of “unlocking” and easing of restrictions from June 1st, India is witnessing an exponential rise in COVID-19 cases indicating the possibility of ‘community transmission’.
	No change		25%			
	Decreased		6%			
Yan et al. (2020) [46]	<i>Change in PA - % total participants</i>					
	Increased a lot		17.8%			
	Increased a little		25.0%			
	No change		24.6%			
	Decreased a little		17.3%			
	Decreased a lot		15.2%			
	<i>Change in PA - % participants without diabetes</i>					
	Increased a lot	N.A.	16.0%	N.A.		“China implemented a lockdown of Wuhan in late January 2020 to contain the spread of COVID-19. China is slowly beginning to reopen since lifting the lockdown in mid-May.”
	Increased a little		25.2%			
	No change		25.0%			
	Decreased a little		17.9%			
	Decreased a lot		16.0%			
	<i>Change in PA - % participants with diabetes</i>					
	Increased a lot		44.6%			
			23.1%			
			19.5%			
	Increased a lot		8.2%			

Increased a little	4.6%	
No change		
Decreased a little		<0.001
Decreased a lot	1.2 (1.5)	
	1.1 (1.4)	
<i>PA - hours per day</i>	2.0 (2.0)	
Total participants		
Participants without diabetes		<0.001
Participants with diabetes	59.2%	
	58.1%	
	73.8%	
<i>PA 150 minutes per week - % participants</i>		
Total participants		
Participants without diabetes	42.9%	
	9.3%	
Participants with diabetes	20.5%	
	14.4%	
	12.9%	
<i>Frequency of exercise - % participants without diabetes</i>		
Never/Rarely	46.5%	
<1 time per week	8.5%	
1-2 time per week	26.5%	
3-5 time per	10.3%	
Daily	8.2%	
<i>Frequency of exercise - % participants with diabetes</i>		
Never/Rarely	40.0%	
<1 time per week	23.9%	
1-2 time per week	11.8%	
3-5 time per	31.5%	
Daily	40.6%	
<i>Type of exercise - % participants without diabetes</i>	43.4%	
	47.7%	
Walking / slow walking	38.8%	
	23.4%	

	Quick walking / square dance		25.6%			
	Tai Chi/ Qigong / Ba Duan Jin					
	Other indoor exercises					
	No exercise					
	<i>Type of exercise - % participants with diabetes</i>					
	Walking / slow walking					
	Quick walking / square dance					
	Tai Chi/ Qigong / Ba Duan Jin					
	Other indoor exercises					
	No exercise					
	<i>Minutes of exercise</i>	66 (42)	38 (31)	-28		
	<i>Number of steps</i>	12606 (5026)	4760 (3145)	-7846		
Assaloni et al. (2020) [47]	<i>Type of exercise - % participants</i>	35.7%	-		<0.001	"In accordance to Istituto Superiore della Sanità (ISS), the Italian Government implemented extraordinary measures to limit viral transmission throughout people and the territory, imposed national quarantine, reduced social interaction and travelling and "stay at home" as a basic means of limiting people's exposure to the virus.
	Individual sport	4.5%	-		<0.001	
	Team sport	10.4%	-			
	Fitness	3.9%	-			
	Resistance training	36.4%	82.5%	+46.1%		
	In autonomy	9.1%	17.5%	+8.4%		
	None					
	<i>Change in type - % participants</i>		80.42%			
	Total		81.32%			
	Male		78.85%			
	Female					
khare et al. (2020) [48]		N.A.		N.A.	N.A.	"Temporary lock down of country along with all precautions advised like social distancing and social isolation."
	<i>Change in timing - % participants</i>		72.72%			
	Total		73.63%			
	Male		71.15%			
	Female					

			60.84%			
		Change in duration - % participants	56.04%			
		Total	69.23%			
		Male				
		Female				
Munekawa et al. (2020) [35]	Change in exercise - Likert scale (0: consid- erably reduced, 5: no change, 10: considera- bly increased)	N.A.	3.7 (2.0)	N.A.	N.A.	“In Japan, a state of emergency, with request-based measures of encouraging the populace to remain at home and businesses to limit operations, was declared on April 7, 2020. Therefore, the Japanese are also becoming more restric- tive in their behavior.”
	Decreased exercise - % participants		53.96%			
Ruiz-Roso et al. (2020) [37]	Moderate PA – minutes per week	60.5	20.6	–39.9	0.0007	“The Spanish government released on the 14th of March an executive order to implement a state of alarm, when strict lockdown measures such as social dis- tancing and complete confinement at home were first imposed.”
	Male	44.5	21.2	–23.3	0.0005	
	Female	190.6	33.8	–156.8	0.0119	
	44–63 years old	68.2	48.4	–19.8	0.3694	
	64–77 years old	81.3	32.7	–48.6	0.2803	
	BMI: 25.0–<30 kg/m ²	102.9	60.9	–42.0	0.0658	
	BMI: 30–<35 kg/m ²	124.0	26.3	–97.7	0.0933	
	BMI: 35–<40 kg/m ²	125.7	43.6	–82.1	0.0118	
	Capillary HbA1c: <6,5%	57.2	40.3	–16.9	0.5591	
	Capillary HbA1c: ≥6,5%	363.2	108.8	–254.4	0.0006	
		268.4	128.3	–140.1	0.0005	
	Walking – minutes per week	231.9	89.7	–142.2	0.0007	
	Male	339.9	124.8	–215.1	<0.0001	
	Female	434.7	138.0	–296.7	0.0037	
	44–63 years old	270.4	113.3	–157.1	0.0002	
	64–77 years old	214.8	95.9	–118.9	0.0142	
	BMI: 25.0–<30 kg/m ²	291.3	127.2	–164.1	0.0003	
	BMI: 30–<35 kg/m ²	289.5	85.4	–204.1	0.0004	
	BMI: 35–<40 kg/m ²					
	Capillary HbA1c: <6,5%	5.2	7.7	+2.5	<0.0001	
		5.6	6.8	+1.2	0.0213	
	Capillary HbA1c: ≥6,5%	5.9	7.3	+1.4	0.0332	
		5.2	7.3	+2.1	<0.0001	
		6.0	7.5	+1.5	0.0516	
		5.2	6.7	+1.5	0.001	

	<i>Sitting – hours per week</i>	5.4	7.2	+1.8	0.0043	
		5.4	6.9	+1.5	<0.0001	
	Male	5.0	7.2	+2.2	0.0002	
	Female					
	44–63 years old					
	64–77 years old					
	BMI: 25.0–<30 kg/m ²					
	BMI: 30–<35 kg/m ²					
	BMI: 35–<40 kg/m ²					
	Capillary HbA1c: <6,5%					
	Capillary HbA1c: ≥6,5%					
Sankar et al. (2020) [38]	<i>Change in PA - % participants</i>	N.A.	2.7%	N.A.	N.A.	“In Pathanamthitta district of South Kerala, the lockdown was enforced on March 16, 2020, one week earlier than the nationwide 21-day lockdown 1.0 which was announced on March 24, 2020. This was followed by lockdown 2.0 and 3.0 which ended on May 17, 2020.”
	Increased		82.7%			
	Same as before		14.5%			
	Decreased					
Brown et al. (2020) [28]	<i>Change in exercise - % participants</i>	N.A.	41%	N.A.	N.A.	N.A.
	Conducted via alternative method(s)		7,9%			
	Postponed		21%			
	Cancelled		30%			
	Not applicable					
Schirinzi et al. (2020) [40]	<i>Playing sports - % participants</i>	80%	81%	+1%	N.A.	N.A.
Shalash et al. (2020) [41]	<i>PA decline - % participants</i>	N.A.	68.4%	N.A.		N.A.
	<i>PA decline</i>				0.002	
	<i>PA frequency – times per week</i>	5.0	5.0	0,0	0.011	
		1.0	0.7	–0.3	0.003	
	<i>PA duration – hours per session</i>	26.4	12.8	–13,6	<0.001	“In Korea, the first COVID-19 was reported on January 21, 2020 and the number of daily new cases increased to 909 on February 29, 2020. The Korean government placed enhanced social distancing (staying at home and refraining from going out as much as possible) from March 22, 2020 to May 19th, 2020, and then changed to routine social distancing.”
Song et al. (2020) [42]	<i>PASE leisure part score</i>	7%	22%	+15%	<0.001	
		58%	60%	+2%	1.000	
	<i>Patterns of exercise - % participants</i>	7%	12%	+5%	0.315	
		23%	5%	–18%	<0.001	
	None	5%	1%	–4%	0.625	

	Outdoor-solo Indoor-solo Exercise at sports facilities Group exercise					
Van der Heide et al. (2020) [45]	Change in PA - % participants More active Equally active Less active	N.A.	20.4% 33.0% 46.6%	N.A.	N.A.	"The first COVID-19 case in the Netherlands was confirmed on February 27, 2020. March 15–20.: Closure of hospitality, schools, nursing homes. No visitors in hospitals. March 23.: Request to stay at home. Only essential traveling. June 1.: Reopening of hospitality and all schools."
Chagué et al. (2020) [52]	Decrease in PA - % participants Total Men Women	N.A.	41.9% 33.3% 55.1%	N.A.	N.A.	"Limitations in access to care"
Vetrovsky et al. (2020) [54]	Average daily step count - 3 weeks before lockdown vs. 3 weeks within lockdown	N.A.	N.A.	-1134 (189) = -16.2%	<0.001	"In the Czech Republic, the first case of COVID-19 was reported on 1 March 2020, and since 16 March, the Czech government approved a nationwide quarantine that prohibited movement in public spaces except under special circumstances, which included travelling to and from work and necessary journeys to procure food and supplies; notably, going outside for a walk in a park or the countryside was allowed."
Malanchini et al. (2020) [49]	Device-derived daily patient activity level - hour per day Reference period Pre lockdown period Lockdown period	2.18 (1.3) 2.14 (1.3)	1.62 (1.2)	-26.1% (25.0%)	<0.0001	N.A.
Sassone et al. (2020) [50]	Time spent in movement based on accelerometry - hours per day Time spent in movement based on accelerometry without very inactive patients - hours per day	1.6 (0.5) 2.0 (0.6)	1.2 (0.3) 1.5 (0.4)	-25% -25%	0.0001 0.0001	N.A.
Cransac-Miet et al. (2020) [29]	Change in PA - % total participants >25% increase No change >25% decrease	N.A.	8.2% 46.7% 45.1%	N.A.	N.A.	N.A.

			<i>Change in PA - %</i>	25.4%		
			<i>non-LTX participants</i>	45.1%		
			More frequently	45.1%		
			No change			
			Less frequently			
Endstrasser et al. (2020) [51]	<i>SF-12 Physical Component Summary score</i>					
			Pre lockdown			N.A.
		37.89 (8.92)	37.36 (9.08)	-0.53	0.204	
			35.48 (9.62)	-2.41 & -1.88	0.026 & 0.071	
Di Stefano et al. (2020) [30]	<i>MET total PA - minutes per week</i>					
	Patients with neuro-muscular disease					
	Healthy controls					
		901.3 (1299.6)	400.6 (1088.5)	-500.7 (705.7)	<0.0001	
		4506.5 (7600.1)	2362.3 (4498.9)	-2144.3 (8630.7)	<0.0001	
	Patients with neuro-muscular disease					
		70.1 (361.9)	37.1 (303.9)	-33 (219.2)	0.69	
		2081.8 (4945.3)	861.9 (1662.9)	-1219.9 (4920.8)	0.04	
	<i>MET moderate intensity PA - minutes per week</i>					
		263.2 (606.9)	146.9 (450.6)	-116.2 (323.2)	0.07	N.A.
		1153.3 (2424.6)	925.4 (3675.6)	-227.87 (4076.9)	0.01	
	Healthy controls					
		547.7 (733.2)	211.9 (534)	-149.3 (426.8)	<0.0001	
		1271.5 (2703.6)	574.9 (1731.3)	-1447.8 (7611.3)	<0.0001	
Patients with neuro-muscular disease						

Van de Venis et al. (2020) [44]	<i>Change in PA - % participants</i>					
	Strong increase		0%			
	Mild increase	N.A.	7%	N.A.	N.A.	“Partial lockdown in the Netherlands”
	No change		19%			
	Mild decrease		41%			
	Strong increase		33%			
Al-Hashel et al. (2020) [26]	<i>Lack of regular exercise - % participants</i>	N.A.	79.7%	N.A.	N.A.	N.A.

Note: physical activity, PA.