

The other half of ILD management : non-pharmacologic intervention

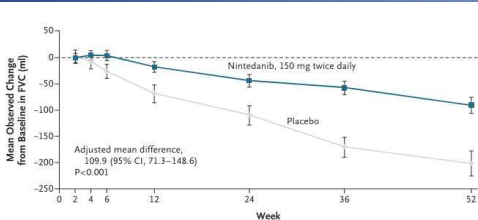
Byoung Soo Kwon

Seoul National University Bundang Hospital

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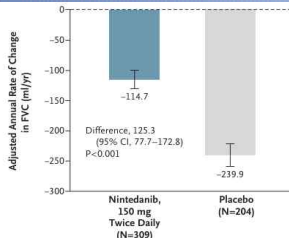
- Why nonpharmacological care matters
- Pulmonary rehabilitation
- Oxygen therapy
- Emotional support

Why non-pharmacological care matters

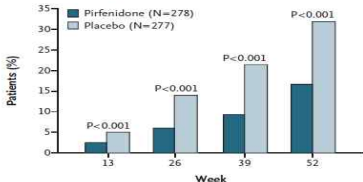


No. of Patients

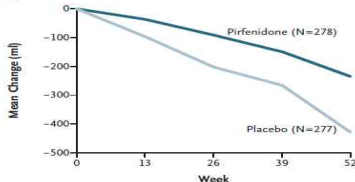
Nintedanib	303	301	298	292	284	274	250
Placebo	202	198	200	194	192	187	165



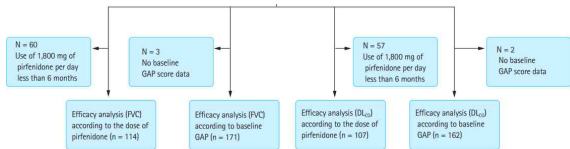
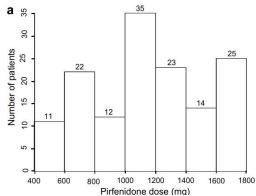
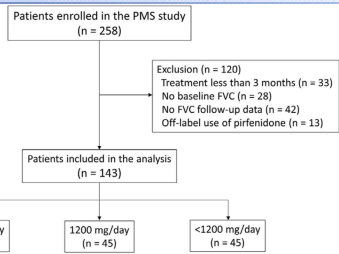
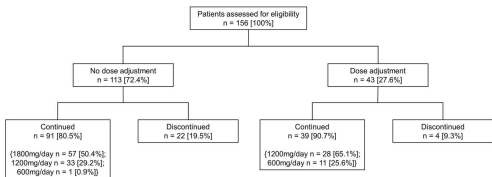
A Decreased FVC or Death



B Change in FVC



Why non-pharmacological care matters

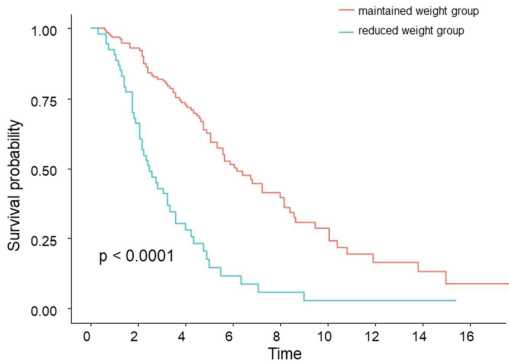


Kim et al., *PLOS One*, 2023
 Kang et al., *Frontiers in pharm*, 2023
 Song et al., *Sci Rep*, 2020
 Hwang et al., *KJIM*, 2022

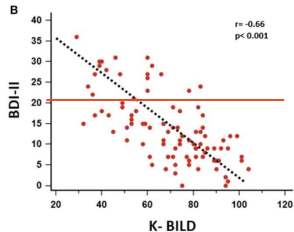
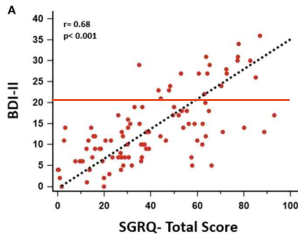
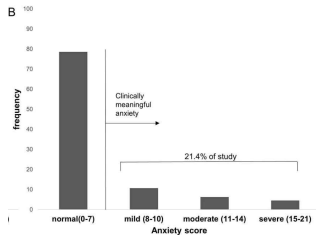
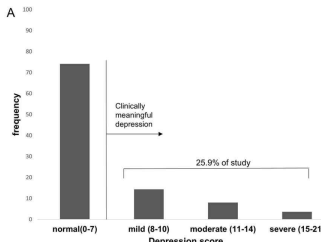
Why non-pharmacological care matters



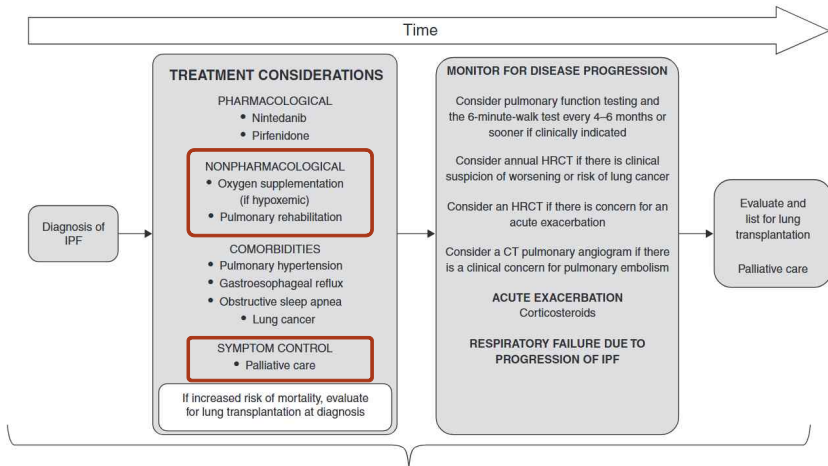
Why non-pharmacological care matters



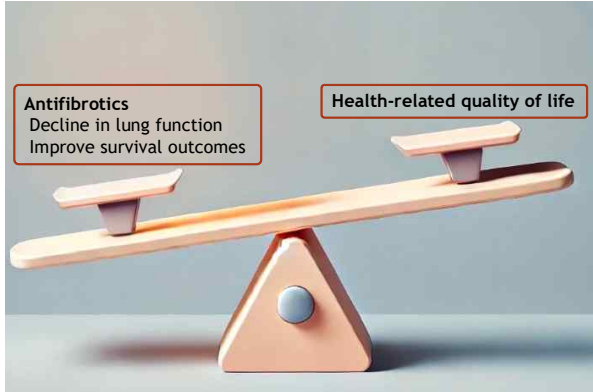
Why non-pharmacological care matters



Management of patients with IPF & ILDs



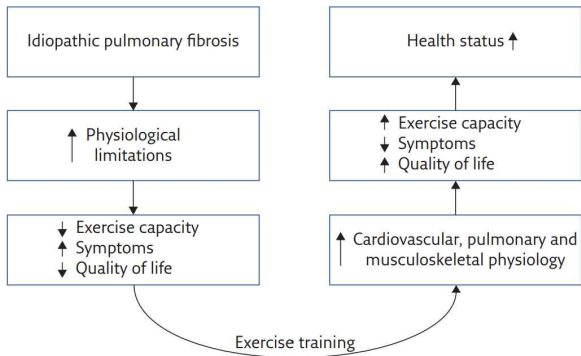
In real-world,



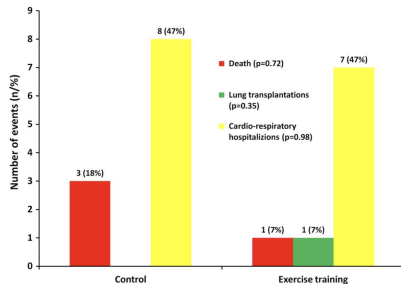
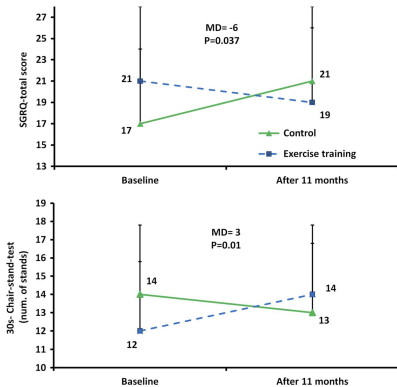
- Why nonpharmacological care matters
- **Pulmonary rehabilitation**
- Oxygen therapy
- Emotional support

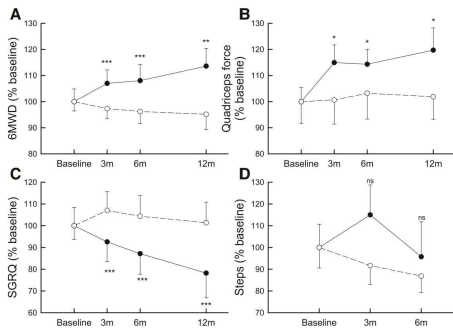
Pulmonary rehabilitation (PR)

*“Pulmonary rehabilitation is a **comprehensive intervention** based on a thorough patient assessment followed by patient tailored therapies that include, but are not limited to, **exercise training, education, and behavior change**, designed to improve the **physical and psychological condition** of people with chronic respiratory disease and to **promote the long-term adherence to health-enhancing behaviors.**”*



- Minimizing symptom burden
- Maximizing exercise performance
- Promoting autonomy
- Increasing everyday activities
- Enhancing quality of life
- Effecting long-term behavior change





PR: short-term effect

6MWD

Study or Subgroup	Pulmonary rehabilitation			Control			Weight	Mean Difference IV, Fixed, 95% CI	Mean Difference IV, Fixed, 95% CI
	Mean	SD	Total	Mean	SD	Total			
1.1.1 All participants									
Dale 2014	71	25.7	7	13	34.4	4	3.6%	58.00 [19.28, 96.72]	
De Las Heras 2019	4.3	24	11	-35.2	47.4	10	5.1%	39.50 [6.88, 72.12]	
Dowman 2017	23	68	74	-2	69.2	68	10.6%	25.00 [2.40, 47.60]	
He 2016	58.7	26.2	15	25.5	25.8	15	15.7%	33.20 [14.59, 51.81]	
Holland 2008	31.2	48.6	30	-3.7	59.8	27	6.7%	34.90 [6.42, 63.38]	
Jackson 2014	-6.2	86.91	11	-15.3	42.89	10	1.6%	9.10 [-48.73, 66.93]	
Jarosch 2020	54.68	85.88	34	-3.83	38.02	17	4.7%	58.51 [24.45, 92.57]	
Ku 2017	27	30.8	20	3.2	29.1	20	15.7%	23.80 [5.23, 42.37]	
Naz 2018	47	33.5	9	-22.6	75.4	9	1.9%	69.60 [15.70, 123.50]	
Nishiyama 2008	42	50.8	13	-4	57.7	15	3.4%	46.00 [5.81, 86.19]	
Perez Bogerd 2018	49	80.4	30	-23	80.4	30	3.3%	72.00 [31.31, 112.69]	
Vainshelboim 2014	70.4	77	15	-10.6	35.4	17	3.0%	81.00 [38.56, 123.44]	
Xiao 2019	53.42	31.9	40	6.97	32.9	34	24.7%	46.45 [31.62, 61.28]	
Subtotal (95% CI)			309			276	100.0%	40.07 [32.70, 47.44]	
Heterogeneity: $\text{Chi}^2 = 16.25$, $\text{df} = 12$ ($P = 0.18$); $I^2 = 26\%$									
Test for overall effect: $Z = 10.66$ ($P < 0.00001$)									

1.1.2 Idiopathic pulmonary fibrosis only

De Las Heras 2019	4.3	24	11	-35.2	47.4	10	11.6%	39.50 [6.88, 72.12]	
Dowman 2017	27	68	32	-3.3	71	29	10.1%	30.30 [-4.67, 65.27]	
He 2016	58.7	26.2	15	25.5	25.8	15	35.5%	33.20 [14.59, 51.81]	
Holland 2008	25.05	54.1	20	8.93	33.3	14	14.2%	16.12 [-13.32, 45.56]	
Jackson 2014	-6.2	86.91	11	-15.3	42.89	10	3.7%	9.10 [-48.73, 66.93]	
Jarosch 2020	54.68	85.88	34	-3.83	38.02	17	10.6%	58.51 [24.45, 92.57]	
Nishiyama 2008	42	50.8	13	-4	57.7	15	7.6%	46.00 [5.81, 86.19]	
Vainshelboim 2014	70.4	77	15	-10.6	35.4	17	6.8%	81.00 [38.56, 123.44]	
Subtotal (95% CI)			151			127	100.0%	37.25 [26.16, 48.33]	
Heterogeneity: $\text{Chi}^2 = 9.00$, $\text{df} = 7$ ($P = 0.25$); $I^2 = 22\%$									
Test for overall effect: $Z = 6.58$ ($P < 0.00001$)									

