

# IMPACT OF SYMPTOM SEVERITY SCORE AND TYPE OF TREATMENT ON QUALITY OF LIFE IN PATIENTS WITH BENIGN PROSTATIC HYPERPLASIA

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# BPH & LUTS

- Benign prostatic hyperplasia (BPH) with associated lower urinary tract symptoms (LUTS) is the fourth most common disease in the male population older than 50 years.



## Type of symptom

## Manifestation

**Obstructive  
(Micturition)**

Weak urinary stream  
Prolonged urination  
Abdominal tension  
Hesitation  
Punctuation  
Incomplete emptying of the bladder  
Terminal and post-void bathing

**Irritative  
(Storage)**

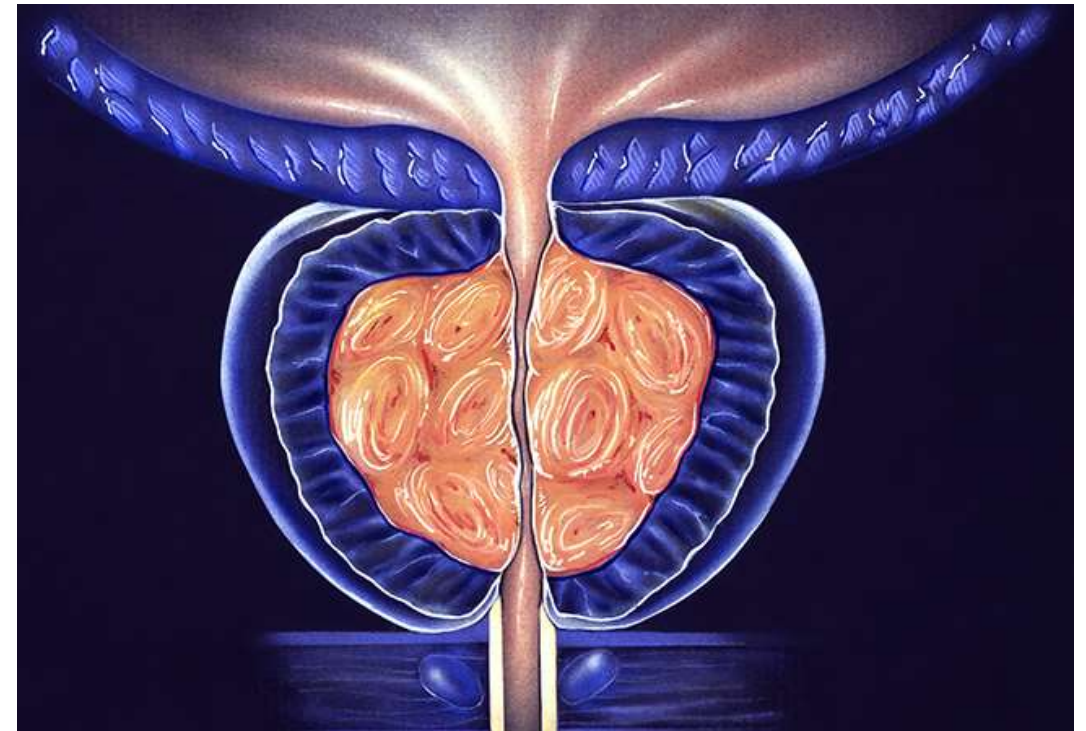
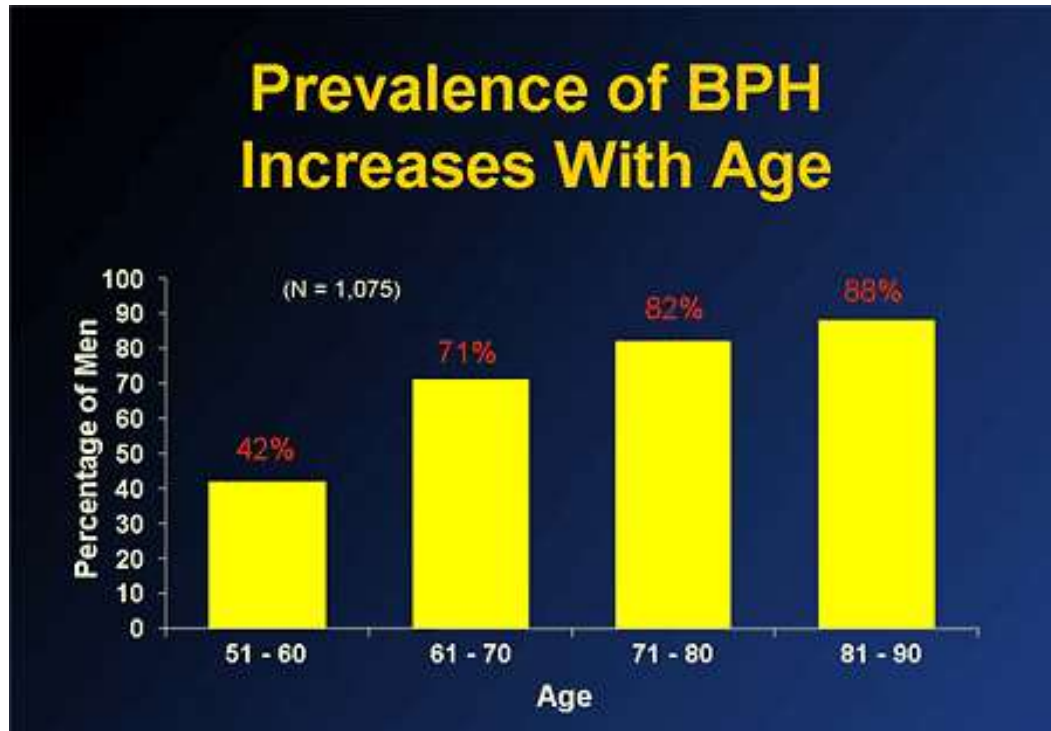
Frequency  
Nocturia  
Urgency  
Incontinence

**Associated sy.**

Dysuria  
Hematuria  
Hemospermia


# BPH PREVALENCE

- The reported prevalence of BPH ranges from 13.84% to 23.79%.
- Globally, there were **94,0 million (95% UI 73,2 to 118) prevalent cases of benign prostatic hyperplasia in 2019**



# HRQoL in BPH patients

Recommendation	Strength rating
Use a validated symptom score questionnaire including both and <b>quality of life</b> assessment during the assessment of male LUTS and for re-evaluation during and/or after treatment.	Strong

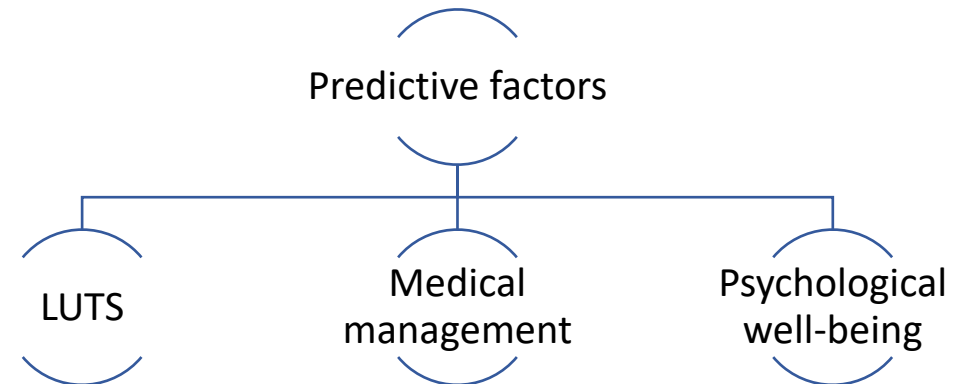


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Published online 2020 Jun 4 doi: [10.3390/healthcare8020158](https://doi.org/10.3390/healthcare8020158) PMID: [32512888](https://pubmed.ncbi.nlm.nih.gov/32512888/) PMCID: [PMC7349344](https://pubmed.ncbi.nlm.nih.gov/PMC7349344/)

### Quality of Life in Older Adults with Benign Prostatic Hyperplasia

[Sewon Park](#), [Jeong-min Ryu](#), and [Munjae Lee](#)\*

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# Quantification of Lower Urinary Symptoms (LUTS)

Determining the progression of the disease in clinical practice

The IPSS is based on the quantification of lower urinary tract symptoms.

Seven questions about severity of symptoms; total score

- 0-7 (mild)
- 8-19 (moderate)
- 20-35 (severe)

The eighth is an independent question about quality of life (from 0 to 6, where 0 indicates a “delighted”, and 6 is for an “unhappy”).

## International Prostate Symptom Score (I-PSS)

Patient Name: \_\_\_\_\_ Date of birth: \_\_\_\_\_ Date completed \_\_\_\_\_

In the past month:	Not at All	Less than 1 in 5 Times	Less than Half the Time	About Half the Time	More than Half the Time	Almost Always	Your score
1. Incomplete Emptying How often have you had the sensation of not emptying your bladder?	0	1	2	3	4	5	
2. Frequency How often have you had to urinate less than every two hours?	0	1	2	3	4	5	
3. Intermittency How often have you found you stopped and started again several times when you urinated?	0	1	2	3	4	5	
4. Urgency How often have you found it difficult to postpone urination?	0	1	2	3	4	5	
5. Weak Stream How often have you had a weak urinary stream?	0	1	2	3	4	5	
6. Straining How often have you had to strain to start urination?	0	1	2	3	4	5	
	None	1 Time	2 Times	3 Times	4 Times	5 Times	
7. Nocturia How many times did you typically get up at night to urinate?	0	1	2	3	4	5	
<b>Total I-PSS Score</b>							

Score: 1-7: Mild 8-19: Moderate 20-35: Severe

Quality of Life Due to Urinary Symptoms	Delighted	Pleased	Moderately Satisfied	Mixed	Moderately Dissatisfied	Unhappy	Terrible
If you were to spend the rest of your life with your urinary condition just the way it is now, how would you feel about that?	0	1	2	3	4	5	6

# Research

Aim - to evaluate the **impact of LUTS/BPH on the patient's QoL** as well as the **effects of tamsulosin and dutasteride** used in the treatment of LUTS/BPH in daily practice allowing a comparison of results between two treatment modalities .

Three time points of analysis: at the beginning (month 0), after 6 months, and after 12 months of therapy

## MATERIAL AND METHODS

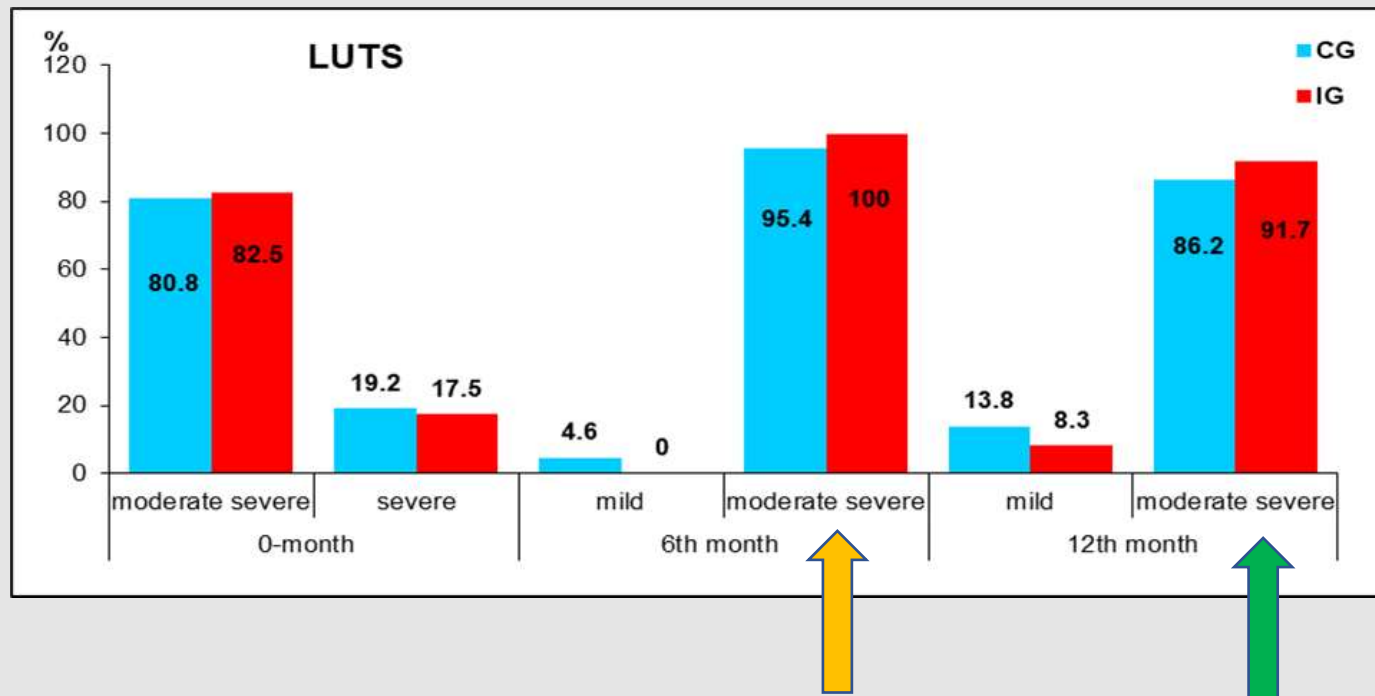
- 130 patients treated with tamsulosin
- 120 patients tamsulosin + dutasteride
- Randomized as control and investigated group



Alpha blockers  
(tamsulosin)

5alpha reductase  
inhibitors  
(dutasteride)

# Results

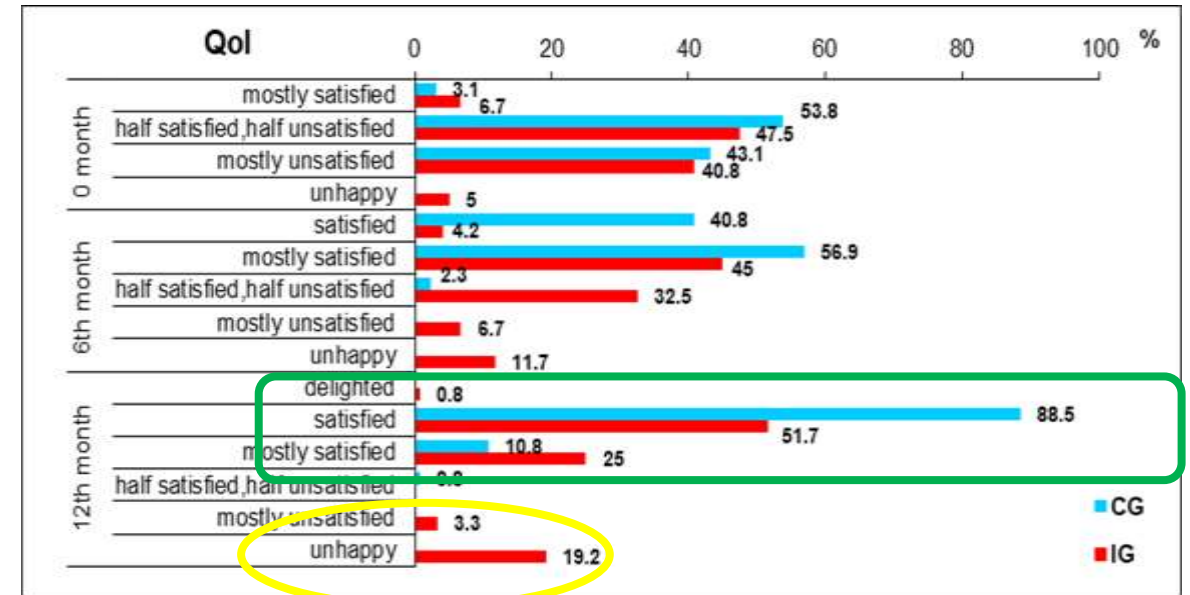


- The severity of LUTS measured by IPSS presented non-significantly different values in CG and IG before therapy ( $p=0.81$ ), and significantly different after 6 months of therapy ( $p=0.000001$ ) and after 12 months of therapy ( $p=0.045$ ).
- **After the treatment - increased number of patients with improvement of symptoms!**

# Quality of life

- With improvement of the symptoms, there was a significant shift in number of patients with improved of QoL (table).
- At the end of the follow-up, after 12 months, a total of 115 (88.5%) patients from CG and 62 (51.7%) from IG were “satisfied” with the quality of life (graph).
- In the IG 26 patients expressed worsened QoL due to medications` side effects (graph).

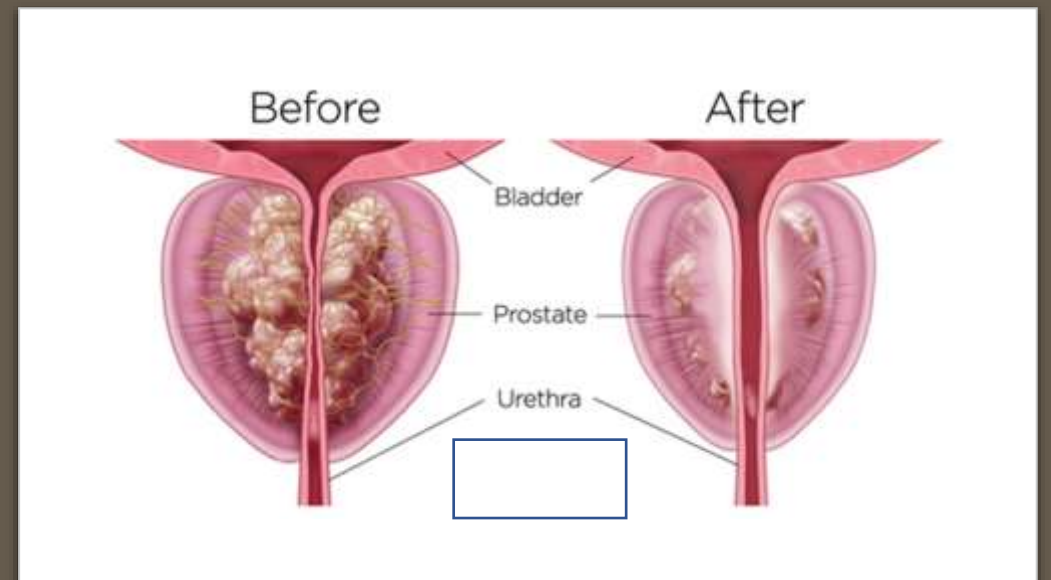
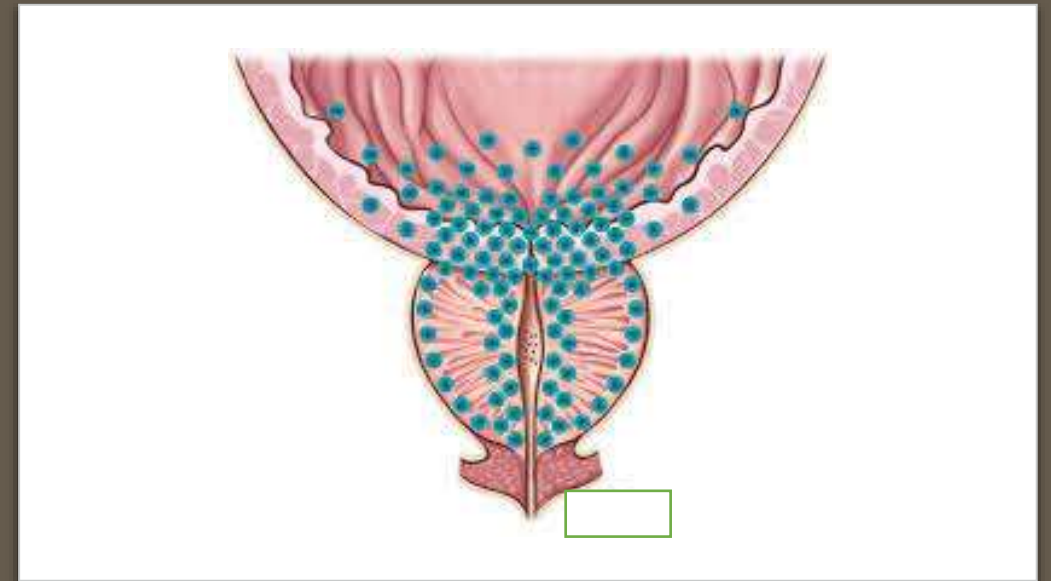
Group	QoL		p value
	mean ± SD	median (IQR)	
<b>0 month</b>			
CG	3.4 ± 0.5	3 (3-4)	Z=0.4
IG	3.44 ± 0.7	3 (3-4)	p=0.7 ns
<b>6<sup>th</sup> month</b>			
CG	1.62 ± 0.5	2 (1-2)	Z=8.8
IG	2.77 ± 1.05	3(2-3)	p=0.000 sig
<b>12<sup>th</sup> month</b>			
CG	1.12 ± 0.5	1 (1-1)	Z=5.2
IG	2.11 ± 1.5	1 (1-2)	p=0.000 sig





# Discussion

- The type of medical treatment, whether only with tamsulosin or a combination of tamsulosin and dutasteride has a similar impact on the severity of LUTS, but it differs in the impact to the QoL regarding the side effects.
- Alpha-blockers (tamsulosin) act quickly and relax the smooth muscles of the lower urinary tract leading to a reduction in LUTS, especially the irritative symptoms (fig. 1).
- 5ARIs, acting as antiandrogens, prevent further growth of the prostate and lead to a reduction in volume by up to 30%, thus reducing the obstructive symptoms of the lower urinary tract (fig. 2).
- The combination of these two drugs has the maximum effect in reducing LUTS\*



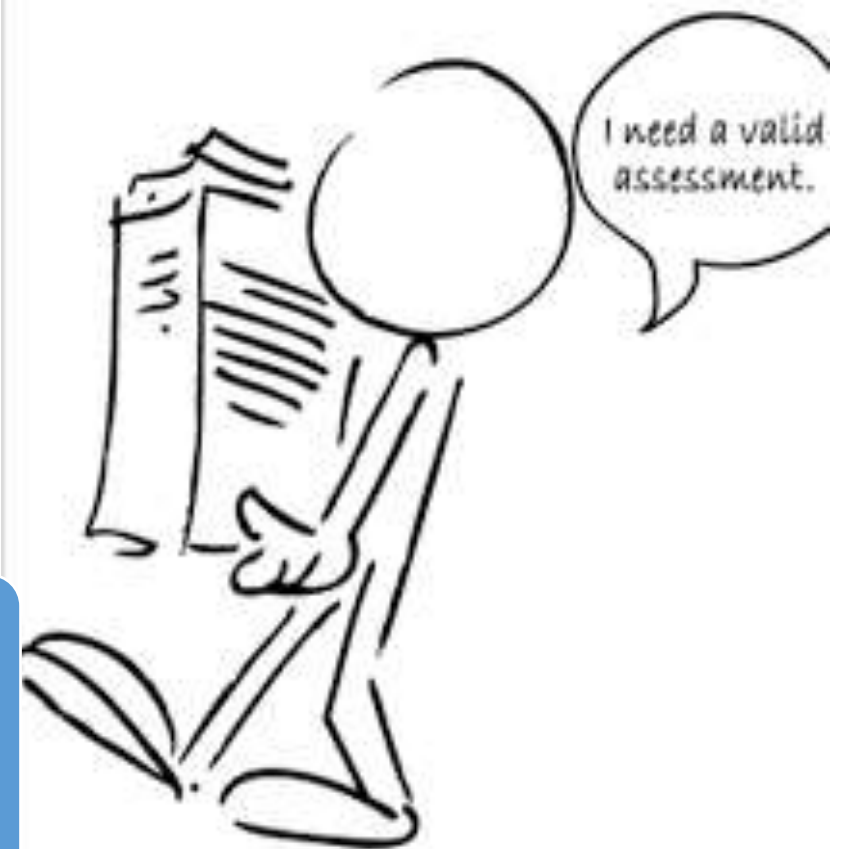
\*Roehrborn, C. G., Siami, P., Barkin, J., Damião, R., Major-Walker, K., Nandy, I., Morrill, B. B., Gagnier, R. P., Montorsi, F., & CombAT Study Group (2010). The effects of combination therapy with dutasteride and tamsulosin on clinical outcomes in men with symptomatic benign prostatic hyperplasia: 4-year results from the CombAT study. *European urology*, 57(1), 123–131.

# Conclusions

BPH prevalence is expected to rise dramatically due to the aging population.

A holistic approach headed towards the patient as an individual is needed in the management of BPH.

Determination of optimal BPH treatment keeping in mind clinical outcomes, cost effectiveness of the treatment and QoL as final goals.



Thank you

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**EVERYONE**

**DESERVE**

**A BETTER**

**LIFE**