





Introduction to engineering design

Team 4



21700227 노은호
22000072 김민기
22000255 박동건
22000456 유승준





CONTENTS

01

Explanation of
NPU / NPR

02

Problems of
NPUs / NPRs

03

Conclusion





01

Explanation of NPU / NPR



01. Explanation of NPU / NPR

- Definition



Room that keeps patients with
infectious illnesses,
Or patients who are susceptible to
infections away from others.

01. Explanation of NPU / NPR

- How they work

The air pressure inside the room is lower than the air pressure outside the room 어떻게 작동하는지 이미지를 통해 보여주는 그림이 있으면 좋겠습니다. 예) 병원균 차단 그림



The air pressure inside the room is lower than the air pressure outside the room



02

Problems of NPUs / NPRs



02. Problems of NPU's / NPRs

Environmental Issues

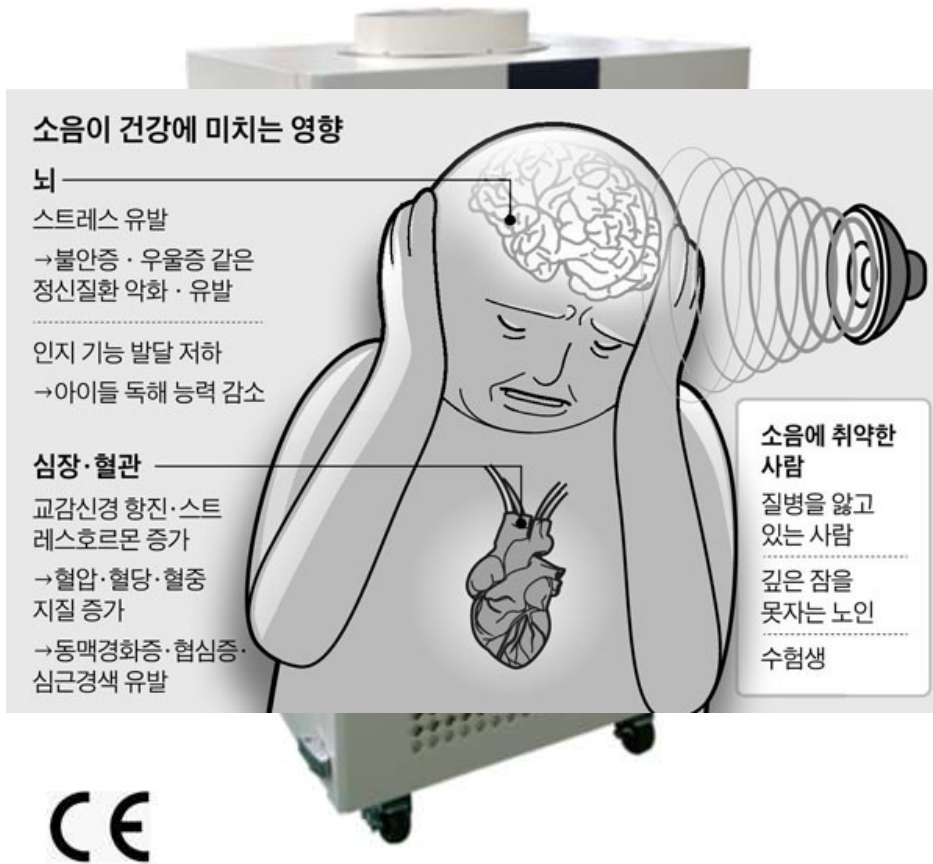


- Depression worsened by CCTVs checking the patients constantly

Intruding one's personal life

02. Problems of NPUs / NPRs

- Noise created by the negative pressure machine in the NPU is too loud



The noise of NPU occurs for 24 hours.

02. Problems of NPU / NPRs

Structural Issues



【 호흡곤란 】

- It is enclosed

It can cause anxiety, nausea, and dyspnoea for patients with claustrophobia. In serious cases, patients may have a seizure, scream out loud, or even faint.

02. Problems of NPU's / NPRs

Structural Issues



1. Causes loneliness and depression
2. If prolonged for a long time, patients may hear a ringing in the ears or even auditory hallucination

- Cut off from social life -

02. Problems of NPU's / NPRs

Lifestyle Issues



- Lack of exercise

02. Problems of NPU's / NPRs

Lifestyle Issues

- Lack of exercise



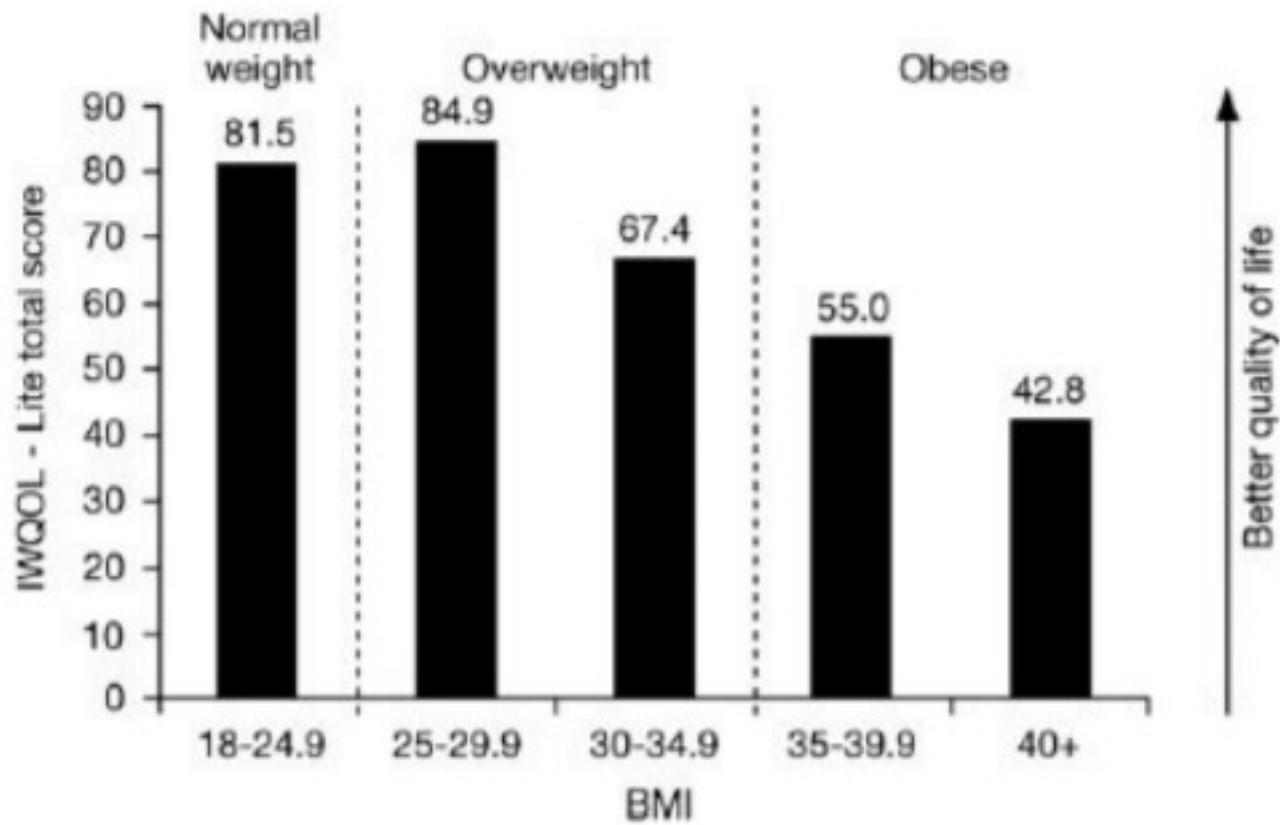
- Increase in weight -

Leads to decrease in body functionality, low self-esteem, and even simple phobia

02. Problems of NPU's / NPRs

Lifestyle Issues

- Lack of exercise



02. Problems of NPU / NPRs

Lifestyle Issues



Leads to decrease in stamina and the level of immunity

- Decrease in activity Caused by the intake of drugs for mental treatment

02. Problems of NPU / NPRs

Priority of the problems



Environmental Issue



Structural Issue



Lifestyle Issue

02. Problems of NPUs / NPRs

Priority of the problems

Reason

1. Noise of Negative Pressure Machine
2. Patient monitoring through multiple CCTVs
3. Absence of windows



A person can get stressed every moment!



03

Conclusion



03. Conclusion



Mental effects that NPUs cause were more severe among those with a history of anxiety or depression

03. Conclusion



ANXIETY



HAIR-PULLING DISORDER





SCHIZOPHRENIA




BULIMIA NERVOSA

For mentally ill patients, negative pressure room can cause higher level of mental problems than general patients.



03. Conclusion

- 1. Do you offer mental treatment to patients living in NPU?**
 - 2. If so, what treatment do you do?**
- 



Thank you

