

Article

Supplementary Materials: Indoor Air Quality including Respiratory Viruses

Antonio López, Esther Fuentes, Vicent Yusà, F. Xavier López-Labrador, Marisa Camaró, Cristina Peris-Martinez, Martín Llácer, Susana Ortolá and Clara Coscollà

Table of Contents

Type	Captions	Page
Table S-1	Sensor specifications	S3
Figure S-1	Sampling methodologies: a) Cassette, b) AirScan with gelatin filter	S4
Figure S-2	NO ₂ concentrations (ppm) in the hall	S5
Figure S-3	NO ₂ concentrations (ppm) in the waiting room	S6
Figure S-4	NO ₂ concentrations (ppm) in the doctor's consultation	S7
Figure S-5	CO ₂ concentrations (ppm) in the hall	S8
Figure S-6	CO ₂ concentrations (ppm) in the waiting room	S9
Figure S-7	CO ₂ concentrations (ppm) in the doctor's consultation	S10
Figure S-8	HCHO concentrations (mg/m ³) in the hall	S11
Figure S-9	HCHO concentrations (mg/m ³) in the waiting room	S12
Figure S-10	PM ₁₀ concentrations (mg/m ³) in the hall	S13
Figure S-11	PM ₁₀ concentrations (mg/m ³) in the waiting room	S14
Figure S-12	PM ₁₀ concentrations (mg/m ³) in the doctor's consultation	S15
Figure S-13	PM _{2.5} concentrations (mg/m ³) in the hall	S16
Figure S-14	PM _{2.5} concentrations (mg/m ³) in the waiting room	S17
Figure S-15	PM _{2.5} concentrations (mg/m ³) in the doctor's consultation	S18
Figure S-16	VOCs concentrations (ppm) in the hall	S19
Figure S-17	VOCs concentrations (ppm) in the waiting room	S20
Figure S-18	Temperature (°C) in the hall	S21
Figure S-19	Temperature (°C) in the waiting room	S22
Figure S-20	Temperature (°C) in the doctor's consultation	S23
Figure S-21	Relative humidity (%) in the hall	S24
Figure S-22	Relative humidity (%) in the waiting room	S25
Figure S-23	Relative humidity (%) in the doctor's consultation	S26

Table 1. Sensor specifications.

Gas	Sensor type	Work range (ppm)	Detection limit (ppm)	Resolution (ppm)	Operating conditions	
					Temp (°C)	RH (%)
CO	GSE ¹	0-100	0.2	0.1	0-40	15-90
CO ₂	NDIR ²	0-5000	10	1	0-40	0-95
HCHO	GSE ¹	0-10	0.01	0.01	0-40	15-90
NO ₂	GSE ¹	0-1	0.005	0.001	0-40	15-90
PM	LPC ⁴	0.001-1.0 mg/m ³	0.001 mg/m ³	0.001 mg/m ³	0-40	0-90
VOCs	PID ³	0-20	0.1	0.1	0-40	10-90

¹ GSE-Gas Sensitive Electrochemical, ² NDIR-Non-dispersive infra-red, ³ pID- Photo Ionization Detector, ⁴ LPC- Laser particle counter

a)



b)



Figure 1. Sampling methodologies: a) Cassette b) AirScan with gelatin filter.

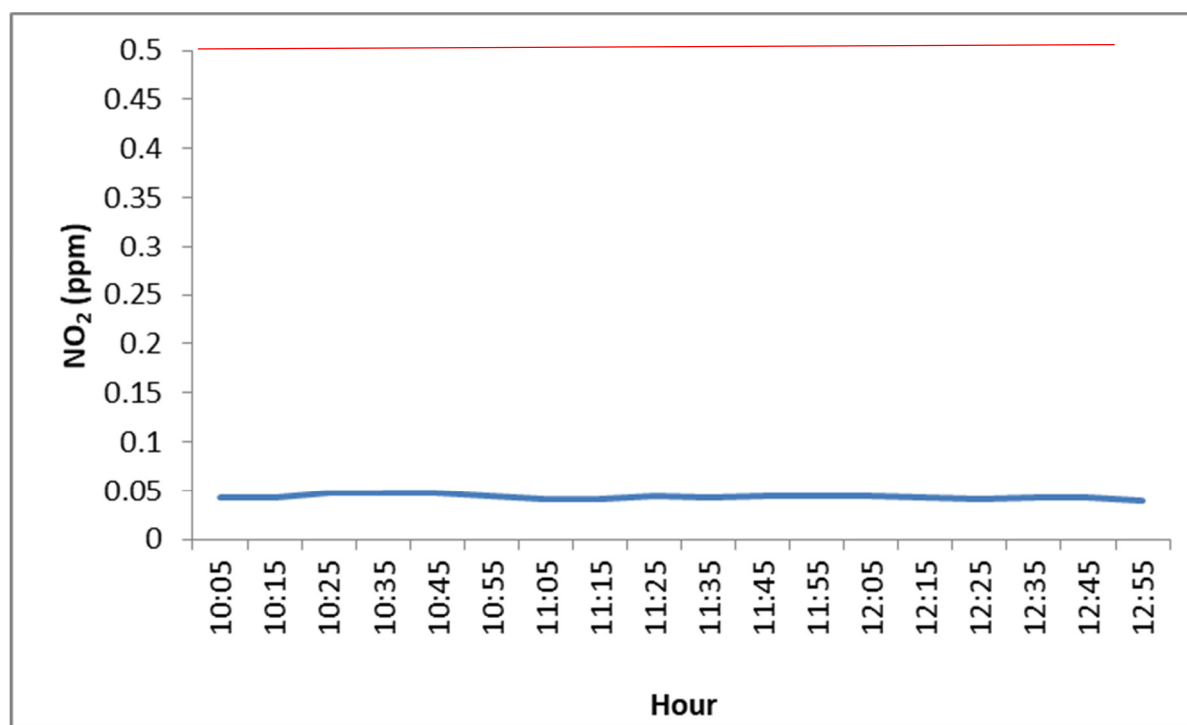


Figure 2. NO₂ concentrations (ppm) in the hall (Red line: Guideline value).

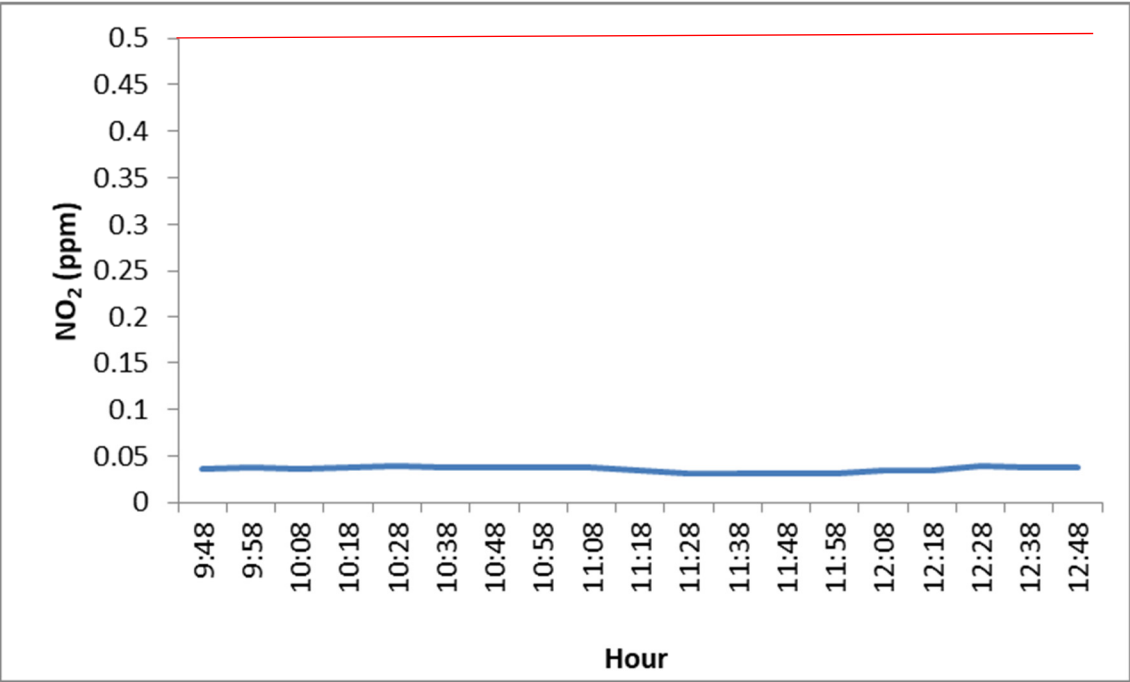


Figure 3. NO₂ concentrations (ppm) in the waiting room (Red line: Guideline value).

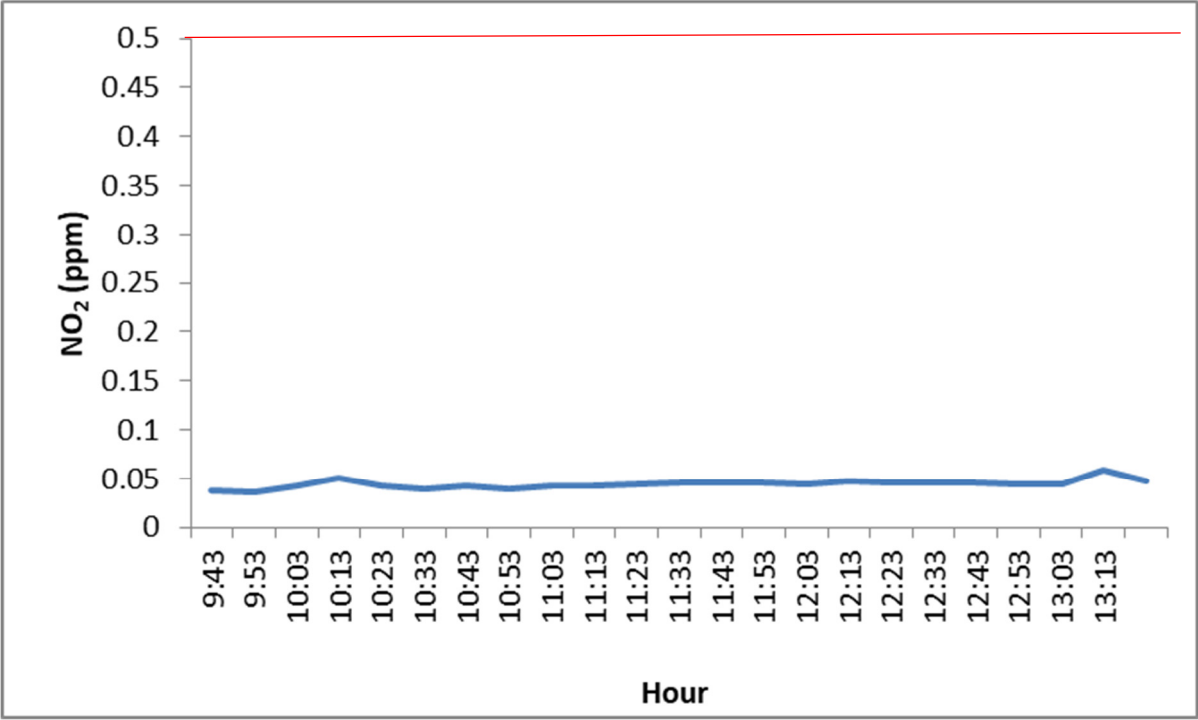


Figure 4. NO₂ concentrations (ppm) in the doctor’s consultation (Red line: Guideline value).

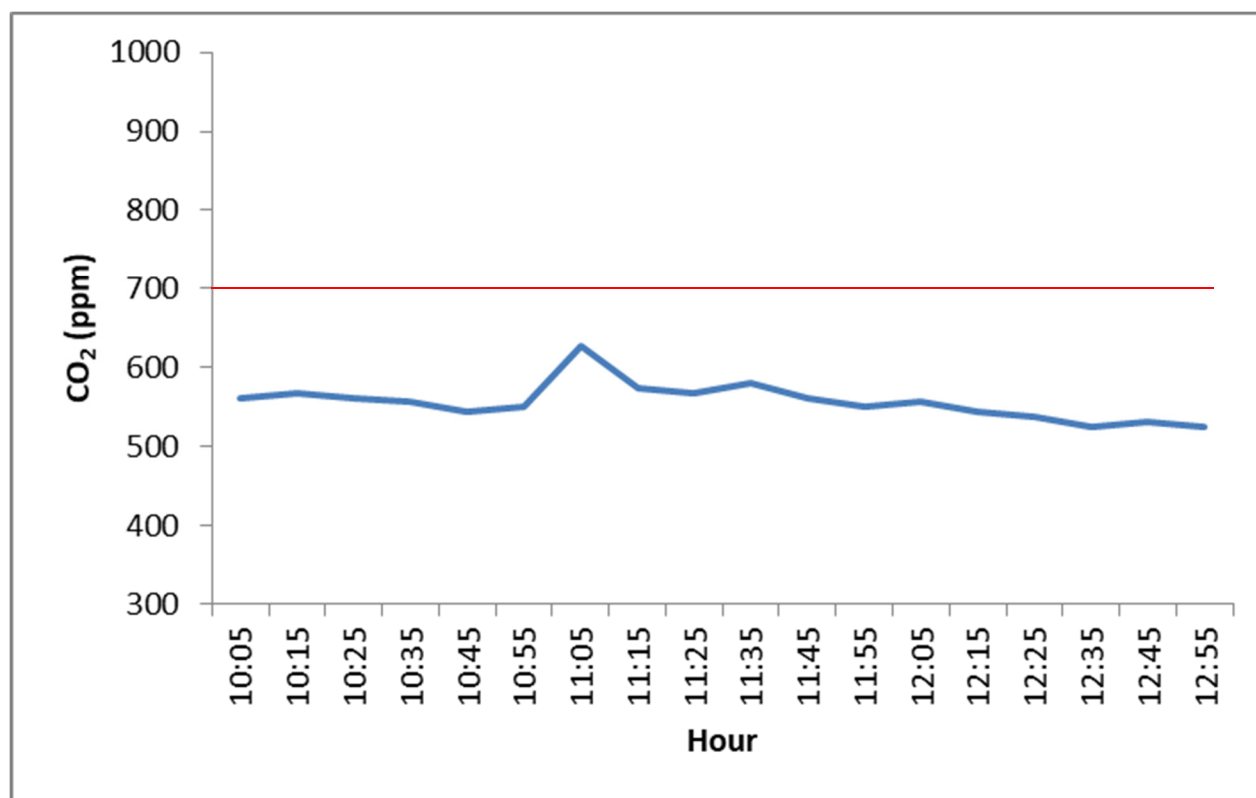


Figure 5. CO₂ concentrations (ppm) in the hall (Red line: Guideline value).

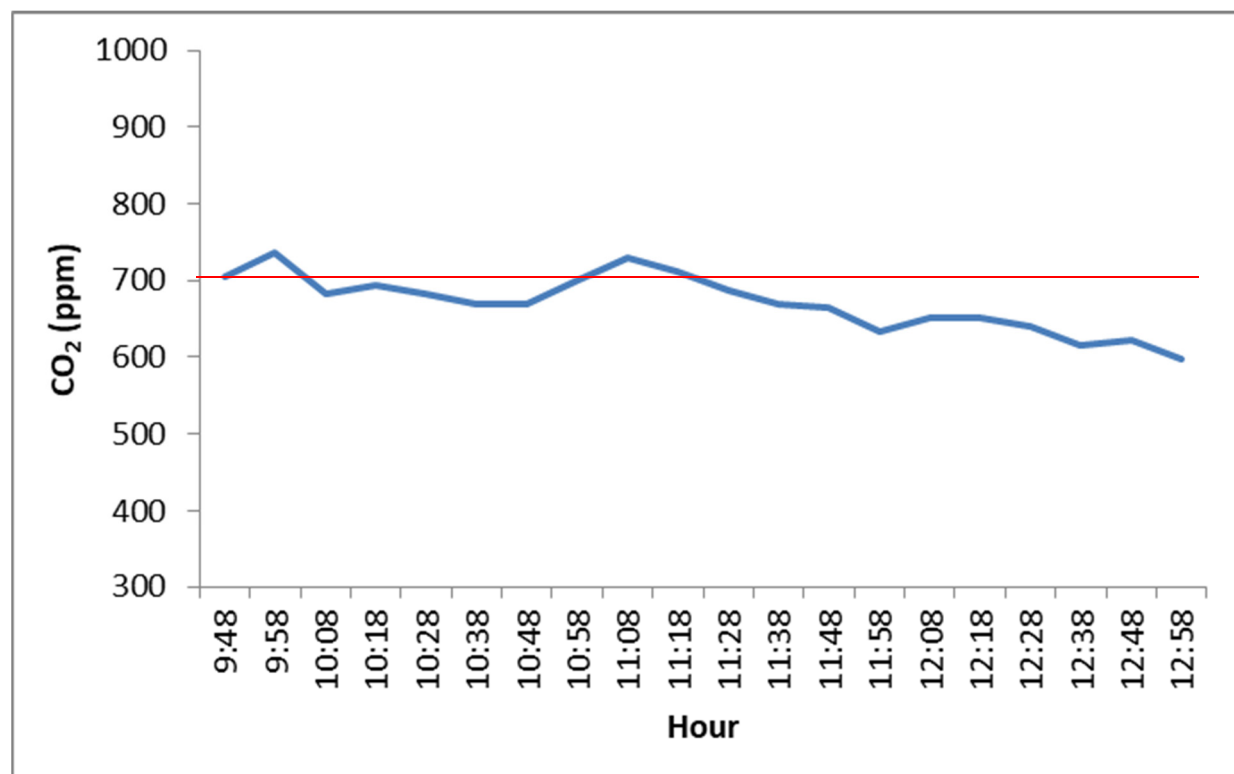


Figure 6. CO₂ concentrations (ppm) in the waiting room (Red line: Guideline value).

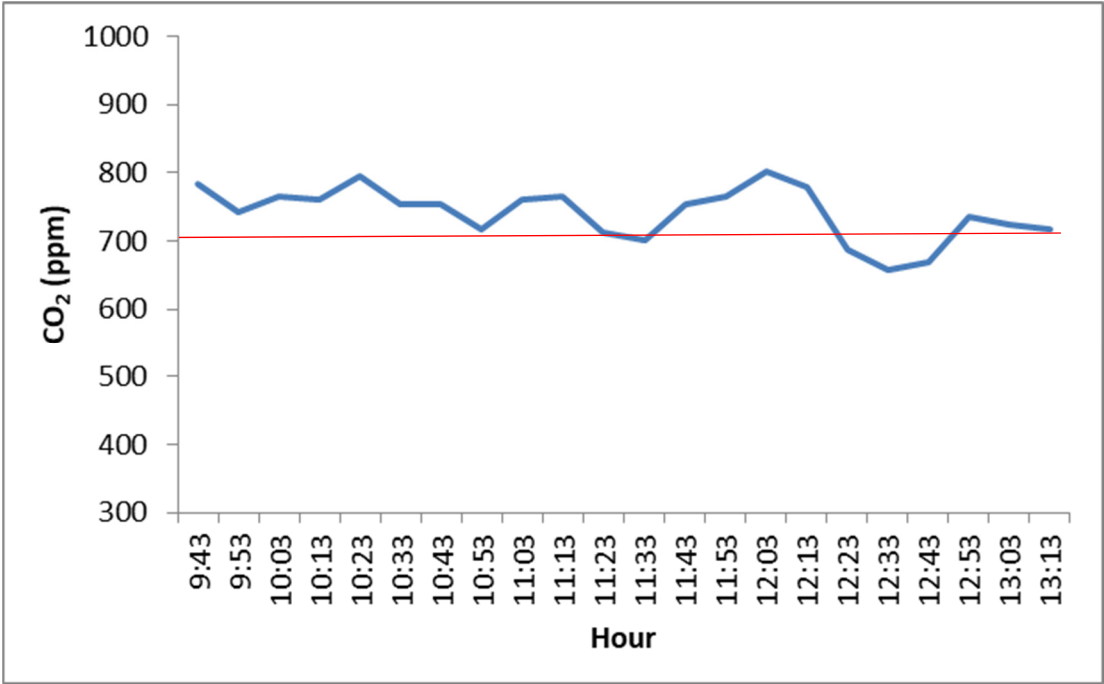


Figure 7. CO₂ concentrations (ppm) in the doctor’s consultation (Red line: Guideline value).

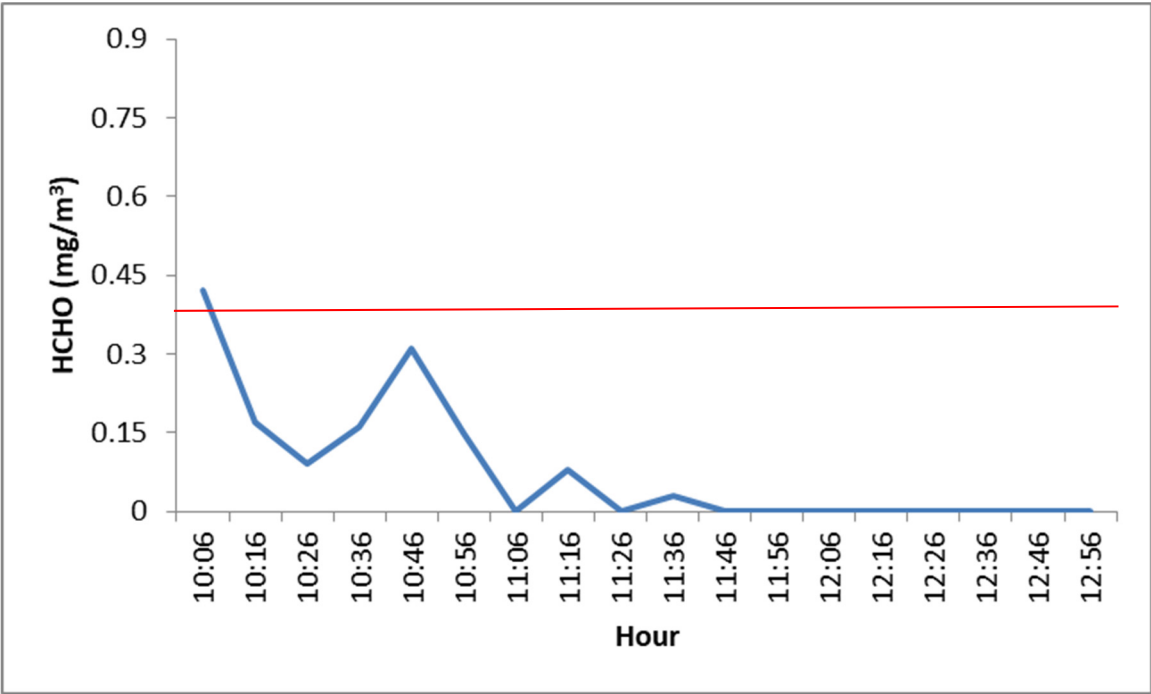


Figure S-8. HCHO concentrations (mg/m³) in the hall (Red line: Guideline value).

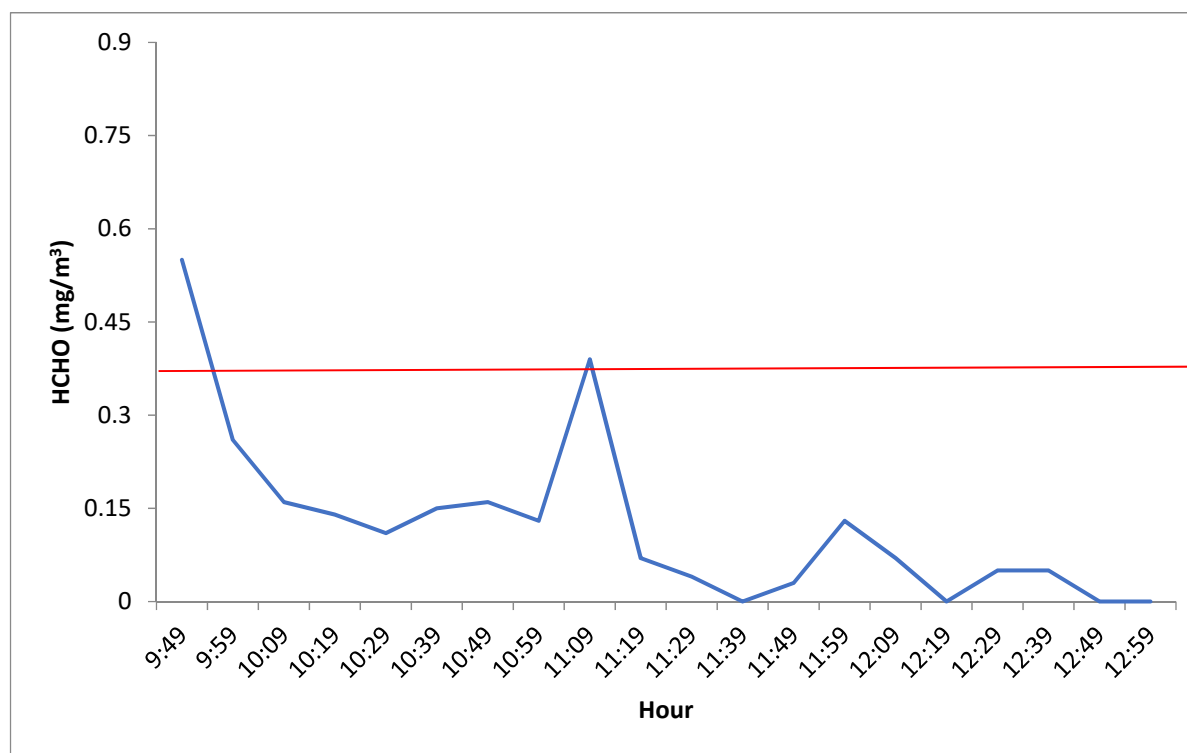


Figure 9. HCHO concentrations (mg/m³) in the waiting room (Red line: Guideline value).

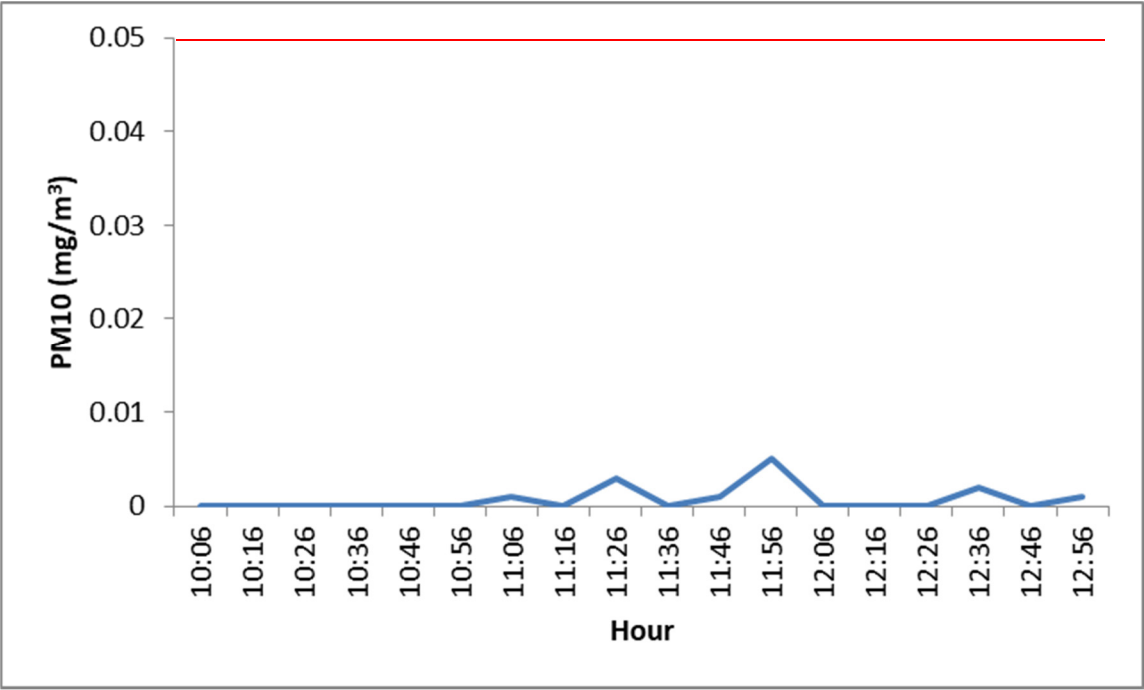


Figure 10. PM₁₀ concentrations (mg/m³) in the hall (Red line: Guideline value, WHO 2010).

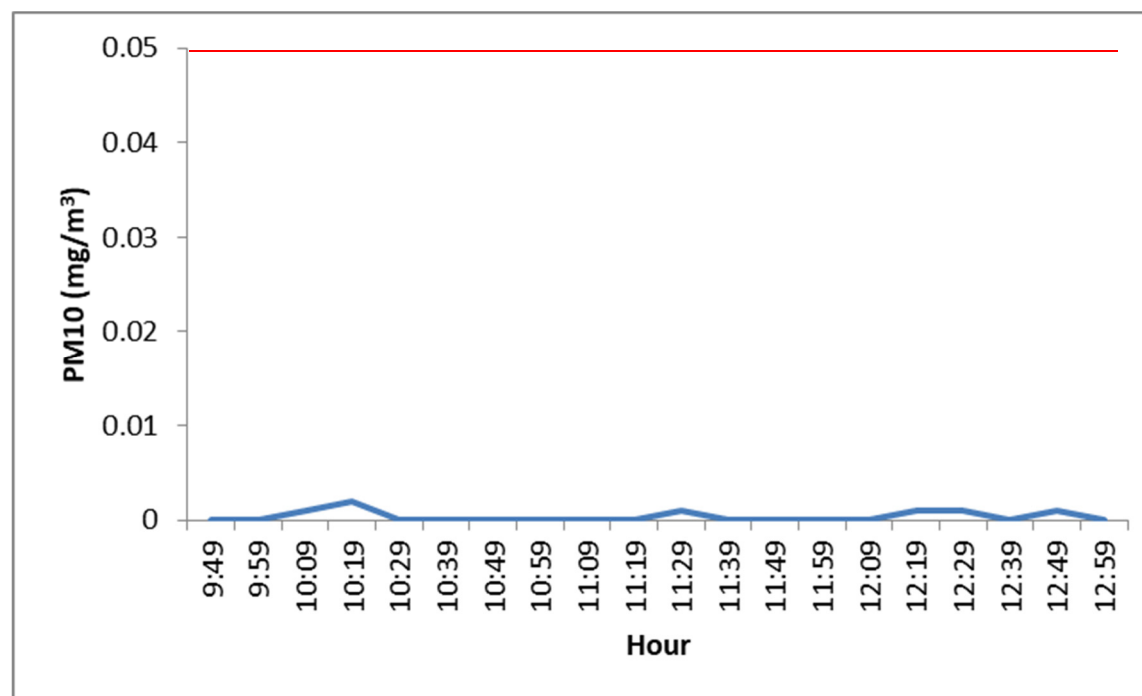


Figure 11. PM₁₀ concentrations (mg/m³) in the waiting room (Red line: Guideline value, WHO 2010).

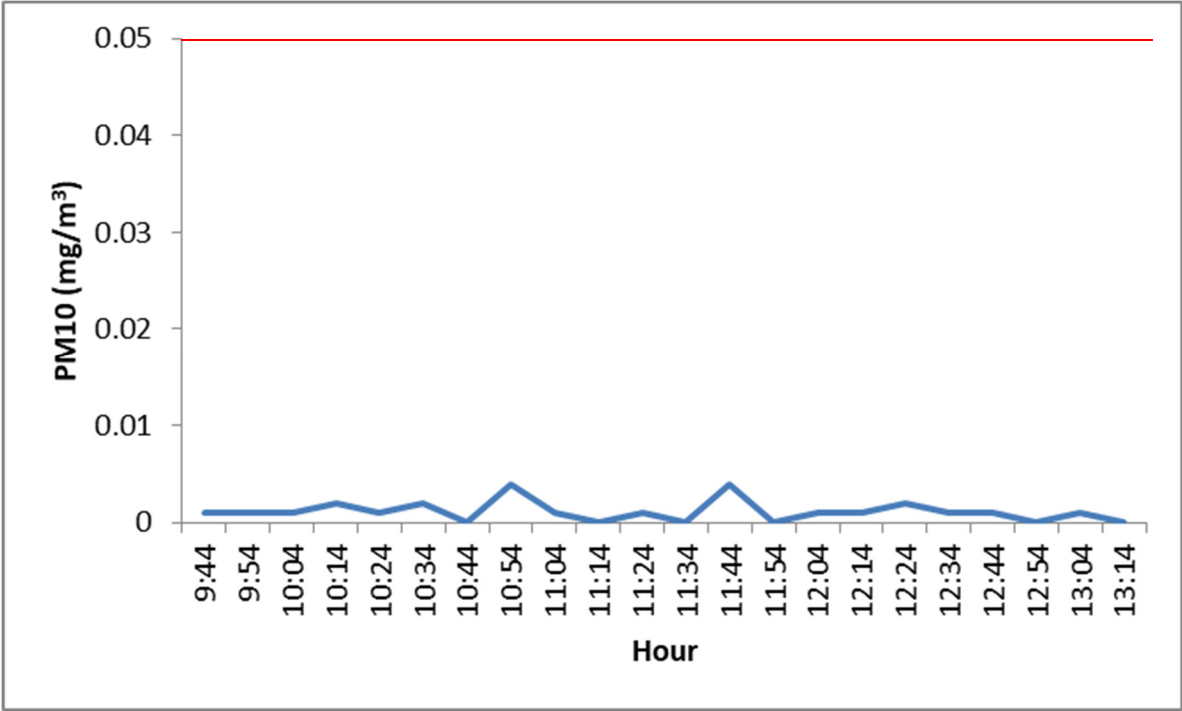


Figure 12. PM₁₀ concentrations (mg/m³) in the doctor's consultation (Red line: Guideline value, WHO 2010).

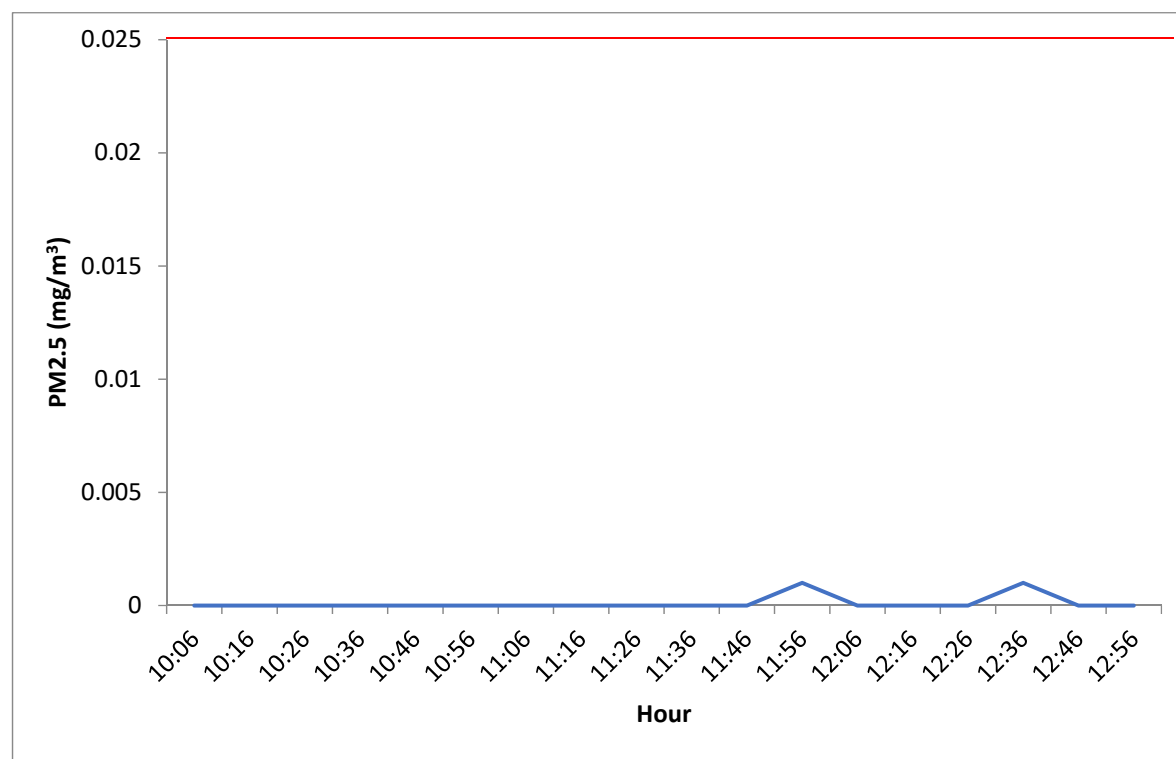


Figure 13. PM_{2.5} concentrations (mg/m³) in the hall (Red line: Guideline value, WHO 2010).

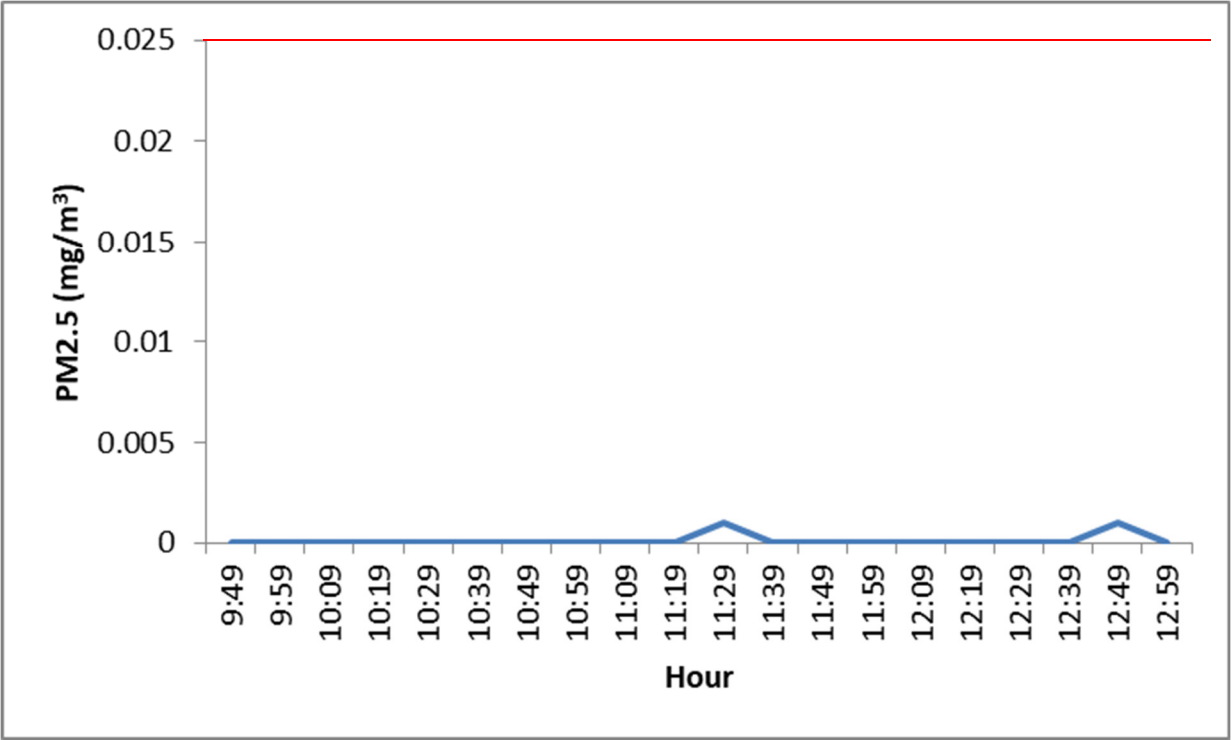


Figure 14. PM_{2.5} concentrations (mg/m³) in the waiting room (Red line: Guideline value, WHO 2010).

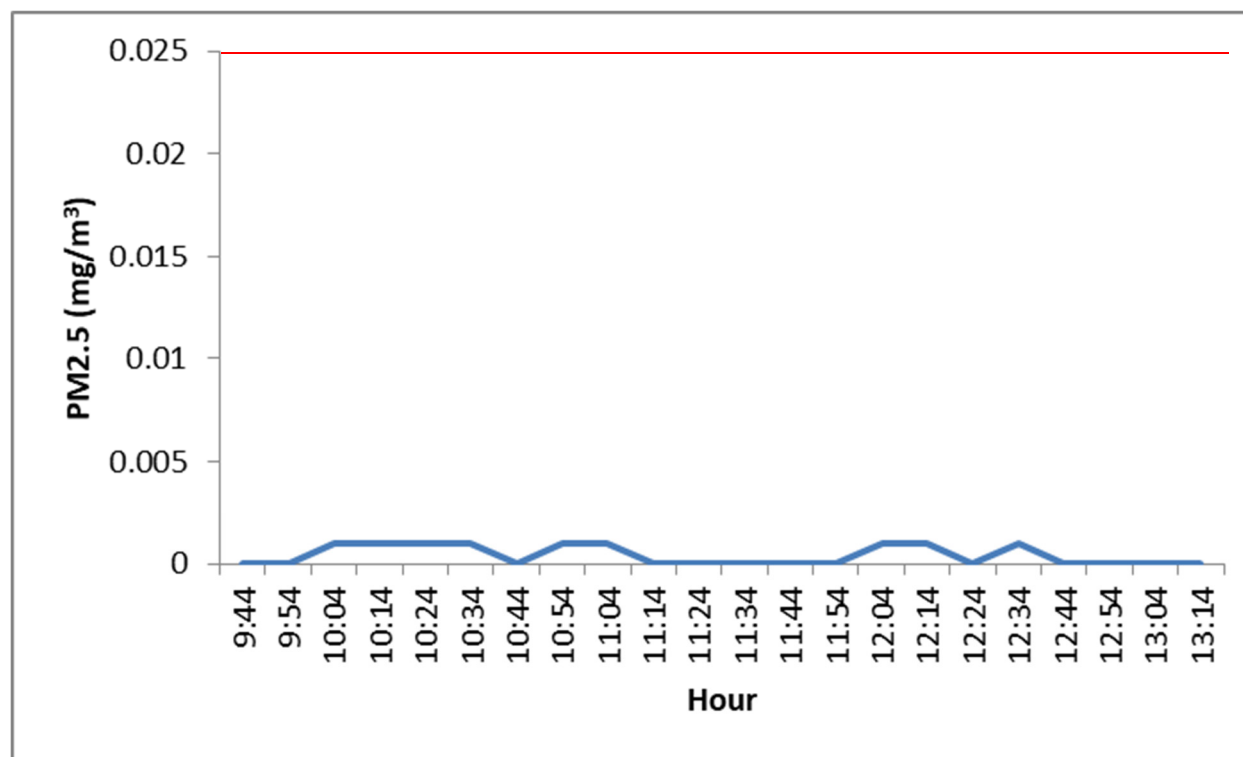


Figure 15. PM_{2.5} concentrations (mg/m³) in the doctor's consultation (Red line: Guideline value, WHO 2010).

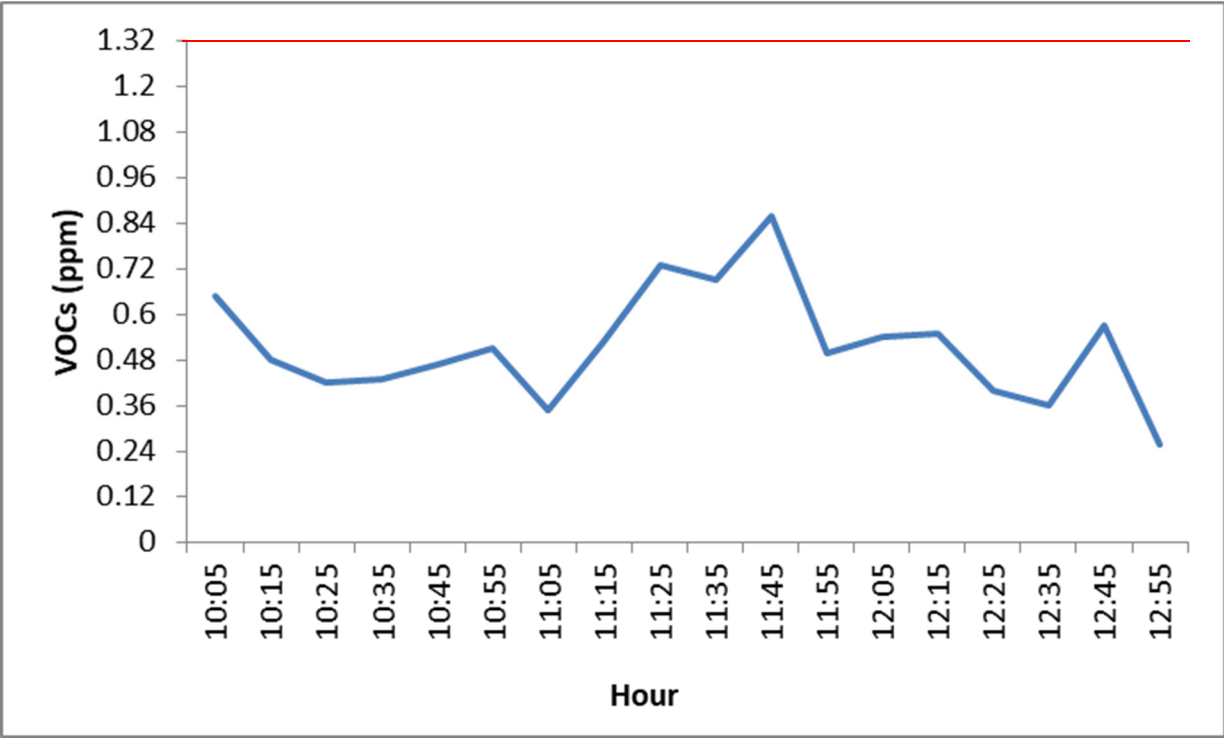


Figure 16. VOCs concentrations (ppm) in the hall (Red line: Guideline value).

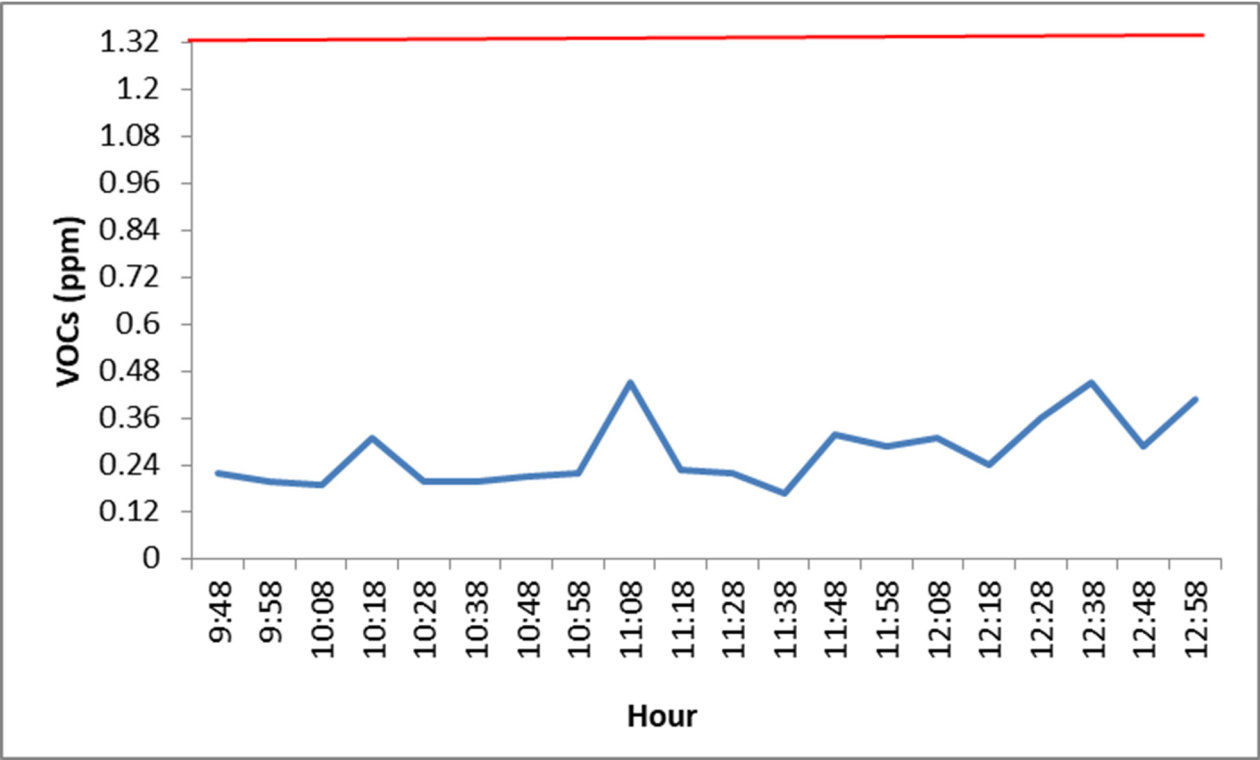


Figure 17. VOCs concentrations (ppm) in the waiting room (Red line: Guideline value).

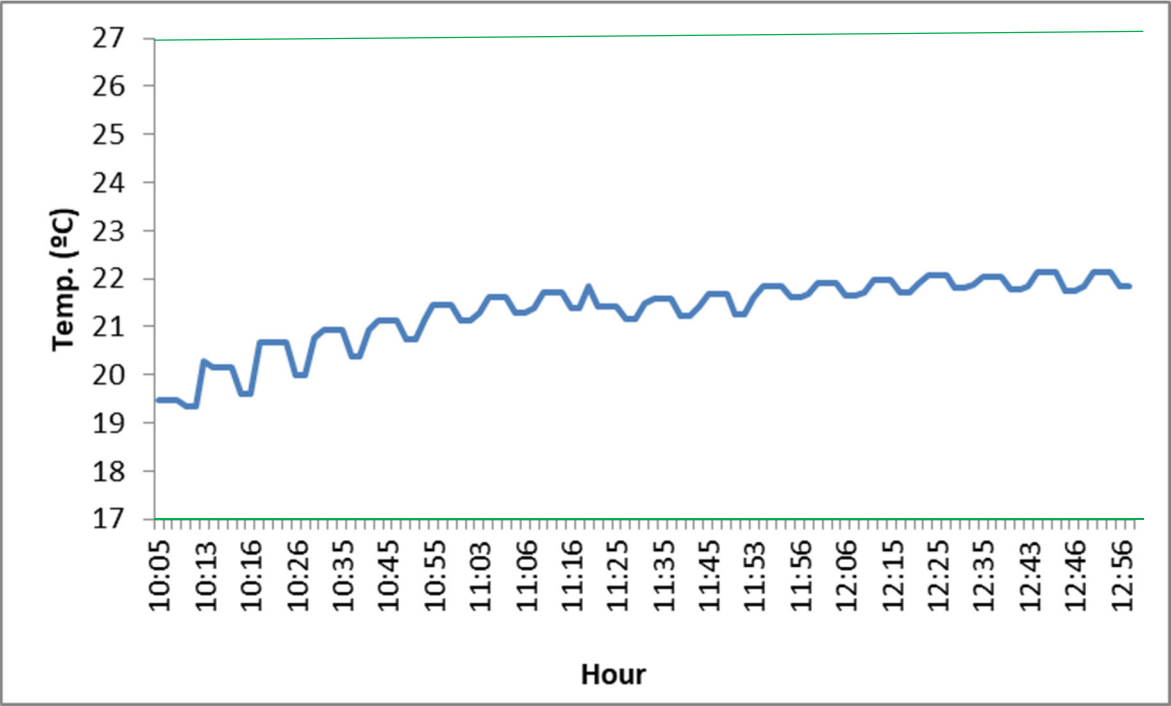


Figure 18. Temperature (°C) in the hall (Green line: Appropriate range).

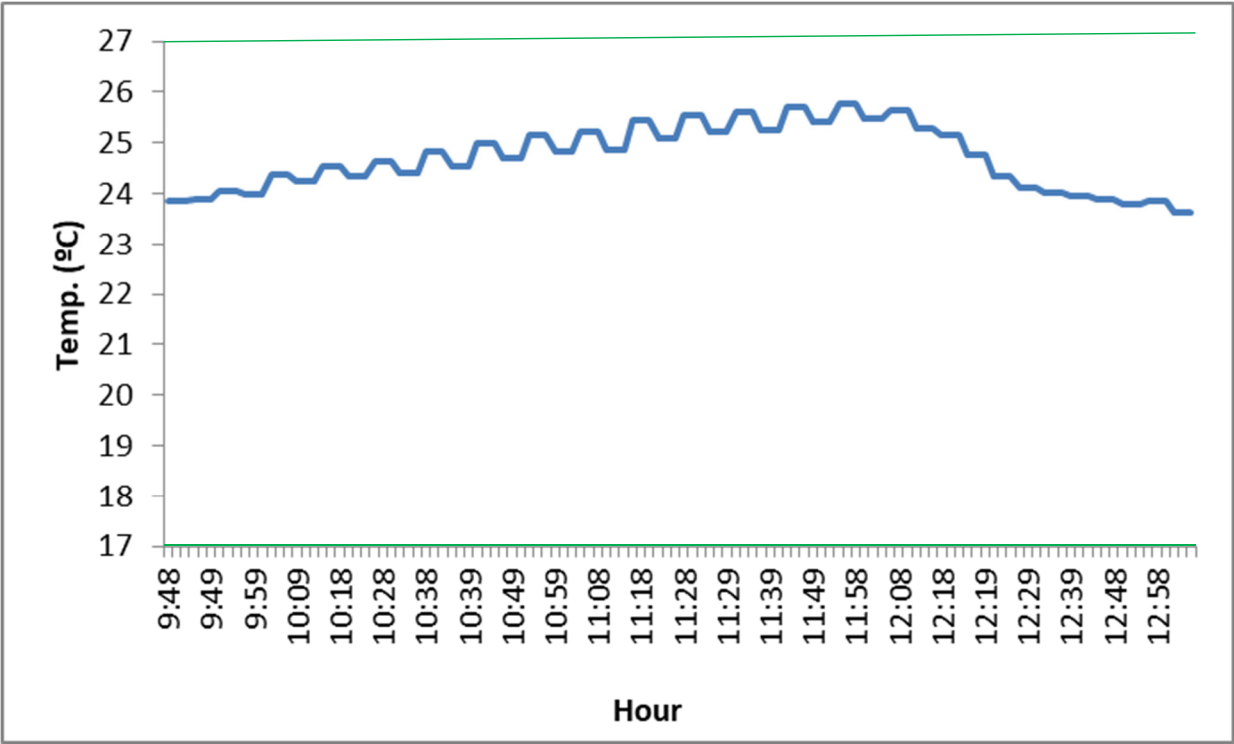


Figure 19. Temperature (°C) in the waiting room (Green line: Appropriate range).

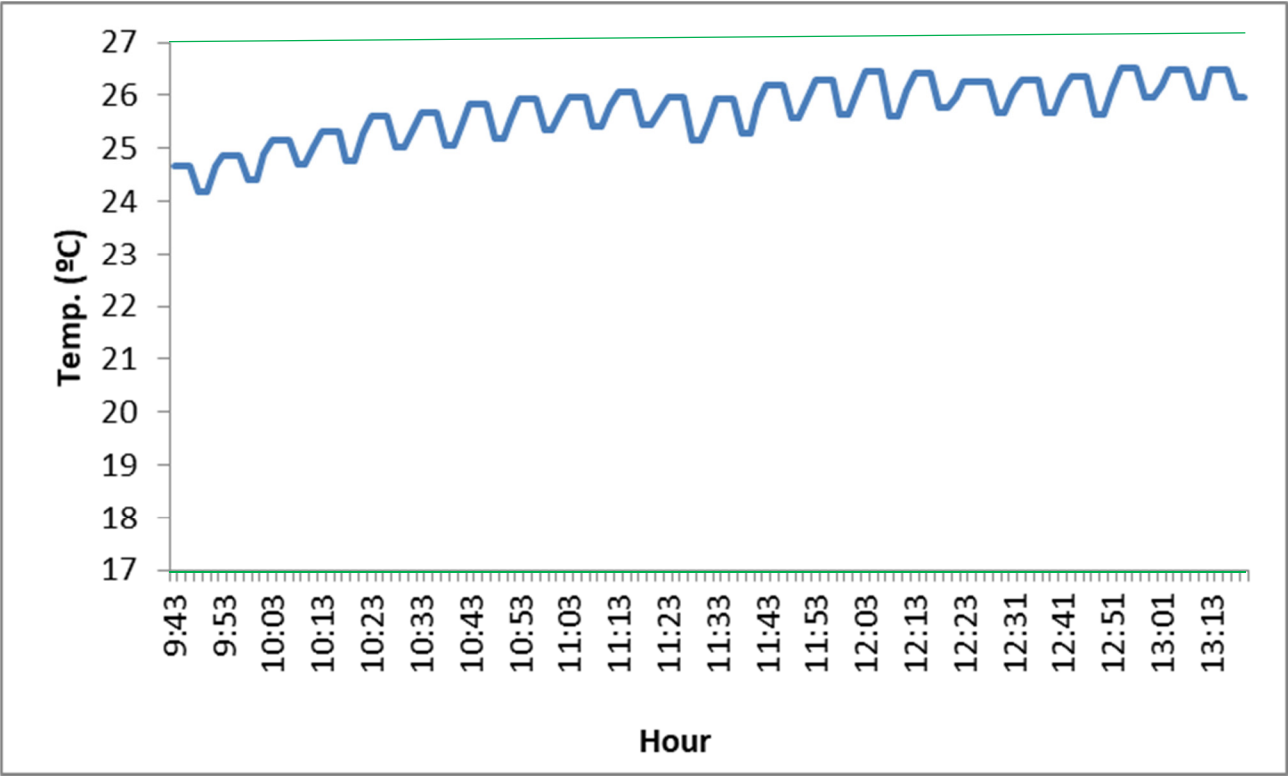


Figure 20. Temperature (°C) in the doctor’s consultation (Green line: Appropriate range).

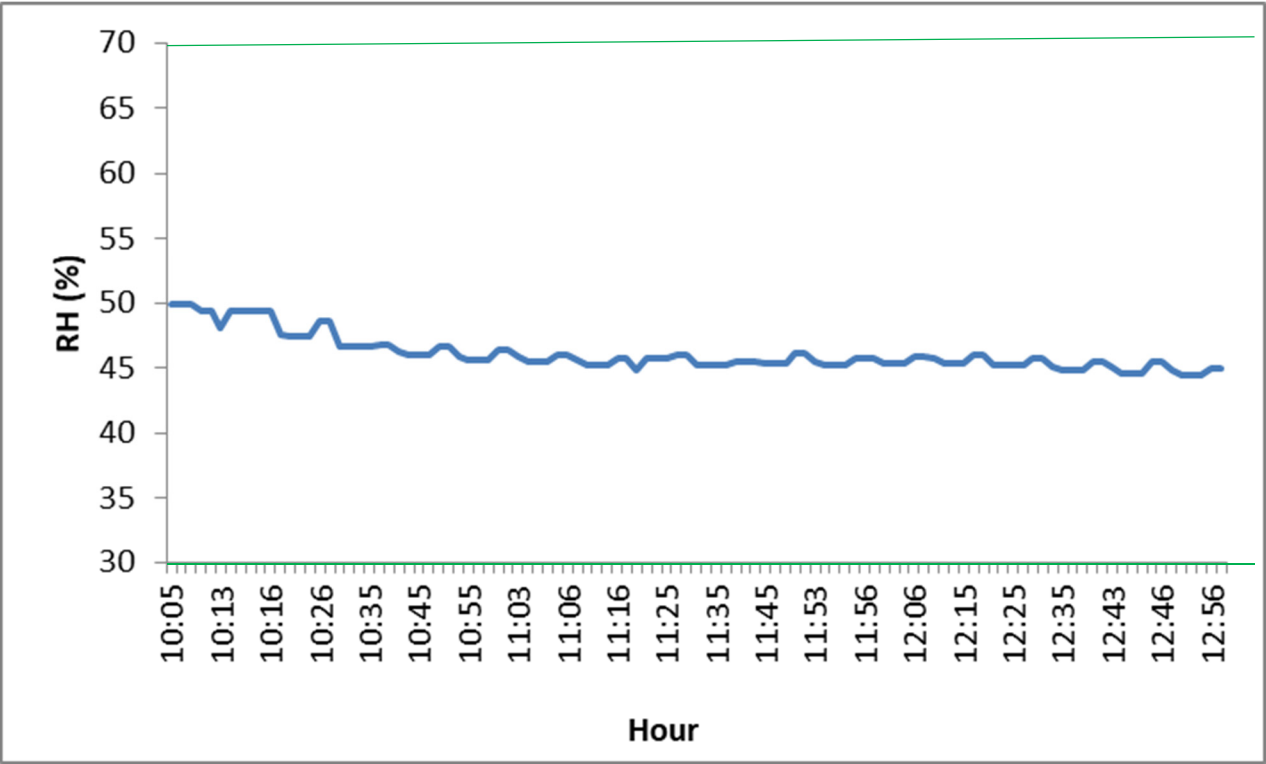


Figure 21. Relative humidity (%) in the hall (Green line: Appropriate range).

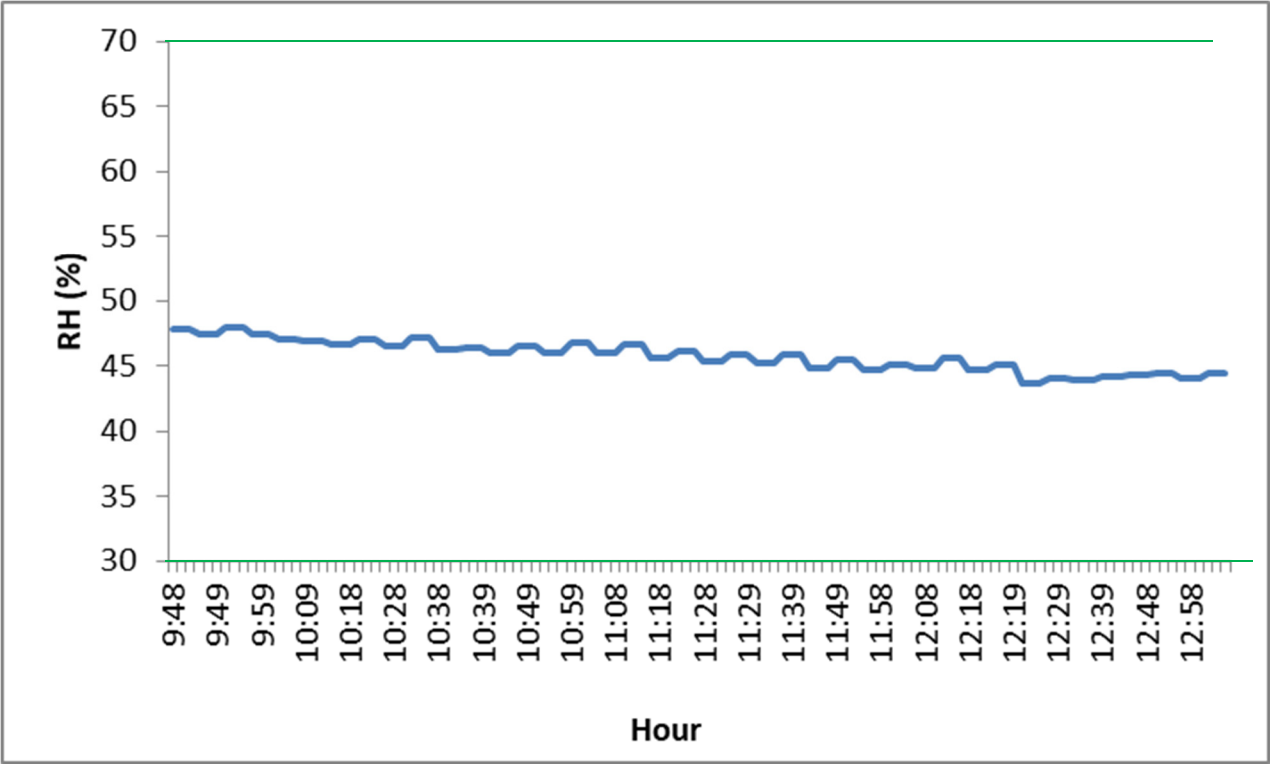


Figure 22. Relative humidity (%) in the waiting room (Green line: Appropriate range).

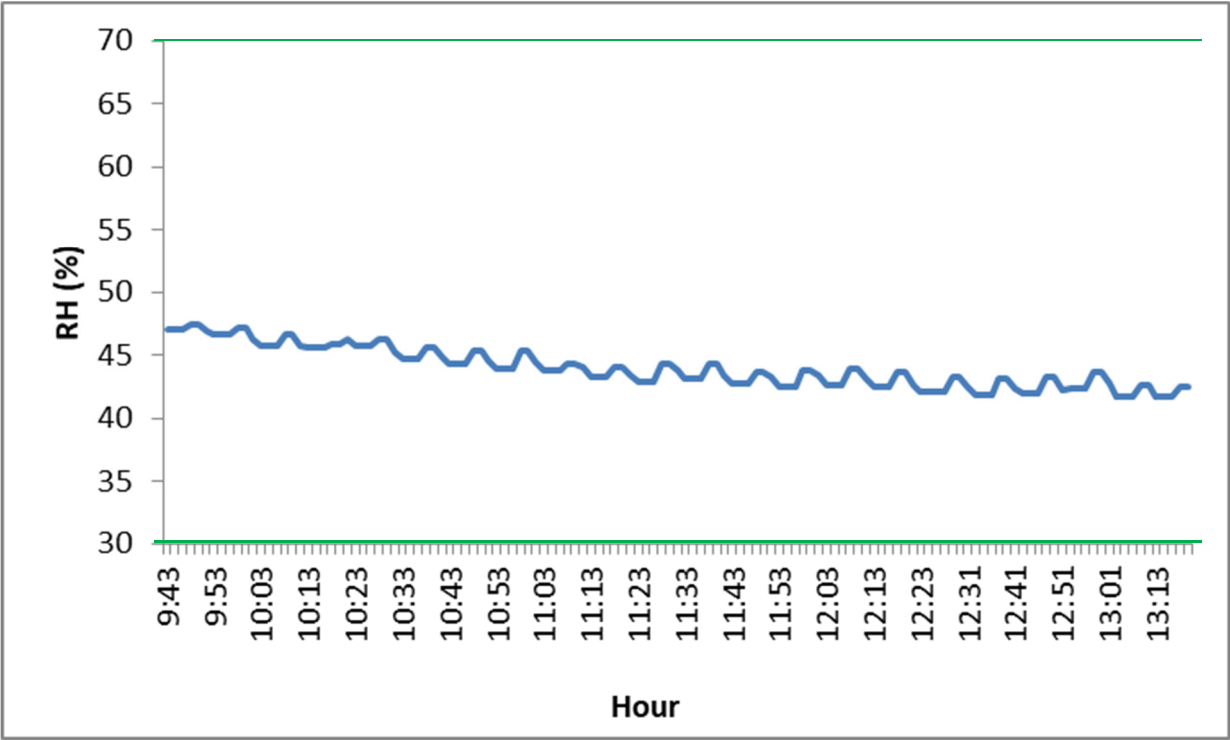


Figure 23. Relative humidity (%) in the doctor’s consultation (Green line: Appropriate range).