

Impact of a Training Project for Primary Health-care Providers (FOCO Project) in the HIV Screening and HIV Late Diagnosis

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OBJECTIVE

Reducing HIV late diagnosis remains an epidemiological challenge. The objective of this project was to promote early HIV diagnosis through the training of primary health-care providers (PHCP).

METHODS

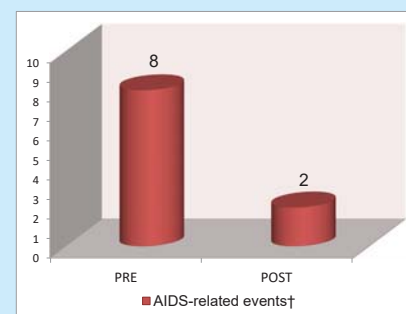
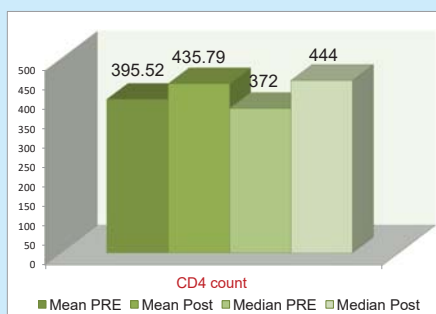
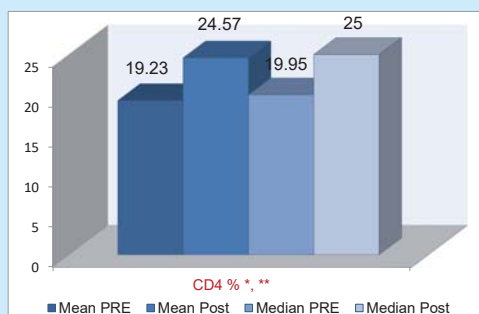
- HIV specialists conducted training sessions in 108 primary care centers (PCC) from six Spanish regions during 2016 and 2017, and with 1804 PHCP involved.
- The intervention was evaluated using a pre-experimental design collecting the dependent variables both in the six months before and after the intervention. Number of requests for HIV tests from the PCC trained and clinical data of new HIV diagnosed patients were collected.
- Parametric and non-parametric tests were used to assess differences between pre and post-intervention data.

Table 1. Distribution of PCC trained among cities

City	Hospital	N° PCC trained	Researcher
Barcelona	Mutua Terrassa	9	Dr. David Dalmau
Cádiz	Puerto Real	9	Dr. Alberto Romero
Gijón	Cabueñes	14	Dr. Belén de la Fuente
Madrid	La Princesa	10	Dr. Ignacio de los Santos
	Ramón y Cajal	20	Dr. María Jesús Pérez
	Gregorio Marañón	5	Dr. Juan Carlos López
	Clínico	1	Dr. Vicente Estrada
Valencia	Clínico Universitario	29	Dr. María José Galindo
Zaragoza	Miguel Servet	11	Dr. Piedad Arazo & Gloria Samperiz
Total	9 hospitals	108 PCC	

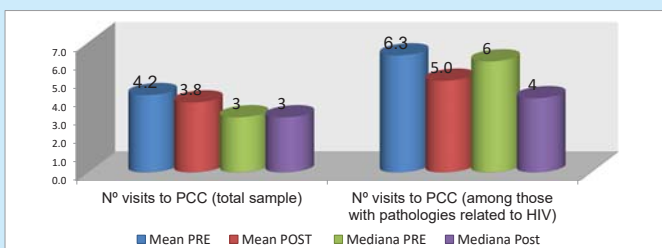
RESULTS

Fig. 1-3. Differences in clinical variables in pre and post intervention periods



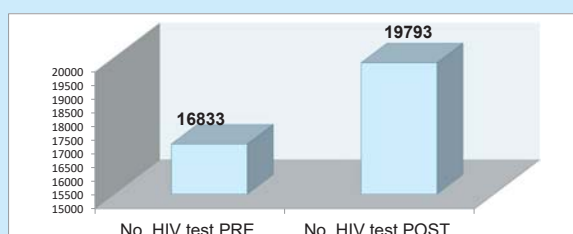
- Clinical data of 132 new HIV diagnosed patients were collected (67 pre and 65 post).
- Percentage of lymphocytes CD4 mm3 were significantly higher ($p=.011$) and the median of absolute lymphocytes was marginally higher ($p=.083$) after the intervention. A total of 44.4% versus 36.1% of the patients in the pre and post-intervention periods were diagnosed with <350 CD4 mm3.
- †The number of AIDS-related events was marginally lower after the intervention ($p=.09$).

Fig. 4. Number of visits to PCC in pre and post-intervention periods of New Diagnosed HIV patients



- There were no significant differences in the mean of visits to PCC during the two previous years to HIV diagnosis.
- In 34.3% and 38.5% of patients of pre and post-intervention periods, the pathologies because they visited PCC were related or suggestive to HIV.
- One patient who had visited six times PCC in the two previous years due dermatological problems died two months after the diagnosis.
- Data available in clinical records showed that while one patient visits PCC due sexually transmitted infections in the pre-intervention period, there were 12 patients in the post period.
- Previous negative HIV test were known in 44.8% and 33.8% of patients from both periods respectively. The pathologies of 42.3% of patients who had a previous HIV test more than two years were related to HIV, while they were in the 30.8% of the patients who had a previous HIV test of fewer than two years.

Fig 5. Number of HIV test performed before and after the intervention



Number of HIV tests performed was higher after the intervention ($p<.0001$). Positive test results were 0.37% and 0.31% in the pre and post-intervention periods respectively.

CONCLUSIONS

- The new HIV diagnosed patients in the post-intervention period showed better immunological status than those in the pre-intervention period.
- We found a relevant number of missed opportunities for HIV diagnosis especially among those patients who visited PCC due to pathologies related or suggestive to HIV.
- Number of HIV test performed was higher after the intervention.
- Training PHCP in the HIV screening and late diagnosis could be useful to increase HIV screening and to reduce late HIV diagnosis.

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