



A STUDY ON THE VACCINATION STATUS OF PEOPLE LIVING WITH HIV/AIDS IN 2 DISTRICTS OF PUNJAB

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Literature Review



A systematic search was conducted using three electronic databases (PubMed, Scopus, and Google Scholar) to gather relevant articles on People Living with HIV/AIDS. The search was limited to articles published from 2000 to the present. The keywords used in the search included **Vaccination, Immunization, People Living with HIV/AIDS, HIV-positive patients, and Immunocompromised adults**. In addition to the databases, various HIV/AIDS websites were also consulted for relevant studies. The search process yielded a total of 75 articles, out of which 69 were not relevant to the objectives of this study. Consequently, eight articles were selected for this review as they contained valuable and pertinent information applicable to the study's objectives.

Literature Review Contd.

S. No	Year	Objective	Findings	Author
1	2015	To understand the recent temporal trends in acquired immunodeficiency syndrome (AIDS) mortality in the era of HAART, trends in causes of death among persons with AIDS	• Commonest Cause- Pulmonary Tuberculosis, followed by- EPTB, hepatitis, bacterial pneumonia • In developing country like India- major cause of death of PLWHA- Opportunistic Infections	Dr Rekha.M.C, Dr Shivakumar.K.M, Dr G.M.Prakash, Dr Manju.B, Dr Suresh.C, Dr Ravikumar.M.B
2	2015	To determine the knowledge, attitude and practices of respondents among guardians of children aged 12-23 months with respect to immunization.	155 mothers/ responsible guardians of children in the age group of 12 to 23 months were studied. Children of 54 out of 155 respondents (34.84%) were fully immunized, 97 (62.58%) were partially immunized and 4 (2.58%) were unimmunized. Main reason for partial and non-immunization - lack of information	M M Angadi, Arun Pulikkottil Jose, Rekha Udgiri, K A Masali, Vijaya Sorganvi
3	2006	To assess the efficacy of recombinant vaccine in treatment-naïve HIV positive patients and healthy controls, and to dissect out differences if any, in different limbs of immune response.	Vaccination in children/ individuals with low CD4 count is ineffective. Early immunization in HIV positive individuals is recommended when the CD4 count is still adequate	N Pasricha, U Datta, Y Chawla, Surjit Singh, Sunil K Arora, A Sud, Ranjana W Minz, B Saikia, H Singh, Isaac James, Shobha Sehgal
4	2016	To study the Knowledge regarding immunization schedule among parents and the source of information regarding vaccination	In present study the highest incidence was of TB 47.92% followed by tetanus, measles, diphtheria & neotetanus. Highest mortality is of tetanus neonatorum followed by tetanus, Diphtheria, Measles & tuberculosis in descending order, among 240 admitted patients. The incidence of VPDS was higher among unvaccinated child as compared to vaccinated child except tuberculosis where vaccination rate was higher (52.17%) and all VPDS were much common in illiterate fathers and mothers.	Agrawal A, Hanspal R

Literature Review Contd.

S. No	Year	Objective	Findings	Author
5	2013	To compare treatment outcomes among HIV-infected patients enrolled in a graduated cost-recovery programme of ART delivery in Chennai, India.	Median age was 34; 73 per cent were male, and the majority were on nevirapine-based regimens. Median follow up was 11.1 months. The mean increase in CD4 cell count within the 1 st three months of HAART was 50.3 cells/ μ l per month in tier 1. Compared to those in tier 1, persons in tiers 2, 3 and 4 had comparable increases (49.7, 57.0, and 50.9 cells/ μ l per month, respectively). Increases in subsequent periods (3-18 and >18 months) were also comparable across tiers. No differential CD4 gains across tiers were observed when the analysis was restricted to patients initiating ART under the GCR programme.	Sunil Suhas Solomon, Aylur K Ganesh, Shruti H Mehta, Tokugha Yephthomi, Kavitha Balaji, Santhanam Anand, Joel E Gallant, Suniti Solomon
6	2016	To evaluate the safety and T-cell-mediated and humoral responses of M72/AS01 in HIV-negative and HIV-positive adults aged 18 to 59 years living in India, which were either <i>Mtb</i> -primed or <i>Mtb</i> -naive.	M72/AS01 was immunogenic in ART-stable, ART-naive, and HIV-negative adults in India, and well tolerated. We show that irrespective of their ART status, this population of HIV-positive subjects can mount cell-mediated and humoral responses to two M72/AS01 doses, which persist at 1 year post-vaccination.	Kumarasamy, Nagalingeswaran; Poongulali, Selvamuthu; Bollaerts, Anne; Moris, Philippe; Beulah, Faith Esthe; Ayuk, Leo Njock; Demoitié, Marie-Ange; Jongert, Erik; Ofori-Anyinam, Opokua
7	2010	To determine the rates of death and infection from HIV in India.	Collectively, these data suggest that India had about 1.4-1.6 million HIV infected adults aged 15-49 years in 2004-6, about 40% lower than the official estimate of 2.3 million for 2006. All cause mortality increased in men aged 25-34 years between 1997 and 2002 in the states with higher HIV prevalence but declined after that. HIV prevalence in young pregnant women, a proxy measure of incidence in the general population, fell between 2000 and 2007. Thus, HIV mortality and prevalence may have fallen further since our study.	Prabhat Jha, Rajesh Kumar et al.

Dilemma of PLWHA for Vaccination



- The dilemma for WHO and governments- Low immunity- high viral load. SO vaccine response- not predictable

Research Question & Objectives of Study



- **Research Question**

- a) What is the vaccination status of People Living with HIV/AIDS?
- b) What is the level of awareness regarding vaccines among People Living with HIV/AIDS?

- **Objective of Study**

- a) To analyse the vaccination status of PLWHA
- b) To study the details of vaccinations administered to PLWHA
- c) To analyse the awareness of the infectious diseases they are prone to
- d) To analyse the awareness of vaccine-preventable diseases among PLWHA

Type of Study, Study Setting, Sample Size



- **Type Of Study:**

A cross-sectional descriptive study with a quantitative approach was used for the study.

- **Study Setting:**

The study was conducted in two Medical Colleges of Punjab i.e., Govt. Medical College and Rajindra Hospital, Patiala and Dr BR Ambedkar State Institute of Medical Sciences, Mohali

- **Sample Size:**

After setting up the inclusion and exclusion criteria and analysing the patient load. The Sample Size was considered as 40 PLWHA.

- **Study Instruments:**

The study tools included questionnaires, Record Observations (where applicable).

Findings



A quantitative study was conducted in two different districts of Punjab for a total sample of 40 respondents (20 each at Patiala and Mohali in Punjab) to check their vaccination status and their level of awareness regarding vaccination.

Findings

- Gender Distribution:

Patiala- 11 females and 9 males

Mohali- 17 males and 3 females.

Total- 26 Males & 14 Females

- Age Distribution

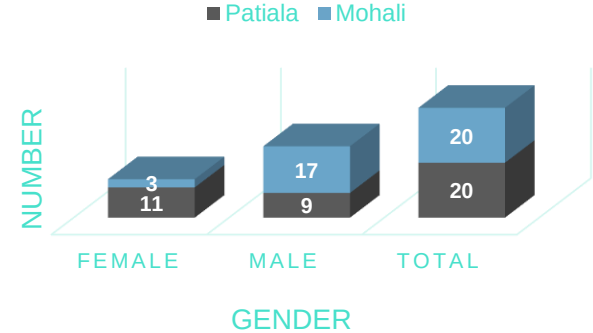
Patiala-

21-30: 1; 31-40: 11; 41-50: 6; 51-60 & 61-70: 1 each

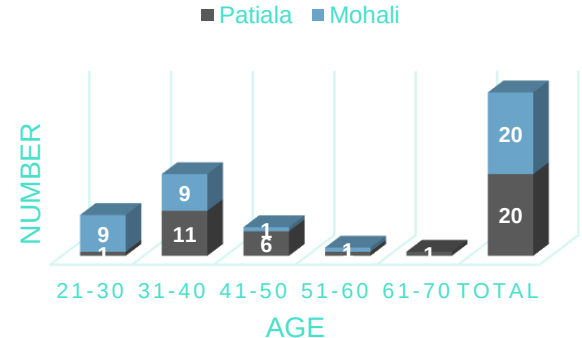
Mohali-

21-30 & 31-40: 9 each; 51-60 & 61-70: 1 each

GENDER DISTRIBUTION



AGE DISTRIBUTION



Findings Contd.

- Awareness regarding Infectious diseases

Patiala- yes-4; No- 16

Mohali- Yes- 7; No-13

Total- Yes-11; No- 29

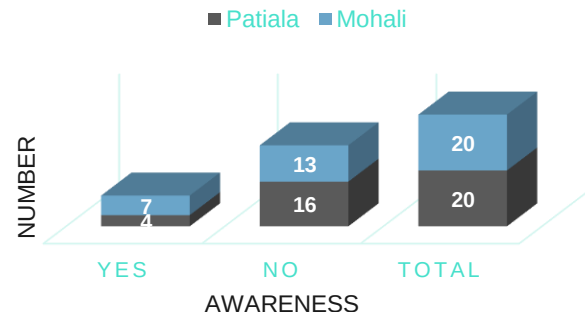
- Awareness regarding vaccine availability

Patiala- yes- 3; No- 17

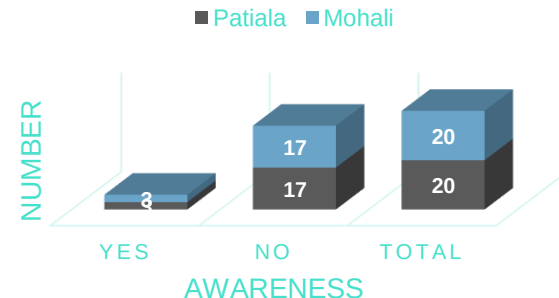
Mohali- Yes- 3; No- 17

Total- Yes- 6; No- 34

INFECTIOUS DISEASES AWARENESS



AWARENESS-VACCINE AVAILABILITY



Findings Contd.

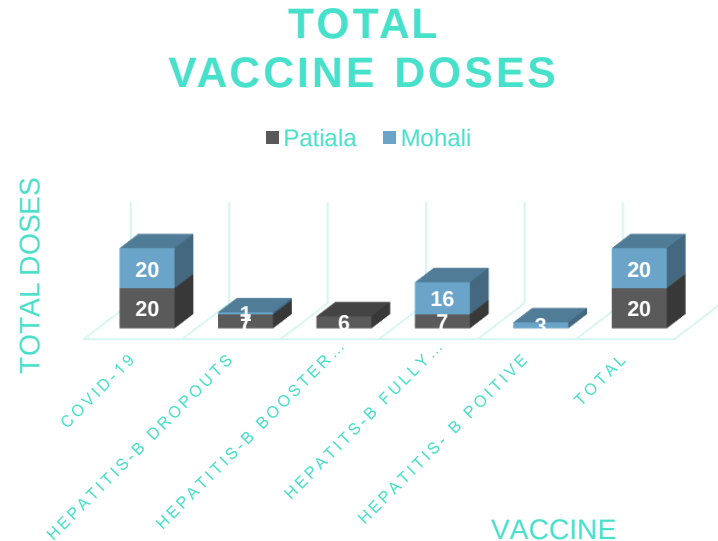
- **Total Vaccine Doses for People Living With HIV/AIDS:**

Out of the 40 respondents.

COVID-19 Vaccination- 40 (Patiala- 20, Mohali-20)

In the case of Hepatitis-B

- a) Hepatitis-B Dropouts- 8 (Patiala- 7, Mohali- 1)
- b) Hepatitis-B Booster Due- 6 (Patiala- 6)
- c) Hepatitis-B Full Vaccinated- 23 (Patiala- 7, Mohali- 16)
- d) Hepatitis-B Positive- 3 (Mohali- 3)



Interpretation



Out of the overall interviewed respondents, 65% were males. Half of the respondents (n=20, 50%) belonged to the age group of 31-40 whereas the rest of the respondents belonged to the age group of 21-30 (n= 10, 25%), 41-50 (n= 7, 17%), 51-60 (n= 2, 5%), 61-70 (n= 1,2%). Other interpretations were that out of the study population that was a part of this survey, a large number of individuals (n=29, 72%) were not aware of the infectious diseases they were more prone to as well as the diseases that could be prevented with the help of vaccination. Even though most of them (n=34, 85%) were not aware of the importance of vaccination, most of them were fully vaccinated with the COVID-19 vaccine as well as the Hepatitis B vaccine.

Suggestions



- a. Awareness campaigns
- b. IEC materials usage
- c. Monitoring and follow-up
- d. Designing a Vaccination Card and Record maintenance
- e. Counselling Sessions
- f. Formulating Guidelines

Strengths Of the Study



- a. Sample size
- b. Geographic diversity
- c. Gender representation
- d. Age group representation
- e. Vaccination coverage assessment
- f. Identification of awareness levels

Limitations Of the Study



- a. Availability Of Studies
- b. Small Sample Size
- c. Imbalanced Gender Distribution
- d. Awareness regarding infectious diseases
- e. Awareness of important vaccines
- f. Limited vaccine coverage