IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)
e-ISSN: 2279-0853, p-ISSN: 2279-0861.Volume 24, Issue 8 Ser. 5 (August. 2025), PP 79-83
www.iosrjournals.org

Silent Epidemic: Uncovering HIV And Hepatitis-B Awareness Gaps Among Adults In Kashmir

Tuba Riaz[1], Sami Jan[1], Huzaifa Parvaiz[1], Farheen Majid[1].
Department Of Community Medicine, Government Medical College, Srinagar, Jammu & Kashmir, India

Abstract
Background: *HIV and hepatitis B (HBV) remain major public-health challenges. Understanding population knowledge, attitudes, and practices (KAP) is essential for effective prevention.*
Methods: *We conducted a cross-sectional online survey among adults (≥18 y) across Kashmir (Google Form). The questionnaire covered awareness, transmission, prevention, attitudes, and practices for HIV/HBV, plus socio-demographics. Data were analyzed as proportions with 95% CIs; multi-select items were split into option-level percentages.*
Results: *Among 326 respondents, awareness was high but uneven: 97.2% (95%CI 94.9–98.6) had heard of HIV and 96.0% (93.4–97.7) of HBV. Knowledge did not consistently translate into preventive behaviors: ever-testing for HIV/HBV was 39.6% (34.2–45.1); only 47.9% (42.4–53.5) reported receiving HBV vaccination; 15.3% (11.7–19.8) reported "never" using condoms. While 94.8% believed HIV is preventable, 43.6% believed HIV is curable. Misconceptions persisted: 14.1% viewed HIV/HBV as a divine punishment and 17.8% supported isolating affected persons. Concern was polarized—40.5% rated "5/5" concern about acquiring infection. Testing prevalence was higher in ages 35–44 (47.7%) and among males (41.6%). Main information sources were Internet (73.9%), mass media (70.9%), and healthcare providers (58.9%).*
Conclusion: *In this Kashmiri sample, high awareness coexisted with substantial misconceptions and suboptimal uptake of testing, vaccination, and condoms. Interventions should prioritize myth-busting, normalize provider discussions, and scale adult HBV vaccination and HIV testing.*
Keywords: *HIV; Hepatitis B; Health literacy; Awareness; Kashmir*

Date of Submission: 12-08-2025 Date of Acceptance: 22-08-2025

I. Introduction

Despite decades of prevention efforts, HIV and HBV continue to cause considerable morbidity and mortality. Public awareness is a necessary—but not sufficient—condition for behavior change. Regions with distinct socio-cultural contexts, such as Kashmir, require locally grounded KAP data to tailor interventions. We aimed to quantify awareness, attitudes, and practices around HIV/HBV among Kashmiri adults and to identify gaps between knowledge and preventive behaviors.

Objectives

1. Estimate awareness and knowledge regarding HIV and HBV.
2. Describe attitudes (stigma, isolation, perceived severity) toward HIV/HBV.
3. Quantify practices (testing, condom use, HBV vaccination, risk behaviors).
4. Explore crude associations between demographics and key outcomes (testing, vaccination, misconceptions).

II. Methods

Study design and setting

Cross-sectional, online survey administered via Google Form to adults (≥18 y) residing in districts of Kashmir division, India.

Participants and recruitment

Convenience sampling through social networks and community contacts. Inclusion: age ≥18 y, residence in Kashmir, consent to participate. Exclusion: duplicate/empty responses.

Questionnaire

Items covered socio-demographics and KAP on HIV/HBV. Multi-select questions included canonical transmission and prevention routes. Free-text captured understanding of "HIV vs AIDS." (Full item list in **Appendix A**.)

Variables

Primary outcomes: awareness (heard of HIV/HBV), ever-tested (HIV/HBV), HBV vaccination (≥1 dose), condom use frequency, and attitudes (divine punishment; isolation). Secondary outcomes: knowledge of transmission/prevention options; information sources; provider discussions; concern (1–5 scale).

Sample size

All complete entries during the collection window were included (N=326).

Data management and analysis

Data exported from Google Form to Excel and analyzed (proportions with 95% Wald CIs). Multi-select responses were split; option-level coverage is reported as % of total sample (denominator=326). Crude cross-tabs describe variation by age group, sex, and education. Age was grouped (18–24, 25–34, 35–44, 45–54, 55–64, 65+).

Ethics

Online information sheet preceded the survey; consent was electronic and voluntary; data were anonymous. No personal identifiers were collected.

III. Results

Sample characteristics

N=326; median age clustered in the 35–44 group; 45.1% male, 44.8% female, 10.1% "prefer not to say/NA" not present (tiny). Most were married (80.4%) and post-graduates (68.7%).

Table 1. Sociodemographic profile (abridged)

(% of N=326)

Age groups

Age group	N	%
18–24	19	5.8
25–34	83	25.5
35–44	109	33.4
45–54	82	25.2
55–64	33	10.1
65+	0	0.0

Sex

sex	N	%
Female	135	41.4
Male	190	58.3
Prefer not to say	1	0.3

Education (top categories)

Education	N	%
postgraduate (Masters/PhD)	223	68.7
college/university (bachelor's)	82	25.2
Secondary (up to 12th grade)	17	5.2
primary (up to 5th grade)	3	0.9
Illiterate	1	0.3

Residence (top 5)

District	N	%
Srinagar	92	28.2

District	N	%
Kupwara	35	10.7
Budgam	24	7.4
Baramulla	18	5.5
Anantnag	8	2.5

Awareness and knowledge

Indicator	Yes_n	Yes_%
Heard of HIV	317	97.2
Heard of Hepatitis B	313	96.0
Thinks HIV preventable	309	94.8
Thinks HepB preventable	314	96.3
Thinks HIV curable	142	43.6

Correctly identified routes (multi-select, % of N=326):

- **HIV transmission:** sexual contact 95.7%; blood transfusion 87.1%; sharing needles 85.9%; mother-to-child 73.0%.
- **HIV prevention:** condom use 90.5%; ART/"treatment as prevention" 51.5%; needle exchange 44.2%.
- **HBV transmission:** blood transfusion 83.1%; sharing needles 71.8%; mother-to-child 63.5%; unprotected sex 56.7%.
- **HBV prevention:** vaccination 94.5%; safe blood 74.8%; safe sex 55.5%; needle exchange 42.9%.

Attitudes and risk perception

- Isolation of persons with HIV/HBV: **17.8% yes**.
- "Punishment from God": **14.1% yes**.
- Would disclose status to family/friends: 64.1% yes (35.9% no/undecided).
- Perceived concern about contracting infection (1–5): score 5/5 in **40.5%**.

Practices

Indicator	n	%
Ever tested for HIV/HBV	129	39.6
Condom use: **Never**	50	15.3
HBV vaccination (≥1 dose): **Yes**	156	47.9
Shares needles	2	0.6
Engaged in risky behaviours (unprotected sex/needle sharing)	13	4.0
Discussed HIV/HBV with a healthcare provider	111	34.0

Information sources (multi-select, % of N=326): Internet 73.9%; mass media 70.9%; healthcare providers 58.9%; friends/family 43.6%.

Precision (selected 95% CIs)

Indicator	%	95% CI low	95% CI high
Heard of HIV	97.2	94.9	98.6
Heard of HepB	96.0	93.4	97.7
Ever tested (HIV/HBV)	39.6	34.2	45.1
Discussed with provider	34.0	29.0	39.4
HBV vaccination (≥1 dose)	47.9	42.4	53.5
"Punishment from God" (Yes)	14.1	10.8	18.2
"Isolate" (Yes)	17.8	14.1	22.2
Condom use: never	15.3	11.7	19.8
Highly concerned (5/5)	40.5	35.2	45.8

Crude differentials (selected)

- **Ever tested for HIV/HBV (Yes):** Male 41.6% vs Female 37.0%. Peak in **35–44 y** (47.7%).

- **HBV vaccination (Yes):** Female 53.3% vs Male 44.2%; highest in **25–34 y** (59.0%).
- **Misconceptions by education (Yes %):** "Punishment from God" — Secondary 29.4%, Bachelor's 14.6%, Post-graduate 12.6%; "Isolate" — Secondary 29.4%, Bachelor's 23.2%, Post-graduate 15.7%. *Interpretation:* Misconceptions persist even in higher education strata (≈12–16%).

IV. Discussion

Principal findings

Awareness of HIV/HBV in this sample was near-universal, yet **gaps between knowledge and action** were pronounced: sub-50% HBV vaccination, sub-40% ever-testing, and 15% reporting no condom use. Stigma-tinged beliefs—"divine punishment" and isolation—were non-trivial (14–18%). The Internet and mass media dominated information sources, outpacing healthcare-mediated counseling.

Comparison with expectations

The co-existence of high awareness and persistent misconceptions is consistent with many community KAP studies: people often remember "headline" facts (e.g., sexual/blood transmission) but hold ambivalence about curability and social stigma, which can suppress testing, vaccination, and disclosure. The relatively higher testing among 35–44 y aligns with greater health-system contact in middle adulthood. Female-higher HBV vaccination may reflect uptake during reproductive-age health encounters.

Public-health implications

1. **Myth-busting at scale:** Messaging must explicitly rebut curability myths and fatalistic frames ("punishment from God"), while emphasizing treatment efficacy and non-isolation.
2. **Normalize provider conversations:** Only one-third had ever discussed HIV/HBV with a clinician—embedding brief KAP counseling into routine visits can shift uptake.
3. **Make prevention frictionless:** Expand **adult HBV vaccination** through opportunistic platforms (OPD/ANC/immunization days) and co-offer **HIV testing** (opt-out) with bloodwork.
4. **Meet people where they are:** With Internet/media as top sources, co-design **digital micro-campaigns** with local cultural cues, plus clear "where to test/vaccinate" calls-to-action.

V. Strengths And Limitations

Strengths: Locally grounded instrument; full option-level reporting for multi-select knowledge items; transparent attitudes/practices measures.

Limitations: Convenience online sample (may over-represent higher education/urban residents); self-report and social-desirability bias; cross-sectional design precludes causal inference; free-text "HIV vs AIDS" not fully coded for correctness.

VI. Conclusion

In Kashmiri adults, high awareness coexists with **action gaps** and **stigma-colored misconceptions**. Strategies should prioritize myth-busting, provider-initiated conversations, and easy access to testing and HBV vaccination.

VII. Recommendations

- Integrate **opt-out HIV testing** and **adult HBV vaccination** into general outpatient flow.
- Run **evidence-based digital campaigns** addressing myths (curability, punishment, isolation).
- Train providers in **brief KAP counseling** and stigma-free communication.
- Monitor **testing/vaccination dashboards** with district granularity to target outreach.

Acknowledgements
We thank all participants for their time and insights.

Funding
None declared.

Competing interests
None declared.

Data availability
De-identified data are available from the corresponding author on reasonable request.

Author contributions
TR: conceptualization, data curation, analysis, drafting; SJ: methodology, supervision, critical revision; HP: investigation, visualization, critical revision.FM: drafting, analysis. All authors approved the final manuscript.

Appendix A. Survey instrument (Google Form question list)
(Verbatim column headers; demographics omitted)
1. Have you heard of HIV
2. How is HIV transmitted (select all that apply)
3. Can HIV be prevented?
4. how can HIV be prevented (select all that apply)
5. What is difference between HIV and AIDS?
6. can HIV be cured?
7. Have you heard about Hepatitis B ?
8. How is hepatitis B transmitted? (Select all that apply)
9. Can hepatitis B be prevented
10. how can hepatitis B be prevented (select all that apply)
11. What are the symptoms of hepatitis B
12. Do you think people with HIV/Hepatitis B should be isolated?
13. Would you disclose your HIV/Hepatitis B status to your family/friends?
14. How concerned are you about contracting HIV/Hepatitis B? (Rate from 1 to 5)
15. Do you think HIV/Hepatitis B is a punishment from God?
16. Have you ever been tested for HIV/Hepatitis B
17. Do you use condoms during sexual intercourse
18. Have you received the Hepatitis B Vaccine?
19. Do you share needles or equipment?
20. Have you ever engaged in risky behaviors? (unprotected sex, Sharing needles)?
21. Do you know someone who has HIV/Hepatitis B
22. where do you get information about HIV/Hepatitis B ? (Select all that apply)
23. Would you like to receive more information about HIV/Hepatitis B?
24. Have you ever discussed HIV/Hepatitis B with a healthcare provider?
25. Do you think HIV/Hepatitis B is a significant public health concern in Kashmir?