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# PUBLICATIONS OF HIV RESEARCH OUTPUT IN INDIA - A SCIENTOMETRIC STUDY

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### ABSTRACT

The human immunodeficiency virus (HIV) targets the immune system and weakens people's defense against many infections and some types of cancer that people with healthy immune systems can fight off. As the virus destroys and impairs the function of immune cells, infected individuals gradually become immune deficient. Immune function is typically measured by CD4 cell count. The most advanced stage of HIV infection is acquired immunodeficiency syndrome (AIDS), which can take many years to develop if not treated, depending on the individual. AIDS is defined by the development of certain cancers, viral infections or other severe long-term clinical manifestations. HIV is one of the alarming deadly diseases with various co morbid conditions leading to debilitating illness and death.

## INTRODUCTION

Scientists believe that HIV originally came from a virus particular to chimpanzees in West Africa during the 1930s, and originally transmitted to humans through the transfer of blood while hunting. Over the decades, the virus spread through Africa, and to other parts of the world.

Acquired Immuno Deficiency Syndrome (AIDS) is the most serious pandemic Health problem that is Affecting Globally.

Human immunodeficiency virus (HIV) is an infection that attacks the body's immune system, specifically the white blood cells called CD4 cells.

AIDS is the last stage in a progression of diseases resulting from a viral infection known as the Human Immunodeficiency Virus (HIV or AIDS). The diseases include a number of unusual and severe infections, chronic fever, pulmunary tuberculosis, pneumonia, cancers and debilitating illnesses, resulting in severe weight loss or wasting away, and diseases affecting the brain and central nervous system.

There is no cure for HIV infection or AIDS nor is there a vaccine to prevent HIV infection. However, new medications not only can slow the progression of the infection, but can also markedly suppress the virus with antiretroviral therapy, thereby restoring the body's immune function and permitting

many HIV-infected individuals to lead a normal, disease-free life with no symptoms.

### METHODOLOGY

The study evaluates the contribution of countries to the growth pattern and development of research productivity in this discipline during the last five years.

### DATA COLLECTION

The publications of research output on HIV research in scientometrics are obtained from various sources, such as Journals articles, Conference papers. Review, short survey, note, editorial press release, and letter. The research data required for the present study are downloaded from the web of science database. All the publications retrieved from the web of science database on HIV and scientometrics cover the period from 2017 to 2022. Further, the researcher has downloaded the data in the form of notepad files; then the bibliographical details are converted to the form of MS-EXCEL format using the PHP (Hypertext Preprocessor) scripting language text unique data are rearranged in MS-EXCEL format to eliminate duplication from the download data. Overall data retrieved by the researcher are 2022 records for analyzing the present study.

### LIMITATIONS

This study covers HIV with respect to the medical field, brought under the purview of the study and no other

themes. This study makes a special attention only on the performance of research output in HIV research. This study covers the years from 2017 to 2022 only.

# Analysis and Interpretation

Table 1: Year wise publication HIV research.

S. No.	<b>Publication Year</b>	Recs.	%	TLCS	TGCS
1	2017	71	3.00	0	37
2	2018	552	23.34	263	7869
3	2019	530	22.50	182	4871
4	2020	523	22.20	82	4321
5	2021	593	25.07	49	1623
6	2022	92	3.89	2	52

The year wise productivity of publications in HIV research during from year 2017 to 2022 is presented in table-1. It shows that the publication of output is

gradually increased and decreased trend. In the 2021 occupied first position that the output is increased (25.07%) compared to 2017 and 2022.



Chart-1: Year wise output in HIV research.



S. No.	Document Type	Recs	%	TLCS	TGCS
1	Article	1630	68.92	479	13024
2	Review	379	16.02	73	5411
3	Meeting Abstract	151	6.38	1	9
4	Article; Early Access	59	2.49	0	35
5	Letter	53	2.24	3	86
6	Editorial Material	49	2.07	17	115
7	Article; Proceedings Paper	14	050	3	59
8	Review; Early Access	11	0.46	0	2
9	Correction	7	0.29	0	0
10	Article; Book Chapter	5	0.21	2	29
11	Review; Book Chapter	3	0.12	0	3

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Chart -2: Sources wise output in HIV research.

The source wise output in level of HIV research is given in table-2. It shows that the Article is occupies first position (68.92%), second is Review (16.02%), followed by Meeting Abstract, Article; Early Access, Letter and etc.

Table 3: Top 10 authors in HIV research (13286).

S. No.	Author	Recs	TLCS	TGCS
1	Kumarasamy N	81	35	375
2	Gupta A	59	24	276
3	Kumar S	52	9	377
4	Kumar P	50	24	1850
5	Kumar A	49	14	170
6	Solomon SS	47	22	139
7	Kumar R	46	9	264
8	Sharma S	40	9	249
9	Singh S	35	3	124
10	Isac S	34	11	175

Table 3 shows that top 10 authors of HIV disease research. It could be noted that the Kumarasamy N occupied in first position (81) compared to Gupta A

second position (59) followed by Kumar S and others. Isac S occupied in last position (34%).

Table 4: Top Ten Journals in HIV research.

S. No.	Journal	Recs	TLCS	TGCS
1	Plos one	61	0	297
2	Journal of biomolecular structure & dynamics	43	38	577
3	Journal of the international aids society	39	0	111
4	Aids research and human retroviruses	36	5	37
5	Jaids-journal of acquired immune deficiency syndromes	35	18	154
6	Frontiers in immunology	33	0	397
7	HIV medicine	30	13	49
8	Indian journal of medical research	26	11	53
9	Indian journal of public health	26	3	23
10	Aids care-psychological and socio-medical aspects of aids/hiv	25	12	61

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The Journal wise output of HIV research is given in table-4. It could be noted that the Plos One occupies in first position (61) Journal of Biomolecular Structure &

DYNAMICS is stood in second place followed by others.

Table 5:	Top Ten	Country	wise	of HIV	research	(152).
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S. No.	Country	Recs	TLCS	TGCS
1	India	2359	578	18766
2	USA	634	259	9170
3	UK	215	71	6717
4	South Africa	144	88	5397
5	Canada	127	75	4972
6	Australia	110	60	4493
7	Saudi Arabia	89	34	3856
8	Thailand	87	48	2355
9	Brazil	82	65	4624
10	Malaysia	81	56	4199

The country wise output in country level of HIV research is given in table-5. It could be noted that the Peoples India is occupies in first position (2359) compared to USA (634); UK (215) followed by South Africa and etc.

### Table-6: Languages wise of HIV research output.

S. No.	Language	Recs	TLCS	TGCS
1	English	2361	578	18773

The language wise output of HIV research is given in Table-6. It could be noted that English language only published 2361 publications.

Table-7: Top Ten Institutions wise of HIV research.

S. No.	Institution	Recs	TLCS	TGCS
1	Johns Hopkins Univ	125	70	4175
2	All India Inst Med Sci	124	66	3624
3	Indian Council Med Res	63	33	2104
4	Johns Hopkins Bloomberg Sch Publ Hlth	63	41	940
5	Univ Calif San Francisco	61	76	3478
6	Univ Manitoba	56	32	3148
7	London Sch Hyg & Trop Med	54	40	4321
8	Harvard Med Sch	52	18	1016
9	WHO	49	22	512
10	Univ Washington	48	52	4027

The Institution wise output in HIV research is given in Table-7. It could be noted that Johns Hopkins Univ occupying in first position (125); second All India Inst Med Sci (124) followed by Indian Council Med Res etc.

### CONCLUSION

It is due to the pivotal place of journal as a medium of scientific communication than any other form of publication; majority of the research output published in article in general. It could be deduced from the discussion that, during the study period the research paper publication trend is increasing. Highest percent of publication published in 2021. Very lowest percent of research paper published in the year 2017.

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