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Information needs and use of E-resources by the Govt.nursing students in the Digital Environment of Bhubaneswar,Odisha: An analysis

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Abstract

Like all other academic areas, nursing education has expanded both vertically and horizontally. There is a substantial body of literature in the chosen topic area, created using both traditional and modern techniques. Additionally, the methods used to produce knowledge in this particular profession have evolved, which has affected how nursing students throughout the world search for information. The current review's objective is to examine several factors related to nursing students' use of electronic resources for information seeking that have been researched by various researchers throughout the world over a range of time periods. The paper discusses a few key elements that are crucial for efficient access to, retrieval of, and transmission of electronic information. The study also analyses how nursing students' information-seeking behaviours have evolved as a result of the altered information environment, particularly in light of the increased use of electronic sources by academia throughout the world with a focus on nursing.

**Key words*:* Nursing Education, Information Seeking Behaviour, Electronic Resources.

Introduction

The study is concentrated on nursing students. The study's goal was to discover more about the information habits and demands of nursing students. The study focused on the information needs, information-seeking behaviours, information-searching techniques, etc. of nursing students. The status of nursing students in Odisha serves as the study's setting.

Objectives of the study

The following objectives have been developed based on the reviewed literature and problem statements:

1. To find out the e-resources of the students.
2. To find out, which is the most used e-resources of the students.
3. To find out what kind of e-resources the students used.
4. To find out the e-resources used by the male and female students.
5. To find out the e-resources used by the male in comparison to female students.

Methodology

The research approach used in the study is a crucial component. The framework of the study has been created using the examined material and the objectives. Information about the efficacy of the data analysis and measurement procedures is provided in this section. To achieve the study objectives through a quantitative manner in the form of various tables, graphs, and charts, the survey method study design has been used in the current study. Structured questionnaires and interview techniques have been used to gather the necessary data. Interviewing techniques have been used to gather data from users and library personnel regarding the profile study and to learn the key facts about the nursing programmes under consideration.

Literature review

An exhaustive search for published information on a certain topic or subject is a review of the literature. A survey of the literature helps a fresh researcher get the appropriate direction for his work and learn what has already been learned about the subject from earlier research.Any research project's main goal is to analyse and review the literature. It makes it possible to comprehend both past and present patterns in a particular subject of study. A human's quest of excellence and advancement in the areas of knowledge and experience is known as research. Every study expands on the results of earlier studies and paves the way for further research.

*Aniekwe, Ogwo and Ayolugbe***(2022)**performed research on the availability and use of ICT resources in management.The study's research design was a descriptive survey. The main objective of the study was to evaluate how well Enugu State academic libraries managed

students with special needs. According to the study's findings, employing ICT resources will assist students with special needs in keeping up with current affairs while also upgrading their pedagogical and academic research projects.

Devan(**2022**)conducted research on users' satisfaction with library materials and services. For this investigation, a case study was undertaken.The main objective of the study was to find out how often individuals visited the PIA library on the Mangalapuzha campus. The findings indicate that the majority of those surveyed were content with the library's hours and frequently visited to borrow books and periodicals.

Charoenkul & Chanchalor(**2021**) investigated how secondary school pupils behave when looking for information.Data were gathered through a self-reported survey of secondary school students in Thailand. The data was analysed using two-way ANOVA and multiple regression correlation. The main objective of the study was to ascertain if the Big Five Personality Traits (BFPT) had a substantial influence on ISB as well as whether BFPT in conjunction with gender, study programmes, or accomplishment had an impact on ISB. The outcome reveals some insights that may help in the creation of a better comprehension of how to raise a student's ISB.

Das & Mandal(**2021**) carried done a study on the information requirements of academics.A questionnaire survey was used as the study's methodology. The main objective of the study was to analyse characteristics of information needs when it comes to information searching by math professors and research researchers, as well as data collection methods.The findings demonstrate the importance of examining the quality of library infrastructure and services within the discipline, specifically for a deeper understanding of faculty and research scholastic information behaviour. Mathematics department scholars conducted regular faculty and regular research comparisons in terms of information needs and how people go about getting them on the campus of Burdwan.

Haritha & et.al.(**2020**) conducted a study on Pondicherry University students' information-seeking behaviours.The conduct of Pondicherry University students in searching out oral health information was studied using a questionnaire-based survey. The study's major objectives were to determine the significance of oral health for students and the function of oral health information available in libraries and information centres in Pondicherry.The findings

indicate that although Pondicherry University students were educated and aware about general health, they had little knowledge of oral health and did not take preventative steps to enhance their dental health.

Qian &Gui(2020) performed study on community users and older citizens' information needs online.The two most well-liked senior online forums in China were mined for a corpus of 14933 health-related messages for this study. The study's main objective was to ascertain whether consumers needed health information from an online senior community.The results show that the four areas into which the users were divided—ageing, dietary nutrition, physical activity, and mental health—all need to be addressed. They are just concerned about their physical health. The health data were in a steady general state. The researchers used a multi-perspective approach to identify the informational needs of Chinese elderly.

Data Analysis

The percentage of male students at government nursing schools ranges from nil in the instance of the GNM school of Nursing in Brajrajnagar, Kalahandi, and Sundergarh, to 13.72% in the case of the All India Institute of Medical Sciences, Bhubaneswar.The male to female student ratio was found to be approximately 1:14 overall across all twelve Government-run nursing schools, with percentages of 6.78% and 93.21%, respectively. For convenience of study and comparison, the findings have been presented as a Pie-diagram as in. The respondents' gender distribution has been collated and examined independently.

Gender wise Distribution of Respondents

Sl. No.	Name of Schools	Total Respondent	Male		Female	
			No	%	No	%
1	All India Institute of Medical Sciences College , Bhubaneswar,	51	7	13.72	44	86.27
2	College of Nursing,Berhampur	28	2	7.14	26	92.85
3	College of Nursing,Vimsar Burla	55	2	3.63	53	96.36
4	Gnm School of Nursing, Dhenkanal	39	1	2.56	38	97.43
5	Gnm School of Nursing,	17	0	0	17	100

Sl. No.	Name of Schools	Total Respondent	Male		Female	
			No	%	No	%
	Sundargarh					
6	GNM School of Nursing, Kalahandi	31	0	0	31	100
7	GNM School of Nursing ,Kandhamal	35	2	5.71	33	94.28
8	M K C G Medical College Hospital , Ganjam	66	6	9.09	60	90.90
9	Nurses Training Institute Ispat General Hospital, Rourkela	28	2	7.14	26	92.85
10	SCB Medical College Hospital Sch. of Nsg. , Cuttack	77	8	10.38	69	89.61
11	Utkal University school of Nursing and Allied Health Science, Jajpur chandikhol	19	1	5.26	18	94.73
12	General Nursing & Midwifery Training School(G N M T)Brajrajnagar	11	0	0	11	100
	Total	457	31	6.78	426	93.22
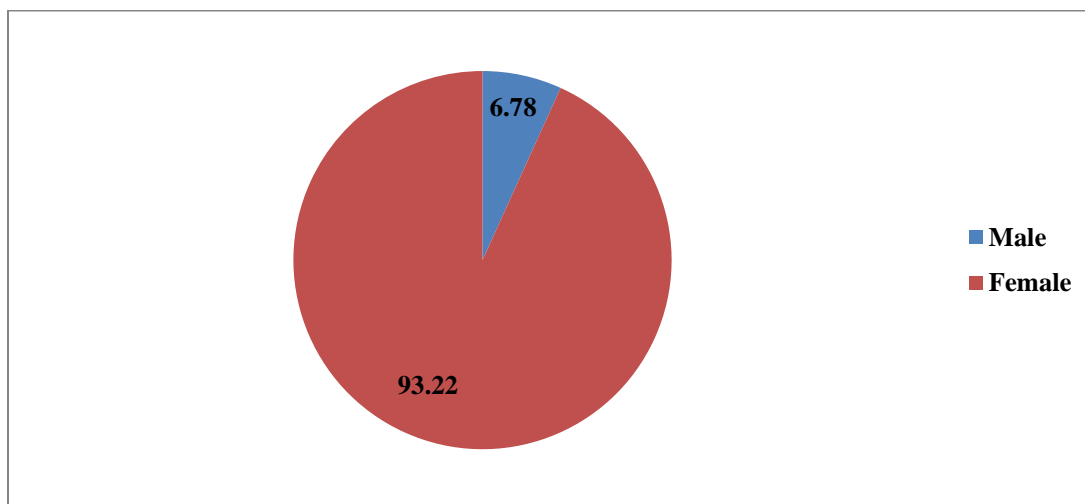
Gender wise Distribution of Respondents

In order to determine the age groupings of the pupils, the students' ages have been taken into consideration in the study. The population has been divided into four age groups for the purpose of data collection: 20–22, 23–25, 26–28, and 29–30.

Age wise Distribution of Respondents

Sl No	Number of Schools	Total Respondent	20-22 years		23-25 years		26-28 years		29-30 years	
			No	%	No	%	No	%	No	%
1	All India Institute of Medical Sciences College , Bhubaneswar,	51	26	50.98	12	23.52	7	13.72	6	11.76
2	College f Nursing,Berhampur	28	14	50	6	21.42	3	10.71	5	17.85
3	College of Nursing,Vimsar Burla	55	25	45.45	15	27.27	9	16.36	6	10.90
4	Gnm School of Nursing, Dhenkanal	39	12	30.76	15	38.46	9	23.07	3	7.69
5	Gnm School of Nursing, Sundargarh	17	6	35.29	5	29.41	3	17.64	3	17.64
6	GNM School Of Nursing, Kalahandi	31	13	41.93	6	19.35	9	29.03	3	9.67
7	GNM School of Nursing ,Kandhamal	35	14	40	10	28.57	8	22.85	3	8.57
8	M K C G Medical College Hospital , Ganjam	66	35	53.03	20	30.30	6	9.09	5	7.57
9	Nurses Training Institute Ispat General Hospital, Rourkela	28	14	50	6	21.42	3	10.71	5	17.85
10	SCB Medical College Hospital Sch. of Nsg. , Cuttack	77	36	46.75	24	31.16	12	15.58	5	6.49
11	Utkal university school of nursing and allied health science, Jajpur chandikhol	19	5	26.31	5	26.31	6	31.57	3	15.78
12	General Nursing & Midwifery Training School(G N M T)Brajrajnagar	11	3	27.27	2	18.18	1	9.09	5	45.45
	Total	457	203	44.42	126	27.57	76	16.63	52	11.38

E-resources are the primary information sources in the current digital environment. Here, the researcher lists 26 different databases and formats that are part of the questionnaire to look at

usage. On a 5-point rating system, where 5 represents "Always," 4 represents "Sometimes," 3 represents "Occasionally," 2 represents "Rarely," and 1 represents "Never," the respondents were asked to rank each particular electronic resource according to their preference of usage.Among the electronic resources were books, journals, medical records, bibliographical databases, guidelines, conference proceedings, and electronic books. information about e-drugs websites of specialised organisations, Websites for businesses, MEDLINE databases, medical software Therapy lit, Access pharmacy, M D consult, Science direct, Scopus, NML Gateway, Multimedia, Audio-Visual Aids, Medlars, IndMed, NML Gateway, CINHAL, J-gate portals, full-text drug information, and biological abstract.For the students attending the Government Nursing schools, the data so received have been gathered and examined. Further data segmentation based on male and female students has been made in both categories of nursing schools, and studies have been conducted to see whether the students' usage of online resources is impacted by their gender. The rank orders of the various E-resources have been determined based on the mean scores, percentage scores, and mean scores.

Use of E-resources: Government Nursing schools

Sl No.	E-resources	No of Respondent					Mean score	% score	Rank
		1	2	3	4	5			
1	E-books	28	46	68	160	155	3.80	76	1.5
2	E-journals	128	75	36	51	167	3.11	62.20	20
3	E-medical records	81	129	67	123	57	2.88	57.6	23
4	E-bibliographical databases	54	75	101	114	113	3.34	66.6	15
5	E-guidelines	50	48	109	137	113	3.47	69.4	9.5
6	E-conference proceedings	27	69	73	130	158	3.70	74	3
7	E-drug information	66	65	71	115	140	3.43	68.6	12

Sl No.	E-resources	No of Respondent					Mean score	% score	Rank
8	Websites of professional bodies	48	40	75	166	128	3.62	72.40	6
9	Commercial websites	56	56	88	127	130	3.47	69.40	9.5
10	Medline databases	52	84	123	118	80	3.19	63.80	17
11	Health software	109	80	46	128	94	3.03	60.60	21
12	Psyc Lit	79	50	72	60	196	3.53	70.6	8
13	Multimedia	193	44	70	64	86	2.57	51.40	25
14	Audio-visual aids	51	71	63	113	159	3.56	71.00	7
15	Medlars	80	46	90	108	133	3.36	67.20	13
16	MEDLINE	197	87	70	49	54	2.29	45.8	26
17	IndMed	68	55	86	192	56	3.24	64.80	16
18	Access pharmacy	103	78	54	127	95	3.07	57.40	24
19	MDConsult	50	86	130	117	74	3.17	63.4	18.5
20	Science Direct	32	43	64	163	155	3.80	76	1.5
21	Scopus	80	48	94	109	126	3.33	66.80	14
22	NML Gateway	46	67	73	79	192	3.66	73.20	4
23	CINHAL	55	59	88	129	126	3.46	69.2	11
24	Biological Abstracts	52	35	70	167	133	3.64	72.8	5
25	J-Gate portals	53	83	130	114	77	3.17	63.4	18.5
26	Drug information full text	118	74	53	125	87	2.97	59.40	22

According to the research, E-books and the Science Direct database are both the most often utilised electronic resources (76.0% each) by students at government nursing schools.This is followed by E-conference proceedings(74.0%),NML Gateway (73.20%), Biological abstracts (72.8%), Websites of professional bodies (72.40%), Audio-visual aids (71.00%), Psyc lit(70.6%),E-guidelines (69.40%) and Commercial websites (69.40%),CINHAL(69.2%),E-drug information(68.6%),Madlars(67.20%),Scopus(66.80%),E-bibliographical databases (66.6%), Drug information full text (59.40%),E-medical records (57.6%),Access pharmacy (57.40%), Multimedia (51.50%) and MEDLINE (45.8%).

Use of E-resources: Male

Sl No.	E-resources	No of Respondent					Mean score	% score	Rank
		1	2	3	4	5			
1	E-books	4	5	9	4	9	3.29	65.8	5.5
2	E-journals	5	9	4	6	7	3.03	60.6	20
3	E-medical records	2	6	16	2	5	3.06	61.2	16
4	E-bibliographical databases	9	3	2	7	10	3.19	63.8	10.5
5	E-guidelines	9	9	4	5	4	2.54	50.80	25
6	E-conference proceedings	5	6	2	7	11	3.41	68.20	2.5
7	E-drug information	10	3	2	5	11	3.12	62.40	12
8	Websites of professional bodies	3	8	9	6	5	3.06	61.2	16
9	Commercial websites	4	5	9	4	9	3.29	65.8	5.5
10	Medline databases	5	6	2	7	11	3.41	68.20	2.5
11	Health software	8	9	3	5	6	2.74	54.8	23
12	Psyc Lit	2	3	7	9	10	3.70	74.00	1

							Mean score	% score	Rank
13	Multimedia	8	2	5	7	9	3.22	64.40	8
14	Audio-visual aids	10	7	2	3	9	2.80	56.00	22
15	Medlars	9	3	2	7	10	3.19	63.8	10.5
16	MEDLINE	11	10	5	2	3	2.22	44.40	26
17	IndMed	3	8	9	6	5	3.06	61.2	16
18	Access pharmacy	2	7	11	4	7	3.22	64.51	8
19	MDConsult	3	8	9	6	5	3.06	61.2	16
20	Science Direct	8	2	5	7	9	3.22	64.40	8
21	Scopus	9	5	6	8	3	2.70	54.00	24
22	NML Gateway	4	10	8	2	7	2.93	58.60	21
23	CINHAL	3	8	9	6	5	3.06	61.2	16
24	Biological Abstracts	7	3	4	7	10	3.32	66.4	4
25	J-Gate portals	6	5	9	3	8	3.06	61.20	16
26	Drug information full text	7	5	6	4	9	3.09	61.80	13

Use of E-resources: Female

Sl No.	E-resources	No of Respondent					Mean score	% score	Rank
		1	2	3	4	5			
1	E-books	24	41	59	156	146	3.84	76.20	6.5
2	E-journals	123	66	32	45	160	3.12	62.4	20
3	E-medical records	79	123	51	121	52	2.86	57.20	24
4	E-bibliographical databases	45	72	99	107	103	3.35	67	15

5	E-guidelines	41	39	105	132	109	3.53	70.60	8
6	E-conference proceedings	22	63	71	123	147	3.72	74.4	1
7	E-drug information	56	62	69	110	129	3.45	69	12
8	Websites of professional bodies	45	32	66	160	123	3.66	73.20	3.5
9	Commercial websites	52	51	79	123	121	3.49	69.8	10.5
10	Medline databases	47	78	121	111	69	3.18	63.6	18
11	Health software	101	71	43	123	88	3.06	61.2	21
12	Psyc Lit	77	47	65	51	186	3.52	70.4	9
13	Multimedia	185	42	65	57	77	2.52	50.4	25
14	Audio-visual aids	41	64	61	110	150	3.61	72.20	5
15	Medlars	71	43	88	101	123	3.38	67.6	13.5
16	MEDLINE	186	77	65	47	51	2.29	45.80	26
17	IndMed	65	47	77	186	51	3.26	65.2	16
18	Access pharmacy	101	71	43	123	88	3.06	61.00	22
19	MDConsult	47	78	121	111	69	3.18	63.6	18
20	Science Direct	24	41	59	156	146	3.84	76.85	6.5
21	Scopus	71	43	88	101	123	3.38	67.6	13.5
22	NML Gateway	42	57	65	77	185	3.71	74.20	2
23	CINHAL	52	51	79	123	121	3.49	69.8	10.5
24	Biological Abstracts	45	32	66	160	123	3.66	73.20	3.5
25	J-Gate portals	47	78	121	111	69	3.18	63.6	18
26	Drug information full text	111	69	47	121	78	2.96	59.20	23

From the Table, the most used E-resources is being Psyc lit (74.0%) as perceived by the male students of the Government Nursing schools followed by Medline databases and E-conference processing's (68.20% both), Biological abstracts(66.4%), E-books and commercial websites (65.80% both) ,Multimedia, Access pharmacy and Science direct (64.4% all), E-bibliographical databases and Medlars (63.80% both), E-drug information (62.4%), Drug information full text (61.8%), E-medical records, Websites of professional bodies, IndMed, MD consult, SINHAL and J-gate portals (61.20% all), E-journals(60.6%),NML Gateway (58.60%),Audio- visual aid (56.0%),Health software(54.8%),Scopus (54.0%), E-guidelines (50.80%) and MEDLINE (44.4%).From the table, basing on the perception of the female students, the corresponding percentages or the e-resources on the above sequence are 70.4%,70.6%,74.4%,73.2%,71.2%,69.8%,50.40%,61.0%,71.2%,67.0%,67.6%,69.0%,59.2%,57.2%,73.2%,65.2%,63.6%,69.8%,63.6%,62.4%,74.2%,72.2%,61.2%,67.6%,70.6% and 45.8%.
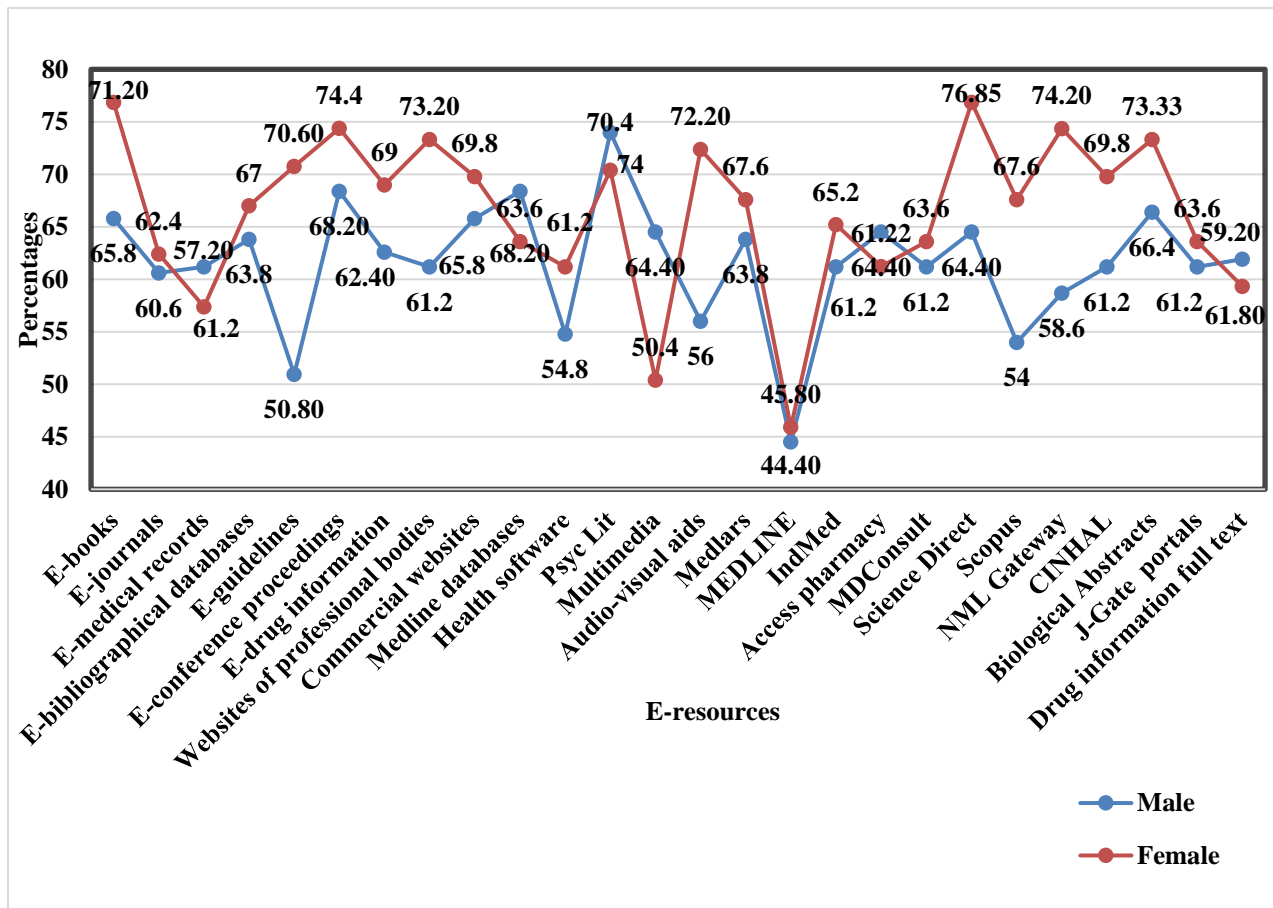
Conclusion

The current study examines how students from nursing schools in Odisha use the internet to find the information they need. The majority of pupils were discovered to regularly use the library. Additionally, it was discovered that the bulk of students used to visit the library for 1-2 hours at a time.Students in nursing programmes typically visit libraries to prepare for classes, consult reference materials, read textbooks and newspapers, and make photocopies of books. Thesis, Handbooks, Magazines, Journals, and Reference Books are the most often utilised print information sources by students.The most frequently utilised electronic resources include e-books, electronic conference proceedings, Science Direct, NML Gateway, biological abstracts, and CINHAL.Students typically use the topic names from other specified syllabuses, the publisher's name, and discussing a key term with the library assistant while looking up material in print sources.They utilised crawling search engines like MSN SEARCH, AltaVista, Google, and ASK to search for information on the internet. Information overload, a lack of computers with internet access, connection issues with the internet, and librarians' lack of expertise in using electronic resources are the most often encountered obstacles to gathering information.

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