

Medical Information Needs and Information-Seeking Behaviour among Postgraduate Medical Professionals Attending PGIM Library Orientation Programmes: A Cross-Sectional Study in Sri Lanka

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ABSTRACT

Postgraduate medical professionals need current and reliable information for patient care, postgraduate study, research, teaching and continuing professional development. This cross-sectional study assessed medical information needs and information-seeking behaviour among participants in Postgraduate Institute of Medicine (PGIM) Library Orientation Programmes held from July to December 2025. 142 eligible participants were invited, and 127 valid responses were analysed, with a response rate of 89.4%. Descriptive statistics, reliability analysis, Spearman correlations and an exploratory Kruskal-Wallis test were used. Respondents reported high information needs across clinical and academic activities. Journals, books, subject experts, online databases and electronic resources were highly valued. The main barriers were difficulty locating journal articles, lack of time, and limited awareness of electronic databases. Overall, 89.8% were satisfied or strongly satisfied with PGIM Library resources. The findings show that high satisfaction can coexist with practical searching and access difficulties. Follow-up training, article-location support, and remote-access guidance are recommended. Because the study was limited to professionals attending PGIM Library Orientation Programmes and relied on self-reported responses, the findings should be interpreted as institutional evidence for this participant group rather than as national estimates of all postgraduate medical professionals in Sri Lanka.

Keywords: Medical information needs; Information-seeking behaviour; Postgraduate medical education; Medical libraries; Information literacy; Sri Lanka

INTRODUCTION

Current medical practice and postgraduate training depend on timely access to reliable information. Clinicians seek information for diagnosis, treatment and patient management, while postgraduate medical professionals also need information for examinations, research, teaching and continuing professional development. Information seeking begins when existing knowledge is not enough to complete a task or make a decision, and it involves identifying the need, selecting suitable sources, searching, evaluating the information and applying it. This process is influenced by the task, working environment, available resources and individual motivation (Case & Given, 2016; Wilson, 1999). Evidence-based medicine also requires health professionals to identify clinical questions, search appropriate sources, assess the evidence and use it together with clinical expertise and patient needs (Evidence-Based Medicine Working Group, 1992; Sackett et al., 1996; Straus et al., 2019). Medical libraries support this process by providing access to books, journals and databases, as well as literature-searching assistance, reference services, citation guidance and user education. Haynes (2006) further highlighted the importance of helping health professionals reach evidence that can be applied more easily in practice.

Previous studies at PGIM have examined ClinicalKey use, library user education, reference-management software, and the use of PubMed and MeSH (Wadasinghe & Dilhani, 2022, 2023; Wadasinghe, 2025; Munasinghe et al., 2026). However, these studies focused on particular resources or skills rather than examining information needs, reasons for seeking information, preferred sources and channels, barriers and satisfaction

together. Therefore, the present study examined the medical information needs and information-seeking behaviour of participants in the 2025 PGIM Library Orientation Programmes.

LITERATURE REVIEW

Information-seeking behaviour is shaped by professional responsibilities, work tasks, previous knowledge and access to suitable resources. Earlier models describe searching as a process that may involve starting, browsing, following references and monitoring information, while uncertainty can occur at different stages of the search (Ellis, 1989; Kuhlthau, 1991). Professional information needs also vary according to work roles and tasks (Leckie et al., 1996). In medicine, common needs relate to diagnosis, treatment, prognosis, medicines and patient management. However, clinicians may leave questions unanswered because of limited time, difficulty locating information and weak searching skills (Coumou & Meijman, 2006; Daei et al., 2020; Davies, 2007; Ely et al., 1999, 2002, 2005; Gorman, 1995; Gorman & Helfand, 1995). These challenges remain even with wider digital access. Health professionals use sources such as colleagues, journals, textbooks, websites and PubMed, but their choices vary according to professional role, experience and working conditions (Daei et al., 2020; Tan et al., 2023; Lee et al., 2024).

Health professionals use both formal sources, such as journals, textbooks, guidelines and databases, and informal sources, including colleagues and subject experts. Their choice of source is influenced by reliability, relevance, speed and ease of access (Bennett et al., 2004; Daei et al., 2020). Studies from lower- and middle-income countries show that access to reliable digital information is still uneven. Health professionals may depend on general search engines, books or colleagues when database access, internet connectivity or information-literacy skills are limited (Andualet et al., 2013; Razak et al., 2022; Gama et al., 2024). Medical libraries can help address these difficulties by supporting clinical decisions, patient care, teaching and research (Marshall, 1992; Marshall et al., 2013; Weightman & Williamson, 2005). Librarian support in database searching and information literacy can also improve users' ability to locate and use relevant evidence (Wu et al., 2023; ZareiVenovel et al., 2022).

Sri Lankan studies have reported information needs related to diagnosis, treatment and medicines, together with difficulties in accessing current information and using electronic resources effectively (Hettige et al., 2022; Marasinghe et al., 2025). At PGIM, previous research has examined ClinicalKey use, library user education, reference-management software and PubMed/MeSH searching (Wadasinghe & Dilhani, 2022, 2023; Wadasinghe, 2025; Munasinghe et al., 2026). These studies focused mainly on particular resources or skills and did not examine information needs, reasons for seeking information, preferred sources and channels, barriers and satisfaction together within one group. The present study addressed this gap by examining participants in PGIM Library Orientation Programmes conducted from July to December 2025, with the aim of providing evidence to improve PGIM Library services and support.

Significance of the Study

This study provides recent institutional evidence on the information needs and information-seeking behaviour of postgraduate medical professionals who use PGIM Library services. It identifies the information they consider important, the reasons for searching, the sources and access channels they value, and the barriers they experience. The findings can guide decisions on database promotion, journal-article support, remote access, user education and follow-up training. The study is also relevant to postgraduate education because the reported needs are closely linked to patient care, clinical decisions, continuing professional development, research and teaching.

Research Problem

PGIM Library had no recent study that examined the main components of medical information seeking together among participants in its library orientation programmes. Users' information needs, reasons for searching, preferred sources and channels, barriers, and satisfaction were only partly understood. Without this evidence, library services could be planned based on assumptions rather than users' reported needs and experiences. The

study examined the medical information needs and information-seeking behaviour of participants in the 2025 PGIM Library Orientation Programmes.

Research Questions

- RQ1: What are the professional designation, postgraduate programme, speciality and work- setting profiles of the respondents?
- RQ2: What types of medical information are considered important for daily practice and research?
- RQ3: What are the main reasons for seeking medical information?
- RQ4: How do respondents rate the relevance and reliability of different medical information sources?
- RQ5: How useful are different information channels for medical information seeking?
- RQ6: What barriers are experienced when searching for medical information?
- RQ7: How satisfied are respondents with PGIM Library medical information resources?
- RQ8: What relationships exist among information needs, reasons for seeking information, source ratings, channel usefulness, overall barrier scores and satisfaction?
- RQ9: What suggestions do respondents provide for improving medical information access and library support?

Research Objectives

To examine the medical information needs and information-seeking behaviour of postgraduate medical professionals who participated in the 2025 PGIM Library Orientation Programmes.

Specific Objectives

- SO1: To describe the professional designation, postgraduate programme, speciality and work- setting profiles of the respondents.
- SO2: To identify the main types of medical information needed for daily practice, postgraduate learning and research.
- SO3: To examine the reasons for seeking medical information.
- SO4: To assess the perceived relevance and reliability of medical information sources.
- SO5: To evaluate the usefulness of different information channels.
- SO6: To identify barriers experienced when searching for medical information.
- SO7: To assess satisfaction with PGIM Library medical information resources.
- SO8: To examine relationships among the main summary scores and explore differences across professional-designation and postgraduate-programme groups.
- SO9: To analyse respondents' suggestions for improving medical information access and PGIM Library support services.

METHODOLOGY

Study design, setting and population

A quantitative cross-sectional survey was used to describe information needs, preferred sources, information channels, barriers and satisfaction during a defined period. This design was appropriate because the study examined existing patterns and associations without introducing an intervention (Creswell & Creswell, 2018). As data were collected at one period in time, the design does not establish changes in information-seeking behaviour over time or the long-term effects of library orientation and subsequent training. The study was conducted through PGIM Library Orientation Programmes held from July to December 2025, and the accessible population consisted of medical professionals who attended these sessions.

Sampling method and sample size

All 142 eligible professionals who attended the orientation sessions were invited to participate. A total of 127 usable questionnaires were included, giving a response rate of 89.4%. As the entire accessible population was invited, no separate sample was drawn. However, participation was restricted to professionals who attended PGIM Library Orientation Programmes. This may introduce selection bias because orientation attendees may differ from non-attendees in their interest in, awareness of, or engagement with library resources. The findings therefore describe this PGIM orientation group and should not be interpreted as national estimates for all postgraduate medical professionals in Sri Lanka.

Data collection instrument and measures

Data were collected using a structured questionnaire administered through Google Forms. It covered professional and postgraduate programme details, medical information needs, reasons for seeking information, information sources, access channels, barriers, satisfaction with PGIM Library resources and suggestions for improvement. The measures were based on respondents' self-reports; objective measures such as database-use logs, search-performance assessments and library-access records were not collected in this study.

Data analysis

The collected data were checked, coded, and analysed using R. Frequencies, percentages, means, and standard deviations were used to describe the responses. Internal consistency was assessed using Cronbach's alpha (Cronbach, 1951). Summary scores were calculated as the average of related items for each respondent. Because 12 group comparisons were made, a Bonferroni-adjusted significance level of $p < .0042$ was used.

RESULTS

Respondent profile

The final analysis included 127 respondents. Medical Officers were the largest professional group, followed by Registrars and Pre-Registrars. MD trainees formed the largest programme group, followed by MSc and Diploma trainees.

Table 1: Respondent profile with frequencies and percentages (n=127)

Variable	Category	n	%
Professional designation	Medical Officers	58	45.7
	Registrar	41	32.3
	Pre-Registrar	23	18.1
	Senior Registrar	5	3.9
PGIM programme	MD	64	50.4

Variable	Category	n	%
Speciality	MSc	42	33.1
	Diploma	21	16.5
	Family Medicine	23	18.1
	Community Medicine	22	17.3
	Human Nutrition	21	16.5
	Medical Administration	11	8.7
	Radiology	11	8.7
	Geriatric Medicine	9	7.1
	Health Sector Disaster Management	9	7.1
	Clinical Nutrition	4	3.1
	Medical Microbiology	4	3.1
	Medical Virology	3	2.4
	Venereology	3	2.4
	Biomedical Informatics	2	1.6
	Medical Education	2	1.6
	Psychiatry	1	0.8
	Paediatrics	1	0.8
	Medicine	1	0.8

Medical information needs

Respondents showed high medical information needs, especially for treatment and drug therapy (89.0%). Information on diagnosis, disease descriptions, treatment efficacy, and medical research findings (87.4% each) was also highly important, showing the need for information to support both clinical practice and academic work.

Table 2: Importance of medical information in daily practice or research (N = 127)

Medical information item	Mean	SD	1 - Not important n (%)	2 - Somewhat important n (%)	3 - Important n (%)	4 - Very important n (%)	5 - Extremely important n (%)	4 + 5 Very/Extremely important n (%)
Clinical epidemiology	4.25	0.83	0 (0.0)	6 (4.7)	13 (10.2)	51 (40.2)	57 (44.9)	108 (85.0)
Diagnosis / Aetiology	4.40	0.78	1 (0.8)	1 (0.8)	14 (11.0)	41 (32.3)	70 (55.1)	111 (87.4)
Diagnostic procedures	4.25	0.84	0 (0.0)	4 (3.1)	21 (16.5)	41 (32.3)	61 (48.0)	102 (80.3)
Differential diagnosis	4.24	0.85	1 (0.8)	3 (2.4)	19 (15.0)	45 (35.4)	59 (46.5)	104 (81.9)
Disease descriptions	4.31	0.79	0 (0.0)	5 (3.9)	11 (8.7)	50 (39.4)	61 (48.0)	111 (87.4)

Medical information item	Mean	SD	1 - Not important n (%)	2 - Somewhat important n (%)	3 - Important n (%)	4 - Very important n (%)	5 - Extremely important n (%)	4 + 5 Very/Extremely important n (%)
Disease complications	4.37	0.77	0 (0.0)	3 (2.4)	14 (11.0)	43 (33.9)	67 (52.8)	110 (86.6)
Disease prognosis	4.27	0.79	1 (0.8)	1 (0.8)	18 (14.2)	50 (39.4)	57 (44.9)	107 (84.3)
Treatment and drug therapy	4.40	0.70	0 (0.0)	1 (0.8)	13 (10.2)	47 (37.0)	66 (52.0)	113 (89.0)
Adverse effects of treatment	4.38	0.77	0 (0.0)	2 (1.6)	16 (12.6)	41 (32.3)	68 (53.5)	109 (85.8)
Treatment efficacy	4.35	0.70	0 (0.0)	0 (0.0)	16 (12.6)	50 (39.4)	61 (48.0)	111 (87.4)
Emergency protocols	4.28	0.83	0 (0.0)	3 (2.4)	21 (16.5)	40 (31.5)	63 (49.6)	103 (81.1)
Patient records	4.28	0.84	2 (1.6)	2 (1.6)	14 (11.0)	49 (38.6)	60 (47.2)	109 (85.8)
Medical research findings	4.44	0.73	0 (0.0)	1 (0.8)	15 (11.8)	38 (29.9)	73 (57.5)	111 (87.4)
Medical equipment	4.10	0.90	2 (1.6)	4 (3.1)	21 (16.5)	52 (40.9)	48 (37.8)	100 (78.7)
Laboratory tests and results	4.26	0.82	1 (0.8)	3 (2.4)	15 (11.8)	51 (40.2)	57 (44.9)	108 (85.0)

Note. The scale ranged from 1 = not important to 5 = extremely important. Means and standard deviations were calculated from responses on the five-point scale.

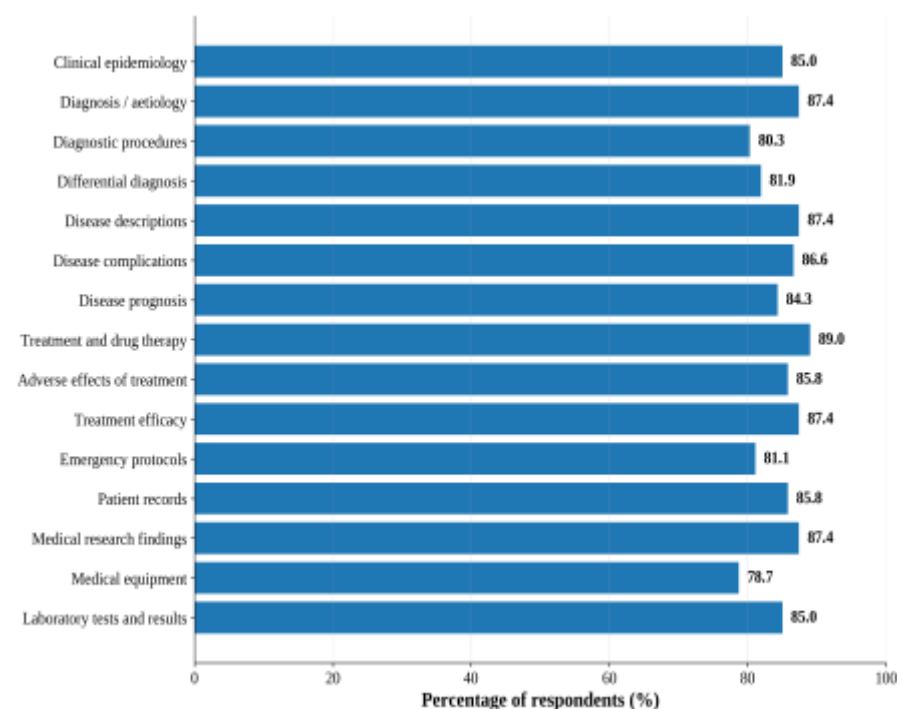


Figure 1. High-importance ratings for medical information needs

Note. Values represent the percentage of respondents selecting 4 = very important or 5 = extremely important.

Reasons for seeking medical information

Respondents mainly searched for information to improve clinical decisions (93.7%), support continuing professional development (91.3%), provide patient care (89.8%), and assist with research and teaching (89.0% each). This shows that information seeking supports both clinical practice and academic activities.

Table 3. Reasons for seeking medical information (N = 127)

Reason	Mean	SD	1 - Not important n (%)	2 - Somewhat important n (%)	3 - Important n (%)	4 - Very important n (%)	5 - Extremely important n (%)	4+5 Very/Extremely n (%)
For patient care	4.49	0.72	0 (0.0)	2 (1.6)	11 (8.7)	37 (29.1)	77 (60.6)	114 (89.8)
Improving clinical decisions	4.51	0.62	0 (0.0)	0 (0.0)	8 (6.3)	46 (36.2)	73 (57.5)	119 (93.7)
Addressing a specific patient problem	4.43	0.76	0 (0.0)	2 (1.6)	15 (11.8)	36 (28.3)	74 (58.3)	110 (86.6)
Personal learning	4.24	0.76	0 (0.0)	1 (0.8)	22 (17.3)	50 (39.4)	54 (42.5)	104 (81.9)
Continuing professional development (CPD)	4.51	0.65	0 (0.0)	0 (0.0)	11 (8.7)	40 (31.5)	76 (59.8)	116 (91.3)
General awareness	4.31	0.77	0 (0.0)	2 (1.6)	18 (14.2)	45 (35.4)	62 (48.8)	107 (84.3)
Research	4.46	0.78	1 (0.8)	2 (1.6)	11 (8.7)	36 (28.3)	77 (60.6)	113 (89.0)
Teaching	4.42	0.73	0 (0.0)	2 (1.6)	12 (9.4)	44 (34.6)	69 (54.3)	113 (89.0)
Answering questions from colleagues	4.26	0.77	0 (0.0)	2 (1.6)	19 (15.0)	50 (39.4)	56 (44.1)	106 (83.5)
Diagnosis, illness and treatment choices	4.38	0.74	0 (0.0)	1 (0.8)	17 (13.4)	42 (33.1)	67 (52.8)	109 (85.8)
New developments in the speciality	4.43	0.78	1 (0.8)	1 (0.8)	14 (11.0)	37 (29.1)	74 (58.3)	111 (87.4)
Drug information	4.38	0.76	0 (0.0)	2 (1.6)	15 (11.8)	43 (33.9)	67 (52.8)	110 (86.6)
New medical equipment and technologies	4.16	0.92	1 (0.8)	6 (4.7)	21 (16.5)	43 (33.9)	56 (44.1)	99 (78.0)
Government regulations and health-related laws	4.24	0.83	0 (0.0)	3 (2.4)	23 (18.1)	41 (32.3)	60 (47.2)	101 (79.5)
Office organisation and management	4.13	0.95	2 (1.6)	6 (4.7)	20 (15.7)	44 (34.6)	55 (43.3)	99 (78.0)

Note. The scale ranged from 1 = not important to 5 = extremely important. Means and standard deviations were calculated from responses on the five-point scale.

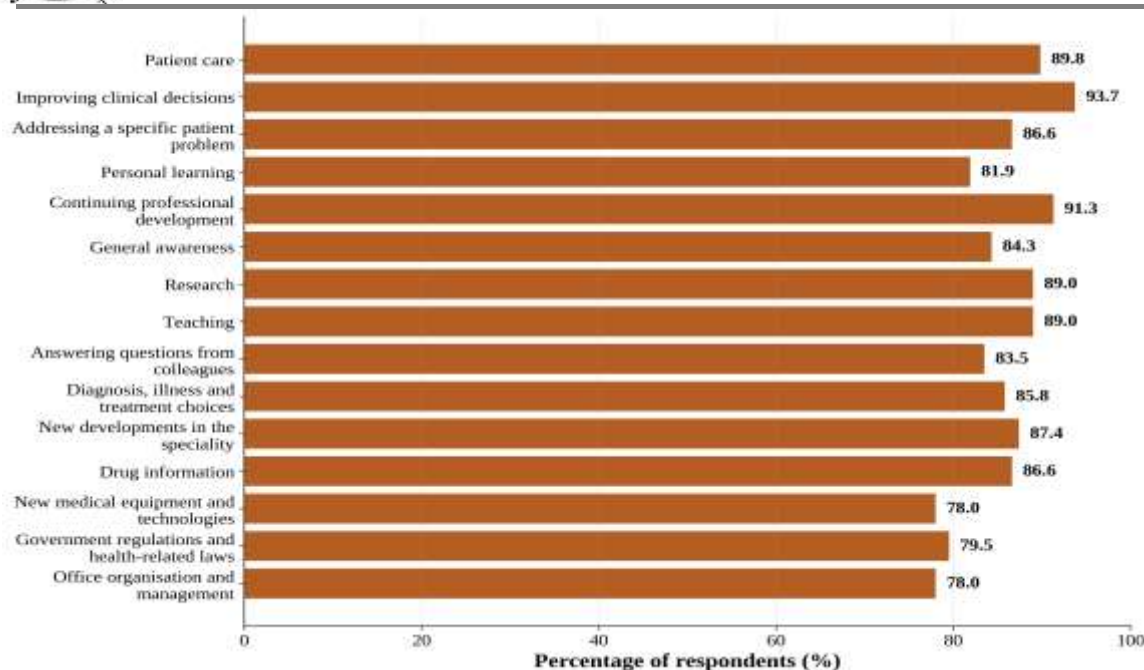


Figure 2. High-importance ratings for reasons for seeking medical information

Note. Values represent the percentage of respondents selecting 4 = very important or 5 = extremely important.

Relevance and reliability of information sources

Respondents preferred scholarly and professional information sources. Subject experts (96.1%) received the highest rating, followed by books and journals (93.7% each). Electronic resources, online databases and conferences were also highly valued, while medical or pharmaceutical representatives received the lowest rating.

Table 4. Relevance and reliability of medical information sources (N = 127)

Source	Mean	SD	1 - Least n (%)	2 - Somewhat n (%)	3 - Neutral n (%)	4 - Moderately n (%)	5 - Most n (%)	4 + 5 Moderately/Most n (%)
Books	4.52	0.66	0 (0.0)	2 (1.6)	6 (4.7)	43 (33.9)	76 (59.8)	119 (93.7)
Journals	4.60	0.63	0 (0.0)	1 (0.8)	7 (5.5)	34 (26.8)	85 (66.9)	119 (93.7)
Discussion with colleagues	3.94	0.84	1 (0.8)	7 (5.5)	21 (16.5)	67 (52.8)	31 (24.4)	98 (77.2)
Consultation with subject experts	4.54	0.63	0 (0.0)	2 (1.6)	3 (2.4)	47 (37.0)	75 (59.1)	122 (96.1)
Conferences and workshops	4.44	0.67	0 (0.0)	2 (1.6)	7 (5.5)	51 (40.2)	67 (52.8)	118 (92.9)
Medical librarian	4.14	0.90	1 (0.8)	7 (5.5)	16 (12.6)	52 (40.9)	51 (40.2)	103 (81.1)
Professional associations and societies	4.30	0.71	0 (0.0)	3 (2.4)	9 (7.1)	62 (48.8)	53 (41.7)	115 (90.6)
Online databases	4.43	0.75	1 (0.8)	2 (1.6)	8 (6.3)	46 (36.2)	70 (55.1)	116 (91.3)
Electronic resources	4.42	0.64	0 (0.0)	0 (0.0)	10 (7.9)	54 (42.5)	63 (49.6)	117 (92.1)
Medical or pharmaceutical representatives	3.26	1.27	17 (13.4)	17 (13.4)	30 (23.6)	42 (33.1)	21 (16.5)	63 (49.6)

Note. The scale ranged from 1 = least relevant and reliable to 5 = most relevant and reliable.

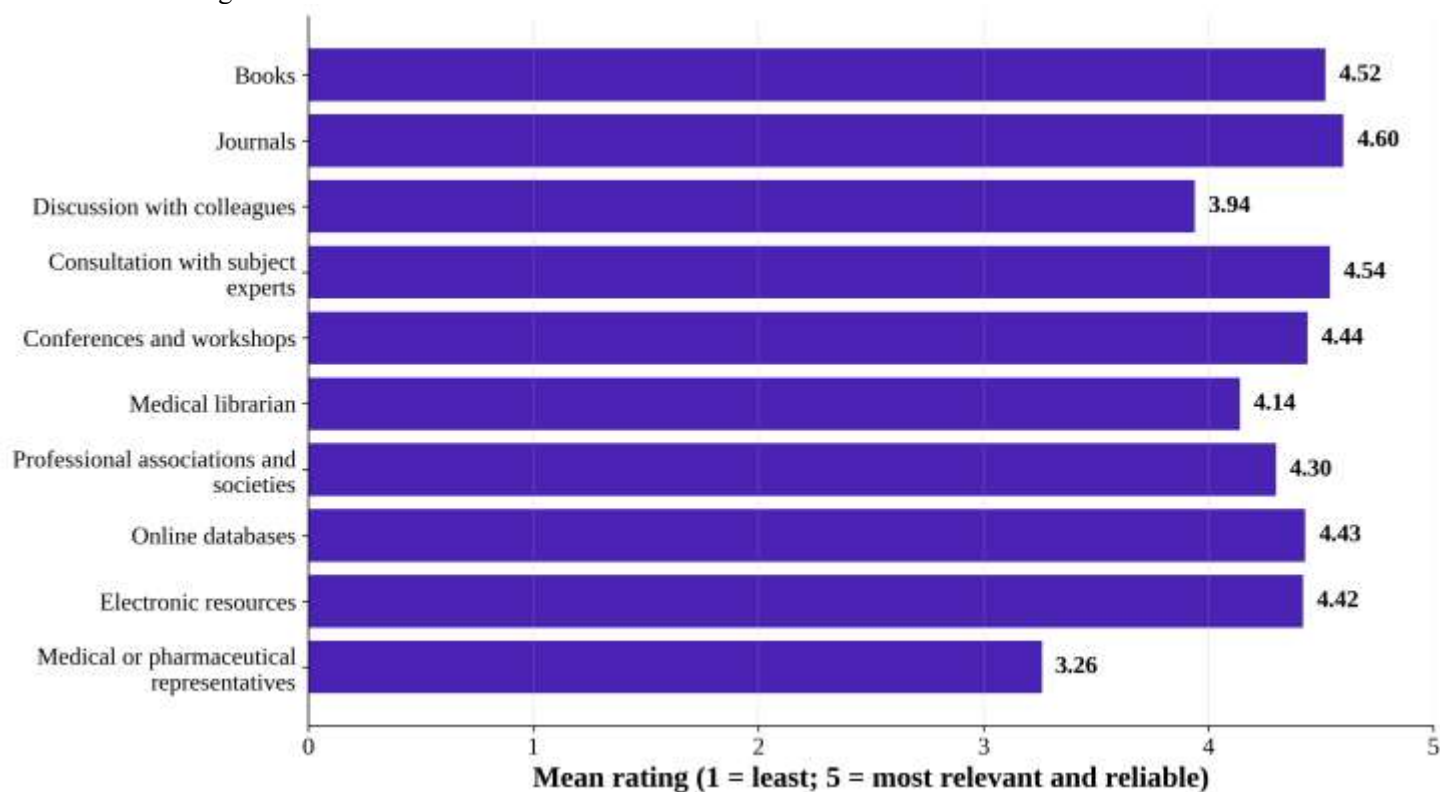


Figure 3. Mean relevance and reliability ratings of information sources

Note. Scale: 1 = least relevant and reliable; 5 = most relevant and reliable.

Usefulness of information channels

The most useful information channels were internet search engines, the library, and seminars or conferences (76.4% each), followed by online medical databases (74.8%). Subject specialists and colleagues were moderately useful, while telephone, social media, and YouTube received lower ratings. These results show perceived usefulness, not frequency of use.

Table 5. Usefulness of information channels (N = 127)

Information channel	Mean	SD	1 - Not useful n (%)	2 - Of limited use n (%)	3 - Moderately useful n (%)	4 - Useful n (%)	5 - Highly useful n (%)	4 + 5 Useful/Highly useful n (%)
Internet search engines	4.12	1.09	6 (4.7)	4 (3.1)	20 (15.7)	36 (28.3)	61 (48.0)	97 (76.4)
Telephone	3.10	1.05	9 (7.1)	27 (21.3)	43 (33.9)	38 (29.9)	10 (7.9)	48 (37.8)
Colleagues	3.54	0.92	2 (1.6)	14 (11.0)	42 (33.1)	51 (40.2)	18 (14.2)	69 (54.3)
Personal consultation with subject specialists	3.69	1.16	8 (6.3)	11 (8.7)	29 (22.8)	43 (33.9)	36 (28.3)	79 (62.2)
Library	3.99	1.08	6 (4.7)	7 (5.5)	17 (13.4)	49 (38.6)	48 (37.8)	97 (76.4)
Seminars, conferences and symposia	4.03	1.02	6 (4.7)	2 (1.6)	22 (17.3)	49 (38.6)	48 (37.8)	97 (76.4)
Social media platforms	3.13	1.18	14 (11.0)	24 (18.9)	35 (27.6)	39 (30.7)	15 (11.8)	54 (42.5)

YouTube	3.47	1.01	3 (2.4)	20 (15.7)	38 (29.9)	46 (36.2)	20 (15.7)	66 (52.0)
Online medical databases	4.06	1.07	5 (3.9)	6 (4.7)	21 (16.5)	40 (31.5)	55 (43.3)	95 (74.8)

Note. The scale ranged from 1 = not useful to 5 = highly useful.

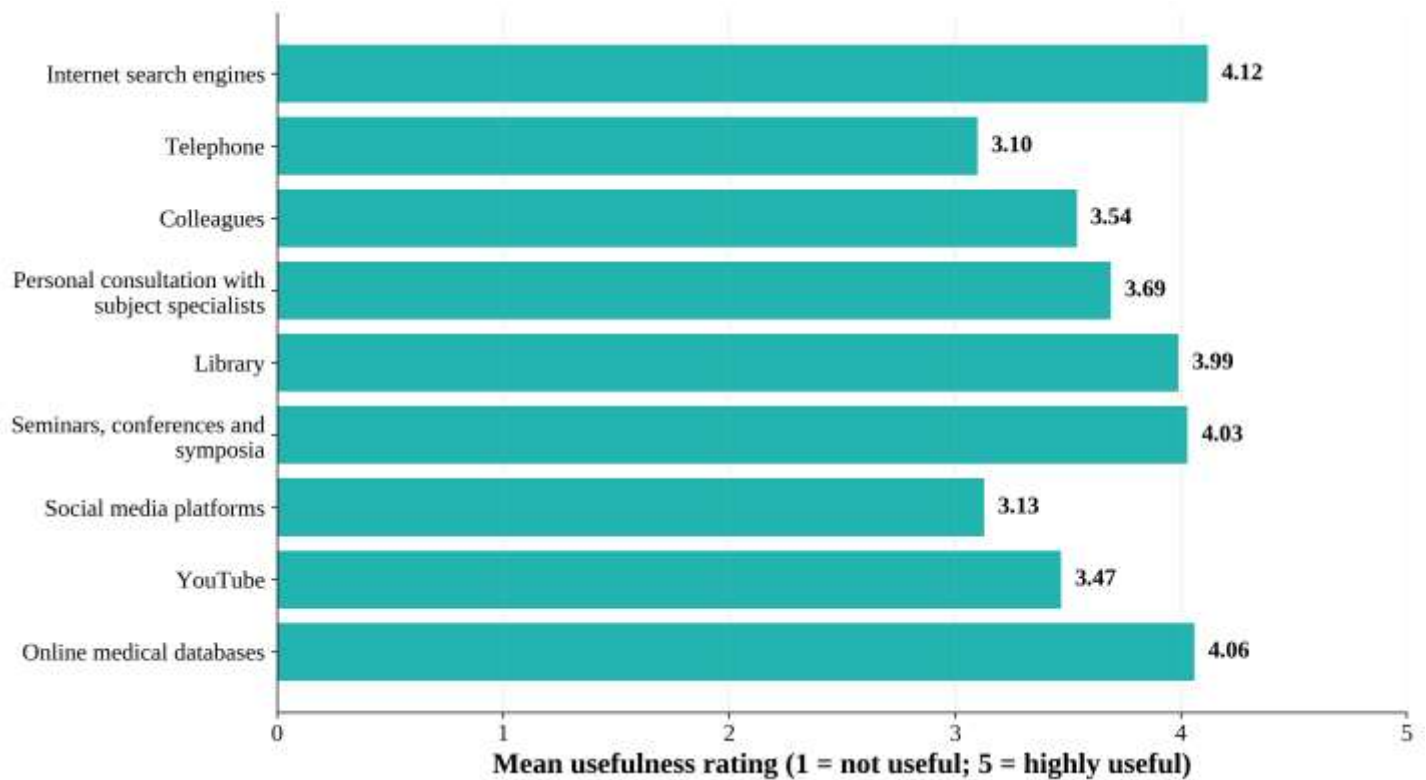


Figure 4. Mean usefulness ratings of information channels

Note. Scale: 1 = not useful; 5 = highly useful.

Barriers to medical information seeking

The main barriers to information seeking were difficulty locating journal articles (85.8%), lack of time (81.9%), limited awareness of electronic databases and slow internet connections (79.5% each), and limited knowledge of keyword searching (74.0%). These findings show that respondents faced both access-related and searching-related difficulties.

Table 6. Barriers encountered when searching for medical information (N = 127)

Barrier	Disagree n (%)	Agree n (%)	Proportion agreeing
Lack of internet search skills	48 (37.8)	79 (62.2)	0.62
Inadequate information about available databases	41 (32.3)	86 (67.7)	0.68
Lack of current materials	39 (30.7)	88 (69.3)	0.69
Problems encountered in the library	62 (48.8)	65 (51.2)	0.51
Inadequate sources of medical information	56 (44.1)	71 (55.9)	0.56
Limited awareness of available electronic databases	26 (20.5)	101 (79.5)	0.80
Outdated information	36 (28.3)	91 (71.7)	0.72
Difficulty locating journal articles	18 (14.2)	109 (85.8)	0.86
Lack of time	23 (18.1)	104 (81.9)	0.82
Lack of ICT knowledge	36 (28.3)	91 (71.7)	0.72
Slow internet speed	26 (20.5)	101 (79.5)	0.80

Limited knowledge of keyword use	33 (26.0)	94 (74.0)	0.74
Difficulty seeking, obtaining and evaluating information	44 (34.6)	83 (65.4)	0.65
Lack of interest or perceived urgency	65 (51.2)	62 (48.8)	0.49

Note. Items were coded as 0 = disagree and 1 = agree. The final column represents the proportion of respondents who agreed with each barrier statement.

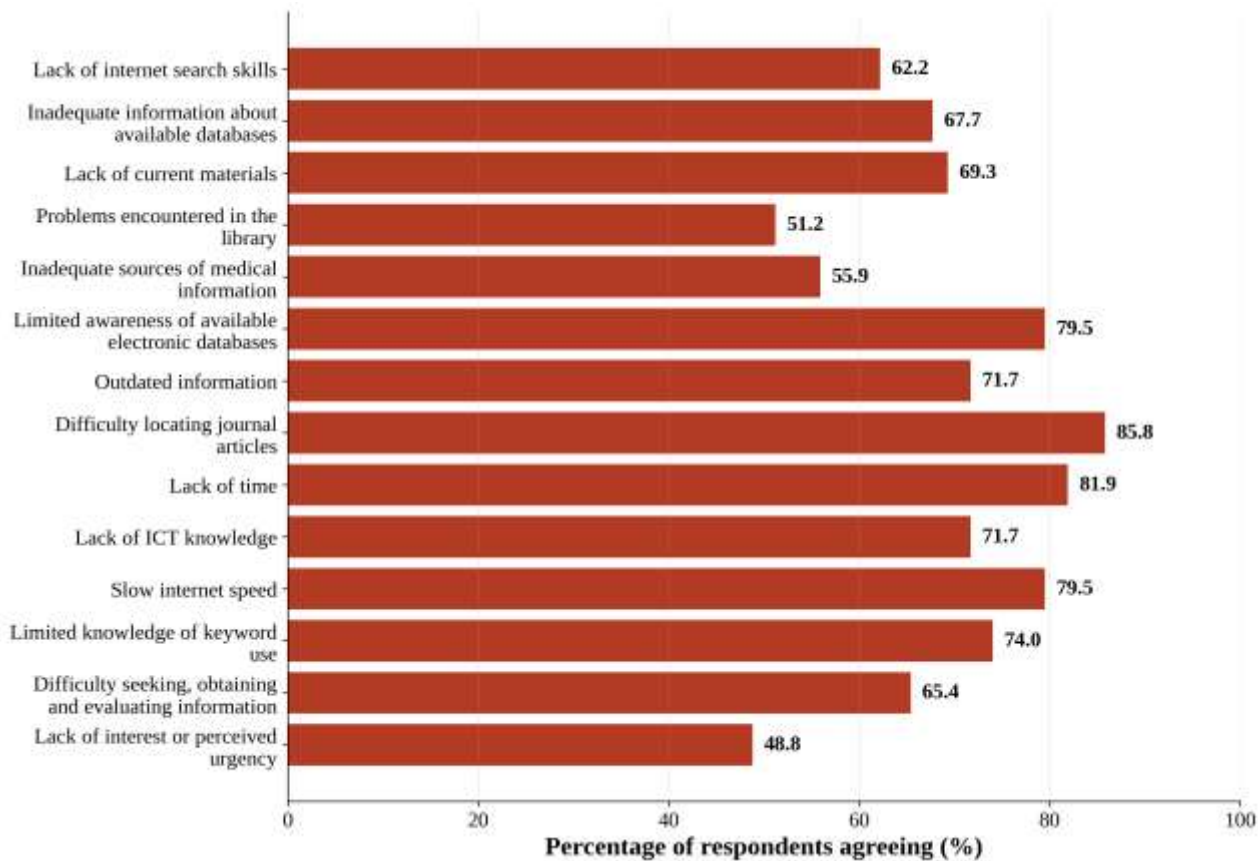


Figure 5. Reported barriers to medical information seeking

Note. Values represent the percentage of respondents who agreed with each barrier statement.

Satisfaction with PGIM Library resources

Most respondents were satisfied with PGIM Library medical information resources, with 89.8% reporting satisfaction or strong satisfaction. However, users still experienced specific difficulties such as article retrieval, remote access, slow internet, and limited time for searching.

Table 7. Satisfaction with PGIM Library medical information resources

Satisfaction level	n	%
4 - Satisfied	67	52.8
5 - Strongly satisfied	47	37.0
3 - Neutral	8	6.3
2 - Dissatisfied	4	3.1
1 - Strongly dissatisfied	1	0.8

Note. The scale ranged from 1 = strongly dissatisfied to 5 = strongly satisfied.

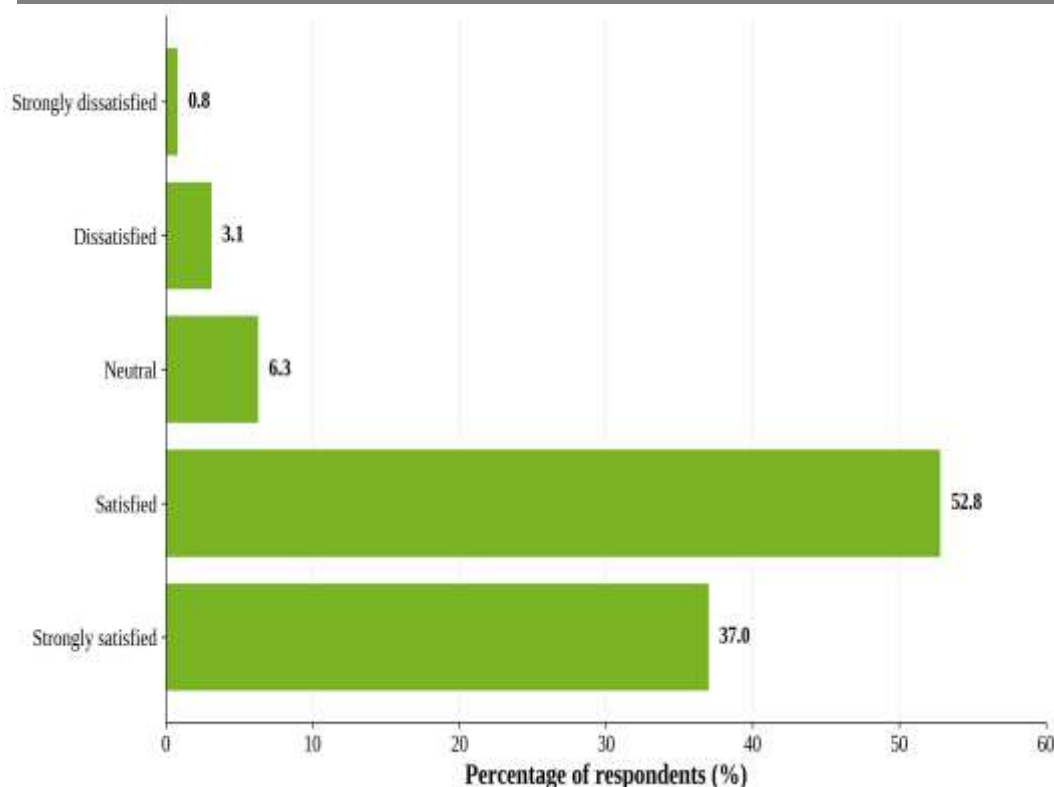


Figure 6. Satisfaction with PGIM Library medical information resources

Note. Percentages are based on 127 valid responses.

Reliability, correlations and group comparisons

The five multi-item measures showed good to very high internal consistency, with Cronbach's alpha values ranging from 0.825 to 0.960. The highest reliability was found for reasons for seeking information (0.960) and medical information needs (0.953). The barrier score was based on 14 agree-or-disagree items and represents the proportion of barriers reported.

Table 8. Reliability and summary-score results

Measure	Items	Cronbach's alpha	Average score	SD	Minimum	Maximum
Medical information need importance	15	0.953	4.31	0.62	2.47	5.00
Reasons for seeking medical information	15	0.960	4.36	0.62	2.13	5.00
Source relevance and reliability	10	0.837	4.26	0.50	2.80	5.00
Information channel usefulness	9	0.903	3.68	0.80	1.33	5.00
Overall barrier score	14	0.825	0.69	0.25	0.00	1.00
Satisfaction	1	Not applicable	4.22	0.77	1.00	5.00

There were statistically significant positive relationships among information needs, reasons for searching, source ratings, channel usefulness, and satisfaction. The strongest relationship was between information needs and reasons for searching (Spearman's $\rho = 0.72$, $p < .001$). The barrier score was not significantly related to any of the other measures.

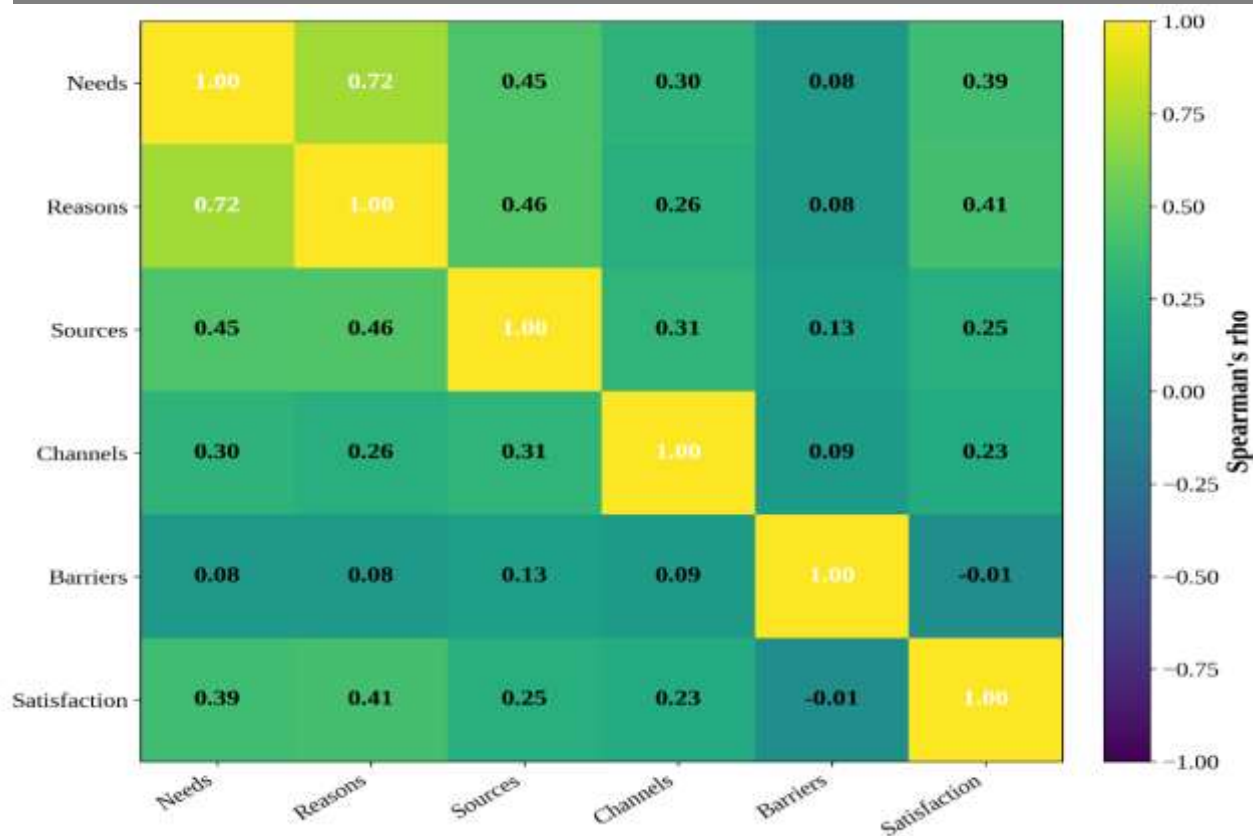


Table 9. Spearman correlations among the main scores, with two-sided p values

Measure	Needs	Reasons	Sources	Channels	Barriers	Satisfaction
Needs	1.00	0.72 (<.001)	0.45 (<.001)	0.30 (<.001)	0.08 (.371)	0.39 (<.001)
Reasons	0.72 (<.001)	1.00	0.46 (<.001)	0.26 (.003)	0.08 (.371)	0.41 (<.001)
Sources	0.45 (<.001)	0.46 (<.001)	1.00	0.31 (<.001)	0.13 (.145)	0.25 (.005)
Channels	0.30 (<.001)	0.26 (.003)	0.31 (<.001)	1.00	0.09 (.314)	0.23 (.009)
Barriers	0.08 (.371)	0.08 (.371)	0.13 (.145)	0.09 (.314)	1.00	-0.01 (.911)
Satisfaction	0.39 (<.001)	0.41 (<.001)	0.25 (.005)	0.23 (.009)	-0.01 (.911)	1.00

Table 10. Exploratory Kruskal–Wallis comparisons across respondent groups

Grouping variable	Outcome measure	H (df)	p	Descriptive average scores
Professional designation	Medical information need importance	5.54 (3)	0.136	Senior Registrar=3.93; Registrar=4.39; Medical Officers=4.37; Pre-Registrar=4.09
	Reasons for seeking medical information	1.75 (3)	0.627	Senior Registrar=4.11; Registrar=4.41; Medical Officers=4.38; Pre-Registrar=4.27
	Source relevance and reliability	1.63 (3)	0.652	Senior Registrar=4.08; Registrar=4.21; Medical Officers=4.27; Pre-Registrar=4.35
	Information channel usefulness	2.05 (3)	0.562	Senior Registrar=3.49; Registrar=3.64; Medical Officers=3.73; Pre-Registrar=3.67

Grouping variable	Outcome measure	H (df)	p	Descriptive average scores
	Overall barrier score	2.55 (3)	0.465	Senior Registrar=0.69; Registrar=0.66; Medical Officers=0.73; Pre-Registrar=0.65
	Satisfaction	4.98 (3)	0.173	Senior Registrar=3.6; Registrar=4.24; Medical Officers=4.31; Pre-Registrar=4.09
PGIM programme	Medical information need importance	0.85 (2)	0.653	MD=4.27; MSc=4.39; Diploma=4.25
	Reasons for seeking medical information	1.53 (2)	0.464	MD=4.35; MSc=4.33; Diploma=4.44
	Source relevance and reliability	2.72 (2)	0.257	MD=4.22; MSc=4.23; Diploma=4.42
	Information channel usefulness	2.81 (2)	0.245	MD=3.7; MSc=3.53; Diploma=3.93
	Overall barrier score	7.17 (2)	0.028	MD=0.65; MSc=0.68; Diploma=0.81
	Satisfaction	2.38 (2)	0.304	MD=4.16; MSc=4.19; Diploma=4.48

The Kruskal–Wallis test was used to determine whether information-seeking scores differed across professional and PGIM programme groups. Most comparisons showed no statistically significant differences. Diploma participants appeared to report more barriers, but this difference was not statistically significant after adjustment for multiple comparisons.

Open-ended suggestions

Twenty respondents gave useful suggestions for improving library services. The most common request was for more digital resources and continued access (45%), followed by more training, longer orientation and continuing support (35%). Other suggestions included extended opening hours and better study facilities (15%) and improved support for users outside Colombo (5%).

Table 11. Descriptive grouping of substantive open-ended suggestions (n = 20)

Theme	n	%	Main focus of suggestions
Digital resources and sustained access	9	45.0	More e-journals, e-books, current editions, evidence tools and wider or continuing access
Training, orientation and continuing support	7	35.0	Repeated search training, greater awareness, longer orientation and continuing professional education
Extended opening hours	3	15.0	Later closing, weekend/holiday access
Remote access and communication	1	5.0	More practical support for users working outside Colombo
Total	20	100.0	

DISCUSSION

PGIM orientation participants required information for both clinical practice and academic work, particularly for diagnosis, treatment, patient care, professional development and research. This is consistent with earlier studies showing that clinicians seek information to support patient care, manage uncertainty and maintain professional knowledge (Daei et al., 2020; Davies, 2007; Ely et al., 1999; Gorman, 1995). Their information-seeking activities were also linked to professional responsibilities such as clinical decision-making, research and teaching (Leckie et al., 1996).

Participants placed greater value on scholarly and professional sources, including journals, books, subject experts, online databases and electronic resources. However, several practical difficulties remained, especially locating journal articles, finding sufficient time to search, identifying suitable databases and dealing with slow internet connections. Similar problems have been reported in previous studies of health professionals (Coumou & Meijman, 2006; Ely et al., 2002; Gama et al., 2024; Gorman & Helfand, 1995; Razak et al., 2022). Previous PGIM studies have also highlighted the need for continued guidance in database searching and user education (Munasinghe et al., 2026; Wadasinghe & Dilhani, 2023).

Although overall satisfaction with PGIM Library resources was high, respondents still reported specific difficulties with searching and access. Earlier PGIM research similarly found that users valued resources such as ClinicalKey while continuing to need guidance and greater awareness of available services (Wadasinghe & Dilhani, 2022). The coexistence of high satisfaction and reported barriers should be interpreted carefully because satisfaction reflects users' perceptions and does not directly measure actual database use or searching proficiency. Overall, the findings support and extend earlier Sri Lankan research on medical information seeking and library use (Marasinghe et al., 2025; Munasinghe et al., 2026; Wadasinghe, 2025; Wadasinghe & Dilhani, 2022, 2023) and provide a practical basis for further improving PGIM Library services.

Implications

PGIM Library should strengthen support for journal article retrieval and medical database searching through continued librarian-led training in PubMed, MeSH, Boolean searching, clinical search filters, open-access resources and document delivery (Munasinghe et al., 2026; Wadasinghe & Dilhani, 2023; Wu et al., 2023; ZareiVenovel et al., 2022). Regular hands-on workshops, database tutorials and personalised research support should be incorporated into continuing professional development activities where feasible. Support should also match the stage of postgraduate training, from basic database guidance for new trainees to advanced searching and reference management for those working on research and theses. Linking library instruction with e-journal and e-book searching, research methods, presentations and thesis work would make the support more relevant, while reference-management guidance remains important for academic writing and citation work (Wadasinghe, 2025). Clear remote-access guidance, timely technical support and reliable infrastructure are also important for improving access to medical information (World Health Organisation, 2021), particularly for users working away from Colombo.

Limitations and Future Research

The study was limited to 127 participants who attended PGIM Library Orientation Programmes. Therefore, the findings may not fully represent postgraduate medical professionals who did not attend these programmes. The cross-sectional design and reliance on self-reported data are additional limitations. Future studies should include larger and more diverse samples from different specialties, institutions and geographical areas, and use longitudinal and objective measures of information-seeking behaviour.

CONCLUSION

The respondents reported strong information needs related to clinical care, postgraduate study and research. They mainly sought information for clinical decision-making, continuing professional development, patient care, research and teaching. Journals, books, subject experts, online databases and electronic resources were among

the most valued sources. Despite the high level of satisfaction with PGIM Library resources, respondents still faced difficulties in locating journal articles, finding enough time to search and identifying suitable databases. The findings highlight the need for practical support in locating articles, training in database and keyword searching, clear guidance on remote access and follow-up instruction linked to postgraduate activities. Because the study was limited to participants in the 2025 PGIM Library Orientation Programmes, used a cross-sectional design and relied mainly on self-reported data, the findings should be interpreted as evidence from this institutional participant group rather than as representative of all postgraduate medical professionals in Sri Lanka. Future studies using broader samples, longitudinal follow-up and objective measures of database use and search performance would strengthen the evidence base for medical library services.

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