Research Report

VISITS TO A MALAYALAM WEBSITE ON MENTAL HEALTH: ANALYSIS OF SEVEN YEARS' DATA

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ABSTRACT

Background: Online articles are an important opportunity for educating the public on mental health topics. No previous study has examined the performance of a mental health website with content in an Indian language. **Methods:** Data on user acquisition and behaviour were obtained through Google Analytics for the first seven years (February 2014 – February 2021) of a Malayalam website that features 93 articles on mental health. Major Google Analytics variables assessed were the numbers of new and returning visitors, bounce rate, number and duration of sessions, pageviews, and unique pageviews. Relevant variables were compared for the first and seventh years. **Results:** In the seven years, there were 82,137 sessions, of which 21.81% were from returning visitors, 64.03% were from India, and 35.54% were from the state of Kerala, India. The mean session duration was 2 minutes 18 seconds. User engagement dropped over the study period. While in the first year, 77.20% of the visitors accessed the website from desktops, in the seventh year, 72.03% used mobile phones. Though social media was the major source of visitors (36.26%), the proportion of visitors has declined. Over the study period, the specific social media sites that send the most traffic and the browsers the visitors predominantly use have changed. Most keywords that brought users from search engines were about love and sex. The most popular articles were also about love and sex. **Conclusion:** Periodic and long-term monitoring using Google Analytics can provide insights that owners of mental health websites can exploit to attract more visitors and improve user engagement. Older websites may need optimization to utilize the growing visits from mobile phones.

Keywords: Mental health website, usage analysis, Google Analytics

INTRODUCTION

Educating the public on mental health matters has a vital role in promoting behaviours that boost mental health, reducing stigma, early detection of mental illnesses, and encouraging simple and practical interventions in the community itself.[1] In the digital era, websites have become a major resource for the public looking for health information[2] because they can search, understand, and gauge information that fits their specific needs.[3] As for any health intervention, periodic assessment of performance and acceptability is important in health information websites. By analyzing the traffic and user behaviour on a health website, we

can gain insights into whether the intended audiencesufficiently accesses the site and what type of content is more attractive to its users. Knowledge about the technical aspects – for example, what devices and browsers the visitors use – will help ensure that the site is adequately accessible to a broader population. Assessing the sources of website traffic, such as search engines and social media, will provide clues to where all our efforts and resources have to be invested to increase awareness about the site. Also, assessing the time trends in user behaviour and the technologies involved will help appropriately modify our promotion efforts and the site's content and technical aspects and consistently obtain the best results.

Many studies have assessed the performance of health information websites. Yadav et al. studied the performance of the India against the Cancer website of the Indian Council on Medical Research. They found that the number of visits increased by 282.9% between two consecutive years.[4] The study revealed many visitor preferences that provided the authors a direction to improve the website's content. Kirk et al. researched the usage data of a website intended to educate nurses about genetics. They uncovered many areas they have to focus on to improve the site's effectiveness, including increasing the conversion of new visitors to returning ones and increasing the time the visitors spend on the site.[5]

A few studies are available on mental health information websites, too. Song et al. assessed the usage patterns of a Canadian mental health portal and found that the visitors spend less than the average time on some of the most important self-help tools on the site.[6] They also noticed that the users to whom personal email invitation was sent spend more time on the site and viewed more pages. King et al. assessed the performance of a website on male suicide. They found 307 outbound clicks to websites of helping organizations and 802 downloads of psychoeducation material, leading the authors to conclude that its visitors engaged well with the website.[7]

However, searches in PubMed and Google Scholar with appropriate keywords did not reveal any study that evaluated the performance of any website on mental health in an Indian language. Hence, this study aimed to detect, in a website that publishes articles on mental health in Malayalam, a language spoken in the state of Kerala,

1. the number of visitors, their engagement with the site, the kind of devices and browsers they use, and how all these changed over seven years (2014-2021),
2. the geographical location of the visitors,
3. the sources that drive traffic to the website and how they changed over seven years,
4. the keywords that bring most search engine traffic, and
5. the most popular articles.

MATERIAL AND METHODS

The website

The author has been writing Malayalam articles on mental health for various Malayalam periodicals since 2011. In 2014, he started posting all his articles on a website (www.mind.in). The first article was published at the site on 9th February 2014, and nine articles written before that date were added in the next 16 days. Currently, the site has 93 articles. Most of the topics were assigned by the publications that requested the article, while the author himself chose some.

The website is promoted through its Facebook page named ''Manasikarogyam'' owned by the Kerala state branch of Indian Psychiatric Society, the author's Facebook account, the website's Flipboard account, by incorporating the website address in the author's affiliation included in the articles printed in various publications, by mentioning the website address in the author's visiting card given to his patients and their caregivers, and on a notice displayed in the waiting area of his outpatient clinic.

The site is built with the Joomla content management system and uses the EasyBlog extension for Joomla to prepare and publish the articles.

Google Analytics

Google Analytics (GA), a free tool, is widely used to track and report website traffic. Though it is mainly designed to garner insights from a marketing perspective, it has been widely used in health research to monitor the performance of health-related websites. Examples include studies of websites on genetics,[5] vaccine safety,[8] pediatric surgery,[9] and osteoporosis and fractures.[10] Indian researchers have used it to assess a website on maternal-child health[11] and the 'India Against Cancer' website mentioned earlier.[4] GA has also been used to evaluate websites on mental health

topics: examples include the Song et al.[6] and King et al.[7] studies mentioned earlier, a study by Jeong et al. on another Canadian mental health portal,[12] and a study on a sexual health website.[13]

Some of the terms used in GA reports and this paper are defined below:

- New visitor: GA records a visitor as 'new' the first time a website is accessed from a device that does not contain GA's cookie for the website.

- Returning visitor: Someone who revisits the site from the same device within two years of the first visit.

- Session: A group of user interactions at the website that take place within a given time frame. A session starts when a user visits a page on a site and ends after 30 minutes of inactivity or when the person leaves the site.

- Pageviews: The number of pages accessed by all users.

- Unique pageviews: This differs from the pageviews mentioned above in that if a user visits a page more than once, here it will be counted as one visit only.

- Bounce rate: Percentage of visitors who left the site after viewing only one page.

- Average page load time: The average time taken for a page to load, from initiation of the pageview (e.g., click on a page link) to completion of the load in the browser.

Data collection

BIGSHOT Google Analytics extension for Joomla was installed on the site. This extension inserts a tracking tag that collects various forms of data related to user behaviour as soon as someone starts using the website. The information thus collected can be viewed by the website administrator by logging in to the GA website. Data on specific variables for any given period can also be downloaded in various formats, including as an Excel file.

Performance indicators studied

For this analysis, information was extracted for the seven years from 9th February 2014 (the date on which the first article was posted on the site) till 8th February 2021, on the following key performance indicators:

- Number of new and returning visitors
- Number of sessions, pageviews per session, and mean session duration
- Countries and Indian states from which the visits originated
- Type of devices used for access (e.g., desktop, mobile)
- Traffic source (e.g., a direct visit by typing the website address in a browser, from a search engine)
- Keywords that brought visitors from search engines
- Pageviews and unique pageviews each article received, and the mean time spent on each article

Ethical aspects

GA provides information in the form of aggregated data, without any personally identifiable information about the site visitors. Hence there are no ethical concerns in using it for research.[5,14] As this study was based only on the data from GA and did not involve direct assessment of human participants, no ethics committee approval was sought.

Statistical analysis

This is a descriptive cross-sectional study, and the aggregate data obtained from GA is being provided. Categorical variables are summarized as numbers and percentage, while continuous variables are summarized as mean. (GA does not provide the standard deviation or individual data that we can use for an analysis.)

RESULTS

In the seven years studied, there were a total of 82,137 sessions, of which 64,219 (78.19%) were from new visitors, and the remaining were from returning visitors. The total number of pageviews in the period was 1,45,780. While the mean bounce rate, pageviews per session, and session duration for the period were 73.51%, 1.77, and 2 minutes 18 seconds, respectively, the values for the new visitors were 75.72%, 1.66, and 1 minute 55 seconds, respectively, and those for the returning visitors were 65.62%, 2.19, and 3 minutes 40 seconds, respectively. While 61,541 sessions lasted <10 seconds, 1,955 lasted 31-60 seconds, 4,544 lasted 61-180 seconds, 6,121 lasted 181-600 seconds, 5,218 lasted 601-1800 seconds, and only 1,101 lasted more than 30 minutes.

Table 1 reveals that most parameters of user engagement went down with the passage of years, the sole exception being a slight improvement in the number of pages viewed per session.

Table 1 – Changes in key indicators of user engagement, from the first to the seventh year

	First year	Seventh year	% Change
New visitors	19,342	3,551	-81.64%
Sessions	24,469	4,603	-81.19%
Page views	44,758	8,784	-80.37%
Pages/Session	1.83	1.91	4.33%
Mean session duration	00:02:41	00:01:42	-36.55%
Bounce rate	69.46%	71.02%	2.24%

In the entire study period, the number and percentage of new users who accessed the website with desktop, mobile, and tablet were 30,918 (48.14%), 31,915 (49.70%), and 1,386 (2.16%), respectively. While the corresponding values for the first year were 14,946 (77.20%), 4,027 (20.80%), and 388 (2.00%), respectively, those for the seventh year were 909 (25.58%), 2,560 (72.03%), and 85 (2.39%), respectively.

The six most commonly used browsers (with the number of users in brackets) in the first year were Chrome (11,676), Firefox (3,464), Internet Explorer (943), Opera Mini (943), Android Browser (918), and Safari (in-app) (489). In the seventh year, the picture changed to Chrome (2,196), Safari (370), Android Webview (313), Samsung Internet (193), and Safari (in-app) (121).

After excluding those countries, the visitors from which had a mean session duration of < 5 seconds, it was found that the site has been accessed from 96 countries. Most visitors accessed the site from India (Table 2). The 52,595 sessions from India constituted 64.03% of the total sessions on the site. Most other countries in the top ten list are from the middle east. Though some visitors were from Western countries, the bounce rate is higher, and the mean session duration is seconds.

After excluding those states and union territories from which the visitors had a mean session duration of < 5 seconds, it was found that the site has been viewed from 28 Indian states and union territories. The state with the most number of visitors was Kerala, and it was followed by the two neighbouring states of Tamil Nadu and Karnataka (Table 3). The 29,191 sessions from Kerala constituted 35.54% of the total sessions on the site. Kerala had the lowest bounce rate and the highest page views per session and mean session duration, too.

Regarding the sources of the visitors, for the entire period, social media sent the maximum number of visitors (36.26%), and direct visits came a close second (33.94%, Table 4). Compared to the first year, in the seventh year, while the proportion of direct visitors and visitors from search engines and other sites increased, the proportion from social media reduced considerably.

A closer look at the social media sources of traffic, for the entire period and the first and seventh years separately, reveals Facebook to be much ahead of all others (Table 5). YouTube, which was not in the top 6 in the first year, reached position 4 in the seventh year. On the other hand, Google+, which enjoyed the third position in the first year, has ceased to exist. In the entire seven-year period, visitors sent by Twitter spent the most time on the site and viewed more pages per session. In the seventh year, though visitors from Instagram came second in terms of the number of sessions and pageviews, the mean session duration is the lowest in the group for them, at a meagre of 27 seconds. The search engine keywords that brought > 25 visitors to the site are listed in Table 6 (n=11). The majority of them are related to love and sex. Those who reached the site using the broad keyword "മനശാസ്ത്രം" (psychology) had a much higher mean session duration.

The list of ten articles that attracted the most visitors says that articles on love, marriage, and sex are the most popular (Table 7). At the same time, articles on cognitive development, psychology of happiness, and personality improvement also made it to the list. A look at pageviews and unique pageviews reveals that some visitors reread the articles. While eight of the articles were published in 2014, one each was published in 2015 and 2016. For all except one of the articles in the list, the topic was the brainchild of the publication and not the author.

The average page load time, provided by GA after assessing 16,902 page loadings, was 12.59 seconds.

Table 2 – Top ten countries from which visitors accessed the website

	Country	New visitors	Sessions	Bounce rate	Pageviews / Session	Mean session duration
	India	38,830	52,595	69.89%	1.94	00:02:46
2	United States	6,253	6,929	84.12%	1.31	00:00:56
3	United Arab Emirates	3,846	4,756	76.20%	1.69	00:02:08
4	Saudi Arabia	2,429	3,036	74.87%	1.68	00:02:29
5	Qatar	1,114	1,406	74.54%	1.70	00:02:16
6	United Kingdom	1,086	1,191	83.46%	1.34	00:00:44
7	Oman	790	997	77.73%	1.82	00:02:09
8	Kuwait	672	892	76.46%	1.58	00:02:10
9	Germany	706	789	84.92%	1.25	00:00:36
10	Bahrain	653	784	79.72%	1.56	00:02:08

Table 3 – Top five Indian states from which visitors accessed the website

	State	New visitors	Sessions	Bounce Rate	Pageviews/ Session	Mean Session Duration
1	Kerala	21,313	29,191	67.21%	2.07	00:02:55
2	Karnataka	6,782	9,051	73.75%	1.75	00:02:34
3	Tamil Nadu	2,757	3,738	71.00%	1.86	00:02:47
4	Maharashtra	2,241	2,787	74.96%	1.67	00:02:05
5	Delhi	1,893	2,350	70.34%	1.84	00:02:26

Table 4 – Proportion of visitors from different traffic sources in the entire period, first year, and seventh year

	Entire period	First year	Seventh year	Change
Direct visit	21,796 (33.94%)	5,845 (30.19%)	1,966 (55.32%)	-66.36%
Search engines	12,516 (19.49%)	1,037 (5.36%)	768 (21.61%)	-25.94%
Social media*	23,286 (36.26%)	11,505 (59.42%)	456 (12.83%)	-96.04%
Links from other sites	6,597 (10.27%)	959 (4.95%)	364 (10.24%)	-62.04%
Others	24 (0.04%)	15 (0.07%)	0	-100.00%

* See Table 5 for detailed breakup and time trends

Table 5 – Top six social media sources in the entire period, first year, and seventh year.*

Rank	Site	No. of sessions (%)**	Pageviews (%)**	Mean session duration	Pages/Session
Entire study period					
1	Facebook	27,731 (94.62%)	46,540 (93.34%)	00:02:17	1.68
2	Twitter	727 (2.48%)	2,059 (4.13%)	00:04:57	2.83
3	Instagram	287 (0.98%)	394 (0.79%)	00:00:16	1.37
4	Google+	211 (0.72%)	419 (0.84%)	00:03:16	1.99
5	Blogger	110 (0.38%)	113 (0.23%)	00:00:03	1.03
6	VKontakte	84 (0.29%)	104 (0.21%)	00:00:52	1.24
First year					
1	Facebook	14,232 (97.53%)	24,684 (96.52%)	00:02:33	1.73
2	Twitter	248 (1.70%)	730 (2.85%)	00:05:03	2.94
3	Google+	102 (0.70%)	142 (0.56%)	00:00:58	1.39
4	LinkedIn	3 (0.02%)	4 (0.02%)	00:00:05	1.33
5	Quora	2 (0.01%)	3 (0.01%)	00:00:07	1.50
6	VKontakte	2 (0.01%)	2 (0.01%)	00:00:00	1.00
Seventh year					
1	Facebook	316 (59.62%)	652 (65.66%)	00:01:53	2.06
2	Instagram	126 (23.77%)	216 (21.75%)	00:00:27	1.71
3	VKontakte	33 (6.23%)	35 (3.52%)	00:01:20	1.06
4	YouTube	31 (5.85%)	49 (4.93%)	00:00:43	1.58
5	Twitter	15 (2.83%)	28 (2.82%)	00:01:52	1.87
6	LinkedIn	9 (1.70%)	13 (1.31%)	00:03:16	1.44

* About specific social media sites, Google Analytics provides information about the sessions only and not about New visitors ** Percentage of referrals from all social media sites

DISCUSSION

This is the first study to assess the long-term trends in the traffic sources, user details, and user behaviour of a mental health website in an Indian language. Its major findings are that the total number of visitors, the number of visits they make, and the time they spend on the site have decreased, though there is a mild increase in the number of pages they view in a session. Over the seven years, there are major changes in the kinds of devices and browsers most used and external, especially the social media, sources of visitors. The public is more interested in articles on love, sex, and marriage. All these findings have implications for mental health professionals, departments, institutions, and organizations that manage health information websites for the public.

Table 6 – Search engine keywords that brought >25 visitors to the site

	Keyword	New Visitors	Sessions	Bounce Rate	Pageviews /Session	Mean Session Duration
1	പ്രണയം (Love)	363	444	72.07%	1.56	00:02:22
2	പ്രണയം വിരഹം (Love separation)	325	420	87.38%	1.21	00:00:55
3	സ്ത്രീകളുടെ മനശാസ്ത്രം (Psychology of women)	268	325	88.92%	1.22	00:01:09
4	സ്ത്രീ മനശാസ്ത്രം (Women psychology)	198	245	82.04%	1.29	00:01:21
5	നല്ല വ്യക്തിത്വം (Good personality)	100	139	79.86%	1.42	00:02:11
6	പ്രണയത്തിന്റെ മനശാസ്ത്രം (Psychology of love)	98	144	85.42%	1.31	00:01:22
7	സ്വവർഗാനുരാഗം (Homosexuality)	56	63	88.89%	1.19	00:01:21
8	പ്രണയം എങ്ങനെ തിരിച്ചറിയാം (How to recognize love)	53	67	89.55%	1.13	00:00:26
9	ലൈംഗികവിദ്യാഭ്യാസം (Sex education)	43	47	85.11%	1.23	00:00:41
10	മനശാസ്ത്രം (Psychology)	36	46	65.22%	2.15	00:05:16
11	യോനി (Vagina)	27	35	74.29%	1.60	00:01:49

Table 7 – Details of ten articles that got the most number of visitors

Rank	Topic of the article	Year of publishing	Topic chosen by	Pageviews	Unique pageviews	Mean time on page
1	Psychology of love	2014	Publication	15451	13225	00:05:42
2	Misconceptions about sex education	2014	Publication	5635	5112	00:04:23
3	Techniques for personality improvement	2014	Publication	3495	2930	00:04:47
4	Marital and occupational stress in youth	2014	Publication	2354	205 9	00:04:26
5	Psychological aspects of marital infidelity	2015	Publication	1724	1312	00:03:19
6	Cognitive development of children	2014	Publication	1708	1533	00:04:20
7	Online habits of Keralites	2014	Publication	1241	1123	00:03:50
8	Psychology of happiness	2016	Author	1093	939	00:06:08
9	How mind affects sexual functioning	2014	Publication	1075	948	00:05:49
10	ADHD	2014	Publication	1045	825	00:02:39

Returning visitors had less bounce rate, viewed more pages per session, and had a higher mean duration for the sessions. This is because they return to the site as they found the content relevant and interesting. The fact that > 20% of the sessions are from returning visitors indicates a high level of interest in the site. In the study by Hammarberg et al. that assessed an information website on fertility, the proportion of returning visitors was 21%.[15] In the two studies on Canadian mental health portals, while Song et al.[6] did not provide the proportion of returning visitors, in the Jeong et al.[12] study, it was 12.89%.

The mean session duration was 2 minutes 18 seconds. The corresponding number for the Song et al.[6] study was 5 minutes 6 seconds, while Jeong et al.[12] did not provide this information. Song et al. obtained a higher mean session duration probably because the website they assessed, www.walkalong.ca, has much better resources at its disposal to create better quality content and promote the site to a highly targeted audience – It is managed by a group of researchers and practitioners at the University of British Columbia and has "generous" external funding.

More than a whopping 60,000 of the sessions lasted < 10 seconds. One possible reason is that non-Malayalam-speaking visitors who arrive at the site through search engines and other external sources immediately leave when they recognize the mistake. Another possibility is that when a webpage is slow to load, the users may not wait and rather decide to leave. The average page load time of this site was 12.59 seconds, which is low (The threshold Google recommends for e-commerce sites is two seconds).[16] The most likely reason for the slow loading of this site is that it is hosted on a shared server. A solution is to use dedicated servers, but they are costlier. Still, it may help visitor retention if website owners with sufficient funds opt for them.

On the positive side, about 6,000 users spent > 10 minutes at the site, probably indicating that they liked the content and accessed more than one article. However, concerns have been raised that long sessions may also be a result of the user keeping the webpage open while busy with unrelated activities.[6]

A drastic decrease happened in the number of visitors and their engagement with the site over the seven years (Table 1). No other study that assessed usage data over this period is available to compare these findings, but several causes can be speculated. Social media sites such as WhatsApp became very popular in this period,[17] and online, overall, people started preferring shorter write-ups. Also, with data becoming much cheaper in this period, people began using video-hosting sites such as YouTube to gather information,[18] brushing aside text-based sites like this. Also, after 2019, as the author got busy with other responsibilities, very few new articles were posted on the site. The slight increase observed in the number of pages viewed per session may be a good sign, but it may also indicate a superficial exploration of several pages.[6]

While in the first year, 77.20% of the users accessed the website from desktops, in the seventh year, 72.03% used mobile phones. No other study has compared the time trend in the type of device used to access a health information website. Presumably, the decreasing prices and the consequent increase in popularity of smartphones caused this change. In the Song et al. study, done between November 2013 and November 2014, a period that overlaps with the first year of this study, desktop users constituted 82.3%, a proportion not different from that obtained in this study. In the Jeong et al. study, the proportion of desktop users was 54.40%, but that was data for 2017 alone. In the study on the India against Cancer website, between 1st April 2017 and 31st March 2019, 64.8% of the new users used mobile phone. The slightly lower proportion they obtained, compared to what this study got in its seventh year, may be attributed to the fact that their study period was 2-3 years prior to the seventh year of this study, and smartphones may have become cheaper in this period.

This change has tremendous implications for owners of health information websites. If your site is not optimized for phones (with responsive design, Accelerated Mobile Pages versions, fast-loading pages, etc.), user engagement and even search engine rankings would suffer. Especially, websites created in the pre-2010 era might need a thorough technological and design overhaul to remain in the game and keep serving their purpose. Likewise, as browsers like Internet Explorer and Opera Mini have fallen out of favour and competitors like Safari and Samsung Internet have taken their place, it is imperative to test and ensure that a website is compatible with all popular browsers.

In the previous studies, too, the most traffic has been from the country where the website is based. In the Jeong et al. and Song et al. studies, 94.12% and 67%, respectively, of the visitors were from Canada itself. The countries other than India that sent the most traffic were from the middle east, which is expected in light of the huge Keralite population there (Table 2). It is satisfying to note that the visitors from India and the middle east countries had a mean session duration of > 2 minutes. The high bounce rates and low mean session duration for Western countries may be because the natives of those countries inadvertently reach the site through search engines and leave immediately. The high number of visitors from Maharashtra and Delhi, compared to other non-southern states (Table 3), may be explained by the high presence of Keralites in Mumbai and New Delhi.

The high number of direct visits to the site (Table 4) may be because of the "advertising" done through the author's visiting card, outside his outpatient clinic, and in his articles published in print. Even though the proportion is high, the actual number of direct visits has gone down, probably because, unlike in the past, new

articles are not being regularly added to the site.

For the Indian against Cancer website, too, the social media site that sent the most traffic was Facebook. The reason for the drastic decline in the proportion of visits to this site from social media, especially Facebook (Table 5), may be that these days very few new articles are shared there. Changes in the Facebook algorithm, which now prefers videos and inspirational, funny, and practical content, may have contributed too.[19]

For nine of the articles in the top-ten list, the topics were suggested by the publications (Table 7). Journalists are well aware of what the readers want. The above finding should inspire mental health professionals to liaise with journalists in recognizing topics that would be of interest to the masses. Once you have some such content, the readers may be pulled to your website and then may also get interested in articles on less juicy aspects of mental health and ill-health.

Limitations

Though the first of its kind, this study has some limitations:

- GA is not perfect in excluding visits by bots from its calculations,[20] and some of the traffic mentioned in this article may have been from bots.

- The site may have been unavailable for hours or even days due to server errors, and this was not measured or adjusted for in this analysis.

- It was not possible to analyze the sex or age group of the visitors because those data have not been recorded, probably due to incorrect settings.

- Most articles on the site are on topics suggested by the publications, and hence, its content does not represent the whole gamut of mental health topics. Besides, though the author has written a few articles on core psychiatry topics such as psychoses, depression, alcoholism, and cannabis, they are published on his institution's website and were not included in this analysis.

- The list of the top ten articles is dominated by those published in 2014, the first year. This may be because a "Most Popular" section is displayed at the top of all pages: Once an early article made it to the section, its prominence made it imperative that those articles keep getting many more clicks, in a "rich getting richer" fashion.

- As all the articles are from a single author and also because all the technical aspects are taken care of by the author himself, the findings may not be generalizable to other mental health websites. For example, multi-author websites may be more attractive to the visitors and may have a better user engagement. Also, sites that contain videos may get entirely different results.

Future Directions

GA data can be supplemented by surveys of users and even by using qualitative methods to find out ways to improve the attractiveness and performance of mental health education websites. Similar studies of multi-author websites and sites by organizations and departments too are needed. Recording and analyzing the keywords used to search within the website using the site search feature may give more insights into what the visitors want. This was a preliminary descriptive study only; future studies can consider checking hypotheses about changes in the pattern of use with time, association with sociodemographic variables, etc.

Implications

Professionals, departments, institutions, and organizations creating or maintaining websites that impart mental health awareness should remain vigilant about technological and social changes and update the websites accordingly. GA is a free tool they can use to obtain loads of data necessary for the purpose. Regularly adding useful content (rather than allowing the site to remain stagnant), spreading the links to the new content through social media sites popular at the time, getting links to one's website from other renowned websites, ensuring that the website is friendly to new kinds of devices and browsers, etc. may help one's educational website achieve its intended purpose.

CONFLICT OF INTEREST

The author owns, funds, and manages the website under study. However, the website does not generate revenue of any sort.

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