# Personal Healthcare Management through Social Media: A Study of Graduate Students in Selected Ethiopian Universities

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Abstract Background: Social media serves as a valuable repository of healthcare information, holding significant potential for enhancing healthcare quality. This study aims to investigate how graduate students perceive and utilize health-related information from social media to manage their health. Objective: The research explores methods, through which graduate students discover and employ health-related information from social media for personal healthcare management, while also examining their perceptions. Methods: A cross-sectional study design was adopted, involving a sample size of 282 students from various universities in Ethiopia, including Jimma, Mizan-Teppi, Adama, and Bonga. Data were collected and entered into Microsoft Excel, and statistical analysis was performed using SPSS version 20. Independent variables with a p-value of <0.05 were deemed statistically significant. Results: The data analysis demonstrated that respondents aged 25 to 30 years were approximately four times more likely (OR 3.972, 95% CI [2.342-6.738]) to utilize social media for managing chronic diseases, while those aged 31 to 35 years were nearly two times more likely (OR 1.814, 95% CI [1.094-3.009]). However, overall, students showed limited use of social media to obtain information about chronic diseases. Facebook emerged as the preferred platform among respondents for accessing healthcare content related to diet advice and walking techniques. Conclusion: The findings indicate

that students use social media primarily in a constrained manner to acquire information about chronic diseases. Although Facebook is favored for specific healthcare content, other aspects of personal health management through social media require more attention and encouragement.

**Keywords** Social Media Use, Personal Health Management, Promotion of a Healthy Lifestyle, Information about Chronic Disease, Graduate Students

## **1. Introduction**

Social media has become a prominent platform among university students, significantly consuming their time. This digital platform has the potential to influence attitudes and behaviors, encouraging the adoption of healthier lifestyles [1]. Notably, social media has played a crucial role in improving healthcare quality by enhancing professionals' and patients' knowledge of health-related issues [2]. Moreover, it goes beyond mere entertainment to disseminating information that can impact human behavior [3]. Firstly, designed for personal interactions within limited boundaries, social media has expanded widely, with diverse users, including healthcare institutions, leveraging its potential [4].

The increase in social media has revolutionized social networking, transcending physical barriers and fostering virtual relationships [5]. As an internet-based platform facilitating the sharing of user-generated content, social media boasts a massive global user base, comprising a significant proportion of the world's population [6]. The rapid growth indicates that internet usage is on track to encompass approximately half the total population, with social media adoption expected to increase more rapidly [6]. Social media's potential in healthcare has been demonstrated through the various opportunities it offers for health promotion and education [2]. Among graduate students in Ethiopia, social media has emerged as a significant channel for accessing health-related information [7, 8]. Due to their extensive knowledge of academics, society, and politics, graduate students recognize the importance of health in their lives. Access to reliable health information on social media can significantly impact their attitudes, perceptions, knowledge, and self-care practices [9, 10]. However, this potential comes with the responsibility to critically assess the sources and accuracy of the shared information to ensure credibility and reliability [11].

Over time, Ethiopia's education landscape has undergone a significant transformation with the establishment of various universities and colleges [12]. The surge in graduate enrollment is remarkable, with thousands of graduate students now pursuing MSc and Ph.D. programs. These students face challenges, as many live off-campus and juggle work responsibilities alongside their studies, potentially leading to stress and health issues.

Given the relevance of social media in the lives of graduate students and its potential impact on health knowledge, attitudes, and practices, this study aims to delve into the social media habits of graduate students in Ethiopia [7]. The research will thoroughly evaluate the quality and reliability of health-related information accessible on social media platforms [3]. By identifying the specific health needs and concerns of this population, the study aims to offer insights into tailoring health promotion and intervention strategies catering to the unique needs of graduate students [8]. Furthermore, this research will contribute to the international literature on the impact of social media on healthcare, particularly in developing countries like Ethiopia [13]. Understanding how social media can effectively enhance health awareness and education will be instrumental in improving healthcare outcomes among graduate students, providing valuable guidance for healthcare institutions and educators utilizing social media as a platform for disseminating credible health information [14].

### **1.1. Research Questions**

To address the research problem and understand the issues involved with the utilization of social media for

personal healthcare management and related factors. Among graduate students in Jimma, Adama, Bonga, and Mizan-Teppi universities, the following research questions have been formulated:

- 1. What are the driving factors that lead graduate students to use social media for personal health management?
- 2. To what extent do graduate students use social media to obtain information about a healthy lifestyle and chronic diseases?
- 3. How do graduate students perceive, use, and evaluate the credibility of health-related information from social media?

## 1.2. Objectives of the Study

The objectives of the study are to examine how social media helps promote personal health management and facilitate a healthy lifestyle for graduate students at selected universities in Ethiopia and to investigate the factors related to perceptions of the credibility of health-related information found on social media platforms.

# 2. Literature Review

Social media has become a powerful platform with significant potential for healthcare purposes, especially among university students. The utilization of social media in various areas, including health promotion, interventions, and information dissemination, has revolutionized the individuals' access ways and engages with healthcare-related content. This literature review aims to investigate the changing ideas about social media in the healthcare context, its utilization, and its adoption among college students. It offers an extensive examination of the current body of research in this area. Social media has transformed the healthcare landscape by providing new avenues for health promotion and interventions. For instance, a visual analysis of South Africa's "TB proof" Facebook page highlighted the potential of social media as a tool for health promotion. This analysis demonstrated the effective use of social media in disseminating health-related information and engaging the community in promoting tuberculosis awareness [15]. A systematic review emphasized the use of strategies involving social media platforms to improve outcomes for patients with diabetes mellitus. This review revealed various social media health interventions have positively impacted diabetes management and patient outcomes [16]. The concept of social media in healthcare goes beyond information dissemination; it includes online social support, behavior change, and improved health outcomes. As social media continues to evolve, researchers and healthcare practitioners recognize the need to harness its potential to address public health challenges effectively. Omar's [17] analysis sheds light on the interplay between

online health information seeking and self-care among diabetes mellitus patients in Saudi Arabia. This study underscores the influential role of social media platforms in shaping contemporary healthcare dynamics. Patients' proactive engagement with digital health resources not only satisfies their informational needs but also translates into heightened self-care practices. This reciprocal relationship highlights social media's capacity to empower patients, fostering informed decision-making and personalized health management within the Saudi Arabian context.

University students, being digitally native, are active users of social media platforms. They actively seek health-related information, support, and interventions through these platforms. Research indicates that university students' use of social media for health awareness has increased significantly [18]. According to Shewaye [18], healthcare teachers and learners in Saudi Arabia extensively use social media for health-related awareness campaigns. The review highlights the role of social media in engaging university students in health promotion and fostering a culture of health awareness. Shockley [19] found that university students at Debrebirhan University utilize social media as a source of health information. The study indicates that social media has served as a readily available and convenient medium for students to seek health-related information and support. As university students are a crucial demographic group, understanding their engagement with social media in the context of healthcare is vital for designing effective health interventions and campaigns.

Kaushik [20] perspective highlights the fusion of social media and healthcare, specifically in understanding depression and related mental health concerns. Through the analysis of linguistic nuances, sentiment trends, and behavioral cues on platforms like Twitter, a novel approach emerges for identifying potential issues discreetly. This symbiotic relationship between technology and healthcare not only promises timely support but also reshapes mental health interventions, reflecting the evolving synergy between digital discourse and well-being awareness.

Social media offers unique opportunities and challenges for healthcare purposes. It enables health promotion initiatives to reach a broader audience, making it an essential tool in public health campaigns [8]. Social media helps the dissemination of health-related information and health education. Also, it encourages community engagement in health initiatives. Moreover, a theoretical framework encompassing social media affordances, online social support, and health behaviors and outcomes accentuates the capacity of social media to enhance health outcomes [1]. The conceptual model emphasizes how social media can provide emotional and informational support to individuals, influencing their health behaviors and ultimately impacting their health outcomes. However, the impact of social media interventions in healthcare needs critical assessment, as not all interventions yield the desired results. For example, a comprehensive scoping review focused on the influence of social media interventions on informal caregivers of critically ill patients underscored the necessity for further research in identifying effective interventions for this group [3]. This call for evidence-based approaches in designing social media interventions to maximize their effectiveness and potential in healthcare settings.

University students actively engage with social media for healthcare purposes. They actively seek health-related information, access support groups, and participate in health campaigns. In Saudi Arabia, university students and health teachers utilize social media extensively to raise health awareness. The above study demonstrates how social media serves as a platform to foster health-conscious behaviors among university students and the wider community. Similarly, at Debrebirhan University, students use social media as a source of health information. The ease of access and the ability to connect with peers and experts make social media an attractive platform for students to address their healthcare needs. As digitally savvy individuals, university students are keen on utilizing social media to empower themselves with health-related knowledge and resources.

In conclusion, social media has revolutionized healthcare and offers a unique opportunity for health promotion and interventions, especially among university students. As digitally native individuals, university students actively engage with social media for health-related information, support, and awareness campaigns. While the potential of social media in healthcare is immense, it is essential to critically assess its impact and effectiveness in achieving desired health outcomes. As the field continues to evolve, further research is needed to optimize social media's role in promoting and improving healthcare among university students and the broader population. Understanding the patterns of social media usage among university students for healthcare purposes can inform the development of tailored interventions that cater to the specific needs and preferences of this demographic group. By harnessing the power of social media effectively, healthcare professionals and policymakers can positively impact the health and well-being of university students and the communities they serve.

## 3. Materials and Methods

### 3.1. Study Design

This study employed a rigorous cross-sectional design, targeting graduate students from four esteemed Ethiopian universities: Jimma, Mizan-Teppi, Adama, and Bonga. The participants were selected using a robust stratified random sampling method, with one university randomly chosen from each of the four generations found in Ethiopian government Universities. The study population consisted of students from the distinguished College of Business and Economics and the innovative College of Technology within the selected Universities. The selection of colleges is done by considering choosing similar colleges from the four universities previously chosen.

The primary objective of this research is to thoroughly investigate social media's influence on the adoption and effectiveness of personalized health management strategies among graduate students, with a keen focus on prevalent chronic diseases. By doing so, this study brought clarity to the situation on the potential benefits and implications of using social media as a tool for fostering proactive health management practices among this population.

### 3.2. Study Participants, Sample Size, and Sampling Procedure

Study participants were meticulously selected from the well-defined population of graduate students attending Jimma, Adama, Mizan-Teppi, and Bonga universities. To ensure unbiased representation, universities were previously chosen randomly from each generation of educational institutions. Within these selected universities, the researchers identified and carefully matched students from similar colleges, specifically the esteemed College of Business Economics and the innovative College of Technology. Interestingly, both Adama and Bonga universities exclusively have one college each for their graduate programs, namely Technology and Business Economics, respectively, streamlining the participant selection process.

The comprehensive population comprises 441 graduate students from Jimma, 316 from Adama, 123 from Bonga, and 180 from Mizan-Teppi, ensuring an inclusive representation of diverse academic backgrounds and research interests. This meticulous approach to participant selection aims to minimize bias and enhance the study's internal validity.

By employing this rigorous sampling technique, the research aims to establish a robust foundation for analyzing the impact of social media on personalized health management strategies among graduate students dealing with prevalent chronic diseases. Such meticulousness in participant selection is crucial in generating reliable and meaningful results, fostering credibility, and contributing to advanced research on health management and social media.

A sample size of the study was calculated from a total population of 1060 graduate students previously summarized. The calculation is based on the assumption of a 50% frequency or extent of social media usage for personal healthcare management in Ethiopian universities, a 95% confidence level, a 5% margin of error, and a 10% response rate. Consequently, a sample size of 282.4 was derived using the research sampling technique. To ensure a

proportional representation of sample size was allocated among the universities: 117.3 for Jimma, 84 for Adama, 33 for Bonga, and 48 for Mizan-Teppi universities.

By adopting this systematic approach to sampling and randomly assigning, the study aims to achieve a representative and unbiased distribution of participants, thereby enhancing the research's reliability and validity. This meticulous attention to participant allocation is vital in drawing meaningful conclusions, and also contributes to the advanced knowledge in the field of social media's impact on personalized health management among graduate students.

### 3.3. Statistical Analysis

Data were entered into Microsoft Excel 2007, and analysis was performed using the Statistical Package for Social Sciences (SPSS) version 20. The researchers choose this version of SPSS because it is the stable version and available in their laboratory. Descriptive statistics were employed to summarize the study variables. From the analysis of logistic binary regression, independent variables with a p-value < 0.05 were considered significant. An odds ratio (OR) with a 95% confidence interval (CI) was used to measure the association between independent variables and social media utilization for personal healthcare management by graduate students.

# 4. Results

## 4.1. Personal Characteristics and Previous Diagnosis History

A comprehensive cohort of 282 students participated in responding to the questionnaire, with an overwhelming majority of 262 (92.9%) being enrolled in master's programs, while the remaining 20 (7.1%) were pursuing Ph.D. studies. Among this engaged group, a notable 184 (65.2%) were male, and an equally substantial 190 (67.4%) fell below the age threshold of 36.

Turning our attention to the medical landscape, the chronicle of prior diagnosis history for chronic diseases unveiled that a significant 207 (73.4%) students exhibited a lack of awareness regarding any previous chronic disease diagnoses. Among those who had grappled with prior diagnoses, a modest 22 (7.8%) were identified as having encountered high blood pressure, while chronic kidney disease remained absent from the medical narrative.

In the realm of digital health management, the vanguard of personal healthcare was distinctly commanded by Facebook. An impressive contingent of 71 (25.2%) respondents attested to its prime role as the preferred social media platform for their healthcare management endeavors. A telling majority, comprising 248 (87.9%) respondents, confirmed their penchant for engaging with healthcare content tailored around physical exercise in their chronic disease management pursuits (Table 1).

**Table 1.** Personal and health history of respondents

Variables	Frequency and (%)
Enrolment category	
Masters	262(92.9%)
PhD	20(7.1%)
Gender	
Male	184(65.2%)
Female	98(34.8%)
Age categories	
25-30	91(32.3%)
31-35	99(35.1%)
36-40	75(26.6%)
41 and above	17(6%)
Previous Diagnosis history	
Diagnosed	75(26.6%)
Not Diagnosed	207(73.4%)
History of medical conditions	
Blood pressure	22(7.8%)
Diabetes	12(4.3%)
Chronic Kidney Disease	0(0%)
SM platform for Healthcare utilization	
Facebook	71(25.2%)
Telegram	25(8.9%)
Twitter	2(0.7%)
YouTube	2(0.7%)
Healthcare content browsing	
Physical exercise	248(87.9%)
Walking	11(3.9%)
Diet advice	13(4.6%)
Medication	10(3.5%)

# 4.2. General Social Media Utilization Experience of Respondents

The overarching portrait of social media engagement exhibited a distinct pattern among the participants. Notably, 161 (57.1%) respondents actively navigated the landscape of Facebook, while a commendable 121 (42.9%) opted for the dynamic avenue of Telegram. Additionally, a modest contingent acknowledged their involvement with platforms like TikTok and YouTube, serving as supplementary channels of interaction.

Delving into the frequency of interaction, the experiential tapestry of research participants unfurled intriguing dynamics. A considerable number of 123 (43.6%) individuals were discerned as ardent daily users, while a notable 132 (46.8%) partook in weekly interactions.

A discerning subset of 27 (9.6%) exhibited a more measured approach, engaging every month.

When dissecting the temporal investment in this digital realm, the daily users furnished illuminating insights. A substantial 139 (49.6%) respondents dedicated 1 to 7 hours daily, while a smaller cohort of 25 (8.9%) engaged for 8 to 14 hours. The spectrum was further broadened, with 6 (2.1%) allocating 15 to 21 hours, and 4 (1.4%) surpassing 21 hours. This rich tapestry of engagement was embellished by 27 (9.6%) individuals who spent 1 to 7 hours, and an intriguing 53 (18.8%) who clocked in between 8 to 14 hours, lending credence to the diverse dynamics at play (as illustrated in Table 1).

# 4.3. Healthcare Information and Knowledge of Chronic Diseases

Table 2. Healthcare information and knowledge of chronic disease

Variables	Frequency	Percent
How do you use SM		
Watching healthcare video clips	6	2.1%
Reading posts	266	94.3%
Joining healthcare discussion groups	2	0.7%
Subscribing to healthcare mail lists	8	2.8%
Sources of healthcare information		
Friends	262	92.9%
Ministry of Health	12	4.3%
Physicians/doctors	8	2.8%
Knowledge of chronic diseases		
Very good	5	1.8%
Good	32	11.3%
Moderate	129	45.7%
None at all	116	41.1%
Driving factors to use SM		
The increase in chronic disease occurrence	5	1.8%
The accessibility of chronic disease information on social media	25	8.9%
The ease of use of social media	26	9.2%
The attractiveness of social media	43	15.2%
The availability of technology	77	27.3%
Access of internet	68	24.1%
The information obtained from the media	37	13.1%

The scrutiny of data concerning the origin of healthcare information unveiled compelling insights. Among the 282 respondents, a notable 262 (92.9%) leaned on their social circle for healthcare insights, while a modest 12 (4.3%) turned to the Ministry of Health for guidance. A smaller

contingent of 8 (2.8%) sought counsel from the medical fraternity, specifically physicians or doctors. A prevailing trend emerged, with an impressive 266 (94.3%) acknowledging social media as their conduit for accessing healthcare information.

Intriguingly, the pursuit of knowledge revealed that a mere 5 (1.8%) respondents laid claim to a strong grasp of chronic diseases, indicating a scarcity of comprehensive awareness. These findings, meticulously outlined in Table 2, paint a vivid picture of the intricate landscape surrounding healthcare information and its diverse channels of acquisition.

### 4.4. Driving Factors to Use Social Media Information for Chronic Disease Management

The meticulous analysis of results has unveiled a nuanced landscape. A mere 2 (0.7%) respondents found themselves engaged in healthcare-focused discussion groups, while a striking 266 (94.3%) preferred the avenue of perusing posts on social media to glean their healthcare information. Intriguingly, a mere 8 (2.8%) individuals resorted to social media as a consequence of the scarcity of healthcare-related information.

When delving into the origins of healthcare knowledge, a distinctive pattern emerges. A modest 25 (8.9%) respondents acknowledged doctors or physicians as their source, while a significant majority of 262 (92.9%) entrusted their friends for this crucial insight.

Turning our gaze towards the realm of chronic diseases, a revealing picture unfolds. A mere 5 (1.8%) respondents held the conviction of possessing an intricate understanding; while a considerable 129 (45.7%) endorsed a more moderate level of knowledge.

Steering the discourse toward the motivations underpinning the use of social media for chronic disease management, the dynamics are compelling. A notable 26 (9.2%) respondents underscored the ease of use that social media platforms offer. Meanwhile, the surge in technology's ubiquity, epitomized by smart phones and laptops, was identified as a dominant factor by a substantial 77 (27.3%) respondents, underscoring its pivotal role

### 4.5. Utilization of Social Media for Personal Healthcare Management and Its Association with Independent Variables

The subsequent tables (Tables 3 and 4) present the association between the dependent variable, which is the utilization of social media for personal healthcare management, particularly for chronic diseases, and independent variables such as gender, age, previous diagnosis history of chronic diseases, the specific diseases for which they have a history, and the type of healthcare content they predominantly browse.

Table 3. The analysis of factors associated with the utilization of social media for personal healthcare management and knowledge about chronic diseases

Independent variables	Social media utilization		Odds ratio and CI95%
	Yes	No	
Enrolled in			
Masters	99(35.1%)	163(57.8%)	11.54(1.521-87.544)
PhD	1(0.35%)	19(6.74%)	0.87(0.011-0.657)
Gender			
Male	96(52.17%)	88(47.82%)	25.64(9.047-72.646)
Female	4(4.08%)	94(95.91%)	0.039(0.014-0.111)
Age			
Age1(25-30)	52(18.44%)	39(13.83%)	3.972(2.342-6.738)
Age2(31-35)	44(15.6%)	55(19.5%)	1.814(1.094-3.009)
Age3(36-40)	4(1.41)	71(25.17%)	0.065(0.23-0.185)
Age4(41&above)	0	17(6.02)	0(0)
Diagnosis History			
Diagnosed	63(22.34%)	12(4.26%)	24.122(11.831-49.181)
Not diagnosed	37(13.12%)	170(60.28%)	0.041(0.020-0.085)

Independent variables	Social media utilization		Odds ratio and CI95%
	Yes	No	
History of medical conditions			
Reactive BP	16(5.67%)	6(2.13%)	5.59(2.11-14.79)
Reactive Diabetes	12(4.26%)	0	Not significant
Reactive CKD	0	0	1.82(1)
SM platform for utilization			
Facebook	71(25.17%)	0	Not significant (0.996)
Telegram	25(8.87%)	0	Not significant (0.998)
Twitter	2(0.7%)	0	Not significant (0.999)
YouTube	2(0.7%)	0	Not significant (0.999)
SM Healthcare content			
Physical exercise	73(25.89%)	175(62.06%)	0.108(0.45-0.259)
Walking	7(2.5%)	4(1.41%)	3.349(0.956-11.735)
Diet advice	10(3.54%)	3(1.06%)	6.630(1.78-24.69)
Medication	10(3.54%)	0	Not significant (0.999)
Do SM help			
Yes	89(31.56%)	1(0.35%)	1464.4(186.13-11522.0)
No	11(3.9%)	181(64.18%)	0.001(0-0.005)

Table 4. The analysis of factors associated with the utilization of social media for personal healthcare management and knowledge about chronic disease

The findings unearthed a compelling array of insights, painting a vivid picture of factors influencing the utilization of social media for chronic disease management:

Age Influence: Respondents aged between 25 to 30 exhibited an intriguing proclivity, being nearly four times more inclined (OR 3.972, 95% CI [2.342-6.738]) to harness social media for chronic disease management. Equally intriguing, those aged 31 to 35 showcased a doubled inclination (OR 1.814, 95% CI [1.094-3.009]) compared to their older counterparts.

Gender Dynamics: A striking gender dimension emerged. Males surfaced as significantly more disposed (OR 25.64, 95% CI [9.047-72.646]) towards utilizing social media for chronic disease management, while females exhibited a contrary tendency (OR 0.039, 95% CI [0.014-0.111]).

Impact of Prior Diagnosis: An illuminating nexus surfaced between prior diagnosis history and social media utilization for chronic disease management. Students with a history of chronic disease diagnosis demonstrated a remarkable inclination (OR 24.122, 95% CI [11.831-49.181]) compared to their counterparts without such history (OR 0.041, 95% CI [0.020-0.085]). Of note, individuals grappling with high blood pressure (OR 5.59, 95% CI [2.11-14.79]) showed a notable correlation with heightened social media engagement, whereas diabetes and chronic kidney disease did not establish such a link.

Platform Predilection: While the relationship between social media platform types and utilization for chronic disease management did not yield statistically significant findings, nuanced dynamics emerged.

Content Preferences: Respondents' proclivity towards specific healthcare content bore intriguing implications. Those engaging with diet advice content exhibited a striking six-fold inclination (OR 6.630, 95% CI [1.78-24.69]), while those tapping into physical exercise content displayed a three-fold likelihood (OR 3.349, 95% CI [0.956-11.735]) compared to those drawn to different contents.

Perceived Helpfulness: The perceived utility of social media for chronic disease management resounded powerfully. A robust association (OR 1464.4, 95% CI [186.13-11522.0]) emerged between those finding it helpful and their heightened utilization, juxtaposed against those who perceived it as unhelpful (OR 0.001, 95% CI [0-0.005]).

These multifaceted dynamics underscore the intricate interplay of age, gender, health history, content preferences, and perceived efficacy in shaping the utilization of social media for effective chronic disease management.

## 5. Discussion

The outcomes of this study unveiled that a substantial

portion of respondents, comprising 35.5%, harnessed the potential of social media for healthcare management, endorsing a healthy lifestyle, and sourcing insights about chronic diseases. Among the array of social media platforms at their disposal, Facebook emerged as the standout choice, with 71 respondents (25.2%) utilizing it for healthcare management. This observation resonates with the Digital 2020 report, which underscores Facebook's preeminence as the most favored platform [6].

An intriguing revelation from this investigation is that students predominantly earmarked social media for entertainment pursuits (33%), followed by educational endeavors (22%), friend networking (20.6%), healthcare (14.9%), and business pursuits (9.2%). This hints at a disparity in effectively leveraging social media for healthcare goals, as the lion's share of their interaction time is allocated to recreational activities. Pertinently, the respondents' usage patterns showed that 123 (43.6%) were daily users, 132 (46.8%) engaged weekly, and 27 (9.6%) indulged every month. The correlation between the frequency of social media use and its healthcare-oriented utilization implies that habitual daily interaction could catalyze an increased adoption of the platform for personal healthcare management.

Further scrutiny into the gender dimension spotlighted that males exhibited a higher inclination toward using social media for healthcare management in comparison to their female counterparts. In terms of age, respondents aged 25 to 30 exhibited a greater propensity for deploying social media as a healthcare management tool, relative to those aged 31 to 35. This temporal pattern hints at a declining trend in social media's healthcare utility with advancing age, suggesting an inverse correlation between age and utilization.

A compelling observation from this study elucidates a direct nexus between prior diagnosis history and social media's utility for healthcare management. This implies that a history of diagnosis exerts a discernible impact on personal healthcare management via social media channels. Within the subset of diagnosed respondents, those grappling with high blood pressure manifested the highest proportion. This could be attributed to the intricate linkage between blood pressure and an array of chronic health conditions.

Evaluating the contours of content engagement, it becomes evident that a significant proportion of students, within the realm of chronic disease healthcare management, were drawn to dietary advice and walking guidance disseminated through social media. However, intriguingly, avenues related to physical exercise and medication counsel did not garner comparable attention. Of those harnessing social media for healthcare pursuits, a substantial contingent, and 89 (31.56%), voiced agreement that it indeed facilitated effective chronic disease management.

In conclusion, this study accentuates the substantial role that social media can play in healthcare management,

advocating a healthy lifestyle, and augmenting awareness about chronic diseases among graduate students. Nevertheless, the findings underscore the imperative for channeling efforts towards bridging the gap between recreational and healthcare-focused social media usage, along with fostering a more inclusive utilization of the platform across various age groups and genders. Such endeavors stand to amplify the constructive impact of social media on personal healthcare management.

# 6. Conclusions

In this study, we delved into how graduate students in Ethiopia utilize social media for personal healthcare management, particularly concerning chronic diseases. The results offer intriguing insights into the dynamics of this emerging trend.

Our analysis revealed that male students between the ages of 25 and 35, especially those with a history of chronic disease diagnosis, were more inclined to leverage social media for managing their health. However, despite the vast array of healthcare information available, only a small fraction of respondents considered themselves well-versed in chronic diseases. This suggests a pressing need for more accurate and credible health-related content on social media platforms to foster better understanding among graduate students.

Interestingly, the platforms of choice for healthcare management were predominantly Facebook and Telegram, while platforms like Twitter and YouTube had a lesser impact. Nevertheless, the specific platform itself didn't significantly dictate the utilization of chronic disease management.

This study underscores the potential of social media as a powerful tool for promoting healthy lifestyles and managing chronic diseases. Yet, it also emphasizes the importance of tailored strategies to enhance information dissemination and uptake among graduate students. The convenience and widespread availability of technology, including smart phones and laptops, emerged as pivotal drivers motivating the adoption of social media for managing chronic conditions.

In conclusion, this research underscores the crucial role that social media can play in disseminating health information and facilitating healthcare management, especially concerning chronic diseases. By focusing on targeted, reliable, and user-friendly content, we can harness the true potential of social media to enhance the overall health and well-being of graduate students and beyond.

# 7. Recommendations

The insights garnered from our study highlight that postgraduate students predominantly rely on informal sources, like friends and discussion groups, for their healthcare information. To optimize the dissemination of accurate health-related knowledge, it's imperative for governmental bodies such as the Ministry of Health, along with healthcare service providers, to take a proactive stance in sharing vital healthcare information.

Furthermore, we propose that students diversify their engagement across various categories of social media platforms. By embracing a wider spectrum of platforms, students can unlock the full potential of these tools for their healthcare management.

Our findings also underscore the underutilization of social media for healthcare purposes by students. This reveals an opportunity for enhancement in leveraging these platforms, particularly in the realm of chronic disease management. Given that social media significantly enhances information accessibility, we recommend that the government take a more prominent role in harnessing this evolving technology to cater to the individualized knowledge needs of students concerning chronic diseases.

In essence, our study underscores the importance of a concerted effort between government institutions, healthcare providers, and students themselves in optimizing the utilization of social media as a powerful tool for disseminating accurate healthcare information and managing chronic conditions effectively.

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## **Conflicts of Interest**

The author asserts that there are no conflicts of interest.

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