



Public Health Awareness, Hygiene Habits, and Media Influence: Insights from Jalpaiguri, Alipurduar, and Cooch Behar

Drishita Chakraborty¹ & Umesh Kumar Saxena²

1. Research Scholar, Department of Mass Communication & Journalism, RKDF University, Ranchi, Jharkhand, 834004, Corresponding author: Email: drishitachakraborty01@gmail.com
2. Assistant Professor, Department of Mass Communication & Journalism, RKDF University, Ranchi, Jharkhand, 834004.

Abstract:

This study examines health awareness, hygiene practices, and healthcare-seeking behaviour among residents of three districts in northern West Bengal—Jalpaiguri, Alipurduar, and Cooch Behar—based on responses from 1,200 individuals. The findings reveal a high level of awareness about health and hygiene, particularly among younger age groups, though notable disparities exist between districts. Government hospitals were the most preferred healthcare option, indicating reliance on public services, while the use of home remedies and religious places highlights the influence of traditional and cultural beliefs. Regarding healthy habits, handwashing after meals is nearly universal. Hygiene habits such as handwashing and dental care are widely practiced but vary in consistency. Television remains the primary source of health information, but usage of mobile apps is increasing, though outreach by health workers remains limited. These findings highlight the need for targeted public health interventions that consider regional disparities in health literacy, cultural influences on healthcare decisions, and evolving preferences for information dissemination channels.

Keywords: Health Awareness, Hygiene, Habits, Media Influence, Cultural Beliefs, Traditional Beliefs.

Introduction:

The increasing dependency on digital media offers immense, yet often underexplored, potential for public health campaigns. Unlike traditional, resource-intensive interpersonal communication strategies for interventions like water, sanitation, and handwashing, digital platforms can reach exceptionally large audiences at a significantly lower cost. While mass media has historically been a low-cost alternative, its rigorous evaluation in public health contexts has been limited. The recent COVID-19 pandemic starkly exposed global health system vulnerabilities, even in nations with advanced medical infrastructure. For underdeveloped countries like India, with their inherently weaker health systems, the threat of infectious diseases becomes particularly acute. In these regions, the existing traditional healthcare system, comprising government hospitals and health sub-centers, often faces challenges such as limited resources, infrastructure gaps, and accessibility issues, especially in rural and remote areas. Consequently, a substantial portion of the population continues to rely on traditional medication for even critical illnesses, often due to a lack of trust in

or access to formal medical facilities, or simply out of cultural inclination. However, amidst this backdrop, a crucial shift is occurring: individuals are becoming more proactive and pre-emptive in seeking relevant health information due to technological advancements. This growing desire for knowledge, combined with the widespread availability of digital platforms, presents a unique opportunity to supplement and strengthen existing healthcare infrastructure.

From the pandemic's outset, public knowledge, awareness levels, attitudes, and cultural norms have been recognized as fundamental indicators influencing an individual's approach to disease prevention. This is particularly evident in the disparity between urban and rural populations, as seen in countries like Bangladesh, where rural communities, including men, women, and adolescents, exhibit deficient knowledge regarding various infectious and chronic diseases compared to their urban counterparts. Recognizing these critical gaps and the evolving information-seeking behaviours, the aim of the present study was to thoroughly investigate the sources of health information, the prevailing awareness levels, and the extent of hygienic practices maintained by the population.

The present study aims to explore these dynamics by examining the various sources through which rural communities acquire health information, evaluating their awareness levels concerning hygiene and disease prevention, and assessing the degree to which they practice healthy behaviours. It also considers the ongoing reliance on public health institutions like government hospitals and health sub-centres, while shedding light on the role of mass and digital media in bridging knowledge gaps. This research ultimately seeks to inform more effective and culturally sensitive health communication strategies that can support public health initiatives in rural and underserved areas.

Research sample:

The study surveyed a total of 1,200 individuals, with 400 respondents drawn from each of the three districts—Jalpaiguri, Alipurduar, and Cooch Behar—forming a well-distributed sample population. To achieve this, four villages were specifically chosen from each district (shown in Figure 1), ensuring a diverse representation of rural demographics and socio-economic conditions. In Jalpaiguri district, the selected villages were Magurmari, Kharia, Belakoba, and KharijaBerubari. In Alipurduar district, the survey focused on Alipurduar Railway Junction CT, Bariguri, Bholardabri, and Chapatali. For Cooch Behar district, the selected villages were Putimari, Kushamari, Dashagram, and Kathalbari. These diverse selections aimed to capture a comprehensive understanding of the varying health-related behaviours and awareness levels across the rural landscapes of these North Bengal districts. The sampling was stratified by age and gender to ensure broad demographic representation. Each district's sample included participants from four distinct age groups: 10–24 years, 25–39 years, 40–54 years, and 55–70 years, with both males and females represented in each category. The largest proportion of respondents in all three districts belonged to the 10–24 years age group, highlighting greater youth engagement. Specifically, Jalpaiguri had 195 individuals in this group, Alipurduar had 179, and Cooch Behar had the highest with 204. The middle-aged and elderly groups showed relatively lower participation, especially the 55–70 years group, with only 30 individuals in Jalpaiguri, 24 in Alipurduar, and 25 in Cooch Behar. Overall, the structured and balanced sampling method allowed for meaningful analysis of health awareness, hygiene behaviour, and information access across various age brackets and gender groups in these districts.

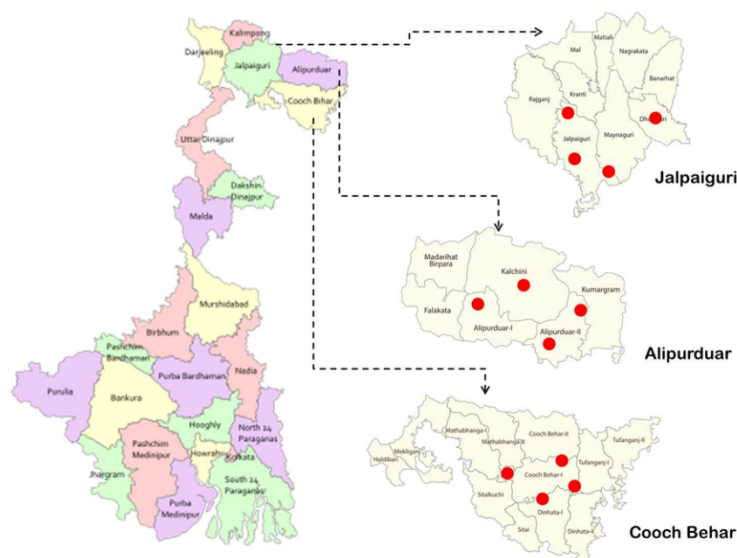


Figure 1: Maps of the study areas: Jalpaiguri, Alipurduar, and Cooch Behar districts.

Methodology:

This study employed a cross-sectional survey in the rural districts of Jalpaiguri, Alipurduar, and Cooch Behar, using a mixed-methods approach. Quantitative data was gathered via a structured questionnaire that covered aspects such as health information sources, the level of awareness regarding health and hygiene, preferences for healthcare facilities, and healthy habits practiced. To enrich these findings with qualitative insights, Focus Group Discussions (FGDs) were conducted in each district with 5-10 participants per group, delving into digital behaviours and challenges in accessing online resources.

Data analysis: The survey gathered data from a total of 1,200 individuals, with an equal distribution of 400 respondents from each of the Jalpaiguri, Alipurduar, and Cooch Behar districts. The age and gender demographics reveal distinct participation patterns. The 10–24 years age group demonstrated the highest representation across all districts, indicating strong youth involvement; specifically, Cooch Behar led with 204 respondents (106 males, 98 females), followed by Jalpaiguri with 195 (97 males, 98 females), and Alipurduar with 179 (101 males, 78 females). The 25–39 years age group showed moderate engagement, with Alipurduar (82 respondents; 39 males, 43 females) slightly outnumbering Jalpaiguri (71 respondents; 40 males, 31 females) and Cooch Behar (59 respondents; 30 males, 29 females). Participation remained fairly consistent for the 40–54 years group across Jalpaiguri (104), Alipurduar (115), and Cooch Behar (112), showing a balanced gender distribution. Conversely, the 55–70 years category was the least represented, with only 30 respondents in Jalpaiguri (19 males, 11 females), 24 in Alipurduar (17 males, 7 females), and 25 in Cooch Behar (15 males, 10 females), possibly due to factors like mobility or survey engagement. Overall, the survey reflected a slightly higher male representation in all districts—Jalpaiguri (209 males, 191 females), Alipurduar (225 males, 175 females, showing the largest gap), and Cooch Behar (208 males, 192 females). This demographic breakdown offers valuable insights into digital engagement, health awareness, and educational outreach in these North Bengal districts, characterized by a predominantly young and digitally active population.

Percentage of surveyed people aware of health and hygiene

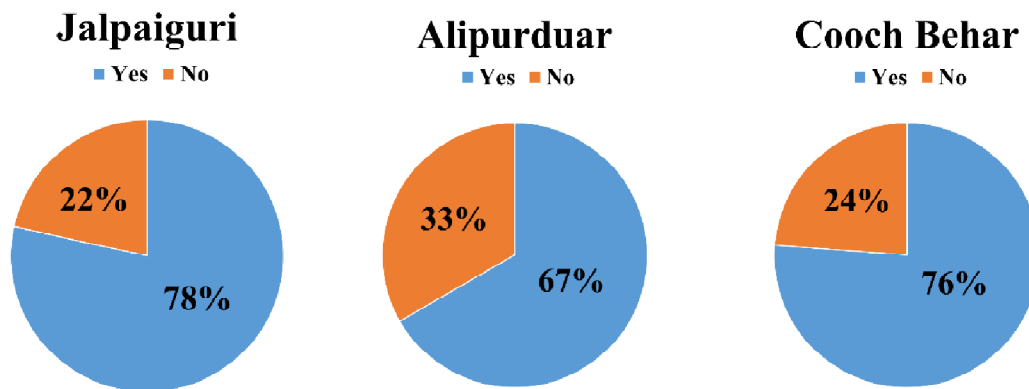


Figure 2. Level of awareness regarding health and hygiene among respondents in Jalpaiguri, Alipurduar, and Cooch Behar districts.

Figure 2 depicts the awareness of health and hygiene across the districts. It shows a generally high level of awareness, though the extent varies by region. In Jalpaiguri, out of 400 people surveyed, 314 individuals (78.5%) reported being aware of health and hygiene practices, while 86 (21.5%) admitted a lack of such awareness. This indicates a strong awareness level, likely supported by better access to health education or interventions by health workers and local authorities. In Alipurduar, the level of awareness is relatively lower. Only 267 people (66.75%) expressed awareness, while a significant 133 (33.25%) indicated they were unaware of health and hygiene practices. This comparatively lower percentage may suggest gaps in public health communication or limited outreach in remote areas. Meanwhile, Cooch Behar closely mirrors Jalpaiguri's profile, with 305 respondents (76.25%) acknowledging awareness and 95 (23.75%) stating otherwise. This indicates a fairly high engagement with hygiene practices, although there's still room for improvement.

| Prefer to visit when ill | Number of people | | |
|--------------------------|------------------|------------|-------------|
| | Jalpaiguri | Alipurduar | Cooch Behar |
| Govt. Hospital | 280 | 240 | 268 |
| Private Clinics | 33 | 23 | 12 |
| Health Sub-centres | 52 | 42 | 45 |
| Health professional | 15 | 13 | 4 |
| Home remedy | 13 | 15 | 41 |
| Religious Places | 7 | 67 | 30 |

Table 1. Preferences for healthcare facilities visited when ill by respondents.

The information presented in Table 1 depicts the healthcare-seeking behaviours of surveyed individuals residing in the Jalpaiguri, Alipurduar, and Cooch Behar districts during periods of illness. Across all three regions, government hospitals emerged as the most preferred choice, with Jalpaiguri (70%) showing the

highest reliance, followed closely by Cooch Behar (67%) and Alipurduar (60%). This consistent preference underscores a strong dependence on public healthcare services, likely due to their greater affordability and accessibility. Health sub-centres served as the second most utilized option across districts, with usage ranging from 10% to 13%. This suggests that while they are not the first choice, these facilities still play a vital supporting role in delivering basic medical care, especially in semi-urban and rural areas. In contrast, private clinics were chosen by relatively few respondents—Jalpaiguri (8.25%), Alipurduar (5.75%), and Cooch Behar (3%)—possibly reflecting economic barriers or limited availability in more remote parts of the districts. The category of independent health professionals or informal practitioners was the least preferred across all three districts, particularly in Cooch Behar (1%), indicating either a lack of trust or minimal presence of such service providers. A notable trend was seen in the use of home remedies, especially in Cooch Behar (10.25%), suggesting a continued cultural inclination toward traditional or household-based treatments. However, the most striking variation emerged in the preference for religious places as a source of healing. Alipurduar reported a significantly high percentage (16.75%) compared to Cooch Behar (7.5%) and Jalpaiguri (1.75%), highlighting the strong influence of spiritual beliefs and religious practices on healthcare decisions, particularly in Alipurduar.

| Healthy habits followed | Number of people | | |
|---|------------------|------------|-------------|
| | Jalpaiguri | Alipurduar | Cooch Behar |
| Hand wash before meal | 280 | 212 | 290 |
| Hand wash after meal | 400 | 397 | 400 |
| Brushing teeth daily (with toothpaste) | 392 | 318 | 357 |
| Hand wash after toilet with soap | 363 | 357 | 320 |
| Hand wash after toilet without soap | 37 | 43 | 80 |
| Wash teeth regularly (without toothpaste) | 8 | 69 | 45 |

Table 2. Healthy habits practiced by respondents.

The districts of Jalpaiguri, Alipurduar, and Cooch Behar exhibit a mix of encouraging and concerning healthy habits, as detailed in Table 2. Handwashing after meals is the most consistently followed habit, with nearly universal adherence in all three districts—Jalpaiguri and Cooch Behar at 100%, and Alipurduar close behind at 99.25%, reflecting a strong awareness of basic hygiene. Brushing teeth daily with toothpaste is also widely practiced, particularly in Jalpaiguri (98%) and Cooch Behar (89.25%), though slightly lower in Alipurduar (79.5%), which may point to gaps in oral hygiene awareness or access. When it comes to handwashing before meals, the compliance rate is highest in Cooch Behar (72.5%), followed by Jalpaiguri (70%) and a comparatively lower Alipurduar (53%), indicating room for improvement in pre-meal hygiene in Alipurduar. Use of soap after toilet is strong in Jalpaiguri (90.75%) and Alipurduar (89.25%), but drops significantly in Cooch Behar (80%), possibly due to behaviour-related issues. Interestingly, a higher number of people in Cooch Behar (20%) and Alipurduar (10.75%) still rely on handwashing without soap, compared to Jalpaiguri (9.25%). This could suggest lack of consistent hygiene practices. The use of traditional practices like brushing without toothpaste is minimal in Jalpaiguri (2%), but significantly higher in Alipurduar (17.25%) and Cooch Behar (11.25%), highlighting a continued reliance on indigenous methods in those areas. Overall, while many healthy hygiene habits are broadly followed, disparities across the districts suggest targeted awareness and accessibility efforts could help bridge the gaps.

| Sources of health information | Number of people | | |
|-------------------------------|------------------|------------|-------------|
| | Jalpaiguri | Alipurduar | Cooch Behar |
| Mobile App | 163 | 121 | 153 |
| Television | 167 | 172 | 149 |
| Print Media | 46 | 92 | 60 |
| Health Worker | 24 | 15 | 38 |

Table 3. Sources of health information used by respondents.

In continuation of health awareness patterns, Table 3 demonstrates the notable variation in sources through which people access health-related information across the three districts.. Television remains the most prominent medium, with 41.75% of respondents in Jalpaiguri, 43% in Alipurduar, and 37.25% in Cooch Behar relying on it. This reflects the enduring influence of traditional broadcast media in disseminating public health messages. Mobile apps, though not as widespread, show significant usage—40.75% in Jalpaiguri and 38.25% in Cooch Behar—indicating a growing digital penetration, while Alipurduar trails behind at 30.25%. Print media shows considerable presence in Alipurduar at 23%, compared to 11.5% in Jalpaiguri and 15% in Cooch Behar, possibly due to regional variations in literacy or reading habits. Interestingly, health workers, who can play a vital role in local health education, are the least relied upon in Alipurduar (3.75%) and Jalpaiguri (6%), but somewhat more in Cooch Behar (9.5%), suggesting differing levels of outreach or trust in direct community engagement. Overall, while mass media continues to dominate, the data reveals a shifting landscape in health communication, with mobile platforms and personal outreach gradually gaining importance.

Conclusion:

This comprehensive survey across Jalpaiguri, Alipurduar, and Cooch Behar, involving 1,200 individuals with a strong youth demographic, reveals varied health landscapes: while awareness of health and hygiene is generally high, especially in Jalpaiguri and Cooch Behar, Alipurduar lags in both awareness and pre-meal handwashing. Government hospitals are the most preferred healthcare choice across all districts, highlighting reliance on public services, though Alipurduar shows a notable inclination towards religious healing. Furthermore, traditional media like television dominates health information dissemination, with growing reliance on mobile apps, suggesting a need for targeted health communication strategies that address regional disparities in hygiene practices, healthcare seeking behaviours, and information access.

References:

- Abroms, L. C. (2019). Public Health in the Era of Social Media. *American Journal of Public Health*, 109(S2), S130–S131. <https://doi.org/10.2105/AJPH.2018.304947>
- Bal, M., & Maity, A. (2019). Impact of economy & sociability on educational development of tribal women. *International Journal of Research and Analytical Reviews*, 6(2).

- Bera, S., & Adhikari, A. (2024). Prevalence of hygiene awareness during menstruation period among rural women of West Bengal, India. *International Journal of Community Medicine and Public Health*, 11(2), 830–834. <https://doi.org/10.18203/2394-6040.ijcmph20240273>
- Biswas Santanu; & Biswas Sarmistha;: “Empowering Indian Women: Sister Nivedita's enduring legacy in education and social reform” “International Journal of Research Publication and Reviews (IJRPR).” 5(6), 2024, Page: 1230 – 1235.
- Biswas Santanu; & KumariMadhu;: “Integrating indigenous wisdom: transforming higher education with Bhartiya knowledge systems.” “American Journal of Social and Humanitarian Research.” 5(2), 2024, Page: 132-142.
- Biswas Santanu; & KumariMadhu;: “The Burden of care: A systematic review of parental stress in families of children with intellectual disabilities.” “International Journal of Trend in Scientific Research and Development (IJTSD)” 8(4), 2024, Page: 842-849.
- Biswas Santanu; Banerjee Rabin;: “Attitude towards integrating ICT in the teaching learning in the higher secondary level: A survey,” “International Journal of Research Publication and Reviews (IJRPR)”, 5(6), 2024, Page: 1-4.
- Biswas, Santanu; & Chatterjee, Pankaj;: “Students’ Attitudes towards E-Learning from a Socio-Economic Perspectives.” “Bharati International Journal of Multidisciplinary Research & Development (Bijmrd)”. 2(11), 2024, Page: 1-12.
- Daripa, Soumili; Khawas, Koomkoom; Das, Sanatanu.,Dey; Ratan. Kumar; & Kuila, Biplab Kumar; “Aligned Proton Conducting Graphene Sheets via Block Copolymer Supramolecular Assembly and Their Application for Highly Transparent Moisture Sensing Conductive Coating.” “*CHEMISTRY SELECT, C*” 4,2019, Page: 7523 -7531.
- Hardey, M. (2008). Public health and Web 2.0. *Journal of the Royal Society for the Promotion of Health*, 128(4), 181–189. <https://doi.org/10.1177/1466424008092228>
- Hu, N. (2022). Sentiment Analysis of Texts on Public Health Emergencies Based on Social Media Data Mining. *Computational and Mathematical Methods in Medicine*, 2022, 3964473. <https://doi.org/10.1155/2022/3964473>
- Islam, M., Benjamin-Chung, J., Sultana, S., Unicomb, L., Alam, M., Rahman, M., Ercumen, A., & Luby, S. P. (2021). Effectiveness of Mass Media Campaigns to Improve Handwashing-Related Behavior, Knowledge, and Practices in Rural Bangladesh. *American Journal of Tropical Medicine and Hygiene*, 104(4), 1546–1553. <https://doi.org/10.4269/ajtmh.20-1154>
- Jain, M., Sharma, P. K., Kamboj, K., & Shyam, A. (2024). The Impact of Social Media on Medical Education and Health-care Communication. *Journal of Orthopaedic Case Reports*, 15(09), 1–3.
- Kanchan, S., & Gaidhane, A. (2023). Social Media Role and Its Impact on Public Health: A Narrative Review. *Cureus*, 15(1), e33737. <https://doi.org/10.7759/cureus.33737>
- Khawas, Koomkoom.; Daripa, Soumili.; Kumari, Pallavi.; Bera, Manas Kumar; Malik, Sudip; & Kuila, Biplab Kumar; : “Simple Synthesis of End Functionalized Regioregular Poly(3-Hexyl thiophene) by

Catalytic-Initiated Kumada Catalyst Transfer Polymerization.” JOURNAL OF POLYMER SCIENCE, PART A: POLYMER CHEMISTRY” 57, 2019, Page: 945- 951.

- Khawas, Koomkoom; & Mishra, P K;: “Advantages And Challenges of Biodiesel Producing Microalgae.” BHARATI INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH & DEVELOPMENT (BIJMRD)” 2(8), 2023, Page: 160- 163.
- Maity, A. (2020). Collaborative active learning: An effective study at training colleges. In *Transition from traditional teaching methodology to online teaching* (ISBN: 978-81-946375-3-0). Redshine Publication.
- Maity, A. (2020). Investigating the benefits of project-based learning in science education. In *New trends of teaching, learning and technology* (Vol. 1). Redshine Publication.
- Maity, A. (2025). Teacher effectiveness in relation to ICT acquaintance among secondary teachers of Medinipur District of West Bengal: A study on demographic variables. *American Journal of Social and Humanitarian Research*, 6(5), 1108–1118. <https://globalresearchnetwork.us/index.php/ajshr/article/view/3641>
- Maity, A., & Sanuar, S. (2020). Women’s access to higher education in West Bengal in open distance learning system. *Journal of Emerging Technologies and Innovative Research*, 7(3).
- Maity, A., et al..(2023). Job satisfaction among secondary school teachers in Paschim Medinipur district in the present context. *Journal of Pharmaceutical Negative Results*, 14(3).
- Maity, A., Sanuar, S., & Ghosh, D. (2024). An assessment of the socio-economic status of the minority girls students at secondary level in Paschim Medinipur district of West Bengal. *Educational Administration: Theory and Practice*, 30(5), 9123–9127. <https://doi.org/10.53555/kuey.v30i5.4522>
- Maity, A. et al (2023). Correlation between study habit, test anxiety and academic achievement of the male and female B.Ed. college students. *Journal for ReAttach Therapy and Developmental Diversities*, 6(9s), 1872–1880. <https://doi.org/10.53555/jrtdd.v6i9s.2660>
- Mansour, N., & Alfojery, A. (2025). Exploring students’ health awareness of personal hygiene and dietary behaviors in primary education in Qatar. *Critical Public Health*, 35(1). <https://doi.org/10.1080/09581596.2025.2505760>
- Mishra, Prafull.Ranjan; & Khawas, Koomkoom; : “Advantages And Challenges of Biodiesel Producing Microalgae.”BHARATI INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH & DEVELOPMENT (BIJMRD)”2, 2024,Page: 160-163.
- Pal, Dibyarupa; &Khawas, Koomkoom; : “Potential Sources and Uses of Chitin and its Polymers: a Review.” “JOURNAL OF DISCOVERIES INAPPLIED AND NATURAL SCIENCE” 2,2024, Page:1-12.
- Roy, P., & Mandal, B. (2023). Status of drinking water, sanitation facilities, and hygiene in West Bengal: evidence from the National Family Health Survey of India (NFHS), 2019–2021. *Water and Development*, 13(1), 50–60. <https://doi.org/10.1002/wat2.1741>

- Sinha, Amardeep; Kumari, Nilu; & Khawas, Koomkoom; : “Role of Nuclear Chemistry in Environmental Applications.” “BHARATI INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH & DEVELOPMENT(BIJMRD)”2, 2024, Page: 61-70.
- Wakefield, M. A., Loken, B., & Hornik, R. C. (2010). Use of mass media campaigns to change health behaviour. *Lancet (London, England)*, 376(9748), 1261–1271. [https://doi.org/10.1016/S0140-6736\(10\)60809-4](https://doi.org/10.1016/S0140-6736(10)60809-4)

Citation: Chakraborty. D. & Saxena. U. K., (2025) “Public Health Awareness, Hygiene Habits, and Media Influence: Insights from Jalpaiguri, Alipurduar, and Cooch Behar”, *Bharati International Journal of Multidisciplinary Research & Development (BIJMRD)*, Vol-3, Issue-04, April-2025.